

**Bayer MaterialScience LLC** 

## Vapor Intrusion Investigation Summary Report

125 New South Road Hicksville, New York USEPA ID No. NYD002920312

August 2011

Another Ching

Andrew C. Enigk Project Environmental Scientist

John C. Brussel

John C. Brussel, PE Principal Engineer

### Vapor Intrusion Investigation Summary Report

125 New South Road Hicksville, New York

Prepared for: Bayer MaterialScience LLC

Prepared by: ARCADIS of New York, Inc. 6723 Towpath Road P.O. Box 66 Syracuse New York 13214-0066 Tel 315.446.9120 Fax 315.449.4111

Our Ref.: B0032305.0004 #10

Date: August 2011

## **Table of Contents**

1.	Introdu	iction 1					
	1.1	Report Organization					
	1.2	Background Information					
		1.2.1	Simone Building Complex Description and History	3			
		1.2.2	Summary of Previous Investigations	4			
2.	Vapor I	ntrusio	on Investigation Activities	7			
	2.1	Buildin	g Reconnaissance and Product Inventory	7			
	2.2	Sub-SI	ab Vapor, Indoor Air, and Outdoor Air Sampling	8			
		2.2.1	Temporary Sub-Slab Vapor Probe Installation	8			
		2.2.2	Sub-Slab Vapor Purging	9			
		2.2.3	Sub-Slab Vapor Sampling	10			
		2.2.4	Indoor and Outdoor Air Sampling	10			
3.	Vapor I	ntrusio	on Investigation Results	12			
	3.1	Buildin	g Reconnaissance and Product Inventory Findings	12			
		3.1.1	Building Use	12			
		3.1.2	Building HVAC	14			
		3.1.3	Potential Pathways and Indoor Sources	14			
	3.2	Sub-Slab Vapor and Indoor/Outdoor Air Analytical Results					
	3.3	Finding Matrice	gs Compared to the NYSDOH Soil Vapor/Indoor Air Decision	19			
4.	Conclu	sions a	and Recommendations	21			
Та	ble						

 
 Table 1
 Sub-Slab Vapor, Indoor Air, and Outdoor Air Analytical Results for Detected VOCs

### **Table of Contents**

### Figure

Figure 1 Sub-Slab Vapor and Indoor Air Sampling Results for PCE and TCE

#### Appendices

- A Completed New York State Department of Health Indoor Air Quality Questionnaires and Building Inventory Forms
- B Building Layouts and Field Observations
- C Building Product Inventory Tables
- D Sub-Slab Vapor, Indoor Air, and Ambient Air Sampling Logs
- E Photographs of Sampling Activities
- F Data Validation Report

#### **Compact Disc**

Photographs from Building Reconnaissance and Product Inventory

Laboratory Analytical Data Report

Bayer MaterialScience LLC 125 New South Road Hicksville, New York

### 1. Introduction

This report summarizes the results of the vapor intrusion (VI) investigation performed at the Simone Development (Simone) building complex located at 1 Enterprise Place, Hicksville, New York. The building complex is on property adjacent to and immediately east of the Bayer MaterialScience LLC site located at 125 New South Road, Hicksville, New York ("the Bayer site"). The VI investigation was implemented to evaluate the following:

- The potential presence, concentration, and distribution of volatile organic compounds (VOCs) in soil vapor below the Simone building complex (hereafter, "sub-slab vapor").
- The potential presence of VOC vapors in the indoor air of the Simone building complex.

The VI investigation was implemented by ARCADIS in April and May 2011 and consisted of a building reconnaissance, product inventory, and sub-slab vapor and indoor air sampling in the Simone building complex. The VI investigation activities were implemented in accordance with the following:

- The Vapor Intrusion Investigation Work Plan (ARCADIS, March 2011) ("the VI Investigation Work Plan"), which was approved by the New York State Department of Environmental Conservation (NYSDEC) in e-mail correspondence dated March 22, 2011.
- April 25, 2011 e-mail correspondence from ARCADIS to the NYSDEC that presents the findings of the building reconnaissance and product inventory and includes a figure showing proposed sampling locations.
- An April 26, 2011 telephone conference call with the NYSDEC and New York State Department of Health (NYSDOH) discussing the selection of sampling locations.
- April 26, 2011 e-mail correspondence from the NYSDEC providing approval of the sampling locations.

Final laboratory analytical data packages were provided by the laboratory on May 16, 2011, and data validation was completed by ARCADIS on June, 1, 2011. The validated



Bayer MaterialScience LLC 125 New South Road Hicksville, New York

laboratory analytical results for the VI investigation were provided to the building owner (Simone) and the NYSDEC via e-mail correspondence dated June 3, 2011. The data submittal to the owner was within 30 days following receipt of validated data as required in Article 27, Title 24 of the NYS Environmental Conservation Law.

#### 1.1 Report Organization

The report is organized as follows:

	Section	Purpose
Section 1 -	Introduction	Presents a brief overview of the VI investigation and relevant background information.
Section 2 -	Vapor Intrusion Investigation Activities	Describes work activities performed as part of the VI investigation.
Section 3 -	Vapor Intrusion Investigation Results	Summarizes the results obtained from the VI investigation field activities.
Section 4 -	Conclusion and Recommendations	Presents conclusions and recommendations based on the investigation results.

#### 1.2 Background Information

Based on findings of the initial soil vapor investigation (SVI) at the Bayer site (completed in September 2007), the NYSDEC requested that a walk-through of the Simone building complex be performed to observe operations at the building and determine if sub-slab vapor and indoor air sampling was needed. On June 4, 2008, Bayer and ARCADIS were accompanied by representatives from the NYSDEC, NYSDOH, and Simone Development for the walk-through of the Simone building complex. Businesses that occupied space at the complex included Allied Building Products (Allied), Publishers Circulation Fulfillment (PCF) Newspaper Delivery, Empire Bakery Equipment (Empire), Coral Graphics, Big Bear Cycles, New Business Solutions (NBS), and Williams Specialized, Inc. The walk-through did not include a full building reconnaissance or product inventory. The walk-through was an opportunity for Bayer, ARCADIS, the NYSDEC, and NYSDOH to observe the general construction of the building, potential use of products containing VOCs, heating ventilation and air conditioning (HVAC) systems for the building, overhead door locations, types of businesses occupying the building, general locations of floor drains, the roof drainage system, and general storm water management. During the walk-through, businesses observed to have potential sources of VOCs were the following:

Bayer MaterialScience LLC 125 New South Road Hicksville, New York

Business Name	Business Description	Potential VOC Source	
Allied	Building materials distributor	Outside/Inside Chemical Storage/Product Inventory, Vehicle Maintenance	
Empire Bakery Equipment	Bakery equipment and systems for baking and food service industries	Parts washing machine located in in- house workshop, paint and painting equipment	
Big Boar Cycles	Motorcycle retail, building, customizing, maintenance, and restoring	General motorcycle maintenance, parts washing, chemical storage	

Based on follow-up SVI work at the Bayer site that identified VOCs at elevated concentrations following source (soil) removal activities in 2009, the NYSDEC submitted a February 23, 2010 letter to Bayer that requested implementation of a phased offsite soil vapor investigation to assess if the Bayer site may be impacting indoor air quality at offsite buildings, particularly the adjacent Simone building complex. In subsequent conference calls, the NYSDEC and NYSDOH requested that a VI investigation, involving sub-slab vapor and indoor air sampling, be conducted within the Simone building complex.

A description of the Simone building complex and property history is presented below. A summary of relevant previous investigations at the Bayer property is also presented below.

#### 1.2.1 Simone Building Complex Description and History

The Simone building complex occupies just over 150,000 square feet on a 7.6 acre lot bordered to the west by the Bayer site and various commercial/industrial properties to the north, south, and east. The building is a rectangular-shaped, one-story structure that is oriented in a north-south direction and has a concrete slab-on-grade. The location of Simone building complex in relation to the Bayer site is shown on Figure 1.

Based on information provided on the Nassau County Department of Assessment (NCDA) website, the Simone building complex was constructed in 1967 for use as a storage facility by Grumman Aerospace Corporation (now known as Northrop Grumman). Information concerning ownership of the building since 1967, the year Simone acquired the property, and the history of building tenants and their activities, was requested of Simone as part of the reconnaissance activities described herein, but was not available. Tenants occupying space at the Simone building complex when the

## Vapor Intrusion Investigation Summary Report

Bayer MaterialScience LLC 125 New South Road Hicksville, New York

VI investigation was implemented include the following (starting from the southern end of the building complex and continuing to the north end), most of which were present during the June 2008 walk-through: Allied, Empire, Mash City Business Systems (Mash City), NBS, and DWG Distribution (DWG). In general, the tenant hours of operation are typically eight to ten hours per day during regular business hours, Monday through Friday. Allied operates a second shift for an additional eight hours. The two spaces formerly occupied by Coral Graphics and PCF had no occupants when the VI investigation was conducted. NBS occupies two spaces at the northern end of the Simone building complex.

### 1.2.2 Summary of Previous Investigations

Soil samples have been collected from approximately 175 locations at the Bayer site and analyzed for VOCs since the start of the RCRA Facility Investigation (RFI) in February 2004. Outside of the Plant 1 area, no VOCs other than acetone (a common laboratory artifact) were detected in soils at concentrations exceeding the soil guidance values presented in the NYSDEC Technical and Administrative Guidance Memorandum (TAGM) titled "Determination of Soil Cleanup Objectives and Cleanup Levels," HWR-94-4046, dated January 24, 1994 (TAGM 4046). A total of 9 VOCs were identified in the Plant 1 area soils at concentrations exceeding the TAGM 4046 soil guidance values. Of these constituents, only one VOC (tetrachloroethene – also referred to as "PCE") was detected at a concentration exceeding the commercial use soil cleanup objectives (SCOs) presented in Title 6 of the Official Compilation of Codes, Rules, and Regulations of the State of New York (6 NYCRR) Part 375-6.8(b). VOC-impacted soil in and around the Plant 1 area was removed as part of an interim corrective measure (ICM) in 2009.

Details of the VOC soil sampling programs and the 2009 ICM are summarized in the VI Investigation Work Plan and presented in the following documents, which have been approved by the NYSDEC:

- *RCRA Facility Investigation Report* prepared by BBL (now known as ARCADIS) (BBL, June 2004).
- Phase II RFI Report contained in a letter from BBL to the NYSDEC dated January 5, 2005.
- Interim Corrective Measure Certification Report (BBL, November 2005).

## Vapor Intrusion Investigation Summary Report

Bayer MaterialScience LLC 125 New South Road Hicksville, New York

- Phase VI Pre-Design Soil Sampling Plan contained in a letter from ARCADIS to the NYSDEC dated March 5, 2007 and follow-up e-mail correspondence from ARCADIS BBL to the NYSDEC dated April 9, 2007.
- Interim Corrective Measure Additional PCB Soil Removal Certification Report (ARCADIS, January 2010).

In addition to the soil sampling, soil vapor sampling activities were previously performed at the Bayer site as part of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Remedial Investigation (RI) in 1989 and a four-phase SVI completed between September 2007 and August 2009. Soil vapor samples have been collected from a total of 29 locations (one or more samples per location) at the Bayer site. Soil vapor sampling locations were selected to provide coverage across the site, including in areas where building construction may occur during site redevelopment, within/near footprints of the former plant buildings, near existing and former sumps, and along the perimeter of the site. The first three phases of the soil vapor investigation were performed to evaluate the presence and extent of VOCs in soil vapor at the site. The fourth phase was conducted to assess potential changes in site-wide concentrations after VOC-impacted soil had been removed from the Plant 1 footprint as part of the 2009 ICM. The soil vapor sampling locations from the four-phase SVI are shown on Figure 1. The results for the CERCLA RI and four-phase SVI and related information are briefly summarized below (and in the VI Investigation Work Plan) and detailed in the following documents and correspondence:

- *Remedial Investigation Report* (Leggette, Brashears & Graham, Inc., revised August 1992).
- A December 20, 2007 letter report from ARCADIS to the NYSDEC (the "Phase I SVI Report").
- July 16, 2008 e-mail correspondence from ARCADIS to the NYSDEC summarizing the Phase II SVI and a November 19, 2008 letter responding to NYSDEC comments on the Phase II SVI.
- February 25, 2008 e-mail correspondence from ARCADIS to the NYSDEC summarizing the findings of the Phase III soil vapor sampling.
- September 28, 2009 and October 6, 2009 e-mail correspondence from ARCADIS to the NYSDEC providing laboratory analytical results for the Phase IV SVI.

## Vapor Intrusion Investigation Summary Report

Bayer MaterialScience LLC 125 New South Road Hicksville, New York

Because the NYSDEC has not established standards, criteria, or guidance values for VOCs in soil vapor, soil vapor data from the previous soil vapor investigations were compared to air guideline values presented in the NYSDOH document titled "Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York", dated October 2006 (hereafter, "the NYSDOH VI Guidance"). PCE and trichloroethene (TCE) were detected in several soil vapor samples at concentrations exceeding these "screening criteria". The highest concentrations of PCE and TCE detected in soil vapor were in the following areas:

- Within the footprints of the former onsite buildings (particularly the Plant 1 building where, as indicated above, VOC-impacted soil was removed in 2009).
- Near Sumps 1 and 2 (also referred to as Areas of Concern [AOC] 28 and 29), which have been subject to a soil flushing remedial action by Occidental Chemical Corporation (former site owner and responsible party) to address impacts from former VOC discharges to the sumps. That work has been performed pursuant to a Record of Decision issued by the United Environmental Protection Agency (USEPA) in 1994.

Elevated PCE and TCE concentrations in soil vapor were believed to extend from the Plant 1 area and AOCs 28 and 29 toward the eastern property boundary. Based on these findings, the NYSDEC and NYSDOH requested that a VI investigation be performed at the Simone building complex.

## Vapor Intrusion Investigation Summary Report

Bayer MaterialScience LLC 125 New South Road Hicksville, New York

### 2. Vapor Intrusion Investigation Activities

This section presents a description of the field activities performed as part of the VI investigation at the Simone building complex, including:

- Building Reconnaissance and Product Inventory
- Sub-Slab Vapor Sampling
- Indoor Air Sampling
- Outdoor Air Sampling

A discussion of the building reconnaissance and product inventory is presented below, followed by a discussion of the sub-slab vapor and indoor/outdoor air sampling activities.

#### 2.1 Building Reconnaissance and Product Inventory

ARCADIS completed building reconnaissance and product inventory activities inside the Simone building complex between April 11, 2011 and April 22, 2011. The activities were performed at every tenant space (occupied and unoccupied) at the complex and outside of the complex.

The building reconnaissance was performed to: (1) observe the layout and construction of each tenant space; (2) identify floor penetrations, cracks, or other preferential pathways where VOCs, if present in the subsurface, could potentially enter the building; and (3) select final sub-slab vapor and indoor air sampling locations. As part of the reconnaissance, ARCADIS used a photoionization detector (PID) capable of measuring VOCs at the parts per billion level (i.e., a ppbRAE) to evaluate the potential presence of VOCs migrating through the potential pathways.

The product inventory was performed to document products containing VOCs (or potentially containing VOCs) that are used, handled, or stored in the buildings. ARCADIS used the ppbRAE to evaluate the presence of VOCs originating from product/storage containers or other potential sources inside the buildings.

As part of these activities, ARCADIS also met with personnel from Simone and tenant owners to discuss the types of HVAC systems used in the building/tenant spaces.

Results of the reconnaissance and product inventory for each tenant space were documented on the NYSDOH Indoor Air Quality Questionnaire and Building Inventory

## Vapor Intrusion Investigation Summary Report

Bayer MaterialScience LLC 125 New South Road Hicksville, New York

form (Appendix B of the NYSDOH VI Guidance). The completed forms are included in Appendix A. Drawings showing the building layouts with notes from observations made during the reconnaissance are included in Appendix B. Findings of the product inventory are presented in Appendix C. Representative photographs taken inside the buildings are included on the attached compact disc (CD), and the approximate locations where the photographs were taken are shown on the building layout drawings.

### 2.2 Sub-Slab Vapor, Indoor Air, and Outdoor Air Sampling

Sub-slab vapor and indoor/outdoor air sampling were performed following completion of the building reconnaissance and product inventory. Temporary sampling probes were installed at each sub-slab vapor sampling location on April 27, 2011 and April 28, 2011. Following the probe installation work, samples were collected from 8 co-located (paired) sub-slab vapor and indoor air sampling locations and from 3 outdoor sampling locations. Sub-slab vapor and indoor air sampling was performed concurrently (April 27<sup>th</sup> or 28<sup>th</sup>), except indoor air sampling at locations IA-7 and IA-8 was delayed until May 5, 2011 because some of the sample canisters provided by the laboratory had an insufficient starting vacuum (i.e., less than 28 inches of mercury [in. of Hg]).

The sub-slab vapor and indoor air sampling locations were selected to: (1) align with previous soil vapor sampling locations along the eastern portion of Bayer's property where VOCs had been identified in soil vapor; and (2) provide spatial coverage inside the Simone building complex. Outdoor (ambient) air samples were collected from locations that were generally upwind of the complex.

The sub-slab vapor and indoor air samples were designated by the prefix "SSV-" (for sub-slab vapor) and "IA-" (for indoor air), followed by a number (1 to 8). The outdoor air sample was designated "AMB-", followed by the date of collection. The sub-slab vapor and indoor/outdoor air sampling locations are shown on Figure 1.

Details of the sub-slab vapor probe installation and sampling activities are presented below.

#### 2.2.1 Temporary Sub-Slab Vapor Probe Installation

The sub-slab vapor probes were installed inside the Simone Building in accordance with the procedures approved by the NYSDEC and NYSDOH that are presented in the VI Investigation Work Plan. Each probe was installed by coring through the floor slab

## Vapor Intrusion Investigation Summary Report

Bayer MaterialScience LLC 125 New South Road Hicksville, New York

using a hammer drill equipped with a ½-inch or ¾-inch diameter pulverizing bit, and then inserting a section of ¼-inch inside diameter Teflon<sup>®</sup>-lined polyethylene tubing into the corehole. The drill bit was advanced an additional 3 to 6 inches into the sub-slab material (where encountered) to create an open cavity. The tubing was extended approximately 2 inches below the bottom of the concrete floor slab. At each probe location, the annular space between the tubing and the corehole was sealed (from the base of the concrete slab to the floor surface) using: (1) hydrated granular bentonite; (2) melted beeswax; or (3) a combination of hydrated granular bentonite and beeswax to the surface. The exposed end of the sample tubing was then connected directly to the sample canister and purge line using Swagelok<sup>®</sup> fittings.

#### 2.2.2 Sub-Slab Vapor Purging

Purging was performed prior to sampling at each sub-slab vapor probe (on the same day that sampling was completed). Purging was performed to remove atmospheric air from each sub-slab vapor probe. At least 3 "implant" volumes (the interior volume of the tubing at each sub-slab vapor probe location) were purged from each probe using a gas-tight syringe. The purging was performed at a flow rate of less than 200 milliliters per minute (mL/min). Purge air collected in the syringe was discharged into a Tedlar bag for release outdoors.

A tracer gas (helium) was used in connection with the purging activities to provide a means to evaluate the integrity of the seals around the sub-slab vapor probe at all but one sample location (SSV-5 where carpeting was present and would have been damaged by the tracer testing activities). A small shroud was placed over each probe and sealed to the concrete floor using bentonite grout. Helium was subsequently introduced into the enclosure. The helium levels in the enclosure (pre- and post-purging) and in the vapor extracted through the sample tubing (post-purging and post-sampling) were measured using a helium gas detector. Helium levels recorded in connection with the purging and sampling are presented on the sampling logs included in Appendix D.

Helium was detected at trace amounts in the sample tubing following sample collection at locations SSV-1, SSV-6, SSV-7, and SSV-8. All helium levels measured in the vapor extracted from these locations were below 1% concentration, which is less than the 10% threshold identified in Section 2.7.5 of the NYSDOH VI Guidance, and therefore considered acceptable.

Bayer MaterialScience LLC 125 New South Road Hicksville, New York

#### 2.2.3 Sub-Slab Vapor Sampling

Sub-slab vapor samples were collected concurrently following purging -- from the three southern-most locations in the complex on April 27, 2011 and from the remaining locations on April 28, 2011. Sampling took place over an approximate 8 hour period. Each sample was collected using a 6-liter SUMMA<sup>®</sup> canister with an attached flow regulator pre-set to draw vapor at approximately 12.5 mL/min. The pre-cleaned (batch-certified) canisters used for the sampling had an initial vacuum of at least 28 in. of Hg. When canister vacuums reached between 3.5 and 6.0 in. of Hg, the valves on the SUMMA<sup>®</sup> canisters were closed, leaving a vacuum in the canisters as a means for the laboratory to verify that the canisters did not leak while in transit. Vacuum readings obtained prior to and at the end of sampling are presented on the soil vapor sampling logs included in Appendix D. Representative photographs taken during purging and sampling are included in Appendix E.

Two duplicate sub-slab vapor samples were collected in support of the VI investigation. The duplicate samples (samples DUP-042811 and DUP2-042711) were collected at sampling locations SSV-2 and IA-5, respectively. The sub-slab vapor samples and duplicate samples were delivered to TestAmerica Laboratories, Inc. (TestAmerica) of Burlington, Vermont for laboratory analysis for VOCs in accordance with USEPA Compendium Method TO-15.

The sub-slab vapor sampling probes were removed following sample collection, and the core holes at each location were filled with hydraulic cement.

#### 2.2.4 Indoor and Outdoor Air Sampling

As described in Subsection 2.2, each of the 8 indoor air samples was paired with a sub-slab vapor sample that was collected concurrently, with two exceptions: indoor air samples from locations IA-7 and IA-8 were collected after the corresponding sub-slab vapor samples were collected. The slight delay in the sampling at locations IA-7 and IA-8 was acceptable to NYSDOH, as discussed during an April 28, 2011 conference call and documented in April 28, 2011 e-mail correspondence to the NYSDOH and NYSDEC. Three outdoor air samples were collected as part of the VI investigation (one on each day of sampling). Each sample was collected generally upwind from the building complex, over an 8-hour sampling period. Consistent with the sub-slab vapor sampling approach, the indoor/outdoor air samples were collected using 6-liter SUMMA<sup>®</sup> canisters with an attached flow regulator set to draw air at 12.5 mL/min. The valve on each canister was closed when the negative canister vacuum reached



Bayer MaterialScience LLC 125 New South Road Hicksville, New York

between 2.5 to 5.5 in. of Hg. Each indoor/outdoor air sample was delivered to TestAmerica and analyzed for VOCs in accordance with USEPA Compendium Low-Level Method TO-15. Conditions encountered during the indoor and outdoor air sampling are identified on the sampling logs in Appendix D.

## Vapor Intrusion Investigation Summary Report

Bayer MaterialScience LLC 125 New South Road Hicksville, New York

#### 3. Vapor Intrusion Investigation Results

This section summarizes the results obtained for the VI investigation, including findings from the building reconnaissance and product inventory, and analytical results obtained for the sub-slab vapor, indoor air, and outdoor air sampling.

#### 3.1 Building Reconnaissance and Product Inventory Findings

Key findings from the building reconnaissance and product inventory are summarized below. For additional details, refer to the questionnaire/inventory forms, building layout drawings, product inventory forms, and photographs presented in Appendices A, B, C, and E, respectively.

#### 3.1.1 Building Use

All of the tenant spaces at the Simone building complex are within a single story, slab on grade, steel-framed structure with masonry walls and/or concrete block walls. A general description of each tenant space and its use is provided below, organized by location (starting with businesses at the south end of the facility and proceeding northward). Refer to Figure 1 for the location of each tenant space.

- Allied: Is a commercial building supply warehouse/distribution business with an office area and showroom. The warehouse/distribution area has a concrete floor slab supporting large shelves of building products, shipping/receiving areas (loading docks) with overhead door access, a break/locker room, and a maintenance area. The office area is physically separated from the warehouse area via internal walls, and access between the areas is provided through a standard double door. The office area has typical office rooms (e.g., break room, conference room, lavatories, offices, open desk areas), a showroom area, and a retail area for smaller building products. The office has commercial carpet and vinyl tile flooring over the concrete slab.
- *PCF*: Is currently vacant, but when it was occupied by PCF, the space was used for newspaper distribution. The area consists of open warehouse, a small office area with a lavatory, a storage area with two overhead doors, and a fenced storage area. The warehouse concrete slab had been recently painted prior to the VI investigation, and the office area had some vinyl tile flooring over the concrete slab.

## Vapor Intrusion Investigation Summary Report

Bayer MaterialScience LLC 125 New South Road Hicksville, New York

- Empire: Is a distributer of bakery equipment and systems to the baking and food service industries. The space consists of a typical office area (e.g., offices, break room, conference room, and lavatories) that leads into the warehouse area where they repair, finish/paint, test/demonstrate, and distribute bakery equipment. The office area and test/demonstration area flooring is commercial carpeting and vinyl tile over the existing concrete slab. The remaining areas consist of painted concrete slab. The warehouse area has two overhead doors, one located on the western side of the building (back) and one for the loading dock area located on the eastern side of the building (front).
- Coral Graphics: Is currently vacant, but when it was occupied by Coral Graphics, the space was used for various graphic design services (i.e., book covers, marketing materials, corporate brochures). The area consists of open warehouse and a small office area with a lavatory. The floor is a recently-painted concrete slab. The warehouse area has two overhead doors, one located on the western side (back) of the building and one for the loading dock area on the eastern side (front) of the building.
- Mash City: Is a full service photo copier distribution and service company. Approximately the eastern half (front) of the space is an office environment consisting of work stations, offices, lavatories, a break room, and a conference room. The office area flooring is a mixture of commercial carpet and tile over concrete slab. The western half (back) of the space consists of various work stations and printer storage. The western half floor consists of sealed concrete slab and has one overhead door.
- NBS: Is a distributor of store displays and fixtures. The space consists of warehouse and office areas. The warehouse area has several small work stations and a large storage/stock area. The flooring in the warehouse is a sealed concrete slab. The office area is comprised of various cubicles, an office, break room, and lavatory with mixed commercial vinyl tile and carpet flooring. One overhead door is located on the western side (back) of the space. NBS also has a separate warehouse area for stock in the last space at the northern end of the building. The warehouse has an overhead door on the east side (front) of the building at the loading dock and another overhead door on the west side (back). The separate warehouse located on the northern-most end of the Simone building complex has a lavatory and sealed concrete floor.

## Vapor Intrusion Investigation Summary Report

Bayer MaterialScience LLC 125 New South Road Hicksville, New York

DWG: Is a distributor of surveillance equipment. The space consists of retail, office, and warehouse areas. A small retail area is located on the east side of the space and consists of a sales floor with shelves of surveillance products and a lavatory. The remaining area to the west of the sales floor consists of office area (e.g., offices, kitchen/break room, conference room, work stations, lavatories). The northern end of the space is a warehouse area for stock storage. The retail area flooring is commercial tile, the office area flooring is a mix of commercial tile and carpet, and the warehouse area flooring is sealed concrete. The warehouse has an overhead door on the east side (front) of the building at the loading dock and another overhead door on the west side (back).

#### 3.1.2 Building HVAC

Based on discussions with Simone's building manager and observations during the building reconnaissance, most of the building is heated via a combination of indirect natural gas-fired components/forced air systems and unit heaters. Central air conditioning units located atop the roof of each building provide the source for cooling within the buildings.

Outside makeup air is introduced and circulated throughout each building during the heating and cooling seasons, but specific details on how the air is circulated for the entire building was not determined/available.

#### 3.1.3 Potential Pathways and Indoor Sources

The building floor is constructed of poured concrete that ranges from approximately 6 to 10 inches in thickness. In general, the apparent original concrete floor remains in most of the warehouse areas of each tenant space. The concrete floor is covered by commercial tile/carpet in the office/retail areas. The concrete floor that is visible (uncovered) is painted or coated with an epoxy sealant. The walls of each building are constructed of half brick on the bottom and half corrugated steel panels. The walls and concrete flooring in each building were observed to be in generally good condition. Some cracks were observed in the floor slabs, as described below. No floor drains were observed in the buildings. Penetrations to the building slab appeared to be limited to select building utilities (sanitary sewer pipes and roof drainage pipes) and structural steel columns. Gas and water service to the building complex generally enters (and continues through the building) above the slab.

## Vapor Intrusion Investigation Summary Report

Bayer MaterialScience LLC 125 New South Road Hicksville, New York

Some of the roof drains discharge storm water to the asphalt driveway on the west side of the building, which slopes toward open-bottomed dry wells. Some of the roof drains penetrate the concrete slab and are presumed to discharge to the same dry wells.

A soil pile of unknown origin was noted on the west side of the Simone complex building along the southern end, near Allied. Aerial photographs of the soil pile show the pile diminishing in size throughout the years. The property manager did not have any information on the soil pile.

Observations specific to each tenant space of the building are summarized below:

Allied: The warehouse concrete slab had various areas with cracks and several patched areas where the slab had been removed and replaced with new concrete. The office area vinyl tile and carpet flooring appeared to be in good condition. The slab condition under the flooring could not be observed, but the floor slab thickness in the office area was the same as in the warehouse (approximately 8 inches). The employee offices contained various household cleaning and office products. The retail and showroom areas attached to the offices had individual containers of building products from the warehouse for show and for sale. PID readings were recorded throughout the tenant space (in areas near product containers) and ranged from 0.0 to 5,094 ppb in the warehouse area and 1,434 to 2,570 ppb in the office area. These readings are attributed to the inventory of products within the tenant space, including (but not limited to) paints, oils, adhesives, solvents, sealants, and lubricants. See the photos of these products/chemicals on the attached CD, and refer to Appendix C for an inventory of the products and the individual PID readings.

Allied also has outside storage of building materials on the southern-most end of the Simone property. The outside storage area primarily consists of palletized roofing materials and adhesives. In the past, Bayer has noted open containers in the corner of this area near the Long Island Railroad (LIRR). Storm water in this area discharges to various dry wells that are presumed to be open-bottomed based on discussions with the property manager.

• *PCF*: The concrete slab in the warehouse area had some minor cracks. As previously indicated, this tenant space was vacant. No products were found in the main warehouse area. The small office area on the eastern side of the space had a couple of household cleaning products. The background PID reading recorded for this area was 1,678 ppb.

### Vapor Intrusion Investigation Summary Report

Bayer MaterialScience LLC 125 New South Road Hicksville, New York

- *Empire*: The concrete slab in the warehouse area had some minor cracks. Products found in the warehouse area include paints, oils, cleaners, degreasers, and petroleum products. The warehouse has a large parts degreaser and a paint booth that are open to the warehouse. The office area and test/demonstration area vinyl tile and carpeting appeared to be in good condition. The slab condition under the flooring is unknown. Products found in the office and test/demonstration area were primarily household cleaning products and paints. PID readings within this tenant space ranged from 732 ppb to 83,900 ppb. The highest PID reading was obtained immediately adjacent to an approximately 55-gallon holding tank for spent oil and cleaning solution in the southern portion of the tenant space. The second highest reading (8,709 ppb) was obtained immediately adjacent to an approximately 35 gallon used/waste liquid container in the southwest corner of the tenant space. Elevated PID readings in this space were also obtained near and attributed to the use of paints in the open paint booth and solvents in the parts cleaner area of the warehouse, which are normal and acceptable tenant operations. Lower PID readings indoors were obtained further away from the above-referenced features.
- *Coral Graphics:* The concrete slab in the warehouse and office area appeared to be in good condition. As previously indicated, this tenant space was vacant. No products were found in this section of the building complex. The walls and floor were recently painted. The background PID reading recorded for this tenant area was 1,695 ppb.
- Mash City: The concrete slab in the warehouse area appeared to be in good condition. The vinyl and carpet flooring in the office area were also observed to be in good condition. Products used in the warehouse area consist of various cleaners, lubricants, degreasers, and adhesives used for printer repair and maintenance. Products found in the office area consisted of paints, joint compound, concrete stain, and household cleaning products. The PID readings recorded for the area ranged from 37 ppb to 316 ppb.
- NBS: The concrete slab in both of NBS's warehouse areas appeared to be in good condition. The vinyl and carpet flooring in the office area appeared to be in good condition. Products in the southern warehouse area consist of lubricants, paints, adhesives, and degreasers. Products in the office area consist of paints and household cleaning products. The warehouse area at the northern end of the Simone building complex has products such as paints, adhesives, and household cleaning products. PID readings ranged from 50 ppb to 2,266 ppb in the southern



Bayer MaterialScience LLC 125 New South Road Hicksville, New York

warehouse/office area and from 1,200 ppb to 1,909 ppb in the northern warehouse area. The highest reading in this tenant space (2,266 ppb) was in an area where painting was performed.

• *DWG*: The concrete slab in the warehouse area had some minor cracks, but was generally in good condition. The vinyl and carpet flooring in the office and retail areas were also observed to be in good condition. Products such as adhesives, paints, solvents, degreasers, and household cleaning products were found in the office and retail areas. No products were found in the warehouse area. PID readings recorded in the areas ranged from 0.0 to 128 ppb.

The analytical results for the sub-slab vapor and indoor air samples (discussed below) support a conclusion that the elevated PID readings found in each tenant area are unrelated to sub-slab conditions. PID readings obtained in the buildings, including near equipment/product containers, are presented in Appendices B and C.

#### 3.2 Sub-Slab Vapor and Indoor/Outdoor Air Analytical Results

Laboratory analytical results for the sub-slab vapor, indoor air, and outdoor air samples are presented in Table 1. The results have been validated by ARCADIS and were found to be of good quality and useable, as intended, with one minor exception. The analytical results for sub-slab vapor sample SSV-6 were either rejected or qualified during validation because the sample canister vacuum measured and recorded by the laboratory upon receipt was 0.0 in. of Hg. (i.e., analytical results reported by the laboratory as non-detect were rejected, and the detected results were qualified as "estimated"). The estimated values for sample SSV-6 indicate that the constituents were positively identified, but the concentrations could be higher. The data validation report and full laboratory analytical data report, with NYSDEC Analytical Services Protocol (ASP) Category B data deliverable-type package, are included on the attached CD.

The sub-slab soil vapor, indoor air, and outdoor air analytical results are summarized as follows:

 A total of 21 different VOCs were detected in the sub-slab vapor and indoor air samples at concentrations above laboratory detection limits. Of these constituents, 13 were also detected in ambient (outdoor) air samples.

## Vapor Intrusion Investigation Summary Report

Bayer MaterialScience LLC 125 New South Road Hicksville, New York

- Concentrations of VOCs detected in the indoor air samples were all well-below the available air guideline values presented in Table 3.1 of the NYSDOH VI Guidance. Only three VOCs were detected in the indoor air samples at concentrations greater than the 90th percentile of background indoor air values observed by the USEPA in a study of public and commercial office buildings, per USEPA database information referenced in Section 3.2.4 of the NYSDOH VI Guidance. These three VOCs include:
  - Ethylbenzene at a concentration of 11 micrograms per cubic meter (µg/m<sup>3</sup>) in sample IA-2.
  - Methylene chloride at concentrations of 24 μg/ m<sup>3</sup>, 30 μg/ m<sup>3</sup>, and 22 μg/ m<sup>3</sup> in samples IA-3, IA-7, and IA-8, respectfully.
  - Toluene at concentrations of 380 μg/ m<sup>3</sup>, 270 μg/ m<sup>3</sup>, and 56 μg/ m<sup>3</sup> in samples IA-3, IA-5, and IA-6, respectfully.

In all cases, the methylene chloride and toluene concentrations identified in indoor air were greater than those identified in sub-slab vapor and outdoor air, suggesting that the source of these constituents is inside the building. The ethylbenzene identified in indoor air at location IA-2 may be related to conditions inside and/or below the building.

Two VOCs were identified in the sub-slab vapor samples at concentrations exceeding the corresponding NYSDOH air guideline values. PCE was detected at a concentration greater than the 100  $\mu$ g/m<sup>3</sup> NYSDOH air guideline value in each sub-slab vapor sample, except sample SSV-8 (toward the north end of the Simone building complex). TCE was detected at a concentration greater than the 5  $\mu$ g/m<sup>3</sup> NYSDOH air guideline value in four of the eight sub-slab vapor samples (samples SSV-4, SSV-6, SSV-7, and SSV-8). Detection limits for other VOC constituents were somewhat elevated at all sampling locations except the three northernmost locations. The elevated detection limits were due to the high PCE and TCE concentrations in the samples and limitations in the laboratory analysis. Based on comparison of the sub-slab vapor and indoor air sampling results for PCE and TCE, it is apparent that the 6-inch to 10-inch thick concrete floor slab at the Simone building complex provides significant attenuation to subsurface vapors, and vapor intrusion into the building is minimal or non-existent. The data indicate that the floor cracks and utility pipe penetrations through the floor slab are not a factor in indoor air conditions.

## Vapor Intrusion Investigation Summary Report

Bayer MaterialScience LLC 125 New South Road Hicksville, New York

#### 3.3 Findings Compared to the NYSDOH Soil Vapor/Indoor Air Decision Matrices

The TCE and PCE concentrations identified in the sub-slab vapor and indoor air samples were compared to the Soil Vapor/Indoor Air Matrices ("decision matrices") presented in the NYSDOH VI Guidance. As indicated in Subsection 3.4.1 of the NYSDOH VI Guidance, the decision matrices were developed to "provide guidance on a case-by-case basis about actions that should be taken to address current and potential exposures related to soil vapor intrusion." As indicated in Subsection 3.4.2 of the NYSDOH VI Guidance, the decision matrices are "generic" and "it may be appropriate to modify a recommended action to accommodate building-specific conditions" and other factors such as current land use or environmental conditions. The comparisons and interpretations made from use of the matrices are as follows:

- Based on the relative concentrations of TCE in the sub-slab vapor samples and the indoor air samples, Soil Vapor/Indoor Air Matrix 1 suggests potential responses to the collected data ranging from "No Further Action" to "Monitor". Considering site circumstances, TCE was not significantly detected in the indoor air samples, and the concentrations detected in the sub-slab vapor samples are not expected to significantly affect indoor air quality. Furthermore, based on the PID readings obtained inside the tenant spaces, the low TCE concentrations in indoor air samples may primarily be a result of tenant operations as opposed to sub-slab conditions. This information suggests that "no additional actions are needed to address human exposures" (this is the definition of "No Further Action" in both NYSDOH matrices).
- Based on the relative concentrations of PCE in the sub-slab vapor samples and the indoor air samples, Soil Vapor/Indoor Air Matrix 2 suggests potential responses to the collected data ranging from "No Further Action" to "Mitigate". The NYSDOH's definition of "Mitigate" states that "Mitigation is needed to minimize current or potential exposures associated with soil vapor intrusion." The decision matrix identifies potential mitigation methods (sealing preferential pathways, depressurizing the sub-slab, and pressurizing the building interior), but indicates that the "type, or combination of types, of mitigation is determined on a buildingspecific basis, taking into account building construction and operating conditions." The suggested actions from Soil Vapor/Indoor Air Matrix 2 are driven primarily by PCE concentrations in sub-slab vapor, without respect to site-specific factors. However, the construction/conditions at this building (i.e., the thick concrete floor slab is in generally good condition, and floor slab penetrations are few and far between) are already effective in limiting or preventing vapor intrusion from

## Vapor Intrusion Investigation Summary Report

Bayer MaterialScience LLC 125 New South Road Hicksville, New York

occurring. Furthermore, based on the data collected during the VI investigation, the highest PCE concentration detected in indoor air is 15 times lower than the 100  $\mu$ g/m<sup>3</sup> NYSDOH air guideline value. Based on the PID readings obtained inside the tenant spaces, these low PCE concentrations in indoor air samples may primarily be a result of tenant operations as opposed to sub-slab conditions. Considering the above information, the sub-slab PCE concentrations are not expected to significantly affect indoor air quality. Accordingly, no additional actions are needed at this time to address PCE concentrations sub-slab or indoors.

## Vapor Intrusion Investigation Summary Report

Bayer MaterialScience LLC 125 New South Road Hicksville, New York

### 4. Conclusions and Recommendations

The validated analytical results for the sub-slab vapor and indoor/outdoor air samples support the conclusions that: (1) there is no confirmed pathway for soil vapor intrusion into the Simone building complex; and (2) the VOCs detected in the indoor samples appear to be tenant-operationally-related and are less than the NYSDOH air guideline values. The low concentrations of VOCs identified in indoor air are primarily related to activities and operational use of various products within the tenant facilities and not as a result of vapor intrusion. The VOC levels identified in indoor air within the buildings are within guidelines for residential settings. Given the acceptable levels identified in indoor air, the significant attenuation provided by the thick concrete floor slab that is in generally good condition, and the commercial occupational uses of the building, Bayer proposes no further action for offsite soil vapor.

Table

### SUB-SLAB SOIL VAPOR, INDOOR AIR, AND OUTDOOR AMBIENT AIR ANALYTICAL RESULTS FOR DETECTED VOCs (µg/m<sup>3</sup>)

### VAPOR INTRUSION INVESTIGATION SUMMARY BAYER MATERIALSCIENCE LLC 125 NEW SOUTH ROAD HICKSVILLE, NEW YORK

	USEPA 90th	Sub-Slab Soil Vapor and Indoor Air Analytical Results								
	Percentile	NYSDOH Air								
Location ID:	Background	Guideline	IA-1	SSV-1	IA-2	SSV-2	IA-3	SSV-3	IA-4	SSV-4
Date Collected:	Levels Indoor	Value	04/28/11	04/28/11	04/28/11	04/28/11	04/27/11	04/27/11	04/27/11	04/27/11
VOCs	VOCs									
1,2-Dibromoethane	1.5		<0.31	<1.5	<0.31	<110 [<120]	<0.31	<240	<0.31	<38
1,2-Dichlorotetrafluoroethane			<0.28	<1.4	<0.28	<100 [<110]	<0.28	<210	<0.28	<35
3-Chloropropene			<0.25	<1.6	<0.25	<120 [<120]	<0.25	<240	<0.25	<39
Bromoethene			<0.35	<0.87	<0.35	<65 [<70]	<0.35	<130	<0.35	<22
Methyl tert-butyl ether	11.5		<0.14	<0.72	<0.14	<54 [<57]	<0.14	<110	<0.14	<18
1,1,2,2-Tetrachloroethane			<0.27	<1.4	<0.27	<100 [<110]	<0.27	<210	<0.27	<34
1,2-Dichloroethene (total)			<0.16	<0.79	<0.16	<59 [<63]	<0.16	<120	<0.16	<20
1,1,2-Trichloroethane	1.5		<0.22	<1.1	<0.22	<81 [<87]	<0.22	<170	<0.22	<27
1,3,5,- Trimethylbenzene	3.7		<0.39	<0.98	0.87	<73 [<78]	0.70	<150	<0.39	<24
1,1-Dichloroethane	0.7		<0.16	<0.81	<0.16	<60 [<64]	<0.16	<120	<0.16	<20
1,3-Butadiene	3		<0.18	<0.44	0.29	<33 [<35]	0.28	<68	<0.18	<11
1,1-Dichloroethene	1.4		<0.16	<0.79	<0.16	<59 [<63]	<0.16	<120	<0.16	<20
2,2,4-Trimethylpentane			0.35	<0.93	0.44	<69 [<74]	<0.19	<140	0.22	<23
1,2-Dichloroethane	0.9		<0.32	<0.81	< 0.32	<60 [<64]	<0.32	<120	<0.32	<20
4-Ethyltoluene	3.6		0.25	<0.98	0.74	<73 [<78]	0.87	<150	<0.20	<24
1,2-Dichloropropane	1.6		<0.37	<0.92	<0.37	<69 [<74]	< 0.37	<140	<0.37	<23
Cyclohexane			0.48	<0.69	0.47	<51 [<55]	18 D	<110	0.42	<17
Dichlorodifluoromethane	16.5		2.1	3.4	2.2	<180 [<200]	2.2	<380	2.3	<61
Freon 11	18.1		15	76	6.1	<83 [<89]	1.2	<170	1.2	<28
n-Heptane			1.3	<0.82	1.3	<61 [<65]	74 D	<130	1.4	<20
n-Hexane	10.2		0.55	0.71	1.4	<52 [<56]	2.0	<110	0.72	<17
Xylene (m,p)			6.0 J	3.5	33 J	<160 [<170]	7.7 J	<330	1.5 J	<54
Bromodichloromethane			<0.27	<1.3	<0.27	<99 [<110]	<0.27	<210	<0.27	<33
Xylene (o)	7.9		2.3 J	1.1	7.3 J	<64 [<69]	1.9 J	<130	0.56 J	<22
1.1.1-Trichloroethane	20.6		<0.22	<1.1	<0.22	<81 [<87]	<0.22	<170	<0.22	<27
Bromoform			<0.41	<2.1	<0.41	<150 [<160]	<0.41	<320	<0.41	<51
Bromomethane	1.7		<0.31	<0.78	<0.31	<58 [<62]	<0.31	<120	<0.31	<19
Carbon tetrachloride	1.3		0.47	<1.3	0.39	<93 [<100]	0.45	<190	0.40	<31
Benzene	9.4		0.43	<0.64	0.71	<47 [<51]	0.53	<98	0.36	<16
Chloroethane	1.1		<0.21	<1.3	<0.21	<98 [<110]	<0.21	<200	<0.21	<33
Chloroform	1.1		<0.20	<0.98	<0.20	<72 [<78]	<0.20	<150	<0.20	<24
cis-1,2-Dichloroethene	1.9		<0.16	<0.79	<0.16	<59 [<63]	<0.16	<120	<0.16	<20
cis-1.3-Dichloropropene	2.3		<0.18	<0.91	<0.18	<67 [<72]	<0.18	<140	<0.18	<23
Dibromochloromethane			< 0.34	<1.7	< 0.34	<130 [<140]	< 0.34	<260	< 0.34	<42
Ethylbenzene	5.7		3.2 J	0.86	11 J	<64 [<69]	2.5 J	<130	0.52 J	<22
Tetrachloroethene	15.9	100	0.40	110	6.5	10.000 [10.000]	0.34	19.000	0.63	3.700
Methylene chloride	10	60	24 J	2.3	<2.8	<130 [<140]	<2.8	<270	<2.8	<43
Toluene	43		15	7.8	12	<56 [<60]	380 D	<120	4.0	<19
trans-1.2-Dichloroethene			<0.16	< 0.79	<0.16	<59 [<63]	<0.16	<120	<0.16	<20
Trichloroethene	4.2	5	0.25	1.1	0.25	<80 [<86]	<0.21	<160	<0.21	66
Vinvl chloride	1.9		<0.20	<0.51	<0.20	<38 [<41]	<0.20	<78	<0.20	<13
Xvlenes (total)	22.2		8.3 J	4.5	40 J	<64 [<69]	9.6 J	<130	2.0 J	<22
trans-1,3-Dichloropropene	1.3		<0.18	<0.91	<0.18	<67 [<72]	<0.18	<140	<0.18	<23

### SUB-SLAB SOIL VAPOR, INDOOR AIR, AND OUTDOOR AMBIENT AIR ANALYTICAL RESULTS FOR DETECTED VOCs (µg/m<sup>3</sup>)

### VAPOR INTRUSION INVESTIGATION SUMMARY BAYER MATERIALSCIENCE LLC 125 NEW SOUTH ROAD HICKSVILLE, NEW YORK

	USEPA 90th		Sub-Slab Soil Vapor and Indoor Air Analytical Results							
	Percentile	NYSDOH Air								
Location ID:	Background	Guideline	IA-5	SSV-5	IA-6	SSV-6	IA-7	SSV-7	IA-8	SSV-8
Date Collected:	Levels Indoor	Value	04/27/11	04/27/11	04/27/11	04/28/11	05/05/11	04/28/11	05/05/11	04/28/11
VOCs										
1,2-Dibromoethane	1.5		<0.31 [<0.31]	<310	<0.31	R	<0.31	<4.6	<0.31 [<0.31]	<1.5
1,2-Dichlorotetrafluoroethane			<0.28 [<0.28]	<280	<0.28	R	<0.28	<4.2	<0.28 [<0.28]	<1.4
3-Chloropropene			<0.25 [<0.25]	<310	<0.25	R	<0.25	<4.7	<0.25 [<0.25]	<1.6
Bromoethene			<0.35 [<0.35]	<170	< 0.35	R	<0.35	<2.6	<0.35 [<0.35]	<0.87
Methyl tert-butyl ether	11.5		<0.14 [<0.14]	<140	<0.14	R	<0.14	340	<0.14 [<0.14]	<0.72
1,1,2,2-Tetrachloroethane			<0.27 [<0.27]	<270	<0.27	R	<0.27	<4.1	<0.27 [<0.27]	<1.4
1,2-Dichloroethene (total)			<0.16 [<0.16]	<160	<0.16	R	<0.16	<2.4	<0.16 [<0.16]	<0.79
1,1,2-Trichloroethane	1.5		<0.22 [<0.22]	<220	<0.22	R	<0.22	<3.3	<0.22 [<0.22]	<1.1
1,3,5,- Trimethylbenzene	3.7		0.89 [0.91]	<200	< 0.39	R	<0.39	<2.9	0.79 [0.80]	<0.98
1,1-Dichloroethane	0.7		<0.16 [<0.16]	<160	<0.16	R	<0.16	<2.4	<0.16 [<0.16]	<0.81
1,3-Butadiene	3		0.20 [<0.18]	<88	<0.18	R	<0.18	<1.3	<0.18 [<0.18]	<0.44
1,1-Dichloroethene	1.4		<0.16 [<0.16]	<160	<0.16	R	<0.16	<2.4	<0.16 [<0.16]	<0.79
2,2,4-Trimethylpentane			<0.19 [<0.19]	<190	0.68	R	<0.19	<2.8	<0.19 [<0.19]	<0.93
1,2-Dichloroethane	0.9		<0.32 [<0.32]	<160	< 0.32	R	<0.32	<2.4	<0.32 [<0.32]	<0.81
4-Ethyltoluene	3.6		1.2 [1.3]	<200	0.33	R	<0.20	<2.9	0.48 [0.33]	<0.98
1,2-Dichloropropane	1.6		<0.37 [<0.37]	<180	< 0.37	R	< 0.37	<2.8	<0.37 [<0.37]	<0.92
Cyclohexane			13 [14 D]	<140	3.0	3.5 J	0.44	<2.1	2.8 [3.4]	<0.69
Dichlorodifluoromethane	16.5		2.2 [2.3]	<490	2.4	R	2.3	<7.4	2.1 [2.1]	3.2
Freon 11	18.1		1.6 [1.6]	<220	2.0	2.9 J	6.2	15	3.3 [3.5]	8.1
n-Heptane			53 D [63 D]	<160	11	3.4 J	0.44	<2.5	2.3 [2.4]	<0.82
n-Hexane	10.2		2.5 [2.3]	<140	0.92	7.8 J	<0.28	<2.1	0.54 [0.54]	<0.70
Xylene (m,p)			9.2 J [8.9 J]	<430	2.7 J	R	2.2	320	1.6 [1.4]	3.1
Bromodichloromethane			<0.27 [<0.27]	<270	<0.27	R	<0.27	<4.0	<0.27 [<0.27]	<1.3
Xylene (o)	7.9		2.2 J [2.1 J]	<170	0.87 J	R	0.69	110	0.53 [0.45]	0.98
1,1,1-Trichloroethane	20.6		<0.22 [<0.22]	<220	<0.22	17 J	<0.22	<3.3	<0.22 [<0.22]	<1.1
Bromoform			<0.41 [<0.41]	<410	<0.41	R	<0.41	<6.2	<0.41 [<0.41]	<2.1
Bromomethane	1.7		<0.31 [<0.31]	<150	<0.31	R	<0.31	<2.3	<0.31 [<0.31]	<0.78
Carbon tetrachloride	1.3		0.45 [0.46]	<250	0.42	R	0.40	<3.8	0.45 [0.40]	<1.3
Benzene	9.4		0.47 [0.45]	<130	0.47	2.6 J	0.34	<1.9	0.27 [0.26]	<0.64
Chloroethane	1.1		<0.21 [<0.21]	<260	<0.21	R	<0.21	<3.9	<0.21 [<0.21]	<1.3
Chloroform	1.1		<0.20 [<0.20]	<190	<0.20	R	<0.20	<2.9	<0.20 [<0.20]	<0.98
cis-1,2-Dichloroethene	1.9		<0.16 [<0.16]	<160	<0.16	R	<0.16	<2.4	<0.16 [<0.16]	<0.79
cis-1,3-Dichloropropene	2.3		<0.18 [<0.18]	<180	<0.18	R	<0.18	<2.7	<0.18 [<0.18]	<0.91
Dibromochloromethane			<0.34 [<0.34]	<340	< 0.34	R	< 0.34	<5.1	<0.34 [<0.34]	<1.7
Ethylbenzene	5.7		3.0 J [3.0 J]	<170	0.89 J	R	0.66	130	0.51 [0.45]	<0.87
Tetrachloroethene	15.9	100	3.1 [3.0]	32,000	3.6	350 J	0.59	340	<0.27 [<0.27]	11
Methylene chloride	10	60	<2.8 [<2.8]	<350	<2.8	R	30 D	<5.2	22 [22]	3.5
Toluene	43		270 D [380 EDJ]	<150	56 D	18 J	3.8	180	14 D [15]	15
trans-1,2-Dichloroethene			<0.16 [<0.16]	<160	<0.16	R	<0.16	<2.4	<0.16 [<0.16]	<0.79
Trichloroethene	4.2	5	<0.21 [<0.21]	<210	<0.21	56 J	<0.21	37	<0.21 <0.21	9.1
Vinyl chloride	1.9		0.44 [0.50]	<100	<0.20	R	<0.20	<1.5	<0.20 <a>[&lt;0.20]</a>	<0.51
Xylenes (total)	22.2		11 J [11 J]	<170	3.6 J	5.1 J	2.9	430	2.1 [1.8]	4.1
trans-1,3-Dichloropropene	1.3		<0.18 [<0.18]	<180	<0.18	R	<0.18	<2.7	<0.18 [<0.18]	<0.91

### SUB-SLAB SOIL VAPOR, INDOOR AIR, AND OUTDOOR AMBIENT AIR ANALYTICAL RESULTS FOR DETECTED VOCs (µg/m<sup>3</sup>)

### VAPOR INTRUSION INVESTIGATION SUMMARY BAYER MATERIALSCIENCE LLC 125 NEW SOUTH ROAD HICKSVILLE, NEW YORK

	USEPA 90th		Outdoor Ambient Air Analytical Results				
Location ID: Date Collected:	Percentile Background Levels Indoor	NYSDOH Air Guideline Value	AMBIENT(042711) 04/27/11	AMBIENT(042811) 04/28/11	AMBIENT(050511) 05/05/11		
VOCs							
1,2-Dibromoethane	1.5		<0.31	<0.31	<0.31		
1,2-Dichlorotetrafluoroethane			<0.28	<0.28	<0.28		
3-Chloropropene			<0.25	<0.25	<0.25		
Bromoethene			<0.35	<0.35	<0.35		
Methyl tert-butyl ether	11.5		<0.14	<0.14	<0.14		
1,1,2,2-Tetrachloroethane			<0.27	<0.27	<0.27		
1,2-Dichloroethene (total)			<0.16	<0.16	<0.16		
1,1,2-Trichloroethane	1.5		<0.22	<0.22	<0.22		
1,3,5,- Trimethylbenzene	3.7		<0.39	<0.39	<0.39		
1,1-Dichloroethane	0.7		<0.16	<0.16	<0.16		
1,3-Butadiene	3		<0.18	<0.18	<0.18		
1,1-Dichloroethene	1.4		<0.16	<0.16	<0.16		
2,2,4-Trimethylpentane			<0.19	<0.19	<0.19		
1,2-Dichloroethane	0.9		<0.32	<0.32	<0.32		
4-Ethyltoluene	3.6		<0.20	<0.20	<0.20		
1,2-Dichloropropane	1.6		<0.37	<0.37	<0.37		
Cyclohexane			0.17	0.16	<0.14		
Dichlorodifluoromethane	16.5		2.3	2.4	2.2		
Freon 11	18.1		1.1	1.2	1.1		
n-Heptane			0.60	0.64	<0.16		
n-Hexane	10.2		0.29	0.48	<0.28		
Xylene (m,p)			0.55 J	0.52 J	0.46		
Bromodichloromethane			<0.27	<0.27	<0.27		
Xylene (o)	7.9		0.18 J	<0.17	0.19		
1,1,1-Trichloroethane	20.6		<0.22	<0.22	<0.22		
Bromoform			<0.41	<0.41	<0.41		
Bromomethane	1.7		<0.31	<0.31	<0.31		
Carbon tetrachloride	1.3		0.48	0.48	0.44		
Benzene	9.4		0.20	0.20	0.23		
Chloroethane	1.1		<0.21	<0.21	<0.21		
Chloroform	1.1		<0.20	<0.20	<0.20		
cis-1,2-Dichloroethene	1.9		<0.16	<0.16	<0.16		
cis-1.3-Dichloropropene	2.3		<0.18	<0.18	<0.18		
Dibromochloromethane			<0.34	<0.34	<0.34		
Ethylbenzene	5.7		0.23 J	0.21 J	<0.17		
Tetrachloroethene	15.9	100	<0.27	0.32	<0.27		
Methylene chloride	10	60	<2.8	<2.8	<2.8		
Toluene	43		1.8	1.5	0.82		
trans-1.2-Dichloroethene		† †	<0.16	<0.16	<0.16		
Trichloroethene	4.2	5	<0.21	<0.21	<0.21		
Vinvl chloride	1.9		<0.20	<0.20	<0.20		
Xvlenes (total)	22.2	<u>†</u> †	0.73 J	0.66 J	0.65		
trans-1,3-Dichloropropene	1.3		<0.18	<0.18	<0.18		



#### SUB-SLAB SOIL VAPOR, INDOOR AIR, AND OUTDOOR AMBIENT AIR ANALYTICAL RESULTS FOR DETECTED VOCs (µg/m3)

### VAPOR INTRUSION INVESTIGATION SUMMARY BAYER MATERIALSCIENCE LLC 125 NEW SOUTH ROAD HICKSVILLE, NEW YORK

### Notes:

- 1. Samples were collected by ARCADIS on the dates indicated.
- Samples were analyzed by TestAmerica, Inc. of Burlington, Vermont using United States Environmental Protection Agency (USEPA) Compendium Method TO-15 (soil vapor and sub-slab soil vapor samples) and USEPA Low-Level Compendium Method TO-15 (indoor air and ambient air samples) for volatile organic compounds (VOCs).
- 3. Sample designations indicate the following:
  - SSV = sub-slab soil vapor sample.
  - IA = indoor air sample.
  - AA = ambient (outdoor) air sample.
- 4. Concentrations for VOC constituents are reported in micrograms per cubic meter (µg/m<sup>3</sup>).
- 5. < = The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
- 6. -- = No Available Standard.
- 7. D = Concentration is based on a diluted sample analysis.
- 8. J = The associated numerical value is an estimated concentration.
- 9. R = The sample results are rejected.
- 10. Field duplicate sample results are presented in brackets.
- 11. USEPA 90th Percentile Background Indoor Air Levels are the 90th percentile of background indoor air values observed by the United States Environmental Protection Agency (USEPA) in a study of public and commercial office buildings, per USEPA database information referenced in Section 3.2.4 of the "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" (NYSDOH, October 2006) (NYSDOH SVI Guidance Document).
- 12. NYSDOH Air Guideline Values are from Table 3.1 of the NYSDOH SVI Guidance Document.
- 13. Shading indicates an exceedence of the NYSDOH Air Guideline Value.
- 14. Bold font indicates an exceedence of the USEPA 90th Percentile Background Indoor Air Value.
- 15. The results have been validated.

Figure



		4 77/2011 3 21	***
BAYER MATERIALSCIENCE LLC 125 NEW SOUTH ROAD HICKSVILLE, NEW YORK VAPOR INTRUSION INVESTIGATION SUB-SLAB VAPOR AND INDOOR AIR SAMPLING RESULTS FOR PCE & TCE (µg/m³) FIGURE	<ul> <li>STALE GEOGRAPHIC INFORMATION STSTEMS (NTSGS) DATABASE. PHOTO DATE: 2007.</li> <li>SAMPLES WERE ANALYZED BY TESTAMERICA LABORATORIES, INC. OF BURLINGTON, VERMONT.</li> <li>SAMPLE COLLECTION/ANALYSIS PERFORMED USING UNITED STATES ENVEROMENTAL ROTOCTON ACENCY (USERA) MUTHOD TO-15 FOR INDOOR AND AMBIENT AIR SAMPLES.</li> <li>CONCENTRATIONS REPORTED IN MICROGRAMS PER CUBIC METER (Jag/m*).</li> <li>ABORATORY ANALYTICAL DETECTED ABOVE THE REPORTED LABORATORY ANALYTICAL DETECTION LIMIT.</li> <li>FIELD DUPLICATE SAMPLE RESULTS ARE PRESENTED IN BRACKETS.</li> <li>J = THE ASSOCIATED NUMERICAL VALUE IS AN ESTIMATED CONCENTRATION.</li> <li>ANALYTICAL RESULTS HAVE BEEN VALIDATED.</li> <li>ANALYTICAL RESULTS HAVE BEEN VALIDATED.</li> </ul>	<ul> <li>NOTES:</li> <li>1. BASE MAP ADAPTED FROM A DRAWING ENTITLED "AREA OF CONCERN SCALE OF 17=60", DATED 2/14/03.</li> <li>2. EXISTING SAMPLING LOCATIONS SG-20, SG-21 AND AMBIENT AR SAMELING LOCATIONS ARE APPROXIMATE BASED ON FIELD MEASUREMENTS.</li> <li>3. THE OTHER EXISTING SAMPLING LOCATIONS SHOWN ON THIS FIGURE WERE SURVEYED BY ARCADIS BETWEEN FEBRUARY 2004 AND JUNE 2008.</li> <li>4. VOC = VOLATLE ORGANIC COMPOUND.</li> <li>5. TAGM 4046 = NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION TECHNICAL AND ADMINISTRATIVE GUIDARE MEMORANDUM (TAGM) TITLED 'DETERMINATION OF SOUL CLEANUP OBJECTIVES AND CLEANUP LEVELS', HWR-94-4046 DATED 1994.</li> <li>6. ICM = INTERIM CORRECTIVE MEASURE.</li> <li>7. FOOTPRINT OF SINONE BUILDING COMPLEX OBTAINED FROM NEW YORK STATE FOOTPRINT OF SINONE BUILDING COMPLEX OBTAINED FROM NEW YORK</li> </ul>	LEGEND: SUB-SLAB VAPOR AND INDOOR AIR SAMPLING COCATION (APRIL 2011) PREVIOUS TEMPORARY SOIL VAPOR SAMPLING DECATION ADDIENT AIR SAMPLING LOCATION <u>COLOR - CODED VOC SOIL ANALYTICAL</u> <u>RESULTS:</u> VOC(s) FORKERLY AT A CONCENTRATION >TAGM 4046 SOIL GUIDANCE VALUE (VOC-IMPACTED SOIL WAS REMOVED IN 1999) VOC(s AT A CONCENTRATION <tagm 4046="" soil<br="">GUIDANCE VALUE ONLY ACETONE AT A CONCENTRATION &gt;TAGM SAMPLING LOCATION METER SOIL WAS REMOVED SAMPLING LOCATION METER SOIL WAS REMOVED SAMPLE NOT SUBMITED FOR VOC ANALYSIS AREA OF CONCERN MISTORIC AND CLOSED AOC SEPTIC TANK LEACHATE PIT</tagm>

Appendices

## Appendix A

Completed New York State Department of Health Indoor Air Quality Questionnaires and Building Inventory Forms

### 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 Daniel Zuck	Date/Time Prepared 04/12/2011							
Preparer's Affiliation ARCADIS	Phone No. (516) 369-2741							
Purpose of Investigation VI Investigation	Purpose of Investigation VI Investigation							
1. OCCUPANT: Allied Building Materials								
Interviewed: YN								
Last Name: NA First Name: NA								
Address: <u>1 Enterprise Drive</u> , Hicksville, NY								
County: Nassau								
Home Phone: NA Office Phone: NA								
Number of Occupants/persons at this location $20 \rightarrow 30$ Age	of Occupants NA							
2. OWNER OR LANDLORD: (Check if same as occupant)								
Interviewed: Y N								
Last Name: Mejias First Name: Eric	· · · · · · · · · · · · · · · · · · ·							
Address: 1250 Waters Place								
County: Bronx, NY								
Home Phone: (646) 772-1531 Office Phone: (718) 215-3000								
3. BUILDING CHARACTERISTICS								

Type of Building: (Circle appropriate response)

Residential Industrial School Church Commercial/Multi-use

If the property is residentia	al, type? (Circle appro	priate response) NA
Ranch Raised Ranch Cape Cod Duplex Modular	2-Family Split Level Contemporary Apartment House Log Home	3-Family Colonial Mobile Home Townhouses/Condos Other:
If multiple units, how many	?	
If the property is commerci	al, type?	
Business Type(s) Suppl	ies/Roofing	
Does it include residence	es (i.e., multi-use)? Y	/N If yes, how many? <u>NA</u>
Other characteristics:		
Number of floors 1	B	uilding age 1960's
Is the building insulated?	Y/N H	ow air tight? Tight / Average Not Tight
4. AIRFLOW		
Use air current tubes or tra	ocer smoke to evaluat	e airflow natterns and qualitatively describe:
coc un current tubes of the		e un now parterno una quantativery desernoe.
Airflow between floors		
NA		
Airflow near source		
INA		
Outdoor air infiltration		
Roll up doors / entry point	S	
Infiltration into air ducts		
Reform air only		
# **5. BASEMENT AND CONSTRUCTION CHARACTERISTICS** (Circle all that apply)

a. Above grade construction:	wood frame	concrete	stone	brick	
b. Basement type: NA	full	crawlspace	slab	other	
c. Basement floor: NA	concrete	dirt	stone	other	
d. Basement floor: NA	uncovered	covered	covered with _		
e. Concrete floor:	unsealed	sealed	sealed with		
f. Foundation walls: NA	poured	block	stone	other	
g. Foundation walls: NA	unsealed	sealed	sealed with		
h. The slab is:	wet	damp 🤇	dry	moldy	
i. The basement is: NA	finished	unfinished	partially finishe	ed	
j. Sump present?	YN				
k. Water in sump? Y(N	not applicable				
Basement (None)/Lowest level depth below NA (feet)					
Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)					
See figures					

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

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

Hot air circulation Space Heaters-Gas Electric baseboard	Heat pump Stream radiation Wood stove	Hot water baseboard Radiant floor Outdoor wood boiler	Other				
The primary type of fuel used is	:						
Natural Gas Electric Wood	Fuel Oil Propane Coal	Kerosene Solar					
Domestic hot water tank fueled by: Electric							
<b>Boiler/furnace located in:</b> B	asement Outdoors	Main Floor	Other ———				
Air conditioning:	entral Air Window unit	ts Open Windows	None				

Are there air distribution ducts present?

(Y) N – In finished area

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.

No model n	numbers, but ~7 years old @ Allied	
7. OCCUP	ANCY Full-time – 8+ hour workday to 16 double	Occasionally Seldom Almost Never
Level	General Use of Each Floor (e.g., familyro	om, bedroom, laundry, workshop, storage)
Basement	NA	
1 <sup>st</sup> Floor	Office space / storage	
2n <sup>d</sup> Floor	NA	
3r <sup>d</sup> Floor	NA	
4 <sup>th</sup> Floor	NA	
8. FACTOR a. Is there	AS THAT MAY INFLUENCE INDOOR AIR (	QUALITY Y N Loading Dock : inside forklifts & roll ups
b. Does th	e garage have a separate heating unit?	$(\mathbf{y})$ N/NA in storage area
c. Are pet stored i	roleum-powered machines or vehicles in the garage (e.g., lawnmower, atv, car)	Y N / NA Please specify Forklift/Bobcat
d. Has th	e building ever had a fire?	Y(N)When?
e. Is a ke	rosene or unvented gas space heater present?	Y(/N)Where? <u>Not to his knowledge</u>
f. Is ther	e a workshop or hobby/craft area?	Y N Where & Type?
g. Is there	smoking in the building?	Y N how frequently? <u>No office; yes loading docks</u>
h. Have cl	leaning products been used recently?	Y N When & Type?
i. Have co	smetic products been used recently?	Y / N When & Type? <u>NA</u>

j. Has painting/st	taining been done in the last 6 months	? Y NWhere & When?
k. Is there new c	arpet, drapes or other textiles?	Y N Where & When?
l. Have air fresh	eners been used recently?	Y N When & Type? <u>NA - TBD</u>
m. Is there a kit	chen exhaust fan?	Y/ N If yes, where vented?
n. Is there a bat	throom exhaust fan?	Y N If yes, where vented?
o. Is there a clothe	es dryer?	Y N f yes, is it vented outside? Y / N
p. Has there been	a pesticide application?	Y N When & Type? <u>TBD</u>
Are there odors in If yes, please desc	<b>the building?</b> Tribe: Chemical odor 1296 ppb	YN
<b>Do any of the buildi</b> (e.g., chemical manuf boiler mechanic, pes	<b>ng occupants use solvents at work?</b> facturing or laboratory, auto mechanic o ticide application, cosmetologist	Y(N) but are sold or auto body shop, painting, fuel oil delivery,
If yes, what types of	of solvents are used? See inventory sh	ieet
If yes, are their clo	thes washed at work?	YN
<b>Do any of the buildin</b> response)	ng occupants regularly use or work at	a dry-cleaning service? (Circle appropriate
Yes, use dry- Yes, use dry- at a dry-clear	-cleaning regularly (weekly)* cleaning infrequently (monthly or less) ` ning service	Yes, work Unknown
Is there a radon mit Is the system active	tigation system for the building/strue or passive? Active/Passive	cture? Y ND ate of Installation:
9. WATER AND SE	WAGE	
Water Supply:	Public Water Drilled Well Dr	iven Well Dug Well Other:
Sewage Disposal:	Public Sewer Septic Tank Le	ach Field Dry Well Other:
10. RELOCATION	INFORMATION (for oil spill reside	ntial emergency)
a. Provide reaso	ns why relocation is recommended:	
D. Residents cho	relocate to	relocate to hotel/motel
c. Responsibility	for costs associated with reimbursem	ent explained? Y / N
u. Relocation pa	chage provided and explained to re-	succes: $Y/N$

#### **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:**



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

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



### 13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: PPB RAE

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
		PLEA	SE SEE APPEI	NDIX C FOR THE PRODUCT INVENTOR	χγ	

\* 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.

#### 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 Daniel Zuck	Date/Time Prepared 04/13/2011
Preparer's Affiliation ARCADIS	Phone No. (516) 369-2741
Purpose of Investigation VI Investigation	
1. OCCUPANT: Unoccupied (Previously Coral Graphics)	
Interviewed: Y N	
Last Name: <u>NA</u> First Name: <u>NA</u>	
Address: <u>1 Enterprise Drive</u> , Hicksville, NY	
County: Nassau	
Home Phone: NA Office Phone: NA	
Number of Occupants/persons at this location <u>NA</u> Age	e of Occupants <u>NA</u>
2. OWNER OR LANDLORD: (Check if same as occupant	)
Interviewed: YN	
Last Name: Mejias First Name: Eric	2
Address: 1250 Waters Place	
County: Bronx, NY	
Home Phone: (646) 772-1531 Office Phone: (718)	215-3000
3. BUILDING CHARACTERISTICS	
Type of Building: (Circle appropriate response)	

Residential School Commercial/Multi-use Industrial Church Other:

If the property is residenti	al, type? (Circle appr	opriate response) NA
Ranch Raised Ranch Cape Cod Duplex Modular	2-Family Split Level Contemporary Apartment House Log Home	3-Family Colonial Mobile Home Townhouses/Condos Other:
If multiple units, how many	y? <u>NA</u>	
If the property is commerc	ial, type?	
Business Type(s) Com	mercial – Not occup	ied
Does it include residen	ces (i.e., multi-use)? Y	If yes, how many? <u>NA</u>
Other characteristics:		
Number of floors 1	E	Building age 1960's
Is the building insulated	? Y /N H	Iow air tight? Tight Average Not Tight
4 AIDELOW		
4. AIRELOW		to sinflow nottoms and suclitationly described
Use air current tubes or tr	acer smoke to evalua	te armow patterns and quantatively describe:
Airflow between floors		
NA		
Airflow near source		
From roll up doors & entr	ry points	
Outdoor air infiltration		
Slight		
Infiltration into air ducts		
No air ducts		

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

a. Above grade construction:	wood frame	concrete	stone	brick
b. Basement type: NA	full	crawlspace	slab	other
c. Basement slab: NA	concrete	dirt	stone	other
d. Basement floor: NA	uncovered	covered	covered with	
e. Concrete floor:	unsealed	sealed	sealed with	
f. Foundation walls: NA	poured	block	stone	other
g. Foundation walls: NA	unsealed	sealed	sealed with	
h. The slab is:	wet	damp 🤇	dry	moldy
i. The basement is: NA	finished	unfinished	partially finish	led
j. Sump present?	YN			
k. Water in sump? Y / N	not applicable	)		
Basement/Lowest level depth below g	grade: <u>NA</u>	_(feet)		

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

See map

\*Area occupied is approximately 10,000 square feet (sf)

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

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

Hot air circulation Space Heaters Electric baseboard	Heat pu Stream Wood	ump radiation stove	Hot water baseboard Radiant floor	Other
The primary type of fuel use	d is:	510 10		
Natural Gas Electric Wood	Fuel O Propar Coal	il ne	Kerosene Solar	
Domestic hot water tank fuele	ed by: Yes			
Boiler/furnace located in:	Basement	Outdoors	Main Floor	Other <u>NA</u>
Air conditioning:	Central Air	Window unit	s Open Windows	None

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

Y (N

### 7. OCCUPANCY

Is basement/lo	west level occupied?	Full-time	Occasionally	Seldom	(Almost Never)
Level	General Use of Eac	<u>h Floor (e.g.</u>	, familyroom, b	oedroom, laundry, y	workshop, storage)
Basement	NA				_
1 <sup>st</sup> Floor	Storage				_
2n <sup>d</sup> Floor	NA				_
3r <sup>d</sup> Floor	NA				_
4 <sup>th</sup> Floor	NA				

### 8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage?	Y N: (Loading Dock)
b. Does the garage have a separate heating unit?	Y/N/NA
c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car)	YNNA Please specify
d. Has the building ever had a fire?	Y/ N When?
e. Is a kerosene or unvented gas space heater present?	Y(/ N)Where?
f. Is there a workshop or hobby/craft area?	Y N Where & Type?
g. Is there smoking in the building?	Y N bow frequently?
h. Have cleaning products been used recently?	Y N When & Type?
i. Have cosmetic products been used recently?	Y N When & Type?

• • • • • •		W WI O WI O Deinted floors (malls 2 to
j. Has painting/s	staining been done in the last 6 months?	Y/N Where & When? Painted floors/walls 2 to months
k. Is there new o	carpet, drapes or other textiles?	Y N Where & When?
l. Have air fres	heners been used recently?	Y N When & Type?
m. Is there a ki	tchen exhaust fan?	Y N f yes, where vented?
n. Is there a ba	throom exhaust fan?	Y N If yes, where vented?
o. Is there a cloth	es dryer?	Y(N) f yes, is it vented outside? Y / N
p. Has there been	a pesticide application?	Y N When & Type?
<b>Are there odors i</b> If yes, please des	<b>n the building?</b> cribe: Paint odor ppb rate 1695	YN
<b>Do any of the build</b> (e.g., chemical manu boiler mechanic, per	ing occupants use solvents at work? facturing or laboratory, auto mechanic or sticide application, cosmetologist	Y(N) auto body shop, painting, fuel oil delivery,
If yes, what types	of solvents are used? NA	
If yes, are their clo	othes washed at work?	YN
<b>Do any of the buildi</b> response)	ng occupants regularly use or work at a	dry-cleaning service? (Circle appropriate
Yes, use dry Yes, use dry at a dry-clea	v-cleaning regularly (weekly)* -cleaning infrequently (monthly or less) Ye ming service	es, work Unknown
Is there a radon mi Is the system active	itigation system for the building/struct or passive? Active/Passive	ure? Y ND ate of Installation:
9. WATER AND SH	EWAGE	
Water Supply:	Public Water Drilled Well Driv	en Well Dug Well Other:
Sewage Disposal:	Public Sewer Septic Tank Lea	ch Field Dry Well Other:
10. RELOCATION	N INFORMATION (for oil spill resident	tial emergency)
a. Provide reaso	ons why relocation is recommended:	
b. Residents c	hoose to: remain in home relocate to f	riends/family relocate to hotel/motel
c. Responsibili	ty for costs associated with reimbursem	ent explained? Y / N
d. Relocation	package provided and explained to re	sidents? 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:



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

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



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

Make & Model of field instrument used: PPB RAE

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
	PLEASE	SEE API	PENDIX C FOR	THE PRODUCT INVENTORY		

\* 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.

#### 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 Pat Prezorski	Date/Time Prepared 04/19/2011; 1500
Preparer's Affiliation ARCADIS	Phone No. (516) 369-2741
Purpose of Investigation VI Investigation	
1. OCCUPANT: DWG Distribution	
Interviewed Y N	
Last Name: Visone First Name	: Sal
Address: <u>1 Enterprise Drive, Hicksville, NY</u>	
County: <u>Nassau</u>	
Home Phone: <u>NA</u> Office Phone: (5)	516) 933-4900 ext 102
Number of Occupants/persons at this location	Age of Occupants
2. OWNER OR LANDLORD: (Check if same as occu	pant)
Interviewed: YN	
Last Name: Mejias First Name	: Eric
Address: 1250 Waters Place	
County: Bronx, NY	
Home Phone: (646) 772-1531 Office Phone: (	718) 215-3000
3. BUILDING CHARACTERISTICS	
Type of Building: (Circle appropriate response)	

Residential School Commercial/Multi-use Industrial Church Other:

If the property is resident	ial, type? (Circle appropri	ate response)
Ranch Raised Ranch Cape Cod Duplex Modular	2-Family Split Level Contemporary Apartment House Log Home	3-Family Colonial Mobile Home Townhouses/Condos Other:
If multiple units, how man	y? <u>NA</u>	
If the property is commer	cial, type?	
Business Type(s) DW	G Distribution	
Does it include residen	nces (i.e., multi-use)? Y	If yes, how many?
Other characteristics:		
Number of floors 1	Build	ling age <u>1960's</u>
Is the building insulated	How	air tight? Tight Average Not Tight – Not known by Sal
4. AIRFLOW		
Use air current tubes or t	racer smoke to evaluate a	irflow patterns and qualitatively describe:
Airflow between floors NA		
Airflow near source NA		
Outdoor air infiltration Doors / roll ups		
Infiltration into air ducts NA		

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

a. Above grade construction:	wood frame	concrete	stone	Brick – No Basement
b. Basement type: NA	full	crawlspace	slab	other
c. Basement floor: NA	concrete	dirt	stone	other
d. Basement floor: NA	uncovered	covered	covered with _	
e. Concrete floor:	unsealed	sealed	sealed with N	A
f. Foundation walls: NA	poured	block	stone	other
g. Foundation walls: NA	unsealed	sealed	sealed with	
h. The slab is:	wet	damp	dry	moldy
i. The basement is: NA	finished	unfinished	partially finishe	ed
j. Sump present?	YN			
k. Water in sump? Y N	not applicable	1		
Basement/Lowest level depth below g	grade: NA	_(feet)		
Identify potential soil vapor entry po	oints and approx	ximate size (e.g.,	cracks, utility p	ports, drains)

Cracks & joints; See photos/figures

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

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

Hot air circulation Space Heaters Electric baseboard	Heat pump Stream radiation Wood stove	Hot water baseboard Radiant floor Outdoor wood boiler	Other
The primary type of fuel used is:			
Natural Gas Electric Wood	Fuel Oil Propane Coal	Kerosene Solar	
Domestic hot water tank fueled by: $\underline{N}$	atural Gas / Electric		
Boiler/furnace located in: Baseme	ent Outdoors	Main Floor – total of 3	Other ———
Air conditioning: Central Air - HV roof; hoses to in air vents	VAC on Window units of terior	Open Windows	None

Are there air distribution ducts present?

(Y) N – Ceiling within each room

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.

7. OCCUPA	ANCY – No Basement		
ls basement/	/lowest level occupied? Full-time 8 -10 ho	urs Seldom	Almost Never
Level	General Use of Each Floor (e.g., familyroo	om, bedroom, laundry, v	vorkshop, storage)
Basement	NA		-
1 <sup>st</sup> Floor	Office space, customer showroom, wareho	ouse	-
2n <sup>d</sup> Floor			-
3r <sup>d</sup> Floor	NA		-
4 <sup>th</sup> Floor	NA		-
8. FACTOR	S THAT MAY INFLUENCE INDOOR AIR Q		
a. Is there	an attached garage?	Y N But ha	as loading dock
b. Does the	e garage have a separate heating unit?	Y / N / NA - I	But storage area does
c. Are peti stored i	roleum-powered machines or vehicles n the garage (e.g., lawnmower, atv, car)	YNNA Please specify	
d. Has the	e building ever had a fire?	Y N When?	
e. Is a ker	rosene or unvented gas space heater present?	Y N Where	?
f. Is ther	e a workshop or hobby/craft area?	Where & Type	?
g. Is there	smoking in the building?	Y N How frequently	/?
h. Have cl	eaning products been used recently?	Y N When & Type?	Floors every 2-weeks -
i. Have cos	smetic products been used recently?	Y N When & Type?	outside person hired

j. Has painting/s	taining been done in the last 6 months?	$\mathbf{Y}$ N Where	& When?	4 months ago & fresh paint every 3 months for touchups
k. Is there new o	carpet, drapes or other textiles?	Y N Where	& When?	
l. Have air fresl	neners been used recently?	Y N When	& Type?	
m. Is there a kit	tchen exhaust fan?	YN f yes,	where vent	ed?
n. Is there a ba	throom exhaust fan?	(Y)N If yes,	where vent	ed?
o. Is there a cloth	es dryer?	Y $N$ f yes,	is it vented	outside? Y / N
p. Has there been	a pesticide application?	YNWhen	& Type?	
<b>Are there odors in</b> If yes, please desc	n the building? cribe:	YN		
<b>Do any of the buildi</b> (e.g., chemical manu boiler mechanic, pes	<b>ng occupants use solvents at work?</b> facturing or laboratory, auto mechanic o ticide application, cosmetologist	YN r auto body shop, j	painting, fue	el oil delivery,
If yes, what types	of solvents are used?			
If yes, are their clo	othes washed at work?	YN		
<b>Do any of the buildi</b> response)	ng occupants regularly use or work at a	a dry-cleaning serv	v <b>ice?</b> (Circle	e appropriate
Yes, use dry Yes, use dry at a dry-clea	-cleaning regularly (weekly)* -cleaning infrequently (monthly or less) Y ning service	Zes, work Unkn	Not comme own	ercially but individuals may
Is there a radon mi Is the system active	tigation system for the building/struc or passive? Active/Passive	ture? Y NDate	of Installati	on:
9. WATER AND SE	CWAGE			
Water Supply:	Public Water Drilled Well Dri	ven Well Dug	Well	Other:
Sewage Disposal:	Public Sewer Septic Tank Le	ach Field Dry V	Vell	Other:
10. RELOCATION	INFORMATION (for oil spill resider	ntial emergency)		
a. Provide reaso	ons why relocation is recommended:			
b. Residents cl	hoose to: remain in home relocate to	friends/family	relocate	to hotel/motel
c. Responsibilit	ty for costs associated with reimburser	nent explained?	Y / N	

d. Relocation package provided and explained to residents?  $Y\/\ N$ 

#### **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:**



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

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



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

Make & Model of field instrument used: PPB RAE

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
	PLEASE	SEE AP	PENDIX C FOR	THE PRODUCT INVENTORY		
						<u> </u>

\* 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.

#### 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 Daniel Zuck	_Date/Time Prepared 04/18/2011; 1630
Preparer's Affiliation ARCADIS	Phone No. (516) 369-2741
Purpose of Investigation VI Investigation	
1. OCCUPANT: Empire Bakery Equipment	
Interviewed: YN	
Last Name: Zarate First Name: Clau	ıdio
Address: <u>1 Enterprise Drive, Suite C, Hicksville, NY</u>	
County: Nassau	
Home Phone: (516) 330-3664 Office Phone: (516) 6	581-1500
Number of Occupants/persons at this location $10$ Age	of Occupants 35 to 60
2. OWNER OR LANDLORD: (Check if same as occupant	)
Interviewed: Y N	
Last Name: Mejias First Name: Eric	
Address: 1250 Waters Place	
County: Bronx, NY	
Home Phone: (646) 772-1531 Office Phone: (718)	215-3000
3. BUILDING CHARACTERISTICS	

Type of Building: (Circle appropriate response)

Residential Industrial

School Church Commercial/Multi-use

If the property is residential	l, type? (Circle approp	priate 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?	NA	
If the property is commercia	l, type?	
Business Type(s) Distrib	oute Bakery Equipm	ent
Does it include residence	es (i.e., multi-use)? Y	N If yes, how many?
Other characteristics:		
Number of floors <u>1</u>	Βι	uilding age 1960's
Is the building insulated:	Y/N Ho	ow air tight? Tight Average Not Tight
4. AIRFLOW		
Use air current tubes or trad	cer smoke to evaluat	airflow natterns and qualitatively describe.
		e un now patterns and quantativery desernse.
Airflow between floors		
NA		
Airflow near source		
NA		
Outdoor air infiltration		
From roll up doors / exits		
Infiltration into air ducts		
None / NA		

2

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

a. Above grade construction:	wood frame	concrete	stone	brick			
b. Basement type: NA	full	crawlspace	slab	other			
c. Basement floor: NA	concrete	dirt	stone	other			
d. Basement floor: NA	uncovered	covered	covered with				
e. Concrete floor:	unsealed	sealed	sealed with				
f. Foundation walls: NA	poured	block	stone	other			
g. Foundation walls: NA	unsealed	sealed	sealed with				
h. The slab is:	wet	damp	dry	moldy			
i. The basement is: NA	finished	unfinished	partially finisl	hed			
j. Sump present?	YN						
k. Water in sump? Y (N	not applicable	>					
Basement/Lowest level depth below grade: <u>NA</u> (feet)							
Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)							

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

See figures

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

Hot air circulation	Heat pump Stream radiation	Hot water baseboard Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	Other
The primary type of fuel u	used is:		
Natural Gas Electric Wood	Fuel Oil Propane Coal	Kerosene Solar	
Domestic hot water tank fu	eled by: <u>Above or at location</u>		
Boiler/furnace located in:	Basement Outdoors	Main Floor	Other ———
Air conditioning:	Central Air Window units	Open Windows	None

(Y) N

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

NA, there an	re return vents	
7. OCCUPA	ANCY	
Is basement/	lowest level occupied? Full-time 8 hours	Seldom Almost Never
Level	General Use of Each Floor (e.g., familyroo	om, bedroom, laundry, workshop, storage)
Basement	NA	
1 <sup>st</sup> Floor	Only work hours	
2n <sup>d</sup> Floor	NA	
3r <sup>d</sup> Floor	NA	
4 <sup>th</sup> Floor	NA	
8. FACTOR	S THAT MAY INFLUENCE INDOOR AIR Q	
a. Is there	an attached garage?	Y N Loading Dock
b. Does the	e garage have a separate heating unit?	YNNA
c. Are petr stored in	<b>roleum-powered machines or vehicles</b> <b>n the garage</b> (e.g., lawnmower, atv, car)	YNNA Please specify
d. Has the	e building ever had a fire?	Y(N)When?
e. Is a ker	osene or unvented gas space heater present?	Y(/ N)Where?
f. Is there	e a workshop or hobby/craft area?	Y N Where & Type?
g. Is there	smoking in the building?	Y N How frequently?
h. Have cl	eaning products been used recently?	Y N When & Type?
i. Have cos	smetic products been used recently?	Y / N When & Type? <u>NA</u>

j. Has painting/s	taining been done in the last 6 month	s? Y N Where & When?
k. Is there new o	carpet, drapes or other textiles?	Y N Where & When?
l. Have air fresl	heners been used recently?	Y N When & Type?
m. Is there a kit	tchen exhaust fan?	Y/ N If yes, where vented?
n. Is there a ba	throom exhaust fan?	Y N If yes, where vented?
o. Is there a clothe	es dryer?	YN f yes, is it vented outside? Y / N
p. Has there been	a pesticide application?	YN When & Type? past month
<b>Are there odors in</b> If yes, please dese	<b>n the building?</b> cribe: mildew / paint	YN
<b>Do any of the buildi</b> (e.g., chemical manu boiler mechanic, pes	<b>ing occupants use solvents at work?</b> facturing or laboratory, auto mechanic sticide application, cosmetologist	(Y)N or auto body shop, painting, fuel oil delivery,
If yes, what types	of solvents are used? See photos & i	nventory with MSDS
If yes, are their clo	othes washed at work?	YN
<b>Do any of the buildi</b> response)	ng occupants regularly use or work a	t a dry-cleaning service? (Circle appropriate
Yes, use dry Yes, use dry at a dry-clea	-cleaning regularly (weekly)* -cleaning infrequently (monthly or less) ning service	No Yes - Personally Yes, work Unknown
Is there a radon mi Is the system active	tigation system for the building/str or passive? Active/Passive	ucture? Y/N Date of Installation: <u>1 / 6 month</u>
9. WATER AND SE	CWAGE	
Water Supply:	Public Water Drilled Well D	Driven Well Dug Well Other:
Sewage Disposal:	Public Sewer Septic Tank I	Leach Field Dry Well Other:
10. RELOCATION	I INFORMATION (for oil spill resid	lential emergency)
a. Provide reaso	ons why relocation is recommended:	
b. Residents cl	hoose to: remain in home relocate t	to friends/family relocate to hotel/motel
c. Responsibilit	ty for costs associated with reimburs	ement explained? Y / N
d. Relocation p	package provided and explained to	residents? 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:**



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

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



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

Make & Model of field instrument used: PPB RAE

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

	 Condition	Chemical Ingredients	Reading (units)	Photo Y / N
PLEASE SEE AP	FOR THE PRO	DUCT INVENTORY		

\* 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.

#### 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 Daniel Zuck	_Date/Time Prepared 04/20/2011
Preparer's Affiliation ARCADIS	Phone No. (516) 369-2741
Purpose of Investigation VI Investigation	
1. OCCUPANT: Mash City Business Systems	
Interviewed: YN	
Last Name: Giordan First Name: John	1
Address: <u>1 Enterprise Drive, Suite E, Hicksville, NY</u>	
County: Nassau	
Home Phone: (516) 647-0075 Office Phone: (516)	437-2062
Number of Occupants/persons at this location $25$ Age	of Occupants 22 to 70+
2. OWNER OR LANDLORD: (Check if same as occupant	)
Interviewed: (Y) N	
Last Name: Mejias First Name: Eric	
Address: 1250 Waters Place	
County: Bronx, NY	
Home Phone: (646) 772-1531 Office Phone: (718)	215-3000
3. BUILDING CHARACTERISTICS	

Type of Building: (Circle appropriate response)

<u>Residentia</u>l Industrial

School Church Commercial/Multi-use Other:

If the property is residentia	al, type? (Circle appropr	iate 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 commerc	ial, type?	
Business Type(s) Printe	er / Copier Repair	
Does it include resident	ces (i.e., multi-use)? Y /	N If yes, how many? <u>NA</u>
Other characteristics:		
Number of floors 1	_ Buil	ding age <u>1960's</u>
Is the building insulated?	Y N How	v air tight? Tight Average Not Tight
4. AIRFLOW		
Use air current tubes or tra	acer smoke to evaluate a	airflow patterns and qualitatively describe:
Airflow between floors		
NA		
Airflow near source		
NA		

\_

Outdoor air infiltration From roll up doors / entry points

Infiltration into air ducts

NA, insulated

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

a. Above grade construction:	wood frame	concrete	stone	brick
b. Basement type: NA	full	crawlspace	slab	other
c. Basement floor: NA	concrete	dirt	stone	other
d. Basement floor: NA	uncovered	covered	covered with _	
e. Concrete floor:	unsealed	sealed	sealed with	
f. Foundation walls: NA	poured	block	stone	other
g. Foundation walls: NA	unsealed	sealed	sealed with	
h. The slab is:	wet	damp	dry	moldy
i. The basement is: NA	finished	unfinished	partially finish	ed
j. Sump present?	YN			
k. Water in sump? Y / N	not applicable	>		
Basement/Lowest level depth below g	grade: <u>NA</u>	_(feet)		
Identify potential soil vapor entry po	oints and appro	oximate size (e.g.	., cracks, utility <sub>l</sub>	ports, drains)
Cracks if applicable, see photos				

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

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

Hot air circulation Space Heaters Electric baseboard	Heat pump Stream radiation Wood stove	Hot water baseboard Radiant floor Outdoor wood boiler	Other
The primary type of fuel used is:			
Natural Gas Electric Wood	Fuel Oil Propane Coal	Kerosene Solar	
Domestic hot water tank fueled by	y: Electric		
<b>Boiler/furnace located in:</b> Ba	asement Outdoors – Above Roof	Main Floor	Other —
Air conditioning:	entral Air – Window units	s Open Windows	None

Y/N

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

Vents and R	Return available only to view		
7. OCCUPA	ANCY Occasio 8 – 10 h Jowest level occupied? Full-time Admin	nally ours & Service Seldom	Almost Never
Level	General Use of Each Floor (e.g., familyrod	om, bedroom, laundry, wo	orkshop, storage)
Basement	NA		
1 <sup>st</sup> Floor	Office Area / Maintenance shed		
2n <sup>d</sup> Floor	NA		
3r <sup>d</sup> Floor	NA		
4 <sup>th</sup> Floor	NA		
8. FACTOR a. Is there	S THAT MAY INFLUENCE INDOOR AIR Q an attached garage?	<b>QUALITY</b> Y N (Loading	Dock / Door)
b. Does the	e garage have a separate heating unit?	Y N/NA (Los	ading Dock & Office Area)
c. Are petr stored in	roleum-powered machines or vehicles n the garage (e.g., lawnmower, atv, car)	YNNA Please specify_	
d. Has the	e building ever had a fire?	Y/NWhen?	
e. Is a ker	cosene or unvented gas space heater present?	Y N Where?	
f. Is there	e a workshop or hobby/craft area?	YN Where & Type?	See Figure
g. Is there	smoking in the building?	Y N How frequently?	
h. Have cl	eaning products been used recently?	Y N When & Type?	
i. Have cos	smetic products been used recently?	Y / N When & Type?	NA

j. Has painting/s		$\frown$	month
	staining been done in the last 6 months?	Y N Where & When? <u>Rebuilt 9</u>	monu
k. Is there new	carpet, drapes or other textiles?	Y N Where & When?	
l. Have air fres	heners been used recently?	Y N When & Type?	
m. Is there a ki	itchen exhaust fan?	Y / N If yes, where vented?	
n. Is there a ba	athroom exhaust fan?	Y N If yes, where vented?	
o. Is there a cloth	nes dryer?	YN f yes, is it vented outside? Y	/ N
p. Has there been	n a pesticide application?	$(Y)$ N When & Type? $\sim 1$ month a	go
<b>Are there odors</b> if If yes, please des	in the building? scribe: In maintenance area	YN	
<b>Do any of the build</b> e.g., chemical manu oiler mechanic, pe	<b>ling occupants use solvents at work?</b> ufacturing or laboratory, auto mechanic or sticide application, cosmetologist	YN auto body shop, painting, fuel oil deliver	у,
If yes, what types	of solvents are used? See inventory		
If yes, are their cl	othes washed at work?	Y(N)	
		U	
<b>Do any of the build</b> esponse) Yes, use dry Yes, use dry at a dry-clea	ing occupants regularly use or work at a y-cleaning regularly (weekly)* y-cleaning infrequently (monthly or less) Ye aning service	dry-cleaning service? (Circle appropriate *(Company no, personally y es, work No Unknown	es.)
Do any of the build esponse) Yes, use dry Yes, use dry at a dry-clea s there a radon m s the system active	ing occupants regularly use or work at a y-cleaning regularly (weekly)* y-cleaning infrequently (monthly or less) Ye aning service itigation system for the building/struct or passive? Active/Passive	dry-cleaning service? (Circle appropriate *(Company no, personally y es, work No Unknown ure? Y N ate of Installation:	es.)
Do any of the build esponse) Yes, use dry Yes, use dry at a dry-clea s there a radon m s the system active	ing occupants regularly use or work at a y-cleaning regularly (weekly)* y-cleaning infrequently (monthly or less) Ye aning service itigation system for the building/struct e or passive? Active/Passive EWAGE	dry-cleaning service? (Circle appropriate *(Company no, personally y es, work No Unknown ure? Y N ate of Installation:	es.)
Do any of the build esponse) Yes, use dry Yes, use dry at a dry-clea s there a radon m s the system active O. WATER AND SI Vater Supply:	ing occupants regularly use or work at a y-cleaning regularly (weekly)* y-cleaning infrequently (monthly or less) Ye aning service itigation system for the building/struct e or passive? Active/Passive EWAGE Public Water Drilled Well Driv	dry-cleaning service? (Circle appropriate *(Company no, personally y es, work No Unknown ure? Y N ate of Installation: en Well Dug Well Other:	es.)
Do any of the build esponse) Yes, use dry Yes, use dry at a dry-clea s there a radon m s the system active O. WATER AND SI Vater Supply: Sewage Disposal:	ing occupants regularly use or work at a y-cleaning regularly (weekly)* y-cleaning infrequently (monthly or less) Ye aning service itigation system for the building/struct e or passive? Active/Passive EWAGE EWAGE Public Water Drilled Well Driv Public Sewer Septic Tank Lea	dry-cleaning service? (Circle appropriate         *(Company no, personally y         es, work       No         Unknown         ure? Y (N) ate of Installation:         en Well       Dug Well         Other:         ch Field       Dry Well	es.)
Do any of the build esponse) Yes, use dry Yes, use dry at a dry-clea s there a radon m s the system active O. WATER AND SI Vater Supply: Sewage Disposal: 0. RELOCATION	ing occupants regularly use or work at a y-cleaning regularly (weekly)* y-cleaning infrequently (monthly or less) Ye aning service itigation system for the building/struct e or passive? Active/Passive EWAGE EWAGE EWAGE Upblic Water Drilled Well Drive Septic Tank Lea N INFORMATION (for oil spill resident	dry-cleaning service? (Circle appropriate         *(Company no, personally y         es, work       No         Unknown         ure? Y       Date of Installation:         en Well       Dug Well       Other:         ch Field       Dry Well       Other:         tial emergency)       Other:	es.)
Do any of the build esponse) Yes, use dry Yes, use dry at a dry-clea s there a radon m s the system active O. WATER AND SI Vater Supply: Sewage Disposal: 0. RELOCATION a. Provide reas	ing occupants regularly use or work at a y-cleaning regularly (weekly)* y-cleaning infrequently (monthly or less) Ye aning service itigation system for the building/struct e or passive? Active/Passive EWAGE EWAGE Public Water Drilled Well Drive Septic Tank Lea N INFORMATION (for oil spill resident ons why relocation is recommended:	dry-cleaning service? (Circle appropriate         *(Company no, personally y         es, work       No         Unknown         ure? Y       N ate of Installation:         en Well       Dug Well       Other:         ch Field       Dry Well       Other:         tial emergency)	es.)
Do any of the build esponse) Yes, use dry Yes, use dry at a dry-clea s there a radon m s the system active O WATER AND SI Water Supply: Sewage Disposal: 0. RELOCATION a. Provide reas b. Residents c	ing occupants regularly use or work at a y-cleaning regularly (weekly)* y-cleaning infrequently (monthly or less) Ye aning service itigation system for the building/struct or passive? Active/Passive EWAGE EWAGE Uplic Water Drilled Well Drive Septic Tank Lea N INFORMATION (for oil spill resident ons why relocation is recommended: choose to: remain in home relocate to find	dry-cleaning service? (Circle appropriate         *(Company no, personally y         es, work       No         Unknown         ure? Y       Date of Installation:         en Well       Dug Well       Other:         ch Field       Dry Well       Other:         tial emergency)          tiends/family       relocate to hotel/mote	es.)
Do any of the build esponse) Yes, use dry Yes, use dry at a dry-clea s there a radon m s the system active O. WATER AND SI Vater Supply: Sewage Disposal: 0. RELOCATION a. Provide reas b. Residents c c. Responsibili	ing occupants regularly use or work at a y-cleaning regularly (weekly)* y-cleaning infrequently (monthly or less) Ye aning service itigation system for the building/struct e or passive? Active/Passive EWAGE EWAGE EWAGE Public Water Drilled Well Drive Septic Tank Lea N INFORMATION (for oil spill resident ons why relocation is recommended: ethoose to: remain in home relocate to finity for costs associated with reimbursem	dry-cleaning service? (Circle appropriate   *(Company no, personally y   es, work No   Unknown   ure? Y n ate of Installation:	es.)

#### **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:**


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

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



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

Make & Model of field instrument used: PPB RAE

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
	PLEAS	SE SEE A	PPENDIX C FO	R THE PRODUCT INVENTORY		

\* 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.

## 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 Daniel Zuck	Date/Time Prepared 04/13/2011
Preparer's Affiliation ARCADIS	Phone No. (516) 369-2741
Purpose of Investigation VI Investigation	
1. OCCUPANT: NBS Design & Manufacturing	
Interviewed: YN	
Last Name: Rup First Name: Jo	hn
Address: <u>1 Enterprise Drive, Hicksville, NY</u>	
County: Nassau	
Home Phone: (516) 932-1600 Office Phone: (715	) 608-5085
Number of Occupants/persons at this location A	ge of Occupants
2. OWNER OR LANDLORD: (Check if same as occupan	nt)
Interviewed: YN	
Last Name: Mejias First Name: Er	ric
Address: 1250 Waters Place	
County: Bronx, NY	
Home Phone: (646) 772-1531 Office Phone: (718	8) 215-3000
3. BUILDING CHARACTERISTICS	

# 5. DOILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

Residential Industrial

School Church Commercial/Multi-use

If the property is residential	, type? (Circle appropr	iate response)
Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos Other:
Modular	Log Home	Oulei
If multiple units, how many?	1	
If the property is commercia	l, type?	
Business Type(s) Manufa	acturing	
Does it include residences	s (i.e., multi-use)? Y 🗸	N If yes, how many? <u>NA</u>
Other characteristics:		
Number of floors 1	Buil	ding age <u>1960's</u>
Is the building insulated	N How	v air tight? Tight Average Not Tight
4. AIRFLOW		
Use air current tubes or trac	er smoke to evaluate	airflow patterns and qualitatively describe:
Airflow between floors		
NA		
Airflow near source		
NA		
Outdoor air infiltration		
From roll up doors / entry p	oints	
Infiltration into air ducts		
NA		

2

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

a. Above grade construction:	wood frame	concrete	stone	brick	
b. Basement type: NA	full	crawlspace	slab	other	
c. Basement floor: NA	concrete	dirt	stone	other	
d. Basement floor: NA	uncovered	covered	covered with		
e. Concrete floor:	unsealed	sealed	sealed with		
f. Foundation walls: NA	poured	block	stone	other	
g. Foundation walls: NA	unsealed	sealed	sealed with		
h. The slab is:	wet	damp	dry	moldy	
i. The basement is: NA	finished	unfinished	partially finish	led	
j. Sump present?	YN				
k. Water in sump? Y / N	not applicable	>			
Basement/Lowest level depth below grade: <u>NA</u> (feet)					
Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)					

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

Cracks and joints

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

Hot air circulation	Heat pump	Hot water baseboard					
Space Heaters	Stream radiation	Radiant floor					
Electric baseboard	Wood stove	Outdoor wood boiler	Other				
The primary type of fuel u	used is:						
Natural Gas	Fuel Oil	Kerosene					
Electric	Propane	Solar					
Wood	Coal						
Domestic hot water tank fueled by: Electric							
Boiler/furnace located in:	Basement Outdoors	Main Floor	Other ———				
Air conditioning:	Central Air Window units	Open Windows	None				

Are there air distribution ducts present?

(Y) N – In finished area

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.

NA (on roo	f)	
7. OCCUPA	ANCY Occasion	nally
Is basement	<b>/lowest level occupied?</b> Full-time $8 - 12$ ho	Seldom Almost Never
Level	General Use of Each Floor (e.g., familyroo	m, bedroom, laundry, workshop, storage)
Basement	NA	
1 <sup>st</sup> Floor	Manufacturing & work area	
2n <sup>d</sup> Floor	NA	
3r <sup>d</sup> Floor	NA	
4 <sup>th</sup> Floor	NA	
8. FACTOR	S THAT MAY INFLUENCE INDOOR AIR Q	UALITY
a. Is there	an attached garage?	Y N (Loading Dock )
b. Does th	e garage have a separate heating unit?	Y / N NA
c. Are pet stored i	roleum-powered machines or vehicles n the garage (e.g., lawnmower, atv, car)	YNNA Please specify Propane forklift
d. Has th	e building ever had a fire?	Y N When?
e. Is a kei	rosene or unvented gas space heater present?	Y(/ N)Where?
f. Is ther	e a workshop or hobby/craft area?	Y N Where & Type?
g. Is there	smoking in the building?	Y N How frequently?
h. Have cl	eaning products been used recently?	Y N When & Type?
i. Have co	smetic products been used recently?	Y N When & Type?
		$\smile$ —

		$\sim$	
j. Has painting/st	taining been done in the last 6 months?	? (Y) N Where & When? on produ	cts
k. Is there new c	arpet, drapes or other textiles?	Y N Where & When?	
l. Have air fresh	eners been used recently?	Y N When & Type?	
m. Is there a kit	chen exhaust fan?	Y/ N If yes, where vented?	
n. Is there a bat	throom exhaust fan?	Y N If yes, where vented?	
o. Is there a clothe	es dryer?	Y(N) f yes, is it vented outside?	Y / N
p. Has there been	a pesticide application?	When & Type?	
Are there odors in If yes, please desc	<b>the building?</b> cribe: Paint / plastics	YN	
<b>Do any of the buildi</b> (e.g., chemical manuf boiler mechanic, pes	<b>ng occupants use solvents at work?</b> facturing or laboratory, auto mechanic o ticide application, cosmetologist	(Y)N or auto body shop, painting, fuel oil delive	ery,
If yes, what types of	of solvents are used? See product inve	entory	_
If yes, are their clo	thes washed at work?	YN	
<b>Do any of the buildin</b> response)	ng occupants regularly use or work at a	a dry-cleaning service? (Circle appropriat	te
Yes, use dry- Yes, use dry- at a dry-clear	-cleaning regularly (weekly)* cleaning infrequently (monthly or less) Y ning service	No Yes, work Unknown	
Is there a radon min Is the system active of	tigation system for the building/struc or passive? Active/Passive	eture? Y N Date of Installation:	
9. WATER AND SE	WAGE		
Water Supply:	Public Water Drilled Well Dri	ven Well Dug Well Other:	
Sewage Disposal:	Public Sewer Septic Tank Le	ach Field Dry Well Other:	
10. RELOCATION	INFORMATION (for oil spill residen	ntial emergency)	
h. Residents ch	<b>noose to:</b> remain in home relocate to	friends/familyrelocate to hotel/me	
o Domonsihiit	v for posts psepsiated with reinhuman	mont ovploined? V / N	101
	y for costs associated with relinderser	nent explaneu: 1 / 18	
u. Relocation p	ackage provided and explained to re	esidents: $Y/N$	

## **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:**



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

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



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

Make & Model of field instrument used: PPB RAE

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
	PLEA	SE SEE	APPENDIX C F	OR THE PRODUCT INVENTORY		

\* 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.

# 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 Daniel Zuck	_Date/Time Prepared 04/13/2011; 1010
Preparer's Affiliation ARCADIS	Phone No. (516) 369-2741
Purpose of Investigation VI Investigation	
1. OCCUPANT: Unoccupied (Previously Publishers Circulat	ion Fulfillment [PCF])
Interviewed: Y N	
Last Name: <u>NA</u> First Name: <u>NA</u>	
Address: <u>1 Enterprise Drive, Hicksville, NY</u>	
County: Nassau	
Home Phone: <u>NA</u> Office Phone: <u>NA</u>	
Number of Occupants/persons at this location <u>NA</u> Age	of Occupants NA
2 OWNER OR LANDLORD. (Check if same as occupant	N
Interviewed: Y N	)
Last Name: Mejias First Name: Eric	
Address: 1250 Waters Place	
County: Bronx, NY	
Home Phone: (646) 772-1531 Office Phone: (718)	215-3000
3. BUILDING CHARACTERISTICS	
Type of Building: (Circle appropriate response)	

Residential School Commercial/Multi-use Industrial Church Other:

If the property is resident	ial, type? (Circle appropria	te 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 man	<b>y?</b> <u>1</u>	
If the property is commer	cial, type?	
Business Type(s) New	spaper Distributor	
Does it include residen	aces (i.e., multi-use)? Y /N	If yes, how many? <u>NA</u>
Other characteristics:		
Number of floors 1	Buildi	ng age <u>5-7 yea</u> rs updated
Is the building insulated	$\frac{1}{2} \left( Y \right) / N - (Exterior) How a$	air tight? Tight / Average Not Tight

# 4. AIRFLOW

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

Airflow between floors

NA

Airflow near source Low movement, no active heater/AC in store room; constant air flow in insulated area

Outdoor air infiltration
Some roll up doors and entry doors

Infiltration into air ducts

Circulation interior

# 3

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

a. Above grade construction	n: wood frame	concrete	stone	brick
b. Basement type: NA	full	crawlspace	slab	other
c. Basement slab:	concrete	dirt	stone	other
d. Basement floor: NA	uncovered	covered	covered with _	
e. Concrete floor:	unsealed	sealed	sealed with	
f. Foundation walls: NA	poured	block	stone	other
g. Foundation walls: NA	unsealed	sealed	sealed with	
h. The slab is:	wet	damp 🤇	dry	moldy
i. The basement is: NA	finished	unfinished	partially finishe	d
j. Sump present?	YN			
k. Water in sump?	Y / N not applicable			
Basement/Lowest level depth below grade:(feet)				
Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)				

See site figure

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

Type of <u>heating system(s)</u> used in this building: (circle all that apply – note primary)						
Hot air circulation - in storage area Space Heaters Electric baseboard	Heat pump Stream radiation Wood stove	Hot water baseboard Radiant floor Outdoor wood boiler	Other			
The primary type of fuel used is:						
Natural Gas Electric Wood	Fuel Oil Propane Coal	Kerosene Solar				
Domestic hot water tank fueled by: Electric						
Boiler/furnace located in: Baseme	ent Outdoors	Main Floor	Other —			
Air conditioning:	Air Window units	Open Windows	None			

Y)/ N

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

On roof			

# 7. OCCUPANCY

Is basement/lo	west level occupied?	Full-time	Occasionally	Seldom	Almost Never
Level	General Use of Eac	<u>h Floor (e.g.</u>	, familyroom, be	droom, laundry, v	vorkshop, storage)
Basement	NA				-
1 <sup>st</sup> Floor	Shipping and receiv	ing			-
2n <sup>d</sup> Floor	NA				-
3r <sup>d</sup> Floor	NA				-
4 <sup>th</sup> Floor	NA				

### 8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage?	Y N
b. Does the garage have a separate heating unit?	Y N / NA
c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car)	YNNA Please specify
d. Has the building ever had a fire?	Y(N)When?
e. Is a kerosene or unvented gas space heater present?	Y(N) Where?
f. Is there a workshop or hobby/craft area?	Y N Where & Type?
g. Is there smoking in the building?	Y N How frequently?
h. Have cleaning products been used recently?	Y N When & Type? See inventory
i. Have cosmetic products been used recently?	Y N When & Type?

j. Has painting/st	aining been done in the last 6 months	? Y $(N)$ Where & When?
k. Is there new ca	arpet, drapes or other textiles?	Y(N) Where & When?
l. Have air fresh	eners been used recently?	Y N When & Type?
m. Is there a kit	chen exhaust fan?	Y(N) f yes, where vented?
n. Is there a bat	hroom exhaust fan?	$(\mathbf{y})$ N If yes, where vented?
o. Is there a clothe	s dryer?	Y (N ) yes, is it vented outside? Y / N
p. Has there been	a pesticide application?	Y N When & Type?
Are there odors in If yes, please desc	the building? ribe:	YN
<b>Do any of the buildin</b> (e.g., chemical manuf boiler mechanic, pest	ng occupants use solvents at work? acturing or laboratory, auto mechanic icide application, cosmetologist	Y(N) or auto body shop, painting, fuel oil delivery,
If yes, what types of	of solvents are used? <u>NA</u>	
If yes, are their clot	hes washed at work?	YN
<b>Do any of the buildin</b> response)	g occupants regularly use or work at	a dry-cleaning service? (Circle appropriate
Yes, use dry- Yes, use dry- at a dry-clean	cleaning regularly (weekly)* cleaning infrequently (monthly or less) ing service	Yes, work Unknown
Is there a radon mit Is the system active o	igation system for the building/stru or passive? Active/Passive	cture? Y ND ate of Installation:
9. WATER AND SE	WAGE	
Water Supply:	Public Water Drilled Well Dr	iven Well Dug Well Other:
Sewage Disposal:	Public Sewer Septic Tank La	each Field Dry Well Other:
10. RELOCATION	INFORMATION (for oil spill reside	ntial emergency)
a. Provide reason	ns why relocation is recommended:	
b. Residents ch	oose to: remain in home relocate to	friends/family relocate to hotel/motel
c. Responsibility	y for costs associated with reimburse	ment explained? Y / N
d. Relocation p	ackage provided and explained to	residents? 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:**



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

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



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

Make & Model of field instrument used: PPB RAE

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
	PLEASE					

\* 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.

# ARCADIS

# Appendix B

Building Layouts and Field Observations

Appendix B Building Layouts and Field Observations

NBS Warehouse Area



# DWG Office/Warehouse Area



Appendix B Building Layouts and Field Observations

NBS Office/Warehouse Area



Appendix B Building Layouts and Field Observations

Mash City Office/Warehouse Area



Coral Graphics Warehouse Area



Appendix B Building Layouts and Field Observations

**Empire Bakery Equipment** 



PCF Warehouse Area





# Allied Office Area



# Allied Warehouse Area







# ARCADIS

# Appendix C

Building Product Inventory Tables

# APPENDIX C - ALLIED BUILDING MATERIALS (OFFICE AREA) PRODUCT INVENTORY

### VAPOR INTRUSION INVESTIGATION REPORT BAYER MATERIAL SCIENCE LLC 125 NEW SOUTH ROAD HICKSVILLE, NEW YORK

Location #	Braduat Description	Container	Quantity	Container Condition UO: Unopened	Chemical	PID Reading	Photo #
Location #	Product Description	Size (Units)	Quantity	OP: Opened	ingredients	(aqq)	Photo #
Allied Office Area	ProLine Anti-Freeze Extended Life	1 gal	274	110	See photos		723/724
	Oiled/Greased Parts	i gui	214	OP	See photo		725
	Clorox Disinfectant Wipes	35 Wipes	One (1)	OP	See photos		726/727
	Time Mist Air Freshener	5.3 oz	One (1)	OP	See photos		728/729
	Dust Off Duster XL	10 oz	One (1)	OP	See photos	1434	730/731
	Prestone Extended Life Anti-Freeze	1 gal	One (1)	OP	See ohotos		732/733
1	Air Brake System by Gunk, Anti-Freeze	32 oz	One (1)	OP	See photos		734/735
1	& Rust Guard						
	Glass & Window Cleaner by System	18.5	One (1)	OP	See photos	1601	736/737
	Clean						
	Rustoleum Inverted Stripping Paint	18 oz	One (1)	UO	See photos		738/739
	Gold Bond Hand Lotion	14 oz	One (1)	OP	See photos	1626	740/742
	Lens Wipes	1 wipe	Multiple	UO	See photo		743
	Tilex Mold & Mildew	32 oz	One (1)	OP	See photos	1614	744/745
	OSI Micro Gutter Prem Sealer	10.2 oz	Multiple	UO	See photos		704/707/708
	Mason Bond, The Evolution of Mortar	10.3 oz	Multiple	00	See photos		705/706
	PL 400 by Loctite	10 oz	Multiple	00	See photos		709/710
	OSI Quad		Multiple	00	See previous logs		
	SCS 1000		Multiple	00	See previous logs		711/710
2	Locule PL Premium		Multiple	00	See previous logs	PID Reading (ppb)           1434           1601           1601           1626           1614           1626           1614           1626           1614           1626           1614           1626           1614           1626           1614           1626           1657           1657           1657           1657           1657           1657           1668           1691           1593           1286           1738           1588           1740           1758           1993	711/712
2	Sopolastic SC1		Multiple	00	See previous logs		
	Boof Xtondor Liltimato 100	10.1.07	Multiple	00	See previous logs		712/714
	Tri Built Wot Surface Boof Comont	10.7 02	Multiple	00	See photo logs		715/716
	Bond Fill for Painters Caulk	10.3.02	Multiple	00	See photo logs		717/718
	Phenoseal Vinyl Adhesiye Caulk	10.07	Multiple	10	See photos		719/720
	Henry: 925 BES Sealant	10.3.07	One (1)	U0	See photos	1740	721/722
	Tri Built Quick Dry Asphalt Primer	17.07	Multiple	UO	See photos	1662	682/683
	WD-40	8 oz	Multiple	UO	See photo &	1600	682
		0.05	manpio		printed log	1000	002
	Great Stuff Pro: Gaps & Cracks	24 oz	Multiple	UO	See photos	1559	684/686
	Great Stuff Pro: Gun Cleaner	12 oz	Multiple	UO	See photos	1657	684/685
	Permatex Hand Cleaner	14 oz	Multiple	UO	See photos	1657	687/689
	Spray Nine	32 oz	Multiple	UO	See photos	1668	690/691
3	Hornet & Wasp Spray 862 by Utility	15 oz	Multiple	UO	See photo	1695	692
	Mates						
	Karnak Karna Klean	1 L	Multiple	UO	See previous	1692	692
					photos		
	Enforcer Wasp & Yellow Jacket Foam	16 oz	Multiple	UO	See photos	1691	693/695
	Eldorado Stove Craft Shield	1 gal	Multiple	UO	See photos	1593	696/697
	Tamko TwoFlash Wrap		Multiple	UO	See photo		676
	Multiple Flash Products					1286	
	EternaBond EternaPrime	1 qt	Multiple	UO	See photos		677/678
	Roof Xtender "Various Types" 500,	5 gal	Multiple	UO	See photos &	1738	679
	300, 200, 100				previous notes		
4	QuickSeal 7	2.5 gal	Multiple	00	See photos &	1944	679
	Desting Disalau		Maddala	0.5	previous notes	4504	000
	Kuuning Display	1 col	Two (2)		See photo	1034	080
	Namdk. #19	i gai	1 w0 (∠)	00	previous photos		001
	Clean Brake	8 wines	Multiple	110	NA	1588	681
	GAF ELK Shingle Match Accessory	12 07	Multiple	μο	See photos	1000	698/700
	Paint	12 02	manple	00	occ priotos		000/100
5	Tri Built Professional Grade Roof	12 oz	Multiple	UQ	See photos	1740	701/702
-	Accessory Paint						
	Krylon Rust Tough Enamel	12 oz	Multiple	UQ	See photos	1758	701/703
	Somerset Pink Hand Soap	1 aal	Two (2)	OP	See photos		825/826
	Enrich Hand Soap	1 gal	One (1)	OP	See photo/NA		827
	Bartenders Helper	15 oz	One (1)	OP	See photos		828/829
	Scotts Liquid Gold Wood Cleaner	12 oz	One (1)	OP	See photo		830
	Great Value Anti-Spray Disinfectant	18 oz	One (1)	OP	See photos		831/832
	Zenex Zena Sheen SS Polish	14 oz	One (1)	OP	See photos		833/834
	Zenex Neutrazen	7.25 oz	One (1)	OP	See photos	4000	835/836/837
6	Glade Carpet Room Powder	32 oz	One (1)	OP	See photo	1993	838
	Goof Off AFTA Adhesive Remover	32 oz	One (1)	OP	See photos		839/840
	Karna Klean				See previous		841
	Pure Bright Disinfectant Bleach	1 gal	One (1)	OP	See photos		842/843
	Soft Scrub w/Bleach	36 oz	One (1)	OP	See photos		844/845
	Comet w/Bleach	14 oz	One (1)	OP	See photos		846/847
	Pledge Natural Beauty				See previous		
1	Franklin Hi-Genic Cleaner	32 oz	Two (2)	OP	See photos	2068	849

#### APPENDIX C - ALLIED BUILDING MATERIALS (OFFICE AREA) PRODUCT INVENTORY

#### VAPOR INTRUSION INVESTIGATION REPORT BAYER MATERIAL SCIENCE LLC 125 NEW SOUTH ROAD HICKSVILLE, NEW YORK

		Container		Container Condition UO: Unopened	Chemical	PID Reading	
Location #	Product Description	Size (Units)	Quantity	OP: Opened	Ingredients	(ppb)	Photo #
Allied Office Area	Cutey Neil Delieb Demover	C ==	One (1)	0.0	Casabatas	2570	000/004
/	Cutex Nall Polish Remover	6 0Z	One (1)	OP	See photos	2570	823/824
	Clorox wipes				See previous		813
	Lucky Super Soft Hand Sanitizer	8.07	One (1)	OP	See previous		914/915
8	Awesome Orange	16.07	One (1)	OP	See photos	2181	816/817
	Lysol Disinfectant Spray	19.02	One (1)	OP	See photos		818/819
	Germ-X	72 cloths	One (1)	OP	See photos		820/821
	Pic Wasp & Hornet Killer II	13.5 oz	One (1)	OP	See photos		801/802
	Raid Ant	17.5 oz	One (1)	OP	See photos		803/804
	Walgreens Isopropyl Alcohol 70%	16 oz	One (1)	OP	See photo		805
9	Brillo Steel Wool	10 pads	One (1)	OP	See photo	1677	806
	Ajax Dish Soap Orange	34 oz	One (1)	OP	See photos		807/808
	Lysol Disinfecting Wipes	20.3 oz	Two (2)	OP	See photos		809/810
	Clorox Wipes	75 wipes			See previous		811/812
	Clorox Wipes	75 wipes	One (1)	UO	See photo		795
	Pledge Natural Beauty	12.7	Two (2)	UO	See photo		796
10	Dustoff XL				See previous	1532	797
	3M Super 77 Adhesive	16.75	One (1)	UO	See photos		798/799
	Soap Dispenser Soap	~0.5	One (1)	UO	See photo		800
	WD-40	8 oz	One (1)	OP	See photo log	1730	788
	CCW-703-V Liquiseal "A"	1 gal	Two (2)	UO	See photo	1700	789
	CCW-703-V Liquiseal "B"	1 pint	Two (2)	OP/UO	See photos	1700	790/791
	Febreeze	27 oz	One (1)	OP	See photo	1715	792
	CVS Special Care Hand Lotion	17.7 oz	One (1)	OP	See photos	1718	793/794
	Henry: 925 Sealant	~250 mL	One (1)	UO	See previous	1689	778/779
	Strippers S-303		~3	NA	See photo		780
11	R97 Federal Store Products	~250 mL	One (1)	NA	See photo		781
	Strippers S-301	~500 mL	One (1)	NA	See photo		782
	Silin Silith White	~250 mL	2 to 4?	NA	See photo		783
	Mason Graffiti Remover, Federal Store Products	~100 mL	One (1)	NA	See photo	1000	784
	SureKlean Marble Pool Tile	~500 mL	1 to 2	UO	See photo		785
	SureKlean Limestone & Masonry Sealer	1 L	One (1)	UO	See photo		786
12	Spray Nine				See previous	1693	787
12	Pledge Clean & Dust	125	One (1)	OP	See photo/NA	1729	788
13	Clorox Bleach	1.42 gal	One (1)	OP	See photos	1666	775/777
	Lucas #6500 Universal Flashing	~1 qt	One (1)	UO	See Photo	1740	768
	Cement						
14	Dust Off XL				See previous photos	1706	768
14	Perma Dri	1 qt	One (1)	UO	"No VOCs" See photos		768/769
	Expo Markers		Multiple	OP	See photo	1691	771
	Mason RE Heavy Duty Latex Cleaner	~ 1 pt	One (1)	NA	See photos	1694	772/773
45	Clorox Disinfectant Wipes	78 wipes	One (1)	OP	See photos	1702	762/763/764
15	Jergens Ultra Healing Lotion	21 oz	One (1)	OP	See photos	1709	766/767
16	Lucas Universal Sealant	10 oz	One (1)	UO	See photos	1711	757/758/759
18	Geocel 4500 Roofing Sealant	10 oz	Multiple	UO	See photos	1683	760/761
	Geocel 2315 LRF Leak Repair	1 pt	Multiple	UO	See photos	2389	747/748
	CUS Hand Sanitizer	8 oz	One (1)	OP	See photos	1693	749/750
17	Lucas Universal Flashing Cement	~1 qt	One (1)	UO	See photo / NA	2077	751
11	Geocel 4515 Sealant	2 L	Four (4)	UO	See photos	1697	752/753
	Hot Shot Flying Insect Killer	14 oz	One (1)	OP	See photos	1670	754/755
	Kemperol Cold Activator	1 L	Multiple	UO	See photo	1690	756
10	Spray Nine				See previous photos	1744	746
10	Dust Off				See previous photos		
			•	•	•	•	

Notes: 1. '-- = No photographs available.

2. Photoionization detector (PID) readings (i.e., approximate total organic vapor concentrations) were obtained using a ppbRAE.

3. ppb = parts per billion.

4. qt = quart

5. gal = gallon

6. oz = ounce

7. mL = milliliter

8. fl oz = fluid ounce

9. L = liter

10. pt = pint

11. kg = kilogram

8/5/2011 G:\Div10\COMMON\Bayer MaterialScience\Hicksville\10 Final Reports and Presentations\2011\VI Summary Report\1291111487\_Appendix C\_Product Inventory.xls Page 2 of 2

#### APPENDIX C - ALLIED BUILDING MATERIALS (OUTSIDE AREA) PRODUCT INVENTORY

#### VAPOR INTRUSION INVESTIGATION REPORT BAYER MATERIAL SCIENCE LLC HICKSVILLE, NY

Location	Product Description	Container Size (Units)	Quantity	Container Condition UO: Unopened OP: Opened	Chemical Ingredients	PID Reading (ppb)	Photo #
Allied							
Outside Warehouse							
1	Carlisle FAST 100lv A&B Polyurethane Adhesive	4 pallets	15 gal / 55 gal	New	See Photos	0	5,6,7,8,1016
	Tri Built: Asphalt primer	4.75 gal	Multiple	UO	See photo		1018,516,517
2	Tri Built: Flashing Roof Cement	4.75 gal	Multiple	UO	See photo		1018,518,519
2	Karnak: 19 Ultra Flashing Cement	4.75 gal	Multiple	UO	See photo		1018,520,522
	Karnak: 19 Flashing Cement	4.75 gal	Multiple	UO	See photos		1018,529,530
3	Various opened/damaged buckets of adhesives, sealants (Identified: Henry 525 Elastic Roof sealer)	5 gal	Multiple	OP	NA		1096,1097, 1098
	BASF Thorolastic	5 gal	Multiple	UO	NA		1019
4	Senergy Finish: Senerflex Fine	70 lbs/5 gal	Multiple	UO	See photos		1019,599,600
	Broken Tar like material	Bags	Multiple	OP	NA		1020

Notes: 1. '-- = No data available.

2. Photoionization detector (PID) readings (i.e., approximate total organic vapor concentrations) were obtained using a ppbRAE.

3. Photos 500-600 are referenced from the Allied warehouse inventory.

4. ppb = parts per billion.

5. gal = gallon

#### APPENDIX C - ALLIED BUILDING MATERIALS (WAREHOUSE AREA) PRODUCT INVENTORY

#### VAPOR INTRUSION INVESTIGATION REPORT BAYER MATERIAL SCIENCE LLC HICKSVILLE, NY

Location	Product Description	Container Size (Units)	Quantity	Container Condition UO: Unopened OP: Opened	Chemical Ingredients	PID Reading (ppb)	Photo #
Allied Warehouse Area		0.20 (00)	Lucity	or opposed	ingroutorito	(66%)	1 11010 #
1	Diesel Powered Bobcat	NA	1	NA		NA	
	SureSeal AFX Plus by Carlisle 105 Mil	Rolls		New		46	
	Fleeceback AFX Plus						
	Carlisle Sure Seal Fleeceback 11.5 Mil	Roll		New		51	
	10'26' Tamrail Straight Railing Kit by Tamko			New	Vipul	42	
	CertainTeed Monogram Double 4" Rough Cedar			New	Cedar		
	Finish						
	A1 Sheets w/sheets			New		0	
	CertainTeed Siding			New	Vinyl		
	CertainTeed Shingles			New			
2	Main Street Woodgrain Clapboard			New		200	
	Fabric Rolls					388	
	Building Materials (Metal & Wood) Trim material					407	
	Starter Strips for Shaker Shingles					341	
	CertainTeed Siding Monogram Cedar					341	
	Siding (Woodgrain clapboard) Cedar					356	
	CertainTeed Vinyl Siding					347	
	Wolverine Wood Planks						
	Vinyl Siding Wolverine & Certain Leed					343	
	Siding	30 shinales	15 nallets	New/LIO	Not listed	300	/35
	Shingle Ridge by CertainTeed	50 Shingles	15 pallets	1100/00	Not listed	100	400
	CertainTeed: Shadow Ridge						
3	Owens Coring: Hip & Ridge AR			All shingles, new	No chemicals listed		434
	GAF ELK: Seal-A-Ridge						
	GAF ELK: Pro Start						
	Weather Watch by GAF ELK: Mineral Surfaced	Roll	~50 pallets				436
	GAF ELK: Cobra Exhaust Vent			New	NA (no liquids)	63	
4	Tri Built Asphalt Roofing Felt			11011		00	437
4	Shingle made by GAF ELK						
	Plywood (various)						440/441
	Henry 120 Premium Non	4.75 ??	One (1)	1: damaged	Petroleum Distrate; Asphalt; Aluminum Metal; Aromatic	11	450
					Petroleum Distillate		
	MBR Flashing Cement Activator	1.3 L	Three (3)	UO	MDI: Polymeric Dipher (See Photo	9	445/446
	MDD Dending Adheniya Dana	4.4 mal	Fixe (F)	110	#39) Detroloum Apphalt	20	447/440
	MBR Bonding Adhesive Base	4.4 gai	Five (5)	00	"No VOCs"	20	447/440
	Pro-Grade Asphalt Primer #113	4.75	14	UO/dented	Petroleum Distillate Asphalt	21	451/452
	Henry 906 Flash Master Plus	4.75	Five (5)	Damaged	NA (no liquids)	20	449
5	Henry III Insulbond	5 gal	12	UO	Batonde clay, water, petroleum oil, asphalt, GBX latex	0	453/454
	MBR Utility Cement	5 gal	24	UO	Asphalt, mineral	0	456/457
	Pro-Grade: Silver Kote, Fibered Aluminum Roof Coating #800	4.75	36	UO	Asphalt, petroleum distillate, aluminum metal, synthetic fibers, aluminum	9	460/462
					silicate		101/107
	Firestone: Multi-Purpose MB Flashing Cement	4.75	16	00	Stoddard solvent, asphalt, cellulose, attaulgite clay, aromatic petroleum distillate	g	464/465
	MBR Cold Application Adhesive	4.75	42	UO	NA Complies w/CA VOC Reas.		467
	Foam Insulation: No Name					0	442
Ø	Wrapping cellophane: No Name						

#### APPENDIX C - ALLIED BUILDING MATERIALS (WAREHOUSE AREA) PRODUCT INVENTORY

#### VAPOR INTRUSION INVESTIGATION REPORT BAYER MATERIAL SCIENCE LLC HICKSVILLE, NY

		Container		Container Condition UO: Unopened	Chemical	PID Reading	
Location	Product Description	Size (Units)	Quantity	OP: Opened	Ingredients	(ppb)	Photo #
Allied Warehouse Area	Appoy 4.5 M Roll	NA	25	110	ΝΔ		468
	Roof Xtender: Premium White Acrylic 700	4.7	36	UO	Titanium dioxide, calcium carbonate, ethylene clycol, zinc oxide		470/471
	Roof Xtender: White Elastromeric 500 Solvent	4.7 gal	36	UO	Water, latex polymer, titanium calcium carbonate, mineral spirits	0	472/473
	Henry Flashmaster 505, flashing cement	4.75	45	UO	Calcium carbonate, cidy, petroleum dist, asphalt, cellulose	0	474/476
	Henry MB Gold Medal 554 flashing cement	4.75	36	UO	Asphalt, petroleum distillate, synthetic rubber, attupulgite clay, cellulose, calcium carbonate		478/479/483
	Dyna Cap Granules	5gal	13	UO	Kaolin dacity prophyry, titanium oxide, iron oxide, carbon black chromium oxide, silica	0	485,486
	Roof Xtender: Rubberized ultimate flashing cement 100	4.7	36	UO	NA		489
	App 180: Firestone asphalt roll	NA	41	UO	NA		490
	MOP Granule asphalt roll	NA	5	UO	NA		491
7	Henry Premium non-fibered aluminum roof paint 120	4.7	25	UO	Aluminum metal, petroleum distillate, asphalt, aromatic petroleum distillate	54	492/493
	Roof Xtender: Premium Thermo Plastic SB roof coating 900	4.7	Three (3)	UO			494/499
	Appex 4.5 M Roll	Roll	10	UO	NA (see above)		NA
	Roof Xtender 500	4.7	12	UO	See above		NA
	Roof Xtender: roof Seal SB 200	4.7		UO	Petroleum asphalt, mineral spirits, cellulose fiber, inorganic filler	0	500/501
	Ruberoid Asphalt Roll	Roll	Multiple	UO	See photo/NA		502
	Lorch smooth	Roll	Multiple	00	See photo/NA		503
	GAE: Gaf Glas #75	4.75 Roll	Multiple	00	See photo		504/505
	Tri Built: Mod. Bituman Adhesive-trowel grade	4.75	Multiple	UO	See photo		507/508
	Karnak 169 Asphalt/aluminum coating	5 gal	Multiple	UO	See photo		509/510
	Firestone MB Base Asphalt Roll	Roll	Multiple	UO	See photo		511
	SBS Cap Roll	Roll	Multiple	UO	See photo	38	512
	Tri Built: Non-fibered roof coating aluminum	4.75 gal	Multiple	UO	See photo		513/515
	Tri Built: Asphalt primer	4.75 gal	Multiple	00	See photo		516/517
	Karpak: 10 Litra Elashing Comont	4.75 gal	Multiple		See photo	U	518/519
	Karnak: 229 AR Flastomer Rulers Asphalt	4.75 gai	Multiple	U0	See photo		520/522
	Karnak: 111 Quick Dry Asphalt Primer	4.75 dal	Multiple	UO/Damaged	See photo	441	525/526
	Karnak: 102 Asphalt Primer	4.75 gal	Multiple	UO	See photos	0	527/528
	Karnak: 19 Flashing Cement	4.75 gal	Multiple	UO	See photos		529/530
	Karnak: 86-AF Trowel Mastic	4.75 gal	Multiple	UO	See photos	[	531/532
	Karnak: 155-AF Amphibikote	4.75 gal	Multiple	UO	See photos	0	533/534
	Henry: MBA 553 Elastomeric	4.75 gal	One (1)	UO	See photos		535/536
	Karnak: Fiber Emulsion 220	4.75 gal	Multiple	UO UO/1 cooped	See photos	501	537/538
<u> </u>	CertainTeed: Cedar Impressions Straight Edge	4.70 gai	wuitiple	UU/1 Opened	See photos	10	239/341 4/2
8	Shingles					10	עדד

#### APPENDIX C - ALLIED BUILDING MATERIALS (WAREHOUSE AREA) PRODUCT INVENTORY

#### VAPOR INTRUSION INVESTIGATION REPORT BAYER MATERIAL SCIENCE LLC HICKSVILLE, NY

		Container		Container Condition UO: Unopened	Chemical	PID Reading	
Location	Product Description	Size (Units)	Quantity	OP: Opened	Ingredients	(ppb)	Photo #
Allied Warehouse Area							
	GE: SLS1000 Calcate/Adhesive	10.1 oz	Multiple	UO	See photos		543,544
	OMG OlyBond 500 Adhesive	1.5 L	Multiple	00	See photos		545,547
9	Karnak: 19 Elashing Cement	.825 L	Multiple	00	See photos	0	550/549/555
	Henry: 570-05 Sealing Compound	24 oz	Multiple	UO	See photos		551,552
	Karnak:#19	0.9 Gal	Multiple	UO	See photos		553,554
	ISO Quad Sealant	10.2 oz	Multiple	New	See photos	36	556/557
	ISO Quad "pro Source" Sealant	10.2 oz	Multiple	UO/Damaged	See photos	48	558/559
10	Loctite PL Premium Adhesive	10 oz	Multiple	00	See photos	9	560/561
10	Sashco: Tough roof Caulk	10.5 oz	Multiple	00	See photos	0	565/566
	FSO SBR-100 Caulk	10.5 oz	Multiple	UO	See photos		567/568
	Sikaflex 15LM Sealant	10.1 oz	Multiple	UO	See photos	192	569/570
11	Carlisle: Flexible fast polyurethane adhesive	50 gal	One (1)	UO	See photos	0	571/572
	PSI: Topsfield EST (CAL) Tint White Base	4.75 gal	Multiple	UO	See photos	205	574
	PSI B-TUFF 921 Side-B	5 gal	Multiple	UO	See photo	140	575
	PSI P-TUFF Classic Solvent Free	5 gai	Multiple	00	See photo	0	5/6
	Primer 733 by BASE	20 IDS	Multiple	00	See photos	30	580/581/582
	PSI B-TUFF 921 Side A	1/2 gal	Multiple	UO	See photos	290	583, 584
40	PSI PTS E10154	28 oz	Multiple	UO	See photo	10	585
12	PSI EnviroGrip EP#1 Part A	2 gal	Multiple	UO	See photo	60	587
	PSI EnviroGrip EP#1 Part B	1 gal	Multiple	UO	See photo	54	588/589
	PSI Chocolate Pigment Paste for Topshield	1 quart	Multiple	UO	See photo	0	590/591
	NP1 by Sonolastic Sealant	10.1 oz	Multiple	00	See photos	210	594/595
	Sacheo Tough Roof	5 gai	wuitipie	00	See protos	0	597/598
	Senergy Finish: Senerflex Fine clear	70 lbs/5 gal	Multiple	UO	See previous prioto	0	599/600
13	Snow Blower	28"	Two (2)	Used	Gasoline/Oil	85	596
-	Karnak: Asphalt & Tar Remover	1 L	Multiple	UO	See photos	20	602/603
14	Senergy Base Coat: Alpha Base Coat	60 lbs	Multiple	UO	See photos	0	604
			Pallets				
	Sure-Seal Adhesive 90-8-30A	5 gal	26 pallets	UO?	See photos	124	605/606
15	Versico Rooting Systems Versiweid TPO Bonding Adhesive	! 5 gai	Pallets	00?	See photos	228	607/608
	Oly Bond 500	151	Multiple	UO	See photo	10	609
	Carlisle EP-95 Splicing Cement	1 gal	1 pallet	New		3342	80,82
	Carlisle HP-250 Primer	1 gal	2 pallets	New		2893	83,85
	Versico Yellow Substrate Adhesive	5 gal bucket	1 pallet	New		2800	88,89,121
	FAST Adhesive	?	1/2 pallet	New	on upper shelf	2812	92
	Splice Adhesive	1 gal	1/2 pallet	New		2600	93,97
	Leather Membrane Cleaner	5 gai	1 pallet	New	Not listed	2618	98,99,100,101,102
	25-50°)	1.5 L 3613	1 box set	INCW	NULIISIEU	2010	103,104,103
	FAST Duct Cartridge Adhesive by Carlisle (temp	1.5 L sets	1 box set	New		2589	106,107
	50°)						
	Carlisle Water Cut-Off Mastic	10-11 fl oz	13	New		2844	109,110
	One Part Pourable Cedar by ChemTree (Black)	4-21 L pouches	1 pallet	New		3057	112
	Carliele Surgeach Fleetoform Fleeting	per bucket	1 hov	Naw	Day is easied	2005	110
	Carlisle Sureseal Black Can Sealant	25-11 oz per boy	1 pallet	New	DUX IS Sedieu	2990	11/ 120
	Versico Yellow Substrate Adhesive	5 gal	3 pallets	New		2885	121
16	FAST Bag in a box Adhesive low rise	Ť	1/2 pallet	New	on upper shelf	2744	126,127,128
	polyurethane adhesive resin Part 2B						
	Carlisle In Seam Sealant	11 oz cartridge	1 box of cartridges	New		2689	122,123
	Carlisle Oly Bond 500 BA-Part B	5 gal	1 box	New	Box is sealed	2794	124,125
	Versico Dual Cartridge Adhesive	1.5 L sets with count of 4	1 box	New	Ingredients not listed	2408	129,130
	Rolls of Flashing			New		2634	
	White One-Part Pourable Sealer	5 gal	1/2 pallet	New		2629	133,134
	Carlisle Cut Edge Sealant	8-16 oz	5 boxes	New		2557	135,136
	SureSeal Secure Tape	24-10.1.07	1/2 pallot	New		2610	
	Versico G-300 K Black	11 07	7 boxes	New		2808	140 141
	Carlisle CCW-702 coating water proofing	5 gal	1 pallet	New	İ	2612	142,143
	Versico G-500 CM Water cut-off mastic	11 oz	25	New		2688	144,145
	Versico G-400 PS-2 Pourable Sealer	1 pint	3 + 1 pallet	New		2989	146,147,148
#### APPENDIX C - ALLIED BUILDING MATERIALS (WAREHOUSE AREA) PRODUCT INVENTORY

#### VAPOR INTRUSION INVESTIGATION REPORT BAYER MATERIAL SCIENCE LLC HICKSVILLE, NY

Location	Product Description	Container Size (Units)	Quantity	Container Condition UO: Unopened OP: Opened	Chemical	PID Reading (ppb)	Photo #
Allied Warehouse Area		0.20 (0	Lucinty	err opened	iligiodicilio	(66%)	1 11010 #
	AguaBase 120 Bonding Adhesive	5 gal bucket	1 pallet	New		2465	149,150,151
	Carlisle Cold Applied	5 gal bucket	1 pallet	New		2591	152
	Moulded Sealed Packets, PureSeals by TPO		•			3546	
	Pressure Sensitive Rugs (TPO)	Rolls				2867	
	In-Seam Sealant	11 fl oz 10 per box	4 boxes	New	1 open box	2482	153
	Versico V-350 Seam Sealant		1 box	New		2525	154,155
	FAST Adhesive by Carlisle		1 box	New		2446	156,157
	Versigard Quick Applied Reinforced Stripper			New		2561	
	Versigard QA Uncured Flashing			New		2561	
	Versigard Pipe Sealer			New		2561	
	Versigard Seam Tape			New		2561	
16	Versigard Reinforced Termination Strips		<b>a</b> (1)	New		2563	
(cont d	TPO Primer	1 gal	One (1)	New		3674	159,160
	LV-600 Primer			New		3674	162,163
	Carlisle SureSeal Cured Cover Trap			New		2699	
	Carlisle SureSeal Elastororm Plastic			New		2695	
	Carlisle Pressure Sensitive Rues			New		2695	
				New		2093	
	Versico V-150 Primer	1 nal	1/2 nallet	New		2782	164
	Oly 500 Spot Shot Adhesiye Fastener	1 gal	1/2 pallet	New		2912	165 168
	Carlisle Sure White Lap Sealant	1 90	172 panet	New	Naphta VM&R titanium oxide	2810	169,180
	Dewitts Siding Cleaner [Near Rollup Door of Warehouse]	1 gal	1	Good (Sprayer on top of drum)			181,182,183, 52, 53
	Nails & Fasteners			New		2955	
17	Carlisle B-500 Waterbased Bonding	5 gal bucket	1 pallet	New		2912	66,67
17	AquaBase 120 Bonding Adhesive	Bucket		New		3285	70,71,72,73, 74
	Simonic Work & Shine	5 gal bucket	One (1)		label smeared	3042	75,76
18	Senergy	70 lb bucket	2 pallets	New	Not listed	2359	59,60,61
	Colortrend KX 888	1 gal	Seven (7)	New		1963	11,14,15
	Colortrend AXX	32 fl oz	16	New		2070	16,17(2)
		32 fl oz	13	New		2070	18,19(2)
	Colortrend L	32 fl oz	One (1)	New		2070	20(2), 22
	Colortrend D	32 II 02	10	New		2108	23,23
	Colortrend E	32 II 02	12 Throp (3)	New		2108	20,27,29(2)
	Colortrend R	32 fl oz	Four (4)	New		2168	33 35
	Colortrend T	32 fl oz	Two (2)	New		2168	36.55
	Colortrend B 888	1 gal	1100 (2)	New		2168	57.58
	Colortrend B 888	1 gal	13	New	See photo	220	1.2.4.6
	Colortrend C 888	1 gal	16	New	Yellow iron oxide, ethylene glycol, water diethylene glycol	128	7
19	Colortrend KX 888	1 gal	11	New	Titanim dioxide, ethylene glycol, talc mg silired hydrate, water koulin, 1332- SB-7, diethylene glycol, al hydroxide, amorphous silica	83	13
	Colortrend I 888	1 gal	Seven (7)	New	See photo	78	17,19,20
	EUCD Winter Admixture for Mortar and Concrete	1 gal	1/2 pallet	New	None listed	53	21, 22
	Nails		5 boxes	New		142	
	BASF Flexguard	Rolls			Fiberglass mesh	92	
	Senergy Finish	70 lbs	25 pallets	New	Silica	141	28,29,30
	Door Casing			New		74	

# APPENDIX C - ALLIED BUILDING MATERIALS (WAREHOUSE AREA) PRODUCT INVENTORY

# VAPOR INTRUSION INVESTIGATION REPORT BAYER MATERIAL SCIENCE LLC HICKSVILLE, NY

		Container		Container Condition UO: Unopened	Chemical	PID Reading	
Location	Product Description	Size (Units)	Quantity	OP: Opened	Ingredients	(ppb)	Photo #
Allied Warehouse Area	Hip & Pidgo Shipglo Cap by Owops Corping				[	121	
	Essential Protector & Finish of Roof Peaks					424	
	VanaTrol by SureClean (Sensitive break stove cleaner)	5 gal bucket	Five (5)		Not stated	1078*	93,94
	Aquafin-LK	50 lbs bucket	One (1)		Portland Cement & silica	1628*	
	HLM 5000 by BASF	5 gal bucket	8			1349*	95,96
	Enviroseal Double 7 for Brick (water based	5 gal bucket	12		Alkoxysilene	443	99
	silicone/siloxane water repellant cedar)	5 11 1 1			<b>T</b> 1 1 1	447	100.101
20	Alson Hashing	5 gai bucket	5		tosyle isograde, 2 methoxy-1-methyl, ethyl acetate, diphenylaethane, 4,4-disocyanate	417	100,101
	Bithene Liquid Membrane Parts A&B	1.5 gal	15			422	102,103
	Henry: 176 pondpatch	23 lb	Six (6)			424	104,105,106
	Acryl 60	5 gal bucket	Seven (7)			443	107,108,110
	Bithuthene Mastic Cartridge	30 oz	54		Net Bete d	456	111,112
	IC 2480	5 gal	1 WO (2)		Not listed	300	113,114,115
	Henry. Bluenton Adhesive	5 gai			possible	300	117
	Bituthane Mastic by Grace	4.75 gal	1 pallet		1	240	119,120,121
	Bithuthene Primer B2LVC	5 gal bucket	1/2 pallet			240	122,123,124
	Top Coat by GAF	5 gal bucket	1 pallet		Buckets strapped on pallet	200	125
	Shingles					200	
	Delta Foremost 3121-ES Dust Command	55 gal	One (1)	Good (Sprayer on top of drum)	Petroleum Hydrocarbons	5094	9,10,11,12,13
21	Senergy Finish	5 gal bucket	One (1)	New		130	60,61
	Senergy Basecoat	5 gal bucket	One (1)	New		144	60,61
	[Located in storecloset by shopsink]	1 gai	1 WO (2)	New		150	4445
	Kemper System Kemperal V210 & V210W (for waterproofing)	2.26 gai	16	New		368	14,15
	Kemper System Kemperdur Deko (Transparent)	1.26 gai	Two (2)	New		165	16,17,18,19, 20
	Kempertec AC Primer	1.26 gal	Three (3)	New	Contains 8062-6 Methyl Methocrylate	165	21,22
	Kempertec Kemper System Kemperal CP (Catalyst Powder)	.6 kg	7 packets	New	94-36-0 dibenzyl peroxide	330	23,24
	Kemper System Kepertec EP (Primer)	.7 kg, +.3 kg (2 products per	15	New	9016-879 Diphenyl methane- disocyanate	334	25,26,27,28
	Kemper System Kempertec R (Primer)	.18 gal	Three (3)	New	,	270	29
	Kemper-EP-ER A&B Finish = B; sealer = A	4.8 oz	Two (2)	New		345	30,31,32,33
22	Kempertec D Kemper System (B&A)	3.89 gal	Five (5)	New		285	34,35,36,37, 38
	Kemper System Kemperal BR A Waterproofing	2.16 gal	Five (5)	New		324	39,40
	Kemper System Kemperal BR B	2.25 gal	Five (5)	New		319	41,42
	Kemper System Kemperal V210M (Waterproofing)	4.4 gal	Six (6)	New		300	43,44
	Kemperal BR-M	4.4	Three (3)	New		358	45,46
	Kemperol 2K Bur A&P	20 kg	1 WO (2)	New		356	47,48
	Kemper System Kemperal VP-A Cold Activator	5 gai bucket 10 kg	30	New	22	349 415	49,50,51
		i v ky	10	1101	[C4methylphenyl)im miro bisethenol]	710	
	Kemper System Kempertec 1K Thinner		One (1)	New	1,2,4 Trimethyl- benzol	396	
	Kemper System Kemperal AzK Pur Accelerator	80 g		New	90064304 - not listed	428	
	Kemper System ThixotropicAdditive	1.5 gal	Eight (8)	New	30491275 - not listed	556	

# APPENDIX C - ALLIED BUILDING MATERIALS (WAREHOUSE AREA) PRODUCT INVENTORY

# VAPOR INTRUSION INVESTIGATION REPORT BAYER MATERIAL SCIENCE LLC HICKSVILLE, NY

Location	Product Description	Container Size (Units)	Quantity	Container Condition UO: Unopened OP: Opened	Chemical Ingredients	PID Reading (ppb)	Photo #
Allied Warehouse Area		0.20 (0		err opened	ingroutomo	(66%)	1 11010 #
22	Kemperal 2K Pur (packet) A&B (Waterproofing)	2.5 kg	Eight (8)	New	996-87-9 - Diphenylmethane disocyate	394	54,55,56,57
(cont'd)	Kemper System Kempertec D Primer Packet	1 kg	Three (3)	New	9016-87-9 - Diphenylmethane disocyate	392	58,59
	Resin Non-Slip #673 PID Base Size: 123 Non Skid Safety Coating	1 gal	Two (2)	Opened	See photo	160	610
	Ortho: Brush-B-Gone Poison Ivy Killer	1.33 gal	One (1)	Used	See photos	190	611,613
	Leaf Blower	NA	One (1)	Used	Gasoline/Oil	146	614
	Generator	NA	One (1)	Used	Gasoline/Oil	153	615
	Techni Seal: Dirt & Grease Cleaner	2 L	One (1)	Used	See photos	128	617/618
	Pemroy: Air Brake Anti-Freeze 5632	32 oz	Multiple	1 Used/ UO	See photos	123	619/620
	PowerService: Air Brake System Anti-Freeze	32 oz	Multiple	UO	See photos	165	622/623
	Lubri-Matic: Lithium Grease	3 oz	Three (3)	UO	See photos	166	624/625
	AGA Super Premium Green Grease	14 oz	Multiple	UO	See photos	191	626/627/628
	Valvoline: Ceruleon Heavy Duty Grease	14 oz	Multiple	UO/OP	See photos	184	629/630
	CRC Diesel Air Brake Anti-Freeze	32 oz	Multiple	OP/UO	See photos	197	631/633
	Silco Heavy Duty Diesel Fuel Conditioner	12 oz	One (1)	OP	See photos		634/635
	Utility Mates: Hornet & Wasp Spray 862	15 oz	One (1)	OP	See photos	189	636/637/638
	Mobil Rarus 427 Air Compressor Oil	1 qt	One (1)	OP	See photo	194	639
	Power Service Diesel Fuel - Injector Cleaner	32 oz	One (1)	OP	See photos	190	640/641
23	Valvoline Hypo 85W140 gear oil	1 qt	One (1)	OP	See photo	182	643
	Shell Rotella T Heavy Duty 15W-40 Oil	1qt	Multiple	UO	See Photo	179	644
	Gunk Air Brake System Anti-Freeze	1 gal	Two (2)	1 OP/1 UO	See photos	183	645/646
	Wagner Brake Products 21B	1 gal	One (1)	OP	See Photo	198	649
	Sipersteins: Super Protective Coating: Sipthane	1 gal	Two (2)	OP	See photos	172	650/651
	Permatex Silicone Spray Lubricant	10.25	One (1)	OP	See photo	188	652
	Oatey #30810 All Purpose Plastic Cement	4 oz	One (1)	OP	See photos	207	653/655/656
	Blaster Protectant & Polish	NA	One (1)	OP	See photo	193	657
	Pyroil De-Icer	11.5 oz	One (1)	OP	See photos	186	658/650
	Great Stuff Pro Series Windows & Door	20 oz	One (1)	OP	See photos	171	661/662
	Used Motor Oil	~0.5	One (1)	OP	See photo	399	663
	ZEP Redi Grease	14.5 oz	One (1)	OP	See photos	304	664/665/666
	No. 7 Heavy Duty Rubbing Compound	10 oz	One (1)	OP	See photo	195	667
	SCS 1000	See previous			See photo	178	668
	Olympic Paint Lt Gray PO #129723	~ 1 qt	One (1)	OP	See photo	182	669
	Interior Spackling Base by Custom Building	1 qt	One (1)	OP	See photos	169	670/671
	3B Putty	~ 1 qt	One (1)	OP	See photo	176	672
24	Rotella T SAE 15W-40 Shell Oil (motor oil)	1 qt	Three (3)	New		394	
24	Dave - 2792 Antifreeze	1 gal	11	New		394	
	Rolls of Rail Brackets by Tomko					394	
	CertainTeed Cedar Shingles					403	
	Tri Built AirFlo Ridgevent					402	
	Shingle Fasteners					402	
	CA Chloride Crystals					402	
	Perlite Stripe					402	
	Plywood					402	
	Den's Deck-Prime Roof Board	4' x 8'; 4' x 4'	20 pallets	New	Fiberglass	520	1, 2
25	Gypsum-Fiber Roof Board	4' x 8'; 4' x 4'	12 pallets	New	Gypsum	480	3, 4
	GAF ELK Seal a Ridge		7 pallets	New		462	
	Prostat: Staten Strip Shingles (GAF ELK)		2 pallets	New		462	
	Hip & Ridge AR with Sealant by Owens Corning		5 pallets	New	Asphalt/Fiberglass	407	
	CertainTeed Shadow Ridge Shingles	72 per package	3 pallets	New		375	
	GAF ELK Timbertex (Ridge Cap Shingles)		12 pallets	New	Asphalt	219	
	CertainTeed Shingles Shadow Ridge Cream	72 per package	10 pallets	New	Asphalt	193	
	CertainTeed Shingles Shadow Ridge Blue	72 per package	3.5 pallets	New	rioprion	190	
I		po. puonage	0.0 pulloto		1		1

Notes:
1. '-- = No photographs available.
2. Photoionization detector (PID) readings (i.e., approximate total organic vapor concentrations) were obtained using a ppbRAE.
3. ppb = parts per billion.

4. qt = quart

5. gal = gallon

6. oz = ounce

7. mL = milliliter

8. fl oz = fluid ounce

9. L = liter

10. pt = pint

11. kg = kilogram

8/5/2011 G:Div10\COMMON\Bayer MaterialScience\Hicksville\10 Final Reports and Presentations\2011\VI Summary Report\1291111487\_Appendix C\_Product Inventory.xls Page 6 of 6

#### APPENDIX C - DWG PRODUCT INVENTORY

Location #	Product Description	Container Size (Units)	Quantity	Container Condition UO: Unopened OP: Opened	Chemical Ingredients	PID Reading (ppb)	Photo #
DWG							9
	Sherwin Williams Master HIDE Semi- Gloss Enamel	5 gal	One (1)	Empty	See photos	8	18,19,30, 32
	Sherwin Williams Promax Metal Enamel Extra White	124 fl oz	One (1)	Dented, paint on outside	See photos	18	20,29
	Sherwin Williams Master HIDE Semi- Gloss Enamel Extra White	124 fl oz	One (1)	Paint on outside	See photos	15	18,19
	Sherwin Williams ProClassic Semi-Gloss Extra White (interior oil based)	916 ml	Four (4)	Good, paint on outside	See photos	0	33,49
	Sherwin Williams Semi-Gloss (Red-Red)	872 ml	One (1)	New, dented	See photos	0	50,51
	Benjamin Moore Professional Coating Moorcraft Super HIDE (Base white)	1 gal	One (1)	Dented, paint on outside	See photos	0	52,53
	Sherwin Williams Color Accents Interior Latex Flat (Red-Red)	118 fl oz	One (1)	Dented, paint on outside	See photos	1	54,56
	KleanStrip Paint Thinner	1 qt	One (1)	Good	See photos	2	57,58
	Guardsmen AFTA Professional Strength Cleaner/Degreaser Adhesive Remover	16 fl ox	One (1)	Looks old	See photos	4	59,61
1	MinWax Wood Finish (Red Oak 215)	1 gal	One (1)	Dented, paint on outside	See photos	0	62,63
	Sherwin Williams ProMax 400 Interior Latex Egg-Shell B20 W 4451	124 fl oz	One (1)	Almost empty	See photos	1	64,65
	Sherwin Williams ProMax 400 Interior Latex Egg-Shell B20 w 4451	5 gal	One (1)	Good	See photos		64,65,69
	Sherwin Williams ProMax 400 Interior Latex Flat B30 W 453	5 gal	One (1)	Good	See photos	0	66,68
	Sherwin Williams Master HIDE Flat Wall Paint Extra White White	5 gal	Four (4)	Paint on outside	See photos	4	70,72
	Sheetrock Lightweight All Purpose Joint Compound	4.5 gal	One (1)	Good	See photos	2	73,75
	Sheetrock All Purpose Joint Compound	61.7 lbs.	One (1)	Good	See photos	2	76,77
	Micrell Antibacterial Lotion Soap	1 gal	One (1)	Almost empty	See photos	22	78,79
	Zyrtec Cetirizine HCL Liquid Hand Soap	8 fl oz	One (1)	Good	See photos	16	80,81
	AirWick (Vanilla Indulgence)	8 fl oz	One (1)	Good	Not listed, see photo	17	82
	Palmolive Oxy Plus	13 fl oz	One (1)	Good	Not listed, see photo	15	83
	Lysol Disinfectant Power Toilet Bowl Cleaner	24 fl oz	One (1)	Good	See photos	11	84,86
2	Tools, screws, bolts, electrical tape, cables, electrical outlet plates		<b>•</b> (1)	New		12	
	DAP Household Adhesive	1 fl oz	One (1)	New	See photos	10	117,118
	Video Camera Kit, Wall Speakers, Speaker, Keypad			New		8	
3	Smoke in a Can by GE Security	2.5 oz		New	See photos		106,108
	Outlet Plugs			New		24	
	Alarms		<b>A</b> (1)				
	Lysol Cleaner Lemon Breeze	28 fl oz	One (1)	Good	See photos	15	109,111,116
4	Cleaner	1 gal	One (1)	Good	See photos	18	112,114,116
	Gojo Rich Pink Antibacterial Lotion Soap		One (1)	In hand dispenser	See photo	10	115,116
_	Gojo Rich Pink Lotion		One (1)	In hand dispenser	See photo	21	115
5	Lysol Disinfectant (Spring Waterfall)	19 oz	One (1)	Good	Not listed, see photo	21	119
	Elmer Glue All	7.65 oz	One (1)	Good	See photo	51	121
	Glade (Clean Linen)	9 oz	One (1)	Good	Not listed, see photo	60	122
6	CVS Antibacterial Hand Soap	8 oz	One (1)	Good	Not listed, see photo	62	123,124
	Gojo Rich Pink Antibacterial Lotion Soap	??	One (1)	In dispenser	See photo	63	125
7	GOJO RICH PINK ANTIDACTERIAL LOTION SOAP	?	Une (1)	in dispenser	See photo	67	125

#### APPENDIX C - DWG PRODUCT INVENTORY

		Container		Container Condition	Chemical	PID	
Location #	Product Description	Size (Units)	Quantity	OP: Opened	Ingredients	(ppb)	Photo #
DWG	DAP Contact Cement	3 fl oz	One (1)	Good	See photos	85	126 128 129
	Windex Original	32 fl oz	One (1)	Good	See photo	82	214
	Ethyl Rubbing alcohol	16 fl oz	One (1)	Good	See photos	108	130.131
	Sheetrock All Purpose Joint Compound	12 lb	One (1)	Good	See Photos	113	132,133
	Romans Wallpaper Paste	1 gal	One (1)	Good	Not listed, see photo	98	134.135
	Rustoleum Rusty Metal Primer	32 fl oz	One (1)	Good	See photos	89	136.137
	Elmers Carpenters Wood Filler	32 fl oz	One (1)	Good	See photos	89	138.139
	KleanStrip Acetone	1 gt	One (1)	Good	See photos	92	140,141
	Rustoleum Metallic	11 oz	Two (2)	Good	See photos	95	142,143
	Rustoleum Painters Touch	12 oz	One (1)	Good	See photos	95	144,145
	WD-40	11 oz	One (1)	Good	See photos		146,147
	WD-40	8 oz	One (1)	No Cap	See photos		146,147
	Liquid Nails Adhesive	118 ml	Three (3)	New	Sealed, NA	101	148
2					(see photo)		
8	MinWax Fast Drying Polyurethane	8 fl oz	One (1)	New	See photos	106	149,150
	MinWax Wood Finish	8 fl oz	One (1)	New	See photos	112	151,152
	Oatey PVC Cement	8 fl oz	One (1)	New	See photos	123	153,156,157
	Oatey Cleaner	8 fl oz	One (1)		See photos	111	160,161
	Oatey Medium Blue Rain-R-Shine PVC Cement	8 fl oz	One (1)		See photos	108	162,163
	Sakrete Concrete & Mortar Repair	10.3 oz	Two (2)	New	See photo	116	164
	Karnak #19 Flashing Roof Cement	1/10 gal Cartridge	One (1)	Good	See photos	113	165,167
	DAP Alex Plus Acrylic Latex Caulk Plus Silicone	10.1 fl oz	One (1)	In dispenser	See photos	118	168,169
	5-Minute Epoxy by ITW Performance Polymer	0.25 ml	One (1)	New	Not listed, see photo	113	170
	Electrical Tape	rolls					
	BIC White Out	20 ml	One (1) Box	New	See photo	112	171
9	Staples Shredder Lubricant	14 oz		Old	Not used - soybean oil, mineral oil		172,173
	Stoner Flux Remover	12 oz			Not used samples		174,184,185
	Stoner Freeze Spray	1 oz			See photos		174,178,181
10	Stoner Gust Bag Duster	15 oz			1		174,182,183
	Stoner Plastic Surface Cleaner	13 oz					174,184,185
	Stoner Electro Klene						175,177
11	Glade (Clean Linen)	9 oz	One (1)	New	See photo	129	122
	Purell Hand Sanitizer	8 fl oz	Seven (7)	New	See photo	129	187
	Rite Aid Hydrogen Peroxide Solution	16 fl oz	One (1)	New	See photos	129	186,188,189
	CVS Antibacterial Soap	8 oz	One (1)	Almost empty	Not listed, see photo	128	123,124
	Lysol Disinfectant Power Toilet Bowl Cleaner	24 fl oz	One (1)	Good	See photos	128	190,191,192
	Micrell Antibacterial Lotion Soap	1 gal	One (1)	Good	See photos	128	193,194
	Windex Glass Cleaner	1 gal	Two (2)	Good	See photos	128	195,196
	Windex Antibacterial Multi-Surface	1 qt	One (1)	Good	See photo	128	197
12	Clorox Disinfecting Bathroom Cleaner	30 fl oz	One (1)	Almost empty	See photos		198,199, 200,201
	Shout	30 fl oz	One (1)	Good	See photos		202,203
	Professional Resolve Spot & Stain	32 fl oz	Two (2)	Good	See photos		204,205, 206,207
	Black Flag Home Insect Control	32 fl oz	One (1)	Good	See photos		208,209
	Oust Air Sanitizer	10 oz	One (1)	Good	See photos		211,212
	Quality Care Antibacterial Spray Disinfectant	10 oz	One (1)	Good - No cap	Not listed, see photo	126	213

#### APPENDIX C - DWG PRODUCT INVENTORY

#### VAPOR INTRUSION INVESTIGATION REPORT BAYER MATERIAL SCIENCE LLC 125 NEW SOUTH ROAD HICKSVILLE, NEW YORK

Location #	Product Description	Container Size (Units)	Quantity	Container Condition UO: Unopened OP: Opened	Chemical Ingredients	PID Reading (ppb)	Photo #
DWG							
	Windex Original	32 fl oz	One (1)	Good	Not listed, see photo	126	214
12	Lysol Disinfectant with Bleach	30 fl oz	One (1)	Good	See photo	126	215
(cont'd)	Pledge Orange Oil	16 fl oz	One (1)	Good	Not listed, see photo	126	216
(cont d)	Fantastik Heavy Duty	1 qt	One (1)	Almost empty	See photo	126	217
	Mr. Clean with Febreze	32 fl oz	One (1)	Almost empty	See photo	126	218

Notes:

1. '-- = No photographs available.

2. Photoionization detector (PID) readings (i.e., approximate total organic vapor concentrations) were obtained using a ppbRAE.

3. ppb = parts per billion.

4. qt = quart

5. gal = gallon

6. oz = ounce

7. ml = milliliter

8. fl oz = fluid ounce

#### APPENDIX C - EMPIRE BAKERY EQUIPMENT PRODUCT INVENTORY

				Container Condition		PID	
		Container		UO: Unopened	Chemical	Reading	
Location #	Product Description	Size (Units)	Quantity	OP: Opened	Ingredients	(ppb)	Photo #
Empire Bakery Equipment							
	Unknown Products	~16 oz	One (1)	OP	NA	1345	933
	Zenex: Zena Gel Oven Cleaner	18 oz	One (1)	OP	See photos	1345	933,935,936
	Odorless Solvent Cleaner	35 gal	Two (2)	UKN	See photos	1345	937,938
1	Spray-on Lubricants 500700 Food Grade	10 oz	One (1)	OP	See photos	1345	939,940
	Machinery Oil						
	Gas Can	1 gal	One (1)	OP	See photo	1164	941
	Odorless Mineral Cleaner: City Wide Paper & Specialty	35 gal	One (1)	OP	See photo	4486	942
2	Orange Cleaner: City Wide Paper & Specialty	55 gal	One (1)	OP	See photos	1602	943,944
	Used/Waste Liquid	35 gal	One (1)	OP	Various	8709	945,946
	All Bright SS Cleaner	14 oz	Multiple	OP/UO	See photos	1167	947,948
	Swell SS Cleaner	15 oz	Multiple	OP/UO	See photos	1167	947, 949
	Zenex: Zena Orange Solv	12 oz	Multiple	OP/UO	See photos	1167	947,950
	Zenex: Zena Gel Oven Cleaner	18 oz	Multiple	OP/UO	See photos	1167	947,951
	Edmer Vandalism Mark Remover	16 oz	Two (2)	OP/UO	See photos	1167	947,952
	Zenex Glecmonex	19 oz	Multiple	OP/UO	See photo	1167	953
	Apollo SS Cleaner	18 oz	Two (2)	OP/UO	See photos	1167	953,954
	Zenex: Zenal Sheen H2O	18 oz	Multiple	OP/UO	See photos	1167	953,955
3	Zenex: Zena Sheen SS Polish	14 oz	Multiple	OP/UO	See photos	1167	953,956
	Zenex: Zena Power Gel	18 oz	Multiple	OP/UO	See photos	1167	953,957
	Heavy Duty Map & Strip: City Wide Paper & Specialty	32 oz	One (1)	OP	See photos	1167	958,959
	Mobil SW-30 oil	1 qt	One (1)	OP	See photo	1167	961
	Jeloven & Grill Cleaner	1 gal	One (1)	OP	See photo	1167	962
	A New Fruit Acid Cleaner	1 gal	Multiple	OP	See photo		963
	Lime Out Extra	24 oz	One (1)	OP	See photo	1185	964
	Oiled Metal parts	35 gal	1 Bucket	OP	NA	1272	965
	Pledge Clean & Shine	17.7 oz	One (1)	OP	See photo/previous	1442	966
	Magnum Research Corp Oven Kleen	18 oz	One (1)	OP	See photos	1442	966,970
	Windex Crystal Rain	32 oz	One (1)	OP	See photo/previous	1442	966
	Mr. Clean Febreze	1 gal	One (1)	OP	See photo/NA	1442	967
	Pledge Lemon	17.7 oz	One (1)	OP	See photo/previous	1442	967
4	SoftSoap Antibacterial	32 oz	One (1)	OP	See photo/previous	1442	967
	WD-40	12 oz	One (1)	OP	See photo/previous	1442	967
	Krud Kutter: The Must for Rust	32 oz	One (1)	OP	See photos	1442	967,971
	Oven Kleen	1 gal	One (1)	OP	See photos	1442	968,972
	Simple Green Cleaner	1 gal	One (1)	OP	See photos	1444	968
	Benjamin Moore Super Hide	3.7 L	One (1)	OP	See photos	1444	969,973
	Apollo SS Cleaner	See previous		OP	See photo/previous	1254	974
5	Zena Gel Oven Cleaner	See previous		OP	See photos/previous	1254	974
	Glecmonex	See previous		OP	See photos/previous	1254	974
5	Valspar Signature Colors Interior Paint	1 gal	Multiple	OP	See photos	1254	975,976
	Valspar Interior Latex Primer	1 gal	Multiple	OP	See photos	1247	977,978
	Drackett: Mr. Muscle Cleaner	19 oz	One (1)	OP	See photos	2349	979,982,983
	Paint Thinner? (very odorous)	~4 oz	1 Small bucket	OP	See photos	2349	979,984
	Ultra Kill: Ant & Roach Killer	17.5 oz	One (1)	OP	See photos	2349	979,985
	Fantastik Heavy Duty	32 oz	One (1)	OP	See photos	2349	979,986
	Unknown Cleaner	32 oz	One (1)	OP	See photo	2349	980
6	Cleamanay	32 0Z	One (1)		See photo	2349	980
	Glecmonex	11 OZ	Une (1)	UP	See previous		980
		See previous					980
		See previous					981
	Oven Kleen (Wagnum)	See previous	076 (1)	0.0	Casabata	0040	981
	Green Satin Glove Hand Soap	5 IDS	Une (1)		See photo	2349	981
1	Go-Jo Orange Pumice Hand Cleaner	4.5 IDS	1 WO (2)	UP	See photos	2357	981,987

#### APPENDIX C - EMPIRE BAKERY EQUIPMENT PRODUCT INVENTORY

		Container		Container Condition UO: Unopened	Chemical	PID Reading	
Location #	Product Description	Size (Units)	Quantity	OP: Opened	Ingredients	(ppb)	Photo #
Empire Bakery Equipment		0	0	0.5	Os e strate	0704	000.000
	Goo Gone: Pro Power	8 02	One (1)	OP	See photo	2734	988,993
		0.34.07	One (1)	OP	See photos	2734	988 995 996
	3M High Strength 90 Spray Adhesive	16.25	One (1)	OP	See photos	2734	988,997,998
	Spray-on Plastics Safe Contact Cleaner	12 oz	One (1)	OP	See photos	2734	989,1000,
	EL2020		( )		,		1001,1002
	3M 1602 IviSpray Sealer	13 oz	One (1)	OP	See photos	2734	989,1003
	RadioShack Electronic Cleaner 64-4327	6.78 oz	One (1)	OP	See photos	2734	989,1004
	Rustoleum Gloss Enamel	12 oz	Multiple	OP/UO	See photos	2734	989,1005
7	Bondo-Glass	2.5 lbs	Multiple	OP	See photos	2734	990,1006
	3M Bondo Body Filler	1 3/4 lbs	Multiple	OP	See photos	2734	990,1007
	DAP Weldwood Contact Cement	16 oz	Multiple	OP	See photos	2734	990,1008
	Bondo Home solutions All Purpose Putty	1 3/4 IDS	One (1)	OP	See photos	2734	991,1010
	Cement	32.02	Offe (1)	OP	See priotos	2734	991,1009
	KleenStrip: Pure Gum Spirit Turpentine	1 qt	One (1)	OP	See photos	2734	991,1025
	KleenStrip: S-L-X Denatured Alcohol	1 gal	Two (2)	OP/UO	See photos	2734	992,1026
	Robarts Mineral Oil	16 oz	One (1)	Open	See photo	2734	992
	WD-40	12 oz	See previous	-	-	3380	992
	Ace Heat Resistant Paint	12 oz	One (1)	Open	See photos	2783	1030,1031
	Valspar Gloss Paint	12 oz	Multiple	0P/00	See photos	2783	1030,1032,1033
	Rustoleum Gloss Enamel Paint	12 OZ	Multiple	0P/00	See photos	2783	1030,1034
	All Pro Spray Enamel	11.02	Multiple	0P/00	See photo	2783	1030,1035
	3M High Strength Adhesive	16.6.07	One (1)	OP OP	See photos	2703	1036 1037
	Rustoleum Professional High Pro Enamel	19 oz	Multiple	OP/UO	See photos	2783	1036.1039.1040
	Rustoleum Specialty Appliance Epoxy	12 oz	One (1)	UO	See photos	2783	1036,1041
0	Rustoleum Professional Oil Based HIPO	1 gal	Multiple	OP/UO	See photos	2783	1036,1042
8	Enamel						
	Ultra Kill: Ant & Roach Killer	See previous					1043,1044
	KleenStrip Mineral Spirits	1 qt	One (1)	OP	See photos	2783	1043,1045
	R-M Limco Supreme LR1270 Fast	~1 gal	One (1)	OP	See photos	2783	1043,1046
	KleenStrip Odorless Mineral Spirits, Paint	1 gal	One (1)	OP	See photos	2783	1047,1048
	BIX Sprav-On Stripper	1 gal	One (1)	OP	See Notes	2783	1047.1049
	KleenStrip S-L-X	See previous		_	See Notes	2722	1047,1050
	Nimbus 460,150	5 gal	Multiple	OP	See photos	2725	1051
	Grease Tube	NA	One (1)	OP	See photos	2725	1051
9	Liquid Paper White Out	22 ml	One (1)	OP	See photos	2770	1052
, i i i i i i i i i i i i i i i i i i i	Krazy Glue	NA	One (1)	OP	See photo	2770	1052
	ShopRite Nail Polish Remover - Regular	6 oz	One (1)	OP	See photo	2741	1052,1053
10	Spent Oil/Cleaner Holding Tank	~55 gal	One (1)	OP	See photo	16.4 - 83,900	1054,1055
	Magnum Bassarah Carni Mag 29 Luh	16.07	$O_{\text{RR}}(1)$		(Strong Odor When Open)	1069	1056 1057 1059
	Illtra Palmolive Antibacterial	~10.02	One (1)	OP	See photos	1068	1056,1057,1056
11	Chemco Dirt Buster III Oven Cleaner	11	One (1)	OP	See photos	1068	1056,1059
	Comet w/Bleach	25 oz	One (1)	OP	See photos	1126	1056.1061.1062
	Sheetrock Joint Compound	61.7 lbs	One (1)	OP	See photos	741	1063,1065, 1066
12	Benjamin Moore Professional Super Hide Paint	~1 gal	One (1)	OP	See photos	732	1063,1064
13	Lysol Disinfectant Wipes	110	One (1)	OP	See photos	915	1070
	CVS Hand Sanitizer		One (1)	OP	See photo	1072	1071
14	Aveeno Hand Lotion		One (1)	OP	See photo	1072	1071
15	CVS Hand Sanitizer w/Aloe		One (1)	OP	See photo	882	1072
	Oust Surface Disinfectant Air Sanitizer	12 oz	One (1)	OP	See photo	856	1073
	Kleen Mist Odor Control by Continental	7 oz	One (1)	OP	See photos	856	1073,1074
16	Manufacturing		-				
	CVS Hand Soap	7.5 oz	One (1)	OP	see photos	856	1075,1076
	Arryvick Plug-in	NA	Une (1)	02	See photos	861	1077
	Peliph Lauren Paint Interior Setin	1 gai			See photos	847 847	1078,1079
17	Sherwin Williams Master Hide Flat Wall	i yai 1 gal	Two (2)		See photos	047 880	1070,1079
	Paint	i yai	1 100 (2)	0		000	1000,1001
18	WD-40	12 oz	One (1)	OP	See previous	1004	1085

#### APPENDIX C - EMPIRE BAKERY EQUIPMENT PRODUCT INVENTORY

#### VAPOR INTRUSION INVESTIGATION REPORT BAYER MATERIAL SCIENCE LLC 125 NEW SOUTH ROAD HICKSVILLE, NEW YORK

Location #	Product Description	Container Size (Units)	Quantity	Container Condition UO: Unopened OP: Opened	Chemical Ingredients	PID Reading (ppb)	Photo #
Empire Bakery Equipment							
	Lysol Wipes	See previous				1096	1082
19	Care One Hand Sanitizer	8 oz	One (1)	OP	See photos	1096	1082,1083
	Zena Orange Solv	See previous				1131	1084
20	Palmolive Soap	90 oz	Two (2)	OP/UO	See photo/NA	896	1086
	Comet w/Bleach	See previous				896	1086
21	Febreze Air Freshener	8.7 oz	One (1)	OP	See photos	1161	1087,1088
	Lysol Wipes	See previous				1194	1087,1089
	Secret Womans Deodorant		One (1)	OP	See photo	1391	1091
	Hydrogen Peroxide		One (1)	OP	See photo	1391	1092
22	Good Sense Ethyl Rubbing Alcohol	16 oz	One (1)	OP	See photo	1391	1093
	Febreze Air Freshener		One (1)	OP	See photo 1088	1391	1090
	Airwick Air Freshener Plug-in	NA	Multiple	OP/UO	See photos	1359	1090,1094

<u>Notes:</u>
1. '-- = No photographs available.
2. Photoionization detector (PID) readings (i.e., approximate total organic vapor concentrations) were obtained using a ppbRAE.

3. ppb = parts per billion.

4. qt = quart

5. gal = gallon

6. oz = ounce

7. ml = milliliter

8. lbs = pounds

9. L = Liter

#### APPENDIX C - MASH CITY PRODUCT INVENTORY

Location #	Product Description	Container Size (Units)	Quantity	Container Condition UO: Unopened OP: Opened	Chemical Ingredients	PID Reading (ppb)	Photo #
Mash			•				
	Mop & Glo	32 fl oz	One (1)	Good	Not listed; see photo	79	219
	Windex - original	26 fl oz	One (1)	Good	See photo	82	214, 197
	Clorox Disinfecting Wipes	1 lb 3.3 oz	One (1)	Good	Not listed; see photo	82	220
	Ajax with Bleach power cleanser	14 oz	Two (2)	Good	See photo	82	221
	Ajax with Bleach power cleanser	21 oz	One (1)	Good	See photo	82	222
1	Comet with Bleach	14 oz	One (1)	Good	See photo	82	223, 224, 226
	Ajax Dish Liquid (lemon)	34 fl oz	One (1)	Good	Not listed; see photo	84	227
	Dawn Ultra concentrated	709 ml	One (1)	Good	Not listed; see photo	84	228
	Fantastik Heavy Duty	1 qt	One (1)	Good	Not listed; see photo	84	229
	PineSol	28 fl oz	One (1)	Good	See photo	84	230,231
	Dawn Non-concentrated Original Scent	14 fl oz	One (1)	Good	See photo	88	232,233,234
	Glade Surface Disinfectant & Air Sanitizer	12 0Z	One (1)	Good	See photo	103	235,238
	Lucky Antibacterial Hand Soap	13.5 OZ	One (1)	Good	See photo	150	239,240
	Swan Hydrogen Peroxide	32 fl oz	One (1)	Good	See photo	156	241,242
2	Swan 70% Isopropyl Alconol	32 fl 0Z	One (1)	Good	See photo	125	243,244
	Clerey Clean up Cleaner with Bleach	13.5 UZ	One (1)	Good	See photo	130	243,240
	Ciorox Clean-up Cleanser with Bleach	1 qt	One (1)	Good	See photo	138	247,248
	Mens Room						141 142 143 144 145
	Glade Crisp Water	9.07	One (1)	Good	Not listed: see photo	132	2
	Berkley & Jensen Disinfectant Wines (fresh	1 lb 6 4 oz	One (1)	Good	See photo	128	3.4
	air scent)	110 0.4 02		0000		120	
	SoftScrub Lemon Cleanser - distributed by Dial Corp	1 lb 10 oz	One (1)	Good	Not listed; see photo	133	5
	SoftSoap Refill Moisturizing Hand Soap (Aloe Vera)	128 fl oz	One (1)	Good	See photo	204	6,8
2	Swan Hydrogen Peroxide	32 fl oz	One (1)	Good	See photo	209	9
5	Swan 70% Isopropyl Alcohol	32 fl oz	One (1)	Good	See photo	316	10
	SoftSoap Antibacterial Hand Soap Refill	80 fl oz	One (1)	Good	See photo	270	11,12
	Febreze Set & Refresh (2 scented refills) Air Fresheners	0.18 fl oz	Two (2)	Good	Not listed; see photo	270	13
	Berkley & Jensen Triple Antibiotic Ointment	2 oz	One (1)	Good	See photo	270	14, 16
	Disposable Flush Brush Toilet Cleansing	not stated	One (1)	Good	Not listed; see photo	194	17
	System						
	Simple Green Natural Liquid Hand Soap	16 fl oz	One (1)	Good	See photo	186	18, 19
_	Lucky Super Soft Antibacterial Hand Soap (papaya & mango)	13.5 oz	One (1)	Good	See photo	184	20,21
3	empty, motorized dispenser						
	Sex in the City Perfumed Body Lotion	20 oz	One (1)	Good	See photo	206	22
	Sheetrock All Purpose Joint Compound	6 lb	One (1)	Dried almost empty	Prior photo	173	76,77 (on 4/19/11)
	Sheetrock All Purpose Joint Compound	7 lb	One (1)	New	Prior photo	173	76,77 (on 4/19/11)
	Sherwin Williams PrepRite Block Filler Interior/Exterior Latex	630 fl oz	One (1)	New	See photo	174	150,151,152
4	Sherwin Williams Master Hide Flat Wall Paint	630 fl oz	One (1)	Old - Paint on outside	See photo	176	153,155
-	Quickrete Multi-surface Concrete Stain	116 fl oz	One (1)	Good	See photo	183	156 158
	Benjamin Moore Semi-Gloss Finish	1 nal	One (1)	Good	See photo	181	159
	Benjamin Moore 100% Acrylic All Purpose	1 gal	One (1)	Paint on outside	See photo	183	162 163
	Primer (white)	r gui				100	102,100
	Aboff's Enamel	126 fl oz	One (1)	Paint on outside	See photo; oil primer	191	164,165
	Sherwin Williams Multi-Purpose Oil Based Primer (white)	5 gal	One (1)	Paint on outside	See photo	198	166,167
5	Berkley & Jensen Disinfectant Wipes (fresh air scent)	1 lb 6.4 oz	One (1)	Good	See photo		3,4
	Sanford Expo White Board Cleanser	8 fl oz	One (1)	Good	See photo	178	24,25,27, 29, 30
	Shredder Lubricant	16 fl oz	Seven (7)	New	See photo	176	31
6	White Out	20 mil	Two (2)	New	See photo	171	171
							(on 4/19/11)

#### APPENDIX C - MASH CITY PRODUCT INVENTORY

Location #	Product Description	Container Size (Units)	Quantity	Container Condition UO: Unopened OP: Opened	Chemical Ingredients	PID Reading (ppb)	Photo #
Mash							
	Windex - original	32 fl oz	Four (4)	Good	See photo	221	197, 214 (on 4/19/11)
	WD-40	8 oz (metal can)	One (1)	Good	Have photo???		146, 147 (on 4/19/11)
	Dust-Off Compressed Gas	12 oz	Seven (7)	Almost Empty	Difluoroethane (R152a) (no clean photo)	316	34,35,36
	TechSpray Platen Cleanser	55 mil	Two (2)	Good	D-limonen chlorinated parafin (no clean photo)	224	50, 53
	Sanford Corp Liquid Paper	22 mil	One (1)	Good	Not listed; see photo	227	56,57
	Ko-Rec Type Coverup	24 mil	One (1)	Good	Not listed; see photo	227	56,57
	WD-40	3 oz	One (1)	Good			146,147
	Goo Gone Spray Gel	12 fl oz	One (1)	Good	Petroleum Disalte; see photo	267	58,62
	D-Ink	250 ml	Two (2)		Refer to MSDS; see photo	254	63,64
7	Rubbing Alcohol	150-300 ml bottles	Five (5)	All almost empty	Not listed on container; see photo	254	65,66
	SuperLube Synthetic Grease	3 oz	One (1)	Almost Empty	Not listed; see photo	237	67,68
	SuperGlue	.07 oz	Two (2)	Good	See photo	237	69,71
	Special Lubricant Oil for Paper Shredder Chinohrim-antone de by HSM-Germany	50 ml	One (1)	Good	Not listed; see photo	275	72
	Epoxy 2 mixture type	40 ml total	One (1)	Good	Not listed; see photo	257	73
	Colman MFG Part Grease # 1665	8 oz	One (1)	Good	Not listed; see photo	193	74,75
	Typewriter Oil	30 ml	Two (2)		Not listed; see photo	249	76
	Ahara Mineral Body Lotion	100 ml	One (1)	Almost Empty	See photo	209	77,78
	Isopropyl Alcohol per	Master Size	One (1)	Old	Not listed; see photo	181	79
	Swan 70% Isopropyl Alcohol	32 fl oz	One (1)	Good	Have prior photo	74	243,244 (on 4/19/11)
	Epson Cleaner	8 oz container	One (1)	Almost Empty	See photo; handwritten	79	80,81
	Simple Green	32 fl oz spray dispenser	One (1)		See photo "Simple Green" not listed	74	83
	Ames Supply Company Lube Oil	80 ml	One (1)	Old	Not listed; see photo	62	85,86,87
	Fedron	400 ml	One (1)	Old	See photo	60	88,89
8	Water (green spray bottle)	12 oz	One (1)	Water Old	Not listed; see photo	60	90
č	Amy Nail Polish (Silver Stone)	1.5 ml	One (1)	Good	See photo	62	91,92
	Liquid Nails Adhesive	4 fl oz	One (1)	New	See photo	42	93,94
	Water & Fantastik Cleaner Mixture	1 gal	One (1)	Old	Not listed; see photo	41	95
	CRC Industrial QD Contact Cleaner	11 oz	One (1)	Old almost empty	See photo	70	96,97,98,99
Q	Windex	16 oz	One (1)	Good	In spray bottle; Not listed; see photo	52	100
5	Noxon 7 Metal Polish	12 fl oz	One (1)	Old	Silica, ammonia oxalic acid; No clean photo (see photo)	62	101,102
	Washing Wax Cleaner	100 ml	One (1)	Good	See photo	52	109
	Midty Sila-Clean Protective Cleaner & Polish	1 gal	Two (2)	Good	See photo	56	110,111
	WD-40	12 oz	One (1)	Empty	See prior photo	44	146, 147 (on 4/19/11)
	WD-40	16 oz	One (1)	Empty	See prior photo	44	146,147 (on 4/19/11)
	D-lnk	6 oz	One (1)		See previous photo; see MSDS Sheet	37	63,64
10	Spray 9 Cleaner	16 oz	One (1)		In spray dispenser; see photo	37	112
	Fantastik	32 fl oz	One (1)		Not listed; see photo	41	113
	Clean Safe Dust Remover	10 oz	One (1)	Empty	See photo	39	114
	Anti-Static Foam Cleanser for Glass & Plastic by Staticode	8 oz	One (1)		Not listed; see photo	54	115
	WD-40		One (1)		See photo; unlabeled spray bottle	61	146,147 (on 4/19/11)
	D-Ink	1 gal	One (1)	Good	See MSDS & Photo	61	63,64

#### APPENDIX C - MASH CITY PRODUCT INVENTORY

#### VAPOR INTRUSION INVESTIGATION REPORT BAYER MATERIAL SCIENCE LLC 125 NEW SOUTH ROAD HICKSVILLE, NEW YORK

Location #	Product Description	Container Size (Units)	Quantity	Container Condition UO: Unopened OP: Opened	Chemical Ingredients	PID Reading (ppb)	Photo #
Mash							
	WD-40	16 oz	One (1)	New	See photo	79	146,147 (on 4/19/11)
	Zep Commercial Formula 505 Cleanser Degreaser	32 fl oz	One (1)	New	See photo	83	120,121
	SoftScrub bleach	2 lb 4 oz	Three (3)	New	See photo	84	122,123
	WD-40	3 oz	One (1)	New	Prior photo	85	146,147 (on 4/19/11)
11	D-Ink by Comperi Office Equipment	1 gal	One (1)	New	See MSDs & Photo	85	63,64, 124,125,126
	WD-40	1 gal	One (1)	New		87	127 (on 4/19/11)
	Dust-Off	12 oz	Three (3)	New	See photos	97	34,35,36
	Windex	1 gal	One (1)	New	See photo	99	197, 214 (on 4/19/11)
	Spray 9 Cleaner & Disinfectant	1 gal	One (1)	Good	See photo	97	128,130
	Zep Formula 505 Cleanser Degreaser	32 fl oz	One (1)	Good	See photos	103	131,132

#### Notes:

1. '-- = No photographs available.

2. Photoionization detector (PID) readings (i.e., approximate total organic vapor concentrations) were obtained using a ppbRAE.

3. ppb = parts per billion.

4. qt = quart

5. gal = gallon

6. oz = ounce

7. ml = milliliter

8. L = Liter

9. fl oz = fluid ounce

		Container		Container Condition UO: Unopened	Chemical	PID Reading	
Location #	Product Description	Size (Units)	Quantity	OP: Opened	Ingredients	(ppb)	Photo #
NR2	Elmers Glue All Multi-Purpose	1 gal	Three (3)	Good one empty	Not listed	1200	3/1
	Stop & Shop Pure Power Glass Cleaner	32 fl oz	One (1)	Good	Not listed	1252	342
	Krylon Fusion for Plastic	12 oz	Five (5)			1227	-
	Goo Gone	8 fl oz	One (1)	3 (no cap)	Not listed	1254	343
	Novus 3 Heavy Scratch Remover	8 fl oz	One (1)			1215	344,345
	Novus 2 Fine Scratch Remover	8 fl oz	One (1)	Good		1235	346,349
	Rustoleum Advanced Formula All Surface Paint Flat Black	12 oz	One (1)	Good		1339	350,351
	Gunk Heavy Duty Silicone Spray Lubricant	11 oz	One (1)	No cap		1281*	352,354,355
	Rustoleum Professional High Performance Enamel	14 oz	One (1)	Good		1335*	356,357,358
	Valspar Interior Eggshell Finish (Eggshell Ultra White)	1 gal	One (1)	Paint on outside		1407*	359,360
	Rustoleum Bright Coat	11 oz	One (1)	No cap		1415*	361,362
	Rustoleum Gloss Protective Enamel	12 oz	One (1)	Good		1440*	363,364
	Rustoleum - America Finest Fast Dry All Purpose Interior/Exterior	11 oz	One (1)	Empty/Good		1415*	365,366,367
	Spray Paint Interior/Exterior Fast Dry	10 oz	One (1)	Good		1357*	368,369
	Valspar Plastic Paint	12 oz	One (1)	Good	Not listed	1394	370,371
	Valspar Satin Finish	12 oz	One (1)	Good		1342	372,373,374
1 Large Warehouse	Ace Premium Enamel	12 oz	One (1)	No cap		1380	375,376
	Krylon Interior/Exterior	12 oz	One (1)	Good		1361	377,378,379,380
	Caseway-Acrylic Adhesive SC- 125	16.02	One (1)	Empty		1368	381,382
	Lubrimatic Green - White Lithium Grease	8 oz	One (1)	Good		1401	383,384
	Ace Siliconized Acrylic Caulk (Window & Door)	5.5 fl oz	One (1)	Good		1362*	385,386 387,388
	Worthington Pro Grade Propane	14.1 oz	One (1)	Good		1361*	389,390
	3M Super 77 Multi-Purpose Adhesive	16.75 oz	One (1)	Good			71,72,73, 74
	Ace Royal Flat Wall Paint Acrylic Latex Black	946 ml	One (1)	Loose lid, paint on outside, dried up inside		1353*	391,392
	Scotch Repositionable Adhesive Transfer Tape for AT6	.75" x 36 yd	24 rolls	Good			393
	3M Loose Large Adhesive Rolls	?		Good		1357*	394
	DAP DryDex Spackling Interior/Exterior	32 fl oz	1	Empty		1337*	395,396,397
	Scotch 3M Tape VHB 4910	25.4 mm x 0.91 m	2 rolls	Good	Not listed on package	1312*	398
	Scotch 3M VHB 4941 Foam Tape	1" x 1 yd	1 roll	Good	Not listed	1250*	399
	Elmers Carpenter Wood Filler Interior/Exterior	32 oz	1	Good		1258*	400,401

Location #	Product Description	Container Size (Units)	Quantity	Container Condition UO: Unopened OP: Opened	Chemical Ingredients	PID Reading (ppb)	Photo #
NBS	Elmora All Multi Duraggo Clug	0.4	One (1)	Emat.		-	400 400 404
	Blactic Disponsors no labol	8 II 02	Une (1)	Empty Open ten dispenser	Chuo	1010	402,403,404
	Machine Tape	~500 III	2 rolls	Cood	Giue	1210	405
	Liquid Nails Heavy Duty	10 fl.oz	26	Good one empty		1249	405
	Benjamin Moore Semi-Gloss	124 fl.oz	20 Eivo (5)	4 Good 1 paint		1/18	400,407,408,411
	Finish Medium Base N33 2B Acrylic Paint	12411-02	1 100 (3)	outside		1410	412,410,414
(cont'd)	Valspar Interior/Exterior High Gloss Enamel Gloss Black	1 gal	One (1)	Good		1328	415,416
	Benjamin Moore Satin Imperio MidBase 314 2B	124 fl oz		Paint on outside		1353	418,419
	E-Z Fox H303 Glue Acrylic to Acrylic	5 gal		Empty		1281	426,427,428
	Codhouse Pneumatic Ar-Tool Lubricant ATL016	1 pt		Old		1447	429,431,434
	Febreze Air Effects Apple Spice Delight	9.75		Good	Not listed	1909	435
	Lysol Professional Disinfectant Spray (Crisp Linen)	19 oz		Good	Not listed	1880	436
2 Large Warehouse	Lysol Disinfectant Bathroom Cleaner 4-in-1	32 oz		Good	Not listed	1969	437
	RedMax Bleach	3 qt	One (1)	Good		1302	438,439
	MDR Instant Fender Cleaner	16 oz	One (1)	Good		1408	440,441
	MDR Krazy Clean	24 fl oz	One (1)	Good		1889	442,443
	Marine Grez-Off	32 fl oz	One (1)	Good		1702	444,445,446
	SoftSoap	7.5 oz	One (1)	Good			447,449,449
	Compressed Gas Oxygen	32" H	One (1)	Good		53	69
1	Compressed Gas Hydrogen	31" H	One (1)	Good		53	69
	& 25% Carbon Dioxide	56" H					70
	Rustoleum Primer Touch Multi- Purpose Paint (clear)	11 oz	One (1)	Almost empty	Toluene, xylene, acetone	97	4,5
	Ace Premium Enamel	12 oz	Two (2)		Ketones, toluene	100	6,7
	Ace Polyurethane Clean Finish - gloss	11 oz	One (1)		Ketones, toluene, xylene	72	8,9
	Krylon Fusion for Plastic Paint	12 oz	Nine (9)	3 empty	Ketones, propane, toluene, butane, alphatic hydrocarbon xylene	66	10,11,12
2	Seymour Rapid Seal	18 oz	One (1)		Propane, N-butone, VM&P naphta, toluone, petroleum asphalt	66	13,14
	Dupont Teflon Silicone Lubricant	10 oz	Three (3)		Acetone, silicone, teflon fluoropolymer, aliphateo hydrocarbon	130	15,16
	Rustoleum Lacquer	11 oz	Two (2)	Broke on top spray nozzle	Petroleum distillate, toluene	132	17,18
	Valspar Satin Red	12 oz	One (1)		dimethyl ketone, xylene, methyl isobutyl ketone	136	19,20
	Rustoleum Professional High Performance Enamel	15 oz	Two (2)	Broken spray nozzle	Acetone, xylene	136	21,22

Location #	Product Description	Container Size (Units)	Quantity	Container Condition UO: Unopened OP: Opened	Chemical Ingredients	PID Reading (ppb)	Photo #
NBS	Ace Rust Stop	15 oz	One (1)	No cap	Ketones, xylene,	136	23,24
			( )		aliphates hydrocarbons		- /
	Krylon Satin Touch: Satin Finish	12 oz	One (1)		Ketones, xylene, acetates, ethylbenzene	136	25,26,27
	Rustoleum Semi-Gloss Black Protective Enamel	12 oz	Two (2)		Xylene, acetone	147	28,29
	Rustoleum Hammered Paint for Elastic	12 oz	Three (3)	One broken spray nozzle	Toluene, acetone, xylene	121	30,31
	Krylon Rust Touch Enamel	12 oz	One (1)		Ketones, toluene, xylene	122	32,33
	Valspar Gloss Basic Colors	12 oz	One (1)		Ethylbenzene, xylene, VM&P naptha, dimethyl ketone, isobutyl acetate	133	34,35
	Rustoleum Plastic Primer	12 oz	One (1)	Good	Toluene, xylene	136	36,37
	Rustoleum Metallic (Silver)	11 oz	One (1)	Empty	Toluene, xylene, acetone	163	38,39
	Five Star Spray Enamel	11 oz	Seven (7)	Good	Toluene, ketones, aliphatic hydrocarbons	136	40,41,42
	Nifty Tan Mark	12 oz	One (1)	Good	VM&P naphta, petroleum naptha, acetone, mineral spirit, hydrocarbon propellant	132	43,44
(cont'd)	Ace Epoxy Enamel	11 oz	One (1)	Good	Ketones, acetate, xylene	110	45,46
	DAP Strong Stik	5.5 fl oz	One (1)	Good	Ca Carbonate, ethylene glycol, crystalline silica, soda lime base select	125	47,48
	DAP Construction Adhesive Heavy Duty (green-go-be)	28 fl oz; 10 oz	One (1) Two (2)	Good	Ethylene stycol calcium carbonate, soda, gycol, lime, ammonia, borsilicate glay	141	49,52,53,54
	DAP Construction Adhesive Subfloor & Deck (Brown Label)	28 oz	One (1)	Good	Diethylane glycol, dibenzode ethanol, vinyl acetate, acrylanite, acetdelyde	138	55,56,58,59
	DAP Construction Adhesive All Purpose (Blue Label)	28 fl oz	One (1)	Good	n-Hexane, petroleum distillate	132	61,62,63
	Counther Premier Mirror Mastic	10.3	One (1)	Good	xylene	122	64,65
	DAP "Pantry & Foam" Construction Adhesive (Blue Label)	10.3	One (1)	Good	Calcium carbonale, phthlate esters, crystallae silica, ethylene glycol, ammonia, formaldehyde ethyl acrylate, acrylonitrile, acetadolyte		66, 67, 68

Location #	Product Description	Container Size (Units)	Quantity	Container Condition UO: Unopened OP: Opened	Chemical Ingredients	PID Reading (ppb)	Photo #
NBS							•
	DAP "Molding & Trim" Construction Adhesive (Purple Label)	10.3	One (1)	Good	Ethylene glycol, cacarbonale, ammonia, soda lime, borrisilicate glas	125	69,70,71
	Gunther Ultraboard Mirror Master	300 gal	One (1)	Good	Toluene, acetone	128	72,74
	PL 400 Subfloor & Deck Adhesive	10.2 fl oz	One (1)	Good	Methyl acetate, acetone, xylene	125	75,76,78
	Elmers Glue All - Multi-purpose	8 oz	Four (4)		Not listed	133	79
	Elmers Glue All - Multi-purpose	4 oz	One (1)		Not listed	133	79
	3M Super 77 Multi-Purpose Adhesive	16 oz	One (1)	No cap	See photos	144	71-4-14
	DAP Dry Dex Spackling Interior/Exterior	32 fl oz	One (1)	Good	Cacarbonate, ethylene glycol, mgal silicate & crystalline silica	202	80,81,82
	Deft Lacquer Sanding Seal	12 fl oz	One (1)	No cap	See photos	183	74-4-14,77
	Bondo Professional Gold Premium Body Filler	1 lb 14 oz	One (1)	Good	See photos	182	78-4-14,79-4- 14,80-4-14
	Metal Can - no label except green in marker	8 oz	Two (2)	Taped closed	Not listed, see photo	157	81-4-14,82-4-14
	Windex Plus	1 gal	One (1)	Good		144	
	Bestine Solvent & Thinner by Union Rubber Inc (Trenton, NJ)	1 gal	One (1)	Good	Not listed, see photo		83-4-14,84-4- 14,85-4-14
2	Goof Off the Miracle Remover	1 gal	One (1)	Good	Acetone, Xylene	123	86-4-14,87-4-14
(cont'd)	Benjamin Moore Semi-Gloss Finish	124 fl oz	One (1)	Good (paint on outside of can)	Acrylic resin, propylene glycol, kaolin, raw	257	88-4-14,89-4- 14,90-4-14
	Deft Lacquer Sanding Seal	12 oz	One (1)	Good	See photo	132	
	Fantastik Bleach	32 oz	One (1)				84,85
	Romans Universal Border Paste	16 oz	One (1)	Good	Not listed	133	86
	3M Scotch-Weld Instant Adhesive CA4	1 lb	One (1)	Good	Ethyl cyanocrylate, poly(methyl)meth	132	87,89,90
	Title Bond II Premium Wood Glue	16 oz	Two (2)		Not listed		91
	Husky Arc Tool Oil	237 ml	One (1)	Good	Not listed	832	92
	Deft Clear Wood Finish - Semi- gloss	12.25 fl oz	One (1)	No сар		806	93,94
	Shell Transmission Fluid ATF	1 qt	One (1)		Not listed	652	95
	Winwax Wood Putty	3.75	One (1)	Good	NOT listed	650	96,97
	Compound	70 mi	One (1)	Good		720	98,99,100
	Kampel Seamfil No.040	8 fl 0Z	One (1)	Good	Not listed	662	101,103
	Kampel Seamfil No 946	1 fl oz	One (1)	Good	Acetone	650	104,105
	Kampel Seamfil No 937	1 II UZ	One (1)	Good		060	110,107
	Kampel Seamfil No 941	1 II UZ	One (1)	Good		502	112 113
	Kampel Seamfil No 900	1 11 02	One (1)	Good	Acetone	602	112,113
	Kampel Seamfil No 940	1 fl oz	One (1)	Good	Acetone	623	116.117
	Kampel Seamfil No 944	1 fl oz	One (1)	Good	Acetone	633	118.119
	Kampel Seamfil No 945	1 fl oz	One (1)	Good	Acetone		120,121
	Blazer Brand Triple Refined Butane Gas	~ 8 oz	One (1)	Good	Butane Gas	646	124,125,126

Location #	Product Description     Size (Units)     Quantity     OP: Opened     Ingredients		PID Reading (ppb)	Photo #			
NBS			<b>1 1 1 1</b>				
	Pacua Paint Thinner	1 gal	One (1)	Good	O sa shata a	608	127
	Paint	31.5 oz	One (1)	Good	See photos	635	128,129
	Valspar Signature Semi-Gloss Finish	31.5 oz	One (1)	Good	See photos	662	130,132
	Minwax Wood Finish	32 oz	One (1)	New	See photos	629	133,134
	Deft Lacquer Sanding Seal	1 qt	One (1)	New	See photos	648	135,137
	Ace Royal Flat Accent Color 100% Acrylic Latex	29 fl oz	One (1)	Green paint on outside	See photos		138,139
	Benjamin Moore Eggshell Finish N319 IB Acrylic Paint	126 fl oz	Four (4)	Good		442	140,141
2	Benjamin Moore Eggshell Finish Deep Base N319 3B Acrylic Paint	118 fl oz	One (1)	Paint on outside		579	142,146
(cont'd)	Benjamin Moore Eggshell Finish Medium Base N319 2B	124 fl oz	One (1)	Paint on outside		486	147,148
	Nazdar 188 with clean	1 gal	One (1)	Paint on outside (old)		420	149,150
	Ace Latex Enamel Black	1 gal	One (1)	Paint on outside		494	151,153
	Sherwood: Sherwood Dye Stain Dark Brown Pine	1.89 L (64 fl oz)	One (1)	Good		418	154,155
	O-LAR LPIC 4545 (handwritten)	1 gal	One (1)	Paint on outside		729	156,157,158
	Lowes Olympic 15-year Interior Semi-Gloss Latex	116 fl oz	One (1)	Paint on outside (lid taped)		620	160,161
	Trihlogy Tech-Lube	5 gal Bucket	One (1)	Good	No back label	306	165,167,168, 169, 170
	Parola Propane with Gas Grill	15 lb	One (1) empty		Propane	1552	189,190, 191,192
	Oil	~120 ml	One (1)	Good	No label	2266	193
	Clear Plastic Containers Dispenser	500 ml	Four (4)	Good	No labels, rubbing alcohol	820	194,195
	Oil (Label smeared)	1 pint	One (1)	Almost empty		675	196,197, 198,199
	Valspar Plastic Paint	12 oz	One (1)	Good		610	200, 202
	Goo Gone Pro Power	32 fl oz	One (1)	Almost empty		745	203,204
	Krazy Glue All Purpose Gel	0.07 oz	One (1)	New		583	205,207
	S-L-X Denatured Alcohol by KleanStrip	1 qt	One (1)	Good		727	208,209
	Krylon Short Cuts	1 oz	One (1)	Good		671	210,211
	Loctite 545	0.34 oz	One (1)	Good		621	213,214,215
3	Bernzomatic Propane Fuel Cylinder	14 oz		Old, no plastic top cap			216
	J-B Weld Epoxy Steel Resin	1 oz	One (1)	Good	Epoxy Resin	1332	217,218,219
	J-B Weld Hardener	1 oz	One (1)	Good	· · ·	559	220,221
	Textron Cement for Plastic Model	18 ml	One (1)	Good		712	222,223
	Ace Gel 10	1 oz	One (1)	Old, holes in tube - tube is taped			227,230
	Dico Premium Buffing Composition	3.5 oz	One (1)	Good	Not listed	596	231,232
	Mobil Synthetic Motor Oil	4 ats	One (1)	Good		596	233.234
	Unlabeled White Bottle	12.5 ml	One (1)	Good	Rubbing Alcohol	596	235
	Kampel Seamfil No 913	1 fl oz	One (1)	Good	~		236,238

#### VAPOR INTRUSION INVESTIGATION REPORT BAYER MATERIAL SCIENCE LLC 125 NEW SOURTH ROAD HICKSVILLE, NEW YORK

Location #	Product Description	Container Size (Units)	Quantity	Container Condition UO: Unopened OP: Opened	Chemical Ingredients	PID Reading (ppb)	Photo #
NBS	• • • •				<b>J</b>	W P * 7	
1100	Wilsonat International 500	5 gal	One (1)	Good	Toluene, Light	596	250.251.261
	Roller Grade Contact	5	( )		Hydrotreated distillate,		, - , -
3	Adhesive				acetone, resin,		
(cont'd)					polychloropane		
	E-Z Fix H303 Glue Acrylic	5 gal	One (1)	Good			266, 268,270
4	CVS Hydrogen Peroxide	16 oz	One (1)	Good		88	239,240,243
	Febreze	9.7 oz	Three (3)	Good		132	277,278,279, 280,281
	Listerine	250 ml	One (1)	Good		132	284,285, 287,288
5	Lysol	19 oz	One (1)	Good		133	291,292,293
	CVS Hand Soap	8 oz	One (1)	Good		130	289,290
	Lysol Professional Toilet	32 oz	One (1)	Good		132	294,295,296,
	Cleaner						297,298
	SoftSoap Refill	1 gal	One (1)	Good		144	300,302
	SoftSoap Refill	128 oz	One (1)	Good		125	329,330, 331,332
	SoftSoap	11.25 oz	One (1)	Good		125	282,283
6	Febreze Air Freshener	9.7 oz	Three (3)	Good	No CFS	124	318, 319,320, 321,322
	Celeste Lav Spray						323
	Lysol Disinfectant Spray	19 oz	One (1)				325,326,327,328
	Joy	90 fl oz	One (1)	Good			304,305
	Windex	32 oz	Two (2)	Good		124	306
7	Mothers Car Wax www.mothers.com	16 oz	One (1)	Good	Petroleum Distillate	124	311,315
	Mothers Power Wax	16 oz	One (1)	Good	Petroleum Distillate	125	307,308,309
	HP Print Cartridge	Cartridge	6 cases	New		124	
	Unlabeled Dispenser Plastic Bottle	1 ltr	One (1)	Good	Unknown Rubbing Alcohol	100	54
	Ace Royal Accent Semi-Gloss Acrylic Latex Enamel	3.43 L	One (1)	Good, paint on outside of can	Acrylic copolymer, ethylene glycol, ester alcohol, polyurethane resin	90	57,58
	Kobalt-Armtool Oil Item #2210110	8 oz	One (1)	Good	Not listed, see photo	92	249,262,263
	Kobalt Air Compressor Oil	16 fl oz	One (1)	Good	Not listed, see photo	50	61
8	Cabot WaterBorne Polystain	1 qt	One (1)	Good	Polyurethane resin	51	59,60
5	KleanStrip Lacquer Thinner	1 gal	One (1)	Good		51	62,63
	MinWax Wood Finish	32 fl oz	Two (2)	Good	Oil based, not listed	59	64,65
	Elmer Glue All	4 fl oz	One (1)	Good	Not listed	69	
	Fuchs Libritech: Air lube 10W/NR Airline Lubricant	4 fl oz	One (1)	Good	Not listed, see photo	69	66,185,186
	Benjamin Moore Advance Satin	931 ml	One (1)	Empty	Propylene Glycol	98	67,68
	Rustoleum Frosted Glass	11 oz	Three (3)	Almost Empty	Toluene & xylene	68	1,2,3
	MinWax Wood Finish	1 qt	One (1)	Paint on outside		1036	64,65,180,181, 182,184

Notes:

1. '-- = No photographs available.

2. Photoionization detector (PID) readings (i.e., approximate total organic vapor concentrations) were obtained using a ppbRAE.

- 3. ppb = parts per billion.
- 4. qt = quart
- 5. gal = gallon
- 6. oz = ounce
- 7. ml = milliliter
- 8. L = Liter
- 9. H = Height
- 10. fl oz = fluid ounce
- 11. \* = Open container of glue nearby products while recording PID readings

8/5/2011

## APPENDIX C - PCF PRODUCT INVENTORY

### VAPOR INTRUSION INVESTIGATION REPORT BAYER MATERIAL SCIENCE LLC 125 NEW SOUTH ROAD HICKSVILLE, NEW YORK

Location #	Product Description	Container Size (Units)	Quantity	Container Condition UO: Unopened OP: Opened	Chemical Ingredients	PID Reading (ppb)	Photo #
PCF							
	409 Cleaner	1 qt	One (1)	Good	See photos	1678	1,2
1	Sustainable Earth by Staples Multi- Purpose Cleaner	1 gal	One (1)	Open Top	See photos	1648	3,4,5

#### Notes:

1. '-- = No photographs available.

2. Photoionization detector (PID) readings (i.e., approximate total organic vapor concentrations) were obtained using a ppbRAE.

3. ppb = parts per billion.

4. qt = quart

5. gal = gallon

# ARCADIS

# Appendix D

Sub-Slab Vapor, Indoor Air, and Ambient Air Sampling Logs

	<b>DIS</b>	Indoo	r/Ambient Collection	: Air Sample n Log	
inirastructure, environi	nent, lacilities		Sample ID:	AMB-42711	
Client:	Bayer Material Scier	nce	Date/Day:	04/27/2011	
Project:	Bayer Hicksville	Sample Intake Height: ~ 4' ALS			
Location:	1 Empire Drive, Hic	ksville. NY	Subcontractor:	NA	

	,		
Project #:	B0032305.0004.00003	Miscellaneous	
Sampler(s):	Daniel Zuck / Carey Healy	Equipment:	Forklifts
Coordinates:	See Site Figure	Time Start:	0956
Outdoor/Indoor:	Outdoor	Time Stop:	1720

Time	Canister	Temperature	Relative	Air Speed/	Barometric	PID
	Pressure	(° <b>F</b> )	Humidity	Direction	Pressure <sup>(1)</sup>	(ppb)
	(inches Hg)		(%)	(mph) S/SE	(inHg)	
0956	-30	58.8	81.4	1.7	30.04	1026
1430	-14.6	64.0	81.8	0.0		0
1720	-6 (-6.02)	62.1	94.6	9.5	29.95	0

# **SUMMA Canister Information**

Size (circle one):	1 L 6 L
	<u>Sample</u>
Canister ID:	4922
Flow Controller ID:	K349

# **General Observations/Notes:**

Digital Initial Pressure: NA
Digital Final Pressure:-6.02
Photo #:1112
<ol> <li>Barometric pressure was collected from WeatherUnderground.com @ the Syosset Station Pressure at 953 = 30.04 inHg, pressure at 1741 = 29.95 inHg</li> </ol>

<b>ARCADIS</b> Infrastructure, environment, facilities		Indoor/Ambient Air Sample Collection Log		
			Sample ID:	AMB-42811
Client:	Bayer Material Scien	nce	Date/Day:	04/28/2011
Project:	Bayer Hicksville		Sample Intake Height:	~ 4' ALS
<b>Location:</b> 1 Empire Drive, Hick		ksville, NY	Subcontractor:	NA

Project #:	B0032305.0004.00003     Miscellaneous       Daniel Zuck / Carey Healy     Equipment:		Forklifts	
Sampler(s):				
Coordinates:	See Site Figure	Time Start:	0900	
Outdoor/Indoor:	Outdoor (see figure)	Time Stop:	1730	

B0032305.0004.00003

# **Instrument Readings:**

Project #:

Time	Canister Pressure (inches Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed/ Direction (mph)	Barometric Pressure <sup>(1)</sup> (inHg)	PID (ppb)
0900	-29	59.1	100.0	5.1	29.28	Too foggy
1400	-15	60.8	97.2	7.0 – 19.5 mph		1086
1730	-4.5 (-3.59)	60.0	92.8	4-6	29.67	NA

# **SUMMA Canister Information**

Size (circle one):	1 L 6 L		
	<u>Sample</u>		
Canister ID:	4092		
Flow Controller ID:	K181		

# **General Observations/Notes:**

Digital Initial Pressure: NA
Digital Final Pressure: -3.59
Photo #:1125
<ol> <li>Barometric pressure was collected from WeatherUnderground.com @ the Syosset Station. Pressure at 853 =29.28 inHg, pressure at 1727 = 29.67 inHg</li> </ol>

<b>ARCADIS</b> Infrastructure, environment, facilities		Indoor/Ambient Air Sample Collection Log		
			Sample ID:	AMB-[050511]
Client:	Bayer Material Scie		Date/Day:	05/05/2011
Project: Bayer Hicksville			Sample Intake Height:	~ 4' ALS
Location:	1 Empire Drive, Hick	ksville, NY	Subcontractor:	NA

	Locution	1 Empire Drive, mensione, 101	Subcontractor	1 11 1
	Project #:	B0032305.0004.00003	Miscellaneous	NA
	Sampler(s):	P. Prezorski	Equipment:	
Coordinates:		See Site Figure	Time Start:	0910
	Outdoor/Indoor:	Outdoor	Time Stop:	1715

Time	Canister	Temperature	Relative	Air Speed/	Barometric	PID
	Pressure	(° <b>F</b> )	Humidity	Direction	Pressure <sup>(1)</sup>	( <del>ppb)</del> ppm
	(inches Hg)		(%)	(mph)	(inHg)	
0910	-30	54.2	55.7	16 / N	29.92	0
1422	-17	64.0	31.4	9 / N		
1536	-12					0
1715	-7	67.5	22.7	11 / N	29.84	0

# **SUMMA Canister Information**

Size (circle one):	1 L 6 L		
	Sample		
Canister ID:	4546		
Flow Controller ID:	2993		

# **General Observations/Notes:**

Digital Initial Pressure: NA
Digital Final Pressure: -5.48
Photo #: 4, 5, 6, 8, 9
(1) Barometric pressure was collected from WeatherUnderground.com @ the Syosset Station. Pressure at 853 =29.96 inHg, pressure at 16.53 =29.88 inHg
Notes

Barometric pressure readings were collected from handheld weather unit. Digital Pressure Readings are presented in parentheses.

<b>ARCADIS</b> Infrastructure, environment, facilities		Indoor/Ambient Air Sample Collection Log		
			Sample ID:	AMB-[050511]
Client:	Bayer Material Scie		Date/Day:	05/05/2011
Project: Bayer Hicksville			Sample Intake Height:	~ 4' ALS
Location:	1 Empire Drive, Hick	ksville, NY	Subcontractor:	NA

	Locution	1 Empire Drive, mensione, 101	Subcontractor	1 11 1
	Project #:	B0032305.0004.00003	Miscellaneous	NA
	Sampler(s):	P. Prezorski	Equipment:	
Coordinates:		See Site Figure	Time Start:	0910
	Outdoor/Indoor:	Outdoor	Time Stop:	1715

Time	Canister	Temperature	Relative	Air Speed/	Barometric	PID
	Pressure	(° <b>F</b> )	Humidity	Direction	Pressure <sup>(1)</sup>	( <del>ppb)</del> ppm
	(inches Hg)		(%)	(mph)	(inHg)	
0910	-30	54.2	55.7	16 / N	29.92	0
1422	-17	64.0	31.4	9 / N		
1536	-12					0
1715	-7	67.5	22.7	11 / N	29.84	0

# **SUMMA Canister Information**

Size (circle one):	1 L 6 L	
	Sample	
Canister ID:	4546	
Flow Controller ID:	2993	

# **General Observations/Notes:**

Digital Initial Pressure: NA
Digital Final Pressure: -5.48
Photo #: 4, 5, 6, 8, 9
(1) Barometric pressure was collected from WeatherUnderground.com @ the Syosset Station. Pressure at 853 =29.96 inHg, pressure at 16.53 =29.88 inHg
Notes

Barometric pressure readings were collected from handheld weather unit. Digital Pressure Readings are presented in parentheses.

<b>ARCADIS</b> Infrastructure, environment, facilities		Indoor/Ambient Air Sample Collection Log		
			Sumple ID:	
Client:	Bayer Material Scier	nce	Date/Day:	04/28/2011
Project:	Bayer Hicksville		Sample Intake Height:	~ 4' ALS
Location:	1 Empire Drive, Hic	ksville, NY	Subcontractor:	NA
Project #:	B0032305.0004.000	03	Miscellaneous	

Project #: Sampler(s):	B0032305.0004.00003 Daniel Zuck / Care Healy	Miscellaneous Equipment:	Forklifts
Coordinates:	See Site Figure	Time Start:	1100
Outdoor/Indoor:	Indoor	Time Stop:	1810

Time	Canister	Temperature	Relative	Air Speed/	Barometric	PID
	(inches Hg)	(° <b>F</b> )	Humidity	Direction (mph)	(inHg)	(ppb)
	(inches rig)		(70)	(mpn)	(IIIIIg)	
1100	-29.25	64.6	80.6	0	29.72	36
1345	-20.25	65.3	80.4	0		1153
1500	-16	65.7	82.6	0		873
1810	-5.75 (-5.19)	65.5	80.0	0	29.66	63

# **SUMMA Canister Information**

Size (circle one):	1 L 6 L
	<u>Sample</u>
Canister ID:	5045
Flow Controller ID:	K258

# **General Observations/Notes:**

Digital Initial Pressure: NA
Digital Final Pressure: -5.19
Photo #: 1123
<ol> <li>Barometric pressure was collected from WeatherUnderground.com @ the Syosset Station. Pressure at 1053 =29.72 inHg, pressure at 1803 = 29.66 inHg</li> </ol>

Infrastructure environment facilities		Indoor/Ambient Air Sample Collection Log		
innastructure, environi	nent, lacinties		Sample ID:	IA-2
Client:	Bayer Material Scien	nce	Date/Day:	04/28/2011
Project:	Bayer Hicksville		Sample Intake Height:	~ 4' ALS
Location:	1 Empire Drive, Hic	ksville, NY	Subcontractor:	NA
Ducient #	P0022205 0004 000	03		

Sampler(s):	Daniel Zuck / Care Healy	Miscellaneous Equipment:	Forklifts
Coordinates:	See Site Figure	Time Start:	1005
Outdoor/Indoor:	Indoor	Time Stop:	1650

Time	Canister Pressure	<b>Temperature</b>	Relative Humidity	Air Speed/ Direction	Barometric Pressure <sup>(1)</sup>	PID (nnh)
	(inches Hg)		(%)	(mph)	(inHg)	(PPD)
1005	-30	65.4	77.8	0	29.74	1064
1305	-19	66.7	77.1	0		730
1650	-6 (-7.63)	66.3	77.4	0	29.67	1231

# **SUMMA Canister Information**

Size (circle one):	1 L 6 L
	<u>Sample</u>
Canister ID:	2670
Flow Controller ID:	K225

# **General Observations/Notes:**

Digital Initial Pressure: NA
Digital Final Pressure: -7.63
Photo #: 1120
<ol> <li>Barometric pressure was collected from WeatherUnderground.com @ the Syosset Station. Pressure at 853 = 29.74 inHg, pressure at 1653= 29.67 inHg</li> </ol>

<b>ARCADIS</b> Infrastructure, environment, facilities		Indoor/Ambient Air Sample Collection Log		
			Sample ID:	IA-3
Client:	Bayer Material Scien	nce	Date/Day:	04/27/2011
Project:	Bayer Hicksville		Sample Intake Height:	~ 4' ALS
Location:	1 Empire Drive, Hicksville, NY		Subcontractor:	NA
Project #:	B0032305.0004.00003		Miscellaneous	<b>F</b> 1110
Somploy(g)	Danial Zuak / Cara Haaly		Fauinment.	Forklifts

Sampler(s):	Daniel Zuck / Care Healy	Equipment:	Forklifts
Coordinates:	See Site Figure	Time Start:	1200
Outdoor/Indoor:	Indoor	Time Stop:	1922

# **Instrument Readings:**

Time	Canister	Temperature	Relative	Air Speed/	Barometric	PID
	Pressure	(° <b>F</b> )	Humidity	Direction	Pressure <sup>(1)</sup>	(ppb)
	(Inches Hg)		(%)	(mpn)	(InHg)	
1200	-30	63.5	81.1	0	30.02	145
1430	-21.5	65.5	84.0	0		690
1822	-9.5	63.7	87.0	0		52
1922	-6 (-5.21)	66.9	77.3	0	29.92	298

# **SUMMA Canister Information**

Size (circle one):	1 L 6 L
	Sample
Canister ID:	4569
Flow Controller ID:	K369

# **General Observations/Notes:**

Digital Initial Pressure: NA
Digital Final Pressure: -5.21
Photo #: 1114
(1) Barometric pressure was collected from WeatherUnderground.com @ the Syosset Station. Pressure at 1153 = 30.02 inHg,

pressure at 1928= 29.92 inHg

<b>ARCADIS</b> Infrastructure, environment, facilities		Indoor/Ambient Air Sample Collection Log		
			Sample ID:	IA-4
Client:	Bayer Material Scier	nce	Date/Day:	04/27/2011
Project:	Bayer Hicksville		Sample Intake Height:	~ 4' ALS
Location:	1 Empire Drive, Hicksville, NY		Subcontractor:	NA
Project #:	B0032305.0004.00003		Miscellaneous	Forklifts

Sampler(s):	Daniel Zuck / Care Healy	Equipment:	
Coordinates:	See Site Figure	Time Start:	0950
Outdoor/Indoor:	Indoor	Time Stop:	1710

Time	Canister	Temperature	Relative	Air Speed/	Barometric	PID
	Pressure	(° <b>F</b> )	Humidity	Direction	Pressure <sup>(1)</sup>	(ppb)
	(inches Hg)		(%)	(mph)	(InHg)	
0950	-29	63.1	83.0	0	30.04	34
1430	-13.5	64.4	85.9	0		20
1710	-4.75 (-3.42)	63.4	88.2	0	29.95	0

# **SUMMA Canister Information**

Size (circle one):	1 L 6 L	
	<u>Sample</u>	
Canister ID:	4235	
Flow Controller ID:	K368	

# **General Observations/Notes:**

Digital Initial Pressure: NA
Digital Final Pressure: -3.42
Photo #: 1113
(1) Barometric pressure was collected from WeatherUnderground.com @ the Syosset Station. Pressure at 953 = 30.04 inHg, pressure at 1708 = 29.95 inHg
Notes: Digital Pressure Readings are presented in parentheses



# Indoor/Ambient Air Sample Collection Log

# Sample ID: IA-5 / DUP-42711

Client:	Bayer Material Science	Date/Day:	04/27/2011
Project:	Bayer Hicksville	Sample Intake Hei	ight: ~ 4' ALS
Location:	1 Empire Drive, Hicksville	NY Subcontractor:	NA
Project #:	B0032305.0004.00003	Miscellaneous	<b>P</b> 1110
Sampler(s):	Daniel Zuck / Care Healy	Equipment:	Forklifts
Coordinates:	See Site Figure	Time Start:	1325
Outdoor/Indoor:	Indoor	Time Stop:	2040

# **Instrument Readings:**

Time	Canister Pressure (inches Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed/ Direction (mph)	Barometric Pressure <sup>(1)</sup> (inHg)	PID (ppb)
1325 (IA5)	-30	69.7	63.5	0	30.02	592 <b>→</b> 786
1325 (DUP)	-29.5	69.7	63.5	0		592 <b>→</b> 786
1430 (IA5)	-27.5	67.4	75.8	0		250
1430 (DUP)	-26.5	67.4	75.8	0		250
1830 (IA5)	-14.5	66.4	77.7	0		463
1830 (DUP)	-13.5	66.4	77.7	0		463
2040 (IA5)	-6 (-4.55)	71.6	61.2	0		444
2040 (DUP)	-5.5 (-6.2)	71.6	61.2	0	29.93	444

# **SUMMA Canister Information**

Size (circle one):	1 L 6 L		
	Sample / DUP		
Canister ID:	3029 / 5074		
Flow Controller ID:	K130 / K307		

# **General Observations/Notes:**

Digital Initial Pressure: NA
Digital Final Pressure: -4.56 / -6.2
Photo #: 1116
<ol> <li>Barometric pressure was collected from WeatherUnderground.com @ the Syosset Station. Pressure at 1253 = 30.02 inHg, pressure at 2053= 29.93 inHg</li> </ol>
Notes: Digital Pressure Readings are presented in parentheses

<b>ARCADIS</b> Infrastructure, environment, facilities		Indoor/Ambient Air Sample Collection Log		
			Sample ID:	IA-6
Client:	Bayer Material Science		Date/Day:	04/27/2011
Project:	Bayer Hicksville		Sample Intake Height:	~ 4' ALS
Location:	1 Empire Drive, Hicksville, NY		Subcontractor:	NA
Project #:	B0032305.0004.000	03	Miscellaneous	E 11'A

Sampler(s):	Daniel Zuck / Care Healy	Miscellaneous Equipment:	Forklifts
Coordinates:	See Site Figure	Time Start:	1505
Outdoor/Indoor:	Indoor	Time Stop:	2315

Time	Canister	Temperature	Relative	Air Speed/	Barometric	PID
	Pressure	(° <b>F</b> )	Humidity	Direction	<b>Pressure</b> <sup>(1)</sup>	(ppb)
	(inches Hg)		(%)	(mph)	(inHg)	
1505	-32	64.7	80.0	0	29.98	53
1845	-19.75	65.6	82.4	0		55
2035	-14.00			0		
2315	-5.5 (-3.9)	65.0	90.1	0	29.92	0

# **SUMMA Canister Information**

Size (circle one):	1 L 6 L
	<u>Sample</u>
Canister ID:	4356
Flow Controller ID:	K359

# **General Observations/Notes:**

Digital Initial Pressure: NA
Digital Final Pressure: -3.9
Photo #: 1117
(1) Barometric pressure was collected from WeatherUnderground.com @ the Syosset Station. Pressure at 1515 =29.98 inHg, pressure at 2253 = 29.92 inHg
Notes: Digital Pressure Readings are presented in parentheses

<b>ARCADIS</b> Infrastructure, environment, facilities		Indoor/Ambient Air Sample Collection Log		
			Sample ID:	IA-7 [050511]
Client:	Bayer Material Science		Date/Day:	05/05/2011
Project:	Bayer Hicksville		Sample Intake Height:	~ 4' ALS
Location:	1 Empire Drive, Hicksville, NY		Subcontractor:	NA
Project #:	t #: B0032305.0004.00003 Miscellaneous			
Sampler(s):	P. Prezorski		Equipment:	NA

**Time Start:** 

Time Stop:

0857

1553

# Instrument Readings: Interior

See Site Figure

Indoor

**Coordinates:** 

**Outdoor/Indoor:** 

Time	Canister Pressure (inches Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed/ Direction (mph)	Barometric Pressure <sup>(1)</sup> (inHg)	PID ( <del>ppb)</del> ppm
0857	-26	63.1	50.7	NA	29.94	0
1407	-12	66.7	42.3	NA	29.86	NA
1553	-7	67.8	41.4	NA	29.85	0

# **SUMMA Canister Information**

Size (circle one):	1 L 6 L
	Sample
Canister ID:	3381
Flow Controller ID:	4766

# **General Observations/Notes:**

Digital Initial Pressure: -29.66
Digital Final Pressure: -8.61
Photo #: 2, 3, 10 & 11
<ol> <li>Barometric pressure was collected from WeatherUnderground.com @ the Syosset Station. Pressure at 853 =29.96 inHg, pressure at 1553 =29.87 inHg</li> </ol>
Notes: Set-up:
All doors closed. Handheld weather unit used.
Digital Pressure Readings are presented in parentheses

G:\Div10\COMMON\Bayer MaterialScience\Hicksville\10 Final Reports and Presentations\2011\VI Summary Report\Appendix D\1291111487\_IA-7-[050511].doc 2/12/2007

# Indoor/Ambient Air Sample Collection Log

			Sample ID:	IA-8 [050511]/DUP-050511
Client:	Bayer Material Science		Date/Day:	05/05/2011
Project:	Bayer Hicksville		Sample Intake Height:	~ 4' ALS
Location:	1 Empire Drive, Hicksville, NY		Subcontractor:	NA
Project #:	B0032305.0004.000	03	Miscellaneous	
Sampler(s):	P. Prezorski		Equipment:	NA
Coordinates:	See Site Figure		Time Start:	0840
Outdoor/Indoor:	Indoor		Time Stop:	1620

### Instrument Readings: Interior

**ARCADIS** 

Infrastructure, environment, facilities

Time	Canister	<b>Temperature</b>	<b>Relative</b>	Air Speed/	Barometric Prossuro <sup>(1)</sup>	PID (nnh)nnm
	(inches Hg)	( <b>F</b> )	(%)	(mph)	(inHg)	( <del>bbo)</del> bbu
0840 (IA8)	-30	64.3	43.9	NA	29.96	0
0840 (DUP)	-27	64.3	43.9	NA	29.68	0
1411 (IA8)	-14	70.0	28.6	NA	29.86	NA
1411 (DUP)	-8	70.0	28.6	NA	29.86	NA
1620 (IA8)	-6	69.2	31.3	NA	29.88	0
1620 (DUP)	-7	68.6	33.8	NA	29.62	NA

# **SUMMA Canister Information**

Size (circle one):	1 L 6 L	
	<u>Sample / DUP</u>	
Canister ID:	5122 / 2985	
Flow Controller ID:	2811 / 2616	

# **General Observations/Notes:**

Digital Initial Pressure: -29.77 / -29.34
Digital Final Pressure: -6.36 / -6.98
Photo #: 1, 2 &7
(1) Barometric pressure was collected from WeatherUnderground.com @ the Syosset Station. Pressure at 853 =29.96 inHg, pressure at 1653 =29.88 inHg
Notes

Notes:

Set-up: All doors closed, no activity in space.

Midpoint Check: Roll up door open, activity minimal in room (cutting paper product), no odor in room Final: Roll up door open, no odor, no activity in room.



# Sample ID: SSV-1

Client:	Bayer Material Science	Date/Day:	4/28/2011
Project:	Bayer Hicksville	Weather:	Lt. Rain
Location:	1 Empire Drive, Hicksville, NY	Temperature:	64.6°F
Project #:	B0032305.0004.00003	Wind Speed/Direction:	NA
Samplers:	Daniel Zuck/ Carey Healy	Subcontractor:	NA
Logged By:	Daniel Zuck	Equipment:	Hammer Drill/ Vacuum
Background PID Ambient Air Reading:	36 PPB	Moisture Content of Sampling Zone	Dry Moist
Sampling Depth:	~ 9" →11" BGS	(circle one):	
Probe (circle one):	Permanent / Temporary	Approximate Volume of Sampling Train::	30 mL (3' of ¼" ID tubing)
Time of Collection:	Start: 1100 Finish: 1810	Approximate Purge Volume:	(30ml*3v)=90ml

# Nearby Groundwater Monitoring Wells/Water Levels:

Well ID	Depth to Groundwater (feet)
NA	NA

# SUMMA Canister Information

Size (circle one): 1 L 6 L

SSV-1

Canister ID: 5161

Flow Controller ID: K108

# **Tracer Gas Information (if applicable)**

Tracer Gas: He

<u>)</u>	lium	

Canister Pressure (inches Hg):		
<b>Reported By Laboratory</b>	Measured Prior to Sample Collection	Measured Following Sample Collection
20.4	29.5	(5.12) (0
-29.4	-28.5	(-5.13) -6.0

Tracer Gas Concentration (if applicable):				
Measured from Soil Vapor Tubing		Measured in 'Concentrated' Area		
Post Purge	Post Sample	Prior to Purging	Post Purging	Post Sampling
75 ppm	1700 dropping to 0 ppm	84.6 %	73.6%	24.0%

# **General Observations/Notes:**

Photo ID: 1123	54 ppb reading on the PID following sample
	Collection from soil vapor tubing.
3.75 Hr Pressure@ 1500 : -15.5	
Digital Pressure Readings are presented in parentheses	Baseline 63 ppb
Helium IA Baseline $75 \rightarrow 100 \text{ ppm}$	Diff Pressure +0.017

### Approximating One-Well Volume (for purging):

Each foot of ¼-inch tubing will have a volume of approximately 10 mL.



Sample ID: SSV- 2 / DUP – 042811

Client:	Bayer Material Science	Date/Day:	4/28/2011
Project:	Bayer Hicksville	Weather:	Foggy
Location:	1 Empire Drive, Hicksville, NY	Temperature:	65.4°F
Project #:	B0032305.0004.00003	Wind Speed/Direction:	NA
Samplers:	Daniel Zuck/ Carey Healy	Subcontractor:	NA
Logged By:	Daniel Zuck	Equipment:	Hammer Drill/ Vacuum
Background PID Ambient Air Reading:	1064 PPB	Moisture Content of Sampling Zone	Dry Moist
Sampling Depth:	~8 " —> 10" BGS	(circle one):	
Probe (circle one):	Permanent / Temporary	Approximate Volume of Sampling Train::	30 mL (3' of ¼" ID tubing)
Time of Collection:	Start: 1005 / 1005 Finish: 1735/1735	Approximate Purge Volume:	(30ml*3v)=90ml

# Nearby Groundwater Monitoring Wells/Water Levels:

Well ID	Depth to Groundwater (feet)
NA	NA

# **SUMMA Canister Information**

Size (circle one):

SSV-2/ DUP - 042811

 $1L \subset 6L$ 

**Canister ID:** 5095/4542

Flow Controller ID: K150/ K408

**Tracer Gas Information (if applicable)** 

Tracer Gas: \_\_\_\_\_Helium

Canister Pressure (inches Hg):		
<b>Reported By Laboratory</b>	Measured Prior to Sample Collection	Measured Following Sample Collection
-29 4/ -29 4	-30/-30	(-6.12)-6.75 / -5 (NA)
-27.4/-27.4	-30/ -30	(-0.12)-0.757-5(10A)

Tracer Gas Concentration (if applicable):				
Measured from S	oil Vapor Tubing	Me	easured in 'Concentrated'	Area
Post Purge	Post Sample	Prior to Purging	Post Purging	Post Sampling
0 ppm	0 ppm	86.1%	72.3%	5.2%

# **General Observations/Notes:**

Photo ID: 1120	1435 ppb reading on the PID following sample
	Collection from soil vapor tubing.
3 Hr Pressure@ 1305: -21/-20	
Digital Pressure Readings are presented in parentheses	Baseline 131 ppb@1750
Differential Procesure - 10,034	NA = threads bad - don't want to compromise
$Differential ressult = \pm 0.034$	sample

#### **Approximating One-Well Volume (for purging):** Each foot of 1/4-inch tubing will have a volume of approximately 10 mL.



### Sample ID: SSV-3

Client:	Bayer Materia	ll Science	Date/Day:	4/27/2011
Project:	Bayer Hicksvi	ille	Weather:	Cloudy
Location:	1 Empire Driv	ve, Hicksville, NY	Temperature:	63.5°F
Project #:	B0032305.000	04.00003	Wind Speed/Direction:	NA
Samplers:	Daniel Zuck/	Carey Healy	Subcontractor:	NA
Logged By:	Daniel Zuck		Equipment:	Hammer Drill/ Vacuum
Background PID Ambient Air Reading:	145 PPB		Moisture Content of Sampling Zone	Dry Moist
Sampling Depth:	~ 8"	—>10" BGS	(circle one):	
Probe (circle one):	Permanen	t / Temporary	Approximate Volume of Sampling Train::	30 mL (3' of ¼" ID tubing)
Time of Collection:	Start: 1200 Finish: 1915		Approximate Purge Volume:	(30ml*3v)=90ml

# Nearby Groundwater Monitoring Wells/Water Levels:

Well ID	Depth to Groundwater (feet)
NA	NA

### **SUMMA Canister Information**

Size (ci	ircle o	ne):	1 L
----------	---------	------	-----

SSV-3

**C6**L

Canister ID: 2748

Flow Controller ID: K343

# **Tracer Gas Information (if applicable)**

Tracer Gas: Helium

Canister Pressure (inches Hg):		
<b>Reported By Laboratory</b>	Measured Prior to Sample Collection	Measured Following Sample Collection
-29.4	-28 75	(-3.99) / -5.5
-29.4	-28.75	(-3.99) / -5.5

Tracer Gas Concentration (if applicable):				
Measured from Soil Vapor Tubing Measured in 'Concentrated' Area				Area
Post Purge	Post Sample	Prior to Purging Post Purging Post Sampling		
1625 (dropping) ppm	0 ppm	50.4 %	45.5%	34.1%

### **General Observations/Notes:**

Photo ID: 1114	3688 ppb reading on the PID following sample
Canister pressure @ -20.5 @1430	Collection from soil vapor tubing.
6.5 Hr Pressure@ 1822: -8.25	
Digital Pressure Readings are presented in parentheses	
Slab Pressure Difference +0.005	

### **Approximating One-Well Volume (for purging):**

Each foot of <sup>1</sup>/<sub>4</sub>-inch tubing will have a volume of approximately 10 mL.



### Sample ID: SSV-4

Client:	Bayer Material Science	Date/Day:	4/27/2011
Project:	Bayer Hicksville	Weather:	Partly Cloudy
Location:	1 Empire Drive, Hicksville, NY	Temperature:	63.3°F
Project #:	B0032305.0004.00003	Wind Speed/Direction:	NA
Samplers:	Daniel Zuck/ Carey Healy	Subcontractor:	NA
Logged By:	Daniel Zuck	Equipment:	Hammer Drill/ Vacuum
Background PID Ambient Air Reading:	34 PPB	Moisture Content of Sampling Zone	Dry Moist
Sampling Depth:	~ 8" →10" BGS	(circle one):	
Probe (circle one):	Permanent / Temporary	Approximate Volume of Sampling Train::	30 mL (3' of ¼" ID tubing)
Time of Collection:	Start: 1015 Finish: 1730	Approximate Purge Volume:	(30ml*3v)=90ml

# Nearby Groundwater Monitoring Wells/Water Levels:

Well ID	Depth to Groundwater (feet)
NA	NA

### **SUMMA Canister Information** $1L \bigcirc 6L$

Size (circle one):

SSV-4

Canister ID: 3150

Flow Controller ID: K469

# **Tracer Gas Information (if applicable)**

Tracer Gas: Helium

Canister Pressure (inches Hg):		
<b>Reported By Laboratory</b>	Measured Prior to Sample Collection	Measured Following Sample Collection
-29.4	-29.75	(-6.07) / -6.5

Tracer Gas Concentration (if applicable):					
Measured from Soil Vapor Tubing		Measured in 'Concentrated' Area			
Post Purge	Post Sample	Prior to Purging	Post Purging	Post Sampling	
0 ppm	0 ppm	73.5 %	48.7%	8.8%	

### **General Observations/Notes:**

Photo ID: 1113	721 ppb reading on the PID following sample		
Canister pressure @ -16.5 @1430	Collection from soil vapor tubing.		
Digital Pressure Readings are presented in parentheses			

Differential Pressure -0.005

### **Approximating One-Well Volume (for purging):**

Each foot of ¼-inch tubing will have a volume of approximately 10 mL.


#### Sample ID: SSV-5

			······	
Client:	Bayer Materia	ll Science	Date/Day:	4/27/2011
Project:	Bayer Hicksvi	ille	Weather:	Cloudy
Location:	1 Empire Driv	e, Hicksville, NY	Temperature:	69.7°F
Project #:	B0032305.000	04.00003	Wind Speed/Direction:	NA
Samplers:	Daniel Zuck/	Carey Healy	Subcontractor:	NA
Logged By:	Daniel Zuck		Equipment:	Hammer Drill/ Vacuum
Background PID Ambient Air Reading:	592 <b>→</b> 786 PP	В	Moisture Content of Sampling Zone	Dry Moist
Sampling Depth:	~ 8"	—>10" BGS	(circle one):	
Probe (circle one):	Permanen	t / Temporary	Approximate Volume of Sampling Train::	30 mL (3' of ¼" ID tubing)
Time of Collection:	Start: 1325 Finish: 2100		Approximate Purge Volume:	(30ml*3v)=90ml

#### Nearby Groundwater Monitoring Wells/Water Levels:

Depth to Groundwater (feet)
NA

#### **SUMMA Canister Information**

Size	(circle one)•	1L  6I
SILC	(chicle one).	

SSV-5

Canister ID: 4334

Flow Controller ID: K477

#### **Tracer Gas Information (if applicable)**

Tracer Gas: NA

Canister Pressure (inches Hg):				
Reported By Laboratory	Measured Prior to Sample Collection	Measured Following Sample Collection		
-29.4	-30	(-4.55) / -6		

Tracer Gas Concentration (if applicable):				
Measured from S	Measured from Soil Vapor Tubing Measured in 'Concentrated' Area			
Post Purge	Post Sample	Prior to Purging	Post Purging	Post Sampling
NA	NA	NA %	NA %	NA %

**General Observations/Notes:** 

Photo ID: 1115	6795 ppb reading on the PID following sample
Canister pressure @ -26.5 @1430	Collection from soil vapor tubing.
5 Hr Pressure @ 1830: -14	
Digital Pressure Readings are presented in parentheses	
Differential Pressure -0.006 $\rightarrow$ -0.008	

#### **Approximating One-Well Volume (for purging):**

Each foot of ¼-inch tubing will have a volume of approximately 10 mL.



#### Sample ID: SSV-6

			····· <b>·</b> · · · ·	
Client:	Bayer Material Science		Date/Day:	4/28/2011
Project:	Bayer Hicksvi	lle	Weather:	Foggy
Location:	1 Empire Driv	e, Hicksville, NY	Temperature:	65°F
Project #:	B0032305.000	04.00003	Wind Speed/Direction:	NA
Samplers:	Daniel Zuck/	Carey Healy	Subcontractor:	NA
Logged By:	Daniel Zuck		Equipment:	Hammer Drill/ Vacuum
Background PID Ambient Air Reading:	PPB		Moisture Content of Sampling Zone	Dry Moist
Sampling Depth:	~ 9" -	→11" BGS	(circle one):	
Probe (circle one):	Permanen	t / Temporary	Approximate Volume of Sampling Train::	30 mL (3' of ¼" ID tubing)
Time of Collection:	Start: 2338 04 Finish: 0700 0	/27/11 04/28/11	Approximate Purge Volume:	(30ml*3v)=90ml

#### Nearby Groundwater Monitoring Wells/Water Levels:

Well ID	Depth to Groundwater (feet)
NA	NA

#### **SUMMA Canister Information**

Size (circle one):

SSV-6

1 L C 6 L

Canister ID: 3669

Flow Controller ID: K281

#### **Tracer Gas Information (if applicable)**

Tracer Gas: \_\_\_\_\_ Helium

Canister Pressure (inches Hg):				
<b>Reported By Laboratory</b>	Measured Prior to Sample Collection	Measured Following Sample Collection		
-29.4	-30	(-6.03) / -6		

Tracer Gas Concentration (if applicable):					
Measured from Soil Vapor Tubing Measured in 'Concentrated' Area				Area	
Post Purge	Post Sample	Prior to Purging	Post Purging	Post Sampling	
0 ppm	900 (dropping) ppm	82.9%	75.8%	14.7%	

**General Observations/Notes:** 

423 ppb reading on the PID following sample
Collection from soil vapor tubing.

Differential Pressure +0.021

#### **Approximating One-Well Volume (for purging):**

Each foot of <sup>1</sup>/<sub>4</sub>-inch tubing will have a volume of approximately 10 mL.



#### Sample ID: SSV-7

Client:	Bayer Material Science	Date/Day:	4/28/2011
Project:	Bayer Hicksville	Weather:	Light Rain
Location:	1 Empire Drive, Hicksville, NY	Temperature:	65.6°F
Project #:	B0032305.0004.00003	Wind Speed/Direction:	NA
Samplers:	Daniel Zuck/ Carey Healy	Subcontractor:	NA
Logged By:	Daniel Zuck	Equipment:	Hammer Drill/ Vacuum
Background PID Ambient Air Reading:	0 PPB	Moisture Content of Sampling Zone	Dry Moist
Sampling Depth:	~ 8" →10" BGS	(circle one):	
Probe (circle one):	Permanent / Temporary	Approximate Volume of Sampling Train::	30 mL (3' of ¼" ID tubing)
Time of Collection:	Start: 1120 Finish: 2000	Approximate Purge Volume:	(30ml*3v)=90ml

#### Nearby Groundwater Monitoring Wells/Water Levels:

Well ID	Depth to Groundwater (feet)
NA	NA

#### SUMMA Canister Information

Size (circle one):  $1 L \bigcirc L$ 

SSV-7

Canister ID: 3257

Flow Controller ID: K405

Tracer Gas Information (if applicable)

Tracer Gas: Helium

m		
ш		

<b>Canister Pressure (inches Hg):</b>		
<b>Reported By Laboratory</b>	Measured Prior to Sample Collection	Measured Following Sample Collection
-79.4	-32	(-5.3) / -6.0
29.4	52	( 5.5)7 0.0

Tracer Gas Concentration (if applicable):							
Measured from Soil Vapor Tubing Measured in 'Concentrated' Area							
Post Purge	Post Sample	Prior to Purging	Prior to Purging Post Purging				
0 ppm	100 ppm	82.1%	78.9%	54.0%			

#### **General Observations/Notes:**

1023 ppb reading on the PID following sample
Collection from soil vapor tubing.
Final Baseline 43 ppb

#### Approximating One-Well Volume (for purging):

Each foot of ¼-inch tubing will have a volume of approximately 10 mL.



#### Sample ID: SSV-8

Client:	Bayer Material Science	Date/Day:	4/28/2011
Project:	Bayer Hicksville	Weather:	Foggy
Location:	1 Empire Drive, Hicksville, NY	Temperature:	65.3°F
Project #:	B0032305.0004.00003	Wind Speed/Direction:	NA
Samplers:	Daniel Zuck/ Carey Healy	Subcontractor:	NA
Logged By:	Daniel Zuck	Equipment:	Hammer Drill/ Vacuum
Background PID Ambient Air Reading:	und PID Ambient     1523 PPB     Moisture Content of       ding:     Sampling Zone		Dry Moist
Sampling Depth:	~ 8" →10" BGS	(circle one):	
Probe (circle one):	Permanent / Temporary	Approximate Volume of Sampling Train::	30 mL (3' of ¼" ID tubing)
Time of Collection:	Start: 1048 Finish:1840	Approximate Purge Volume:	(30ml*3v)=90ml

#### Nearby Groundwater Monitoring Wells/Water Levels:

Well ID	Depth to Groundwater (feet)
NA	NA

#### SUMMA Canister Information

Size (circle one): 1 L 6 L

SSV-8

Canister ID: 2779

Flow Controller ID: K263

#### Tracer Gas Information (if applicable)

Tracer Gas: Helium

m

Measured Prior to Sample Collection	Measured Following Sample Collection
-30	(-4.42) / -5.0
	Measured Prior to Sample Collection -30

Tracer Gas Concentration (if applicable):							
Measured from Soil Vapor Tubing Measured in 'Concentrated' Area							
Post Purge	Post Sample	Prior to Purging	Prior to Purging Post Purging				
150 ppm	300 ppm	80.1%	77.8%	10.0%			

#### **General Observations/Notes:**

Photo ID: 1121	57 ppb reading on the PID following sample		
	Collection from soil vapor tubing.		
4 Hr Pressure @ 1500: -16.5			
Digital Pressure Readings are presented in parentheses	Baseline 40 ppb		
	Differential Pressure +0.008		

#### Approximating One-Well Volume (for purging):

Each foot of 1/4-inch tubing will have a volume of approximately 10 mL.

## ARCADIS

## Appendix E

Photographs of Sampling Activities



**Photo for SSV-1 and IA-1** Shows setup for collecting a sample using a tracer gas in an enclosed space.



Photo for SSV-2, DUP-042811 and IA-2 Shows setup for collecting a duplicate sample using a tracer gas in an enclosed space.



**Photo for SSV-4 and IA-4** Shows setup following sample collection.



**Photo for SSV-3 and IA-3** Shows setup for collecting a sample using a tracer gas in an enclosed space.



Photo for SSV-5

Shows setup following sample collection.



**Photo for IA-5 and DUP-042711** Shows setup for collecting a sample.



**Photo for SSV-6 and IA-6** Shows setup for collecting a sample using a tracer gas in an enclosed space.



Photo for SSV-7 and IA-7 Shows setup for collecting a sample using a tracer gas in an enclosed space.



IA-7 [050511] Shows setup for collecting indoor air sample.



Photo for SSV-8 and IA-8 Shows setup for collecting a sample using a tracer gas in an enclosed space.



IA-8 [050511] & DUP-050511 Shows setup for collecting indoor air/duplicate sample.



Photo for AMB-042711 Shows upwind ambient sampling location along western fence line.



Photo for AMB-042811 Shows upwind ambient sampling location south of eastern parking lot.



Photo for AMB-050511 Shows upwind ambient sampling location along northern fence line.

## ARCADIS

## Appendix F

Data Validation Report

Imagine the result



## **Bayer Material Science**

## **Data Usability Summary Report**

HICKSVILLE, NEW YORK

Volatile Analyses

SDG# 200-4973

Analyses Performed By: TestAmerica Laboratories Burlington, Vermont

Report: # 14163R Project: B0032305.0004.00003

#### SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #200-4973 for samples collected in association with the Bayer site. The review was conducted as a Tier III evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

			Sample			Analysis			
Sample ID	Lab ID	Matrix	Collection Date	Parent Sample	voc	svoc	РСВ	MET	MISC
SSV-2	200-4973-1	Air	4/28/2011		Х				
SSV-8	200-4973-3	Air	4/28/2011		Х				
SSV-1	200-4973-5	Air	4/28/2011		Х				
DUP-042811	200-4973-6	Air	4/28/2011	SSV-2	Х				
SSV-7	200-4973-8	Air	4/28/2011		Х				
IA-2	200-4973-10	Air	4/28/2011		Х				
IA-1	200-4973-4	Air	4/28/2011		Х				
AMB-042811	200-4973-9	Air	4/28/2011		Х				

#### ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

			Reported		mance ptable	Not
	Items Reviewed	No	Yes	No	Yes	Required
1.	Sample receipt condition		Х		Х	
2.	Requested analyses and sample results		Х		Х	
3.	Master tracking list		Х		Х	
4.	Methods of analysis		Х		Х	
5.	Reporting limits		Х		Х	
6.	Sample collection date		Х		Х	
7.	Laboratory sample received date		Х		Х	
8.	Sample preservation verification (as applicable)		Х		х	
9.	Sample preparation/extraction/analysis dates		Х		Х	
10.	Fully executed Chain-of-Custody (COC) form		Х		Х	
11.	Narrative summary of QA or sample problems provided		х		х	
12.	Data Package Completeness and Compliance		х		х	

QA - Quality Assurance

#### **ORGANIC ANALYSIS INTRODUCTION**

Analyses were performed according to United States Environmental Protection Agency (USEPA) Method TO-15. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999, USEPA Region II SOP HW-31- Validating Air Samples Volatile Organic Analysis of Ambient Air In Canister by Method TO-15 of October 2006, New York State DEC Analytical Method ASP 2005 TO-15 (QA/QC Criteria R9 TO-15), NYSDEC Modifications to R9 TO-15 QA/QC Criteria February 2008 and NYSDEC Proposed Change to the ASP Regarding Canister Vacuum June 26, 2009.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers
  - U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
  - B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
- Quantitation (Q) Qualifiers
  - E The compound was quantitated above the calibration range.
  - D Concentration is based on a diluted sample analysis.
- Validation Qualifiers
  - J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
  - UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
  - JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.
  - UB Compound considered non-detect at the listed value due to associated blank contamination.
  - N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.
  - R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

## VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

#### 1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation	Return Canister Pressure
EPA TO-15	Air	30 days from collection to analysis	Ambient Temperature	> 1" Hg

All samples were analyzed within the specified holding time criteria.

#### 2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

All compounds associated with the QA blanks exhibited a concentration less than the MDL.

#### 3. Mass Spectrometer Tuning

Sample locations IA-1, AMB-042811, and IA-2 were compliant with the Method TO-15 requirement of analysis within a 24-hour tune clock but not compliant with the NYSDEC requirement of analysis within a 12-hour tune clock. The data was not qualified.

#### 4. Calibration

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

#### 4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (30%) and an RRF value greater than control limit (0.05).

#### 4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (30%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits.

#### 5. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the VOC exhibit area counts that are not greater than 40% or less than 40% of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

#### 6. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the established acceptance limits of 70% to 130%.

Sample locations associated with LCS/LCSD analysis exhibiting recoveries outside of the control limits presented in the following table.

Sample Locations	Compound	LCS Recovery
	Bromodichloromethane	131%
	Bromoform	146%
IA-1	Dibromochloromethane	137%
AMB-042811	Ethylbenzene	136%
IA-2	Methylene chloride	132%
	m,p-Xylene	138%
	o-Xylene	136%

The criteria used to evaluate the LCS recoveries are presented in the following table. In the case of an LCS deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
LCS percent recovery > 120%	Non-detect	No Action
LCS percent recovery >130 %	Detect	J
$1.02$ percent receivery $\sqrt{200}$ but $> 100/$	Non-detect	J
CS percent recovery <70% but > 10%	Detect	J
- 10%	Non-detect	R
< 10%	Detect	J

Note: Sample results were not qualified as rejected (R) due to the deviations listed above.

#### 7. Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 20% for air matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of three times the RL is applied for air matrices.

Laboratory duplicates were not performed as part of this SDG.

#### 8. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method. A control limit of 100% for air matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of three times the RL is applied for air matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
SSV-2/ DUP-042811	Tetrachloroethene (µg/m <sup>3</sup> )	10,000	10,000	0%

U = Not detected

AC = Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

#### 9. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

#### 10. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

VOCs: TO-15	Repo	orted	Performance Acceptable		Not Bequired
	No	Yes	No	Yes	Required
GAS CHROMATOGRAPHY/MASS SPECTROME	TRY (GC/I	MS)			
Tier II Validation					
Canister return pressure/vacuum (>1"Hg)		Х		Х	
Holding times		Х		Х	
Reporting limits (units)		Х		Х	
Blanks					
A. Method blanks		Х		Х	
B. Equipment blanks					Х
C. Trip blanks					Х
Laboratory Control Sample (LCS)		Х	Х		
Laboratory Control Sample Duplicate (LCSD)					Х
LCS/LCSD Precision (RPD)					Х
Field/Lab Duplicate (RPD)		Х		Х	
Surrogate Spike Recoveries					Х
Dilution Factor		Х		Х	
Moisture Content					Х
Tier III Validation					
System performance and column resolution		Х		Х	
Initial calibration %RSDs		Х		Х	
Continuing calibration RRFs		Х		Х	
Continuing calibration %Ds		Х		Х	
Instrument tune and performance check		Х		Х	
Ion abundance criteria for each instrument used		Х		Х	
Internal standard		Х		Х	
Compound identification and quantitation					
A. Reconstructed ion chromatograms		Х		Х	
B. Quantitation Reports		Х			
C. RT of sample compounds within the established RT windows		х		х	
D. Transcription/calculation errors present		Х		Х	
E. Reporting limits adjusted to reflect sample dilutions		х		х	
%RSDRelative standard deviation%RPercent recoveryRPDRelative percent difference					

## DATA VALIDATION CHECKLIST FOR VOCs

%D Percent difference

## SAMPLE COMPLIANCE REPORT

#### SAMPLE COMPLIANCE REPORT

Commis						Compliancy <sup>1</sup>			Noncompliance	
Delivery Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	voc	SVOC	PCB/PEST /HERB	MET	MISC	
200-4973	4/28/2011	TO-15	SSV-2	Air	Yes					
200-4973	4/28/2011	TO-15	SSV-8	Air	Yes					
200-4973	4/28/2011	TO-15	SSV-1	Air	Yes					
200-4973	4/28/2011	TO-15	DUP-042811	Air	Yes					
200-4973	4/28/2011	TO-15	SSV-7	Air	Yes					
200-4973	4/28/2011	TO-15	IA-2	Air	No					VOC – LCS %Recovery
200-4973	4/28/2011	TO-15	IA-1	Air	No					VOC – LCS %Recovery
200-4973	4/28/2011	TO-15	AMB-042811	Air	No					VOC – LCS %Recovery

1 Samples which are compliant with no added validation qualifiers are listed as "yes". Samples which are non-compliant or which have added qualifiers are listed as "no". A "no" designation does not necessarily indicate that the data have been rejected or are otherwise unusable.

### VALIDATION PERFORMED BY: Amy Coats

SIGNATURE:

May Coats

\_\_\_\_\_

DATE: May 24, 2011

PEER REVIEW BY: Joseph C. Houser

DATE: <u>May 24, 2011</u>

## CHAIN OF CUSTODY/ CORRECTED SAMPLE ANALYSIS DATA SHEETS

### Analytical Data

Client Sample ID:	SSV-2	
Lab Sample ID:	200-4973-1	Date Sampled: 04/28/2011 1735
Client Matrix:	Air	Date Received: 05/02/2011 0950

		TO-15 Volatile Organic	Compounds in Am	nbient Air		
Analysis Method: Prep Method: Dilution: Analysis Date: Prep Date:	TO-15 Summa Canister 74.2 05/05/2011 1802 05/05/2011 1802	Analysis Batch: Prep Batch:	200-17603 N/A	Instrument ID: Lab File ID: Initial Weight/Volume: Final Weight/Volume: Injection Volume:	B.i bkaj010.d 21 mL 200 mL 200 mL	
Analyte		Result (p	ob v/v) Qua	alifier	RL	
Dichlorodifluorome	thane	37	U		37	
1.2-Dichlorotetraflu	oroethane	15	Ū		15	
Vinvl chloride		15	Ũ		15	
1.3-Butadiene		15	Ŭ		15	
Bromomethane		15	Ŭ		15	
Chloroethane		37	Ű		37	
Bromoethene(Vinv	Bromide)	15	Ŭ		15	
Trichlorofluorometh	nane	15	Ű		15	
1 1-Dichloroethene		15	Ŭ		15	
3-Chloronropene		37	U U		37	
Methylene Chloride	2	37	U U		37	
Methyl tert-butyl et	her	15	11		15	
trans-1 2-Dichloroe	thene	15	U U		15	
n-Hexane		15	U U		15	
1 1-Dichloroethane		15	0		15	
cis-1 2-Dichloroeth	ene	15	0		15	
1.2-Dichloroethene	Total	15	0		15	
Chloroform	1 I Utdi	15	0		15	
1.1.1-Trichloroetha	<b>no</b>	15	0		15	
Cyclohevane		15	0		15	
Carbon totrachloric	lo	15	0		10	
2.2.4-Trimethylpen	tane	15	0		10	
Bonzono	lanc	15	0		15	
1.2-Dicbloroethane		15	0		15	
n-Hentane	,	15	0		15	
Trichloroethene		15	0		15	
1 2-Dichloropropar	10	15			15	
Bromodichloromet		15	0		15	
cis-1 3-Dichloropro	inanc	15	0		15	
Toluene	pene	15	0		15	
trans_1.3_Dichloror	vronene	15	0		15	
1.1.2-Trichloroetha	nopene	15	0		10	
Tetrachloroethene	inc	1500	0		15	
Dibromochloromet	hano	1500	11		15	
1.2-Dibromoetban		15	0		15	
Ethylhenzene	,	15	0		15	
m n-Xvlene		37	0		27	
Xvlene o.		15	U U		15	
Xylene (total)		15	0		15	
Bromoform		15	0		15	
1122-Tetrachlor	ethane	15	0		15	
4-Ethyltoluene		15	U U		15	
1 3.5-Trimethylben	izene	15	U U		15	
10,0 minomyber		10	0		15	
Analyte		Result (L	ig/m3) Ou	alifier	RL	
Dichlorodifluorome	thane	180	U U		180	

SSV-2

Air

200-4973-1

Client Sample ID:

Lab Sample ID:

**Client Matrix:** 

### Analytical Data

Job Number: 200-4973-1 Sdg Number: 200-4973

Date Sampled: 04/28/2011 1735 Date Received: 05/02/2011 0950

TO-15 Volatile Organic Compounds in Ambient Air						
Analysis Method: Prep Method: Dilution: Analysis Date:	TO-15 Summa Canister 74.2 05/05/2011 1802	Analysis Batch: Prep Batch:	200-17603 N/A	Instrument ID: Lab File ID: Initial Weight/Volume: Final Weight/Volume:	B.i bkaj010.d 21 mL 200 mL	
Prep Date:	05/05/2011 1802			Injection Volume:	200 mL	
Analyte		Result (u	g/m3) (	Qualifier	RL	
1,2-Dichlorotetraflu	proethane	100	<u> </u>	J	100	
Vinyl chloride		38	ι	J	38	
1,3-Butadiene		33	U	J	33	
Bromomethane		58	L	J	58	
Chloroethane		98	ι	J	98	
Bromoethene(Vinyl	Bromide)	65	ι	J	65	
Trichlorofluorometh	ane	83	ι	J	83	
1,1-Dichloroethene		59	ι	J	59	
3-Chloropropene		120	l	J	120	
Methylene Chloride		130	ι	J	130	
Methyl tert-butyl eth	ner	54	ι	L	54	
trans-1,2-Dichloroe	thene	59	ι	J	59	
n-Hexane		52	ι	U	52	
1,1-Dichloroethane		60	ι	U	60	
cis-1,2-Dichloroethe	ene	59	ι	J	59	
1,2-Dichloroethene	, Total	59	ι	J	59	
Chloroform		72	ι	J	72	
1,1,1-Trichloroetha	ne	81	1	U	81	
Cyclohexane		51	U	U	51	
Carbon tetrachlorid	e	93	L.	U	93	
2,2,4-Trimethylpen	ane	69	(	U	69	
Benzene		47	L. L	U	47	
1,2-Dichloroethane		60	ι	U	60	
n-Heptane		61	l	U	61	
Trichloroethene		80	l	U	80	
1,2-Dichloropropan	e	69	l	Ū	69	
Bromodichlorometh	ane	99	l	U	99	
cis-1,3-Dichloropro	pene	67	t.	U	67	
Toluene		56	l	U	56	
trans-1,3-Dichlorop	ropene	67	L.	U	67	
1,1,2-Trichloroetha	ne	81	l	Ŭ	81	
Tetrachloroethene		10000			100	
Dibromochlorometh	nane	130		U	130	
1.2-Dibromoethane		110	1	U	110	
Ethylbenzene		64	1	Ū	64	
m.p-Xvlene		160		Ū	160	
Xylene, o-		64		U	64	
Xylene (total)		64		Ū	64	
Bromoform		150		U	150	
1,1,2,2-Tetrachloro	ethane	100		Ū	100	
4-Ethyltoluene		73	1	U	73	
1.3.5-Trimethylben	zene	73		U	73	

#### **Analytical Data**

Client Sample ID:	SSV-8						
Lab Sample ID: Client Matrix:	200-4973-3 Air					Date Sample Date Receiv	ed: 04/28/2011 1840 ed: 05/02/2011 0950
		TO-15 Volatile Organic	Compounds i	in Ambie	nt Air		
Analysis Method: Prep Method: Dilution: Analysis Date: Prep Date:	TO-15 Summa Canister 1.0 05/05/2011 1854 05/05/2011 1854	Analysis Batch: Prep Batch:	200-17603 N/A		Instrument ID: Lab File ID: Initial Weight/Volum Final Weight/Volum Injection Volume:	B.i bkaji ne: 200 ne: 200 200	011.d mL mL mL
Analyte		Result (p	pb v/v)	Qualifie	er		RL
Dichlorodifluorome	thane	0.66	***			*******	0.50
1,2-Dichlorotetraflu	oroethane	0.20		U			0.20
Vinyl chloride		0.20		U			0.20
1,3-Butadiene		0.20		U			0.20
Bromomethane		0.20		U			0.20
Chloroethane		0.50		U			0.50
Bromoethene(Viny	I Bromide)	0.20		U			0.20
Trichlorofluorometh	nane	1.4					0.20
1,1-Dichloroethene	•	0.20		U			0.20
3-Chloropropene		0.50		U			0.50
Methylene Chloride	9	1.0					0.50
Methyl tert-butyl et	her	0.20		U			0.20
trans-1,2-Dichloroe	ethene	0.20		U			0.20

Dichlorodifluoromethane	3.2		2.5
Analyte	Result (ug/m3)	Qualifier	RL
r,s,s-i nmetnyibenzene	0.20	U	0.20
4-Ethyltoluene	0.20	U	0.20
1,1,2,2-1 etrachloroethane	0.20	U	0.20
Bromotorm	0.20	U	0.20
Xylene (total)	0.94		0.20
Xylene, o-	0.23		0.20
m,p-Xylene	0.72		0.50
Ethylbenzene	0.20	U	0.20
1,2-Dibromoethane	0.20	U	0.20
Dibromochloromethane	0.20	U	0.20
Tetrachloroethene	1.6		0.20
1,1,2-Trichloroethane	0.20	U	0.20
trans-1,3-Dichloropropene	0.20	U	0.20
Toluene	4.1		0.20
cis-1,3-Dichloropropene	0.20	U	0.20
Bromodichloromethane	0.20	U	0.20
1,2-Dichloropropane	0.20	U	0.20
Trichloroethene	1.7		0.20
n-Heptane	0.20	U	0.20
1,2-Dichloroethane	0.20	U	0.20
Benzene	0.20	U	0.20
2,2,4-Trimethylpentane	0.20	U	0.20
Carbon tetrachloride	0.20	U	0.20
Cyclohexane	0.20	U	0.20
1,1,1-Trichloroethane	0.20	U	0.20
Chloroform	0.20	U	0.20
1,2-Dichloroethene, Total	0.20	U	0.20
cis-1,2-Dichloroethene	0.20	U	0.20
1,1-Dichloroethane	0.20	U	0.20
n-Hexane	0.20	U	0.20
trans-1,2-Dichloroethene	0.20	U	0.20
Methyl tert-butyl ether	0.20	U	0.20
Methylene Chloride	1.0		0.50

### Analytical Data

Job Number: 200-4973-1 Sdg Number: 200-4973

011 1840 011 0950

Client Sample ID:	SSV-8		
Lab Sample ID: Client Matrix:	200-4973-3 Air		Date Sampled: 04/28/20 Date Received: 05/02/20
		TO-15 Volatile Organic Compounds in Ambient Air	

Analysis Method: Prep Method: Dilution: Analysis Date: Prep Date:	TO-15 Summa Canister 1.0 05/05/2011 1854 05/05/2011 1854	Analysis Batch: Prep Batch:	200-17603 N/A		Instrument ID: Lab File ID: Initial Weight/Volume: Final Weight/Volume: Injection Volume:	B.i bkaj 200 200 200	011.d mL mL mL
Analyte		Result (u	g/m3)	Qualifie	r		RL
1,2-Dichlorotetrafluo	proethane	1.4		U	n an daaraa waxaa ka ka ka ahaa ahaa ka k		1.4
Vinyl chloride		0.51		U			0.51
1,3-Butadiene		0.44		U			0.44
Bromomethane		0.78		U			0.78
Chloroethane		1.3		U			1.3
Bromoethene(Vinyl	Bromide)	0.87		U			0.87
Trichlorofluorometha	ane	8.1					1.1
1,1-Dichloroethene		0.79		U			0.79
3-Chloropropene		1.6		U			1.6
Methylene Chloride		3.5					1.7
Methyl tert-butyl eth	er	0.72		U			0.72
trans-1,2-Dichloroet	hene	0.79		U			0.79
n-Hexane		0.70		U			0.70
1,1-Dichloroethane		0.81		U			0.81
cis-1,2-Dichloroethe	ine	0.79		U			0.79
1,2-Dichloroethene,	Total	0.79		U			0.79
Chloroform		0.98		U			0.98
1,1,1-Trichloroethan	ne -	1.1		U			1.1
Cyclohexane		0.69		U			0.69
Carbon tetrachloride	Э	1.3		U			1.3
2,2,4-Trimethylpenta	апе	0.93		U			0.93
Benzene		0.64		U			0.64
1,2-Dichloroethane		0.81		U			0.81
n-Heptane		0.82		U			0.82
Trichloroethene		9.1					1.1
1,2-Dichloropropane	e	0.92		U			0.92
Bromodichlorometh	ane	1.3		U			1.3
cis-1,3-Dichloroprop	bene	0.91		U			0.91
Toluene		15					0.75
trans-1,3-Dichloropr	ropene	0.91		U			0.91
1,1,2-Trichloroethar	ne	1.1		U			1.1
Tetrachloroethene		11					1.4
Dibromochlorometh	ane	1.7		U			1.7
1,2-Dibromoethane		1.5		U			1.5
Ethylbenzene		0.87		U			0.87
m,p-Xylene		3.1					2.2
Xylene, o-		0.98					0.87
Xylene (total)		4.1					0.87
Bromoform		2.1		U			2.1
1,1,2,2-Tetrachloroe	ethane	1.4		U			1.4
4-Ethyltoluene		0.98		U			0.98
1,3,5-Trimethylbenz	zene	0.98		U			0.98

SSV-1

Air

200-4973-5

Client Sample ID:

Lab Sample ID:

Client Matrix:

#### Analytical Data

Job Number: 200-4973-1 Sdg Number: 200-4973

Date Sampled: 04/28/2011 1810 Date Received: 05/02/2011 0950

		TO-15 Volatile Organic	Compounds in	n Ambient A	ir		
Analysis Method: Prep Method:	TO-15 Summa Canister	Analysis Batch: Prep Batch:	200-17603 N/A	Ins Lai	trument ID: b File ID:	B.i bkaj(	012.d
Dilution:	1.0			Init	ial Weight/Volume:	200	mL
Analysis Date:	05/05/2011 1946			Fin	al Weight/Volume:	200	mL
Prep Date:	05/05/2011 1946			Inje	ection Volume:	200	mL
Analyte		Result (p	pb v/v)	Qualifier			RL
Dichlorodifluorome	thane	0.68					0.50
1,2-Dichlorotetraflu	oroethane	0.20		U			0.20
Vinyl chloride		0.20		U			0.20
1,3-Butadiene		0.20		U			0.20
Bromomethane		0.20		U			0.20
Chloroethane		0.50		U			0.50
Bromoethene(Vinyl	l Bromide)	0.20		U			0.20
Trichlorofluorometh	nane	14					0.20
1,1-Dichloroethene		0.20		U			0.20
3-Chloropropene		0.50		Ŭ			0.50
Methylene Chloride	3	0.67					0.50
Methyl tert-butyl etl	her	0.20		U			0.20
trans-1,2-Dichloroe	thene	0.20		U			0.20
n-Hexane		0.20					0.20
1.1-Dichloroethane		0.20		Ū			0.20
cis-1.2-Dichloroeth	ene	0.20		U			0.20
1.2-Dichloroethene	. Total	0.20		Ū			0.20
Chloroform		0.20		Ū			0.20
1.1.1-Trichloroetha	ine	0.20		Ū			0.20
Cvclohexane		0.20		Ū			0.20
Carbon tetrachloric	le	0.20		Ū			0.20
2.2.4-Trimethylpen	tane	0.20		Ū			0.20
Benzene		0.20		Ŭ			0.20
1.2-Dichloroethane		0.20		Ū			0.20
n-Heptane		0.20		Ū			0.20
Trichloroethene		0.20					0.20
1,2-Dichloropropar	ne	0.20		U			0.20
Bromodichlorometi	hane	0.20		U			0.20
cis-1.3-Dichloropro	pene	0.20		U			0.20
Toluene		2.1					0.20
trans-1.3-Dichloror	propene	0.20		U			0.20
1.1.2-Trichloroetha	ine	0.20		U			0.20
Tetrachloroethene		16					0.20
Dibromochloromet	hane	0.20		U			0.20
1,2-Dibromoethane	e	0.20		U			0.20
Ethylbenzene		0.20					0.20
m.p-Xviene		0.80					0.50
Xviene, o-		0.24					0.20
Xvlene (total)		1.0					0.20
Bromoform		0.20		U			0.20
1,1,2,2-Tetrachloro	pethane	0.20		U			0.20
4-Ethyltoluene		0.20		U			0.20
1,3,5-Trimethylber	zene	0.20		U			0.20
Analyte		Result (	ug/m3)	Qualifier			RL
Dichlorodifluorome	ethane	3.4					2.5

### Analytical Data

Client Sample ID:	SSV-1				
Lab Sample ID: Client Matrix:	200-4973-5 Air			C [	Date Sampled: 04/28/2011 1810 Date Received: 05/02/2011 0950
		TO-15 Volatile Organic	Compounds in A	mbient Air	
Analysis Method:	TO-15	Analysis Batch:	200-17603	Instrument ID:	B.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	bkaj012.d
Dilution:	1.0			Initial Weight/Volum	ne: 200 mL
Analysis Date:	05/05/2011 1946			Final Weight/Volum	e: 200 mL

Prep Date: 05/05/2011 1946		Injection Volume: 20	0 mL
Analyte	Result (ug/m3)	Qualifier	RL
1,2-Dichlorotetrafluoroethane	1.4	U	1.4
Vinyl chloride	0.51	U	0.51
1,3-Butadiene	0.44	U	0.44
Bromomethane	0.78	U	0.78
Chloroethane	1.3	U	1.3
Bromoethene(Vinyl Bromide)	0.87	U	0.87
Trichlorofluoromethane	76		1.1
1,1-Dichloroethene	0.79	U	0.79
3-Chloropropene	1.6	U	1.6
Methylene Chloride	2.3		1.7
Methyl tert-butyl ether	0.72	U	0.72
trans-1,2-Dichloroethene	0.79	U	0.79
n-Hexane	0.71		0.70
1,1-Dichloroethane	0.81	U	0.81
cis-1,2-Dichloroethene	0.79	U	0.79
1,2-Dichloroethene, Total	0.79	υ	0.79
Chloroform	0.98	U	0.98
1,1,1-Trichloroethane	1.1	U	1.1
Cyclohexane	0.69	U	0.69
Carbon tetrachloride	1.3	U	1.3
2,2,4-Trimethylpentane	0.93	U	0.93
Benzene	0.64	U	0.64
1,2-Dichloroethane	0.81	U	0.81
n-Heptane	0.82	U	0.82
Trichloroethene	1.1		1.1
1,2-Dichloropropane	0.92	U	0.92
Bromodichloromethane	1.3	U	1.3
cis-1,3-Dichloropropene	0.91	U	0.91
Toluene	7.8		0.75
trans-1,3-Dichloropropene	0.91	U	0.91
1,1,2-Trichloroethane	1.1	U	1.1
Tetrachloroethene	110		1.4
Dibromochloromethane	1.7	U	1.7
1,2-Dibromoethane	1.5	U	1.5
Ethylbenzene	0.86		0.87
m,p-Xylene	3.5		2.2
Xylene, o-	1.1		0.87
Xylene (total)	4.5		0.87
Bromoform	2.1	U	2.1
1,1,2,2-Tetrachloroethane	1.4	U	1.4
4-Ethyltoluene	0.98	U	0.98
1,3,5-Trimethylbenzene	0.98	U	0.98

DUP-042811

200-4973-6

Client Sample ID:

Lab Sample ID:

### Analytical Data

Date Sampled:	04/28/2011 0000
Date Received	05/02/2011 0950

Client Matrix:	Air			Date	Received: 05/02/2011 0950
		TO-15 Volatile Organic	Compounds in Amb	ient Air	
Analysis Method:	TO-15	Analysis Batch:	200-17603	Instrument ID:	B.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	bkai013 d
Dilution:	79.6			Initial Weight/volume	20 ml
Analysis Date:	05/05/2011 2039			Final Weight//olume:	200 ml
Pren Date:	05/05/2011 2039			Interveign/volume:	200 mL
r top Date.				injection volume.	200 ML
Analyte		Result (p	pb v/v) Quali	fier	RL
Dichlorodifluorome	ethane	40	U		40
1,2-Dichlorotetraflu	uoroethane	16	U		16
Vinyl chloride		16	U		16
1,3-Butadiene		16	U		16
Bromomethane		16	U		16
Chloroethane		40	U		40
Bromoethene(Viny	/I Bromide)	16	U		16
Trichlorofluoromet	hane	16	U		16
1,1-Dichloroethen	e	16	U		16
3-Chloropropene		40	U		40
Methylene Chlorid	le	40	U		40
Methyl tert-butyl ei	ther	16	U		16
trans-1,2-Dichloro	ethene	16	U		16
n-Hexane		16	U		16
1,1-Dichloroethan	e	16	U		16
cis-1,2-Dichloroeth	hene	16	U		16
1,2-Dichloroethen	e, Total	16	U		16
Chloroform		16	U		16
1,1,1-Trichloroetha	ane	16	U		16
Cyclohexane		16	U		16
Carbon tetrachlori	de	16	U		16
2.2.4-Trimethylper	ntane	16	U		16
Benzene		16	Ū		16
1.2-Dichloroethan	e	16	U		16
n-Heptane		16	U		16
Trichloroethene		16	Ŭ		16
1.2-Dichloropropa	ne	16	Ū		16
Bromodichlorome	thane	16	ū		16
cis-1.3-Dichloroph	opene	16	ŭ		16
Toluene		16	Ū		16
trans-1.3-Dichloro	propene	16	Ū		16
1.1.2-Trichloroeth	ane	16	U		16
Tetrachloroethene		1500	-		16
Dibromochlorome	thane	16	U		16
1.2-Dibromoethan	ne .	16	ū		16
Ethylbenzene		16	U U		16
m p-Xvlene		40	Ű		40
Xviene o.		16	Ű		16
Xylene (total)		16	U		16
Bromoform		16	1		16
1122-Tetrachlor	roethane	16			16
4-Ethyltoluene	oonuno	16	1		16
1,3,5-Trimethylbe	nzene	16	U		16
Analyte		Rocult /	un/m3) Ousi	lifier	RI
Dichlorodifluorom	othana	200			200
Dictrior addition 0 m	ethalle	200	U		200

### Analytical Data

Job Number: 200-4973-1 Sdg Number: 200-4973

#### 0 0

Client Sample ID:	DUP-042811				
Lab Sample ID: Client Matrix:	200-4973-6 Air				Date Sampled: 04/28/2011 0000 Date Received: 05/02/2011 0950
		TO-15 Volatile Organic	Compounds in A	mbient Air	
Analysis Method:	TO-15	Analysis Batch:	200-17603	Instrument ID:	B.i

Analysis Methou.	10-10	Analysis Daton.	200-17003	instrument iD.	Dit	
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File 1D:	bkaj013.d	
Dilution:	79.6			Initial Weight/Volume:	20 mL	
Analysis Date:	05/05/2011 2039			Final Weight/Volume:	200 mL	
Prep Date:	05/05/2011 2039			Injection Volume	200 ml	
				injoeden voidine.	200 1112	
Analyte		Result (u	g/m3) Quali	ifier	RL	
1,2-Dichlorotetrafluo	roethane	110	U	*****	110	risededeleter for er ed e urasen k
Vinyl chloride		41	U		41	
1,3-Butadiene		35	U		35	
Bromomethane		62	U		62	
Chloroethane		110	U		110	
Bromoethene(Vinyl I	Bromide)	70	U		70	
Trichlorofluorometha	ane	89	U		89	
1,1-Dichloroethene		63	U		63	
3-Chloropropene		120	U		120	
Methylene Chloride		140	U		140	
Methyl tert-butyl ethe	ег	57	U		57	
trans-1,2-Dichloroet	hene	63	U		63	
n-Hexane		56	U		56	
1,1-Dichloroethane		64	U		64	
cis-1,2-Dichloroethe	ne	63	U		63	
1,2-Dichloroethene,	Total	63	U		63	
Chloroform		78	U		78	
1,1,1-Trichloroethan	e	87	U		87	
Cyclohexane		55	U		55	
Carbon tetrachloride	9	100	U		100	
2,2,4-Trimethylpenta	ane	74	U		74	
Benzene		51	U		51	
1,2-Dichloroethane		64	U		64	
n-Heptane		65	U		65	
Trichloroethene		86	U		86	
1,2-Dichloropropane	9	74	U		74	
Bromodichlorometha	ane	110	U		110	
cis-1,3-Dichloroprop	ene	72	U		72	
Toluene		60	U		60	
trans-1,3-Dichloropr	opene	72	U		72	
1,1,2-Trichloroethan	le	87	U		87	
Tetrachloroethene		10000			110	
Dibromochlorometh	ane	140	U		140	
1,2-Dibromoethane		120	U		120	
Ethylbenzene		69	U		69	
m,p-Xylene		170	U		170	
Xylene, o-		69	U		69	
Xylene (total)		69	U		69	
Bromoform		160	U		160	
1,1,2,2-Tetrachloroe	ethane	110	U		110	
4-Ethyltoluene		78	U		78	
1,3,5-Trimethylbenz	ene	78	U		78	

### Analytical Data

Client Sample ID:	SSV-7							
Lab Sample ID: Client Matrix:	200-4973-8 Air				Date Sampled: 04/28/2011 2000 Date Received: 05/02/2011 0950			
	TO-15 Volatile Organic Compounds in Ambient Air							
Analysis Method: Prep Method:	TO-15 Summa Canister	Analysis Batch: Prep Batch:	200-17603 N/A	Instrument ID: Lab File ID:	B.i bkaj014.d			

Dilution:	2.99		Initial Weight/Volume:	67 mL
Analysis Date:	05/05/2011 2131		Final Weight/Volume:	200 mL
Prep Date:	05/05/2011 2131		Injection Volume:	200 mL
Analuto		Pagult (nph v(v)	Qualifiar	PI
Dichlorodifluoromot	1220			1.E
1.2 Dichlaratetrafu	araathana	1.5	0	1.5
Vinul chlorido	oroemane	0.60	0	0.60
1.2 Putodiono		0.00	0	0.60
r,o-buldulene		0.60	U	0.60
Chloroothono		0.60	0	0.60
Chioroethane Bromoothane() (aul	Descride)	1.5	0	1.5
Bromoetnene(viny)	Bromide)	0.60	U	0.60
1 1 Disblassethere	lane	2.7		0.60
1, I-Dichloroethene		0.60	U	0.60
3-Onioroproperie Methylene Obleside		1.5	U	1.5
Methylene Chloride		1.5	U	1.5
weinyl tert-butyl etr	there	94		0.60
trans-1,2-Dichloroe	inene	0.60	0	0.60
n-Hexane		0.60	0	0.60
1,1-Dichloroethane		0.60	U	0.60
cis-1,2-Dichloroeth	ene	0.60	U	0.60
1,2-Dichloroethene	, Iotal	0.60	U	0.60
Chlorotorm		0.60	U	0.60
1,1,1-I richloroetha	ne	0.60	U	0.60
Cyclohexane		0.60	U	0.60
Carbon tetrachlorid	e	0.60	U	0.60
2,2,4-1 rimethylpen	tane	0.60	U	0.60
Benzene		0.60	U	0.60
1,2-Dichloroethane		0.60	U	0.60
n-Heptane		0.60	U	0.60
Trichloroethene		6.9		0.60
1,2-Dichloropropan	ne	0.60	U	0.60
Bromodichlorometh	hane	0.60	U	0.60
cis-1,3-Dichloropro	pene	0.60	U	0.60
Toluene		47		0.60
Irans-1,3-Dichlorop	ropene	0.60	U	0.60
1,1,2-Trichloroetha	ne	0.60	U	0.60
Tetrachloroethene		51		0.60
Dibromochloromet	hane	0.60	U	0.60
1,2-Dibromoethane	9	0.60	U	0.60
Ethylbenzene		29		0.60
m,p-Xylene		73		1.5
Xylene, o-		25		0.60
Xylene (total)		98		0.60
Bromoform		0.60	U	0.60
1,1,2,2-Tetrachloro	bethane	0.60	U	0.60
4-Ethyltoluene		0.60	U	0.60
1,3,5-Trimethylben	zene	0.60	U	0.60
Analyte		Result (ug/m3)	Qualifier	RL
Dichlorodifluorome	thane	7.4	U	7.4
TestAmerica Burli	ngton	Page 26 of 5	74	

## Analytical Data

Client Sample ID:	SSV-7	
Lab Sample ID:	200-4973-8	Date Sampled: 04/28/2011 2000
Client Matrix:	Air	Date Received: 05/02/2011 0950

TO-15 Volatile Organic Compounds in Ambient Air						
Analysis Method: Prep Method: Dilution: Analysis Date: Prep Date:	TO-15 Summa Canister 2.99 05/05/2011 2131 05/05/2011 2131	Analysis Batch: Prep Batch:	200-17603 N/A	Instrument ID: Lab File ID: Initial Weight/Volume: Final Weight/Volume: Injection Volume:	B.i bkaj014.d 67 mL 200 mL 200 mL	
Analyte		Result (u	g/m3) Qual	lifier	RL	
1,2-Dichlorotetraflu	oroethane	4.2	U		4.2	
Vinyl chloride		1.5	U		1.5	
1,3-Butadiene		1.3	U		1.3	
Bromomethane		2.3	U		2.3	
Chloroethane		3.9	U		3.9	
Bromoethene(Vinyl	Bromide)	2.6	U		2.6	
Trichlorofluorometh	ane	15			3.4	
1,1-Dichloroethene		2.4	U		2.4	
3-Chloropropene		4.7	U		4.7	
Methylene Chloride		5.2	U		5.2	
Methyl tert-butyl eth	ner	340			2.2	
trans-1,2-Dichloroe	thene	2.4	U		2.4	
n-Hexane		2.1	U		2.1	
1,1-Dichloroethane		2.4	U		2.4	
cis-1,2-Dichloroethe	ene	2.4	U		2.4	
1,2-Dichloroethene	, Total	2.4	U		2.4	
Chloroform		2.9	U		2.9	
1,1,1-Trichloroetha	ne	3.3	U		3.3	
Cyclohexane		2.1	U		2.1	
Carbon tetrachlorid	e	3.8	U		3.8	
2,2,4-Trimethylpent	lane	2.8	U		2.8	
Benzene		1.9	U		1.9	
1,2-Dichloroethane		2.4	U		2.4	
n-Heptane		2.5	U		2.5	
Trichloroethene		37			3.2	
1,2-Dichloropropan	e	2.8	U		2.8	
Bromodichlorometh	ane	4.0	U		4.0	
cis-1,3-Dichloropro	pene	2.7	U		2.7	
Toluene		180			2.3	
trans-1,3-Dichlorop	ropene	2.7	U		2.7	
1,1,2-Trichloroetha	ne	3.3	U		3.3	
Tetrachloroethene		340			4.1	
Dibromochlorometh	nane	5.1	U		5.1	
1,2-Dibromoethane		4.6	U		4.6	
Ethylbenzene		130			2.6	
m,p-Xylene		320			6.5	
Xylene, o-		110			2.6	
Xylene (total)		430			2.6	
Bromoform		6.2	U		6.2	
1,1,2,2-Tetrachloro	ethane	4.1	U		4.1	
4-Ethyltoluene		2.9	U		2.9	
1,3,5-Trimethylben:	zene	2.9	U		2.9	

## Analytical Data

Client Sample ID:	IA-1	
Lab Sample ID:	200-4973-4	Date Sampled: 04/28/2011 1810
Client Matrix:	Air	Date Received: 05/02/2011 0950

TO15 LL Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)									
Analysis Method:	T015 LL	Analysis Batch: 200-17816		Instrument ID:	E.i	E.i			
Prep Method:	Summa Canister	Prep Batch: N/A		Lab File ID:	eejv	eeiw018.d			
Dilution:	4.0			Initial Weight/Volum	e: 125	mL			
Analysis Date:	05/11/2011 0048			Final Weight/Volume	500	ml.			
Pren Date:	05/11/2011 0048			Injection Volume:	. 500	ml			
Trep Date.	0011112011 0010			injection volume.	500				
Analyte		Result (p	pb v/v)	Qualifier		RL			
Dichlorodifluoromethane		0.42		<b>1</b> - Jan 1977 - 1977 - 1977 - 1979 - 1997 - 1979 - 19		0.040			
1,2-Dichlorotetrafluoroethane		0.040		U		0.040			
Vinyl chloride		0.080		U		0.080			
1,3-Butadiene		0.080		U		0.080			
Bromomethane		0.080		U		0.080			
Chloroethane		0.080		U		0.080			
Bromoethene(Vinyl Bromide)		0.080		U		0.080			
Trichlorofluoromethane		2.7				0.040			
1,1-Dichloroethene		0.040		U		0.040			
3-Chloropropene		0.080		U		0.080			
Methylene Chloride		6.9	-	*)		0.80			
Methyl tert-butyl ether		0.040		υ		0.040			
trans-1,2-Dichloroethene		0.040		υ		0.040			
n-Hexane		0.16				0.080			
1,1-Dichloroethane		0.040		υ		0.040			
cis-1,2-Dichloroethene		0.040		U		0.040			
Chloroform		0.040		U		0.040			
1,1,1-Trichloroethane		0.040		υ		0.040			
Cyclohexane		0.14				0.040			
Carbon tetrachloride		0.074				0.040			
2,2,4-Trimethylpentane		0.075				0.040			
Benzene		0.14				0.040			
1,2-Dichloroethane		0.080		U		0.080			
n-Heptane		0.31				0.040			
Trichloroethene		0.047				0.040			
1,2-Dichloropropane		0.080		U		0.080			
Bromodichloromethane		0.040		U		0.040			
cis-1,3-Dichloropropene		0.040		U		0.040			
Toluene		3.8				0.040			
trans-1,3-Dichloropropene		0.040		U		0.040			
1,1,2-Trichloroethane		0.040		U		0.040			
Tetrachloroethene		0.058				0.040			
Dibromochloromethane		0.040		U.*		0.040			
1,2-Dibromoethane		0.040		U		0.040			
Ethylbenzene		0.74		-*- J		0.040			
o-Xylene		0.53		× · J		0.040			
Bromoform		0.040		U×		0.040			
1,1,2,2-Tetrachloroethane		0.040		U		0.040			
4-Ethyltoluene		0.052				0.040			
1,3,5-Trimethylbenzene		0.080		U		0.080			
1,2-Dichloroethene, Total		0.040		U		0.040			
m-Xylene & p-Xylene		1.4				0.080			
Xylenes, Total		1.9		*		0.040			
Analyte		Result (u	ıg/m3)	Qualifier		RL			
Dichlorodifluoromethane		2.1		nan an		0.20			
TestAmerica Burlington		Page	28 of 574						
## Analytical Data

Client Sample ID:	IA-1			
Lab Sample ID:	200-4973-4	Date Sampled:	04/28/2011	1810
Client Matrix:	Air	Date Received:	05/02/2011	0950

	TO15 LL Volati	le Organic Compounds	in Ambient Air	, Low Concentration (GC/MS)	
Analysis Method:	TO15 LL	Analysis Batch:	200-17816	Instrument ID:	E.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	eeiw018.d
Dilution:	4.0			Initial Weight/Volume	125 ml
Analysis Date:	05/11/2011 0048			Final Weight/Volume:	500 ml
Pren Date:	05/11/2011 0048			Injection Valume:	500 mL
riep bate.	00111/2011 0040			injection volume.	JUO INL
Analyte		Result (u	g/m3)	Qualifier	RL
1,2-Dichlorotetrafluo	roethane	0.28	*****	U	0.28
Vinyl chloride		0.20		U	0.20
1,3-Butadiene		0.18		U	0.18
Bromomethane		0.31		U	0.31
Chloroethane		0.21		U	0.21
Bromoethene(Vinyl I	Bromide)	0.35		U	0.35
Trichlorofluorometha	ane	15			0.22
1,1-Dichloroethene		0.16		U	0.16
3-Chloropropene		0.25		U	0.25
Methylene Chloride		24		J - a	2.8
Methyl tert-butyl eth	er	0.14		U	0.14
trans-1,2-Dichloroet	hene	0.16		U	0.16
n-Hexane		0.55			0.28
1,1-Dichloroethane		0.16		U	0.16
cis-1,2-Dichloroethe	ne	0.16		U	0.16
Chloroform		0.20		U	0.20
1,1,1-Trichloroethan	e	0.22		U	0.22
Cyclohexane		0.48			0.14
Carbon tetrachloride		0.47			0.25
2,2,4-Trimethylpenta	ane	0.35			0.19
Benzene		0.43			0.13
1,2-Dichloroethane		0.32		U	0.32
n-Heptane		1.3			0.16
Trichloroethene		0.25			0.21
1,2-Dichloropropane	9	0.37		U,	0.37
Bromodichlorometh	ane	0.27		U1	0.27
cis-1,3-Dichloroprop	ene	0.18		U	0.18
Toluene		15			0.15
trans-1,3-Dichloropr	opene	0.18		U	0.18
1,1,2-Trichloroethan	e	0.22		U	0.22
Tetrachloroethene		0.40			0.27
Dibromochlorometh	ane	0.34		Ux	0.34
1,2-Dibromoethane		0.31		U	0.31
Ethylbenzene		3.2		A U	0.17
o-Xylene		2.3			0.17
Bromoform		0.41		U×	0.41
1,1,2,2-Tetrachloroe	ethane	0.27		U	0.27
4-Ethyltoluene		0.25			0.20
1,3,5-Trimethylbenz	ene	0.39		U	0.39
1,2-Dichloroethene,	Total	0.16		U	0.16
m-Xylene & p-Xylen	e	6.0		* 0	0.35
Xylenes, Total		8.3		*	0.17

## Analytical Data

Client Sample ID:	AMB-042811	
Lab Sample ID:	200-4973-9	Date Sampled: 04/28/2011 1730
Client Matrix:	Air	Date Received: 05/02/2011 0950

	TO15 LL Volat	ile Organic Compounds	in Ambient Air, Low	v Concentration (GC/MS)		
Analysis Method:	TO15 LL	Analysis Batch:	200-17816	Instrument ID:	E.i	
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	eejw019.d	
Dilution:	4.0			Initial Weight/Volume:	125 mL	
Analysis Date:	05/11/2011 0142			Final Weight/Volume:	500 mL	
Prep Date:	05/11/2011 0142			Injection Volume:	500 mL	
				,		
Analyte		Result (u	g/m3) Qua	lifier	RL	
1,2-Dichlorotetrafluc	proethane	0.28	U		0.28	
Vinyl chloride		0.20	U		0.20	
1,3-Butadiene		0.18	U		0.18	
Bromomethane		0.31	U		0.31	
Chloroethane		0.21	U		0.21	
Bromoethene(Vinyl	Bromide)	0.35	U		0.35	
Trichlorofluorometh	ane	1.2			0.22	
1,1-Dichloroethene		0.16	U		0.16	
3-Chloropropene		0.25	U		0.25	
Methylene Chloride		2.8	U.*		2.8	
Methyl tert-butyl eth	er	0.14	U		0.14	
trans-1,2-Dichloroet	lhene	0.16	U		0.16	
n-Hexane		0.48			0.28	
1,1-Dichloroethane		0.16	U		0.16	
cis-1,2-Dichloroethe	ene	0.16	U		0.16	
Chloroform		0.20	U		0.20	
1,1,1-Trichloroethar	ne	0.22	U		0.22	
Cyclohexane		0.16			0.14	
Carbon tetrachloride	e	0.48			0.25	
2,2,4-Trimethylpent	ane	0.19	U		0.19	
Benzene		0.20			0.13	
1.2-Dichloroethane		0.32	U		0.32	
n-Heptane		0.64			0.16	
Trichloroethene		0.21	U		0.21	
1.2-Dichloropropan	e	0.37	Ū		0.37	
Bromodichlorometh	ane	0.27	U×	•	0.27	
cis-1,3-Dichloropror	bene	0.18	U		0.18	
Toluene		1.5			0.15	
trans-1,3-Dichlorop	ropene	0.18	U		0.18	
1,1,2-Trichloroethai	ne	0.22	U		0.22	
Tetrachloroethene		0.32			0.27	
Dibromochlorometh	iane	0.34	U/*		0.34	
1,2-Dibromoethane		0.31	U		0.31	
Ethylbenzene		0.21	y J		0.17	
o-Xvlene		0.17	U.*		0.17	
Bromoform		0.41	UM	/	0.41	
1,1,2,2-Tetrachloro	ethane	0.27	Ū		0.27	
4-Ethyltoluene		0.20	Ŭ		0.20	
1,3,5-Trimethylben:	zene	0.39	Ű		0.39	
1,2-Dichloroethene	Total	0.16	Ŭ	1	0.16	
m-Xylene & p-Xvler	ne	0.52	×	0	0.35	
Xylenes, Total		0.66	×	3	0.17	

## Analytical Data

Client Sample ID:	AMB-042811	
Lab Sample ID:	200-4973-9	Date Sampled: 04/28/2011 1730
Client Matrix:	Air	Date Received: 05/02/2011 0950

	TO15 LL Volat	ile Organic Compounds	in Ambient Air,	Low Concentration (GC/MS)		
Analysis Method:	TO15 LL	Analysis Batch:	200-17816	Instrument ID:	E.i	
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	eejw	019.d
Dilution:	4.0			Initial Weight/Volume:	125	mL
Analysis Date:	05/11/2011 0142			Final Weight/Volume:	500	ml
Pren Date:	05/11/2011 0142			Injection Volume:	500	ml
riep bute.				injection volume.	500	THE
Analyte		Result (p	pb v/v)	Qualifier		RL
Dichlorodifluoromet	hane	0.48			iandahasik yanga bapakin si sa bara	0.040
1,2-Dichlorotetrafluc	proethane	0.040		U		0.040
Vinyl chloride		0.080		U		0.080
1,3-Butadiene		0.080	1	U		0.080
Bromomethane		0.080		U		0.080
Chloroethane		0.080		U		0.080
Bromoethene(Vinyl	Bromide)	0.080		U		0.080
Trichlorofluorometh	ane	0.21				0.040
1,1-Dichloroethene		0.040		U		0.040
3-Chloropropene		0.080		U		0.080
Methylene Chloride		0.80		UA		0.80
Methyl tert-butyl eth	ег	0.040		U		0.040
trans-1,2-Dichloroet	lhene	0.040	1	U		0.040
n-Hexane		0.14				0.080
1,1-Dichloroethane		0.040	1	U		0.040
cis-1,2-Dichloroethe	ene	0.040		U		0.040
Chloroform		0.040		U		0.040
1,1,1-Trichloroethar	ne	0.040		U		0.040
Cyclohexane		0.046				0.040
Carbon tetrachlorid	e	0.077				0.040
2,2,4-Trimethylpent	ane	0.040		U		0.040
Benzene		0.064				0.040
1,2-Dichloroethane		0.080		U		0.080
n-Heptane		0.16				0.040
Trichloroethene		0.040		U		0.040
1,2-Dichloropropan	e	0.080		U		0.080
Bromodichlorometh	ane	0.040		U 🖉		0.040
cis-1,3-Dichloroprop	pene	0.040		U		0.040
Toluene		0.39				0.040
trans-1,3-Dichlorop	ropene	0.040		U		0.040
1,1,2-Trichloroetha	ne	0.040		U		0.040
Tetrachloroethene		0.047				0.040
Dibromochlorometh	nane	0.040		U X		0.040
1,2-Dibromoethane		0.040		U		0.040
Ethylbenzene		0.048	7	* .]		0.040
o-Xylene		0.040		U.*		0.040
Bromoform		0.040		U.* <sup>*</sup>		0.040
1,1,2,2-Tetrachloro	ethane	0.040		U		0.040
4-Ethyltoluene		0.040		U		0.040
1,3,5-Trimethylben:	zene	0.080		U		0.080
1,2-Dichloroethene	, Total	0.040		U		0.040
m-Xylene & p-Xyler	ne	0.12	24	ar J		0.080
Xylenes, Total		0.15		* J		0.040
Analyte		Result (u	ıg/m3)	Qualifier		RL
Dichlorodifluorome	lhane	2.4		n 1922 - Constant and an anna A		0.20
TestAmerica Burli	ngton	Page	30 of 574			

## Analytical Data

Client Sample ID:	IA-2	
Lab Sample ID: Client Matrix:	200-4973-10 Air	Date Sampled: 04/28/2011 1650 Date Received: 05/02/2011 0950

	TO15 LL Volati	le Organic Compounds	in Ambient Air	, Low Concentration (GC/MS)		
Analysis Method:	TO15 LL	Analysis Batch:	200-17816	Instrument ID:	E.i	
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	eeiw020.d	
Dilution:	40			Initial Weight/Volume:	125 ml	
Analysis Date:	05/11/2011 0237			Final Weight Volume:	500 ml	
Prop Date:	05/11/2011 0237			Injection Volume:	500 mL	
Prep Date.	03111/2011 0237			injection volume.	500 ML	
Analyte		Result (u	g/m3)	Qualifier	RL	
1,2-Dichlorotetrafluo	roethane	0.28		U	0.28	
Vinyl chloride		0.20		U	0.20	
1,3-Butadiene		0.29			0.18	
Bromomethane		0.31		U	0.31	
Chloroethane		0.21		U	0.21	
Bromoethene(Vinyl	Bromide)	0.35		U	0.35	
Trichlorofluorometha	ane	6.1			0.22	
1,1-Dichloroethene		0.16		U	0.16	
3-Chloropropene		0.25		U	0.25	
Methylene Chloride		2.8		U,*	2.8	
Methyl tert-butyl eth	er	0.14		U	0.14	
trans-1,2-Dichloroet	hene	0.16		U	0.16	
n-Hexane		1.4			0.28	
1,1-Dichloroethane		0.16		U	0.16	
cis-1,2-Dichloroethe	ne	0.16		U	0.16	
Chloroform		0.20		U	0.20	
1,1,1-Trichloroethan	e	0.22		U	0.22	
Cyclohexane		0.47			0.14	
Carbon tetrachloride	2	0.39			0.25	
2,2,4-Trimethylpenta	ane	0.44			0.19	
Benzene		0.71			0.13	
1,2-Dichloroethane		0.32		U	0.32	
n-Heptane		1.3			0.16	
Trichloroethene		0.25			0.21	
1,2-Dichloropropane	2	0.37		U	0.37	
Bromodichlorometh	ane	0.27		U,**	0.27	
cis-1,3-Dichloroprop	ene	0.18		U	0.18	
Toluene		12			0.15	
trans-1,3-Dichloropr	opene	0.18		U	0.18	
1,1,2-Trichloroethar	ie	0.22		U	0.22	
Tetrachloroethene		6.5			0.27	
Dibromochlorometh	ane	0.34		U.*'	0.34	
1,2-Dibromoethane		0.31		U,	0.31	
Ethylbenzene		11		× J	0.17	
o-Xylene		7.3		× J	0.17	
Bromoform		0.41		U.M	0.41	
1,1,2,2-Tetrachloroe	ethane	0.27		Ŭ	0.27	
4-Ethyltoluene		0.74			0.20	
1,3,5-Trimethylbenz	ene	0.87			0.39	
1,2-Dichloroethene.	Total	0.16		υ,	0.16	
m-Xylene & p-Xylen	e	33		* J	0.35	
Xylenes, Total		40		×	0.17	

## **Analytical Data**

Client Sample ID:	IA-2	
Lab Sample ID:	200-4973-10	Date Sampled: 04/28/2011 1650
Client Matrix:	Air	Date Received: 05/02/2011 0950

	TO15 LL Volat	le Organic Compounds	in Ambient Air, I	Low Concentration (GC/MS)		
Analysis Method:	TO15 LL	Analysis Batch:	200-17816	Instrument ID:	E.i	
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	eeiw	020.d
Dilution:	4.0			Initial Weight/Volume:	125	mL
Analysis Date:	05/11/2011 0237			Final Weight/Volume:	500	ml
Pren Date:	05/11/2011 0237			Injection Volume:	500	ml
Frep Date.	00111/2011 0201			injection volume.	500	inc.
Analyte		Result (p	ob v/v) C	Qualifier		RL
Dichlorodifluorometh	ıane	0.44				0.040
1,2-Dichlorotetrafluo	roethane	0.040	L	J		0.040
Vinyl chloride		0.080	ι	J		0.080
1,3-Butadiene		0.13				0.080
Bromomethane		0.080	ι	J		0.080
Chloroethane		0.080	ι	J		0.080
Bromoethene(Vinyl	Bromide)	0.080	ι	J		0.080
Trichlorofluorometha	ane	1.1				0.040
1,1-Dichloroethene		0.040	ι	J		0.040
3-Chloropropene		0.080	ι	J		0.080
Methylene Chloride		0.80	ι	لمرال		0.80
Methyl tert-butyl eth	er	0.040	ι	ل		0.040
trans-1.2-Dichloroet	hene	0.040	ι	- J		0.040
n-Hexane		0.39				0.080
1.1-Dichloroethane		0.040	ί	ر		0.040
cis-1,2-Dichloroethe	ne	0.040	L	J		0.040
Chloroform		0.040	ι	J		0.040
1.1.1-Trichloroethan	e	0.040	L	_ _		0.040
Cyclohexane		0.14		-		0.040
Carbon tetrachloride	2	0.061				0.040
2.2.4-Trimethylpent	ane	0.094				0.040
Benzene		0.22				0.040
1 2-Dichloroethane		0.080	1	1		0.080
n-Hentane		0.31		-		0.040
Trichloroethene		0.047				0.040
1.2-Dichloropropane	2	0.080	ι	J		0.080
Bromodichlorometh	ane	0.040	l	J.F		0.040
cis-1.3-Dichloropror	ene	0.040	l	-		0.040
Toluene		31		-		0.040
trans-1.3-Dichloropr	onene	0.040	1			0.040
1 1 2-Trichloroethar	ie.	0.040	1			0.040
Tetrachloroethene		0.96		-		0.040
Dibromochlorometh	ane	0.040	1	1 *		0.040
1 2-Dibromoethane	uno	0.040				0.040
Ethylhenzene		26		č		0.040
o-Xylene		17	,	w .)		0.040
Bromoform		0.040	i	13 /		0.040
1 1 2 2-Tetrachloroe	othane	0.040				0.040
4-Ethyltoluene	Stridito.	0.15		0		0.040
1.3.5-Trimethylbenz	rene	0.18				0.080
1.2-Dichlomethene	Total	0.040		u G		0.040
m-Xylene & n-Xyler	ne	7.6				0.080
Xvlenes Total		9.2	,	*		0.040
Agronoo, Total		V.2				0.010
Analyte		Result (u	a/m3) (	Qualifier		RL
Dichlorodifluoromet	hane	22	<u></u>			0.20
		844 - 1 May				

**TestAmerica Burlington** 

30 Community Drive Suite 11 South Burlington, VT 05403

**Canister Samples Chain of Custody Record** 

TestAmerica Analytical Testing Corp. assumes no liability with respect to the collection and shipment of these samples.

phone 802-660-1990 fax 802-660-1919																	
Client Contact Information	Project Mana	ط ع	٨٦	Brise		Samples Coll	ected Bv: 1	72 /4	H-	<u> </u>	o der	2	COCS				
Company: ARCAODS	Phone: (2)	5 6	1-944														
Address: 6723 Townseth Be	Email:	hh.	Brusell	Ared	is rue. con			$ \Gamma $			_						
City/State/Zip > vacu fe 1/1 12214-046	Site Contact:	Cold Cold	Zuck								(noit:		and and			(noita	
FAX: (315) 449-411	TA Contact:	2	Na wie	I X				1			)əs s					as s	
Project Name: Bayer Hicksville		Analysis	Turnarour	d Time					<i>7</i> 1~		notes					ajou	
Site: I Empire Drive Hicksville, UN	Sta	andard (Sp	ecify) L	S days				1	-		ui (1		- Matta 1			ui Vi	
PO # 130032305.0064.00003	Rı	ısh (Speci	fy)	•				51	~		ipeci	1				ipeqi	
Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canlster Vacuum In Field, 'Hg (Stop)	Flow Controller ID	Canister ID	SI-01	EPA 3C	EPA 25C	ASTM D-1946	əd <u>vi</u> əlqme2	Indoor Air	Ambient Air	seo liitone.	s əssəlq) <b>rərt</b> O	
521-2	11/84/4	1005	1735	202-	*XXX	KIEO	2602	1						- (		7	<u> </u>
8-JJ-P	11/82/11	840	1328	-13.5	hir	K3I3	4476	-					7				
ge-VSZ	11/82/7	1048	1840	-30	-4,42	K263	611T	-					1010, 40, 100			7	-
1-VI 572	11/22/11	100	1810	-29.25	-5.79	K258	SOUS	-					7				
1-7SZ 0	1//22/41	001	180	-78.5	5.13	Klog	5 16	_					and within the			7	(
000-042811	11/8=/1	)	(	-36	150	K408	4542	_					× 1-1-0-1-12			7	
4				Temperatur	e (Fahrenheit)												
		nterior		Ambient													
	Start																
	Stop																
				Pressure (ir	iches of Hg)												
		nterior		Ambient													
	Start																
	Stop																
Special Instructions/QC Requirements & Comments: Send Results to Attn:	Andy	Enig	v			Othler	اكطبنك ا	א קיי	apor								
#SSU-2 Design Re	- : Lipa	-6.12															_
Samples Shipped by: Daniel Euch	Date/Time	1/1	[23		Samples F	Received by:	i o	120/5	0								
Samples Relinquished by:	Date/Time:				Received	by:											
Relinquished by:	Date/Time:				Received	by:											
Lab-Use Only Shinner Name:				Dened		Condition											S.s.

# TestAmerica Burlington 30 Community Drive Suite 11 South Burlington, VT 05403

**Canister Samples Chain of Custody Record** 

TestAmerica Analytical Testing Corp. assumes no liability with respect to the collection and shipment of these samples.

Client Contact Information	Project Man		hn B	LUSSE		Samples Coli	ected Bv: D	7/2	T		#2 of	N	cocs			
Company: ARCADIS	Phone: (31)	5) 671	9441												ł	
Address: 6723 Taupath Rd	Email: John	Brusse.	@ Area	Jis-US a	5 M				┝		-				┝	
City/State/Zip Syracuse, 13214-0066			1					1.			(uoi					(uoi
FAX: 7449-414	TA Contact:		2222	c.k.						-	sect				_	sect
Project Name: 12c Hicksville		Analveis	Turnarou	d Time						_	səto					otes
Sile: 1 Empire ONize Hicksulle, JY	S	tandard (Sp	ecify)	S Javi							u ui /					u ui A
PO # BO032365.0004.00003		kush (Speci	fy)					<u>к</u>			hioeq	e e				hiceq
Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Fleld, "Hg (Start)	Canister Vacuum In Fleid, 'Hg (Stop)	Flow Controller ID	Canister ID	51-01	EPA 3C	EPA 25C	ASTM D-1946	əqvT əlqmə2	Indoor Air	TiA fn9idmA	sed lithned	Ofher (Please s
TAN	11/282/4	1125	1550	-18.5	3.9	K1(33	2820	-					>			
1	11/82/71	120	1600	-32	~5.5	Kyos	7225	-	-							7
and - 04231	11/82/41	oal	1730	62-	-3.59	1814	4092	-						7		
2-4IT	4/28/11	5001	1650	2	-7.63	KZS	2670						7			
0f	•							•								
57																
4				Temperature	e (Fahrenheit			ľ						1		
		Interior		Amblent												
	Start															
	Stop															
				Pressure (in	ches of Hg)											
		Interior		Ambient												
	Start															
	Stop															
Special Instructions/QC Requirements & Comments	Send 1	<b>Zeeu Its</b>	4	Att.	Andy	Enigk				Her	Y	12 9	-5	a po		
Samples Shipped by: Dariel Zurlu	Date/Time:	4/29/		235	Samples F	Received by:	100	045	~ 0							
Samples Relinquished by:	Date/Time:	-			Received	by:										
Relinquished by:	Date/Time:				Received	by:										
Laborativia SSL-2-110																

Imagine the result



# **Bayer Material Science**

# **Data Usability Summary Report**

HICKSVILLE, NEW YORK

Volatile Analyses

SDG# 200-4953

Analyses Performed By: TestAmerica Laboratories Burlington, Vermont

Report: # 14192R Project: B0032305.0004.00003

## SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #200-4953 for samples collected in association with the Bayer site. The review was conducted as a Tier III evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

			Sample		Analysis				
Sample ID	Lab ID	Matrix	Collection Date	Parent Sample	voc	SVOC	РСВ	MET	MISC
AMB-042711	200-4953-1	Air	4/27/2011		Х				
IA-4	200-4953-3	Air	4/27/2011		Х				
IA-3	200-4953-5	Air	4/27/2011		Х				
IA-5	200-4953-7	Air	4/27/2011		Х				
IA-6	200-4953-8	Air	4/27/2011		Х				
DUP2-4/27/11	200-4953-9	Air	4/27/2011	IA-5	Х				
SSV-6	200-4953-10	Air	4/28/2011		Х				
SSV-4	200-4953-2	Air	4/27/2011		Х				
SSV-3	200-4953-4	Air	4/27/2011		Х				
SSV-5	200-4953-6	Air	4/27/2011		Х				

## ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

		Reported		Performance Acceptable		Not
	Items Reviewed	No	Yes	No	Yes	Required
1.	Sample receipt condition		Х		Х	
2.	Requested analyses and sample results		Х		Х	
3.	Master tracking list		Х		Х	
4.	Methods of analysis		Х		Х	
5.	Reporting limits		Х		Х	
6.	Sample collection date		Х		Х	
7.	Laboratory sample received date		Х		Х	
8.	Sample preservation verification (as applicable)		х		х	
9.	Sample preparation/extraction/analysis dates		Х		Х	
10.	Fully executed Chain-of-Custody (COC) form		Х		Х	
11.	Narrative summary of QA or sample problems provided		х		х	
12.	Data Package Completeness and Compliance		х		х	

QA - Quality Assurance

## **ORGANIC ANALYSIS INTRODUCTION**

Analyses were performed according to United States Environmental Protection Agency (USEPA) Method TO-15. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999, USEPA Region II SOP HW-31- Validating Air Samples Volatile Organic Analysis of Ambient Air In Canister by Method TO-15 of October 2006, New York State DEC Analytical Method ASP 2005 TO-15 (QA/QC Criteria R9 TO-15), NYSDEC Modifications to R9 TO-15 QA/QC Criteria February 2008 and NYSDEC Proposed Change to the ASP Regarding Canister Vacuum June 26, 2009.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers
  - U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
  - B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
- Quantitation (Q) Qualifiers
  - E The compound was quantitated above the calibration range.
  - D Concentration is based on a diluted sample analysis.
- Validation Qualifiers
  - J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
  - UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
  - JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.
  - UB Compound considered non-detect at the listed value due to associated blank contamination.
  - N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.
  - R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

## **VOLATILE ORGANIC COMPOUND (VOC) ANALYSES**

#### 1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation	Return Canister Pressure
EPA TO-15	Air	30 days from collection to analysis	Ambient Temperature	> 1" Hg

The sample locations with canisters that exceeded return pressure criteria are presented in the following table.

Sample Locations	Return Pressure/Vacuum Reading ("of Hg)
SSV-6	0.0

Sample results associated with sample locations analyzed by analytical method TO-15 were qualified, as specified in the table below. All other canister return pressure/vacuum criteria were met.

	Qualification			
Criteria	Detected Analytes	Nondetect Analytes		
Return pressure/vacuum <1"Hg to 0.1"Hg	J	UJ		
Return pressure/vacuum 0.0"Hg	J	R		

## 2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

All compounds associated with the QA blanks exhibited a concentration less than the MDL.

#### 3. Mass Spectrometer Tuning

Sample locations IA-3, IA-5, IA-6, DUP2-4/27/11, and SSV-5 were compliant with the Method TO-15 requirement of analysis within a 24-hour tune clock but not compliant with the NYSDEC requirement of analysis within a 12-hour tune clock. The data was not qualified.

## 4. Calibration

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

#### 4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (30%) and an RRF value greater than control limit (0.05).

#### 4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (30%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits.

## 5. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the VOC exhibit area counts that are not greater than 40% or less than 40% of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

## 6. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the established acceptance limits of 70% to 130%.

Sample locations associated with LCS/LCSD analysis exhibiting recoveries outside of the control limits presented in the following table.

Sample Locations	Compound	LCS Recovery
	Bromodichloromethane	131%
AMB-042711	Bromoform	146%
IA-4 IA-3	Dibromochloromethane	137%
IA-5	Ethylbenzene	136%
IA-6   DUP2-4/27/11	Methylene chloride	132%
	m,p-Xylene	138%
	o-Xylene	136%

The criteria used to evaluate the LCS recoveries are presented in the following table. In the case of an LCS deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
LCS porcept recovery > 120%	Non-detect	No Action
LCS percent recovery >130%	Detect	J
$1.02$ percent receivery $\sqrt{200}$ but $> 100/$	Non-detect	J
LCS percent recovery <70% but > 10%	Detect	J
- 10%	Non-detect	R
	Detect	J

Note: Sample results were not qualified as rejected (R) due to the deviations listed above.

## 7. Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 20% for air matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of three times the RL is applied for air matrices.

Laboratory duplicates were not performed as part of this SDG.

## 8. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method. A control limit of 100% for air matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of three times the RL is applied for air matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
	1,3,5-Trimethylbenzene	0.89	0.91	AC
	1,3-Butadiene	0.2	0.18U	AC
	4-Ethyltoluene	1.2	1.3	8.0 %
	Benzene	0.47	0.45	AC
	Carbon tetrachloride	0.45	0.46	AC
	Cyclohexane	13	14 D	7.4 %
IA-5/ DUP2-4/27/11	Dichlorodifluoromethane	2.2	2.3	4.4 %
	Ethylbenzene	3	3	0 %
	m-Xylene & p-Xylene	9.2	8.9	3.3 %
	n-Heptane	53 D	63 D	0 %
	n-Hexane	2.5	2.3	8.3 %
	o-Xylene	2.2	2.1	4.6 %
	Tetrachloroethene	3.1	3	3.2 %

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
	Toluene	270 D	380 EDJ	33.8 %
	Trichlorofluoromethane	1.6	1.6	0 %
	Vinyl chloride	0.44	0.5	AC
	Xylenes, Total	11	11	0 %
	1,3,5-Trimethylbenzene	0.89	0.91	AC

U = Not detected

AC = Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

## 9. Compound Identification

Sample results associated with compound that exhibited a concentration greater than the linear range of the instrument calibration are summarized in the following table.

Sample ID	Compound	Original Analysis	Diluted Analysis	Reported Analysis
	Cyclohexane	16 E	18 D	18 D
IA-3	n-Heptane	65 E	74 D	74 D
	Toluene	310 E	380 D	380 D
	n-Heptane	49 E	53 D	53 D
IA-5	Toluene	260 E	270 D	270 D
IA-6	Toluene	61 E	56 D	56 D
	Cyclohexane	14 E	14 D	14 D
DUP2-4/27/11	n-Heptane	49 E	63 D	63 D
	Toluene	270 E	380 ED	380 EDJ

Note: In the instance where both the original analysis and the diluted analysis sample results exhibited a concentration greater than and/or less than the calibration linear range of the instrument; the sample result exhibiting the greatest concentration will be reported as the final result.

Sample results associated with compounds exhibiting concentrations greater than the linear range are qualified as documented in the table below when reported as the final reported sample result.

Reported Sample Results	Qualification
Diluted sample result within calibration range	D
Diluted sample result less than the calibration range	DJ
Diluted sample result greater than the calibration range	EDJ
Original sample result greater than the calibration range	EJ

#### 10. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

VOCs: TO-15	Repo	orted	Perfor Acce	mance ptable	Not Bequired
	No	Yes	No	Yes	Required
GAS CHROMATOGRAPHY/MASS SPECTROME	TRY (GC/I	MS)			
Tier II Validation					
Canister return pressure/vacuum (>1"Hg)		Х	Х		
Holding times		Х		Х	
Reporting limits (units)		Х		Х	
Blanks					
A. Method blanks		Х		Х	
B. Equipment blanks					Х
C. Trip blanks					Х
Laboratory Control Sample (LCS)		Х	Х		
Laboratory Control Sample Duplicate (LCSD)					Х
LCS/LCSD Precision (RPD)					Х
Field/Lab Duplicate (RPD)		Х		Х	
Surrogate Spike Recoveries					Х
Dilution Factor		Х		Х	
Moisture Content					Х
Tier III Validation					
System performance and column resolution		Х		Х	
Initial calibration %RSDs		Х		Х	
Continuing calibration RRFs		Х		Х	
Continuing calibration %Ds		Х		Х	
Instrument tune and performance check		Х		Х	
Ion abundance criteria for each instrument used		Х		Х	
Internal standard		Х		Х	
Compound identification and quantitation					
A. Reconstructed ion chromatograms		Х		Х	
B. Quantitation Reports		Х			
C. RT of sample compounds within the established RT windows		х		Х	
D. Transcription/calculation errors present		Х		Х	
E. Reporting limits adjusted to reflect sample dilutions		x		x	
%RSDRelative standard deviation%RPercent recoveryRPDRelative percent difference					

# DATA VALIDATION CHECKLIST FOR VOCs

%D Percent difference

# SAMPLE COMPLIANCE REPORT

## SAMPLE COMPLIANCE REPORT

					Compliancy <sup>1</sup>		Noncompliance			
Sample Delivery Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	voc	svoc	PCB/PEST /HERB	MET	MISC	rencempliance
200-4953	4/27/2011	TO-15	AMB-042711	Air	No					VOC – LCS %Recovery
200-4953	4/27/2011	TO-15	IA-4	Air	No					VOC – LCS %Recovery
200-4953	4/27/2011	TO-15	IA-3	Air	No					VOC – LCS %Recovery
200-4953	4/27/2011	TO-15	IA-5	Air	No					VOC – LCS %Recovery
200-4953	4/27/2011	TO-15	IA-6	Air	No					VOC – LCS %Recovery
200-4953	4/27/2011	TO-15	DUP2-4/27/11	Air	No					VOC – LCS %Recovery
200-4953	4/28/2011	TO-15	SSV-6	Air	No					VOC – Canister pressure
200-4953	4/27/2011	TO-15	SSV-4	Air	Yes					
200-4953	4/27/2011	TO-15	SSV-3	Air	Yes					
200-4953	4/27/2011	TO-15	SSV-5	Air	Yes					

1 Samples which are compliant with no added validation qualifiers are listed as "yes". Samples which are non-compliant or which have added qualifiers are listed as "no". A "no" designation does not necessarily indicate that the data have been rejected or are otherwise unusable.

## VALIDATION PERFORMED BY: Amy Coats

SIGNATURE:

My Coats

\_\_\_\_\_

DATE: May 26, 2011

PEER REVIEW BY: Joseph C. Houser

DATE: <u>May 31, 2011</u>

## CHAIN OF CUSTODY/ CORRECTED SAMPLE ANALYSIS DATA SHEETS

Lab Sample ID:

**Client Matrix:** 

#### Client Sample ID: SSV-4

Air

200-4953-2

#### **Analytical Data**

Job Number: 200-4953-1 Sdg Number: 200-4953

Date Sampled: 04/27/2011 1730 Date Received: 04/29/2011 1020

TO-15 Volatile Organic Compounds in Ambient Air									
Analysis Method: Prep Method: Dilution: Analysis Date: Prep Date:	TO-15 Summa Canister 24.8 05/04/2011 1625 05/04/2011 1625	Analysis Batch: Prep Batch:	200-1756 N/A	0	Instrument ID: Lab File ID: Initial Weight/Volume: Final Weight/Volume: Injection Volume:	C.i cjug009.d 36 mL 200 mL 200 mL			
Analyte		Result (p	pb v/v)	Qualifie	r	RL			
Dichlorodifluoromet	hane	12		U	and a start of the second s	12			
1,2-Dichlorotetraflu	proethane	5.0		U		5.0			
Vinyl chloride		5.0		U		5.0			
1,3-Butadiene		5.0		U		5.0			
Bromomethane		5.0		U		5.0			
Chloroethane		12		U		12			
Bromoethene(Vinyl	Bromide)	5.0		U		5.0			
Trichlorofluorometh	ane	5.0		υ		5.0			
1,1-Dichloroethene		5.0		U		5.0			
3-Chloropropene		12		U		12			
Methylene Chloride		12		U		12			
Methyl tert-butyl eth	1er	5.0		U		5.0			
trans-1,2-Dichloroe	thene	5.0		U		5.0			
n-Hexane		5.0		U		5.0			
1,1-Dichloroethane		5.0		U		5.0			
cis-1,2-Dichloroeth	ene	5.0		U		5.0			
1,2-Dichloroethene	, Total	5.0		U		5.0			
Chloroform		5.0		U		5.0			
1,1,1-Trichloroetha	ne	5.0		U		5.0			
Cyclohexane		5.0		U		5.0			
Carbon tetrachlorid	e	5.0		U		5.0			
2,2,4-Trimethylpen	lane	5.0		U		5.0			
Benzene		5.0		U		5.0			
1,2-Dichloroethane		5.0		U		5.0			
n-Heptane		5.0		U		5.0			
1 2 Dichlerence	•	12				5.0			
Remodiablesemet		5.0		U		5.0			
cis 1.3 Dichloropen	nono	5.0		0		5.0			
	heue	5.U # 0		U		5.0			
Irong 1.2 Diableron		5.0		U		5.0			
1.1.2 Trichlorootha	ropene	5.0		0		5.0			
Tetrachloroethene	ne -	5.0		0		5.0			
Dibromochloromet	ano	540		1.1		5.0			
1 2-Dibromoethane		5.0		0		5.0			
Fibylbenzene		5.0		0		5.0			
m n-Xvlene		12		0		5.0			
Xvlene. o-		5.0		1		50			
Xylene (total)		5.0		U U		5.0			
Bromoform		5.0		Ŭ		5.0			
1,1,2,2-Tetrachloro	ethane	5.0		Ū		5,0			
4-Ethyltoluene		5.0		U		5.0			
1,3,5-Trimethylben	zene	5.0		U		5.0			
Analyte		Result (I	ug/m3)	Qualifie	ðr.	RL			
Dichlorodifluorome	thane	61	ananaganan contra ta Ari	U	and a second	61			
TestAmerica Burli	ngton	Page	18 of 5	65					

Lab Sample ID:

**Client Matrix:** 

#### Client Sample ID: SSV-4

Air

200-4953-2

#### Analytical Data

Job Number: 200-4953-1 Sdg Number: 200-4953

Date Sampled: 04/27/2011 1730 Date Received: 04/29/2011 1020

Analysis Batch:     200-17560     Instrument ID:     C i       Prep Mathcit:     Summa Canister     Prep Batch:     N/A     Lab File ID:     club Cite Cite Cite Cite Cite Cite Cite Cite		TO-15 Volatile Organic Compounds in Ambient Air									
AnalyleResult (ug/m3)QualifierRL1.2-Dichlorotetrafluorethane35U351.3-Butadeine13U11Bromonethane14U11Dromonethane33U33Bromonethane22U22Chloroethane28U291.1-Dictioroethane39U39Achildroethane20U203Chloropopene39U30Methylene Chloride43U43Methylene Chloride20U20-Arthene20U20-Arthene20U20-Arthene20U20-Arthene20U20-Arthene20U20-Arthene20U20-Arthene20U20-Arthene20U20-Arthene20U20-Arthene20U20-Arthene20U20-Arthene21U21-Arthene23U23-Arthene23U23-Arthene23U23-Arthene23U23-Arthene23U23-Arthene23U23-Arthene23U23-Arthene23U23-Arthene24U24-Arthene	Analysis Method: Prep Method: Dilution: Analysis Date: Prep Date:	TO-15 Summa Canister 24.8 05/04/2011 1625 05/04/2011 1625	Analysis Batch: Prep Batch:	200-17560 N/A	Instrument ID: Lab File ID: Initial Weight/Volume: Final Weight/Volume: Injection Volume:	C.i cjug009.d 36 mL 200 mL 200 mL					
1.2-Dichlorotetrafluoroethane   36   J   35     Viny, dioride   13   J   13     1.3-Butadiene   11   J   13     Bromenthane   19   J   19     Chlorotehane   33   J   22     Trichorofucoromethane   20   J   20     3-Chloropopene   39   J   20     3-Chloropopene   39   J   38     Methyler-Douly lether   18   J   34     Methyler-Dioride   43   J   43     Methyler-Dioridenene   20   J   20     -1-Abcane   17   J   17   17     -1-Hoxane   20   J   20   20     -1-Solichoroethane   20   J   20   20     -1-Solichoroethane   20   J   20   20     -1-Solichoroethane   20   J   20   21     -1-Solichoroethane   20   J   20   21     -1-Solichoroethane   21   J   21   22     -1,1-Dichioro	Analyte		Result (u	g/m3) Qua	lifier	RL					
Vinyi chioride13U31.3-Butadiene11U11Bromorethane19U19Chiorosthane33U33Bromorethane22U22Trichorofuoromethane28U281.1-Dichlorosthane20U39Schlorospropene39U39Acthoropropene39U39Methylene Chioride43U43Methylene Chioride18U16trans.1-2-Dichlorosthene20U20-Hexane17U171.1-Dichlorosthene20U20cist-1.2-Dichlorosthene20U20-Hexane17U171.1-Dichlorosthene20U20-Hexane27U27Cyclobexane17U17Carlon tetrachloride31U312.2-Larlone tetrachloride31U312.2-Larline tetrachloride31U23Berzene16U201.2-Dichlorosthane23U23Jolicotethane33U33I-1.2-Dichlorosthane33U33Berzene16U201.2-Dichlorosthane23U23Jolicotethane23U23Jolicotethane24U241.2-Dichlorosthane24241.2-Dichlorop	1.2-Dichlorotetrafi	Joroethane	35	y l		35					
1.3-Butadiene11U11Brommethane19U19Brommethane33U33Brommethane22U22Inchiorationemethane28U281.1-Dichlorationemethane28U393-Chioropropene39U39Methylet ne-Dioride43U43Methylet ne-Dioride18U18Instans 1.2-Dichloroethane20U20n-Hexane17U171.1-Dichloroethane20U20i=1.2-Dichloroethane20U20i=1.2-Dichloroethane20U20i=1.2-Dichloroethane20U201.2-Dichloroethane21U211.2-Dichloroethane23U23Chloroform24U23Benzene16U201.2-Dichloroethane20U201.2-Dichloroethane20U23J.2-Dichloroethane20U23Intractificitie33U23Intractificitie23U23Intractificitie23U23Intractificitiene23U23Intractificitiene23U23Intractificitiene23U23Intractificitiene24U24Intractificitiene23U23Intractificitiene24U	Vinvl chloride		13	Ū		13					
Permomenthane19U19Chioresthane33U33Chioresthane22U22Trichlorofuboromethane28U281-10ichloromethane20U203-Chioropopene39U39Methylene Chioride43U43Methylene Chioride18U18Urasse17U171-10ichloroethane20U20n-Hexane17U171-10ichloroethane20U20cis-1,2-Dichloroethane20U201-10ichloroethane20U201-10ichloroethane20U201,2-Dichloroethane20U20Cyclohoxathere, Total20U241,1-11ichloroethane27U23Benzene16U161,2-Dichloroethane23U23Senzene662723Trichloroethane33U331,2-Dichloroethane33U331,2-Dichloroethane23U23Trichloroethane23U23Trichloroethane33U331,2-Dichloroethane33U331,2-Dichloroethane33U331,2-Dichloroethane34U341,2-Dichloroethane2727271,2-Dichloroethane38U33 <td>1.3-Butadiene</td> <td></td> <td>11</td> <td>Ū</td> <td></td> <td>11</td> <td></td>	1.3-Butadiene		11	Ū		11					
Chloroethane33U32Bromechene(Vip) Bromide)22U22Bromechene(Vip) Bromide)28U281.1-Dichloroethane20U39Methylene Chloride43U43Methylene Chloride43U30Methylene Chloride18U30Methylene Chloride20U20Insan-1.2-Dichloroethane20U20cis-1.2-Dichloroethane20U20cis-1.2-Dichloroethane20U20cis-1.2-Dichloroethane20U20cis-1.2-Dichloroethane20U20cis-1.2-Dichloroethane20U20cis-1.2-Dichloroethane20U20cis-1.2-Dichloroethane20U20cis-1.2-Dichloroethane20U20cis-1.2-Dichloroethane20U20cis-1.2-Dichloroethane20U20cis-1.2-Dichloroethane21U21cis-1.2-Dichloroethane23U23cis-1.2-Dichloroethane20U20cis-1.2-Dichloroethane20U20cis-1.2-Dichloroethane20U20cis-1.2-Dichloroethane20U20cis-1.2-Dichloroethane20U20cis-1.2-Dichloroethane20U20cis-1.2-Dichloroethane21U201.2-Dichloroethane23	Bromomethane		19	Ū		19					
Bromeethene(Vinyl Bromide)     22     U     22       Trichiorofluoromethane     28     U     28       1.1-bichiorotethene     20     U     20       3-Chitopropene     39     U     30       Methylen Chloride     43     U     43       Methylen Chloride     43     U     43       Methylen Chloride     20     U     20       n-Hexane     17     U     7       1.1-Dichoroethene     20     U     20       icis -1.2-Dichoroethene     20     U     20       1.2-Dichoroethene.     704     U     20       Chloroothene     27     U     27       Cyclohexane     17     U     31       1.2-Dichoroethene     31     U     32       Berzene     16     U     16       1.2-Dichloroethene     23     U     23       Bromodichloromethane     33     U     33       1.2-Dichloroethene     33     U     33	Chloroethane		33	Ű		33					
Trichlorodituromethane     28     U     28       1,1-Dichloroditene     20     U     20       3-Chloropopene     39     U     39       Methylten Chloride     43     U     43       Methylten Chloride     43     U     43       Methylten-Schlorodithore thene     20     U     20       n-Hexane     17     U     17       1,1-Dichlorodithore thene     20     U     20       cis-1,2-Dichlorodithore thene     20     U     20       cis-1,2-Dichlorodithene     20     U     20       cis-1,2-Dichlorodithene     20     U     20       ciblorodithene     20     U     20       ciblorodithene     20     U     21       1,1-Tichlorodithane     27     U     23       Benzene     16     U     20       1,2-Dichlorodithane     20     20     21       1,2-Dichloropopane     23     U     23       Bromodichloropopopene     23     U	Bromoethene(Vinv	/ Bromide)	22	Ŭ		22					
1,1-Dichloroethene 20 U 20   3-Chloropropene 39 U 39   Methyle chloride 43 U 43   Methyle chloride 18 U 18   Methyle chloride 20 U 20   n-Hexane 17 U 17   1,1-Dichloroethene 20 U 20   istrans-1,2-Dichloroethene 20 U 20   istrans-1,2-Dichloroethene, Total 20 U 20   1,2-Dichloroethene, Total 20 U 20   Cydohexane 17 U 17   Cydohexane 23 U 20   n-Heptane 20 U 20   n-Heptane 23 U 23   Bromodichloromethane 33 U 23   Isolende 19 U 19   Irans-1,2-Dichloropropene 23 U 24   I,1,2-Tricholorothane 22 U 23   Diboromothorom	Trichlorofluoromet	hane	28	Ū		28					
3-Chloropropene     39     U     39       Methylene Chloride     43     U     43       Methyl letholide     18     U     18       trans-1,2-Dichloroethene     20     U     20       n-Hexane     17     U     17       1,1-Dichloroethane     20     U     20       cis-1,2-Dichloroethene, Total     20     U     20       1,1-Trichloroethane     20     U     24       Chloroform     24     U     24       1,1-Trichloroethane     27     U     24       Chloroform     24     U     24       1,1-Trichloroethane     27     U     27       Cyclohexane     17     U     17       Carbon tetrachloride     31     U     31       2,2,4-Trimethylpentane     20     U     20       1,2-Dichloroptnene     20     U     20       1,2-Dichloroptnene     23     U     23       Bromodichloroptnene     23     U     23	1.1-Dichloroethend	2	20	Ū		20					
Methylene Chloride     43     U     43       Methyl ter-bulyl ether     18     U     18       Trans-1.2-Dichloroethene     20     U     20       n-Hexane     17     U     17       1,1-Dichloroethene     20     U     20       isi-1.2-Dichloroethene, Total     20     U     20       1,2-Dichloroethene, Total     20     U     20       Cyclohexane     17     U     27       Cyclohexane     17     U     31       2,2.4-Timethylpentane     33     U     23       Benzene     16     U     20       Trichloroethene     23     U     20       Trichloroethene     23     U     23       Benzene     16     U     20       Trichloroethene     23     U     23       Benzene     23     U     23       Benzene     16     U     20       Trichloroethene     23     U     23       Benzene	3-Chloropropene		39	ů		39					
Methy ten-butyle ther     18     1     18       trans-1,2-Dichloroethene     20     U     20       n-Hexane     17     U     20       n-Hoxane     20     U     20       1,1-Dichloroethane     20     U     20       1,2-Dichloroethene     70     U     20       Chloroform     24     U     24       1,1-Trichloroethane     27     U     27       Cyclohexane     17     U     17       Carbon tetrachloride     31     2,2,4-Trimethylpentane     23     U     23       Benzone     16     U     20     11,2-Dichloroethane     20     20       1,2-Dichloropropane     23     U     23     20     20     20       1,2-Dichloropropane     23     U     23     23     23     23     23     23     23     23     23     23     23     24     24     24     24     24     24     24     24     24     24	Methylene Chlorid	e	43	Ű		43					
Trans-1,2-Dichloroethene     20     U     20       n-Hexane     17     U     17       1,1-Dichloroethane     20     U     20       cis-1,2-Dichloroethene, Total     20     U     20       Chloroform     24     U     24       1,1-Tichloroethane     27     U     27       Cyclobexane     17     U     17       Carbon tetrachloride     31     U     31       2,2-4-Timethylpentane     23     U     23       Benzene     16     U     20       1,2-Dichloroethane     20     U     20       -Heptane     20     U     20       1,2-Dichloroethane     33     U     23       Bromodichloromethane     33     U     23       Trichloroethene     33     U     23       Toluene     19     19     19       Trans-1,3-Dichloropropene     23     U     23       Toluene     77     U     27       Tetrachlor	Methvi tert-butvl el	- lher	18	Ū		18					
n-Hexane     17     U     17       1,1-Dichloroethane     20     U     20       cis-1,2-Dichloroethane     20     U     20       1,2-Dichloroethane     20     U     20       1,2-Dichloroethane     20     U     20       Chloroforn     24     U     24       1,1-Trichloroethane     27     U     27       Cyclohexane     17     U     17       Carbon tetrachloride     31     U     31       2,2,4-Trimethylpentane     23     U     23       Benzene     16     U     16       1,2-Dichloroethane     20     U     20       n-Heptane     20     U     23       Iz-Dichloroppane     23     U     23       Bromodichloromethane     33     U     23       Iz-Dichloroppane     23     U     23       Iz-Dichloroppane     23     U     23       Iz-Dichloroppane     23     U     23       Iz-Dichloro	trans-1.2-Dichloro	ethene	20	Ū		20					
1.1-Dichloroethane   20   0   20     cis-1.2-Dichloroethene   20   0   20     1,2-Dichloroethene   20   0   20     1,2-Dichloroethene   70   0   20     Chloroform   24   0   21     Chloroform   24   0   21     Cyclohexane   77   0   77     Cyclohexane   17   0   31     2,2-4-Timethylpentane   23   0   23     Benzene   16   0   16     1,2-Dichloroethane   20   0   20     Trichloroethane   20   0   23     Bromodichloropropane   23   0   23     Toluene   19   0   23     Toluene   27   0   27     Tetrachloroethane   27   0   22	n-Hexane		17	Ū		17					
is-1,2-Dichloroethene, Total     20     U     20       1,2-Dichloroethene, Total     20     U     20       Chloroform     24     U     24       1,1-Trichloroethane     27     U     27       Cyclohexane     17     U     17       Carbon tetrachloride     31     U     31       2,2,4-Trimethylpentane     23     U     28       Benzene     16     U     20       n-Heptane     20     U     20       n-Heptane     20     U     23       Bromodichloropropene     23     U     23       Ichlohopropene     23     U     20       1,2-Dichloropropene     23     U     23       Bromodichloromethane     30     U     33       ich-1,3-Dichloropropene     23     U     23       Toluene     19     U     19       transchoroethane     27     22     22       n_1,1,2-Trichloroethane     22     U     22	1.1-Dichloroethan	9	20	Ŭ		20					
Instrument     Image: Constraint of the constrai	cis-1.2-Dichloroett	- lene	20	Ű		20					
Chloroform     24     U     24       1,1,1-Trichloroethane     27     U     27       Cyclobexane     17     U     17       Carbon tetrachloride     31     U     31       2,2,4-Trimethylpentane     23     U     23       Benzene     16     U     16       1,2-Dichloroethane     20     U     20       n-Heptane     20     U     20       Trichloroethane     66     27     23       1,2-Dichloropropane     23     U     23       Bromodichloromethane     33     U     23       rich-1,3-Dichloropropene     23     U     23       I (2-Dichloropropene     23     U     23       rich-1,3-Dichloropropene     23     U     23       rich-1,3-Dichloropropene     23     U     23       rich-1,2-Trichloroethane     27     U     27       Tetrachloroethane     27     U     22       richloromethane     22     U     22 <	1.2-Dichloroethen	e. Total	20	Ű		20					
1,1,1-Tichloroethane 27 U 27   Cyclobexane 17 U 17   Carbon tetrachloride 31 U 31   2,2,4-Trimethylpentane 23 U 23   Benzene 16 U 16   1,2-Dichloroethane 20 U 20   n-Heptane 20 U 20   Tichloroethene 66 27 23   J2-Dichloropopane 23 U 23   Bromodichloromethane 33 U 33   cis-1,3-Dichloropopene 23 U 23   Toluene 19 U 19   trans-1,3-Dichloropropene 23 U 23   1,1,2-Trichloroethane 27 U 27   1,2-Dichloropropene 23 U 23   1,1,2-Trichloroethane 27 U 27   Tetrachloroethane 27 U 22   Ubiromochloromethane 22 U 22   J2-Dichloroptone 38 U 38   Ethylbenzene 22 U 22   Mp-Mylene 24 U 22   Bromochloromethane 22 U 22	Chloroform		24	Ű		24					
The formation of the second	1.1 1-Trichloroeth	ane	27	U		27					
Carbon tetrachloride 11 0 11   2,2,4-Trimethylpentane 23 U 23   Benzene 16 U 16   1,2-Dichloroethane 20 U 20   n-Heptane 20 U 20   Trichloroethene 66 27   1,2-Dichloropropane 23 U 23   Bromodichloromethane 33 U 33   cis-1,3-Dichloropropane 23 U 23   Toluene 19 U 19   trans-1,3-Dichloropropene 23 U 23   Toluene 19 U 19   trans-1,3-Dichloropropene 23 U 23   Toluene 19 U 19   trans-1,3-Dichloropropene 23 U 23   1,1,2-Trichloroethane 27 U 27   Tetrachloroethane 27 U 22   tylene, o- 38 U 38   Ethylbenzene 24 U 22   Xylene, o- 22 U 22   Xylene, o- 22 U 22   Xylene, o- 34 U 34   1,1,2,2-Tetrachloroethane	Cyclobexane		17	11		17					
2.2.4-Trimethylpentane   23   U   23     Benzene   16   U   16     1.2-Dichloroethane   20   U   20     n-Heptane   20   U   20     Trichloroethene   66   27   23     1.2-Dichloropropane   23   U   23     Bromodichloromethane   33   U   33     cis-1,3-Dichloropropene   23   U   23     Toluene   19   U   19     trans-1,3-Dichloropropene   23   U   23     Toluene   19   U   19     trans-1,3-Dichloropropene   23   U   23     Tetrachloroethane   27   U   27     Tetrachloroethane   27   U   27     Dibromochloromethane   22   U   22     1,1.2-Trichloroethane   22   U   22     1,2-Dibromoethane   22   U   22     1,2-Stelene   24   U   22     Xylene, o-   22   U   22     Xylene (total)   22	Carbon tetrachlori	de	31	Ű		31					
A. P. Ministry presents   10   10     Benzene   16   10   20     1,2-Dichloroethane   20   0   20     n-Heptane   20   0   20     Trichloroethane   66   27     1,2-Dichloropropane   23   0   23     Bromodichloromethane   33   0   33     cis-1,3-Dichloropropane   23   0   23     Toluene   19   0   19     trans-1,3-Dichloropropane   23   0   23     Toluene   19   0   23     trans-1,3-Dichloropropene   23   0   23     1,1,2-Trichloroethane   27   0   27     Tetrachloroethane   3700   34   24     Dibromochloromethane   42   0   42     1,2-Dibromoethane   22   0   22     m,p-Xylene   24   0   24     Xylene, o-   22   0   22     Kylene (total)   22   22   22     Bromoform   51   0   34 <td>2.2.4-Trimethylper</td> <td>ntane</td> <td>23</td> <td>Ŭ</td> <td></td> <td>23</td> <td></td>	2.2.4-Trimethylper	ntane	23	Ŭ		23					
12-Dichloroethane     12     12     12       1,2-Dichloroethane     20     U     20       n-Heptane     20     U     20       Trichloroethene     66     27       1,2-Dichloropropane     23     U     23       Bromodichloromethane     33     U     33       cis-1,3-Dichloropropene     23     U     23       Toluene     19     U     23       trans-1,3-Dichloropropene     23     U     23       trans-1,3-Dichloroethane     27     U     27       Tetrachloroethane     27     U     22       tybenpoethane     22     U     22       m,p-Xylene     24     U     22       Xylene, o-     22     U     22 <tr< td=""><td>Benzene</td><td>lianc</td><td>16</td><td>0</td><td></td><td>16</td><td></td></tr<>	Benzene	lianc	16	0		16					
Interview	1 2-Dichloroethan	e	20	Ű		20					
Trichloroethene     27       1,2-Dichloropropane     23     U     23       Bromodichloromethane     33     U     33       cis-1,3-Dichloropropene     23     U     23       Toluene     19     U     19       trans-1,3-Dichloropropene     23     U     23       1,1,2-Trichloroethane     27     U     23       1,1,2-Trichloroethane     27     U     27       Tetrachloroethane     3700     34     24       1,2-Dibromoethane     22     U     42       1,2-Dibromoethane     22     U     22       n,p-Xylene     38     U     38       Ethylbenzene     22     U     22       m,p-Xylene     54     U     22       Xylene, o-     22     U     22       Stromoform     51     U     34       1,1,2,2-Tetrachloroethane     34     34     34       4-Ethylblenzene     34     34     34       1,1,2,2-Tetretrachloroethane	n-Heptane	•	20	ŭ		20					
1,2-Dichloropropane   23   U   23     Bromodichloropropane   33   U   33     cis-1,3-Dichloropropene   23   U   23     Toluene   19   U   19     trans-1,3-Dichloropropene   23   U   23     1,1,2-Trichloroethane   27   U   27     Tetrachloroethane   3700   34     Dibromochloromethane   42   U   42     1,2-Dibromoethane   22   U   22     m,p-Xylene   38   U   38     Ethylbenzene   22   U   22     m,p-Xylene, o-   22   U   22     Xylene, (otal)   22   U   22     Bromoform   51   U   34     1,1,2,2-Tetrachloroethane   34   34     4-Ethyltoluene   34   22   22     J   34   34   34     1,1,2,2-Tetrachloroethane   34   34   34     4-Ethyltoluene   24   44   34	Trichloroethene		66			27					
Bromodichloromethane     33     U     33       cis-1,3-Dichloropropene     23     U     23       Toluene     19     U     19       trans-1,3-Dichloropropene     23     U     23       1,1,2-Trichloroethane     27     U     27       Tetrachloroethane     3700     34       Dibromochloromethane     42     U     42       1,2-Dibromoethane     22     U     38       Ethylbenzene     22     U     22       m,p-Xylene     54     U     54       Xylene, o-     22     U     22       Kylene (total)     22     U     22       Bromoform     51     U     51       1,1,2.2-Tetrachloroethane     34     4     54       22     U     22     22       Xylene, o-     22     U     22       Bromoform     51     U     51       1,1,2.2-Tetrachloroethane     34     4     24       4-Ethyltoluene     24 </td <td>1.2-Dichlorooropa</td> <td>ne</td> <td>23</td> <td>()</td> <td></td> <td>23</td> <td></td>	1.2-Dichlorooropa	ne	23	()		23					
cis-1,3-Dichloropropene     23     U     23       Toluene     19     19     19       trans-1,3-Dichloropropene     23     U     23       1,1,2-Trichloroethane     27     U     27       Tetrachloroethane     3700     34     38       Dibromochloromethane     42     U     42       1,2-Dibromoethane     22     U     38       Ethylbenzene     38     U     38       Tylene, o-     22     U     22       Xylene, o-     22     U     22       Stronoform     51     U     22       Hornoform     51     U     22       Jacobioroethane     22     U     22       Xylene, o-     22     U     22       Xylene (total)     22     22     22       Bromoform     51     U     34       1,1,2,2-Tetrachloroethane     24     U     24       1,3,5-Trimethylbenzene     24     U     24	Bromodichlorome	hane	33	Ŭ		33					
Toluene     19     U     19       trans-1,3-Dichloropropene     23     U     23       1,1,2-Trichloroethane     27     U     27       Tetrachloroethane     3700     34     34       Dibromochloromethane     42     U     42       1,2-Dibromoethane     22     U     38       Ethylbenzene     38     U     38       Ethylbenzene     22     U     22       m,p-Xylene     54     U     22       Xylene, o-     22     U     22       Kylene (total)     22     U     22       Bromoform     51     U     51       1,1,2,2-Tetrachloroethane     34     24     24	cis-1.3-Dichloropr	opene	23	ũ		23					
trans-1,3-Dichloropropene   23   U   23     1,1,2-Trichloroethane   27   U   27     Tetrachloroethane   3700   34     Dibromochloromethane   42   U   42     1,2-Dibromoethane   38   U   38     Ethylbenzene   22   U   22     m,p-Xylene   54   U   22     Xylene, o-   22   U   22     Stylene (total)   22   U   22     Bromoform   51   U   51     1,1,2,2-Tetrachloroethane   24   U   24	Toluene		19	Ŭ		19					
1,1,2-Trichloroethane   27   27     Tetrachloroethane   3700   34     Dibromochloromethane   42   U   42     1,2-Dibromoethane   38   U   38     Ethylbenzene   22   U   22     m,p-Xylene   54   U   22     Xylene, o-   22   U   22     Stornoform   51   U   22     Bromoform   51   U   34     1,1,2,2-Tetrachloroethane   24   U   24	trans-1.3-Dichloro	propene	23	Ű		23					
Tetrachloroethane     3700     34       Dibromochloromethane     42     42       1,2-Dibromoethane     38     42       thylbenzene     38     42       m,p-Xylene     22     42       Xylene, o-     22     42       Xylene (total)     22     42       Bromoform     51     4       1,1,2,2-Tetrachloroethane     34     4       4-Ethyltoluene     24     4     24	1.1.2-Trichloroeth	ane	27	Ű		20					
Dibromochloromethane   42   42     1,2-Dibromoethane   38   0     Ethylbenzene   22   0   22     m,p-Xylene   54   0   54     Xylene, o-   22   0   22     Kylene (total)   22   0   22     Bromoform   51   0   51     1,1,2,2-Tetrachloroethane   34   0   34     4-Ethyltoluene   24   0   24	Tetrachloroethene	2 2	3700	0		34					
1,2-Dibromoethane   38   U   38     Ethylbenzene   22   U   22     m,p-Xylene   54   U   54     Xylene, o-   22   U   22     Kylene (total)   22   U   22     Bromoform   51   U   51     1,1,2,2-Tetrachloroethane   34   U   34     4-Ethyltoluene   24   U   24	Dibromochlorome	Ihane	42	U		42					
Ethylbenzene     22     U     22       m,p-Xylene     54     U     54       Xylene, o-     22     U     22       Xylene (total)     22     U     22       Bromoform     51     U     51       1,1,2,2-Tetrachloroethane     34     U     34       4-Ethyltoluene     24     U     24	1.2-Dibromoethan	ie	38	Ŭ		38					
m,p-Xylene 54 U 54   Xylene, o- 22 U 22   Xylene (total) 22 U 22   Bromoform 51 U 51   1,1,2,2-Tetrachloroethane 34 U 34   4-Ethyltoluene 24 U 24	Fthylbenzene	-	22	Ũ		22					
Xylene, o- 22 U 22   Xylene (total) 22 U 22   Bromoform 51 U 51   1,1,2,2-Tetrachloroethane 34 U 34   4-Ethyltoluene 24 U 24	m,p-Xylene		54	Ŭ		54					
Xylene (total)     22     U     22       Bromoform     51     U     51       1,1,2,2-Tetrachloroethane     34     U     34       4-Ethyltoluene     24     U     24	Xvlene, o-		22	Ŭ		22					
Bromoform     51     U     51       1,1,2,2-Tetrachloroethane     34     U     34       4-Ethyltoluene     24     U     24       1,3,5-Trimethylbenzene     24     U     24	Xylene (total)		22	Ű		22					
1,1,2,2-Tetrachloroethane 34 U 34   4-Ethyltoluene 24 U 24   1,3,5-Trimethylbenzene 24 U 24	Bromoform		51	Ŭ,		51					
4-Ethyltoluene     24     U     24       1,3,5-Trimethylbenzene     24     U     24	1,1,2,2-Tetrachlor	oethane	34	ŭ		34					
1,3,5-Trimethylbenzene 24 U 24	4-Ethyltoluene		24	Ű.		24					
	1,3,5-Trimethylbe	nzene	24	υ		24					

# Client Sample ID:

Lab Sample ID:

Client Matrix:

## SSV-3

Air

200-4953-4

## Analytical Data

Job Number: 200-4953-1 Sdg Number: 200-4953

Date Sampled: 04/27/2011 1915 Date Received: 04/29/2011 1020

TO-15 Volatile Organic Compounds in Ambient Air										
Analysis Method: Prep Method: Dilution: Analysis Date: Prep Date:	TO-15 Summa Canister 153 05/04/2011 1714 05/04/2011 1714	Analysis Batch: Prep Batch:	200-17560 N/A		nstrument ID: .ab File ID: Initial Weight/Volume: Final Weight/Volume: Injection Volume:	C.i cjug010.d 21 mL 200 mL 200 mL				
Analyte		Result (p	pb v/v)	Qualifier		RL				
Dichlorodifluoromet	lhane	76	······································	U	nan na shekara na sheka	76	andre dan Afrika an an Afrika an Andreage			
1,2-Dichlorotetraflu	oroethane	31		U		31				
Vinyl chloride		31		U		31				
1,3-Butadiene		31		U		31				
Bromomethane		31		U		31				
Chloroethane		76		U		76				
Bromoethene(Vinyl	Bromide)	31		U		31				
Trichlorofluorometh	ane	31		U		31				
1,1-Dichloroethene		31		U		31				
3-Chloropropene		76		U		76				
Methylene Chloride	•	76		U		76				
Methyl tert-butyl eth	her	31		U		31				
trans-1,2-Dichloroe	thene	31		U		31				
n-Hexane		31		U		31				
1,1-Dichloroethane	1	31		U		31				
cis-1,2-Dichloroeth	ene	31		U		31				
1,2-Dichloroethene	, Total	31		U		31				
Chloroform		31		U		31				
1,1,1-Trichloroetha	ne	31		U		31				
Cyclohexane		31		U		31				
Carbon tetrachloric	le	31		U		31				
2,2,4-Trimethylpen	lane	31		U		31				
Benzene		31		U		31				
1,2-Dichloroethane	<b>;</b>	31		U		31				
n-Heptane		31		U		31				
Trichloroethene		31		U		31				
1,2-Dichloropropar	10	31		U		31				
Bromodichloromet	hane	31		U		31				
cis-1,3-Dichloropro	ppene	31		U		31				
Toluene		31		U		31				
trans-1,3-Dichlorop	propene	31		U		31				
1,1,2-Trichloroetha	ine	31		U		31				
l etrachioroethene	L	2800				31				
Dibromochioromet	nane	31		U		31				
1,2-Dibromoetnani	8	31		0		31				
ethylbenzene		31		0		31				
П.р-Лунене		70		U U		70				
Aylene, 0~		31		0		31				
Bromoform		31		0		31				
1 1 2 2 Tatrachlon	nelbane	ا ت 1		U		24				
A-Ethyltoluono	u c ta da Ra	21		11		31				
1.3.5-Trimethylbor	17606	31		11		31				
цого ниненнулен	144-14-1 EC	01		0		U i				
Analyte		Result (	ug/m3)	Qualifie	r	RL				
Dichlorodifluorome	elhane	380	er er er en	Ų		380				
TestAmerica Burl	ington	Page	20 of 56	5						

## Analytical Data

Job Number: 200-4953-1 Sdg Number: 200-4953

Client Sample ID:SSV-3Lab Sample ID:200-4953-4Client Matrix:Air

Date Sampled: 04/27/2011 1915 Date Received: 04/29/2011 1020

Analysis Method:     TO-15     Analysis Batch:     200-17560     Instrument ID:     C I       Prep Method:     Summa Carister     Prep Batch:     N/A     Lab File ID:     cpug010.d       Analysis Date:     05/04/2011 1714     Final Weight/Volume:     200     mL       Prep Date:     05/04/2011 1714     Final Weight/Volume:     200     mL       Analysis Date:     05/04/2011 1714     Final Weight/Volume:     200     mL       Analysis Date:     05/04/2011 1714     Result (ug/m3)     Qualifier     RL	TO-15 Volatile Organic Compounds in Ambient Air									
Analyte     Result (ug/m3)     Qualifier     RL       1,2-Dichloroteltaflucrotethane     210     U     210       1,3-Butadiene     68     U     68       Bronnethane     200     U     200       Bronnethane     200     U     200       Bronnethane     130     U     130       Bronnethane     170     U     170       1,1-Dichlorotethene     200     U     200       Schloroppene     240     U     200       Methylen Chloride     270     U     120       Methylen Chloride     270     U     120       Methylen Chloride     200     U     120       Methylen Chloride     200     U     120       Methylen Chloride     100     U     120       Methylen Chloride     120     U     120 </th <th>Analysis Method: Prep Method: Dilution: Analysis Date: Prep Date:</th> <th>TO-15 Summa Canister 153 05/04/2011 1714 05/04/2011 1714</th> <th>Analysis Batch: Prep Batch:</th> <th>200-17560 N/A</th> <th>Instrument ID: Lab File ID: Initial Weight/Volume Final Weight/Volume: Injection Volume:</th> <th>C.i cjug010.d : 21 mL : 200 mL 200 mL</th>	Analysis Method: Prep Method: Dilution: Analysis Date: Prep Date:	TO-15 Summa Canister 153 05/04/2011 1714 05/04/2011 1714	Analysis Batch: Prep Batch:	200-17560 N/A	Instrument ID: Lab File ID: Initial Weight/Volume Final Weight/Volume: Injection Volume:	C.i cjug010.d : 21 mL : 200 mL 200 mL				
1.2-Dichlorotetrafluoroethane     210     U     210       Vnyl choride     78     U     78       J.3-Butadiene     68     U     68       Brommethane     120     U     120       Choroethane     200     U     200       Bromoethene(Vinyl Bromide)     130     U     130       Trichlorofulouromethane     170     U     170       1.1-Dichloroethene     120     U     200       3-Choropropene     240     U     240       Methylert-buyl ether     110     U     110       trans-1.2-Dichloroethene     120     U     120       -1-Elexane     110     U     110       trans-1.2-Dichloroethene     120     U     120       -1-Elexane     110     U     120     120       1.1-Dichloroethane     120     U     120     120       1.2-Dichloroethane     120     U     120     120       1.1-Dichloroethane     120     U     120     120	Analyte		Result (u	iq/m3)	Qualifier	RL				
Viry chloride     78     U     78       1.3-Butadiene     68     U     68       Bromonethane     120     U     120       Chlorosthane     200     U     200       Bromonethane(Viryl Bromide)     130     U     130       Trichlorosthane     170     U     170       1.1-Dichlorosthane     170     U     200       Schloroppene     240     U     200       Achtyl terbulyt ether     110     U     110       trans.1.2-Dichlorosthane     120     U     120       1.1-Dichlorosthane     120     U     120       r.1-Dichlorosthane     120     U     120       1.1-Dichlorosthane     120     U     120       1.1-Dichlorosthane     120     U     120       1.1-Dichlorosthane     120     U     120       1.1-Dichlorosthane     120     U     120       1.1-Trichlorosthane     120     U     120       1.1-Trichlorosthane     120     140	1.2-Dichlorotetraflu	loroethane	210		U	210				
A.Builatine     68     U     68       Bromombine     120     U     120       Bromombine     120     U     120       Chorothane     200     U     130       Bromombine     130     U     130       Trichlorothomsthane     170     U     120       1.1-Dichloroethene     120     U     120       3-Chioropropene     240     U     240       Methylet-butyl ether     110     U     110       1.1-Dichloroethene     120     U     120       n-Hexane     110     U     120       n-Hexane     120     U     120       1.1-Dichloroethene, Total     120     U     120       1.2-Dichloroethene, Total     120     U     120       1.2-Dichloroethene, Total     120     U     120       1.2-Dichloroethane     170     U     120       1.2-Dichloroethane     140     U     140       2.2-Dichloroethane     140     U     140 </td <td>Vinvl chloride</td> <td></td> <td>78</td> <td></td> <td>U</td> <td>78</td>	Vinvl chloride		78		U	78				
Promomethane     120     U     120       Chioreshiane     200     U     200       Bromoethane(Viny Bromide)     130     U     130       Trichloroluoromethane     170     U     170       1.1 Dichloroethene     120     U     200       Schioroppene     240     U     200       Methylene Choride     270     U     120       Schioroppene     240     U     200       Methylene Choride     170     U     120       Intrasschiorophene     120     U     120       Intrasschiorophene     120     U     120       Intrasschiorophene, Total     120     U     120       Chiorophene, Total     120     U     120       Chiorophene, Total     120     U     120       Chiorophene, Total     120     U     120       Chiorophene     140     U     140       Benzene     98     U     98       1,2-Dichrorophane     140     U     140 </td <td>1.3-Buladiene</td> <td></td> <td>68</td> <td></td> <td>Ū</td> <td>68</td>	1.3-Buladiene		68		Ū	68				
Chioroethane     200     U     200       Bromechiene(Vinyl Bromide)     130     U     130       Trichloroftenene     170     U     170       1,1-Dichloroethene     120     240     U     240       Methylene Chloride     270     U     270       Methylene Chloride     110     U     110       Trans-1,2-Dichloroethene     120     U     120       r.ass-1,2-Dichloroethene     120     U     120       1,1-Dichloroethene     120     U     120       1,2-Dichloroethene     120     U     120       1,2-Dichloroethene     120     U     120       1,1-Dichloroethene     120     U     120       1,2-Dichloroethene     120     U     120       1,2-Dichloroethene     120     U     130       1,2-Dichloroethene     120     U     120       1,2-Dichloroethene     120     U     140       2,2-Dichloroethene     120     140     140       2,2-Dichloroethe	Bromomethane		120		U	120				
Bromoethene(Vinyl Bromide)     130     U     130       Trichiorofuoromethane     170     U     170       1/1-Dichlorosethene     120     U     240       3-Chtoropropene     240     U     240       Methylen Chloride     270     U     270       Methylen Chloride     270     U     110       trans-1,2-Dichloroethene     120     U     120       -/-Exane     120     U     120       1,2-Dichloroethene     160     U     160       1,1-Trichloroethene     170     U     140       Cyclohexare     180     U     180       1,2-Dichloroethene     120     U     140       Bromodichloroethene     120     U     140       Bromodichloroethene     120	Chloroethane		200		Ŭ	200				
Trichlorofluoromethane     170     U     170       1,1-Dichloroethene     120     U     120       3-Chloropropene     240     U     240       Methylene Chloride     270     U     270       Methylene Chloride     270     U     110       Trish.3-Zbichloroethene     120     U     120       nas.1.2-Dichloroethene     120     U     120       -thexane     110     U     120       1,1-Dichloroethene     120     U     120       cis.1,2-Dichloroethene, Total     120     U     120       Chloroform     150     U     150       1,1-Tirichbroethane     170     U     170       Cyclohexane     100     U     140       Benzene     98     U     98       1,2-Dichloropethane     120     140     140       Benzene     98     U     120       1,2-Dichloropropane     140     U     140       Gis-1,3-Dichloropropane     140     U	Bromoethene/Vinv	Bromide)	130		Ŭ	130				
1.1-Dichloroethene 120 U 120   3-Chloropropene 240 U 240   Methyler Choide 270 U 270   Methyler Choide 270 U 100   Irans-1,2-Dichloroethene 110 U 120   n-Hexane 110 U 120   n-Hexane 120 U 120   1,1-Dichloroethene 120 U 120   1,2-Dichloroethene 120 U 120   1,1-Dichloroethene 120 U 120   1,2-Dichloroethene, Total 120 U 120   Cydohexane 170 U 170   Cydohexane 170 U 140   Benzene 98 U 98   1,2-Dichloroethane 120 120   1,2-Dichloroethane 120 140   Benzene 98 U 120   1,2-Dichloroethane 120 140   Bromothene 120 140   Bromothene 140 U 140   Bromothene 140 U 140   Bromothene 140 U 140   I,2-Dichloroethane 140 140	Trichlorofluoromet	nane	170		U	170				
3-Chloroprepene     240     U     240       Methylene Chloride     770     U     270       Methyllene Chloride     770     U     110       trans-1,2-Dichloroethene     120     U     120       n-Hexane     110     U     120       1,1-Dichloroethene     120     U     120       cis-1,2-Dichloroethene     120     U     120       1,2-Dichloroethene     120     U     120       1,2-Dichloroethene     120     U     120       Chloroform     150     U     160       1,1,1-Trichloroethane     170     U     170       Cyclokexane     170     U     180       2,2-Artimethylpentane     140     U     180       2,2-Artimethylpentane     120     120     120       1,2-Dichloroptane     120     120     120       2,2-Dichloroptane     140     U     140       Benzene     98     U     120       1,2-Dichloroptane     140     140	1.1-Dichloroethene	)	120		U	120				
Methyler Chioride     270     U     270       Methyler Chioride     110     U     110       trans-1.2-Dichloroethene     120     U     120       n-Hexane     110     U     110       1,1-Dichloroethene     120     U     120       1,2-Dichloroethene     120     U     120       isi-1.2-Dichloroethene     120     U     120       isi-1.2-Dichloroethene     120     U     120       isi-1.2-Dichloroethene     120     U     120       isi-1.2-Dichloroethene     100     U     120       1,1-Trichloroethane     120     U     130       Cyclohexane     110     U     140       Benzene     98     U     98       1,2-Dichloroethane     120     U     120       n-Heptane     160     U     140       1,2-Dichloroethane     120     140     140       1,2-Dichloroethane     120     140     140       1,2-Dichloroethane     120     140	3-Chloropropene		240		U	240				
Methy terbutyle ther     110     U     110       trans-1,2-Dichloroethene     120     U     120       n-Hexare     110     U     110       1,1-Dichloroethene     120     U     120       1,1-Dichloroethene     120     U     120       1,2-Dichloroethene, Total     120     U     120       Chloroform     150     U     150       1,1-Trichloroethane     170     U     170       Cydohexane     110     U     110       Carbon tetrachloride     190     U     190       2,2-A-Trimethylpentane     140     U     140       Benzene     98     U     98       1,2-Dichloroethane     120     U     120       n-Heptane     130     U     140       Bromodichloropropane     140     U     140       Bromodichloropropene     140     U     140       1,2-Dichloropropene     140     140     140       1,2-Dichloropropene     140     140	Methylene Chloride	9	270		Ŭ	270				
trans-1,2-Dichlorozethene     120     U     120       n-Hexane     110     U     110       1,1-Dichlorozethane     120     U     120       is-1,2-Dichlorozethane     120     U     120       1,2-Dichlorozethane     120     U     120       Chloroform     150     U     150       1,1-Trichlorozethane     170     U     170       Cyclohexane     110     U     110       Carbon tetrachloride     190     U     190       2,2,4-Trimethylpentane     440     U     140       Benzene     98     U     98       1,2-Dichlorozethane     120     U     130       1,2-Dichlorozethane     160     U     140       Promodichloromethane     120     140     140       1,2-Dichloropropene     140     U     140       1,2-Dichloropropene     140     U     140       1,2-Dichloropropene     140     U     140       1,2-Dichloropropene     140     U	Methyl tert-butyl et	her	110		Ū	110				
n-Hexane     110     U     110       1,1-Dichloroethane     120     U     120       cis-1,2-Dichloroethane     120     U     120       1,2-Dichloroethane     120     U     120       Chlorooftm     150     U     120       Chlorooftm     150     U     150       1,1-Trichloroethane     170     U     170       Cyclohexane     110     U     190       2,2,4-Trimethylpentane     140     U     140       Benzene     98     U     98       1,2-Dichloroethane     120     U     120       n-Heptane     130     U     130       Trichloroethane     140     U     140       Bromodichloromethane     210     U     140       I_2-Dichloroppane     140     U     140       Bromodichloromethane     200     U     120       rans-1,3-Dichloroppane     140     U     140       1,1,2-Trichloroethane     170     170     170	trans-1.2-Dichloroe	ethene	120		U	120				
1.1-Dichloroethane     120     U     120       cis-1,2-Dichloroethane     120     U     120       1,2-Dichloroethane     120     U     120       1,2-Dichloroethane     120     U     120       1,2-Dichloroethane     120     U     120       Chloroform     150     U     170       Cyclohexane     170     U     170       Cyclohexane     170     U     170       Cyclohexane     170     U     190       2,2,4-Trimethylpentane     140     U     140       Benzene     98     U     98       1,2-Dichloroethane     120     U     130       Trichloroethane     120     U     140       Bromodichloromethane     210     U     140       Gronotichloropropane     140     U     140       Trichloropropane     140     U     140       Trichloropropane     140     U     140       Trichloropropane     140     U     120 <	n-Hexane		110		Ū	110				
ds-1,2-Dichloroethene     120     U     120       1,2-Dichloroethene, Total     120     U     120       Chloroform     150     U     150       1,1,1-Tichloroethane     170     U     170       Cyclohexane     110     U     110       Carbon tetrachloride     190     U     190       2,2,4-Trimethylpentane     440     U     140       Benzene     98     U     98       1,2-Dichloroethane     120     U     120       n-Heptane     130     U     130       Tichloroethane     120     U     140       Bromodichloromethane     120     U     140       Bromodichloromethane     140     U     140       Toluene     120     U     140       Toluene     120     U     120       trans-1,3-Dichloropropene     140     U     140       1,1,2-Trichoroethane     170     170     120       trans-1,3-Dichloropropene     140     140	1.1-Dichloroethane	2	120		Ŭ	120				
International and the second	cis-1.2-Dichloroeth	iene	120		Ŭ	120				
InterventionInterventionInterventionInterventionChloroform150U1501,1,1-Trichloroethane170U170Cyclohexane110U190Carbon tetrachloride190U1902,2,4-Trimethylpentane140U140Benzene98U981,2-Dichloroethane120U120-Heptane130U130Trichloroethane160U140Bromodichloropropane140U140Bromodichloropropene140U140Toluene120U140Toluene120U140Toluene120U140Toluene19000120transhortoethane19000120L1,2-Trichloroethane19000210Dibromochloromethane260U240Ethylbenzene330U330Xylene, o-130U130Xylene (total)130U330Xylene (total)320U3201,1,2-Tritenkloroethane210U2104-Ethyltorene320U3201,1,2-Tritenkloroethane210130Toluene320U3201,2,2-Tetrachloroethane210130Jabertonethane210130Jabertonethane210150Jabertonethane150U150 <td>1.2-Dichloroethene</td> <td>Total</td> <td>120</td> <td></td> <td>- 11</td> <td>120</td>	1.2-Dichloroethene	Total	120		- 11	120				
InstantIntIntIntIntCyclohexane170U170Cyclohexane110U110Carbon tetrachloride190U1902.2.4-Trimethylpentane140U140Benzene98U981.2-Dichloroethane120U120n-Heptane160U130Trichloroethene160U140Bromodichloromethane210U140Bromodichloromethane210U140Toluene120U140Toluene120U140Toluene120U1401.2-Dichloropropene140U140Toluene120U120Tetrachloroethane1900210170Tetrachloroethane260U240Dibromochloromethane260U240Ethylbenzene130U130Mylene330U330Xylene, o-130U330Xylene, fotal)320U3201.1,2-Tetrachloroethane210U210Labelence130U330Xylene, o-130U330Xylene, fotal)320U3201.1,2-Tetrachloroethane210U2101.3.5-Trimethyluenzene150U150	Chloroform	, , , , , , , , , , , , , , , , , , , ,	150		11	150				
Trigonomiana   110   U   110     Cyclohexane   110   U   190     2.2.4-Trimethylpentane   140   U   140     Benzene   98   U   98     1.2-Dichloroethane   120   U   120     n-Heptane   130   U   130     Trichloroethane   160   U   160     1.2-Dichloropropane   140   U   140     Bromodichloromethane   120   U   140     Bromodichloropropane   140   U   210     cis-1.3-Dichloropropane   140   U   140     Toluene   120   U   120     trans-1.3-Dichloropropene   140   U   140     1.1.2-Trichloroethane   170   U   170     Tetrachloroethane   260   U   260     1.2-Dichloromethane   260   U   330     1.2-Dibromoethane   330   U   330     1.2-Dibromoethane   330   U   330     1.2-Dibromoethane   240   130   330	1.1.1-Trichloroetha	ine	170		0	170				
Carbon tetrachloride     10     0     10       Carbon tetrachloride     190     U     140       Benzene     98     U     98       1,2-Dichloroethane     120     U     120       n-Heptane     130     U     130       Trichloroethene     160     U     160       1,2-Dichloropropane     140     U     160       1,2-Dichloropropane     140     U     140       Bromodichloromethane     210     U     140       Gis-1,3-Dichloropropane     140     U     140       Trichloroethane     120     U     120       trans-1,3-Dichloropropene     140     U     140       1,1,2-Trichloroethane     170     U     170       Tetrachloroethane     260     U     120       t/2-Dibromoethane     240     U     240       Llybenzene     130     U     330       n, p-Xylene     330     U     130       Xylene (otal)     130     130     13	Cyclohexane		110		U	110				
2.2.4-Trimethylpentane   140   140     Benzene   98   140     Benzene   98   120     1.2-Dichloroethane   120   120     n-Heptane   130   130     Trichloroethene   160   130     1.2-Dichloropropane   160   140     Bromodichloromethane   210   140     Bromodichloropropane   140   140     Bromodichloropropene   140   140     Tolkene   120   120     trans-1,3-Dichloropropene   140   140     1,1,2-Trichloroethane   170   120     Dibromochloromethane   260   140     1,2-Dibromoethane   240   240     Ethylbenzene   330   130     m,p-Xylene   330   130     Xylene, o-   130   130     Xylene (total)	Carbon tetrachlori	de	190		U	190				
Benzene   98   U   98     1,2-Dichloroethane   120   U   120     n-Heptane   130   U   130     Trichloroethane   160   U   160     1,2-Dichloroptopane   160   U   160     1,2-Dichloroptopane   140   U   140     Bromodichloromethane   210   U   210     cis-1,3-Dichloropropene   140   U   140     Toluene   120   U   120     trans-1,3-Dichloropropene   140   U   140     1,1,2-Trichloroethane   170   U   120     trans-1,3-Dichloropropene   140   U   140     1,1,2-Trichloroethane   170   U   170     Tetrachloroethane   260   U   260     1,2-Dibromoethane   240   130   130     m,p-Xylene   330   U   330     Xylene, o-   130   U   130     Xylene (total)   130   U   320     Bromoform   320   U   320 <td< td=""><td>2.2.4-Trimethylper</td><td>lane</td><td>140</td><td></td><td>1</td><td>140</td></td<>	2.2.4-Trimethylper	lane	140		1	140				
1.2-Dichloroethane   120   U   120     n-Heptane   130   U   130     Trichloroethene   160   U   160     1,2-Dichloroptopane   140   U   140     Bromodichloromethane   210   U   210     cis-1,3-Dichloropropene   140   U   140     Doluene   120   U   120     trans-1,3-Dichloropropene   140   U   140     1,1,2-Trichloroethane   170   U   170     Tetrachloroethane   19000   120   140     Dibromochloromethane   260   U   260     Dibromochlane   240   240   240     Ethylbenzene   330   U   330     xylene, o-   130   U   130     Xylene (total)   130   130   220     I,1,2,2-Tetrachloroethane   210   130   220     1,1,2,2-Tetrachloroethane   210   130   320     Xylene (total)   130   130   130   130     Xylene (total)   130   150 <td>Benzene</td> <td></td> <td>98</td> <td></td> <td>ц ц</td> <td>98</td>	Benzene		98		ц ц	98				
n-Heptane   130   U   130     Trichloroethene   160   U   160     1,2-Dichloropropane   140   U   140     Bromodichloromethane   210   U   210     cis-1,3-Dichloropropene   140   U   140     Toluene   120   U   120     trans-1,3-Dichloropropene   140   U   140     1,1,2-Trichloroethane   170   U   120     trans-1,3-Dichloropropene   140   U   140     1,1,2-Trichloroethane   170   U   170     Tetrachloroethane   19000   210   200     Dibromochloromethane   260   U   240     Ethylbenzene   130   U   130     m,p-Xylene   330   U   330     Xylene, o-   130   U   130     Xylene, o-   130   U   320     I,1,2,2-Tetrachloroethane   210   130     Kylene (total)   130   320   130     Kylene (total)   130   130   130     <	1.2-Dichloroethan	<del>a</del>	120		1	120				
Trichloroethene     160     U     160       1,2-Dichloropropane     140     140     140       Bromodichloromethane     210     U     210       cis-1,3-Dichloropropene     140     U     140       Toluene     120     U     120       trans-1,3-Dichloropropene     140     U     140       1,1,2-Trichloroethane     170     U     170       trans-1,3-Dichloropropene     140     U     140       1,1,2-Trichloroethane     170     U     170       Tetrachloroethane     19000     210     260       Dibromochloromethane     260     U     240       Ethylbenzene     130     U     130       m,p-Xylene     330     U     330       Xylene, o-     130     U     130       Xylene (total)     130     130     320       Bromoform     320     U     320       1,1,2,2-Tetrachloroethane     210     150     150	n-Hentane	-	130		U .	130				
1.2-Dichloropropane     140     U     140       Bromodichloromethane     210     U     210       cis-1,3-Dichloropropene     140     U     140       Toluene     120     U     120       trans-1,3-Dichloropropene     140     U     140       1,1,2-Trichloroethane     170     U     170       Tetrachloroethane     19000     210     260       Dibromochloromethane     260     U     260       1,2-Dibromoethane     240     U     240       Ethylbenzene     330     U     330       m,p-Xylene, o-     130     U     130       Xylene, o-     130     U     330       Kylene, o-     320     U     320       I,1,2,2-Tetrachloroethane     210     320     320       I,1,2,2-Tetrachloroethane     210     210     210       I,1,2,2-Tetrachloroethane     150     U     150	Trichloroethene		160			160				
Bromodichloromethane     210     110       cis-1,3-Dichloropropene     140     140       Toluene     120     120       trans-1,3-Dichloropropene     140     120       trans-1,3-Dichloropropene     140     140       1,1,2-Trichloroethane     170     140       1,1,2-Trichloroethane     170     170       Tetrachloroethane     260     U     260       1,2-Dibromoethane     240     240     240       Ethylbenzene     130     U     130       m,p-Xylene     330     U     130       Xylene, o-     130     U     130       Xylene (total)     130     U     130       Bromoform     320     U     320       1,1,2,2-Tetrachloroethane     210     120       1,1,2,2-Tetrachloroethane     150     U     150	1.2-Dichloropropa	ne	140		11	140				
Link     Link <thlink< th="">     Link     Link     <thl< td=""><td>Bromodichloromet</td><td>hane</td><td>210</td><td></td><td>11</td><td>210</td></thl<></thlink<>	Bromodichloromet	hane	210		11	210				
Toluene   170   U   120     trans-1,3-Dichloropropene   140   U   140     1,1,2-Trichloroethane   170   U   170     Tetrachloroethane   19000   210   210     Dibromochloromethane   260   U   260     1,2-Dibromoethane   240   U   240     Ethylbenzene   130   U   330     xylene, o-   130   U   130     Sylene (total)   130   U   320     Bromoform   320   U   320     1,1,2,2-Tetrachloroethane   210   150   150	cis-1.3-Dichloropro	nene	140			140				
trans-1,3-Dichloropropene   140   140     1,1,2-Trichloroethane   170   170     Tetrachloroethane   19000   210     Dibromochloromethane   260   U   260     1,2-Dibromoethane   240   240   240     Ethylbenzene   130   U   130     m,p-Xylene   330   U   330     Xylene, o-   130   U   130     Bromoform   320   U   320     1,1,2,2-Tetrachloroethane   210   210     4-Ethyltoluene   150   U   150	Toluene	shorre	120			120				
1,1,2-Trichloroethane   170   U   170     Tetrachloroethane   19000   210     Dibromochloromethane   260   U   260     1,2-Dibromoethane   240   U   240     Ethylbenzene   130   U   130     m,p-Xylene   330   U   330     Xylene, o-   130   U   130     Bromoform   320   U   320     1,1,2,2-Tetrachloroethane   210   U   120     4-Ethyltoluene   150   U   150	trans-1.3-Dichloro	nronene	140		1	140				
Tetrachloroethene     19000     210       Dibromochloromethane     260     U     260       1,2-Dibromoethane     240     U     240       Ethylbenzene     130     U     130       m,p-Xylene     330     U     330       Xylene, o-     130     U     130       Bromoform     130     U     130       J.1,2,2-Tetrachloroethane     210     U     220       1,1,2,2-Tetrachloroethane     210     U     120       4-Ethyltoluene     150     U     150       1,3,5-Trimethylbenzene     150     U     150	1 1 2-Trichloroeth	ane	170		U	170				
Dibromochloromethane     260     U     260       Dibromochloromethane     260     U     260       1,2-Dibromoethane     240     U     240       Ethylbenzene     130     U     130       m,p-Xylene     330     U     330       Xylene, o-     130     U     130       Stylene (total)     130     U     130       Bromoform     320     U     320       1,1,2,2-Tetrachloroethane     210     U     210       4-Ethyltoluene     150     U     150	Tetrachloroethene		19000		5	210				
1,2-Dibromoethane   240   U   240     Ethylbenzene   130   U   130     m,p-Xylene   330   U   330     Xylene, o-   130   U   130     Xylene (total)   130   U   130     Bromoform   320   U   320     1,1,2,2-Tetrachloroethane   210   U   210     4-Ethyltoluene   150   U   150     1,3,5-Trimethylbenzene   150   U   150	Dibromochlorome	Ihane	260		L1	260				
Ethylbenzene   130   U   130     m,p-Xylene   330   U   330     Xylene, o-   130   U   130     Xylene (total)   130   U   130     Bromoform   320   U   320     1,1,2,2-Tetrachloroethane   210   U   210     4-Ethyltoluene   150   U   150     1,3,5-Trimethylbenzene   150   U   150	1.2-Dibromoethan	e	240		11	240				
m,p-Xylene 330 U 330   Xylene, o- 130 U 130   Xylene (total) 130 U 130   Bromoform 320 U 320   1,1,2,2-Tetrachloroethane 210 U 210   4-Ethyltoluene 150 U 150   1,3,5-Trimethylbenzene 150 U 150	Ethylbenzene	-	130		11	130				
Xylene, o-     130     U     130       Xylene (total)     130     U     130       Bromoform     320     U     320       1,1,2,2-Tetrachloroethane     210     U     210       4-Ethyltoluene     150     U     150	m.p-Xvlene		330		- U	330				
Xylene (total)     130     U     130       Bromoform     320     U     320       1,1,2,2-Tetrachloroethane     210     U     210       4-Ethyltoluene     150     U     150       1,3,5-Trimethylbenzene     150     U     150	Xviene. o-		130			130				
Bromoform     320     U     320       1,1,2,2-Tetrachloroethane     210     U     210       4-Ethyltoluene     150     U     150       1,3,5-Trimethylbenzene     150     U     150	Xviene (total)		130		Ŭ	130				
1,1,2,2-Tetrachloroethane     210     U     210       4-Ethyltoluene     150     U     150       1,3,5-Trimethylbenzene     150     U     150	Bromoform		320		U U	320				
4-Ethyltoluene     150     U     150       1.3,5-Trimethylbenzene     150     U     150	1 1.2.2-Tetrachlor	oethane	210		1	210				
1,3,5-Trimethylbenzene 150 U 150	4-Ethvitoluene		150		11	150				
	1,3,5-Trimethylbe	nzene	150		Ŭ	150				

## Analytical Data

Job Number: 200-4953-1 Sdg Number: 200-4953

Client Sample ID:SSV-5Lab Sample ID:200-4953-6Client Matrix:Air

#### Date Sampled: 04/27/2011 2100 Date Received: 04/29/2011 1020

TO-15 Volatile Organic Compounds in Ambient Air									
Analysis Method: Prep Method: Dilution: Analysis Date: Prep Date:	TO-15 Summa Canister 199 05/05/2011 0819 05/05/2011 0819	Analysis Batch: Prep Batch:	200-1756 N/A	0	Instrument ID: Lab File ID: Initial Weight/Volume: Final Weight/Volume: Injection Volume:	C.i cjug025.d 60 mL 200 mL 200 mL			
Analyte		Result (p	pb v/v)	Qualifier		RL			
Dichlorodifluorome	thane	100		U	nadi na mana damaa na 1925 na garananya ini na mana na k	100	No		
1,2-Dichlorotetraflu	loroethane	40		U		40			
Vinyl chloride		40		U		40			
1,3-Butadiene		40		U		40			
Bromomethane		40		υ		40			
Chloroethane		100		U		100			
Bromoethene(Viny	l Bromide)	40		U		40			
Trichlorofluorometh	nane	40		U		40			
1,1-Dichloroethene	2	40		U		40			
3-Chloropropene		100		U		100			
Methylene Chloride	9	100		U		100			
Methyl tert-butyl et	her	40		U		40			
trans-1,2-Dichloroe	ethene	40		U		40			
n-Hexane		40		U		40			
1,1-Dichloroethane	9	40		U		40			
cis-1,2-Dichloroeth	iene	40		U		40			
1,2-Dichloroethene	e, Total	40		U		40			
Chloroform		40		U		40			
1,1,1-Trichloroetha	ane	40		U		40			
Cyclohexane		40		U		40			
Carbon tetrachlorid	de	40		U		40			
2,2,4-Trimethylper	ntane	40		U		40			
Benzene		40		U		40			
1,2-Dichloroethand	9	40		U		40			
n-Heptane		40		U		40			
Trichloroethene		40		Ų		40			
1,2-Dichloropropa	ne	40		U		40			
Bromodichloromet	hane	40		U		40			
cis-1,3-Dichloropro	opene	40		U		40			
Toluene		40		U		40			
trans-1,3-Dichloro	propene	40		U		40			
1,1,2-Trichloroetha	ane	40		U		40			
Tetrachloroethene	ł	4800				40			
Dibromochlorome	Ihane	40		U		40			
1,2-Dibromoethan	e	40		U		40			
Ethylbenzene		40		U		40			
m,p-Xylene		100		U		100			
Xylene, o-		40		U		40			
Xylene (total)		40		U		40			
Bromoform		40		U		40			
1,1,2,2-Tetrachlor	oethane	40		U		40			
4-Ethyltoluene		40		U		40			
1,3,5-Trimethylber	nzene	40		U		40			
Analyte		Result (	ug/m3)	Qualifie	r	RL			
Dichlorodifluorom	ethane	490		U		490			

**TestAmerica Burlington** 

Page 22 of 565

## Analytical Data

Job Number: 200-4953-1 Sdg Number: 200-4953

Client Sample ID:SSV-5Lab Sample ID:200-4953-6Client Matrix:Air

#### Date Sampled: 04/27/2011 2100 Date Received: 04/29/2011 1020

TO-15 Volatile Organic Compounds in Ambient Air								
Analysis Method: Prep Method: Dilution: Analysis Date: Prep Date:	TO-15 Summa Canister 199 05/05/2011 0819 05/05/2011 0819	Analysis Batch: Prep Batch:	200-17560 N/A	Instrument ID: Lab File ID: Initial Weight/Volume: Finat Weight/Volume: Injection Volume:	C.i cjug025.d 60 mL 200 mL 200 mL			
Analyte		Result (u	a/m3) Q	ualifier	RL			
1.2-Dichlorotetraflu	oroethane	280	Ŭ	ay an and defending a manimum and defending a second second second second second second second second second se	280			
Vinvl chloride		100	Ũ		100			
1,3-Butadiene		88	U		88			
Bromomethane		150	Ŭ		150			
Chloroethane		260	U		260			
Bromoethene(Vinv	Bromide)	170	Ū		170			
Trichlorofluorometh	iane	220	Ū		220			
1.1-Dichloroethene		160	Ū		160			
3-Chioropropene		310	Ū		310			
Methylene Chloride	2	350	Ũ		350			
Methyl tert-butyl et	her	140	Ű		140			
trans-1.2-Dichloroe	athene	160	Ū	1	160			
n-Hexane		140	Ű		140			
1.1-Dichloroethane	•	160	Ŭ.		160			
cis-1 2-Dichloroeth	ene	160			160			
1.2-Dichloroethene	Total	160	Ű	1	160			
Chloroform		190	Ű		190			
1 1 1-Trichloroetha	ne	220	U		220			
Cyclohexane		140			140			
Carbon tetrachlorid	10	250	1		250			
2 2 4-Trimethylpen	tane	190	U		190			
Benzene	auto	130		1	130			
1 2-Dichloroethane	3	160	U		160			
n-Hentane	-	160	U U	•	160			
Trichloroethene		210	1		210			
1.2-Dichloropropa	he	180		4	180			
Bromodichloromet	hane	270	1	, 	270			
cis+1 3-Dichloropro	nene	180	L L	, 	180			
Toluene	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	150	Ĺ	1	150			
trans-1.3-Dichloro	oropene	180	1	1	180			
1 1 2-Trichloroeth	ane	220	1	]	220			
Tetrachlornethene		32000			270			
Dibromochloromel	hane	340	1	1	340			
1 2-Dibromoethan	A	310	1	, 1	310			
Fihvlbenzene	0	170		1	170			
m.n-Xvlene		430	1	-	430			
Xvlene. o-		170	1	- 	170			
Xvlene (total)		170	1	-	170			
Bromoform		410	1	1	410			
1 1 2 2-Tetrachlor	oethane	270	L L	1	270			
4-Ethyltoluene	o priminu	200		1	200			
1.3.5-Trimethylber	nzene	200	1	- J	200			
			•					

SSV-6

200-4953-10

Client Sample ID:

Lab Sample ID:

## Analytical Data

Job Number: 200-4953-1 Sdg Number: 200-4953

Date Sampled: 04/28/2011 0700 Date Received: 04/29/2011 1020

Client Matrix:	Air				Date	Receive	ed: 04/29/2011 1020
		TO-15 Volatil	le Organic Co	ompounds in Ambie	ent Air		
Analysis Method:	TO-15	Analysi	s Batch:	200-17560	Instrument ID:	C.i	
Prep Method:	Summa Canister	Prep Ba	atch:	N/A	Lab File ID:	cjuq	)12.d
Dilution:	2.0				Initial Weight/Volume:	100	mL
Analysis Date:	05/04/2011 1850				Final Weight/Volume:	200	ml
Prop Date:	05/04/2011 1850				Inigation Volume:	200	mL
Frep Date.	03/04/2011 1000				injection volume.	200	111
Analyte		country and assessing as on	Result (ppb	v/v) Qualifi	er		RL
Dichlorodifluorome	thane	R	1:0	U			1.0
1,2-Dichtorotetraflu	Joroethane	1	0.40	U			0.40
Vinyl chloride			0.40	U			0.40
1,3-Butadiene			0.40	0			0.40'
Bromomethane			0.40	U		_	0.40
Chloroethane			1:0				1.0
Bromoethene(Viny	I Bromide)	U	0:40				0.40
Trichlorofluoromet	hane		0.51	)			0.40
1,1-Dichloroethene	3	R	.0:40	U		_	0.40
3-Chloropropene		1	10	U			1.0
Methylene Chloride	e		1.0	U			1.0
Methyl tert-butyl et	ther		0.40	U			0.40
trans-1,2-Dichloroe	ethene	V	0:40	U U			0.40
n-Hexane			2.2	1			0.40
1,1-Dichloroethane	e		0.40				0.40
cis-1,2-Dichloroeth	nene		0:40	U			0.40
1,2-Dichloroethene	e, Total		0.40	U			0.40
Chloroform			0.40	U			0.40
1,1,1-Trichloroetha	ane		3.2	1			0.40
Cyclohexane			1.0	ĩ			0.40
Carbon tetrachlori	de	R	0.40	U			0.40
2,2,4-Trimethylper	ntane	R	0.40	U			0.40
Benzene			0.82	1			0.40
1,2-Dichloroethan	e	R	9.40	U			0.40
n-Heptane			0.84	7			0.40
Trichloroethene			10	7			0.40
1,2-Dichloropropa	ne	K	0.40	U			0.40
Bromodichlorome	Ihane	1	0:40	<del>U</del>			0.40
cis-1,3-Dichloropre	opene	1	0.40	U			0.40
Toluene			4.9	7			0.40
trans-1,3-Dichloro	propene	K	0.40	U			0.40
1,1,2-Trichloroeth	ane	R	0.40	U			0.40
Tetrachloroethene	9		51	7			0.40
Dibromochlorome	thane	R	0.40	U			0.40-
1,2-Dibromoethan	ie	1	0.40	U			0.40
Ethylbenzene			0.40	U			0.40
m.p-Xylene			/1.0	U			1.0
Xylene, o-		L	0.40	U			0.40
Xylene (total)			1.2	7			0.40
Bromoform		R	0.40	U			0.40
1,1,2,2-Tetrachior	roethane		0,40	U			0.40
4-Ethyltoluene			, 0.40	U		_	0.40
1,3,5-Trimethylbe	nzene	4	0.40	U			0.40
Analyte			Result (ug/	m3) Quali	fier		RL
Dichlorodifluorom	ethane	R	4.9	U			4.9
TestAmerica Bur	lington		Page 24	l of 565			

#### **Analytical Data**

Client Sample ID: Lab Sample ID: Client Matrix:	SSV-6 200-4953-10 Air				Date Sampled: 04/28/2011 07 Date Received: 04/29/2011 10
		TO-15 Volatile Organ	nic Compounds i	n Ambient Air	
Analysis Method: Prep Method: Dilution: Analysis Date; Prep Date:	TO-15 Summa Canister 2.0 05/04/2011 1850 05/04/2011 1850	Analysis Batch Prep Batch:	: 200-17560 N/A	Instrument ID: Lab File ID: Initial Weight/\ Final Weight/\ Injection Volue	C.i cjug012.d /olume: 100 mL /olume: 200 mL ne: 200 mL
Analyte		Result	(ug/m3)	Qualifier	RL
1.2-Dicblorotetraflu	oroethane	7 2.8	(dgino)	11	2.8
Vinyl chloride		1.0		<u>u</u>	10
1.3-Butadiene		0.88		<u>u</u>	0.88
Bromomethane		16		ų –	16
Chloroethane		26			
Bromoethene(Vinvl	Bromide)	¥ 17		- <u>U</u>	1.7
Trichlorofluorometh	ane	2.9		Ĭ	2.2
1.1-Dichloroethene		0 1.6		<u> </u>	1.6
3-Chloropropene		3.1		<u> </u>	3.1
Methylene Chloride		3.5		U	3.5
Methyl tert-butyl eth	ner	1.4		U	1.4
trans-1,2-Dichloroe	thene	1,6		U	1,6
n-Hexane		7.8		1	1.4
1,1-Dichloroethane		1.6		Ŭ	1.6
cis-1.2-Dichloroeth	ene	1 1.6		U	1.6
1,2-Dichloroethene	, Total	1.6		U	1.6
Chloroform		1 2.0		U	2.0
1,1,1-Trichloroetha	ne	17		1	2.2
Cyclohexane		3.5		]	1.4
Carbon tetrachlorid	le	R 2.5		U	2.5
2,2,4-Trimethylpen	tane	R 1.0-		U	1.9
Benzene		2.6		1	1.3
1,2-Dichloroethane	3	2 1.6		U	1:8
n-Heptane		3.4		1	1.6
Trichloroethene		56		7	2.1
1,2-Dichloropropar	ne	R 1.8		U	1.8
Bromodichloromet	hane	2.7		-U	2.7
cis-1,3-Dichloropro	pene	11.8		U	1:8
Toluene		18		7	1.5
trans-1,3-Dichlorop	oropene	R 1_8_		U	1.8
1,1,2-Trichloroetha	ane	R 2.2		U	2:2
Tetrachloroethene		350		1	2.7
Dibromochloromet	hane	R 3.4_		0	
1,2-Dibromoethane	8	3.1		0	3.1
Ethylbenzene		1.7		0	1.7
m,p-Xylene		4.3			4.3
Aylene, 0-		1.7-		0	1.7
Aylene (total)		5.1		4	1.7
Bromotorm	a a lla su a	K 4.1			4.1
1,1,2,2-1 etrachloro	oemane	2.7		U	2.1
4-Einyitoluene		2.0		0	20
1,3,5-Trimethylber	nzene	¥ 2:0-		U	2.0

Client: ARCADIS U.S. Inc

#### Client Sample ID: AMB-042711

Lab Sample ID: 200-4953-1 Client Matrix: Air Job Number: 200-4953-1 Sdg Number: 200-4953

Date Sampled: 04/27/2011 1720 Date Received: 04/29/2011 1020

Analysis Method:	TO15 LL	Analysis Batch:	200-17816	Instrument ID:	E.i
Pren Method:	Summa Canister	Pren Batch	N/A	Lab File ID:	eeiw012 d
Dilution:	4.0	Trop Baton.		Initial Weight Volume:	125 ml
Analysis Date:	05/10/2011 1920			Final Weight Volume:	500 ml
analysis Date.	05/10/2011 1020			Pinal Weight Volume.	500 mL
rep Date:	05/10/2011 1920			injection volume:	500 ML
Analyte		Result (p	pb v/v) Qualifi	ier	RL
Dichlorodifluoromet	hane	0.46			0.040
1,2-Dichlorotetraflu	oroethane	0.040	U		0.040
/inyl chloride		0.080	U		0.080
1,3-Butadiene		0.080	U		0.080
Bromomethane		0.080	U		0.080
Chloroethane		0.080	U		0.080
Bromoethene(Vinyl	Bromide)	0.080	U		0.080
richlorofluorometh	ane	0.20			0.040
,1-Dichloroethene		0.040	U		0.040
-Chloropropene		0.080	U		0.080
Methylene Chloride		0.80	UM		0.80
vethyl tert-butyl et	ner	0.040	U		0.040
rans-1,2-Dichloroe	thene	0.040	U		0.040
n-Hexane		0.082			0.080
1,1-Dichloroethane		0.040	U		0.040
cis-1,2-Dichloroeth	ene	0.040	U		0.040
Chloroform		0.040	U		0.040
1,1,1-Trichloroetha	ne	0.040	U		0.040
Cyclohexane		0.048			0.040
Carbon tetrachloric	le	0.076			0.040
2,2,4-Trimethylpen	tane	0.040	U		0.040
Benzene		0.062			0.040
1,2-Dichloroethane		0.080	U		0.080
n-Heptane		0.15			0.040
Trichloroethene		0.040	U		0.040
1,2-Dichloropropar	ne	0.080	U		0.080
Bromodichloromet	hane	0.040	U		0.040
cis-1,3-Dichloropro	opene	0.040	U		0.040
Toluene		0.48			0.040
trans-1,3-Dichloro	propene	0.040	U		0.040
1,1,2-Trichloroetha	ane	0.040	υ		0.040
Tetrachloroethene		0.040	U,		0.040
Dibromochloromet	hane	0.040	U		0.040
1,2-Dibromoethan	e	0.040	υ,		0.040
Ethylbenzene		0.052	12		0.040
o-Xylene		0.041	J. Ye		0.040
Bromoform		0.040	U		0.040
1,1,2,2-Tetrachlor	pethane	0.040	U		0.040
4-Ethyltoluene		0.040	U		0.040
1,3,5-Trimethylber	nzene	0.080	U		0.080
1,2-Dichloroethen	e, Total	0.040	U		0.040
m-Xylene & p-Xyle	ene	0.13	1		0.080
Xylenes, Total		0.17			0.040
A		Result (	(uo/m3) Qual	ilier	RI

Page 26 of 565

Client: ARCADIS U.S. Inc

#### Client Sample ID: AMB-042711

200-4953-1

Air

Lab Sample ID: Client Matrix: Job Number: 200-4953-1 Sdg Number: 200-4953

Date Sampled: 04/27/2011 1720 Date Received: 04/29/2011 1020

	TO15 LL Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)									
Analysis Method:	TO15 LL	Analysis Batch:	200-17816	Instrument ID:	Eli					
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	eejw012.d					
Dilution:	4.0			Initial Weight/Volume:	125 mL					
Analysis Date:	05/10/2011 1920			Final Weight/Volume:	500 mL					
Prep Date:	05/10/2011 1920			Injection Volume:	500 mL					
Analyte		Result (u	g/m3) Qualif	îer	RL					
1,2-Dichlorotetraflue	proethane	0.28	U	an shara na shakeen a saa na badaan a ka saheen a shakeen a shakeen ahaan ar sa	0.28	·····				
Vinyl chloride		0.20	U		0.20					
1,3-Butadiene		0.18	U		0.18					
Bromomethane		0.31	U		0.31					
Chloroethane		0.21	U		0.21					
Bromoethene(Vinyl	Bromide)	0.35	U		0.35					
Trichlorofluorometh	ane	1.1			0.22					
1,1-Dichloroethene		0.16	U		0.16					
3-Chloropropene		0.25	U		0.25					
Methylene Chloride	1	2.8	U.**		2.8					
Methyl tert-butyl eth	ner.	0.14	U		0.14					
trans-1,2-Dichloroe	thene	0.16	U		0.16					
n-Hexane		0.29			0.28					
1,1-Dichloroethane		0.16	U		0.16					
cis-1,2-Dichloroeth	ene	0.16	U		0.16					
Chloroform		0.20	U		0.20					
1,1,1-Trichloroetha	ne	0.22	U		0.22					
Cyclohexane		0.17			0.14					
Carbon tetrachlorid	e	0.48			0.25					
2,2,4-Trimethylpen	tane	0.19	U		0.19					
Benzene		0.20			0.13					
1,2-Dichloroethane		0.32	U		0.32					
n-Heptane		0.60			0.16					
Trichloroethene		0.21	U		0.21					
1,2-Dichloropropan	e	0.37	U		0.37					
Bromodichlorometh	nane	0.27	Upe		0.27					
cis-1,3-Dichloropro	pene	0.18	U		0.18					
Toluene		1.8			0.15					
trans-1,3-Dichlorop	propene	0.18	U		0.18					
1,1,2-Trichloroetha	ne	0.22	U		0.22					
Tetrachloroethene		0.27	U		0.27					
Dibromochloromell	hane	0.34	U		0.34					
1,2-Dibromoethane	9	0.31	U,		0.31					
Ethylbenzene		0.23	AP J		0.17					
o-Xylene		0.18	×3		0.17					
Bromoform		0.41	UX		0.41					
1,1,2,2-Tetrachloro	pethane	0.27	U		0.27					
4-Ethyltoluene		0.20	U		0.20					
1,3,5-Trimethylben	zene	0.39	U		0.39					
1,2-Dichloroethene	e, Total	0.16	U		0.16					
m-Xylene & p-Xyle	ne	0.55	10 m 20		0.35					
Xylenes, Total		0.73	13		0.17					

Client: ARCADIS U.S. Inc.

Job Number: 200-4953-1 Sdg Number: 200-4953

Date Sampled: 04/27/2011 1710 Date Received: 04/29/2011 1020

Client Sample ID:IA-4Lab Sample ID:200-4953-3Client Matrix:Air

	TO15 LL Volat	ile Organic Compounds	in Ambient A	Air, Low Co	oncentration (GC/MS)		
Analysis Method:	TO15 LL	Analysis Batch:	200-17816	3	Instrument ID:	E.i	
Prep Method:	Summa Canister	Prep Batch:	N/A		Lab File ID:	eejw	013.d
Dilution:	4.0				Initial Weight/Volume:	125	mL.
Analysis Date:	05/10/2011 2015				Final Weight/Volume:	500	mL,
Prep Date:	05/10/2011 2015				Injection Volume:	500	mL
Analyte		Result (p	pb v/v)	Qualifie	r		RL
Dichlorodifluorome	thane	0.47	interest in the second of		n ang kenterten di saktan mendering ang di ng saktan kenang sakan sa sakan tertang sak		0.040
1,2-Dichlorotetraflu	oroethane	0.040		U			0.040
Vinyl chloride		0.080		U			0.080
1,3-Butadiene		0.080		U			0.080
Bromomethane		0.080		U			0.080
Chloroethane		0.080		U			0.080
Bromoethene(Viny	l Bromide)	0.080		U			0.080
Trichlorofluorometh	nane	0.21					0.040
1,1-Dichloroethene	9	0.040		U			0.040
3-Chloropropene		0.080		U			0.080
Methylene Chloride	Э	0.80		U.ac			0.80
Methyl tert-butyl et	her	0.040		U			0.040
trans-1,2-Dichloroe	elhene	0.040		U			0.040
n-Hexane		0.20					0.080
1,1-Dichloroethane	)	0.040		U			0.040
cis-1,2-Dichloroeth	ene	0.040		U			0.040
Chloroform		0.040		U			0.040
1,1,1-Trichloroetha	ine	0.040		U			0.040
Cyclohexane		0.12					0.040
Carbon tetrachlorid	le	0.064					0.040
2,2,4-Trimethylpen	itane	0.047					0.040
Benzene		0.11					0.040
1,2-Dichloroethane	9	0.080		U			0.080
n-Heptane		0.34					0.040
Trichloroethene		0.040		U			0.040
1,2-Dichloropropar	ne	0.080		U			0.080
Bromodichloromet	hane	0.040		UM			0.040
cis-1,3-Dichloropro	pene	0.040		U			0.040
Toluene		1.1					0.040
trans-1,3-Dichlorog	propene	0.040		U			0.040
1,1,2-Trichloroetha	ane	0.040		U			0.040
Tetrachloroethene		0.094					0.040
Dibromochloromet	hane	0.040		U.**			0.040
1,2-Dibromoethan	e	0.040		U,			0.040
Ethylbenzene		0.12		1			0.040
o-Xylene		0.13		f S			0.040
Bromoform		0.040		U ***			0.040
1,1,2,2-Tetrachlore	pethane	0.040		U			0.040
4-Ethyltoluene		0.040		U			0.040
1,3,5-Trimethylber	nzene	0.080		U			0.080
1,2-Dichloroethen	e, Total	0.040		U i			0.040
m-Xylene & p-Xyle	ene	0.34		4 J 15			0.080
Xylenes, Total		0.46		13			0.040
Analyte	روزی داشته است. به رو بود اور او این این در این	Result (	ug/m3)	Qualifi	er		RL
Dichlorodifluorome	elhane	2.3					0.20
TestAmerica Burl	ington	Page	28 of 56	55			

Client: ARCADIS U.S. Inc

IA-4

Client Sample ID:

Lab Sample ID: 200-4953-3 Client Matrix: Air Job Number: 200-4953-1 Sdg Number: 200-4953

Date Sampled: 04/27/2011 1710 Date Received: 04/29/2011 1020

TO15 LL Volatile Organic Compounds in Amblent Air, Low Concentration (GC/MS)					
Analysis Method:	TO15 LL	Analysis Batch:	200-17816	Instrument ID:	E.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	eejw013.d
Dilution:	4.0			Initial Weight/Volume:	125 mL
Analysis Date:	05/10/2011 2015			Final Weight/Volume:	500 mL
Prep Date:	05/10/2011 2015			Injection Volume:	500 mL
Analyte		Result (ug	ı/m3)	Qualifier	RL
1,2-Dichlorotetrafluo	roethane	0.28		U	0.28
Vinyl chloride		0.20		U	0.20
1,3-Butadiene		0.18		U	0.18
Bromomethane		0.31		U	0.31
Chloroethane		0.21		U	0.21
Bromoethene(Vinyl E	Bromide)	0.35		U	0.35
Trichlorofluorometha	ne	1,2			0.22
1,1-Dichloroethene		0.16		U	0.16
3-Chloropropene		0.25		U	0.25
Methylene Chloride		2.8		Upar	2.8
Methyl tert-butyl ethe	er	0.14		U	0.14
trans-1,2-Dichloroeth	iene	0.16		U	0.16
n-Hexane		0.72			0.28
1,1-Dichloroethane		0.16		U	0.16
cis-1,2-Dichloroethe	ne	0.16		U	0.16
Chloroform		0.20		U	0.20
1,1,1-Trichloroethan	e	0.22		U	0.22
Cyclohexane		0.42			0.14
Carbon tetrachloride		0.40			0.25
2,2,4-Trimethylpenta	ine	0.22			0.19
Benzene		0.36			0.13
1,2-Dichloroethane		0.32		U	0.32
n-Heptane		1.4			0.16
Trichloroethene		0.21		U	0.21
1,2-Dichloropropane		0.37		U	0.37
Bromodichlorometha	ane	0.27		Use	0.27
cis-1,3-Dichloroprop	ene	0.18		U	0.18
Toluene		4.0			0.15
Irans-1,3-Dichloropr	opene	0.18		U	0.18
1,1,2-Trichloroethan	e	0.22		U	0.22
Tetrachloroethene		0.63			0.27
Dibromochlorometh	ane	0.34		Und	0.34
1,2-Dibromoethane		0.31		U,	0.31
Ethylbenzene		0.52		13	0.17
o-Xylene		0.56		4.5	0.17
Bromoform		0.41		Use	0.41
1,1,2,2-Tetrachloroe	thane	0.27		U	0.27
4-Ethyltoluene		0.20		U	0.20
1,3,5-Trimethylbenz	ene	0.39		U	0.39
1,2-Dichloroethene,	Total	0.16		U_ (	0.16
m-Xylene & p-Xylen	e	1.5		1 2	0.35
Xylenes, Total		2.0		1 2	0.17

#### Client Sample ID: 1A-3

Lab Sample ID: 200-4953-5 Client Matrix: Air

## Analytical Data

Job Number: 200-4953-1 Sdg Number: 200-4953

Date Sampled: 04/27/2011 1922 Date Received: 04/29/2011 1020

	TO15 LL Volat	ile Organic Compounds	in Ambient Ai	r, Low Concentration (	GC/MS)		
Analysis Method:	TO15 LL	Analysis Batch:	200-17816	Instrument ID	): E	E.I	
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	e	ejw014.d	
Dilution:	4.0			Initial Weight	Nolume: 1	125 mL	
Analysis Date:	05/10/2011 2109			Final Weight/	Volume: 5	500 mL	
Prep Date:	05/10/2011 2109			Injection Volu	ume: 5	500 mL	
Analida		Posuli (r	op v/v)	Qualifier		PI	
Dieblaradifluoromo	in the second		ipo viv)	Quantici		0.040	
1.2 Disblasstatesflu	thane	0.44		11		0.040	
View chloride	loroethane	0.040				0.040	
1 3-Butadiene		0.000		Ú.		0.080	
Bromomethane		0.080				0.080	
Chloroethane		0.000		U U		0.080	
Bromoethone/\/inv	Bromide)	0.080				0.080	
Trichlorofluorometh	hane	0.21		0		0.040	
1.1-Dichloroethene		0.040		11		0.040	
3-Chloropropene		0.080		11		0.080	
Methylene Chloride	P	0.80		01		0.80	
Methyl tert-butyl et	her	0.040		H		0.040	
trans-1 2-Dichloroe	elhene	0.040		ŭ		0.040	
n-Hexane	Striche	0.56		0		0.080	
1 1-Dichloroethane	2	0.040		U		0.040	
cis-1 2-Dichloroeth	lene	0.040		U		0.040	
Chloroform		0.040		11		0.040	
1.1.1.Trichloroetha	ane	0.040		11		0.040	
Cyclohexane		47-5	3	Et D		0.040	
Carbon tetrachlorie	de	0.071		and the state		0.040	
2 2 4-Trimethylper	ntane	0.040		U		0.040	
Benzene		0.17				0.040	
1.2-Dichloroethane	e	0.080		U		0.080	
n-Heptane		-10-18		EtD		0.040	
Trichloroethene		0.040		U		0.040	
1,2-Dichloropropa	ne	0.080		U		0.080	
Bromodichloromet	ihane	0.040		UA		0.040	
cis-1,3-Dichloropre	opene	0.040		U		0.040	
Toluene		_82 / (	00	EJD		0.040	
trans-1,3-Dichloro	propene	0.040		U		0.040	
1,1,2-Trichloroetha	ane	0.040		U		0.040	
Tetrachloroethene		0.050				0.040	
Dibromochlorome	thane	0.040		U		0.040	
1,2-Dibromoethan	e	0.040		U		0.040	
Ethylbenzene		0.57		P J		0.040	
o-Xylene		0.44		63		0.040	
Bromoform		0.040		UM		0.040	
1,1,2,2-Tetrachlor	oethane	0.040		U		0.040	
4-Ethyltoluene		0.18				0.040	
1,3,5-Trimethylber	nzene	0.14				0.080	
1,2-Dichloroethen	e, Total	0.040		U		0.040	
m-Xylene & p-Xyle	ene	1.8		1		0.080	
Xylenes, Total		2.2		لى مو		0.040	
Analyte		Result	(ug/m3)	Qualifier		RL	
Dichlorodifluorom	ethane	2.2				0.20	
TestAmerica Bur	lington	Page	Page 30 of 565				

Client: ARCADIS U.S. Inc

Client Sample ID:IA-3Lab Sample ID:200-4953-5Client Matrix:Air

Job Number: 200-4953-1 Sdg Number: 200-4953

Date Sampled: 04/27/2011 1922 Date Received: 04/29/2011 1020

	TO15 LL Volat	ile Organic Compounds	in Ambient Ai	r, Low Concentration (GC/MS)	
Analysis Method:	TO15 LL	Analysis Batch:	200-17816	Instrument ID:	E.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	eejw014.d
Dilution:	4.0			Initial Weight/Volume	: 125 mL
Analysis Date:	05/10/2011 2109			Final Weight/Volume	: 500 mL
Pren Date:	05/10/2011 2109			Injection Volume:	500 ml
Trop Dute.				njoonon volunio.	000 1112
Analyte		Result (u	g/m3)	Qualifier	RL
1,2-Dichlorotetraflu	oroethane	0.28		U	0.28
Vinyl chloride		0.20		U	0.20
1,3-Butadiene		0.28			0.18
Bromomethane		0.31		U	0.31
Chloroethane		0.21		U	0.21
Bromoethene(Viny	l Bromide)	0.35		U	0.35
Trichlorofluorometh	nane	1.2			0.22
1,1-Dichloroethene		0.16		U	0.16
3-Chloropropene		0.25		U	0.25
Methylene Chloride	9	2.8		U	2.8
Methyl tert-butyl et	her	0.14		U	0.14
trans-1,2-Dichloroe	ethene	0.16		U	0.16
n-Hexane		2.0			0.28
1.1-Dichloroethane		0.16		U	0.16
cis-1.2-Dichloroeth	ene	0.16		U	0.16
Chloroform		0.20		Ū	0.20
1.1.1-Trichtoroetha	ine	0.22		Ŭ	0.22
Cyclohexane		18-18		EtD	0.14
Carbon tetrachloric	le	0.45			0.25
2.2.4-Trimethylpen	tane	0.19		U.	0.19
Benzene		0.53		0	0.13
1.2-Dichloroethane	2	0.32		н	0.32
n-Heptane		65-74		FTD	0.16
Trichloroethene		0.21			0.10
1.2-Dichloropropar	10	0.37		0	0.21
Bromodichloromet	hane	0.27		11	0.37
cis-1 3-Dichloron	nane	0.18		11	0.27
Toluene	spone	340- 29	210	ETD	0.16
trans-1 3.Dichloro	0100000	0.18			0.15
1.1.2-Trichloroeths	properte	0.10		0	0.10
Tatrachloroothene	and	0.22		0	0.22
Dibromochloromet	hane	0.34		111	0.27
1.2-Dibromoelhan	a	0.34		11	0.34
Ethulbanzono	c	0.51			0.31
o_Xulene		2.0		15	0.17
Bromoform		1.9		11.5	0.17
1.1.2.2 Tokrockler	aathaaa	0.41			0.41
A Cibultahugas	oculdite	0.27		0	0.27
4-Einyitoiuene		0.87			0.20
1,3,5-Trimethylber	Izene	0.70			0.39
1,2-Dichloroethen	e, rotar	0.16			0.16
m-Xylene & p-Xyle	ene	7.7		11	0.35
Xylenes, Total		9.6		A 3	0.17

Client Sample ID: IA-3 Lab Sample ID: 200-4953-5 Client Matrix: Air

12

#### **Analytical Data**

Job Number: 200-4953-1 Sdg Number: 200-4953

Date Sampled: 04/27/2011 1922 Date Received: 04/29/2011 1020

	TO15 LL Volat	ile Organic Compounds	in Amblent Air, Low C	Concentration (GC/MS)			
Analysis Method:	TO15 LL	Analysis Batch:	200-18009	Instrument ID:	E.i		
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	eejz006.d		
Dilution:	149			Initial Weight/Volume:	56 mL		
Analysis Date:	05/13/2011 1246	Run Type:	DL	Final Weight/Volume:	500 mL		
Pren Date:	05/13/2011 1246	i latt i jpot		Injection Volume:	500 ml		
rop buto.				injection volume.	500 mL		
Analyte		Result (p	pb v/v) Qualifi	ier	RL		
Dichlorodifluorome	thane	1.5	U		1.5		
1,2-Dichlorotetraflu	oroethane	1.5	U		1.5		
Vinyl chtoride		3.0	U		3.0		
1,3-Butadiene		3.0	U		3.0		
Bromomethane		3.0	U		3.0		
Chloroethane		3.0	U		3.0		
Bromoethene(Vinyl	Bromide)	3.0	U		3.0		
Trichlorofluorometh	nane	1.5	U		1.5		
1,1-Dichloroethene		1.5	U		1.5		
3-Chloropropene		3.0	U		3.0		
Methylene Chloride		30	U		30		
Methyl tert-butyl et	her	1.5	ŭ		1.5		
trans-1.2-Dichloroe	thene	1.5	u		1.5		
n-Hexane		30	U		3.0		
1.1-Dichloroethane		1.5	U		1.5		
cis-1 2-Dichloroeth	ene	15	U U		15		
Chloroform		1.5	11		1.5		
1.1.1.Trichloroetha	100	1.5	0		1.5		
Cyclobeyane		6.3	D		1.5		
Carbon totrachloric		1.5			1.5		
2.2.4 Trimathuloon	tano	1.5	0		1.5		
Z,Z,4- minemypen	nane	1.0	U		1.5		
1.2 Dichloroothono		1.0	U		C.1		
1,2-Dichloroethane		3.0	0		3.0		
n-Heptane		18	D		1.5		
1 nonioroetnene		1.5	U		1.5		
1,2-Dichloropropar		3.0	U		3.0		
Bromodicnioromet	nane	1.5	U		1.5		
cis-1,3-Dichloropro	opene	1.5	Q		1.5		
loluene		100	D		1.5		
trans-1,3-Dichlorop	propene	1.5	U		1.5		
1,1,2-Trichloroetha	ane	1.5	U		1.5		
Tetrachloroethene		1.5	U		1.5		
Dibromochloromet	hane	1.5	U		1.5		
1,2-Dibromoethan	e	1.5	U		1.5		
Ethylbenzene		1.5	U		1.5		
o-Xylene		1.5	U		1.5		
Bromoform		1.5	U		1.5		
1,1,2,2-Tetrachlore	oethane	1.5	U		1.5		
4-Ethyltoluene		1.5	U		1.5		
1,3,5-Trimethylber	izene	3.0	U		3.0		
1,2-Dichloroethen	e, Total	1.5	U		1.5		
m-Xylene & p-Xyle	ene	3.0	U		3.0		
Xylenes, Total		2.1	D		1.5		
Analyte		Result (	uo/m3) Quali	fier	RI		
Dichlorodifluorome	ethane	7.4	U		7.4		
TostAmorian Puri	ington	Pare	32 of 565				
TESTRICTICS DULL		rage 32 OI 565					
#### **Analytical Data**

Job Number: 200-4953-1 Sdg Number: 200-4953

Date Sampled: 04/27/2011 1922 Date Received: 04/29/2011 1020

Client Sample ID:	IA-3
Lab Sample ID:	200-4953-5
Client Matrix:	Air

TO15 LL Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)							
Analysis Method: Prep Method: Dilution:	TO15 LL Summa Canister	Analysis Batch: Prep Batch:	200-18009 N/A	Instrument ID: Lab File ID:	E.i eejz006.d		
Dilution.	143	D Turn	DI	initial weight volume.	50 mL		
Analysis Date:	05/15/2011 1240	Run Type:	DL	Final Weight/Volume:	500 mL		
Prep Date:	05/13/2011 1246			Injection Volume:	500 mL		
Analyte		Result (u	g/m3) Quali	fier	RL		
1,2 Dichlorotetraflu	oroethane	10	U	ang a ng tang tang pang pangkanan tan tan tan tan tan ta	10		
Vinyl chloride		7.6	U		7.6		
1,3-Butadione		6.6	υ		6.6		
Bromomethane		12	U		12		
Chloroethane		7.9	U		7.9		
Bromoethene(Vinv	Bramide)	13	U		13		
Trichlorofluorometh	ane	8.4	ū		8.4		
1.1-Dichloroethene		5.9	11		5.9		
3.Chioronronene		9.3	11		93		
Methylene Chloride		100			100		
Methylene Chlohad	hor	5.4			5.4		
trane 1.2 Dichloros	lhono	5.9	0		5.4		
n Hovero	anene	5.5	0		0.0		
1.4 Disbleresthone		60	0		11		
r, r-Dichloroethane	200	0.0	U		6.0		
CIS-1,2-Dichloroeth	ene	5.9	0		5.9		
Chiorotorm		1.3	U		7.3		
1,1,1-1 richloroetha	ne	8.1	0		8.1		
Cyclohexane		18	D		5.1		
Carbon letrachloric	fe	9.4	U		9,4		
2,2,4-Trimethylpen	tane	7.0	U		7.0		
Benzene		4.8	U		4.8		
1,2-Dichloroethane	2	12	U		12		
n-Heptane		74	D		6.1		
Trichloroethene		8.0	U		8.0		
1,2-Dichloropropar	ne	14	U		14		
Bromodichloromet	hane	10	U		10		
cis-1,3-Dichloropro	pene	6.8	U		6.8		
Toluene		380	D		5.6		
trans-1,3-Dichlorop	propene	6.8	U		6.8		
1,1,2-Trichloroetha	ane	8.1	U		8.1		
Tetrachloroethene		10	U		10		
Dibromochloromet	hane	13	U		13		
1,2-Dibromoethan	e	11	U		11		
Ethylbenzene		6.5	υ		6.5		
o-Xylene		6.5	U		6.5		
Bromoform		15	U		15		
1,1,2,2-Tetrachlore	pethane	10	U		10		
4-Ethyltoluene		7.3	U		7.3		
1.3.5-Trimethylber	zene	15	U.		15		
1.2-Dichloroethen	e. Total	5.9	ŭ		5.9		
m-Xviene & p-Xvie	ene	13	ŭ		13		
Xvienes, Total		8.9	D		6.5		
		0.0	8		0.0		

.

Page 33 of 565

#### Client Sample ID:

#### IA-5 Lab Sample ID: 200-4953-7

Air

Client Matrix:

#### **Analytical Data**

Job Number: 200-4953-1 Sdg Number: 200-4953

Date Sampled: 04/27/2011 2040 Date Received: 04/29/2011 1020

	TO15 LL Volat	ile Organic Compounds	in Ambient Air	, Low Concentration	(GC/MS)	
Analysis Method:	TO15 LL	Analysis Batch:	200-17816	Instrument II	D: E.i	
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	eej	w015.d
Dilution:	4.0			Initial Weigh	t/Volume: 12	5 mL
Analysis Date:	05/10/2011 2204			Final Weight	Nolume: 500	0 mL
Pren Date:	05/10/2011 2204			Injection Vol	ume: 500	) mL
Thep Dute.				ngeotori i e		
Analyte		Result (p	pb v/v)	Qualifier		RL
Dichlorodifluorome	Ihane	0.44				0.040
1,2-Dichlorotetraflu	oroethane	0.040		U		0.040
Vinyl chloride		0.17				0.080
1,3-Butadiene		0.092				0.080
Bromomethane		0.080		U		0.080
Chloroethane		0.080		U		0.080
Bromoethene(Viny	Bromide)	0.080		U		0.080
Trichlorofluorometh	nane	0.29				0.040
1,1-Dichloroethene		0.040		U		0.040
3-Chloropropene		0.080		U		0.080
Methylene Chloride	2	0.80		U1		0.80
Methyl tert-bulyl et	her	0.040		U		0.040
trans-1,2-Dichloroe	ethene	0.040		U		0.040
n-Hexane		0.71				0.080
1,1-Dichloroethane	9	0.040		U		0.040
cis-1,2-Dichloroeth	iene	0.040		U		0.040
Chloroform		0.040		U		0.040
1.1.1-Trichloroetha	ane	0.040		U		0.040
Cyclohexane		3.9				0.040
Carbon tetrachlorid	de	0.071				0.040
2.2.4-Trimethylpen	tane	0.040		U		0.040
Benzene		0.15				0.040
1.2-Dichloroethane	2	0.080		U		0.080
n-Heptane		12 1	3	Et D		0.040
Trichloroethene		0.040	-	U		0.040
1,2-Dichloropropar	ne	0.080		U		0.080
Bromodichloromet	hane	0.040		U		0.040
cis-1,3-Dichloropro	opene	0.040		U		0.040
Toluene		68	7/	Eth		0.040
trans-1.3-Dichloro	propene	0.040		U		0.040
1.1.2-Trichloroetha	ane	0.040		U		0.040
Tetrachloroethene		0.46				0.040
Dibromochloromet	lhane	0.040		U		0.040
1,2-Dibromoethan	e	0.040		U.		0.040
Ethylbenzene		0.70		13		0.040
o-Xylene		0.50		45		0.040
Bromoform		0.040		UF		0.040
1,1,2,2-Tetrachlor	oethane	0.040		U		0.040
4-Ethyltoluene		0.25				0.040
1.3.5-Trimethylber	nzene	0.18				0.080
1,2-Dichloroethen	e, Total	0.040		U I		0.040
m-Xylene & p-Xyle	ene	2.1				0.080
Xylenes, Total		2.6		/ ]		0.040
Appluto		Decult	(110/m2)	Qualifier		PI
Diablocadillucation	alhana	Result	luginisi	Quanner		0.00
Lichiorodificorom	emane	4.4	and the second			0.20

TestAmerica Burlington

Page 34 of 565

IA-5

Аіг

200-4953-7

Client Sample ID:

Lab Sample ID:

Client Matrix:

#### **Analytical Data**

Job Number: 200-4953-1 Sdg Number: 200-4953

Date Sampled: 04/27/2011 2040 Date Received: 04/29/2011 1020

	TO15 LL Volat	ile Organic Compounds	in Ambient Ai	r, Low Concentration (GC/MS)		
Analysis Method:	TO15 LL	Analysis Batch:	200-17816	Instrument ID:	E.i	
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	eejw015.d	
Dilution:	4.0			Initial Weight/Volume:	125 mL	
Analysis Date:	05/10/2011 2204			Final Weight/Volume:	500 mL	
Prep Date:	05/10/2011 2204			Injection Volume:	500 mL	
Analyte		Result (u	g/m3)	Qualifier	RL	
1,2-Dichlorotetrafl	uoroethane	0.28	nya a Shiniyi. Sayin <b>a</b> sh <del>aas</del> i sa	U	0.28	And and a second second
Vinyl chloride		0.44			0.20	
1,3-Butadiene		0.20			0.18	
Bromomethane		0.31		U	0.31	
Chloroethane		0.21		U	0.21	
Bromoethene(Viny	/I Bromide)	0.35		U	0.35	
Trichlorofluoromet	hane	1.6			0.22	
1.1-Dichloroethen	e	0.16		U	0.16	
3-Chloropropene		0.25		U	0.25	
Methylene Chlorid	e	2.8		Ut	2.8	
Methyl tert-butyl e	ther	0.14		U	0.14	
trans-1.2-Dichloro	ethene	0.16		U	0.16	
n-Hexane		2.5		0	0.28	
1.1-Dichloroethan	P	0.16		11	0.16	
cis-1 2-Dichloroeti	hene	0.16			0.16	
Chloroform		0.20		0	0.20	
1.1.1-Trichloroeth	ana	0.22		<b>U</b>	0.20	
Cyclobeyane	and	13		0	0.14	
Carbon tetrachiari	ide	0.45			0.14	
2.2.4.Trimethylne	niane	0.10			0.19	
Renzene	marie	0.47		0	0.13	
1.2-Dichloroethan	P	0.32			0.13	
n-Hentane		49 63		ETD	0.16	
Trichloroethene		0.21		LU L	0.10	
1.2-Dicbloropropa	100	0.37		U	0.27	
Bromodichlorome	thane	0.27			0.37	
cis.1.3.Dichloropr	onene	0.18		1	0.18	
Toluono	opene	268- 2	70	eth	0.16	
trane-1 3-Dichlorr	00700000	0.18			0.15	
1 1 2 Trichlarooth	ano	0.10		0	0.18	
Tetrachloroethen		3.4		0	0.22	
Dibramachlarama	thano	0.24		11.	0.27	
1.2 Dibromostbar		0.34		07	0.34	
Fibulbenzene		3.0		r.)	0.31	
C Tyleno		2.2		× 1	0.17	
Bromoform		0.41		11/	0.17	
1 1 2 2. Totrachio	roethane	0.97		11	0.71	
A.Ethyltoluone	i o ca non co	1.2		~	0.27	
1.3.5.Trimethulbo	0.2000	0.80			0.20	
1.2. Dichlorootho	ne Total	0.09		11	0.59	
m Yulono & n Yul	ia, i utai	0.10		A J	0.10	
Yulanas Total	iene	3.2		15	0.30	
Ayleries, Toldi		11			0.17	

Page 35 of 565

IA-5

#### Client Sample ID:

Lab Sample ID: 200-4953-7 Client Matrix: Air Job Number: 200-4953-1 Sdg Number: 200-4953

Date Sampled: 04/27/2011 2040 Date Received: 04/29/2011 1020

	TO15 LL Volat	lle Organic Compounds	in Ambient Air, Low C	Concentration (GC/MS)	
Analysis Method:	TO15 LL	Analysis Batch:	200-18009	Instrument ID:	E.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	eejz007.d
Dilution:	101			Initial Weight/Volume:	61 mL
Analysis Date:	05/13/2011 1340	Run Type:	DL	Final Weight/Volume:	500 mL
Pren Date:	05/13/2011 1340	· · · · · · · · · · · · · · · · · · ·		Injection Volume:	500 ml
Top Date.				ngeonon volunie.	000 1112
Analyte		Result (p	pb v/v) Qualif	ier	RL
<b>Dichlorodifluorome</b>	Ihane	1.0	U		1.0
1,2-Dichlorotetraflu	oroethane	1.0	U		1.0
Vinyl chloride		2.0	U		2.0
1,3-Butadiene		2.0	U		2.0
Bromomethane		2.0	U		2.0
Chloroethane		2.0	U		2.0
Bromoethene(Viny	Bromide)	2.0	U		2.0
Trichlorofluorometh	nane	1.0	U		1.0
1,1-Dichloroethene		1.0	U		1.0
3-Chloropropene		2.0	U		2.0
Methylene Chloride	9	20	U		20
Methyl tert-butyl et	her	1.0	U		1.0
trans-1.2-Dichloroe	ethene	1.0	U		1.0
n-Hexane		2.0	Ŭ		2.0
1 1-Dichloroethane	3	10			10
cis-1.2-Dichloroeth	1000	1.0	11		1.0
Chloroform	lelle	1.0			1.0
1.1.1 Triphlereethe		1.0	0		1.0
Cuclebourge	ine	1.0	0		1.0
Cyclonexane Cash as to track lock	de la	6.4	U		1.0
Carbon tetrachiorio	de	1.0	0		1.0
2,2,4-1 rimetnyiper	itane	1.0	U		1.0
Benzene		1.0	U		1.0
1,2-Dichloroethane	e	2.0	U		2.0
n-Heplane		13	D		1.0
Trichloroelhene		1.0	U		1.0
1,2-Dichloropropa	ne	2.0	U		2.0
Bromodichloromet	hane	1.0	U		1.0
cis-1,3-Dichloropro	opene	1.0	U		1.0
Toluene		71	D		1.0
trans-1,3-Dichloro	propene	1.0	U		1.0
1,1,2-Trichloroetha	ane	1.0	U		1.0
Tetrachloroethene		1.0	U		1.0
Dibromochlorome	Ihane	1.0	U		1.0
1,2-Dibromoethan	e	1.0	U		1.0
Ethylbenzene		1.0	U		1.0
o-Xylene		1.0	U		1.0
Bromoform		1.0	U		1.0
1,1,2,2-Tetrachlor	oelhane	1.0	U		1.0
4-Ethyltoluene		1.0	U		1.0
1,3,5-Trimethylber	nzene	2.0	U		2.0
1,2-Dichloroethen	e, Total	1.0	U		1.0
m-Xylene & p-Xyle	ene	2.0	D		2.9
Xylenes, Total		2.0	D		1.0
Analida		Decult	(unlm2)	illor	PI
Dichlorodifluorom	ethane	5.0	ugima) Qual U		5.0
elonio como o om	warrend fw	0.0			
TestAmerica Bur	lington	Page	36 of 565		

Client: ARCADIS U.S. Inc

Job Number: 200-4953-1 Sdg Number: 200-4953

Date Sampled: 04/27/2011 2040

Date Received: 04/29/2011 1020

# Client Sample ID:IA-5Lab Sample ID:200-4953-7Client Matrix:Air

	TO15 LL Volat	lle Organic Compounds	in Ambient Air, Low	Concentration (GC/MS)	
Analysis Method:	TO15 LL	Analysis Batch:	200-18009	Instrument ID:	E.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	eejz007.d
Dilution:	101			Initial Weight/Volume:	61 mL
Analysis Date:	05/13/2011 1340	Run Type:	DL	Final Weight/Volume:	500 mL
Pren Date:	05/13/2011 1340		are to	Injection Volume:	500 ml
rich Date.	00,10,2011 1010			injection volume.	500 mL
Analyte		Result (u	g/m3) Quali	fier	RL
1,2 Dichlorotetraflu	oroethane	7.1	U		7.1
Vinyl chloride		5.2	U		5.2
1,3-Butadiene		4.5	U		4.5
Bromomethane		7.8	U		7.8
Chloroethane		5.3	U		5.3
Bromoethene(Viny	Bromide)	8.8	U		8.8
Trichlorofluorometh	nane	5.7	U		5.7
1,1-Dichloroethene		4.0	U		4.0
3-Chloropropene		6.3	U		6.3
Methylene Chloride	9	70	U		70
Methyl tert-butyl et	her	3.6	U		3.6
trans-1,2-Dichloroe	ethene	4.0	U		4.0
n-Hexane		7.1	U		7.1
1.1-Dichloroelhane	2	4.1	U		4.1
cis-1 2-Dichloroeth	ene	40	Ŭ		4.0
Chloroform		4.9			49
1.1.1-Trichloroetha	ine	5.5	11		5.5
Cyclobexane		15	D		3.5
Carbon tetrachloric	ie.	64	U U		6.4
2.2.4-Trimethylnen	itane	47	11		47
Renzene		32	U U		3.2
1.2-Dichloroethane	2	8.2			82
n-Hentane		53			4 1
Trichloroethane		5.4			5.4
1.2.Dicblorooroo	00	0.2	11		0.4
Bromodichleromol	hane	5.5	0		6.8
cie.1.3.Diablocopr	none	0.0	0		4.6
Tolueno	phene	9.0	0		2.9
trans_1 3 Dichloro	0707000	210			3.0 A G
1 1 2 Trichlorocthe	hohene	4.0	U		4.0
Totrachloraothora	and	0.0	U		0.0
Dibromochloror	hano	0.9	U		0.9
1.2 Dibromosthan	anane	0.0	0		0.0
T,Z-Dibiomoeman	c	7.0 A A	0		1.0
e Yulono		4.4	U		4.4
0-Aylene Decement		4.4	U		4.4
Bromotorm	11	10	0		10
1,1,2,2-Tetrachlor	oemane	6.9	U		6.9
4-Einyitoluene		5.0	U		0.0
1,3,5-Trimethylber	nzene	9.9	U		9.9
1,2-Dichloroethen	e, Iotal	4.0	U		4.0
m-Xylene & p-Xyle	ene	8.6	D		8.8
Xylenes, Total		8.6	D		4.4

IA-6

#### Client Sample ID:

Lab Sample ID: 200-4953-8 Client Matrix: Air Analytical Data

Job Number: 200-4953-1 Sdg Number: 200-4953

Date Sampled: 04/27/2011 2315 Date Received: 04/29/2011 1020

	TO15 LL Volat	ile Organic Compounds	in Ambient A	ir, Low Concentrat	ion (GC/MS)		
Analysis Method:	TO15 LL	Analysis Batch:	200-17816	Instrume	ent ID:	E.i	
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File	ID:	eeiw	016.d
Dilution:	4.0			Initial W	eight/Volume:	125	mi
Analysis Date:	05/10/2011 2258			Final We	eight/olume:	500	mi
Pren Date:	05/10/2011 2258			Injection	Volume:	500	ml
rep bute.				injection	volutile.	500	1116
Analyte		Result (p	opb v/v)	Qualifier			RL
Dichlorodifluorom	ethane	0.48	**************************************	le la la la secona de la secona d	··· · · · · · · · · · · · · · · · · ·		0.040
1,2-Dichlorotetrafl	uoroethane	0.040		U			0.040
Vinyl chloride		0.080		U			0.080
1,3-Butadiene		0.080		U			0.080
Bromomethane		0.080		U			0.080
Chloroethane		0.080		U			0.080
Bromoethene(Vin	yl Bromide)	0.080		U			0.080
Trichlorofluoromei	thane	0.36					0.040
1,1-Dichloroethen	e	0.040		U			0.040
3-Chloropropene		0.080		U			0.080
Methylene Chloric	le	0.80		U			0.80
Methyl tert-butyl e	lher	0.040		U			0.040
trans-1,2-Dichloro	bethene	0.040		U			0.040
n-Hexane		0.26					0.080
1,1-Dichloroethan	10	0.040		U			0.040
cis-1,2-Dichloroet	hene	0.040		U			0.040
Chloroform		0.040		U			0.040
1,1,1-Trichloroeth	ane	0.040		U			0.040
Cyclohexane		0.88					0.040
Carbon tetrachlor	ide	0.067					0.040
2.2,4-Trimethylpe	ntane	0.15					0.040
Benzene		0.15					0.040
1,2-Dichloroethan	ne	0.080		U			0.080
n-Heplane		2.6					0.040
Trichloroethene		0.040		U			0.040
1,2-Dichloropropa	ane	0.080		U			0.080
Bromodichlorome	athane	0.040		U			0.040
cis-1,3-Dichloropi	ropene	0.040		U			0.040
Toluene		-10- 15		Et D			0.040
trans-1,3-Dichloro	opropene	0.040		U			0.040
1,1,2-Trichloroeth	ane	0.040		U			0.040
Tetrachloroethen	e	0.53					0.040
Dibromochlorome	ethane	0.040		U.			0.040
1,2-Dibromoethai	ne	0.040		U			0.040
Ethylbenzene		0.21		13			0.040
o-Xylene		0.20		A 1			0.040
Bromoform		0.040		U			0.040
1,1,2,2-Tetrachio	roethane	0.040		U			0.040
4-Ethylloluene		0.067					0.040
1.3,5-Trimethylbe	enzene	0.080		U			0.080
1.2-Dichloroether	ne, Total	0.040		U			0.040
m-Xylene & p-Xyl	lene	0.63		1			0.080
Xylenes, Total		0.83		13			0.040
Analyte		Result (	(ug/m3)	Qualifier			RL
Dichlorodifluorom	nethane	2.4					0.20
TestAmerica Bu	rlington	Page	38 of 56	5			

#### Client Sample ID:

Lab Sample ID: 200-4953-8 Client Matrix: Air

IA-6

#### **Analytical Data**

Job Number: 200-4953-1 Sdg Number: 200-4953

Date Sampled: 04/27/2011 2315 Date Received: 04/29/2011 1020

	TO15 LL Volat	ile Organic Compounds	in Ambient Air	r, Low Concentration (GC/MS)	
Analysis Method:	TO15 LL	Analysis Batch:	200-17816	Instrument ID:	E.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	eeiw016.d
Dilution:	4.0			Initial Weight/Volume:	125 mL
Analysis Date:	05/10/2011 2258			Final Weight/olume:	500 ml
Pren Date:	05/10/2011 2258			Injection Volume:	500 ml
Flep Date.	0011012011 2200			injection volume.	500 mL
Analyte		Result (u	ig/m3)	Qualifier	RL
1,2-Dichlorotetraflu	oroethane	0.28		U	0.28
Vinyl chloride		0.20		U	0.20
1,3-Butadiene		0.18		U	0.18
Bromomethane		0.31		U	0.31
Chloroethane		0.21		U	0.21
Bromoethene(Vinyl	Bromide)	0.35		U	0.35
Trichlorofluorometh	nane	2.0			0.22
1,1-Dichloroethene		0.16		U	0.16
3-Chloropropene		0.25		U	0.25
Methylene Chloride	9	2.8		Les C	2.8
Methyl tert-butyl eti	her	0.14		U	0.14
trans-1,2-Dichloroe	thene	0.16		U	0.16
n-Hexane		0.92			0.28
1,1-Dichloroethane		0.16		U	0.16
cis-1,2-Dichloroeth	ene	0.16		U	0.16
Chloroform		0.20		U	0.20
1.1.1-Trichloroetha	ine	0.22		U	0.22
Cyclohexane		3.0			0.14
Carbon tetrachloric	ie	0.42			0.25
2,2,4-Trimethylpen	lane	0.68			0.19
Benzene		0.47			0.13
1,2-Dichloroethane	9	0.32		U	0.32
n-Heptane		11			0.16
Trichloroethene		0.21		U	0.21
1,2-Dichloropropar	ne	0.37		U	0.37
Bromodichloromet	hane	0.27		4 and	0.27
cis-1,3-Dichloropro	opene	0.18		U	0.18
Toluene		-61-56		-Ed D	0.15
trans-1,3-Dichloro	propene	0.18		U	0.18
1,1,2-Trichloroetha	ane	0.22		U	0.22
Tetrachloroethene		3.6			0.27
Dibromochloromet	hane	0.34		U March	0.34
1,2-Dibromoethan	e	0.31		U	0.31
Ethylbenzene		0.89		13	0.17
o-Xylene		0.87			0.17
Bromoform		0.41		U	0.41
1,1,2,2-Tetrachlor	oethane	0.27		U	0.27
4-Ethyltoluene		0.33			0.20
1,3,5-Trimethylber	nzene	0.39		υ	0.39
1,2-Dichloroethen	e, Total	0.16		U	0.16
m-Xylene & p-Xyle	ene	2.7			0.35
Xylenes, Total		3.6		15	0.17

IA-6

#### Client Sample ID:

Lab Sample ID: 200-4953-8

Client Matrix: Air

Job Number: 200-4953-1 Sdg Number: 200-4953

Date Sampled: 04/27/2011 2315 Date Received: 04/29/2011 1020

	TO15 LL Volat	ile Organic Compounds	in Ambient Air, Low C	oncentration (GC/MS)	
Analysis Method:	TO15 LL	Analysis Batch:	200-18009	Instrument ID:	E.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	eeiz008.d
Dilution:	40.8	riep Baton.		Initial Weight/Volume	50 ml
Analysis Date:	05/13/2011 1435	Run Tyne:	DI	Final Weight/Volume:	500 ml
Pron Date:	05/13/2011 1435	rear type.		Injection Volume:	500 mL
Frep Date.	0010/2011 1400			injection volume.	500 ML
Analyte		Result (p	pb v/v) Qualifi	er	RL
Dichlorodifluorome	thane	0.52	D	i sarran i	0.41
1,2-Dichlorotetraflu	oroethane	0.41	υ		0.41
Vinyl chloride		0.82	U		0.82
1,3-Butadiene		0.82	U		0.82
Bromomethane		0.82	U		0.82
Chloroethane		0.82	U		0.82
Bromoethene(Viny	Bromide)	0.82	U		0.82
Trichlorofluorometh	hane	0.42	D		0.41
1,1-Dichloroethene		0.41	U		0.41
3-Chloropropene		0.82	U		0.82
Methylene Chloride	e	8.2	Ű		8.2
Methyl tert-butyl et	her	0.41	U		0.41
trans-1 2-Dichloroe	ethene	0.41	11		0.41
n-Heyang	culotte	0.82			0.82
1.1.Dichloroathans		0.41			0.02
cis. 1.2 Dichlorooth		0.41	11		0.41
Chloroform	lette	0.41	0		0.41
1.1.1 Trichlesoeths		0.41	0		0.41
Cuelebouene	arte	0.41	0		0.41
Cyclonexane Corbon totraphlarie	da	0.96			0.41
Carbon tetrachione	ue	0.41	0		0.41
2,2,4-1 nmetnyiper	liane	0.41	U		0.41
Benzene		0.41	U		0.41
1,2-Dichloroethane	e	0.82	U		0.82
n-Heptane		3.3	D		0.41
Trichloroethene		0.41	U		0.41
1,2-Dichloropropa	ne	0.82	U		0.82
Bromodichloromet	hane	0.41	U		0.41
cis-1,3-Dichloropro	opene	0.41	U		0.41
Toluene		15	D		0.41
trans-1,3-Dichloro	propene	0.41	U		0.41
1,1,2-Trichloroetha	ane	0.41	d		0.41
Tetrachloroethene	2	0.69	D		0.41
Dibromochlorome	thane	0.41	U		0.41
1,2-Dibromoethan	e	0.41	U		0.41
Ethylbenzene		0.41	U		0.41
o-Xylene		0.41	U		0.41
Bromoform		0.41	U		0.41
1,1,2,2-Tetrachlor	oethane	0.41	U		0.41
4-Ethyltoluene		0.41	U		0.41
1,3,5-Trimethylber	nzene	0.82	U		0.82
1,2-Dichloroethen	e, Total	0.41	U		0.41
m-Xylene & p-Xyle	ene	0.82	U		0.82
Xylenes, Total		0.47	D		0.41
Analyle		Result (	ug/m3) Quali	lier	RL
Dichlorodifluorom	ethane	2.6	D		2.0
TestAmerica Burl	lington	Page	40 of 565		

#### Analytical Data

Job Number: 200-4953-1 Sdg Number: 200-4953

	TO15 LL Volatile Organic Compounds in	Ambient Air, Low Concentration (GC/MS)
Client Matrix:	Air	Date Received: 04/29/2011 1020
Lab Sample ID:	200-4953-8	Date Sampled: 04/27/2011 2315
Client Sample ID:	IA-6	

	TO TO LE VOIAL	ne organic compounds	in Anolencan,	con concentration (como)	
Analysis Method:	TO15 LL	Analysis Batch:	200-18009	Instrument ID:	E.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	eejz008.d
Dilution:	40.8			Initial Weight/Volume:	50 mL
Analysis Date:	05/13/2011 1435	Run Type:	DL	Final Weight/Volume:	500 mL
Prep Date:	05/13/2011 1435			Injection Volume:	500 mL
, top 2 ator					
Analyte		Result (u	g/m3)	Qualifier	RL
1,8-Dichlorotetraflu	oroethane	2.9		υ	2.9
Vinyl chloride		2.1		υ	2.1
1,3-Butadiene		1.8		U	1.8
Bromomethane		3.2		U	3.2
Chloroethane		2.2		U	2.2
Bromoethene(Viny)	(Bromide)	3.6		U	3.6
Trichlorofluorometh	nane	2.4		D	2.3
1,1-Dichloroethene		1.6		U	1.6
3-Chloropropene		2.6		U	2.6
Methylene Chloride	3	28		U	28
Methyl tert-butyl eth	her	1.5		U	1.5
trans-1,2-Dichloroe	thene	1.6		U	1.6
n-Hexane		2.9		U	2.9
1,1-Dichloroethane		1.7		U	1.7
cis-1,2-Dichloroeth	ene	1.6		U	1.6
Chloroform		2.0		U	2.0
1,1,1-Trichloroetha	ine	2.2		U	2.2
Cyclohexane		3.3		D	1.4
Carbon tetrachlorid	ie	2.6		U	2.6
2,2,4-Trimethylpen	lane	19		U	1.9
Benzene		1.3		U	1.3
1,2-Dichloroethane		3.3		U	3.3
n-Heptane		14		D	1.7
Trichloroethene		2.2		υ	2.2
1,2-Dichloropropar	ne	3.8		U	3.8
Bromodichloromet	hane	2.7		U	2.7
cis-1,3-Dichloropro	opene	1.9		U	1.9
Toluene		56		R	1.5
trans-1,3-Dichlorop	propene	1.9		U	1.9
1,1,2-Trichloroetha	ane	2.2		U	2.2
Tetrachloroethene		4.7		D	2.8
Dibromochloromet	hane	3.5		U	3.5
1,2-Dibromoethan	e	3.1		U	3.1
Ethylbenzene		1.8		U	1.8
o-Xylene		1.8		U	1.8
Bromoform		4.2		U	4.2
1,1,2,2-Tetrachlord	oethane	2.8		U	2.8
4-Ethyltoluene		2.0		U	2.0
1,3,5-Trimethylber	nzene	4.0		U	4.0
1,2-Dichloroethene	e, Total	1.6		U	1.6
m-Xylene & p-Xyle	ene	3.5		U	3.5
Xylenes, Total		2.1		D	18

Page 41 of 565

#### Analytical Data

Job Number: 200-4953-1 Sdg Number: 200-4953

 Client Sample ID:
 DUP2-4/27/11

 Lab Sample ID:
 200-4953-9

Air

Lab Sample ID: Client Matrix: Date Sampled: 04/27/2011 0000 Date Received: 04/29/2011 1020

	TO15 LL Volat	lle Organic Compounds	in Amblent Ai	ir, Low Concentration (GC/MS)		
Analysis Method:	TO15 LL	Analysis Batch:	200-17816	Instrument ID:	E.i	
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	eeiw	/017.d
Dilution:	4.0			Initial Weight/Volume	125	mL
Analysis Date:	05/10/2011 2353			Final Weight/Volume	500	ml
Prop Date:	05/10/2011 2353			Injection Volume:	500	ml
riep Date.	00110/2011 2000			injection volume.	500	1116
Analyte		Result (p	pb v/v)	Qualifier		RL
Dichlorodifluorom	elhane	0.46				0.040
1,2-Dichlorotetrafl	uoroethane	0.040		υ		0.040
Vinyl chloride		0.20				0.080
1,3-Butadiene		0.080		U		0.080
Bromomethane		0.080		U		0.080
Chloroethane		0.080		U		0.080
Bromoethene(Vin	yl Bromide)	0.080		U		0.080
Trichlorofluorome	thane	0.29				0.040
1,1-Dichloroethen	e	0.040		U		0.040
3-Chloropropene		0.080		U		0.080
Methylene Chlorid	ie	0.80		U		0.80
Methyl tert-butyl e	ether	0.040		U		0.040
trans-1.2-Dichloro	oethene	0.040		U		0.040
n-Hexane		0.65				0.080
1.1-Dichloroethan	1e	0.040		U		0.040
cis-1.2-Dichloroet	hene	0.040		U		0.040
Chloroform		0.040		Ŭ		0.040
1.1.1-Trichloroeth	ane	0.040		U		0.040
Cyclobexane		4.1		E D		0.040
Carbon tetrachlor	ide	0.073				0.040
2 2.4-Trimethylpe	intane	0.040		U		0.040
Benzene		0.14				0.040
1 2-Dichloroethar	1e	0.080		U		0.080
n-Hentane		12 15		E+ D		0.040
Trichloroethene		0.040				0.040
1.2-Dichloroprop	ane	0.080		U.		0.080
Bromodichlorome	ethane	0.040		U		0.040
cis-1 3-Dichlorop	ropene	0.040		U		0.040
Toluene	i oponio	71 /	00	ET EDI		0.040
trans-1.3-Dichlor	opropene	0.040		U U		0.040
1 1 2-Trichloroeth	bane	0.040		ŭ		0.040
Tetrachloroethen	6	0.45		-		0.040
Dibromochlorom	ethane	0.040		U		0.040
1.2-Dibromoetha	ne	0.040		U .		0.040
Fthylbenzene		0.68		-1		0.040
o-Xylene		0.47		~)		0.040
Bromoform		0.040		11.0		0.040
1 1 2 2-Tetrachio	raelhane	0.040				0.040
4-Fibyltoluone		0.26				0.040
135.Trimethulbo	907606	0.19				0.080
1.2.Dichlorootho	ne Total	0.040				0.040
m-Xvlene & o.Xv	lene	2 1		J .		0.080
Xulenes Total		25		J		0.040
Aylenes, rotal		2.0				
Analyte		Result	(ug/m3)	Qualifier		RL
Dichlorodifluoron	nethane	2.3	e de la composition d	a and an		0.20

**TestAmerica Burlington** 

Page 42 of 565

Client: ARCADIS U.S. Inc

Client Sample ID: DUP2-4/27/11

200-4953-9

Air

Lab Sample ID: Client Matrix: Job Number: 200-4953-1 Sdg Number: 200-4953

Date Sampled: 04/27/2011 0000 Date Received: 04/29/2011 1020

	TO15 LL Volat	ile Organic Compounds	in Ambient Ai	r, Low Concentration (GC/M	S)
Analysis Method:	TO15 LL	Analysis Batch:	200-17816	Instrument ID:	E.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	eeiw017 d
Dilution:	4.0			Initial WeightA/olu	ne: 125 ml
Analysis Date:	05/10/2011 2353			Final Weight Volu	ne: 500 ml
Prop Date:	05/10/2011 2353			Initial Velgito Volu	500 mil
riep Date.	00/10/2011 2000			injection volume.	SUU INL
Analyte		Result (u	g/m3)	Qualifier	RL
1,2-Dichlorotetraflu	oroethane	0.28		U	0.28
Vinyl chloride		0.50			0.20
1,3-Buladiene		0.18		U	0.18
Bromomethane		0.31		U	0.31
Chloroethane		0.21		U	0.21
Bromoethene(Vinyl	Bromide)	0.35		U	0.35
Trichlorofluorometh	ane	1.6			0.22
1,1-Dichloroethene		0.16		U	0.16
3-Chloropropene		0.25		U	0.25
Methylene Chloride		2.8		U	2.8
Methyl tert-bulyl eth	ner	0.14		U	0.14
trans-1,2-Dichloroe	thene	0.16		U	0.16
n-Hexane		2.3			0.28
1,1-Dichloroethane		0.16		U	0.16
cis-1,2-Dichloroeth	ene	0.16		U	0.16
Chloroform		0.20		U	0.20
1,1,1-Trichloroetha	ne	0.22		U	0.22
Cyclohexane		14		ET D	0.14
Carbon tetrachlorid	e	0.46			0.25
2.2.4-Trimethylpen	tane	0.19		U	0.19
Benzene		0.45			0.13
1.2-Dichloroethane		0.32		U	0.32
n-Heptane		49 6	3	Et D	0.16
Trichloroethene		0.21		u	0.21
1.2-Dichloropropar	ie	0.37		U	0.37
Bromodichloromet	nane	0.27		U PP	0.27
cis-1,3-Dichloropro	pene	0.18		U	0.18
Toluene		.270 39	50	ET ED)	0.15
trans-1.3-Dichloron	propene	0.18		U	0.18
1.1.2-Trichloroetha	ine	0.22		Ū	0.22
Tetrachloroethene		3.0		-	0.27
Dibromochloromet	hane	0.34		4	0.34
1,2-Dibromoethane	2	0.31		U 4	0.31
Ethylbenzene		3.0		15	0.17
o-Xylene		2.1		1 5	0.17
Bromoform		0.41		U	0.41
1,1,2,2-Tetrachlord	bethane	0.27		U	0.27
4-Ethyltoluene		1.3			0.20
1.3.5-Trimethylber	izene	0.91			0.39
1.2-Dichloroethene	e. Total	0.16		υ.	0.16
m-Xylene & p-Xyle	ne	8.9		15	0.35
Xylenes, Total		11		13	0.17

Client: ARCADIS U.S. Inc

Client Sample ID: DUP2-4/27/11

Lab Sample ID: 200-4953-9 **Client Matrix:** 

Job Number: 200-4953-1 Sdg Number: 200-4953

Date Sampled: 04/27/2011 0000 Date Received: 04/29/2011 1020

Client Matrix:	Air			Date	Received: 04/29/2011 1020
14	TO15 LL Volat	tile Organic Compounds In	Ambient Air, Low Con	centration (GC/MS)	
Analysis Method:	TO15 LL	Analysis Batch:	200-18009 Ir	nstrument ID:	Ei
Pren Method:	Summa Canister	Pren Batch:	N/Δ I	ah File ID:	eeiz000 d
Dilution:	100	riep baten.		nitial MoinhtA (alumo:	62 ml
Analysia Datas	06/12/2011 1520	Due Trans		niual vvelgnø volume.	COO IL
Analysis Date:	05/13/2011 1529	Run Type:	DL F	-inal weight/volume:	500 mL
Prep Date:	05/13/2011 1529		In	njection Volume:	500 mL
Analyte		Result (ppb	v/v) Qualifier		RL
Bichlorodifluorome	thane	1.0	U		1.0
1,2-Dichlorotetraflu	loroethane	1.0	U		1.0
Vinyl chloride		2.0	U		2.0
1,3-Butadiene		2.0	U		2.0
Bromomethane		2.0	U		2.0
Chloroethane		2.0	U		2.0
Bromoethene(Viny	Bromide)	2.0	U		2.0
Trichlorofluorometh	ane	1.0	U		1.0
1.1-Dichloroethene		1.0	U		1.0
3-Chloropropene		2.0	U		20
Methylene Chloride		20	Ŭ		20
Methyl tert-butyl et	hor	1.0	11		10
trong 1.2 Disblorg	athono	1.0	0		1.0
tians-1,2-Dichloroe	emene	1.0	0		1.0
n-mexane		2.0	0		2.0
1,1-Dichloroethane	9	1.0	U		1.0
cis-1,2-Dichloroeth	iene	1.0	U		1.0
Chloroform		1.0	U		1.0
1,1,1-Trichloroetha	ane	1.0	U		1.0
Cyclohexane		4.1	D		1.0
Carbon tetrachlorid	de	1.0	U		1.0
2,2,4-Trimethylper	ntane	1.0	U		1.0
Benzene		1.0	U		1.0
1,2-Dichloroethane	е	2.0	U		2.0
n-Heptane		15	D		1.0
Trichloroethene		1.0	U		1.0
1.2-Dichloropropa	ne	20	U		2.0
Bromodichloromet	thane	1.0	U		1.0
cis-1.3-Dichloropro	onene	1.0	U		1.0
Toluene	operio	100	ED-1		1.0
trans.1.3.Dichloro	nronene	10	1		1.0
1 1 2-Trichloroeth	ane	10	U U		10
Tetrachloroethene		1.0	11		1.0
Dibramachlarama	thana	1.0			10
1.2 Dibromochon	andre	1.0			1.0
T,Z-Dibiotitioetrian		1.0	2		1.0
Emyidenzene		1.2			1.0
o-Xylene		1.0	U		1.0
Bromotorm		1.0	U		1.0
1,1,2,2-Tetrachlor	oethane	1.0	U		1.0
4-Ethyltoluene		1.0	U		1.0
1,3,5-Trimethylber	nzene	2.0	U		2.0
1,2-Dichloroethen	e, Total	1.0	U		1.0
m-Xylene & p-Xyle	ene	2.7	D		2.0
Xylenes, Total		3.4	D		1.0
Analyte		Result (ug	/m3) Qualifier	r	RL
Dichlorodifluorom	ethane	4.9	U		4.9

Page 44 of 565

Client: ARCADIS U.S. Inc

#### Client Sample ID: DUP2-4/27/11

Lab Sample ID: 200-4953-9

Client Matrix:

Job Number: 200-4953-1 Sdg Number: 200-4953

Date Sampled: 04/27/2011 0000 Date Received: 04/29/2011 1020

Client Matrix:	Air			Date	Received: 04/29/2011 1020
	TO15 LL Volat	ile Organic Compounds	in Amblent Air	, Low Concentration (GC/MS)	
Analysis Method:	TO15 LL	Analysis Batch:	200-18009	Instrument ID:	E.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	eeiz009.d
Dilution:	100			Initiat Weight Volume:	63 ml
Analysis Date:	05/13/2011 1529	Run Tuno	DI	Final Weight Volume:	500 ml
Prop Date:	05/13/2011 1529	Run Type.	UL	Inication Volume:	500 mL
Fiep Date.	00/10/2011 1020			injection volume.	500 mL
Analyte		Result (u	g/m3)	Qualifier	RL
1,2-Dichlorotetraflu	Joroethane	7.0	1 page 2 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	U	7.0
Vinyl chloride		5.1		U	5.1
1,3-Butadiene		4.4		U	4.4
Bromomethane		7.8		U	7.8
Chloroethane		5.3		U	5.3
Bromoethene(Viny	(Bromide)	8.7		U	8.7
Trichlorofluoromet	hane	5.6		U	5.6
1.1-Dichloroethene	9	4.0		U	4.0
3-Chloropropene		6.3		U	6.3
Methylene Chlorid	e	69		ŭ	69
Methyl tert-butyl et	lher	3.6		U.	3.6
trans-1.2-Dichloro	ethene	4.0		ŭ	4.0
n-Hexane		7.0		U.	7.0
1 1-Dichloroelhane	e	4.0		1	4.0
cis-1 2-Dichloroeth	hene	40			4.0
Chloroform		49		IJ	49
1.1.1-Trichloroetha	ane	5.5		U .	5.5
Cyclobexane		14		D	3.4
Carbon tetrachlori	de	63		11	63
2 2 4-Trimethylner	niane	4 7		1	4.7
Renzene		32		U	3.2
1.2-Dichloroethan	ρ	81			8.1
n-Hentane		63		D	4.1
Trichloroethene		5 A		11	5.4
1.2-Dichloropropa	08	9.2		U U	0.2
Bromodichloromel	Ibane	67			6.7
cis-1.3-Dichloronru	onene	4.5		N	4.5
Toluene	operio	380		EDI	3.8
trans-1 3-Dichloro	nronene	4.5		H	4.5
1.1.2-Trichtoroeth	ane	5.5		U II	5.5
Tetrachloroethene		6.8		U I	6.8
Dibromochlorome	thane	8.5		U II	85
1.2-Dibromoethan	le	77		11	77
Ethylhenzene		5.1		D	43
o.Xylane		43			4.0
Bromoform		4.5		0	4.5
1 1 2 2. Telrachlor	roethane	0.3		0	60
4-Ethyltobiono	oundrie	0.5		11	4.9
13.5.Trimethylbo	07000	4.9			4.5
1.2.Dichloroothon	Total	J.O			5.0
m-Xylene & n-Yyl	PDP	-10		D	8.7
Xylenes Total		15		D	43
Ayronoa, Tutar		10		9	4.0

#### **TestAmerica Burlington**

30 Community Drive Suite 11 South Burlington, VT 05403

.

### **Canister Samples Chain of Custody Record**

TestAmerica Analytical Testing Corp. assumes no liability with respect to the collection and shipment of these samples.

phone 802-660-1990 fax 802-660-1919

								_											
Client Contact Information	Project Man	ager. ) of	n E	Srassel		Samples Coll	ected By:	Dz	/L	H		1	of_	2	000	š			
Company: ARCADIX	Phone:	(5) 67	1-944	4						_									
Address: 6723 Towpath Road	Email:	ohn. Br	ussel@	ARCADI	3-US.com	L .			ł										
City/State/Zip Syracuse, NY 13214-0066									S S				(LO						(uoi
Phone: (315) 446-9120	Site Contact	<u>D</u>	Zuck	· _ • · · · · · · · · · · · · · · · · ·					4				sect						sect
FAX: (3)5) 449-411	TA Contact:	Non	Dawn	CRI		ł			3				tes						otes
Project Name: Bayer Hicksville	<b> </b>	Analysis	Turnarou	nd Time					19			ľ	ou u		1				in no
Site: 1 Empire Drive Hicksville NT	S	tandard (Sp	pecify) I	5 day	•				5				city						ŝ
PO# B0032305.0004.00003	F	Rush (Spec	ify)	1		1	, <u> </u>	-	5			۵	spe	ě					spe
									IF			194	ase	TV TV	-	Ä		as	ease
				Canister	Canister				<	ပ	50	d	a i	e	L Ai	ä	as		Ĕ.
	Samole			Field, "Ho	Field, 'Ho	Flow Controller		-15	¥	A 3	A 2	N E	her	Ë	8	ġ	0	hd	her
Sample Identification	Date(s)	Time Start	Time Stop	(Start)	(Stop)	ID	Canister ID	2	₹.	<u><u><u></u></u></u>	Ш	AS	ð	ŝ	Ĕ	Å,	ŝ	La	ŏ
AMA-D42711	4/27/11	9:56	1720	-30	-6.69	K349	4922		1							-			
v 55V-4	4/27/11	1015	1730	-29.75	-6.07	K469	3150	1							-				1
" IA-4	4/27/11	950	1710	-29	-3.42	K368	4235		1						V				
ึฐี ≤ร√-3	4/27/11	1200	1915	-78:75	-3.99	K343	2748	١											レ
2 IA-3	4/27/11	1200	1922	-30	-5.21	K369	4569		١						~				
5 SSV-5	4/27/11	1325	2100	-30	-4.55	K477	4334	1											~
- на	1			Temperatur	e (Fahrenhel	()		1											
	·	Interior		Amblent	<u></u>	1	<u>_</u>	1											
	Start			1				1											
	Start	L						-											
	Stop			<u> </u>		<u> </u>		1			_								
				Pressure (ir	nches of Hg)														
		Interior		Ambient				4											
	Start																		
	Stop	1						7											
Special Instructions/QC Requirements & Comments Send v to Results	Attn:	Andy	En Oth	ngk er = S	ub-51	ab Vap	6~	<u></u>	-										
Samples Shipped by: Dam Zuck	Date/Time:	4/28/	c(	600	Samples	Received by:	29/11	10		,									
Samples Relinquished by:	Date/Time:	11 - V 1a			Received	Log 1		<u></u>				1							
Relinquished by:	Date/Time:			-	Received	i hv:			_			1							
i teiniquienee by.	Early fund.					,.					_								

Lab Use Only Shipper Name:

#### notpnihu8 soinemAteeT

#### 30 Community Drive

TestAmerica Analytical Testing Corp. assumes no liability with respect to the collection and shipment of these samples.

Canister Samples Chain of Custody Record

South Burlington, VT 05403 tt ətiu2

tab Use Only. Shipper Name: Received by: :emiT\etsO Relinquished by: :emi∏etsG Samples Relinquished by: Ka périesak Sampled Received by: an Euch 9601 h H:=miThateD 2 Samples Shipped by: 🖊 DON'T SAMPLE Conster 32899 11/LT/H - TONO # 5.65-PHUI Send Realls Other = Subside Depression adion Special Instructions/QC Requirements & Comments: dots heis tnsidmA nterior Pressure (Inches of Hg) qoi2 heiz nterior JneidmA Temperature (Fahrenheit) SOOL DOT 07.00  $\mathcal{D}$ hpz/A 00L #2 EL "/82] H 1821 80.7-0S-6992  $\boldsymbol{\chi}$ 2500 KZOZ 4205 2.0 11/LZ/ th 11/22/H GSEY 5312 1:5 72-5051 11/12/4 ١ 95' 500 FOCH 02 11/LT/H OEIN 55.H-5281 S-VI **9**Σ-Ofor 1 6202 Sample Identification EPA 25C (do15) qois emit heis emit (heiz) Date(s) Soll Gas EPA MANNA TO-15 **Ginster ID** ۵I Sample Type Other (Please specify in notes section) Other (Please specify in notes Landfill Gas Ambient Air Indoor Air ASTM D-1946 Flow Controller Sample Pleid, 'biel? Pleid, "Hg 30 Vacuum in nî muuseV reter Canister 77-15 PO# 30032365.0004.00003 #09 Rush (Specify) Sites | Empire Hickeyle, NY Orive Standard (Specify) IS dee Low Hicksville Project Name: 134.40-Analysis Turnaround Time الله-٥٢ (٦٤) : XA3 Drone: (عند) المراجعة (١٢٩/٢٩٩٢) - محمد المراجعة (١٢٩/٢٩٩) - محمد المراجعة (١٢٩/٢٩) - محمد المراجعة (١٢٩/٢٩) - محمد المراجعة) - محمد المراجعة (١٢٩/٢٩) - محمد المراجعة (١٢٩/٢٩) - محمد المراجعة (١٢٩/٢٩) - محمد المراجعة) - محمد المراجعة) - محمد المراجعة) - محمد المراجعة (١٢٩/٢٩) - محمد المراجعة) - محمد المراجعة) - محمد المراجعة) - محمد المراجعة (١٢٩) - محمد المراجعة) - محمد المراجعة) - محمد المراجعة) - محمد المراجعة (١٢٩) - محمد المراجعة) - محمد المراجعة (١٢٩) - محمد المراجعة) - محمد المراجعة) - محمد المراجعة) - محمد المراجعة) - محمد الممد (محمد المراجعة) - محمد المراجعة Site Contact: On Zuck TA Contact: 04 section) leve ! Address: 6723 Towpert 2200-HIREI John Brusse & ARCADTS- US. con :lism3 62 1++6-129 Lhone: (315) Company: ARCADIS Samples Collected By: D2 /LH Project Manager: John Client Contact Information Brussel of Z cocs 2 Phone 802-660-1990 tax 802-660-1919

Imagine the result



#### **Bayer Material Science**

#### **Data Usability Summary Report**

HICKSVILLE, NEW YORK

Volatile Analyses

SDG# 200-5075

Analyses Performed By: TestAmerica Laboratories Burlington, Vermont

Report: # 14193R Project: B0032305.0004.00003

#### SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #200-5075 for samples collected in association with the Bayer site. The review was conducted as a Tier III evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

	Sample					Analysi	S		
Sample ID	Lab ID	Matrix	Date	Parent Sample	voc	svoc	РСВ	МЕТ	MISC
IA-7_050511	200-5075-1	AIR	5/5/2011		Х				
AMB_050511	200-5075-2	AIR	5/5/2011		Х				
IA-8_050511	200-5075-3	AIR	5/5/2011		Х				
DUP 050511	200-5075-4	AIR	5/5/2011	IA-8_050511	Х				

#### ANALYTICAL DATA PACKAGE DOCUMENTATION

		Reported		Perfor Acce	mance ptable	Not
	Items Reviewed	No	Yes	No	Yes	Required
1.	Sample receipt condition		Х		Х	
2.	Requested analyses and sample results		Х		Х	
3.	Master tracking list		Х		Х	
4.	Methods of analysis		Х		Х	
5.	Reporting limits		Х		Х	
6.	Sample collection date		Х		Х	
7.	Laboratory sample received date		Х		Х	
8.	Sample preservation verification (as applicable)		Х		х	
9.	Sample preparation/extraction/analysis dates		Х		Х	
10.	Fully executed Chain-of-Custody (COC) form		Х		Х	
11.	Narrative summary of QA or sample problems provided		х		х	
12.	Data Package Completeness and Compliance		Х		Х	

The table below is the evaluation of the data package completeness.

QA - Quality Assurance

#### **ORGANIC ANALYSIS INTRODUCTION**

Analyses were performed according to United States Environmental Protection Agency (USEPA) Method TO-15. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999, USEPA Region II SOP HW-31- Validating Air Samples Volatile Organic Analysis of Ambient Air In Canister by Method TO-15 of October 2006, New York State DEC Analytical Method ASP 2005 TO-15 (QA/QC Criteria R9 TO-15), NYSDEC Modifications to R9 TO-15 QA/QC Criteria February 2008 and NYSDEC Proposed Change to the ASP Regarding Canister Vacuum June 26, 2009.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers
  - U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
  - B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
- Quantitation (Q) Qualifiers
  - E The compound was quantitated above the calibration range.
  - D Concentration is based on a diluted sample analysis.
- Validation Qualifiers
  - J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
  - UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
  - JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.
  - UB Compound considered non-detect at the listed value due to associated blank contamination.
  - N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.
  - R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

#### VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

#### 1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation	Return Canister Pressure
EPA TO-15	Air	30 days from collection to analysis	Ambient Temperature	> 1" Hg

All samples were analyzed within the specified holding time criteria.

#### 2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

All compounds associated with the QA blanks exhibited a concentration less than the MDL.

#### 3. Mass Spectrometer Tuning

Sample locations IA-7\_050511, AMB\_050511, IA-8\_050511, and DUP 050511 were compliant with the Method TO-15 requirement of analysis within a 24-hour tune clock but not compliant with the NYSDEC requirement of analysis within a 12-hour tune clock. The data was not qualified.

#### 4. Calibration

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

#### 4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (30%) and an RRF value greater than control limit (0.05).

#### 4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (30%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits.

#### 5. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the VOC exhibit area counts that are not greater than 40% or less than 40% of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

#### 6. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the established acceptance limits of 70% to 130%.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

#### 7. Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 20% for air matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of three times the RL is applied for air matrices.

Laboratory duplicates were not performed as part of this SDG.

#### 8. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method. A control limit of 100% for air matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of three times the RL is applied for air matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
	1,3,5-Trimethylbenzene	0.79	0.8	AC
	4-Ethyltoluene	0.48	0.33	AC
	Benzene	0.27	0.26	AC
	Carbon tetrachloride	0.45	0.4	AC
	Cyclohexane	2.8	3.4	19.3 %
IA-8_050511/DUP 050511	Dichlorodifluoromethane	2.1	2.1	0 %
	Ethylbenzene	0.51	0.45	AC
	Methylene Chloride	22	22	0 %
	m-Xylene & p-Xylene	1.6	1.4	AC
	n-Heptane	2.3	2.4	4.2 %
	n-Hexane	0.54	0.54	AC

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
	o-Xylene	0.53	0.45	AC
	Toluene	14 D	15	12.5 %
IA-6_050511/DOP 050511	Trichlorofluoromethane	3.3	3.5	5.8 %
	Xylenes, Total	2.1	1.8	15.3 %

U = Not detected

AC = Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

#### 9. Compound Identification

Sample results associated with compound that exhibited a concentration greater than the linear range of the instrument calibration are summarized in the following table.

Sample ID	Compound	Original Analysis	Diluted Analysis	Reported Analysis
IA-7_050511	Methylene Chloride	30 E	30 D	30 D
IA-8_050511	Toluene	17 E	14 D	14 D

Note: In the instance where both the original analysis and the diluted analysis sample results exhibited a concentration greater than and/or less than the calibration linear range of the instrument; the sample result exhibiting the greatest concentration will be reported as the final result.

Sample results associated with compounds exhibiting concentrations greater than the linear range are qualified as documented in the table below when reported as the final reported sample result.

Reported Sample Results	Qualification
Diluted sample result within calibration range	D
Diluted sample result less than the calibration range	DJ
Diluted sample result greater than the calibration range	EDJ
Original sample result greater than the calibration range	EJ

#### 10. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

VOCs: TO-15	Repo	orted	Perfor Accep	mance otable	Not Required	
	No	Yes	No	Yes	Nequireu	
GAS CHROMATOGRAPHY/MASS SPECTROME	TRY (GC/I	MS)				
Tier II Validation						
Canister return pressure/vacuum (>1"Hg)		Х		Х		
Holding times		Х		Х		
Reporting limits (units)		Х		Х		
Blanks						
A. Method blanks		Х		Х		
B. Equipment blanks					Х	
C. Trip blanks					Х	
Laboratory Control Sample (LCS)		Х		Х		
Laboratory Control Sample Duplicate (LCSD)					Х	
LCS/LCSD Precision (RPD)					Х	
Field/Lab Duplicate (RPD)		Х		Х		
Surrogate Spike Recoveries					Х	
Dilution Factor		Х		Х		
Moisture Content					Х	
Tier III Validation						
System performance and column resolution		Х		Х		
Initial calibration %RSDs		Х		Х		
Continuing calibration RRFs		Х		Х		
Continuing calibration %Ds		Х		Х		
Instrument tune and performance check		Х		Х		
Ion abundance criteria for each instrument used		Х		Х		
Internal standard		Х		Х		
Compound identification and quantitation						
A. Reconstructed ion chromatograms		Х		Х		
B. Quantitation Reports		Х				
C. RT of sample compounds within the established RT windows		х		х		
D. Transcription/calculation errors present		Х		Х		
E. Reporting limits adjusted to reflect sample dilutions		x		x		
%RSDRelative standard deviation%RPercent recoveryRPDRelative percent difference						

#### DATA VALIDATION CHECKLIST FOR VOCs

%D Percent difference

#### SAMPLE COMPLIANCE REPORT

#### SAMPLE COMPLIANCE REPORT

Comple							Compliancy <sup>1</sup>			Noncompliance
Delivery Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	voc	SVOC	PCB/PEST /HERB	МЕТ	MISC	
200-5075	5/5/2011	TO-15	IA-7_050511	Air	Yes					
200-5075	5/5/2011	TO-15	AMB_050511	Air	Yes					
200-5075	5/5/2011	TO-15	IA-8_050511	Air	Yes					
200-5075	5/5/2011	TO-15	DUP 050511	Air	Yes					

1 Samples which are compliant with no added validation qualifiers are listed as "yes". Samples which are non-compliant or which have added qualifiers are listed as "no". A "no" designation does not necessarily indicate that the data have been rejected or are otherwise unusable.

#### VALIDATION PERFORMED BY: Amy Coats

SIGNATURE:

May Coats

\_\_\_\_\_

DATE: May 27, 2011

PEER REVIEW BY: Joseph C. Houser

DATE: May 31, 2011

#### CHAIN OF CUSTODY/ CORRECTED SAMPLE ANALYSIS DATA SHEETS

Client: ARCADIS U.S. Inc

Client Sample ID: IA-7[050511]

Lab Sample ID:200-5075-1Client Matrix:Air

	TO15 LL Volati	le Organic Compounds	in Ambient Ai	ir, Low Coi	ncentration (GC/MS)		
Analysis Method: Prep Method: Dilution: Analysis Date: Prep Date:	TO15 LL Summa Canister 4.0 05/12/2011 0323 05/12/2011 0323	Analysis Batch: Prep Batch:	200-17921 N/A		Instrument ID; Lab File ID; Initial Weight/Volume; Final Weight/Volume: Injection Volume;	E.i eejx020.d 125 mL 500 mL 500 mL	
Analyte		Result (p	upb v/v)	Qualifier		RL	
Dichlorodifluorome	thane				ann a san ganna shekara ga na shekara ng ga sa san san san sa	0.040	<ul> <li>Second constraints of the second secon</li></ul>
1,2-Dichlorotetraflu	oroethane	0.040		U		0.040	
Vinyl chloride		0.080		U		0.080	
1,3-Butadiene		0.080		U		0.080	
Bromomethane		0.080		U		0.080	
Chloroethane		0.080		U		0.080	
Bromoethene(Viny	l Bromide)	0.080		U		0.080	
Trichlorofluorometh	nane	1.1				0.040	
1,1-Dichloroethene	2	0.040		U		0.040	
3-Chloropropene		0.080		U		0.080	
Methylene Chloride	Э	- <del>8.6</del>	, (	-Ed -		0.80	
Methyl tert-butyl et	her	0.040		U		0.040	
trans-1,2-Dichloroe	ethene	0.040		U		0.040	
n-riexane		0.080		U		0.080	
1,1-Dichloroethane	)	0.040		U		0.040	
Cls-1,Z-Dichloroeth	iene	0.040		U 11		0.040	
1 1 1 Trichlorooths	200	0.040		U U		0.040	
Cyclobevane	ane	0.040		0		0.040	
Carbon tetrachlorid	de	0.15				0.040	
2.2.4.Trimethylner	tane	0.004		υ		0.040	
Benzene		0.11		0		0.040	
1.2-Dichloroethan	9	0.080		U		0.080	
n-Heptane	-	0.11		•		0.040	
Trichloroethene		0.040		U		0.040	
1,2-Dichloropropa	ne	0.080		U		0.080	
Bromodichloromet	hane	0.040		U		0.040	
cis-1,3-Dichloropro	opene	0.040		U		0.040	
Toluene		1.0				0.040	
trans-1,3-Dichloro	propene	0.040		U		0.040	
1,1,2-Trichloroetha	ane	0.040		U		0.040	
Tetrachloroethene	5	0.086				0.040	
Dibromochlorome	thane	0.040		U		0.040	
1,2-Dibromoethan	e	0.040		U		0.040	
Ethylbenzene		0.15				0.040	
o-Xylene		0.16				0.040	
Bromotorm		0.040		U		0.040	
1,1,2,2-Tetrachion	oetnane	0.040		0		0.040	
4-Emylioluene	<b>7</b> 000	0,040		U U		0.040	
1.2.Dichloroethon	e Total	0.080		11		0.000	
m_Xvlens & n_Xvl	ene	0.040		U U		0.040	
Xvlenes Total	0()0	0.66				0.040	
Allenee, rotai		0.00				510 10	
Analyte		Result (	ug/m3)	Qualifie	۶r	RL	
Dichlorodifluorom	ethane	2,3	- 11		<b>9. 09. 00. 00. 01. 01. 01. 01. 01. 01. 01. 01</b>	0.20	
TaatAmaxiaa Drie	Har sole area	Dago	12 ~# 30	1			

### Date Sampled

Date Sampled: 05/05/2011 1553 Date Received: 05/06/2011 1000

Job Number: 200-5075-1 Sdg Number: 200-5075

Client: ARCADIS U.S. Inc

Client Sample ID:IA-7[050511]Lab Sample ID:200-5075-1Client Matrix:Air

Job Number: 200-5075-1 Sdg Number: 200-5075

Date Sampled: 05/05/2011 1553 Date Received: 05/06/2011 1000

<u></u>	TO15 LL Volat	ile Organic Compounds	in Ambient Ai	r, Low Concentration (GC/MS)	**************************************
Analysis Method:	TO15 LL	Analysis Batch:	200-17921	Instrument ID:	E.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	eejx020.d
Dilution:	4.0			Initial Weight/Volume:	125 mL
Analysis Date:	05/12/2011 0323			Final Weight/Volume:	500 mL
Pren Date:	05/12/2011 0323			Injection Volume:	500 ml
Trop Dute.				ngeocorr volume,	000 mL
Analyte	en - proposed and the end of the state of the	Result (u	g/m3)	Qualifier	RL
1,2-Dichlorotetraflu	oroethane	0.28		υ	0.28
Vinyl chloride		0.20		U	0.20
1,3-Butadiene		0.18		U	0.18
Bromomethane		0.31		U	0.31
Chloroethane		0.21		U	0.21
Bromoethene(Viny	l Bromide)	0.35		U	0.35
Trichlorofluorometh	nane	6.2			0.22
1,1-Dichloroethene	9	0.16		U	0.16
3-Chloropropene		0.25		U	0.25
Methylene Chlorid	e	30		-E-J D	2.8
Methyl tert-butyl et	her	0.14		U	0.14
trans-1,2-Dichloroe	ethene	0.16		U	0.16
n-Hexane		0.28		U	0.28
1,1-Dichloroethane	9	0.16		U	0.16
cis-1,2-Dichloroeth	nene	0.16		U	D.16
Chloroform		0.20		U	0.20
1,1,1-Trichloroetha	ane	0.22		U	0.22
Cyclohexane		0.44			0.14
Carbon tetrachlori	de	0.40			0.25
2,2,4-Trimethylper	ntane	0.19		U	0.19
Benzene		0.34			0.13
1,2-Dichloroethan	e	0.32		U	0.32
n-Heptane		0.44			0.16
Trichloroethene		0.21		U	0.21
1,2-Dichloropropa	ne	0.37		U	0.37
Bromodichlorome	thane	0.27		U	0.27
cis-1,3-Dichloropr	opene	0.18		U	0.18
Toluene		3.8			0.15
trans-1,3-Dichloro	propene	0.18		U	0.18
1,1,2-Trichloroeth	ane	0.22		U	0.22
Tetrachloroethene	3	0.59			0.27
Dibromochlorome	thane	0.34		U	0.34
1,2-Dibromoethar	10	0.31		U	0.31
Ethylbenzene		0.66			0.17
o-Xylene		0.69			0.17
Bromoform		0.41		U	0.41
1,1,2,2-Tetrachlor	roethane	0.27		U	0.27
4-Ethyltoluene		0.20		U	0.20
1,3,5-Trimethylbe	nzene	0.39		U	0.39
1,2-Dichloroether	ne, Total	0.16		U	0,16
m-Xylene & p-Xyl	ene	2.2			0.35
Xylenes, Total		2.9			0.17

Client: ARCADIS U.S. Inc

Job Number: 200-5075-1 Sdg Number: 200-5075

Date Sampled: 05/05/2011 1553

# Client Sample ID:IA-7[050511]Lab Sample ID:200-5075-1Client Matrix:Air

Client Matrix:	Air			Date	Received: 05/06/2011 1000
	TO15 LL Vol	atile Organic Compounds	in Ambient Air, Low C	Concentration (GC/MS)	
Analysis Method:	TO15 LL	Analysis Batch:	200-17921	Instrument ID:	E.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	eeix024.d
Dilution:	6.25	rop Batan		Initial Weight/Volume:	80 ml
Analucia Data:	05/12/2011 0825	Dup Tupo:		Final Weight Volume:	500 ml
Analysis Date.	05/12/2011 0825	Run Type.	UL	Initial Weight Volume:	500 mL
Prep Date.	03/12/2011 0020			injection volume.	500 mL
Analyte		Result (p	pb v/v) Qualif	fier	RL
Dichlorodifluorome	thane	0.47	D		0.062
1,2-Dichlorotetraflu	loroethane	0.062	U		0.062
Vinyl chloride		0.12	U		0.12
1,3-Butadiane		0.12	U		0.12
Bromomethane		0.12	U		0.12
Chloroethane		0.12	U		0.12
Bromoethene(Viny	(Bromide)	0.12	U		0.12
Trichlorofluoromet	hane	1.2	D		0.062
1,1-Dichloroethene	9	0.062	U		0.062
3-Chloropropene		0.12	U		0.12
Methylene Chlorid	e	8.7	D		1.2
Methyl tert-butyl el	ther	0.062	U		0.062
trans-1.2-Dichloro	ethene	0.062	U		0.062
n-Hexane		0.12	U		0.12
1.1-Dichloroethan	e	0.062	U		0.062
cis-1 2-Dichloroet	hene	0.062	U		0.062
Chloroform		0.062	U		0.062
1.1.1.Trichtoroeth	ane	0.062	U		0.062
Cyclobevane	and	0.13	D		0.062
Carbon tetrachlori	de	0.068	D		0.062
2.2.4-Trimethylnei	ntane	0.062	U		0.062
Boozono	Induc	0.15	D		0.062
1 2 Diabloroothan	0	0.12	1		0.12
1,2-Dichloroeman	le	0.12	D		0.062
Trichlaracthana		0.062			0.062
1.2 Diablarapropa	000	0.002	1		0.12
Promodiablerama	thana	0.062	U		0.062
bromodicniorome	thane	0.002	0		0.062
cis-1,3-Dicnioropr	opene	0.062	D		0.062
Toluene		1.0	D		0.062
trans-1,3-Dichlord	propene	0.062	Q		0.062
1,1,2-1 richloroeth	lane	0.062	0		0.062
letrachioroethene	9	0.095			0.062
Dibromochlorome	ethane	0.062	U		0.062
1,2-Dibromoethar	ne	0.062	U		0.062
Ethylbenzene		0.16	D		0.062
o-Xylene		0.15	D		0.062
Bromoform		0,062	U		0.062
1,1,2,2-Tetrachlor	roethane	0.062	U		0.062
4-Ethyltoluene		0.062	U		0.062
1,3,5-Trimethylbe	enzene	0.12	U		0.12
1,2-Dichloroether	ne, Total	0.062	U		0.062
m-Xylene & p-Xyl	lene	0.48	D		0.12
Xylenes, Total		0.63	D		0.062
Analyte		Result (	(ug/m3) Qua	lifier	RL
Dichlorodifluorom	nethane	2.3	D		0.31
	17	Page	15 of 301		

Client: ARCADIS U.S. Inc

Lab Sample ID:

Client Matrix:

#### Client Sample ID: IA-7[050511]

200-5075-1

Air

Job Number: 200-5075-1 Sdg Number: 200-5075

Date Sampled: 05/05/2011 1553 Date Received: 05/06/2011 1000

	TO15 LL Volat	ile Organic Compounds	in Ambient Air,	Low Concentration (GC/MS)	
Analysis Method:	TO15 LL	Analysis Batch:	200-17921	Instrument ID:	E.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	eejx024.d
Dilution:	6.25			Initial Weight/Volume:	80 mL
Analysis Date:	05/12/2011 0825	Rup Type:	DI	Final Weight Avolume:	500 ml
Pren Date:	05/12/2011 0825	Run Type.	DL	Injection Volume:	500 mL
Fiep Date.	00/12/2011 0020			injection volume.	500 mL
Analyte		Result (u	ig/m3)	Qualifier	RL
1,2-Dichlorotetraflu	loroethane	0.44		U	0.44
Vinyl chloride		0.32		U	0.32
1,3-Butadiene		0.28		U	0.28
Bromomethane		0.49		U	0.49
Chloroethane		0.33		U	0.33
Bromoethene(Viny	Bromide)	0.55		U	0.55
Trichlorofluorometh	hane	6.7		D	0.35
1,1-Dichloroethene		0.25		U	0.25
3-Chloropropene		0.39		U	0.39
Methylene Chloride	e	30		D	4.3
Methyl tert-butyl et	ther	0.23		U	0.23
trans-1.2-Dichloroe	ethene	0.25		U	0.25
n-Hexane		0.44		Ŭ	0.44
1 1-Dichloroethane	9	0.25		U.	0.25
cis-1 2-Dichloroeth	hene	0.25		11	0.25
Chloroform		0.31			0.31
1.1.1.Trichlorooth:	200	0.34			0.34
Cyclobevane	and	0.46		D	0.22
Carbon tetrachlori	de	0.43		D	0.39
2.2.4 Trimothyloor	de	0.45			0.39
Z,Z,4- mineuryper	Raile	0.29		D	0.29
1.2 Dichlara athan		0.40			0.20
n Lontono	e	0.57		D	0.36
Tricklassethese		0.34			0.20
1 2 Disklasses		0.34		0	0.34
1,2-Dichloropropa	ne	0.58		0	0.30
Bromodicniorome	tnane	0.42			0.42
cis-1,3-Dichloropro	opene	0.28		0	0.20
Foluene		4.0		U	0.24
trans-1,3-Dichloro	propene	0.28		U	0.28
1,1,2-1 richloroeth	ane	0.34		0	0.34
I etrachloroethene	2	0.65		U	0.42
Dibromochlorome	thane	0.53		0	0.53
1,2-Dibromoethan	10	0.48		0	0.48
Ethylbenzene		0.70		D	0.27
o-Xylene		0.66		D	0.27
Bromoform		0.65		U	0.65
1,1,2,2-Tetrachlor	roethane	0.43		U	0.43
4-Ethyltoluene		0.31		U	0.31
1,3,5-Trimethylbe	nzene	0.61		U	0.61
1,2-Dichloroethen	ne, Total	0.25		U	0.25
m-Xylene & p-Xyl	ene	2.1		D	0.54
Xylenes, Total		2.7		D	0.27

Client: ARCADIS U.S. Inc

Job Number: 200-5075-1 Sdg Number: 200-5075

## Client Sample ID:AMB[050511]Lab Sample ID:200-5075-2

Lab Sample ID:	200-5075-2	Date Sampled:	05/05/2011	1755
Client Matrix:	Air	Date Received	: 05/06/2011	1000

TO15 LL Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)								
Analysis Method: Prep Method: Dilution: Analysis Date: Prep Date:	TO15 LL Summa Canister 4.0 05/12/2011 0418 05/12/2011 0418	Analysis Batch: Prep Batch:	200-17921 N/A	Instrument ID: Lab File ID: Initial Weight/Vol Final Weight/Vol Injection Volume	E.i eejx021.d ume: 125 mL ume: 500 mL : 500 mL			
Analvte		Result (p	(v/v dq	Qualifier	RL			
Dichlorodifluoromet	hane	0.44	and the second se	a na analasanan ang manananan na karang na karang	0.040			
1,2-Dichlorotetrafluc	proethane	0.040		U	0.040			
Vinyl chloride		0.080		U	0.080			
1,3-Butadiene		0.080		U	0.080			
Bromomethane		0.080		U	0.080			
Chloroethane		0.080		U	0.080			
Bromoethene(Vinyl	Bromide)	0.080		U	0.080			
Trichlorofluorometh	ane	0.20			0.040			
1,1-Dichloroethene		0.040		U	0.040			
3-Chloropropene		0.080		U	0.080			
Methylene Chloride	1	0.80		U	0.80			
Methyl tert-butyl eth	her	0.040		U	0.040			
trans-1,2-Dichloroe	thene	0.040		U	0.040			
n-Hexane		0.080		U	0.080			
1,1-Dichloroethane		0,040		0	0.040			
cis-1,2-Dichloroeth	ene	0.040		U	0.040			
4.1.1 Trichlaractha	<b>n</b> 0	0.040		U U	0.040			
Cyclobovana	lie	0.040		0	0.040			
Carbon tetrachlorid	4	0.040		0	0.040			
2.2.4-Trimethylnen	tane	0.040		0	0.040			
Renzene		0.072		Ū.	0.040			
1.2-Dichloroethane		0.080		U	0.080			
n-Heptane		0.040		U	0.040			
Trichloroethene		0.040		U	0.040			
1,2-Dichloropropar	18	0.080		U	0.080			
Bromodichlorometh	nane	0.040		U	0.040			
cis-1,3-Dichloropro	pene	0.040		U	0.040			
Toluene		0.22			0.040			
trans-1,3-Dichlorop	propene	0.040		U	0.040			
1,1,2-Trichloroetha	ine	0.040		U	0.040			
Tetrachloroethene		0.040		U	0.040			
Dibromochloromet	hane	0,040		U	0.040			
1,2-Dibromoethane	9	0.040		U	0.040			
Ethylbenzene		0.040		U	0,040			
o-Xylene		0.044		н	0.040			
Bromoiorm	othana	0.040		U	0.040			
A Ethyltoluono	Jeunanie	0,040		U	0.040			
1 3 5-Trimethylher	zene	0.040		Ŭ	0.080			
1.2-Dichloroethen	e. Total	0.040		Ū	0,040			
m-Xylene & p-Xyle	ene	0.11			0.080			
Xylenes, Total		0.15			0.040			
		<u></u>		0	<b>D1</b>			
Analyte		Result	(ug/m3)	Qualifier				
Dichlorodifluorome	ethane	2.2			0.20			
Tant Amarian Bush	in at mu	Dago	17 of 30	1				

#### Client Sample ID: AMB[050511]

Lab Sample ID: 200-5075-2 Client Matrix: Air

#### Analytical Data

Job Number: 200-5075-1 Sdg Number: 200-5075

Date Sampled: 05/05/2011 1755 Date Received: 05/06/2011 1000

	TO15 LL Volati	le Organic Compounds	in Ambient Aiı	r, Low C	oncentration (GC/MS)		
Analysis Method:	TO15 LL	Analysis Batch:	200-17921		Instrument ID:	E.i	
Prep Method:	Summa Canister	Prep Batch:	N/A		Lab File ID:	eeix021.d	
Dilution:	4.0	•			Initial Weight/Volume	125 ml	
Analysis Date:	05/12/2011 0418				Final Weight/olume:	500 ml	
Prep Date:	05/12/2011 0418				Injection Volume:	500 mL	
•					injedion volume,	500 mL	
Analyte		Result (u	g/m3)	Qualifie	ər	RL	
1,2-Dichlorotetraflue	proethane	0.28		U		0.28	• • • • • • • • •
Vinyl chloride		0.20		U		0.20	
1,3-Butadiene		0.18		U		0.18	
Bromomethane		0.31		U		0.31	
Chloroethane		0.21		U		0.21	
Bromoethene(Vinyl	Bromide)	0.35		U		0.35	
Trichlorofluorometh	ane	1.1				0.22	
1,1-Dichloroethene		0.16		U		0.16	
3-Chloropropene		0,25		U		0.25	
Methylene Chloride		2.8		U		2.8	
Methyl tert-butyl eth	her	0.14		U		0.14	
trans-1,2-Dichloroe	thene	0,16		U		0.16	
n-Hexane		0.28		U		0.28	
1,1-Dichloroethane		0.16		U		0.16	
cis-1,2-Dichloroeth	ene	0.16		U		0.16	
Chloroform		0.20		υ		0.20	
1,1,1-Trichloroetha	ne	0.22		U		0.22	
Cyclohexane		0.14		U		0.14	
Carbon tetrachlorid	е	0.44				0.25	
2,2,4-Trimethylpen	tane	0.19		U		0.19	
Benzene		0.23				0.13	
1,2-Dichloroethane	1	0.32		U		0.32	
n-Heptane		0.16		U		0.16	
Trichloroethene		0.21		U		0.21	
1,2-Dichloropropar	e	0,37		U		0.37	
Bromodichlorometh	nane	0.27		U		0.27	
cis-1,3-Dichloropro	pene	0.18		U		0.18	
Toluene		0.82				0.15	
trans-1,3-Dichlorop	propene	0.18		U		0.18	
1,1,2-Trichloroetha	ne	0.22		U		0.22	
Tetrachloroethene		0.27		U		0.27	
Dibromochloromet	hane	0.34		U		0.34	
1,2-Dibromoethane	è	0.31		U		0.31	
Ethylbenzene		0.17		U		0.17	
o-Xylene		0.19				0.17	
Bromoform		0.41		U		0.41	
1,1,2,2-Tetrachloro	pethane	0.27		U		0.27	
4-Ethyltoluene		0.20		U		0.20	
1,3,5-Trimethylber	zene	0.39		U		0,39	
1,2-Dichloroethene	e, Total	0.16		U		0.16	
m-Xylene & p-Xyle	ne	0.46				0.35	
Xylenes, Total		0.65				0.17	

## Client Sample ID: IA-8[050511] Lab Sample ID: 200-5075-3

Lab Sample ID: 200 Client Matrix: Air

#### Analytical Data

Job Number: 200-5075-1 Sdg Number: 200-5075

Date Sampled: 05/05/2011 1620 Date Received: 05/06/2011 1000

	TO15 LL Volati	ile Organic Compounds	in Ambient Air, Low	Concentration (GC/MS)		
Analysis Method:	TO15 LL	Analysis Batch:	200-17921	Instrument ID:	E.i	
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	eeixC	122 d
Dilution:	4.0			Initial WeightA/olume:	125	ml
Analysis Date:	05/12/2011 0514			Final Weight Volume:	500	m
Pren Date:	05/12/2011 0514			Initial Weight/Volume:	500	init.
ricp bate.	001112011 0014			injection volume.	500	m.
Analyte		Result (p	pb v/v) Qual	ifier		RL
Dichlorodifluorometh	ane	0.43	a no companyon in an anna an	annan a' amhfar gann am f Saddarg annan 1954) Canana ann dàr 1976 an a' ann a' Arb	1.1 Subtraction could a contraction of the second second br>second second secon	0.040
1,2-Dichlorotetrafluo	roethane	0.040	U			0.040
Vinyl chloride		0.080	U			0.080
1,3-Butadiene		0.080	U			0.080
Bromomethane		0.080	U			0.080
Chloroethane		0.080	U			0.080
Bromoethene(Vinyl I	Bromide)	0.080	U			0.080
Trichlorofluorometha	ane	0.59	-			0.040
1.1-Dichloroethene		0.040	U			0.040
3-Chloropropene		0.080	Ŭ			0.080
Methylene Chloride		63	Ū.			0.80
Methyl tert-butyl eth	er	0.040	u			0.00
trans-1.2-Dichloroet	hene	0.040	Ŭ			0.040
n-Hexane		0.15	Ŭ			0.080
1 1-Dichloroethane		0.040	11			0.040
cis-1 2-Dichloroethe	ne	0.040	Ü			0.040
Chloroform	110	0.040	0			0.040
1.1.1.Trichloroether	10 10	0.040	U			0.040
Cyclohexane		0.040	U			0.040
Carbon tetrachloride	2	0.071				0,040
224 Trimethylpent	200	0.071	(1			0.040
2,2,4* minearypena		0,040	0			0.040
1.2.Dichloroethane		0.000	11			0.040
n Hentane		0.000	0			0.000
Trichloroethene		0.07	11			0.040
1.2-Dichloropropan	2	0.040	U U			0.040
Bromodichlorometh	-	0,000	0			0.000
cis-1 3-Dichloronror	ane a	0.040	U U			0.040
Toluene	Jona	4.6 2	7 5			0.040
trans-1 3 Dichlorom	ranana		/ ~~~~	and the second sec		0.040
1 1 2 Trichloroothar	opene	0.040	0			0.040
Totrachloroothona		0.040	0			0.040
Dibromochlorometh	220	0.040	U U			0.040
1.2 Dibromochioromem	laile	0.040	U			0.040
T,2-Dibioindethane		0.040	U			0.040
		0.12				0.040
Bromoform		0.12	11			0.040
1 1 2 2-Tetrachloror	athana	0.040	U			0.040
A Ethyltoluene	enane	0.040	U			0.040
135.Trimethylben	7ene	0.007				0.080
1.2-Dichloroothoro	Total	0.10	11			0.040
m-Xylana & n Xylar	1 10(0)	0.040	0			0.040
M-Aylene & p-Ayler	10	0.00				0.000
Aylenes, Total		0.48				0.040
Analyte		Result (	ug/m3) Qua	lifier		RL
Dichlorodifluoromet	hane	2.1		nije od kristina ma u 1. spisovskom na pra na mana na se na svedna na na svedna se s		0.20
Tarthmarian Dunli	n est as sn	Dada	10 .4 901			

Client: ARCADIS U.S. Inc

Client Sample ID: IA-8[050511]

Lab Sample ID:200-5075-3Client Matrix:Air

	TO15 LL Volat	ile Organic Compounds	in Ambient Ai	r, Low Concer	itration (GC/MS)		an air air shallan fa charanna an a ta bhann an an tarainn
Analysis Method: Prep Method:	TO15 LL Summa Canister	Analysis Batch: Pren Batch	200-17921 N/A	Instr	ument ID: File ID:	E.i	22 d
Dilution:		riep baton.	1977	Lau	I Maight Maluma	405	zz.u ml
Applycic Date:	9.0 05/12/2011 051/			li liud	U Weight Volume.	120 E00	····
Analysis Date.	05/12/2011 0514			Fina	i weight/volume:	500	ITIL.
Prep Date:	05/12/2011 0514			Injec	tion volume:	500	mL
Analyte		Result (u	ıg/m3)	Qualifier		F	۶L.
1,2-Dichlorotetraflu	oroethane	0.28		U	ann 6' ann aileadh a nairt 2 aileadh ann air a nair air an air an air air an air air air air air air air air a	)	),28
Vinyl chloride		0.20		U		(	).20
1,3-Butadiene		0.18		U		(	),18
Bromomethane		0.31		U		(	0.31
Chloroethane		0.21		U		(	0.21
Bromoethene(Viny	l Bromide)	0,35		U		(	0.35
Trichlorofluorometh	nane	3.3				(	0.22
1,1-Dichloroethene		0.16		U		(	D.16
3-Chloropropene		0.25		U		(	0.25
Methylene Chloride	е	22					2.8
Methyl tert-butyl et	her	0.14		U		(	D.14
trans-1.2-Dichloroe	ethene	0.16		U		(	0.16
n-Hexane		0.54					0.28
1.1-Dichloroethane	2	0.16		U		1	0.16
cis-1 2-Dichloroeth	iene	0.16		Ū			0.16
Chloroform		0.20		U			0.20
1.1.1-Trichloroetha	ine	0.22		Ü			0.22
Cyclohexane		28		-			0.14
Carbon tetrachlori	de	0.45					0.25
2 2 4-Trimethylner	atane	0.19		11			0.19
Benzene	Runo	0.10		0			0.13
1.2-Dichloroethan	2	0.32		D			0.32
n-Hentane	6	2.3		0			0.16
Trichloroethene		0.21		11			0.10
1.2-Dichloropropa	ne	0.37		Ŭ			0.27
Bromodichloromet	hana	0.07		U U			0.27
ois 1.3 Dichloropr		0.27		U .			0.18
Toluono	opene	14 14 14	1	Et D			0.15
trans_1 3-Dichloro	nronana	0.18		1			0.18
1 1 2 Trichloraeth	pioperie	0.70		U U			0.70
Totrachloroethene		0.22		0			0.22
Dibramaablarama	thana	0.27		0			0.34
1.2 Dibromochor	ulane	0.34		U El			0.34
Cthulbonropo	e	0.51		U			0.51
		0.01					0.17
0-Aylene Bromoform		0.03		[]			0.17
oromoiorm	aethana	0.41					0.41
1,1,2,2-1 etrachlor	oeinane	0.27		U			0.27
4-Ethyltoluene		0.48					0.20
1,3,5-trimethylbe	nzene	0.79		11			0.39
1,2-Dichloroethen	e, iotal	0.16		U			0.10
m-Xylene & p-Xyl	ene	1.6					0.35
Xylenes, Total		2.1					0.17

Job Number: 200-5075-1 Sdg Number: 200-5075

Date Sampled: 05/05/2011 1620 Date Received: 05/06/2011 1000

Client: ARCADIS U.S. Inc

#### Client Sample ID: IA-8[050511]

Lab Sample ID: 200-5075-3 Client Matrix: Air Job Number: 200-5075-1 Sdg Number: 200-5075

Date Sampled: 05/05/2011 1620 Date Received: 05/06/2011 1000

	TO15 LL Volat	ile Organic Compounds	in Ambient Air, Low C	oncentration (GC/MS)	
Analysis Method:	TO15 LL	Analysis Batch:	200-17921	Instrument ID:	E.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	eeix025.d
Dilution:	6 25			Initial Weight/Volume	80 ml
Analysis Date:	05/12/2011 0920	Run Tyne	DI	Final Weight Volume:	500 ml
Pron Date:	05/12/2011 0920	itan Type.		Injection Volume:	500 mL
riep Date.	00/12/2011 00/20			injection volume.	500 mL
Analyte		Result (p	pb v/v) Qualifi	er	RL
Dishlorodifluorome	thane	0.48	D		0.062
1,2-Dichlorotetraflu	oroethane	0.062	U		0.062
Vinyl chloride		0.12	U		0.12
1.3-Butadiane		0.12	U		0.12
Bromomethane		0.12	U		0.12
Chloroethane		0.12	U		0.12
Bromoethene(Viny	KBromide)	0.12	U		0.12
Trichlorofluorometh	hane	0.64	D		0.062
1,1-Dichloroethene		0.062	U		0.062
3-Chloropropene		0.12	U		0.12
Methylene Chloride	e	6.1	D		1.2
Methyl tert-butyl et	her	0.062	U		0.062
trans-1 2-Dichloroe	athene	0.062	U		0.062
n-Hevane		0.15	D		0.12
1 1-Dichloroothang		0.062			0.062
cie 1.2 Dichlorooth		0.062	11		0.062
Chloroform	iene	0.062	U		0.062
1.1.1 Trichlasacths		0.002			0.002
Cuelebovene	ane	0.002	D		0.002
Cyclonexarie	4.	0.62	D		0.062
Carbon tetrachiori	ae	0.068	U		0.062
2,2,4-1 rimetnyiper	ntane	0.062	0		0.062
Benzene		0.085	D		0.062
1,2-Dichloroethan	B	0.12	U		0.12
n-Heptane		0.49	D		0.062
Trichloroethene		0.062	U		0.062
1,2-Dichloropropa	ne	0.12	U		0.12
Bromodichloromet	ihane	0.062	U		0.062
cis-1,3-Dichloropre	opene	0.062	U		0.062
Toluene		3.7	Q		0.062
trans-1,3-Dichloro	propene	0.062	U		0.062
1,1,2-Trichloroetha	ane	0.062	U		0.062
Tetrachloroethene		0.062	U		0.062
Dibromochlorome	thane	0.062	U		0.062
1,2-Dibromoethan	e	0.062	U		0.062
Ethylbenzene		0.085	D		0.062
o-Xylene		0.095	D		0.062
Bromoform		0.062	U		0.062
1,1,2,2-Tetrachlor	oethane	0.062	U		0.062
4-Ethyltoluene		0.090	D		0.062
1,3,5-Trimethylbe	nzene	0.14	D		0.12
1,2-Dichloroethen	e, Total	0.062	U		0.062
m-Xylene & p-Xyl	ene	0.29	D		0.12
Xylenes, Total		0.38	D		0.062
Analyte		Result (	ug/m3) Quali	fier	RL
Dichlorodifluorom	ethane	2.4	D		0.31
Tanthasaina Dro	15 m ark as an	Dago	21 of 201		/
#### Analytical Data

Client: ARCADIS U.S. Inc

Job Number: 200-5075-1 Sdg Number: 200-5075

Date Sampled: 05/05/2011 1620 Date Received: 05/06/2011 1000

# Client Sample ID: IA-8[050511]

Lab Sample ID:	200-5075-3
Client Matrix:	Air

TO15 LL Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)													
Analysis Method:	TO15 LL	Analysis Batch:	200-17921	Instrument ID:	E.i								
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	eejx025.d								
Dilution:	6.25			Initial Weight/Volume:	80 mL								
Analysis Date:	05/12/2011 0920	Run Type:	DL	Final Weight/Volume:	500 mL								
Prep Date:	05/12/2011 0920			Injection Volume:	500 mL								
Analyte		Result (u	g/m3)	Qualifier	RL								
12-Dichlorotetraflu	oroethane	0.44		U	0.44								
Vinyl chloride		0.32		U	0.32								
1,3-Butadiene		0.28		υ	0.28								
Bromomethane		0.49		U	0.49								
Chloroethane		0.33		U	0.33								
Bromoethene(Viny	Bromide)	0.55		U	0.55								
Trichlorofluorometh	ane	3.6		D	0.35								
1,1-Dichloroethene		0.25		U	0.25								
3-Chloropropene		0.39		U	0.39								
Methylene Chlorida		21		D	4.3								
Methyl tert-butyl et	her	0.23		U	0.23								
trans-1.2-Dichloroe	ethene	0.25		U	0.25								
n-Hexane		0.52		D	0.44								
1.1-Dichloroethane		0.25		U	0.25								
cis-1 2-Dichloroeth	nene	0.25		U	0.25								
Chloroform		0.31		U	0.31								
1.1.1-Trichloroetha	ane	0.34		U	0.34								
Cyclohexane		2.8		D	0.22								
Carbon tetrachlori	de	0.43		D	0.39								
2 2 4-Trimethylper	ntane	0.29		U	0.29								
Benzene		0.27		D	0.20								
1 2-Dichloroethan	8	0.51		U	0.51								
n-Heptane		2.0		D	0.26								
Trichloroethene		0.34		U	0.34								
1.2-Dichloropropa	ne	0.58		U	0.58								
Bromodichloromet	thane	0.42		U	0.42								
cis-1.3-Dichloropro	opene	0.28		U	0.28								
Toluene		14		D	0.24								
trans-1.3-Dichloro	propene	0.28		U	0.28								
1,1,2-Trichloroeth	ane	0.34		U U	0.34								
Tetrachloroethene	2	0.42		U	0.42								
Dibromochlorome	thane	0.53		U	0.53								
1,2-Dibromoethan	ne	0.48		U	0.48								
Ethylbenzene		0.37		D	0.27								
o-Xylene		0.41		D	0.27								
Bromoform		0.65		U	0.65								
1,1,2,2-Tetrachlor	roethane	0.43		υ	0.43								
4-Ethyltoluene		0.44		D	0.31								
1,3,5-Trimethylbe	nzene	0.67		D	0.61								
1,2-Dichloroether	ne, Total	0.25		U	0.25								
m-Xylene & p-Xyl	ene	1.2		D	0.54								
Xylenes, Total		1.6		D	0.27								

### Analytical Data

Job Number: 200-5075-1

Client: ARCADIS U.S. Inc

Client Sample ID: DUP 050511

Lab Sample ID: 200-5075-4 Client Matrix: Air Sdg Number: 200-5075 Date Sampled: 05/05/2011 0000 Date Received: 05/06/2011 1000

	TO15 LL Volati	le Organic Compounds	in Ambient Air, Low	Concentration (GC/MS)	
Analysis Method:	TO15 LL	Analysis Batch:	200-17921	Instrument ID:	E.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	eejx023.d
Dilution:	4.0			Initial Weight/Volume:	125 mL
Analysis Date:	05/12/2011 0608			Final Weight/Volume:	500 mL
Prep Date:	05/12/2011 0608			Injection Volume:	500 mL
Analyte		Result (p	pb v/v) Quali	fier	RL
Dichlorodifluorometh	ane	0.43	nden synametry (2012) - a na anderstansan i balan sugaran ar arabanya ana	an a	0.040
1,2-Dichlorotetrafluo	roethane	0.040	U		0.040
Vinyl chloride		0.080	U		0.080
1,3-Butadiene		0.080	U		0.080
Bromomethane		0.080	U		0.080
Chloroethane		0.080	U		0.080
Bromoethene(Vinyl	Bromide)	0.080	U		0.080
Trichlorofluorometha	ane	0.63			0.040
1,1-Dichloroethene		0.040	U		0.040
3-Chloropropene		0.080	U		0.080
Methylene Chloride		6.2			0.80
Methyl tert-butyl eth	er	0.040	U		0.040
trans-1,2-Dichloroet	hene	0.040	U		0.040
n-Hexane		0.15			0.080
1,1-Dichloroethane		0.040	U		0.040
cis-1,2-Dichloroethe	ene	0.040	U		0.040
Chloroform		0.040	U		0.040
1,1,1-Trichloroethar	ne	0.040	U		0.040
Cyclohexane		0.98			0.040
Carbon tetrachlorid	9	0.064			0.040
2,2,4-Trimethylpent	ane	0.040	U		0.040
Benzene		0.083			0.040
1,2-Dichloroethane		0.080	U		0.080
n-Heptane		0.58	1.1		0.040
1 richloroethene	_	0.040	0		0.040
1,2-Dichloropropan	e 	0.080	0		0.080
biomodichioromeur	ane	0.040	0		0.040
Teluene	perie	0.040	U		0.040
trong 1.2 Dioblarga		0.040	11		0.040
1 1 2 Trichlorootha	no	0.040	U		0.040
Tetrachleresthere	lie	0.040	Ц		0.040
Dibromobloromoti	2000	0.040	U		0.040
1.2 Dibromochorothang	idite	0,040	0		0.040
Fibulbonzone		0.040	0		0.040
a Yvlona		0.10			0.040
Bromoform		0,10	U		0.040
1 1 2 2-Tetrachloro	ethane	0.040	Ŭ		0.040
4-Fthvltoluene	onnario	0.067	-		0.040
1.3.5-Trimethylben	zene	0.16			0.080
1.2-Dichloroethene	. Total	0.040	U		0.040
m-Xylene & p-Xvle	ne	0.31			0.080
Xylenes, Total		0.42			0.040
· · ·					
Analyte		Result (	ug/m3) Qua	llifier	RL
Dichlorodifluorome	thane	2.1			0.20

Tant Amanian Dimlination

Dago 22 of 221

#### Analytical Data

Client: ARCADIS U.S. Inc

Client Sample ID: DUP 050511

Lab Sample ID: 200-5075-4 Client Matrix: Air

baannaanna an ar an a							
	TO15 LL Volat	ile Organic Compounds	in Ambient Ai	r, Low C	oncentration (GC/MS)		
Analysis Method:	TO15 LL	Analysis Batch:	200-17921		Instrument ID:	E.i	
Prep Method:	Summa Canister	Prep Batch:	N/A		Lab File ID:	eejx(	)23.d
Dilution:	4.0				Initial Weight/Volume:	125	mL
Analysis Date:	05/12/2011 0608				Final Weight/Volume:	500	mL
Prep Date:	05/12/2011 0608				Injection Volume	500	ml
· · - F					ngoonons voitanto.	000	
Analyte		Result (u	g/m3)	Qualifi	er		RL
1,2-Dichlorotetrafluc	proethane	0.28		U	ennennet synthesissen angelet e etter felt etter etter en flansere om enne men sy omkenet, methoden and	tarin - Harington - Araba in	0.28
Vinyl chloride		0.20		U			0.20
1,3-Butadiene		0.18		U			0.18
Bromomethane		0.31		U			0.31
Chloroethane		0.21		U			0.21
Bromoethene(Vinyl	Bromide)	0.35		U			0.35
Trichlorofluorometh	ane	3.5					0.22
1,1-Dichloroethene		0.16		U			0.16
3-Chloropropene		0.25		U			0.25
Methylene Chloride		22					2.8
Methyl tert-butyl eth	er	0.14		U			0.14
trans-1,2-Dichloroet	hene	0.16		U			0.16
n-Hexane		0.54					0.28
1,1-Dichloroethane		0.16		U			0.16
cis-1,2-Dichloroethe	ene	0.16		U			0.16
Chloroform		0.20		U			0.20
1,1,1-Trichloroethar	ne	0.22		U			0.22
Cyclohexane		3,4					0.14
Carbon tetrachlorid	е	0.40					0.25
2,2,4-Trimethylpent	ane	0,19		υ			0.19
Benzene		0.26					0.13
1,2-Dichloroethane		0.32		υ			0.32
n-Heptane		2.4					0.16
Trichloroethene		0.21		U			0.21
1,2-Dichloropropan	e	0.37		U			0.37
Bromodichlorometh	ane	0.27		υ			0.27
cis-1,3-Dichloropro	pene	0.18		υ			0.18
Toluene		15					0.15
trans-1,3-Dichlorop	ropene	0.18		U			0.18
1,1,2-Trichloroethal	ne	0.22		U			0.22
Tetrachloroethene		0.27		U			0.27
Dibromochlorometh	nane	0.34		U			0.34
1,2-Dibromoethane	•	0.31		U			0.31
Ethylbenzene		0.45					0,17
o-Xylene		0.45					0.17
Bromoform		0.41		U			0.41
1,1,2,2-Tetrachloro	ethane	0.27		U			0.27
4-Ethyltoluene		0.33					0.20
1,3,5-Trimethylben	zene	0.80					0.39
1,2-Dichloroethene	, Total	0.16		U			0.16
m-Xylene & p-Xyle	ne	1.4					0.35
Xylenes, Total		1.8					0.17

Job Number: 200-5075-1 Sdg Number: 200-5075

Date Sampled: 05/05/2011 0000 Date Received: 05/06/2011 1000

#### **TestAmerica Burlington**

30 Community Drive

Suite 11

South Burlington, VT 05403 phone 802-660-1990 fax 802-660-1919

### **Canister Samples Chain of Custody Record**

TestAmerica Analytical Testing Corp. assumes no liability with respect to the collection and shipment of these samples.

	1		,	~ .		1								r					
Client Contact Information	Project Man	ager: An	frer 1	Enis K		Samples Coll	lected By:					$\underline{}$	of_	1	coc	s			
Company: Arcadis	Phone: 🤇	315-67	71-954	14		Pa	+ prez	orst	<u>.</u>									,	
Address: 6723 Toupath Road	Email: And	trew. ar	nist@a	readers-was	c.com											I			
City/State/Zip Syracure, NY 13057	City Captor		2.4					d			l		(uoi						(ion)
FAX: 015- 049-0111	TA Contact	O AN	Dantic	E:				+9					sect						sec
Project Name: Bauge Harkrulle	In Condet.	Analysis	Turparou	nd Time -	mit	1		22			Ì		otes						otes
Site: Hrckinlle M		tandard (Sr		nu inne	PM			1.1				1	ŭ L			Ì	Ì		u U
PO# Ban 32 305, AMY ADM?		anuaru (op Jush (Sneci	ify)	البيبيو بسيطتي ومنظالة التاريخ ستكا				NO			ľ		ecify						ecify
5007-70710007:00005		(ush (opec	l			l		7				9	e sp	be		. 1			e sp
				Conjutor	Conjeter			11		- [		192	easi	5	5	Air		Gas	leas
				Vacuum in	Vacuum in		-	2	4A	SC	250	0 M	L (P	ple	or A	ien	Gas	Ifill	E P
Comple Identification	Sample	Time Start	Time Ofer	Field, "Hg	Field, 'Hg	Flow Controller	Canistan (D	6	6	PA	PA	STI	othe	am	op	qu	lio	anc.	Othe
Sample identification	Date(S)	Time Start	Time Stop		(310)		Camster ib	<u> </u>		<u> </u>	<u></u>	-41	$\stackrel{\vee}{=}$			~			$\equiv$
IA-7 [050511]	5/5/11	8157	1553	-29.0	-7	4766	338	1						<u></u>		]			
AMB 6050511	5/5/11	9:10n	1755	-30	-7	2993	4546	1											
TA-8 (050511)	5/5/11	8:40	1620	-30	-6	2811	5/22	1											
DUP 050511	5/5/11			-27	-7	2616	2995	1											
C th					JJ														
ພ N								1											
			L	Temperature	e (Fahrenhei	i)		1											
		Interior		Ambient		1													
	Start							1											
	Stop						<del>_</del>	1											
		<u></u>		Pressure (in	ches of Hg)	L													
		Interior		Ambient		T		1											
	Start																		
	Stop			-				1											
Special Instructions/QC Requirements & Comments	<u>,                                     </u>	L			an a	<u>ا</u>						_							
						$c \sim$													ĺ
							_												
Samples Shiped by:	Date/Time:	1 16	130	<u></u>	Samples	Received by:	5/6	1,1	1	100	,								
Samples Relinquished by:	Date/Time:	<u>i                                     </u>			Received	by:	- 70	/''_		00									
Relinquished by:	Date/Time:				Received	by:	1												
					L							L							

Lab Use Only Shipper Name: Opened by:

#### **TestAmerica Burlington**

30 Community Drive Suite 11 South Burlington, VT 05403

## **Canister Samples Chain of Custody Record**

.

TestAmerica Analytical Testing Corp. assumes no liability with respect to the collection and shipment of these samples.

nhone 802-660-1990 fax 802-660-1919

Client Contact Information	Project Man	ager: An	law 1	Enis K		Samples Coll	ected By:	t					of_	[	coc	s		
Company: Arcadis	Phone: (	315-67	71-954	19		Pa	t prez	Orst				r	<u> </u>			r	r	
Address: 6723 Tolpath Road	Email: And	Irew. ar	nist@a	readers-w	c.com			-1						. 1				-
City/State/Zip Syracure, NY 13057	City Castan		0. F					$\ddot{a}$					tion				ł	dion
Phone: 313-671-9595	TA Contact	e: $315-671-9548$ e: $315-671-9548$ i: and i. anigt Carcalis-us. com Contact: Oan Zuck ontact: Oan Dawict. Analysis Turnaround Time - contrad- Standard (Specify) PM Rush (Specify) Rush (Specify) Standard (Specify) Canister Vacuum in Field, "Hg (Start) (Stop) 5/11 8:54 1553 - 29.6 - 7 5/11 9:16 1755 - 30 - 7 5/11 9:16 1755 - 30 - 7 5/11 8:16 1626 - 30 - 6 5/11 8:16 1626 - 30 - 6 5/11 27 - 7 Temperature (Fahrenh Interior Ambient Start Stop Pressure (Inches of Hg Interior Ambient						+9			Į		sec	. 1				ser
Project Name: Bouch In Foulle	In Conduct.	Analysis	Turnarou	nd Time -	control	1		20					lotes	(	{		ļ	alon
Site Horan Man		Allalysis		nu inic *	Q M	1		3					in c	.				. <u></u>
PO # 0 + 200		andaru (Sp	secny)		111			20			ĺ		ecify	·.	1			Pol
10# D0032305,0009,00003		cush (Spec	IIY)		<u>i</u>	l	<u> </u>	1				ģ	e sb	be				c SC
Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum In Field, 'Hg (Stop)	Flow Controller	Canister ID	TO-15 LL	TO-14A	EPA 3C	EPA 25C	ASTM D-194	Other (Pleas	Sample Ty	Indoor Air	Ambient Air	Soil Gas	Landfill Gas
- IA-7 E0505117	5/5/11	915-AM	1553	-29.00	-7	4766	3381	1						• • • • • • • •				
AMR CASOSIIT	5/011	ginn	1750	- 3/1	-7	2993	11546	1										
	TIPLY	a. AM	1103		-6	2112	5/22	1										
$\square \square $	5/5//(	0/10	16.40			2011	2005											
0 ULP 030511	515[1]			-2+	-7-	2610	2985			$\left  - \right $								
U Hi			ļ	<u> </u>					ļ									
ω Ν									Ì									
				Temperatur	e (Fahrenhei	t)												
		Interior		Ambient														
	Start																	
	Stop																	
				Pressure (ii	nches of Hg)													
		Interior		Ambient		ļ		-										
	Start			<u> </u>				4										
	Stop	<u> </u>															-	
Special Instructions/QC Requirements & Comment	3:					$\left( \begin{array}{c} \\ \end{array} \right)$		6										
Samplee Shipped by:	Date/Time:	1	930		Garmpide	Received by:	-5/6	11	1	20C	)							
Samples Relinguished by:	Date/Time:				Received	t by:	4	/										
Relinquished by:	Date/Time:				Received	i by:												
Lab Use Only Shipper Name		t tit		Opened	av:	Condition:				24) 24)				2 - 2 - 2 			,	