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PUBLIC VERSION  
SOIL VAPOR INTRUSION SUMMARY REPORT  
2013/2014 HEATING SEASON

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WORK ASSIGNMENT D007622-04.1

100 OSER AVENUE SITE  
HAUPPAUGE

SITE NO. 1-52-162  
SUFFOLK COUNTY, NY

Prepared for:  
NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
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DIVISION OF ENVIRONMENTAL REMEDIATION

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**Draft**  
**May 2014**

**SOIL VAPOR INTRUSION DATA SUMMARY REPORT  
2013/2014 HEATING SEASON  
FOR THE  
100 OSER AVENUE OPERABLE UNIT #2  
SITE NUMBER 152162  
HAUPPAUGE, NEW YORK**

**Prepared For:**

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF ENVIRONMENTAL REMEDIATION  
REMEDIAL BUREAU E  
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**100 OSER AVENUE OPERABLE UNIT #2**  
**SOIL VAPOR INTRUSION DATA SUMMARY REPORT**  
**2014 HEATING SEASON**

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## LIST OF ACRONYMS AND ABBREVIATIONS

%	percent
1,1,1-TCA	1,1,1-trichloroethane
1,1-DCA	1,1-dichloroethane
1,1-DCE	1,1-dichloroethene, aka 1,1-dichloroethylene
1,2-DCA	1,2-dichloroethane
aka	also known as
ASP	Analytical Services Protocol
cis-1,2-DCE	1,2-dichloroethene (cis), aka cis-1,2-dichloroethylene
COC	chain-of-custody
Con-Test	Con-Test Analytical Laboratory
DER	Division of Environmental Remediation
DUSR	Data Usability Summary Report
ELAP	Environmental Laboratory Approval Program
Freon 11	trichlorofluoromethane
Freon 113	1,1,2-trichloro-1,2,2-trifluoroethane
Freon 12	dichlorodifluoromethane
FS	feasibility study
GC/MS	gas chromatography/mass spectrometry
ID	inside diameter
IRM	interim remedial measures
L	liter
L/min	liters per minute
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
OU	operable unit
PCE	perchloroethene, aka tetrachloroethene or tetrachloroethylene or perchloroethylene
PID	photoionization detector
ppb	parts per billion
RI	remedial investigation
ROD	record of decision
SVE	soil vapor extraction
SVI	soil vapor intrusion
TCE	trichloroethene, aka trichloroethylene
TCL	target compound list
trans-1,2-DCE	1,2-dichloroethene (trans), aka trans-1,2-dichloroethylene
$\mu\text{g}/\text{m}^3$	micrograms per cubic meter
URS	URS Corporation
USEPA	United States Environmental Protection Agency
VC	vinyl chloride
VOC	volatile organic compound
WA	work assignment

## **1.0 INTRODUCTION**

URS Corporation (URS) conducted soil vapor intrusion (SVI) sampling at the 100 Oser Avenue Operable Unit (OU) 2 Site in accordance with New York State Department of Environmental Conservation (NYSDEC) Work Assignment (WA) Number D007622-04.1. The 100 Oser Avenue OU2 Site is located in Hauppauge, New York (Figure 1). The first round of SVI sampling at the site was completed during the 2007/2008 heating season under NYSDEC WA Number D004440-15.1. This second round of SVI sampling was performed during the 2013/2014 heating season, in January 2014. This Data Summary Report has been prepared to summarize the second round of SVI sampling and analytical results. The extent of the 2013/2014 heating season outreach was limited to residential structures on Eagle Lane, Falcon Court, and Holiday Park Drive, as directed by the NYSDEC and New York State Department of Health (NYSDOH).

### **1.1 Site Description and History**

100 Oser Avenue is a two and one-half acre parcel of land located in the Heartland Industrial Park, in the Hamlet of Hauppauge, Town of Smithtown, Suffolk County. Sands Textile Corporation (Sands) reportedly operated a textile manufacturing facility on this property, leased from the owner, Vanderbilt Associates, prior to 1985. Sands reportedly used perchloroethene (PCE) to dry clean finished products from the mid-1970's until 1985. The source of contamination is allegedly related to discharges of PCE to the subsurface on the west side of the 100 Oser Avenue building. In 1998, the NYSDEC listed the site as a Class 2 site in the Registry of Inactive Hazardous Waste Disposal Sites in New York.

Three interim remedial measures (IRM) were implemented at the 100 Oser Avenue property including: the removal of 11 yards of contaminated soil and water (April 2000); the installation of a soil vapor extraction (SVE) system to extract PCE from the west side of 100 Oser Avenue (September 2000); and the installation of a SVE system below both 100 and 110 Oser Avenue to lower indoor concentrations of PCE (September 2004). A Record of Decision (ROD) for the 100 Oser Avenue property, designated by the NYSDEC as Operable Unit 1 (OU1), was signed in March 2002 that requires the IRMs to continue to operate, and called for in-situ chemical oxidation by

potassium permanganate injections into the contaminated groundwater. This work at OU1 was performed in 2005-2006.

A remedial investigation (RI) for Operable Unit 2 (OU2), which consists of the area northeast (down-gradient) of OU1, was conducted between May 2001 and December 2003 to define the nature and extent of contamination beyond the immediate source area. Evaluation of the groundwater data shows that a groundwater PCE contaminant plume extends over 1 mile down-gradient from the site, and that PCE was detected in surface water collected from New Mill pond. The contaminated area includes single-residential and multi-residential development, commercial establishments, undeveloped land, and parkland. A feasibility study (FS) for OU2 was completed in February 2005 to formulate and evaluate remedial alternatives to mitigate potential risks posed by site contamination. A ROD for OU2 was signed in March 2005. In July 2012, the OU2 remedial program commenced. The first of three scheduled OU2 permanganate injections was completed in September 2013. The second injection was completed in April 2014. The third injection is scheduled for September 2014.

In addition to expanding the use of permanganate oxidation into the down-gradient plume, one other element of the OU2 ROD was the implementation of a SVI monitoring program to provide for additional characterization of the potential for SVI and, if necessary, installation of sub-slab depressurization systems. The first round of SVI investigations were conducted at OU2 in January and February 2008. Based on the analytical results from the first round of sampling, no homes required sub-slab depressurization systems. The second round of SVI investigations were conducted in January 2014.

## **2.0 FIELD INVESTIGATION ACTIVITIES**

The second round of SVI sampling was conducted during the 2013/2014 heating season at the 100 Oser Avenue OU2 site on January 13-17, 2014, and was limited to residential structures selected by the NYSDOH on Eagle Lane, Falcon Court, and Holiday Park Drive. The activities consisted of the following work tasks:

- The NYSDOH generated a standard letter, dated January 6, 2014, that was sent to select addresses notifying the property owner or current resident of the SVI sampling program.
- URS contacted owners and/or tenants by telephone starting January 7, 2014 and throughout the field investigation to determine interest in participating in the SVI sampling program. Only residential property owners that accepted the offer for the SVI sampling were scheduled for sampling.
- URS canvassed the outreach area on January 10-14, 2014 by going door-to-door to identify potential participants for the SVI sampling program that did not respond to voicemail messages left by URS, did not have voicemail, or current phone numbers were unavailable.
- URS scheduled appointments for home surveys and indoor air sampling for the participating residences.
- URS conducted interviews with the owners and completed indoor air quality questionnaires and building surveys, as well as conducted inventories of household chemicals present in the sampling areas and evaluated their potential to affect air sample results.
- URS collected SVI samples from 11 locations, which consisted of 11 basement/lower level indoor air samples plus 1 field duplicate, and 11 sub-slab soil vapor samples plus 1 field duplicate. During indoor air sampling, 9 outdoor air samples plus 1 field duplicate were also collected.

### **2.1 Soil Vapor Intrusion Investigation**

At each address an indoor air, outdoor air, and sub-slab soil vapor sample were collected and analyzed for the target compound list (TCL) volatile organic compounds (VOCs) listed in Table 1, to a minimum detection limit of 1 microgram per cubic meter ( $\mu\text{g}/\text{m}^3$ ), except for acetone and methyl

ethyl ketone (2-butanone). Trichloroethene (TCE), carbon tetrachloride and vinyl chloride (VC) in all indoor and outdoor air samples were analyzed to a minimum detection limit of 0.25 µg/m<sup>3</sup>. If adjacent structures were sampled on the same day (i.e., H-002/H-057; H-005/H-155), only one outdoor air sample was collected for those structures. A summary of detected PCE concentrations in the sub-slab soil vapor for the 2007/2008 and 2013/2014 heating seasons is presented in Table 2.

### **2.1.1 Indoor Air Quality Survey and Questionnaire**

Prior to sampling, URS personnel conducted owner/tenant interviews and completed an inventory of household chemicals found in the basement. A RAE Systems ppbRAE Plus PGM 7240 part-per-billion (ppb)-range photoionization detector (PID) was used to screen indoor air and identify potential sources of VOCs from household chemicals prior to collecting the air samples.

### **2.1.2 Indoor Air and Outdoor Air Sampling**

URS selected the indoor air sampling locations in consultation with each of the owners/tenants. Where possible, the indoor air locations were placed in the breathing zone (approximately three feet above the floor), central to the building and away from the foundation walls, appliances, and apparent penetrations.

All sampling was performed in accordance with the procedures outlined in the Scope of Work for WA Number D007622-04.1 (URS, 2013). The indoor air and outdoor air samples were collected using laboratory evacuated 6-liter Summa® canisters with 24-hour laboratory calibrated flow regulators. The regulators were calibrated at the flow rate of approximately 0.004 liters per minute (L/min). Upon opening the canister valve and after the 24-hour sampling period, the initial and final vacuum pressures were read, respectively, from the built-in gauge on the flow controller and recorded onto the Indoor Air Quality Questionnaire and Building Inventory form. After the 24-hour sampling period the valve was then closed.

Outdoor air samples were collected at each residence. All outdoor air samples were collected in the building's back yard for the purpose of canister security. The outdoor air samples

were also collected over a 24-hour period concurrent with the indoor air samples and/or sub-slab samples.

Eleven indoor air samples plus one field duplicate and nine outdoor air samples plus one field duplicate were collected during the January 2014 sampling program. As noted in Section 2.1 above, only one outdoor air sample was collected for adjacent residences sampled on the same day.

The field duplicate samples were collected at location H-046. The indoor air and outdoor air field duplicates were collected by placing independently flow controlled canisters adjacent to each other.

### **2.1.3 Sub-slab Soil Vapor Sampling**

Sub-slab soil vapor samples were collected at each residential location. For all locations, URS used a ppbRAE to screen indoor air and penetrations such as concrete floor cracks, floor drains, and sump holes prior to collecting the air samples.

At sub-slab sample locations, an electric hammer drill was used to advance a 1/2-inch drill bit approximately 1/2-inch deep into the concrete slab, followed by a 3/8-inch drill bit through the remaining thickness of the concrete slab. All concrete debris was removed using a hand brush to prevent it from entering the hole. Sub-slab soil vapor samples were collected through a 1/8-inch inner diameter by 1/4-inch outer diameter Teflon-lined polyethylene tubing which was inserted through the hole in the slab. The tubing was sealed to the concrete slab with modeling clay.

At each sub-slab soil vapor location, a helium tracer gas was utilized to evaluate whether indoor (ambient) air was short circuiting into the sub-slab sample collection tubing. To perform the test, a one quart plastic enclosure was placed over the sealed sub-slab sample location. The sample tubing was run through a hole in the enclosure and modeling clay was used to seal the interface between the tubing and the enclosure. The enclosure was then sealed at the ground surface with a silicon gasket. A tank containing ultra-high purity helium [99.999 percent (%)] was connected to a side port of the enclosure and enough helium was released to displace any ambient air and to maintain a positive pressure within the enclosure. Following the application of the tracer gas, one

liter of soil vapor was purged using a SKC Universal PCXR8 sample pump at a rate of approximately 0.5 L/min into a 1 liter tedlar bag.

The contents of the tedlar bag were measured for helium using a Radiodetection/Dielectric MGD-2002 Multi-gas Detector. If the helium concentration was less than 10%, the seal was considered adequate. The enclosure was removed and the tubing was connected to the Summa canister via the flow controller and sampling commenced. If the concentration of helium exceeded 10%, the clay seal between the sample tubing and the concrete slab was redone and the seal was retested. The contents of the Tedlar bag containing the sub-slab purged vapor were subsequently discharged outdoors.

The sub-slab samples were collected over a 24-hour period using 6-liter Summa® canisters equipped with flow controller valves pre-calibrated at the laboratory (i.e., calibrated at the flow rate of approximately 0.004 L/min). Upon opening the canister valve and after the 24-hour sampling period, the initial and final vacuum pressures were read, respectively, from the built-in gauge on the flow controller and recorded onto the Indoor Air Quality Questionnaire and Building Inventory form. After the 24-hour sampling period the valve was then closed. The sample tubing was removed and the sub-slab sample port/hole in basement floor was then filled to grade with hydraulic cement.

## **2.2 Sample Analysis**

All indoor air, sub-slab soil vapor, and outdoor air samples were shipped under chain-of-custody (COC) via Federal Express to URS' standby subcontractor Con-Test Analytical Laboratory (Con-Test), located in East Longmeadow, MA. Con-Test is a NYSDOH Environmental Laboratory Approval Program (ELAP) certified laboratory for the analysis of VOCs by United States Environmental Protection Agency (USEPA) Method TO-15. All indoor air, outdoor air, and sub-slab soil vapor samples were analyzed for the TCL VOCs listed in Table 1, to a minimum detection limit of 1  $\mu\text{g}/\text{m}^3$ , except for acetone and methyl ethyl ketone (2-butanone). Trichloroethene, carbon tetrachloride, and vinyl chloride in all indoor and outdoor air samples were analyzed to a minimum detection limit of 0.25  $\mu\text{g}/\text{m}^3$ .

### **3.0 RESULTS OF THE INVESTIGATION**

This section presents the results of the January 2014 soil vapor intrusion investigation at the 100 Oser Avenue site.

#### **3.1 Soil Vapor Intrusion Investigation Sampling Results**

Based on the Soil Vapor/Indoor Air Decision Matrices (NYSDOH, 2006) provided in Appendix A, all 2014 sample locations had sub-slab vapor PCE concentrations below 100  $\mu\text{g}/\text{m}^3$ . All indoor air concentrations were below 3  $\mu\text{g}/\text{m}^3$ , with the exception of location H-152 which had an indoor air concentration of 3.8  $\mu\text{g}/\text{m}^3$ . The sub-slab vapor concentration at H-152 was 1.6  $\mu\text{g}/\text{m}^3$ .

Other chlorinated compounds monitored by the NYSDOH decision matrices that were detected in the samples included 1,1,1-trichloroethane, carbon tetrachloride, and PCE breakdown products 1,2-dichloroethane and trichloroethene. All locations had concentrations either below subslab vapor/indoor air matrix action levels or the indoor air concentrations were similar to the outdoor air sample concentrations.

The recommendation based on the decision matrix was “No further action” at all locations except H-152. The recommended action at H-152 is “Take reasonable and practical actions to identify source(s) and reduce exposures.” It should be noted that if the concentrations detected compounds referenced above in the indoor air samples were similar to their respective concentrations in the outdoor air samples, the results of the indoor air samples can be considered marginal based on the results of the outdoor air samples. It should also be noted the PCE concentration in the sub-slab soil vapor at H-152 was lower than the indoor air concentration, suggesting soil vapor may not be the only source of PCE in the indoor air.

Laboratory results for detected PCE concentrations in the sub-slab soil vapor air samples are provided in Table 2. Complete data validation summary tables (including indoor air and outdoor air) can be found in the Data Usability Summary Report (DUSR) included in Appendix B.

### **3.2 Data Validation and Data Usability Summary Report**

The data packages submitted by the laboratory were equivalent to the NYSDEC's Analytical Services Protocol (ASP) Category B Deliverable requirements. A DUSR was prepared following the guidelines provided in Division of Environmental Remediation *DER-10 Technical Guidance for Site Investigation and Remediation, Appendix 2B, Guidance for Data Deliverables and the Development of Data Usability Summary Reports*, May 2010. The complete validated analytical results and Form 1s are provided in the DUSR which has been included in Appendix B. URS also submits the validated analytical results to the NYSDEC in a NYSDEC EQIS electronic data deliverable format.

Field duplicate results in general were in good agreement with the parent sample. At locations where a sample and a field duplicate sample are collected, the higher value is used for the evaluation of SVI.

## **4.0 FUTURE ACTIONS**

### **4.1 Residential Mitigation and Monitoring**

The NYSDEC and NYSDOH will further evaluate the vapor intrusion sampling results from the 2013/2014 heating season. As noted above, the detected sub-slab air concentrations for PCE were below NYSDOH SVI decision matrices at all locations except H-152. Therefore, the recommendation based on the decision matrices was “No further action” at all locations except H-152. The recommended action for H-152 is “Take reasonable and practical actions to identify source(s) and reduce exposures.”

The sub-slab soil vapor PCE concentrations from 2013-2014 heating season or are either similar to or below their respective 2007/2008 heating season results, as listed on Table 2. This suggests that the permanganate injections have not impacted the soil vapor concentrations of PCE and its breakdown products.

## 5.0 REFERENCES

- NYDOH. 2006. *Guidance for Evaluating Soil Vapor Intrusion in the State of New York*. Final. October.
- NYSDEC. 2010. *Guidance for Data Deliverables and the Development of Data Usability Summary Reports*. DER-10 Technical Guidance for Site Investigation and Remediation, Appendix 2B. Division of Environmental Remediation. May.
- URS. 2013. *Scope of Work for Construction Oversight, Work Assignment D007622-04.2. 100 Oser Ave OU-2 (Site #152162)*. December.
- USEPA. 2006. *Validating Volatile Organic Analysis of Ambient Air in Canister by Method TO-15, HW-31, Revision 4*. Region 2. October.

## **TABLES**

**TABLE 1**  
**SUMMARY OF PARAMETERS ANALYZED IN**  
**SUB-SLAB, INDOOR, AND OUTDOOR AIR SAMPLES**  
**BY USEPA METHODS TO-15**  
**OSER AVENUE OU2**

1,1,1-Trichloroethane (1,1,1-TCA)	Carbon disulfide
1,1,2,2-Tetrachloroethane	Carbon tetrachloride #
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	Chlorobenzene
1,1,2-Trichloroethane	*Chloroethane
*1,1-Dichloroethane (1,1-DCA)	Chloroform
*1,1-Dichloroethene (1,1-DCE)	Chloromethane
1,2,4-Trichlorobenzene	Cyclohexane
1,2-Dibromo-3-chloropropane	Dibromochloromethane
1,2-Dibromoethane (Ethylene dibromide)	Dichlorodifluoromethane (Freon 12)
1,2-Dichlorobenzene	Ethylbenzene
*1,2-Dichloroethane (1,2-DCA)	Isopropylbenzene (Cumene)
*cis-1,2-Dichloroethene (cis-1,2-DCE)	Methyl acetate
*trans-1,2-Dichloroethene (trans-1,2-DCE)	Methyl ethyl ketone (2-Butanone)
1,2-Dichloropropane	Methyl tert-butyl ether
1,3-Dichlorobenzene	Methylcyclohexane
cis-1,3-Dichloropropene	Methylene chloride
trans-1,3-Dichloropropene	Styrene
1,4-Dichlorobenzene	*Tetrachloroethene (PCE)
2-Hexanone	Tetrahydrofuran
4-Methyl-2-pentanone	Toluene
Acetone	*Trichloroethene (TCE) #
Benzene	Trichlorofluoromethane (Freon 11)
Bromodichloromethane	*Vinyl chloride (VC) #
Bromoform	Xylene (meta & para and ortho
Bromomethane	isomers)

USEPA Method TO-15, VOCs in Air Collected in SUMMA<sup>®</sup> Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS): USEPA Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, January 1999.

\* - Tetrachloroethene and its breakdown products.

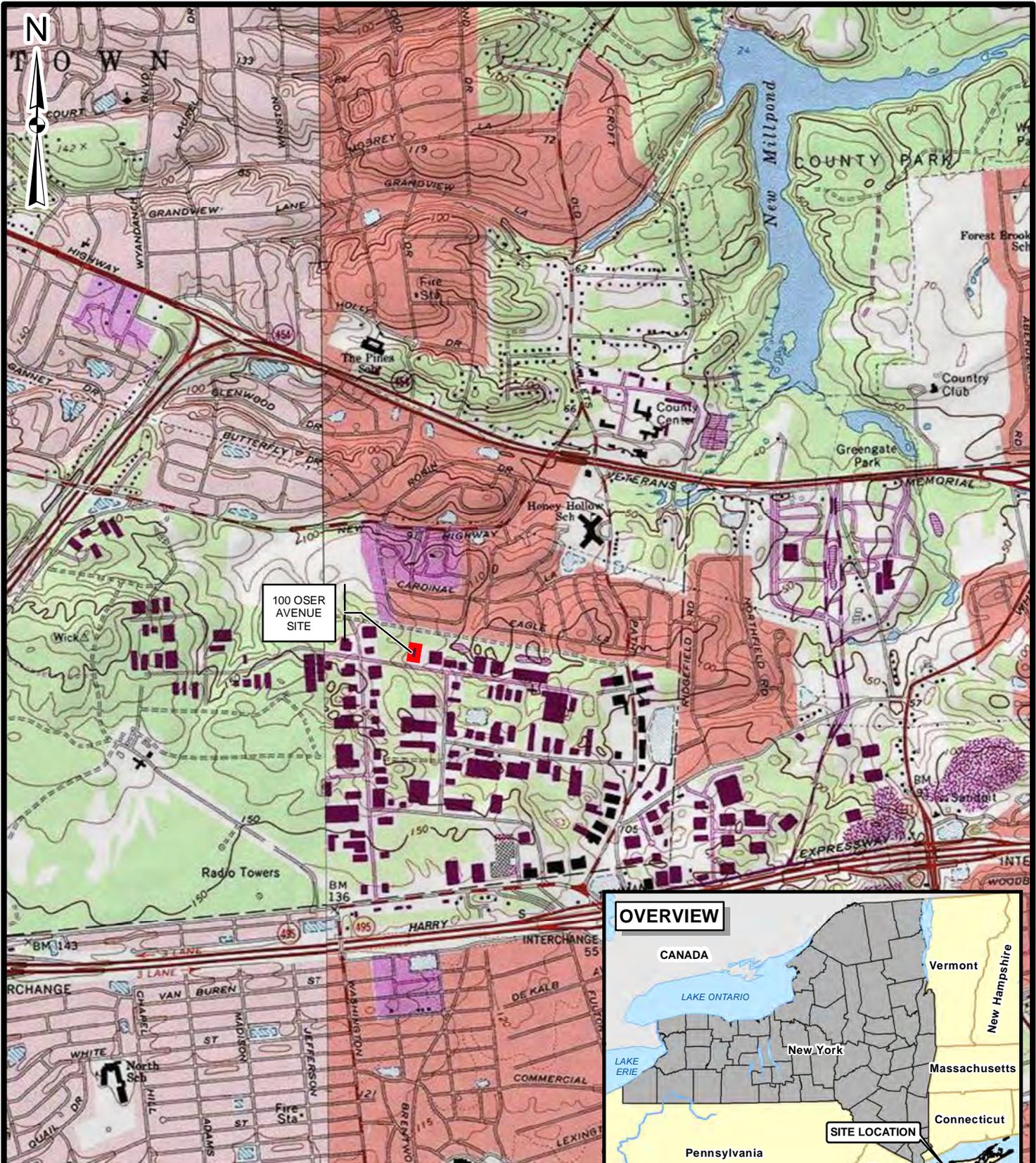
# - The minimum reporting limit in all indoor and outdoor air samples for these compounds is 0.25 microgram per cubic meter ( $\mu\text{g}/\text{m}^3$ ); the reporting limits for all other compounds are at least 1  $\mu\text{g}/\text{m}^3$ . The minimum reporting limit for all compounds in sub-slab samples is 1  $\mu\text{g}/\text{m}^3$ .

**Table 2**  
**Perchloroethene Concentrations Detected in Sub-Slab Air Samples**  
**2007/2008 and 2013/2014 Heating Seasons**  
**100 Oser Avenue OU-2 Site**

Matrix	Location ID	PCE Result (µg/m3)	PCE Result (µg/m3)
		2007/2008	2013/2014
Sub-Slab Air	H-002	0.76	1.1
	H-005	86	31
	H-018	68	39
	H-023	5.8	4.8
	H-042	1.1	0.98
	H-046	9.5	5.0
	H-057	1.6	0.81
	H-124	38	21
	H-152	1.3	1.6
	H-154	NS	0.95
	H-155	NS	29

µg/m3 - micrograms per cubic meter of perchloroethene (PCE)  
NS - Not sampled.

## **FIGURES**



SOURCE: USGS 7.5' Quadrangles:  
 Central ISLIP, New York - 1967; Greenlawn, New York - 1967.

N:\1174133.00000\DB\GIS\site\location.mxd 5/13/2014



100 OSER AVENUE OU2  
 SITE LOCATION MAP

FIGURE 1

## **APPENDIX A**

### **NYSDOH SOIL VAPOR/INDOOR AIR DECISION MATRICES**

# Soil Vapor/Indoor Air Matrix 1

October 2006

SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m <sup>3</sup> )	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m <sup>3</sup> )			
	< 0.25	0.25 to < 1	1 to < 5.0	5.0 and above
< 5	1. No further action	2. Take reasonable and practical actions to identify source(s) and reduce exposures	3. Take reasonable and practical actions to identify source(s) and reduce exposures	4. Take reasonable and practical actions to identify source(s) and reduce exposures
5 to < 50	5. No further action	6. MONITOR	7. MONITOR	8. MITIGATE
50 to < 250	9. MONITOR	10. MONITOR / MITIGATE	11. MITIGATE	12. MITIGATE
250 and above	13. MITIGATE	14. MITIGATE	15. MITIGATE	16. MITIGATE

#### No further action:

Given that the compound was not detected in the indoor air sample and that the concentration detected in the sub-slab vapor sample is not expected to significantly affect indoor air quality, no additional actions are needed to address human exposures.

#### Take reasonable and practical actions to identify source(s) and reduce exposures:

The concentration detected in the indoor air sample is likely due to indoor and/or outdoor sources rather than soil vapor intrusion given the concentration detected in the sub-slab vapor sample. Therefore, steps should be taken to identify potential source(s) and to reduce exposures accordingly (e.g., by keeping containers tightly capped or by storing volatile organic compound-containing products in places where people do not spend much time, such as a garage or outdoor shed). Resampling may be recommended to demonstrate the effectiveness of actions taken to reduce exposures.

#### MONITOR:

Monitoring, including sub-slab vapor, basement air, lowest occupied living space air, and outdoor air sampling, is needed to determine whether concentrations in the indoor air or sub-slab vapor have changed. Monitoring may also be needed to determine whether existing building conditions (e.g., positive pressure heating, ventilation and air-conditioning systems) are maintaining the desired mitigation endpoint and to determine whether changes are needed. The type and frequency of monitoring is determined on a site-specific and building-specific basis, taking into account applicable environmental data and building operating conditions. Monitoring is an interim measure required to evaluate exposures related to soil vapor intrusion until contaminated environmental media are remediated.

#### MITIGATE:

Mitigation is needed to minimize current or potential exposures associated with soil vapor intrusion. The most common mitigation methods are sealing preferential pathways in conjunction with installing a sub-slab depressurization system, and changing the pressurization of the building in conjunction with monitoring. The type, or combination of types, of mitigation is determined on a building-specific basis, taking into account building construction and operating conditions. Mitigation is considered a temporary measure implemented to address exposures related to soil vapor intrusion until contaminated environmental media are remediated.

#### MONITOR / MITIGATE:

Monitoring or mitigation may be recommended after considering the magnitude of sub-slab vapor and indoor air concentrations along with building- and site-specific conditions.

See additional notes on page 2.

## ADDITIONAL NOTES FOR MATRIX 1

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This matrix summarizes the minimum actions recommended to address current and potential exposures related to soil vapor intrusion. To use the matrix appropriately as a tool in the decision-making process, the following should be noted:

- [1] The matrix is generic. As such, it may be appropriate to modify a recommended action to accommodate building-specific conditions (e.g., dirt floor in basement, crawl spaces, etc.) and/or factors provided in Section 3.2 of the guidance (e.g., current land use, environmental conditions, etc.). For example, resampling may be recommended when the matrix indicates "no further action" for a particular building, but the results of adjacent buildings (especially sub-slab vapor results) indicate a need to take actions to address exposures related to soil vapor intrusion. Additionally, actions more protective of public health than those specified within the matrix may be proposed at any time. For example, the party implementing the actions may decide to install sub-slab depressurization systems on buildings where the matrix indicates "no further action" or "monitoring." Such an action is usually undertaken for reasons other than public health (e.g., seeking community acceptance, reducing excessive costs, etc.).
- [2] Actions provided in the matrix are specific to addressing human exposures. Implementation of these actions does not preclude investigating possible sources of vapor contamination, nor does it preclude remediating contaminated soil vapors or the source of soil vapor contamination.
- [3] Appropriate care should be taken during all aspects of sample collection to ensure that high quality data are obtained. Since the data are being used in the decision-making process, the laboratory analyzing the environmental samples must have current Environmental Laboratory Approval Program (ELAP) certification for the appropriate analyte and environmental matrix combinations. Furthermore, samples should be analyzed by methods that can achieve a minimum reporting limit of 0.25 microgram per cubic meter for indoor and outdoor air samples. For sub-slab vapor samples, a minimum reporting limit of 5 micrograms per cubic meter is recommended for buildings with full slab foundations, and 1 microgram per cubic meter for buildings with less than a full slab foundation.
- [4] Sub-slab vapor and indoor air samples are typically collected when the likelihood of soil vapor intrusion to occur is considered to be the greatest (i.e., worst-case conditions). If samples are collected at other times (typically, samples collected outside of the heating season), then resampling during worst-case conditions may be appropriate to verify that actions taken to address exposures related to soil vapor intrusion are protective of human health.
- [5] When current exposures are attributed to sources other than soil vapor intrusion, the agencies should be given documentation (e.g., applicable environmental data, completed indoor air sampling questionnaire, digital photographs, etc.) to support a proposed action other than that provided in the matrix box and to support agency assessment and follow-up.
- [6] The party responsible for implementing the recommended actions will differ depending upon several factors, including the identified source of the volatile chemicals, the environmental remediation program, and site-specific and building-specific conditions. For example, to the extent that all site data and site conditions demonstrate that soil vapor intrusion is not occurring and that the potential for soil vapor intrusion to occur is not likely, the soil vapor intrusion investigation would be considered complete. In general, if indoor exposures represent a concern due to indoor sources, then the State will provide guidance to the property owner and/or tenant on ways to reduce their exposure. If indoor exposures represent a concern due to outdoor sources, then the NYSDEC will decide who is responsible for further investigation and any necessary remediation. Depending upon the outdoor source, this responsibility may or may not fall upon the party conducting the soil vapor intrusion investigation.

# Soil Vapor/Indoor Air Matrix 2

October 2006

SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m <sup>3</sup> )	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m <sup>3</sup> )			
	< 3	3 to < 30	30 to < 100	100 and above
< 100	1. No further action	2. Take reasonable and practical actions to identify source(s) and reduce exposures	3. Take reasonable and practical actions to identify source(s) and reduce exposures	4. Take reasonable and practical actions to identify source(s) and reduce exposures
100 to < 1,000	5. MONITOR	6. MONITOR / MITIGATE	7. MITIGATE	8. MITIGATE
1,000 and above	9. MITIGATE	10. MITIGATE	11. MITIGATE	12. MITIGATE

#### No further action:

Given that the compound was not detected in the indoor air sample and that the concentration detected in the sub-slab vapor sample is not expected to significantly affect indoor air quality, no additional actions are needed to address human exposures.

#### Take reasonable and practical actions to identify source(s) and reduce exposures:

The concentration detected in the indoor air sample is likely due to indoor and/or outdoor sources rather than soil vapor intrusion given the concentration detected in the sub-slab vapor sample. Therefore, steps should be taken to identify potential source(s) and to reduce exposures accordingly (e.g., by keeping containers tightly capped or by storing volatile organic compound-containing products in places where people do not spend much time, such as a garage or outdoor shed). Resampling may be recommended to demonstrate the effectiveness of actions taken to reduce exposures.

#### MONITOR:

Monitoring, including sub-slab vapor, basement air, lowest occupied living space air, and outdoor air sampling, is needed to determine whether concentrations in the indoor air or sub-slab vapor have changed. Monitoring may also be needed to determine whether existing building conditions (e.g., positive pressure heating, ventilation and air-conditioning systems) are maintaining the desired mitigation endpoint and to determine whether changes are needed. The type and frequency of monitoring is determined on a site-specific and building-specific basis, taking into account applicable environmental data and building operating conditions. Monitoring is an interim measure required to evaluate exposures related to soil vapor intrusion until contaminated environmental media are remediated.

#### MITIGATE:

Mitigation is needed to minimize current or potential exposures associated with soil vapor intrusion. The most common mitigation methods are sealing preferential pathways in conjunction with installing a sub-slab depressurization system, and changing the pressurization of the building in conjunction with monitoring. The type, or combination of types, of mitigation is determined on a building-specific basis, taking into account building construction and operating conditions. Mitigation is considered a temporary measure implemented to address exposures related to soil vapor intrusion until contaminated environmental media are remediated.

#### MONITOR / MITIGATE:

Monitoring or mitigation may be recommended after considering the magnitude of sub-slab vapor and indoor air concentrations along with building- and site-specific conditions.

See additional notes on page 2.

## ADDITIONAL NOTES FOR MATRIX 2

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This matrix summarizes the minimum actions recommended to address current and potential exposures related to soil vapor intrusion. To use the matrix appropriately as a tool in the decision-making process, the following should be noted:

- [1] The matrix is generic. As such, it may be appropriate to modify a recommended action to accommodate building-specific conditions (e.g., dirt floor in basement, crawl spaces, etc.) and/or factors provided in Section 3.2 of the guidance (e.g., current land use, environmental conditions, etc.). For example, resampling may be recommended when the matrix indicates "no further action" for a particular building, but the results of adjacent buildings (especially sub-slab vapor results) indicate a need to take actions to address exposures related to soil vapor intrusion. Additionally, actions more protective of public health than those specified within the matrix may be proposed at any time. For example, the party implementing the actions may decide to install sub-slab depressurization systems on buildings where the matrix indicates "no further action" or "monitoring." Such an action is usually undertaken for reasons other than public health (e.g., seeking community acceptance, reducing excessive costs, etc.).
- [2] Actions provided in the matrix are specific to addressing human exposures. Implementation of these actions does not preclude investigating possible sources of vapor contamination, nor does it preclude remediating contaminated soil vapors or the source of soil vapor contamination.
- [3] Appropriate care should be taken during all aspects of sample collection to ensure that high quality data are obtained. Since the data are being used in the decision-making process, the laboratory analyzing the environmental samples must have current Environmental Laboratory Approval Program (ELAP) certification for the appropriate analyte and environmental matrix combinations. Furthermore, samples should be analyzed by methods that can achieve a minimum reporting limit of 3 micrograms per cubic meter for indoor and outdoor air samples. For sub-slab vapor samples, a minimum reporting limit of 5 micrograms per cubic meter is recommended.
- [4] Sub-slab vapor and indoor air samples are typically collected when the likelihood of soil vapor intrusion to occur is considered to be the greatest (i.e., worst-case conditions). If samples are collected at other times (typically, samples collected outside of the heating season), then resampling during worst-case conditions may be appropriate to verify that actions taken to address exposures related to soil vapor intrusion are protective of human health.
- [5] When current exposures are attributed to sources other than soil vapor intrusion, the agencies should be given documentation (e.g., applicable environmental data, completed indoor air sampling questionnaire, digital photographs, etc.) to support a proposed action other than that provided in the matrix box and to support agency assessment and follow-up.
- [6] The party responsible for implementing the recommended actions will differ depending upon several factors, including the identified source of the volatile chemicals, the environmental remediation program, and site-specific and building-specific conditions. For example, to the extent that all site data and site conditions demonstrate that soil vapor intrusion is not occurring and that the potential for soil vapor intrusion to occur is not likely, the soil vapor intrusion investigation would be considered complete. In general, if indoor exposures represent a concern due to indoor sources, then the State will provide guidance to the property owner and/or tenant on ways to reduce their exposure. If indoor exposures represent a concern due to outdoor sources, then the NYSDEC will decide who is responsible for further investigation and any necessary remediation. Depending upon the outdoor source, this responsibility may or may not fall upon the party conducting the soil vapor intrusion investigation.

## **APPENDIX B**

### **DATA USABILITY SUMMARY REPORT**

**DATA USABILITY SUMMARY REPORT**

**WORK ASSIGNMENT D007622-04**

**OPERABLE UNIT #2**

**100 OSER AVENUE**

**HAUPPAUGE, NEW YORK**

**Site No. 152162**

**Analyses Performed by:**

**CONTEST ANALYTICAL LABORATORIES, INC.  
EAST LONGMEADOW, MA**

**Prepared for:**

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF ENVIRONMENTAL REMEDIATION**

**Prepared by:**

**URS CORPORATION  
77 GOODELL STREET  
BUFFALO, NY 14203**

**MARCH 2014**

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**ATTACHMENTS**

ATTACHMENT A Validated Form 1's

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## 1.0 INTRODUCTION

This Data Usability Summary Report (DUSR) has been prepared following the guidelines provided in New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation *DER-10 Technical Guidance for Site Investigation and Remediation, Appendix 2B - Guidance for Data Deliverables and the Development of Data Usability and Summary Reports*, May 2010. Discussed in this DUSR are analytical data for 11 soil gas samples, 11 indoor air samples, 1 soil gas field duplicate (FD), 1 indoor air FD, 9 outdoor air samples, and 1 outdoor air FD collected by URS personnel on January 13-17, 2014 from the 100 Oser Avenue Operable Unit #2 site.

## 2.0 ANALYTICAL METHODOLOGIES/DATA VALIDATION PROCEDURES

All samples were sent to Contest Analytical Laboratories, Inc. (East Longmeadow, MA) for analysis. The samples were analyzed for volatile organic compounds (VOCs) following USEPA Compendium Method TO-15, *Determination of VOCs in Air Collected in Specially Prepared Canisters and Analyzed By Gas Chromatography/Mass Spectrometry (GC/MS)*.

A limited data validation was performed in accordance with following the guidelines in the following USEPA Region II document:

- *Volatile Organic Analysis of Ambient Air in Canister By Method TO-15, SOP HW-31, Rev. 4, October 2006.*

The limited validation included: a completeness review of all required deliverables; holding times; a review of quality control (QC) results [blanks, instrument tunings, calibration standards, duplicate analyses, and laboratory control sample (LCS) recoveries] to determine if the data are within the protocol-required limits and specifications; a determination that all samples were analyzed using established and agreed upon analytical protocols; an evaluation of the raw data to confirm the results provided in the data summary sheets; and a review of laboratory data qualifiers.

Qualifications applied during the validation to the data include 'J' (estimated concentration), 'UJ' (estimated quantitation limit), and 'U' (non-detect). Definitions of USEPA Region II data qualifiers are presented at the end of this text. A summary of data qualifications is provided on Table 1. The validated analytical results are presented on Tables 2 and 3. Copies of the validated laboratory results (i.e., Form

1's) are presented in Attachment A. Documentation supporting the qualification of data is presented in Attachment B. Only analytical deviations affecting data usability are discussed in this report.

### **3.0 DATA DELIVERABLE COMPLETENESS**

Full deliverable data packages (i.e., NYSDEC ASP (Category B or equivalent) were provided by the laboratory, which included all reporting forms and raw data necessary to fully evaluate and verify the reported analytical results.

### **4.0 SAMPLE RECEIPT/PRESERVATION/HOLDING TIMES**

All samples were received by the laboratory intact, properly preserved, and under proper chain-of-custody (COC). All samples were analyzed within the required holding times.

### **5.0 NON-CONFORMANCES**

#### **Instrument Calibration**

The relative standard deviation (%RSD) for acetone in the initial calibration (ICAL) associated with the samples listed on Table 1 was above the QC limit (30%). The detected results for acetone in the associated samples have been qualified 'J'.

The percent difference (%D) between the ICAL average relative response factor (RRF) and the RRF in one or more of the continuing calibration (CCAL) standards exceeded the QC limit of 30% for VOCs acetone and cyclohexane. The non-detect results for these compounds in the associated samples listed on Table 1 were qualified 'UJ'.

#### **Laboratory Blanks**

Methylene chloride was detected in the laboratory blanks associated with the samples listed on Table 1. Those samples that had concentrations less than or equal to five times the associated blank value, have been qualified 'U' at the detected value, or at the quantitation limit, whichever is higher.

#### **Laboratory Control Sample (LCS)**

The percent recoveries (%Rs) of acetone, 1,2-dibromo-3-chloropropane, 1,2-dichloropropane, 2-hexanone, isopropylbenzene, methyl acetate, methylcyclohexane, 4-methyl-2-pentanone,

and/or 1,2,4-trichlorobenzene in the LCSs were outside the QC limits. The results for these compounds in the associated samples listed on Table 1 were qualified 'J' or 'UJ'. Note the associated samples were previously qualified for acetone due to the ICAL outliers.

## 6.0 SAMPLE RESULTS AND REPORTING

All quantitation/detection limits were reported in accordance with method requirements and were adjusted for sample volume and dilution factors. Results below the quantitation limits were qualified 'J' by the laboratory.

### Field Duplicate Samples

Field duplicates were collected for samples H-046-BA, H-046-AS, and H-046-OA. Generally, similar detections and concentrations were observed in the samples and their respective field duplicates.

Note, the USEPA Region II validation guidelines do not require qualification of VOC analytical results based upon field duplicate precision.

## 7.0 SUMMARY

All sample analyses were found to be compliant with the method criteria, except where previously noted. Those results qualified 'J' or 'UJ' are considered conditionally usable. Results qualified 'U' are considered non-detect. All other sample results are usable as reported. URS does not recommend the recollection of any samples at this time.

**Prepared By:**

Ann Marie Kropovitch, Chemist

*AK*  
*PF*

**Date:** 3/10/14

**Reviewed By:**

Peter R. Fairbanks, Senior Chemist

**Date:** 3/11/14

## **DEFINITIONS OF USEPA REGION II DATA QUALIFIERS**

- U – The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- J – The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ – The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R – The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
- D – The positive value is the result of an analysis at a secondary dilution factor.

**TABLE 1**

**SUMMARY OF DATA QUALIFICATIONS**

**100 OSER AVENUE OU #2**

<b>Sample ID</b>	<b>Analytical Deviation</b>	<b>Qualification</b>
H-002-AS, H-002-BA, H-002-OA, H-005-AS, H-005-BA, H-005-OA, H-046-BA, 2014-01-13-BA (H-046-BA), H-046-OA, 2014-01-13-OA (H-046-OA), 2014-01-13-AS (H-046-AS), H-057-AS, H-057-BA, H-152-BA, H-152-OA, H-152-AS, H-154-AS, H-154-BA, and H-154-OA	ICAL %RSD > 30% for acetone.	Qualify detected results 'J'.
H-002-AS, H-002-BA, H-002-OA, H-005-AS, H-005-BA, H-005-OA, H-046-AS, 2014-01-13-AS (H-046-AS), H-046-BA, 2014-01-13-BA (H-046-BA), H-046-OA, 2014-01-13-OA (H-046-OA), H-057-AS, H-057-BA, H-152-OA, H-152-BA, H-152-AS, H-154-AS, H-154-BA, and H-154-OA	Methylene chloride detected in the laboratory blanks.	Qualify results 'U' at the detected value.
H-018-AS, H-018-BA, H-018-OA, and H-042-OA	CCAL %D > 30% for cyclohexane.	Qualify detected results 'J' and non-detected results 'UJ'.
H-023-AS, H-023-IA, H-023-OA, H-042-BA, H-042-AS, H-124-AS, H-124-BA, H-124-OA, H-155-BA, and H-155-AS	LCS %R > QC limit for acetone.	Qualify detected results 'J'.
H-023-AS, H-023-IA, H-023-OA, H-042-BA, H-042-AS, H-124-AS, H-124-BA, H-124-OA, H-155-BA, and H-155-AS	LCS %R < QC limit for isopropylbenzene.	Qualify non-detected results 'UJ'.
H-018-AS, H-018-BA, H-018-OA, and H-042-OA	LCS %R < QC limit for 1,2-dibromo-3-chloropropane, 1,2-dichloropropane, 2-hexanone, isopropylbenzene, methyl acetate, methylcyclohexane, 4-methyl-2-pentanone, and 1,2,4-trichlorobenzene.	Qualify detected results 'J' and non-detected results 'UJ'.

**TABLE 2**  
**VALIDATED AIR ANALYTICAL RESULTS**  
**OSER AVENUE SITE INVESTIGATION**

Location ID		H-002	H-002	H-005	H-005	H-018
Sample ID		H-002-BA	H-002-AS	H-005-BA	H-005-AS	H-018-BA
Matrix		Indoor Air	Sub-Slab Vapor	Indoor Air	Sub-Slab Vapor	Indoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		01/14/14	01/14/14	01/15/14	01/15/14	01/16/14
Parameter	Units					
<b>Volatile Organic Compounds</b>						
1,1,1-Trichloroethane	UG/M3	0.19 U	0.55 U	0.19 U	0.55	0.19 U
1,1,2,2-Tetrachloroethane	UG/M3	0.24 U	0.69 U	0.24 U	0.69 U	0.24 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	0.65	0.77	0.70	1.2	0.86
1,1,2-Trichloroethane	UG/M3	0.19 U	0.55 U	0.19 U	0.55 U	0.19 U
1,1-Dichloroethane	UG/M3	0.14 U	0.40 U	0.14 U	0.40 U	0.14 U
1,1-Dichloroethene	UG/M3	0.14 U	0.40 U	0.14 U	0.40 U	0.14 U
1,2,4-Trichlorobenzene	UG/M3	0.26 U	0.74 U	0.26 U	0.74 U	0.26 UJ
1,2-Dibromo-3-chloropropane	UG/M3	0.44 U	1.3 U	0.44 U	1.3 U	0.44 UJ
1,2-Dibromoethane (Ethylene dibromide)	UG/M3	0.27 U	0.77 U	0.27 U	0.77 U	0.27 U
1,2-Dichlorobenzene	UG/M3	0.21 U	0.60 U	0.21 U	0.60 U	0.21 U
1,2-Dichloroethane	UG/M3	0.14	0.40 U	0.14	0.40 U	0.14 U
1,2-Dichloroethene (cis)	UG/M3	0.14 U	0.40 U	0.14 U	0.40 U	0.14 U
1,2-Dichloroethene (trans)	UG/M3	0.14 U	0.40 U	0.14 U	0.40 U	0.14 U
1,2-Dichloropropane	UG/M3	0.16 U	0.46 U	0.16 U	0.46 U	0.16 UJ
1,3-Dichlorobenzene	UG/M3	0.21 U	0.60 U	0.21 U	0.60 U	0.21 U
1,3-Dichloropropene (cis)	UG/M3	0.16 U	0.45 U	0.16 U	0.45 U	0.16 U
1,3-Dichloropropene (trans)	UG/M3	0.16 U	0.45 U	0.16 U	0.45 U	0.16 U
1,4-Dichlorobenzene	UG/M3	0.21 U	0.60 U	0.21 U	0.60 U	0.21 U
2-Hexanone	UG/M3	0.57	0.74	0.83	0.90	0.39 J
4-Methyl-2-pentanone	UG/M3	0.29	0.41 U	0.43	0.41 U	0.14 UJ
Acetone	UG/M3	29 J	31 J	57 J	44 J	38
Benzene	UG/M3	1.6	0.64	1.4	0.32 U	0.99
Bromodichloromethane	UG/M3	0.24 U	0.67 U	0.24 U	3.9	0.24 U

Flags assigned during chemistry validation are shown

Made By: AMK 3/7/14

Checked By: PRF 3/7/14

**Detection Limits shown are PQL**

**TABLE 2**  
**VALIDATED AIR ANALYTICAL RESULTS**  
**OSER AVENUE SITE INVESTIGATION**

Location ID		H-002	H-002	H-005	H-005	H-018
Sample ID		H-002-BA	H-002-AS	H-005-BA	H-005-AS	H-018-BA
Matrix		Indoor Air	Sub-Slab Vapor	Indoor Air	Sub-Slab Vapor	Indoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		01/14/14	01/14/14	01/15/14	01/15/14	01/16/14
Parameter	Units					
<b>Volatile Organic Compounds</b>						
Bromoform	UG/M3	0.36 U	1.0 U	0.36 U	1.0 U	0.36 U
Bromomethane	UG/M3	0.14 U	0.39 U	0.14 U	0.39 U	0.14 U
Carbon disulfide	UG/M3	1.1 U	3.1 U	1.1 U	3.1 U	1.1 U
Carbon tetrachloride	UG/M3	0.40	0.63 U	0.53	3.3	0.52
Chlorobenzene	UG/M3	0.16 U	0.46 U	0.16 U	0.46 U	0.16 U
Chloroethane	UG/M3	0.09 U	0.26 U	0.09 U	0.26 U	0.09 U
Chloroform	UG/M3	0.17 U	0.49 U	2.0	1,400	0.17 U
Chloromethane	UG/M3	0.88	0.54	0.88	0.45	1.1
Cyclohexane	UG/M3	0.77	0.34 U	0.51	0.34 U	0.53 J
Dibromochloromethane	UG/M3	0.30 U	0.85 U	0.30 U	0.85 U	0.30 U
Dichlorodifluoromethane	UG/M3	1.3	1.9	1.3	2.1	2.3
Ethylbenzene	UG/M3	0.58	0.52	0.70	0.52	0.21
Isopropylbenzene (Cumene)	UG/M3	0.44 U	1.2 U	0.44 U	1.2 U	0.44 UJ
m&p-Xylene	UG/M3	1.7	2.3	2.3	2.4	0.62
Methyl acetate	UG/M3	0.44 U	1.2 U	0.44 U	1.2 U	0.44 UJ
Methyl ethyl ketone (2-Butanone)	UG/M3	4.1 U	12 U	7.1	12 U	6.3
Methyl tert-butyl ether	UG/M3	0.13 U	0.36 U	0.13 U	0.36 U	0.13 U
Methylcyclohexane	UG/M3	0.73	1.3 U	0.62	1.3 U	0.57 J
Methylene chloride	UG/M3	3.2 U	4.4 U	3.6 U	4.0 U	1.9
o-Xylene	UG/M3	0.61	1.5	0.79	1.3	0.23
Styrene	UG/M3	0.15 U	0.51	0.18	0.43 U	0.15 U
Tetrachloroethene	UG/M3	0.24 U	1.1	1.1	31	1.5
Tetrahydrofuran	UG/M3	0.12	0.29 U	0.17	0.29 U	4.3

Flags assigned during chemistry validation are shown.

Made By: AMK 3/7/14

Checked By: PRF 3/7/14

**Detection Limits shown are PQL**

**TABLE 2**  
**VALIDATED AIR ANALYTICAL RESULTS**  
**OSER AVENUE SITE INVESTIGATION**

Location ID		H-002	H-002	H-005	H-005	H-018
Sample ID		H-002-BA	H-002-AS	H-005-BA	H-005-AS	H-018-BA
Matrix		Indoor Air	Sub-Slab Vapor	Indoor Air	Sub-Slab Vapor	Indoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		01/14/14	01/14/14	01/15/14	01/15/14	01/16/14
Parameter	Units					
<b>Volatile Organic Compounds</b>						
Toluene	UG/M3	3.9	54	8.0	46	1.6
Trichloroethene	UG/M3	0.19 U	0.54 U	0.26	0.54 U	0.19 U
Trichlorofluoromethane	UG/M3	1.4	2.5	1.7	1.5	2.0
Vinyl chloride	UG/M3	0.09 U	0.26 U	0.09 U	0.26 U	0.09 U

Flags assigned during chemistry validation are shown.

Made By: AMK 3/7/14

Checked By: PRF 3/7/14

**Detection Limits shown are PQL**

**TABLE 2**  
**VALIDATED AIR ANALYTICAL RESULTS**  
**OSER AVENUE SITE INVESTIGATION**

Location ID		H-018	H-023	H-023	H-042	H-042
Sample ID		H-018-AS	H-023-IA	H-023-AS	H-042-BA	H-042-AS
Matrix		Sub-Slab Vapor	Indoor Air	Sub-Slab Vapor	Indoor Air	Sub-Slab Vapor
Depth Interval (ft)		-	-	-	-	-
Date Sampled		01/16/14	01/17/14	01/17/14	01/16/14	01/16/14
Parameter	Units					
<b>Volatile Organic Compounds</b>						
1,1,1-Trichloroethane	UG/M3	0.79	0.19 U	0.82	0.19 U	0.55 U
1,1,2,2-Tetrachloroethane	UG/M3	0.69 U	0.24 U	0.69 U	0.24 U	0.69 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	3.6	0.58	1.1	0.89	0.77 U
1,1,2-Trichloroethane	UG/M3	0.55 U	0.19 U	0.55 U	0.19 U	0.55 U
1,1-Dichloroethane	UG/M3	0.40 U	0.14 U	0.40 U	0.14 U	0.40 U
1,1-Dichloroethene	UG/M3	0.40 U	0.14 U	0.40 U	0.14 U	0.40 U
1,2,4-Trichlorobenzene	UG/M3	0.74 UJ	0.26 U	0.74 U	0.26 U	0.74 U
1,2-Dibromo-3-chloropropane	UG/M3	1.3 UJ	0.44 U	1.3 U	0.44 U	1.3 U
1,2-Dibromoethane (Ethylene dibromide)	UG/M3	0.77 U	0.27 U	0.77 U	0.27 U	0.77 U
1,2-Dichlorobenzene	UG/M3	0.60 U	0.21 U	0.60 U	0.21 U	0.60 U
1,2-Dichloroethane	UG/M3	0.40 U	0.33	0.40 U	0.15	0.40 U
1,2-Dichloroethene (cis)	UG/M3	0.40 U	0.14 U	0.40 U	0.14 U	0.40 U
1,2-Dichloroethene (trans)	UG/M3	0.40 U	0.14 U	0.40 U	0.14 U	0.40 U
1,2-Dichloropropane	UG/M3	0.46 UJ	0.16 U	0.46 U	0.16 U	0.46 U
1,3-Dichlorobenzene	UG/M3	0.60 U	0.21 U	0.60 U	0.21 U	0.60 U
1,3-Dichloropropene (cis)	UG/M3	0.45 U	0.16 U	0.45 U	0.16 U	0.45 U
1,3-Dichloropropene (trans)	UG/M3	0.45 U	0.16 U	0.45 U	0.16 U	0.45 U
1,4-Dichlorobenzene	UG/M3	0.60 U	0.21 U	0.60 U	0.21 U	0.60 U
2-Hexanone	UG/M3	1.9 J	0.42	0.41 U	0.37	0.41 U
4-Methyl-2-pentanone	UG/M3	0.50 J	0.51	0.41 U	0.41	0.41 U
Acetone	UG/M3	62	79 J	22 J	66 J	53 J
Benzene	UG/M3	0.33	1.6	0.35	1.5	0.40
Bromodichloromethane	UG/M3	0.67 U	0.24 U	0.67 U	0.24 U	0.67 U

Flags assigned during chemistry validation are shown

Made By: AMK 3/7/14

Checked By: PRF 3/7/14

Detection Limits shown are PQL

**TABLE 2**  
**VALIDATED AIR ANALYTICAL RESULTS**  
**OSER AVENUE SITE INVESTIGATION**

Location ID		H-018	H-023	H-023	H-042	H-042
Sample ID		H-018-AS	H-023-IA	H-023-AS	H-042-BA	H-042-AS
Matrix		Sub-Slab Vapor	Indoor Air	Sub-Slab Vapor	Indoor Air	Sub-Slab Vapor
Depth Interval (ft)		-	-	-	-	-
Date Sampled		01/16/14	01/17/14	01/17/14	01/16/14	01/16/14
Parameter	Units					
<b>Volatile Organic Compounds</b>						
Bromoform	UG/M3	1.0 U	0.36 U	1.0 U	0.36 U	1.0 U
Bromomethane	UG/M3	0.39 U	0.14 U	0.39 U	0.14 U	0.39 U
Carbon disulfide	UG/M3	3.1 U	1.1 U	3.1 U	1.1 U	3.1 U
Carbon tetrachloride	UG/M3	0.63 U	0.56	0.63 U	0.63	0.63 U
Chlorobenzene	UG/M3	0.46 U	0.16 U	0.46 U	0.16 U	0.46 U
Chloroethane	UG/M3	0.26 U	0.09 U	0.26 U	0.09 U	0.26 U
Chloroform	UG/M3	8.5	0.20	20	0.17 U	0.49 U
Chloromethane	UG/M3	0.41 U	1.0	0.41 U	1.2	0.41 U
Cyclohexane	UG/M3	0.34 UJ	0.62	0.34 U	0.95	0.34 U
Dibromochloromethane	UG/M3	0.85 U	0.30 U	0.85 U	0.30 U	0.85 U
Dichlorodifluoromethane	UG/M3	2.9	2.5	2.8	2.8	2.5
Ethylbenzene	UG/M3	0.51	2.0	0.43 U	1.5	0.43 U
Isopropylbenzene (Cumene)	UG/M3	1.2 UJ	0.44 UJ	1.2 UJ	0.44 UJ	1.2 UJ
m&p-Xylene	UG/M3	2.5	7.3	0.88	5.3	1.9
Methyl acetate	UG/M3	1.2 UJ	1.5	1.2 U	0.44 U	1.2 U
Methyl ethyl ketone (2-Butanone)	UG/M3	12 U	9.5	12 U	5.1	12 U
Methyl tert-butyl ether	UG/M3	0.36 U	0.13 U	0.36 U	0.13 U	0.36 U
Methylcyclohexane	UG/M3	1.3 UJ	1.8	1.3 U	1.7	1.3 U
Methylene chloride	UG/M3	3.5 U	31	3.5 U	2.8	3.5 U
o-Xylene	UG/M3	1.3	2.5	0.43 U	1.8	0.96
Styrene	UG/M3	0.43 U	0.23	0.43 U	0.15 U	0.43 U
Tetrachloroethene	UG/M3	39	0.75	4.8	0.49	0.98
Tetrahydrofuran	UG/M3	0.29 U	0.38	0.29 U	0.17	0.29 U

Flags assigned during chemistry validation are shown.

Made By: AMK 3/7/14

Checked By: PRF 3/7/14

**Detection Limits shown are PQL**

**TABLE 2**  
**VALIDATED AIR ANALYTICAL RESULTS**  
**OSER AVENUE SITE INVESTIGATION**

Location ID		H-018	H-023	H-023	H-042	H-042
Sample ID		H-018-AS	H-023-IA	H-023-AS	H-042-BA	H-042-AS
Matrix		Sub-Slab Vapor	Indoor Air	Sub-Slab Vapor	Indoor Air	Sub-Slab Vapor
Depth Interval (ft)		-	-	-	-	-
Date Sampled		01/16/14	01/17/14	01/17/14	01/16/14	01/16/14
Parameter	Units					
Volatile Organic Compounds						
Toluene	UG/M3	75	16	4.1	7.8	65
Trichloroethene	UG/M3	0.54 U	0.19 U	0.54 U	0.19 U	0.54 U
Trichlorofluoromethane	UG/M3	2.2	2.6	2.3	1.9	1.6
Vinyl chloride	UG/M3	0.26 U	0.09 U	0.26 U	0.09 U	0.26 U

Flags assigned during chemistry validation are shown.

Made By: AMK 3/7/14

Checked By: PRF 3/7/14

**Detection Limits shown are PQL**

**TABLE 2**  
**VALIDATED AIR ANALYTICAL RESULTS**  
**OSER AVENUE SITE INVESTIGATION**

Location ID		H-046	H-046	H-046	H-046	H-057
Sample ID		2014-01-13-BA	H-046-BA	2014-01-13-AS	H-046-AS	H-057-BA
Matrix		Indoor Air	Indoor Air	Sub-Slab Vapor	Sub-Slab Vapor	Indoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		01/14/14	01/14/14	01/14/14	01/14/14	01/14/14
Parameter	Units	Field Duplicate (1-1)		Field Duplicate (1-1)		
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/M3	2.1	2.1	0.76	0.65	0.84
1,1,2,2-Tetrachloroethane	UG/M3	0.24 U	0.24 U	0.69 U	0.69 U	0.24 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	0.65	0.65	0.77 U	0.77 U	0.65
1,1,2-Trichloroethane	UG/M3	0.19 U	0.19 U	0.55 U	0.55 U	0.19 U
1,1-Dichloroethane	UG/M3	0.14 U	0.14 U	0.40 U	0.40 U	0.14 U
1,1-Dichloroethene	UG/M3	0.14 U	0.14 U	0.40 U	0.40 U	0.14 U
1,2,4-Trichlorobenzene	UG/M3	0.26 U	0.26 U	0.74 U	0.74 U	0.26 U
1,2-Dibromo-3-chloropropane	UG/M3	0.44 U	0.44 U	1.3 U	1.3 U	0.44 U
1,2-Dibromoethane (Ethylene dibromide)	UG/M3	0.27 U	0.27 U	0.77 U	0.77 U	0.27 U
1,2-Dichlorobenzene	UG/M3	0.21 U	0.21 U	0.60 U	0.60 U	0.21 U
1,2-Dichloroethane	UG/M3	0.28	0.31	0.40 U	0.40 U	1.5
1,2-Dichloroethene (cis)	UG/M3	0.14 U	0.14 U	0.40 U	0.40 U	0.14 U
1,2-Dichloroethene (trans)	UG/M3	0.14 U	0.14 U	0.40 U	0.40 U	0.14 U
1,2-Dichloropropane	UG/M3	0.16 U	0.16 U	0.46 U	0.46 U	0.16 U
1,3-Dichlorobenzene	UG/M3	0.21 U	0.21 U	0.60 U	0.60 U	0.21 U
1,3-Dichloropropene (cis)	UG/M3	0.16 U	0.16 U	0.45 U	0.45 U	0.16 U
1,3-Dichloropropene (trans)	UG/M3	0.16 U	0.16 U	0.45 U	0.45 U	0.16 U
1,4-Dichlorobenzene	UG/M3	0.21 U	0.21 U	0.60 U	0.60 U	0.21 U
2-Hexanone	UG/M3	0.14 U	0.14 U	1.3	0.49	0.69
4-Methyl-2-pentanone	UG/M3	0.29	0.14 U	0.41	0.41 U	0.37
Acetone	UG/M3	24 J	24 J	35 J	9.5 U	65 J
Benzene	UG/M3	15	15	0.32 U	0.38	5.1
Bromodichloromethane	UG/M3	0.24 U	0.24 U	0.67 U	0.67 U	0.24 U

Flags assigned during chemistry validation are shown.

Made By: AMK 3/7/14

Checked By: PRF 3/7/14

Detection Limits shown are PQL

**TABLE 2  
VALIDATED AIR ANALYTICAL RESULTS  
OSER AVENUE SITE INVESTIGATION**

Location ID		H-046	H-046	H-046	H-046	H-057
Sample ID		2014-01-13-BA	H-046-BA	2014-01-13-AS	H-046-AS	H-057-BA
Matrix		Indoor Air	Indoor Air	Sub-Slab Vapor	Sub-Slab Vapor	Indoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		01/14/14	01/14/14	01/14/14	01/14/14	01/14/14
Parameter	Units	Field Duplicate (1-1)		Field Duplicate (1-1)		
<b>Volatile Organic Compounds</b>						
Bromoform	UG/M3	0.36 U	0.36 U	1.0 U	1.0 U	0.36 U
Bromomethane	UG/M3	0.14 U	0.14 U	0.39 U	0.39 U	0.14 U
Carbon disulfide	UG/M3	1.1 U	1.1 U	3.1 U	3.1 U	1.1 U
Carbon tetrachloride	UG/M3	0.40	0.40	0.63 U	0.63 U	0.44
Chlorobenzene	UG/M3	0.16 U	0.16 U	0.46 U	0.46 U	0.16 U
Chloroethane	UG/M3	0.09 U	0.09 U	0.26 U	0.26 U	0.09 U
Chloroform	UG/M3	0.41	0.41	0.49 U	0.49 U	2.2
Chloromethane	UG/M3	0.81	0.81	0.41 U	0.41 U	0.87
Cyclohexane	UG/M3	5.7	5.7	0.34 U	0.34 U	3.8
Dibromochloromethane	UG/M3	0.30 U	0.30 U	0.85 U	0.85 U	0.30 U
Dichlorodifluoromethane	UG/M3	1.5	1.4	1.9	1.9	1.3
Ethylbenzene	UG/M3	12	13	0.43 U	0.43 U	4.5
Isopropylbenzene (Cumene)	UG/M3	1.4	1.4	1.2 U	1.2 U	0.44 U
m&p-Xylene	UG/M3	45	45	2.0	1.9	14
Methyl acetate	UG/M3	0.70	0.70	1.2 U	1.2 U	0.98
Methyl ethyl ketone (2-Butanone)	UG/M3	4.1 U	4.1 U	12 U	12 U	4.1 U
Methyl tert-butyl ether	UG/M3	0.13 U	0.13 U	0.36 U	0.36 U	0.13 U
Methylcyclohexane	UG/M3	7.3	7.2	1.3 U	1.3 U	4.8
Methylene chloride	UG/M3	2.9 U	2.9 U	4.9 U	4.0 U	3.3 U
o-Xylene	UG/M3	15	15	1.0	0.96	4.8
Styrene	UG/M3	0.18	0.21	0.43 U	0.43 U	0.18
Tetrachloroethene	UG/M3	0.24 U	0.24 U	5.0	4.7	0.24 U
Tetrahydrofuran	UG/M3	0.23	0.27	0.29 U	0.29 U	0.10 U

Flags assigned during chemistry validation are shown.

Made By: AMK 3/7/14  
Checked By: PRF 3/7/14

**Detection Limits shown are PQL**

**TABLE 2  
VALIDATED AIR ANALYTICAL RESULTS  
OSER AVENUE SITE INVESTIGATION**

Location ID		H-046	H-046	H-046	H-046	H-057
Sample ID		2014-01-13-BA	H-046-BA	2014-01-13-AS	H-046-AS	H-057-BA
Matrix		Indoor Air	Indoor Air	Sub-Slab Vapor	Sub-Slab Vapor	Indoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		01/14/14	01/14/14	01/14/14	01/14/14	01/14/14
Parameter	Units	Field Duplicate (1-1)		Field Duplicate (1-1)		
Volatile Organic Compounds						
Toluene	UG/M3	91	92	30	29	34
Trichloroethene	UG/M3	0.19 U	0.19 U	0.54 U	0.54 U	0.19 U
Trichlorofluoromethane	UG/M3	3.9	4.5	1.6	1.6	1.3
Vinyl chloride	UG/M3	0.09 U	0.09 U	0.26 U	0.26 U	0.09 U

Flags assigned during chemistry validation are shown

Made By: AMK 3/7/14

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**Detection Limits shown are PQL**

**TABLE 2**  
**VALIDATED AIR ANALYTICAL RESULTS**  
**OSER AVENUE SITE INVESTIGATION**

Location ID		H-057	H-124	H-124	H-152	H-152
Sample ID		H-057-AS	H-124-BA	H-124-AS	H-152-BA	H-152-AS
Matrix		Sub-Slab Vapor	Indoor Air	Sub-Slab Vapor	Indoor Air	Sub-Slab Vapor
Depth Interval (ft)		-	-	-	-	-
Date Sampled		01/14/14	01/17/14	01/17/14	01/13/14	01/13/14
Parameter	Units					
<b>Volatile Organic Compounds</b>						
1,1,1-Trichloroethane	UG/M3	0.55 U	0.19 U	2.6	1.1	0.55 U
1,1,2,2-Tetrachloroethane	UG/M3	0.69 U	0.24 U	0.69 U	0.24 U	0.69 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	1.1	0.59	1.8	0.59	0.92
1,1,2-Trichloroethane	UG/M3	0.55 U	0.19 U	0.55 U	0.19 U	0.55 U
1,1-Dichloroethane	UG/M3	0.40 U	0.14 U	0.40 U	0.14 U	0.40 U
1,1-Dichloroethene	UG/M3	0.40 U	0.14 U	0.40 U	0.14 U	0.40 U
1,2,4-Trichlorobenzene	UG/M3	0.74 U	0.26 U	0.74 U	0.26 U	0.74 U
1,2-Dibromo-3-chloropropane	UG/M3	1.3 U	0.44 U	1.3 U	0.44 U	1.3 U
1,2-Dibromoethane (Ethylene dibromide)	UG/M3	0.77 U	0.27 U	0.77 U	0.27 U	0.77 U
1,2-Dichlorobenzene	UG/M3	0.60 U	0.21 U	0.60 U	0.21 U	0.60 U
1,2-Dichloroethane	UG/M3	0.40 U	0.63	0.40 U	0.14 U	0.40 U
1,2-Dichloroethene (cis)	UG/M3	0.40 U	0.14 U	0.40 U	0.14 U	0.40 U
1,2-Dichloroethene (trans)	UG/M3	0.40 U	0.14 U	0.40 U	0.14 U	0.40 U
1,2-Dichloropropane	UG/M3	0.46 U	0.16 U	0.46 U	0.16 U	0.46 U
1,3-Dichlorobenzene	UG/M3	0.60 U	0.21 U	0.60 U	12	0.72
1,3-Dichloropropene (cis)	UG/M3	0.45 U	0.16 U	0.45 U	0.16 U	0.45 U
1,3-Dichloropropene (trans)	UG/M3	0.45 U	0.16 U	0.45 U	0.16 U	0.45 U
1,4-Dichlorobenzene	UG/M3	0.60 U	0.21 U	0.60 U	17	0.72
2-Hexanone	UG/M3	0.41 U	0.73	0.66	0.63	0.9
4-Methyl-2-pentanone	UG/M3	0.41 U	0.37	0.41 U	0.29	0.41
Acetone	UG/M3	22 J	55 J	28 J	26 J	41 J
Benzene	UG/M3	0.32 U	1.9	0.93	4.3	0.77
Bromodichloromethane	UG/M3	0.67 U	0.24 U	2.0	0.38	0.67 U

Flags assigned during chemistry validation are shown.

Made By: AMK 3/7/14

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Detection Limits shown are PQL

**TABLE 2**  
**VALIDATED AIR ANALYTICAL RESULTS**  
**OSER AVENUE SITE INVESTIGATION**

Location ID		H-057	H-124	H-124	H-152	H-152
Sample ID		H-057-AS	H-124-BA	H-124-AS	H-152-BA	H-152-AS
Matrix		Sub-Slab Vapor	Indoor Air	Sub-Slab Vapor	Indoor Air	Sub-Slab Vapor
Depth Interval (ft)		-	-	-	-	-
Date Sampled		01/14/14	01/17/14	01/17/14	01/13/14	01/13/14
Parameter	Units					
<b>Volatile Organic Compounds</b>						
Bromoform	UG/M3	1.0 U	0.36 U	1.0 U	0.36 U	1.0 U
Bromomethane	UG/M3	0.39 U	0.14 U	0.39 U	0.14 U	0.39 U
Carbon disulfide	UG/M3	3.1 U	1.1 U	3.1 U	1.1 U	3.1 U
Carbon tetrachloride	UG/M3	0.63 U	0.54	0.63 U	0.40	0.63 U
Chlorobenzene	UG/M3	0.46 U	0.16 U	0.46 U	0.16 U	0.46 U
Chloroethane	UG/M3	0.26 U	0.09 U	0.26 U	0.09 U	0.26 U
Chloroform	UG/M3	310	0.31	43	0.17 U	1.2
Chloromethane	UG/M3	0.41 U	1.4	0.41 U	0.9	0.41 U
Cyclohexane	UG/M3	0.41	0.12 U	0.34 U	3.0	0.34 U
Dibromochloromethane	UG/M3	0.85 U	0.30 U	0.85 U	0.30 U	0.85 U
Dichlorodifluoromethane	UG/M3	2.0	2.5	2.9	1.4	2.0
Ethylbenzene	UG/M3	0.43 U	0.40	0.44	5.3	0.69
Isopropylbenzene (Cumene)	UG/M3	1.2 U	0.44 UJ	1.2 UJ	0.55	1.2 U
m&p-Xylene	UG/M3	1.8	1.2	2.4	17	2.8
Methyl acetate	UG/M3	1.2 U	0.44 U	1.2 U	0.44 U	1.2 U
Methyl ethyl ketone (2-Butanone)	UG/M3	12 U	5.2	12 U	4.1 U	12 U
Methyl tert-butyl ether	UG/M3	0.36 U	0.13 U	0.36 U	0.13 U	0.36 U
Methylcyclohexane	UG/M3	1.3 U	0.44 U	1.3 U	4.6	1.3 U
Methylene chloride	UG/M3	4.7 U	1.9	3.5 U	2.9 U	4.8 U
o-Xylene	UG/M3	0.61	0.42	1.3	7.2	1.1
Styrene	UG/M3	0.43 U	0.23	0.43 U	0.15 U	0.43 U
Tetrachloroethene	UG/M3	0.81	0.81	21	3.8	1.6
Tetrahydrofuran	UG/M3	0.29 U	0.14	0.29 U	0.10 U	0.29 U

Flags assigned during chemistry validation are shown.

Made By: AMK 3/7/14

Checked By: PRF 3/7/14

**Detection Limits shown are PQL**

**TABLE 2**  
**VALIDATED AIR ANALYTICAL RESULTS**  
**OSER AVENUE SITE INVESTIGATION**

Location ID		H-057	H-124	H-124	H-152	H-152
Sample ID		H-057-AS	H-124-BA	H-124-AS	H-152-BA	H-152-AS
Matrix		Sub-Slab Vapor	Indoor Air	Sub-Slab Vapor	Indoor Air	Sub-Slab Vapor
Depth Interval (ft)		-	-	-	-	-
Date Sampled		01/14/14	01/17/14	01/17/14	01/13/14	01/13/14
Parameter	Units					
<b>Volatile Organic Compounds</b>						
Toluene	UG/M3	12	4.1	68	26	12
Trichloroethene	UG/M3	0.54 U	0.19 U	0.54 U	0.19 U	0.54 U
Trichlorofluoromethane	UG/M3	3.4	1.7	2.0	1.7	1.5
Vinyl chloride	UG/M3	0.26 U	0.09 U	0.26 U	0.09 U	0.26 U

Flags assigned during chemistry validation are shown.

Made By: AMK 3/7/14

Checked By: PRF 3/7/14

**Detection Limits shown are PQL**

**TABLE 2  
VALIDATED AIR ANALYTICAL RESULTS  
OSER AVENUE SITE INVESTIGATION**

Location ID		H-154	H-154	H-155	H-155
Sample ID		H-154-BA	H-154-AS	H-155-BA	H-155-AS
Matrix		Indoor Air	Sub-Slab Vapor	Indoor Air	Sub-Slab Vapor
Depth Interval (ft)		-	-	-	-
Date Sampled		01/14/14	01/14/14	01/15/14	01/15/14
Parameter	Units				
<b>Volatile Organic Compounds</b>					
1,1,1-Trichloroethane	UG/M3	1.3	0.87	0.36	0.62
1,1,2,2-Tetrachloroethane	UG/M3	0.24 U	0.69 U	0.24 U	0.69 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	4.2	1.7	0.74	0.78
1,1,2-Trichloroethane	UG/M3	0.19 U	0.55 U	0.19 U	0.55 U
1,1-Dichloroethane	UG/M3	0.14 U	0.40 U	0.14 U	0.40 U
1,1-Dichloroethene	UG/M3	0.14 U	0.40 U	0.14 U	0.40 U
1,2,4-Trichlorobenzene	UG/M3	0.26 U	0.74 U	0.26 U	0.74 U
1,2-Dibromo-3-chloropropane	UG/M3	0.44 U	1.3 U	0.44 U	1.3 U
1,2-Dibromoethane (Ethylene dibromide)	UG/M3	0.27 U	0.77 U	0.27 U	0.77 U
1,2-Dichlorobenzene	UG/M3	0.21 U	0.60 U	0.21 U	0.60 U
1,2-Dichloroethane	UG/M3	0.14 U	0.40 U	0.14 U	0.40 U
1,2-Dichloroethene (cis)	UG/M3	0.14 U	0.40 U	0.14 U	0.40 U
1,2-Dichloroethene (trans)	UG/M3	0.14 U	0.40 U	0.14 U	0.40 U
1,2-Dichloropropane	UG/M3	0.16 U	0.46 U	0.16 U	0.46 U
1,3-Dichlorobenzene	UG/M3	0.21 U	0.60 U	0.21 U	0.60 U
1,3-Dichloropropene (cis)	UG/M3	0.16 U	0.45 U	0.16 U	0.45 U
1,3-Dichloropropene (trans)	UG/M3	0.16 U	0.45 U	0.16 U	0.45 U
1,4-Dichlorobenzene	UG/M3	0.21 U	0.60 U	0.21 U	0.60 U
2-Hexanone	UG/M3	0.86	0.9	2.9	0.86
4-Methyl-2-pentanone	UG/M3	0.34	0.57	0.96	0.41 U
Acetone	UG/M3	76 J	62 J	98 J	54 J
Benzene	UG/M3	3.2	1.8	3.0	0.32 U
Bromodichloromethane	UG/M3	0.24 U	0.67 U	0.24 U	0.67 U

Flags assigned during chemistry validation are shown.

Made By: AMK 3/7/14

Checked By: PRF 3/7/14

**Detection Limits shown are PQL**

**TABLE 2**  
**VALIDATED AIR ANALYTICAL RESULTS**  
**OSER AVENUE SITE INVESTIGATION**

Location ID		H-154	H-154	H-155	H-155
Sample ID		H-154-BA	H-154-AS	H-155-BA	H-155-AS
Matrix		Indoor Air	Sub-Slab Vapor	Indoor Air	Sub-Slab Vapor
Depth Interval (ft)		-	-	-	-
Date Sampled		01/14/14	01/14/14	01/15/14	01/15/14
Parameter	Units				
<b>Volatile Organic Compounds</b>					
Bromoform	UG/M3	0.36 U	1.0 U	0.36 U	1.0 U
Bromomethane	UG/M3	0.14 U	0.39 U	0.14 U	0.39 U
Carbon disulfide	UG/M3	1.1 U	3.1 U	1.1 U	3.1 U
Carbon tetrachloride	UG/M3	0.44	0.63 U	0.73	0.63 U
Chlorobenzene	UG/M3	0.16 U	0.46 U	0.16 U	0.46 U
Chloroethane	UG/M3	0.09 U	0.26 U	0.09 U	0.26 U
Chloroform	UG/M3	0.21	0.49 U	0.19	0.99
Chloromethane	UG/M3	0.99	0.41 U	1.1	0.41 U
Cyclohexane	UG/M3	2.4	0.34 U	1.4	0.34 U
Dibromochloromethane	UG/M3	0.30 U	0.85 U	0.30 U	0.85 U
Dichlorodifluoromethane	UG/M3	1.9	2.3	2.6	2.6
Ethylbenzene	UG/M3	3.3	0.43 U	2.2	0.43 U
Isopropylbenzene (Cumene)	UG/M3	0.44 U	1.2 U	0.44 UJ	1.2 UJ
m&p-Xylene	UG/M3	11	1.6	7.6	2.0
Methyl acetate	UG/M3	0.91	1.2 U	1.0	1.2 U
Methyl ethyl ketone (2-Butanone)	UG/M3	10	12 U	13	12 U
Methyl tert-butyl ether	UG/M3	0.13 U	0.36 U	0.13 U	0.36 U
Methylcyclohexane	UG/M3	5.0	1.3 U	2.3	1.3 U
Methylene chloride	UG/M3	3.7 U	4.4 U	2.3	3.5 U
o-Xylene	UG/M3	4	0.96	2.5	0.73
Styrene	UG/M3	0.15 U	0.43 U	0.59	0.43 U
Tetrachloroethene	UG/M3	1.9	0.95	1.5	29
Tetrahydrofuran	UG/M3	1.8	0.29 U	0.14	0.29 U

Flags assigned during chemistry validation are shown

Made By: AMK 3/7/14

Checked By: PRF 3/7/14

**Detection Limits shown are PQL**

**TABLE 2**  
**VALIDATED AIR ANALYTICAL RESULTS**  
**OSER AVENUE SITE INVESTIGATION**

Location ID		H-154	H-154	H-155	H-155
Sample ID		H-154-BA	H-154-AS	H-155-BA	H-155-AS
Matrix		Indoor Air	Sub-Slab Vapor	Indoor Air	Sub-Slab Vapor
Depth Interval (ft)		-	-	-	-
Date Sampled		01/14/14	01/14/14	01/15/14	01/15/14
Parameter	Units				
<b>Volatile Organic Compounds</b>					
Toluene	UG/M3	19	27	21	5.9
Trichloroethene	UG/M3	1.2	0.54 U	0.36	0.54 U
Trichlorofluoromethane	UG/M3	3.1	1.9	1.8	1.5
Vinyl chloride	UG/M3	0.09 U	0.26 U	0.09 U	0.26 U

Flags assigned during chemistry validation are shown.

Made By: AMK 3/7/14

Checked By: PRF 3/7/14

**Detection Limits shown are PQL**

**TABLE 3  
VALIDATED OUTDOOR AIR ANALYTICAL RESULTS  
OSER AVENUE SITE INVESTIGATION**

Location ID		H-002	H-005	H-018	H-023	H-042
Sample ID		H-002-OA	H-005-OA	H-018-OA	H-023-OA	H-042-OA
Matrix		Outdoor Air				
Depth Interval (ft)		-	-	-	-	-
Date Sampled		01/14/14	01/15/14	01/16/14	01/17/14	01/16/14
Parameter	Units					
<b>Volatile Organic Compounds</b>						
1,1,1-Trichloroethane	UG/M3	0.19 U				
1,1,2,2-Tetrachloroethane	UG/M3	0.24 U				
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	0.65	0.65	0.80	0.61	1.0
1,1,2-Trichloroethane	UG/M3	0.19 U				
1,1-Dichloroethane	UG/M3	0.14 U				
1,1-Dichloroethene	UG/M3	0.14 U				
1,2,4-Trichlorobenzene	UG/M3	0.26 U	0.26 U	0.26 UJ	0.26 U	0.26 UJ
1,2-Dibromo-3-chloropropane	UG/M3	0.44 U	0.44 U	0.44 UJ	0.44 U	0.44 UJ
1,2-Dibromoethane (Ethylene dibromide)	UG/M3	0.27 U				
1,2-Dichlorobenzene	UG/M3	0.21 U				
1,2-Dichloroethane	UG/M3	0.14 U				
1,2-Dichloroethene (cis)	UG/M3	0.14 U				
1,2-Dichloroethene (trans)	UG/M3	0.14 U				
1,2-Dichloropropane	UG/M3	0.16 U	0.16 U	0.16 UJ	0.16 U	0.16 UJ
1,3-Dichlorobenzene	UG/M3	0.21 U				
1,3-Dichloropropene (cis)	UG/M3	0.16 U				
1,3-Dichloropropene (trans)	UG/M3	0.16 U				
1,4-Dichlorobenzene	UG/M3	0.21 U				
2-Hexanone	UG/M3	0.43	0.34	0.26 J	0.25	0.45 J
4-Methyl-2-pentanone	UG/M3	0.2	0.20	0.14 UJ	0.14 U	0.14 UJ
Acetone	UG/M3	20 J	27 J	17	24 J	25
Benzene	UG/M3	0.58	0.99	0.84	1.2	0.91
Bromodichloromethane	UG/M3	0.24 U				

Flags assigned during chemistry validation are shown.

Made By: AMK 3/7/14

Checked By: PRF 3/7/14

Detection Limits shown are PQL

**TABLE 3**  
**VALIDATED OUTDOOR AIR ANALYTICAL RESULTS**  
**OSER AVENUE SITE INVESTIGATION**

Location ID		H-002	H-005	H-018	H-023	H-042
Sample ID		H-002-OA	H-005-OA	H-018-OA	H-023-OA	H-042-OA
Matrix		Outdoor Air				
Depth Interval (ft)		-	-	-	-	-
Date Sampled		01/14/14	01/15/14	01/16/14	01/17/14	01/16/14
Parameter	Units					
<b>Volatile Organic Compounds</b>						
Bromoform	UG/M3	0.36 U				
Bromomethane	UG/M3	0.14 U				
Carbon disulfide	UG/M3	1.1 U				
Carbon tetrachloride	UG/M3	0.40	0.40	0.52	0.58	0.54
Chlorobenzene	UG/M3	0.16 U				
Chloroethane	UG/M3	0.09 U				
Chloroform	UG/M3	0.17 U				
Chloromethane	UG/M3	0.85	0.85	1.1	1.1	1.1
Cyclohexane	UG/M3	0.12 U	0.12 U	0.12 UJ	0.12 U	0.17 J
Dibromochloromethane	UG/M3	0.30 U				
Dichlorodifluoromethane	UG/M3	1.3	1.3	2.4	2.7	2.0
Ethylbenzene	UG/M3	0.15 U	0.30	0.17	0.42	0.20
Isopropylbenzene (Cumene)	UG/M3	0.44 U	0.44 U	0.44 UJ	0.44 UJ	0.44 UJ
m&p-Xylene	UG/M3	0.30 U	0.88	0.48	1.3	0.54
Methyl acetate	UG/M3	0.44 U	0.44 U	0.44 UJ	0.44 U	0.44 UJ
Methyl ethyl ketone (2-Butanone)	UG/M3	4.1 U	4.1 U	4.1 U	4.1 U	4.5
Methyl tert-butyl ether	UG/M3	0.13 U				
Methylcyclohexane	UG/M3	0.44 U	0.44 U	0.44 UJ	0.44 U	0.44 UJ
Methylene chloride	UG/M3	2.9 U	2.8 U	1.5	1.5	1.8
o-Xylene	UG/M3	0.15 U	0.34	0.20	0.48	0.22
Styrene	UG/M3	0.15 U				
Tetrachloroethene	UG/M3	0.24 U	1.1	0.27	0.69	0.37
Tetrahydrofuran	UG/M3	0.10 U	0.12	0.10 U	0.10 U	0.10 U

Flags assigned during chemistry validation are shown.

Made By: AMK 3/7/14

Checked By: PRF 3/7/14

**Detection Limits shown are PQL**

**TABLE 3**  
**VALIDATED OUTDOOR AIR ANALYTICAL RESULTS**  
**OSER AVENUE SITE INVESTIGATION**

Location ID		H-002	H-005	H-018	H-023	H-042
Sample ID		H-002-OA	H-005-OA	H-018-OA	H-023-OA	H-042-OA
Matrix		Outdoor Air				
Depth Interval (ft)		-	-	-	-	-
Date Sampled		01/14/14	01/15/14	01/16/14	01/17/14	01/16/14
Parameter	Units					
<b>Volatile Organic Compounds</b>						
Toluene	UG/M3	0.82	5.0	1.1	3.0	1.3
Trichloroethene	UG/M3	0.19 U	0.26	0.19 U	0.19 U	0.19 U
Trichlorofluoromethane	UG/M3	1.3	1.4	2.0	1.6	2.0
Vinyl chloride	UG/M3	0.09 U				

Flags assigned during chemistry validation are shown.

Made By: AMK 3/7/14

Checked By: PRF 3/7/14

**Detection Limits shown are PQL**

**TABLE 3  
VALIDATED OUTDOOR AIR ANALYTICAL RESULTS  
OSER AVENUE SITE INVESTIGATION**

Location ID		H-046	H-046	H-124	H-152	H-154
Sample ID		2014-01-13-0A	H-046-0A	H-124-0A	H-152-0A	H-154-0A
Matrix		Outdoor Air	Outdoor Air	Outdoor Air	Outdoor Air	Outdoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		01/14/14	01/14/14	01/17/14	01/13/14	01/14/14
Parameter	Units	Field Duplicate (1-1)				
<b>Volatile Organic Compounds</b>						
1,1,1-Trichloroethane	UG/M3	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1,2,2-Tetrachloroethane	UG/M3	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	0.70	1.8	0.58	0.59	0.59
1,1,2-Trichloroethane	UG/M3	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1-Dichloroethane	UG/M3	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
1,1-Dichloroethene	UG/M3	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
1,2,4-Trichlorobenzene	UG/M3	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
1,2-Dibromo-3-chloropropane	UG/M3	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
1,2-Dibromoethane (Ethylene dibromide)	UG/M3	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,2-Dichlorobenzene	UG/M3	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
1,2-Dichloroethane	UG/M3	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
1,2-Dichloroethene (cis)	UG/M3	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
1,2-Dichloroethene (trans)	UG/M3	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
1,2-Dichloropropane	UG/M3	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
1,3-Dichlorobenzene	UG/M3	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
1,3-Dichloropropene (cis)	UG/M3	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
1,3-Dichloropropene (trans)	UG/M3	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
1,4-Dichlorobenzene	UG/M3	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
2-Hexanone	UG/M3	0.55	0.17	0.37	0.29	0.49
4-Methyl-2-pentanone	UG/M3	0.17	0.14 U	0.22	0.14	0.20
Acetone	UG/M3	17 J	13 J	29 J	21 J	29 J
Benzene	UG/M3	0.45	0.49	1.0	1.1	0.47
Bromodichloromethane	UG/M3	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U

Flags assigned during chemistry validation are shown.

Made By: AMK 3/7/14

Checked By: PRF 3/7/14

Detection Limits shown are PQL

**TABLE 3  
VALIDATED OUTDOOR AIR ANALYTICAL RESULTS  
OSER AVENUE SITE INVESTIGATION**

Location ID		H-046	H-046	H-124	H-152	H-154
Sample ID		2014-01-13-OA	H-046-0A	H-124-OA	H-152-OA	H-154-OA
Matrix		Outdoor Air	Outdoor Air	Outdoor Air	Outdoor Air	Outdoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		01/14/14	01/14/14	01/17/14	01/13/14	01/14/14
Parameter	Units	Field Duplicate (1-1)				
<b>Volatile Organic Compounds</b>						
Bromoform	UG/M3	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Bromomethane	UG/M3	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Carbon disulfide	UG/M3	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Carbon tetrachloride	UG/M3	0.40	0.40	0.53	0.40	0.40
Chlorobenzene	UG/M3	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Chloroethane	UG/M3	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U
Chloroform	UG/M3	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Chloromethane	UG/M3	0.87	0.88	1.2	0.84	0.84
Cyclohexane	UG/M3	0.12 U	0.12 U	0.12 U	0.22	0.12 U
Dibromochloromethane	UG/M3	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U
Dichlorodifluoromethane	UG/M3	1.3	1.4	2.6	1.3	1.2
Ethylbenzene	UG/M3	0.15 U	0.15 U	0.36	0.24	0.15 U
Isopropylbenzene (Cumene)	UG/M3	0.44 U	0.44 U	0.44 UJ	0.44 U	0.44 U
m&p-Xylene	UG/M3	0.37	0.37	1.1	0.76	0.30 U
Methyl acetate	UG/M3	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
Methyl ethyl ketone (2-Butanone)	UG/M3	4.1 U	4.1 U	4.1 U	4.1 U	4.2
Methyl tert-butyl ether	UG/M3	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Methylcyclohexane	UG/M3	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
Methylene chloride	UG/M3	3.4 U	3.1 U	1.8	2.4 U	3.0 U
o-Xylene	UG/M3	0.15 U	0.15 U	0.38	0.30	0.15 U
Styrene	UG/M3	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Tetrachloroethene	UG/M3	0.24 U	0.24 U	0.79	0.43	2.1
Tetrahydrofuran	UG/M3	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U

Flags assigned during chemistry validation are shown.

Made By: AMK 3/7/14

Checked By: PRF 3/7/14

Detection Limits shown are PQL

**TABLE 3**  
**VALIDATED OUTDOOR AIR ANALYTICAL RESULTS**  
**OSER AVENUE SITE INVESTIGATION**

Location ID		H-046	H-046	H-124	H-152	H-154
Sample ID		2014-01-13-OA	H-046-0A	H-124-OA	H-152-OA	H-154-OA
Matrix		Outdoor Air	Outdoor Air	Outdoor Air	Outdoor Air	Outdoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		01/14/14	01/14/14	01/17/14	01/13/14	01/14/14
Parameter	Units	Field Duplicate (1-1)				
Volatile Organic Compounds						
Toluene	UG/M3	2.1	2.1	3.1	1.7	0.63
Trichloroethene	UG/M3	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Trichlorofluoromethane	UG/M3	1.4	1.7	1.6	1.3	1.3
Vinyl chloride	UG/M3	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U

Flags assigned during chemistry validation are shown.

Made By: AMK 3/7/14

Checked By: PRF 3/7/14

**Detection Limits shown are PQL**

**ATTACHMENT A**  
**VALIDATED FORM 1's**

ANALYTICAL RESULTS

Project Location: 100 Oser Ave.  
 Date Received: 1/15/2014  
 Field Sample #: H-002-AS  
 Sample ID: 14A0426-01  
 Sample Matrix: Sub Slab  
 Sampled: 1/14/2014 07:13

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 1962  
 Canister Size: 6 liter  
 Flow Controller ID: 3449  
 Sample Type: 24 hr

Work Order: 14A0426  
 Initial Vacuum(in Hg): -30  
 Final Vacuum(in Hg): -10  
 Receipt Vacuum(in Hg): -9.8  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL		Analized		
Acetone	13	4.0	S	31	9.5	2	1/28/14	4:30	WSD
Benzene	0.20	0.10		0.64	0.32	2	1/28/14	4:30	WSD
Bromodichloromethane	ND	0.10	U	ND	0.67	2	1/28/14	4:30	WSD
Bromoform	ND	0.10	U	ND	1.0	2	1/28/14	4:30	WSD
Bromomethane	ND	0.10	U	ND	0.39	2	1/28/14	4:30	WSD
2-Butanone (MEK)	ND	4.0	U	ND	12	2	1/28/14	4:30	WSD
Carbon Disulfide	ND	1.0	U	ND	3.1	2	1/28/14	4:30	WSD
Carbon Tetrachloride	ND	0.10	U	ND	0.63	2	1/28/14	4:30	WSD
Chlorobenzene	ND	0.10	U	ND	0.46	2	1/28/14	4:30	WSD
Chloroethane	ND	0.10	U	ND	0.26	2	1/28/14	4:30	WSD
Chloroform	ND	0.10	U	ND	0.49	2	1/28/14	4:30	WSD
Chloromethane	0.26	0.20		0.54	0.41	2	1/28/14	4:30	WSD
Cyclohexane	ND	0.10	U	ND	0.34	2	1/28/14	4:30	WSD
Dibromochloromethane	ND	0.10	U	ND	0.85	2	1/28/14	4:30	WSD
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.13	U	ND	1.3	2	1/28/14	4:30	WSD
1,2-Dibromoethane (EDB)	ND	0.10	U	ND	0.77	2	1/28/14	4:30	WSD
1,2-Dichlorobenzene	ND	0.10	U	ND	0.60	2	1/28/14	4:30	WSD
1,3-Dichlorobenzene	ND	0.10	U	ND	0.60	2	1/28/14	4:30	WSD
1,4-Dichlorobenzene	ND	0.10	U	ND	0.60	2	1/28/14	4:30	WSD
Dichlorodifluoromethane (Freon 12)	0.38	0.10		1.9	0.49	2	1/28/14	4:30	WSD
1,1-Dichloroethane	ND	0.10	U	ND	0.40	2	1/28/14	4:30	WSD
1,2-Dichloroethane	ND	0.10	U	ND	0.40	2	1/28/14	4:30	WSD
1,1-Dichloroethylene	ND	0.10	U	ND	0.40	2	1/28/14	4:30	WSD
cis-1,2-Dichloroethylene	ND	0.10	U	ND	0.40	2	1/28/14	4:30	WSD
trans-1,2-Dichloroethylene	ND	0.10	U	ND	0.40	2	1/28/14	4:30	WSD
1,2-Dichloropropane	ND	0.10	U	ND	0.46	2	1/28/14	4:30	WSD
cis-1,3-Dichloropropene	ND	0.10	U	ND	0.45	2	1/28/14	4:30	WSD
trans-1,3-Dichloropropene	ND	0.10	U	ND	0.45	2	1/28/14	4:30	WSD
Ethylbenzene	0.12	0.10		0.52	0.43	2	1/28/14	4:30	WSD
2-Hexanone (MBK)	0.18	0.10		0.74	0.41	2	1/28/14	4:30	WSD
Isopropylbenzene (Cumene)	ND	0.25	U	ND	1.2	2	1/28/14	4:30	WSD
Methyl Acetate	ND	0.41	U	ND	1.2	2	1/28/14	4:30	WSD
Methyl tert-Butyl Ether (MTBE)	ND	0.10	U	ND	0.36	2	1/28/14	4:30	WSD
Methyl Cyclohexane	ND	0.31	U	ND	1.3	2	1/28/14	4:30	WSD
Methylene Chloride	1.3	<del>1.0</del>	S	4.4	<del>3.5</del>	2	1/28/14	4:30	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.10	U	ND	0.41	2	1/28/14	4:30	WSD
Styrene	0.12	0.10		0.51	0.43	2	1/28/14	4:30	WSD

*Handwritten notes:*  
 01/28/14  
 2/11/14

**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave.  
 Date Received: 1/15/2014  
 Field Sample #: H-002-AS  
 Sample ID: 14A0426-01  
 Sample Matrix: Sub Slab  
 Sampled: 1/14/2014 07:13

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 1962  
 Canister Size: 6 liter  
 Flow Controller ID: 3449  
 Sample Type: 24 hr

Work Order: 14A0426  
 Initial Vacuum(in Hg): -30  
 Final Vacuum(in Hg): -10  
 Receipt Vacuum(in Hg): -9.8  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time Analyzed	Analyst
	Results	RL	Flag/Qual	Results	RL			
1,1,2,2-Tetrachloroethane	ND	0.10	U	ND	0.69	2	1/28/14 4:30	WSD
Tetrachloroethylene	0.16	0.10		1.1	0.68	2	1/28/14 4:30	WSD
Tetrahydrofuran	ND	0.10	U	ND	0.29	2	1/28/14 4:30	WSD
Toluene	14	0.10		54	0.38	2	1/28/14 4:30	WSD
1,2,4-Trichlorobenzene	ND	0.10	U	ND	0.74	2	1/28/14 4:30	WSD
1,1,1-Trichloroethane	ND	0.10	U	ND	0.55	2	1/28/14 4:30	WSD
1,1,2-Trichloroethane	ND	0.10	U	ND	0.55	2	1/28/14 4:30	WSD
Trichloroethylene	ND	0.10	U	ND	0.54	2	1/28/14 4:30	WSD
Trichlorofluoromethane (Freon 11)	0.44	0.10		2.5	0.56	2	1/28/14 4:30	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.10	0.10		0.77	0.77	2	1/28/14 4:30	WSD
Vinyl Chloride	ND	0.10	U	ND	0.26	2	1/28/14 4:30	WSD
m&p-Xylene	0.52	0.20		2.3	0.87	2	1/28/14 4:30	WSD
o-Xylene	0.34	0.10		1.5	0.43	2	1/28/14 4:30	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	94.0	70-130	1/28/14 4:30
4-Bromofluorobenzene (2)	104	70-130	1/28/14 4:30

ANALYTICAL RESULTS

Project Location: 100 Oser Ave.  
 Date Received: 1/15/2014  
 Field Sample #: H-002-BA  
 Sample ID: 14A0426-05  
 Sample Matrix: Indoor air  
 Sampled: 1/14/2014 07:12

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 1966  
 Canister Size: 6 liter  
 Flow Controller ID: 3453  
 Sample Type: 24 hr

Work Order: 14A0426  
 Initial Vacuum(in Hg): -30  
 Final Vacuum(in Hg): -12  
 Receipt Vacuum(in Hg): -12.9  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL		Analized		
Acetone	12	1.4	S	29	3.3	0.702	1/27/14 18:48	WSD	
Benzene	0.50	0.035		1.6	0.11	0.702	1/27/14 18:48	WSD	
Bromodichloromethane	ND	0.035	U	ND	0.24	0.702	1/27/14 18:48	WSD	
Bromoform	ND	0.035	U	ND	0.36	0.702	1/27/14 18:48	WSD	
Bromomethane	ND	0.035	U	ND	0.14	0.702	1/27/14 18:48	WSD	
2-Butanone (MEK)	ND	1.4	U	ND	4.1	0.702	1/27/14 18:48	WSD	
Carbon Disulfide	ND	0.35	U	ND	1.1	0.702	1/27/14 18:48	WSD	
Carbon Tetrachloride	0.063	0.035		0.40	0.22	0.702	1/27/14 18:48	WSD	
Chlorobenzene	ND	0.035	U	ND	0.16	0.702	1/27/14 18:48	WSD	
Chloroethane	ND	0.035	U	ND	0.093	0.702	1/27/14 18:48	WSD	
Chloroform	ND	0.035	U	ND	0.17	0.702	1/27/14 18:48	WSD	
Chloromethane	0.43	0.070		0.88	0.14	0.702	1/27/14 18:48	WSD	
Cyclohexane	0.22	0.035		0.77	0.12	0.702	1/27/14 18:48	WSD	
Dibromochloromethane	ND	0.035	U	ND	0.30	0.702	1/27/14 18:48	WSD	
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.046	U	ND	0.44	0.702	1/27/14 18:48	WSD	
1,2-Dibromoethane (EDB)	ND	0.035	U	ND	0.27	0.702	1/27/14 18:48	WSD	
1,2-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/27/14 18:48	WSD	
1,3-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/27/14 18:48	WSD	
1,4-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/27/14 18:48	WSD	
Dichlorodifluoromethane (Freon 12)	0.26	0.035		1.3	0.17	0.702	1/27/14 18:48	WSD	
1,1-Dichloroethane	ND	0.035	U	ND	0.14	0.702	1/27/14 18:48	WSD	
1,2-Dichloroethane	0.035	0.035	U	0.14	0.14	0.702	1/27/14 18:48	WSD	
1,1-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/27/14 18:48	WSD	
cis-1,2-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/27/14 18:48	WSD	
trans-1,2-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/27/14 18:48	WSD	
1,2-Dichloropropane	ND	0.035	U	ND	0.16	0.702	1/27/14 18:48	WSD	
cis-1,3-Dichloropropene	ND	0.035	U	ND	0.16	0.702	1/27/14 18:48	WSD	
trans-1,3-Dichloropropene	ND	0.035	U	ND	0.16	0.702	1/27/14 18:48	WSD	
Ethylbenzene	0.13	0.035		0.58	0.15	0.702	1/27/14 18:48	WSD	
2-Hexanone (MBK)	0.14	0.035		0.57	0.14	0.702	1/27/14 18:48	WSD	
Isopropylbenzene (Cumene)	ND	0.089	U	ND	0.44	0.702	1/27/14 18:48	WSD	
Methyl Acetate	ND	0.14	U	ND	0.44	0.702	1/27/14 18:48	WSD	
Methyl tert-Butyl Ether (MTBE)	ND	0.035	U	ND	0.13	0.702	1/27/14 18:48	WSD	
Methyl Cyclohexane	0.18	0.11		0.73	0.44	0.702	1/27/14 18:48	WSD	
Methylene Chloride	0.91	0.35	S	3.2	1.2	0.702	1/27/14 18:48	WSD	
4-Methyl-2-pentanone (MIBK)	0.070	0.035		0.29	0.14	0.702	1/27/14 18:48	WSD	
Styrene	ND	0.035	U	ND	0.15	0.702	1/27/14 18:48	WSD	

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**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave.  
 Date Received: 1/15/2014  
 Field Sample #: H-002-BA  
 Sample ID: 14A0426-05  
 Sample Matrix: Indoor air  
 Sampled: 1/14/2014 07:12

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 1966  
 Canister Size: 6 liter  
 Flow Controller ID: 3453  
 Sample Type: 24 hr

Work Order: 14A0426  
 Initial Vacuum(in Hg): -30  
 Final Vacuum(in Hg): -12  
 Receipt Vacuum(in Hg): -12.9  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time Analyzed	Analyst
	Results	RL	Flag/Qual	Results	RL			
J,1,2,2-Tetrachloroethane	ND	0.035	U	ND	0.24	0.702	1/27/14 18:48	WSD
Tetrachloroethylene	0.035	0.035	U	0.24	0.24	0.702	1/27/14 18:48	WSD
Tetrahydrofuran	0.042	0.035		0.12	0.10	0.702	1/27/14 18:48	WSD
Toluene	1.0	0.035		3.9	0.13	0.702	1/27/14 18:48	WSD
1,2,4-Trichlorobenzene	ND	0.035	U	ND	0.26	0.702	1/27/14 18:48	WSD
1,1,1-Trichloroethane	ND	0.035	U	ND	0.19	0.702	1/27/14 18:48	WSD
1,1,2-Trichloroethane	ND	0.035	U	ND	0.19	0.702	1/27/14 18:48	WSD
Trichloroethylene	ND	0.035	U	ND	0.19	0.702	1/27/14 18:48	WSD
Trichlorofluoromethane (Freon 11)	0.25	0.035		1.4	0.20	0.702	1/27/14 18:48	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.084	0.035		0.65	0.27	0.702	1/27/14 18:48	WSD
Vinyl Chloride	ND	0.035	U	ND	0.090	0.702	1/27/14 18:48	WSD
m&p-Xylene	0.39	0.070		1.7	0.30	0.702	1/27/14 18:48	WSD
o-Xylene	0.14	0.035		0.61	0.15	0.702	1/27/14 18:48	WSD

Surrogates	% Recovery	% REC Limits	Date/Time Analyzed
4-Bromofluorobenzene (1)	96.5	70-130	1/27/14 18:48
4-Bromofluorobenzene (2)	107	70-130	1/27/14 18:48

ANALYTICAL RESULTS

Project Location: 100 Oser Ave.  
 Date Received: 1/15/2014  
 Field Sample #: H-002-OA  
 Sample ID: 14A0426-06  
 Sample Matrix: Ambient Air  
 Sampled: 1/14/2014 07:25

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 1965  
 Canister Size: 6 liter  
 Flow Controller ID: 3454  
 Sample Type: 24 hr

Work Order: 14A0426  
 Initial Vacuum(in Hg): -29  
 Final Vacuum(in Hg): -12  
 Receipt Vacuum(in Hg): -11.2  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv			ug/m3		Dilution	Date/Time Analyzed	Analyst
	Results	RL	Flag/Qual	Results	RL			
Acetone	8.4	1.4	S	20	3.3	0.702	1/27/14 19:35	WSD
Benzene	0.18	0.035		0.58	0.11	0.702	1/27/14 19:35	WSD
Bromodichloromethane	ND	0.035	U	ND	0.24	0.702	1/27/14 19:35	WSD
Bromoform	ND	0.035	U	ND	0.36	0.702	1/27/14 19:35	WSD
Bromomethane	ND	0.035	U	ND	0.14	0.702	1/27/14 19:35	WSD
2-Butanone (MEK)	ND	1.4	U	ND	4.1	0.702	1/27/14 19:35	WSD
Carbon Disulfide	ND	0.35	U	ND	1.1	0.702	1/27/14 19:35	WSD
Carbon Tetrachloride	0.063	0.035		0.40	0.22	0.702	1/27/14 19:35	WSD
Chlorobenzene	ND	0.035	U	ND	0.16	0.702	1/27/14 19:35	WSD
Chloroethane	ND	0.035	U	ND	0.093	0.702	1/27/14 19:35	WSD
Chloroform	ND	0.035	U	ND	0.17	0.702	1/27/14 19:35	WSD
Chloromethane	0.41	0.070		0.85	0.14	0.702	1/27/14 19:35	WSD
Cyclohexane	0.035	0.035	U	0.12	0.12	0.702	1/27/14 19:35	WSD
Dibromochloromethane	ND	0.035	U	ND	0.30	0.702	1/27/14 19:35	WSD
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.046	U	ND	0.44	0.702	1/27/14 19:35	WSD
1,2-Dibromoethane (EDB)	ND	0.035	U	ND	0.27	0.702	1/27/14 19:35	WSD
1,2-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/27/14 19:35	WSD
1,3-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/27/14 19:35	WSD
1,4-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/27/14 19:35	WSD
Dichlorodifluoromethane (Freon 12)	0.26	0.035		1.3	0.17	0.702	1/27/14 19:35	WSD
1,1-Dichloroethane	ND	0.035	U	ND	0.14	0.702	1/27/14 19:35	WSD
1,2-Dichloroethane	ND	0.035	U	ND	0.14	0.702	1/27/14 19:35	WSD
1,1-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/27/14 19:35	WSD
cis-1,2-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/27/14 19:35	WSD
trans-1,2-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/27/14 19:35	WSD
1,2-Dichloropropane	ND	0.035	U	ND	0.16	0.702	1/27/14 19:35	WSD
cis-1,3-Dichloropropene	ND	0.035	U	ND	0.16	0.702	1/27/14 19:35	WSD
trans-1,3-Dichloropropene	ND	0.035	U	ND	0.16	0.702	1/27/14 19:35	WSD
Ethylbenzene	ND	0.035	U	ND	0.15	0.702	1/27/14 19:35	WSD
2-Hexanone (MBK)	0.11	0.035		0.43	0.14	0.702	1/27/14 19:35	WSD
Isopropylbenzene (Cumene)	ND	0.089	U	ND	0.44	0.702	1/27/14 19:35	WSD
Methyl Acetate	ND	0.14	U	ND	0.44	0.702	1/27/14 19:35	WSD
Methyl tert-Butyl Ether (MTBE)	ND	0.035	U	ND	0.13	0.702	1/27/14 19:35	WSD
Methyl Cyclohexane	ND	0.11	U	ND	0.44	0.702	1/27/14 19:35	WSD
Methylene Chloride	0.84	0.35	S	2.9	1.2	0.702	1/27/14 19:35	WSD
4-Methyl-2-pentanone (MIBK)	0.049	0.035		0.20	0.14	0.702	1/27/14 19:35	WSD
Styrene	ND	0.035	U	ND	0.15	0.702	1/27/14 19:35	WSD

*Handwritten signature and date: 1/14/14*

**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave.  
 Date Received: 1/15/2014  
 Field Sample #: H-002-OA  
 Sample ID: 14A0426-06  
 Sample Matrix: Ambient Air  
 Sampled: 1/14/2014 07:25

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 1965  
 Canister Size: 6 liter  
 Flow Controller ID: 3454  
 Sample Type: 24 hr

**Work Order: 14A0426**  
 Initial Vacuum(in Hg): -29  
 Final Vacuum(in Hg): -12  
 Receipt Vacuum(in Hg): -11.2  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time Analyzed	Analyst
	Results	RL	Flag/Qual	Results	RL			
1,1,2,2-Tetrachloroethane	ND	0.035	U	ND	0.24	0.702	1/27/14 19:35	WSD
Tetrachloroethylene	ND	0.035	U	ND	0.24	0.702	1/27/14 19:35	WSD
Tetrahydrofuran	ND	0.035	U	ND	0.10	0.702	1/27/14 19:35	WSD
Toluene	0.22	0.035		0.82	0.13	0.702	1/27/14 19:35	WSD
1,2,4-Trichlorobenzene	ND	0.035	U	ND	0.26	0.702	1/27/14 19:35	WSD
1,1,1-Trichloroethane	ND	0.035	U	ND	0.19	0.702	1/27/14 19:35	WSD
1,1,2-Trichloroethane	ND	0.035	U	ND	0.19	0.702	1/27/14 19:35	WSD
Trichloroethylene	ND	0.035	U	ND	0.19	0.702	1/27/14 19:35	WSD
Trichlorofluoromethane (Freon 11)	0.23	0.035		1.3	0.20	0.702	1/27/14 19:35	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.084	0.035		0.65	0.27	0.702	1/27/14 19:35	WSD
Vinyl Chloride	ND	0.035	U	ND	0.090	0.702	1/27/14 19:35	WSD
m&p-Xylene	0.070	0.070	U	0.30	0.30	0.702	1/27/14 19:35	WSD
o-Xylene	ND	0.035	U	ND	0.15	0.702	1/27/14 19:35	WSD

Surrogates	% Recovery	% REC Limits	Date/Time Analyzed
4-Bromofluorobenzene (1)	96.0	70-130	1/27/14 19:35
4-Bromofluorobenzene (2)	107	70-130	1/27/14 19:35

ANALYTICAL RESULTS

Project Location: 100 Oser Ave.  
 Date Received: 1/17/2014  
 Field Sample #: H-005-AS  
 Sample ID: 14A0568-07  
 Sample Matrix: Sub Slab  
 Sampled: 1/14/2014 00:00

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 2002  
 Canister Size: 6 liter  
 Flow Controller ID: 3467  
 Sample Type: 24 hr

Work Order: 14A0568  
 Initial Vacuum(in Hg): -29  
 Final Vacuum(in Hg): -7  
 Receipt Vacuum(in Hg): -6.6  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL		Analized		
Acetone	18	4.0	J	44	9.5	2	1/28/14 7:49	WSD	
Benzene	0.10	0.10		0.32	0.32	2	1/28/14 7:49	WSD	
Bromodichloromethane	0.58	0.10		3.9	0.67	2	1/28/14 7:49	WSD	
Bromoform	ND	0.10	U	ND	1.0	2	1/28/14 7:49	WSD	
Bromomethane	ND	0.10	U	ND	0.39	2	1/28/14 7:49	WSD	
2-Butanone (MEK)	ND	4.0	U	ND	12	2	1/28/14 7:49	WSD	
Carbon Disulfide	ND	1.0	U	ND	3.1	2	1/28/14 7:49	WSD	
Carbon Tetrachloride	0.52	0.10		3.3	0.63	2	1/28/14 7:49	WSD	
Chlorobenzene	ND	0.10	U	ND	0.46	2	1/28/14 7:49	WSD	
Chloroethane	ND	0.10	U	ND	0.26	2	1/28/14 7:49	WSD	
Chloroform	280	0.50		1400	2.4	10	1/28/14 9:07	TPH	
Chloromethane	0.22	0.20		0.45	0.41	2	1/28/14 7:49	WSD	
Cyclohexane	ND	0.10	U	ND	0.34	2	1/28/14 7:49	WSD	
Dibromochloromethane	ND	0.10	U	ND	0.85	2	1/28/14 7:49	WSD	
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.13	U	ND	1.3	2	1/28/14 7:49	WSD	
1,2-Dibromoethane (EDB)	ND	0.10	U	ND	0.77	2	1/28/14 7:49	WSD	
1,2-Dichlorobenzene	ND	0.10	U	ND	0.60	2	1/28/14 7:49	WSD	
1,3-Dichlorobenzene	ND	0.10	U	ND	0.60	2	1/28/14 7:49	WSD	
1,4-Dichlorobenzene	ND	0.10	U	ND	0.60	2	1/28/14 7:49	WSD	
Dichlorodifluoromethane (Freon 12)	0.42	0.10		2.1	0.49	2	1/28/14 7:49	WSD	
1,1-Dichloroethane	ND	0.10	U	ND	0.40	2	1/28/14 7:49	WSD	
1,2-Dichloroethane	ND	0.10	U	ND	0.40	2	1/28/14 7:49	WSD	
1,1-Dichloroethylene	ND	0.10	U	ND	0.40	2	1/28/14 7:49	WSD	
cis-1,2-Dichloroethylene	ND	0.10	U	ND	0.40	2	1/28/14 7:49	WSD	
trans-1,2-Dichloroethylene	ND	0.10	U	ND	0.40	2	1/28/14 7:49	WSD	
1,2-Dichloropropane	ND	0.10	U	ND	0.46	2	1/28/14 7:49	WSD	
cis-1,3-Dichloropropene	ND	0.10	U	ND	0.45	2	1/28/14 7:49	WSD	
trans-1,3-Dichloropropene	ND	0.10	U	ND	0.45	2	1/28/14 7:49	WSD	
Ethylbenzene	0.12	0.10		0.52	0.43	2	1/28/14 7:49	WSD	
2-Hexanone (MBK)	0.22	0.10		0.90	0.41	2	1/28/14 7:49	WSD	
Isopropylbenzene (Cumene)	ND	0.25	U	ND	1.2	2	1/28/14 7:49	WSD	
Methyl Acetate	ND	0.41	U	ND	1.2	2	1/28/14 7:49	WSD	
Methyl tert-Butyl Ether (MTBE)	ND	0.10	U	ND	0.36	2	1/28/14 7:49	WSD	
Methyl Cyclohexane	ND	0.31	U	ND	1.3	2	1/28/14 7:49	WSD	
Methylene Chloride	1.1	<del>1.0</del>	B	4.0	<del>3.5</del>	2	1/28/14 7:49	WSD	
4-Methyl-2-pentanone (MIBK)	ND	0.10	U	ND	0.41	2	1/28/14 7:49	WSD	
Styrene	ND	0.10	U	ND	0.43	2	1/28/14 7:49	WSD	

*Handwritten signature and date: 1/28/14*

**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave,  
 Date Received: 1/17/2014  
 Field Sample #: H-005-AS  
 Sample ID: 14A0568-07  
 Sample Matrix: Sub Slab  
 Sampled: 1/14/2014 00:00

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 2002  
 Canister Size: 6 liter  
 Flow Controller ID: 3467  
 Sample Type: 24 hr

**Work Order: 14A0568**  
 Initial Vacuum(in Hg): -29  
 Final Vacuum(in Hg): -7  
 Receipt Vacuum(in Hg): -6.6  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL		Analyzed		
1,1,2,2-Tetrachloroethane	ND	0.10	U	ND	0.69	2	1/28/14	7:49	WSD
Tetrachloroethylene	4.6	0.10		31	0.68	2	1/28/14	7:49	WSD
Tetrahydrofuran	ND	0.10	U	ND	0.29	2	1/28/14	7:49	WSD
Toluene	12	0.10		46	0.38	2	1/28/14	7:49	WSD
1,2,4-Trichlorobenzene	ND	0.10	U	ND	0.74	2	1/28/14	7:49	WSD
1,1,1-Trichloroethane	0.10	0.10		0.55	0.55	2	1/28/14	7:49	WSD
1,1,2-Trichloroethane	ND	0.10	U	ND	0.55	2	1/28/14	7:49	WSD
Trichloroethylene	ND	0.10	U	ND	0.54	2	1/28/14	7:49	WSD
Trichlorofluoromethane (Freon 11)	0.26	0.10		1.5	0.56	2	1/28/14	7:49	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.16	0.10		1.2	0.77	2	1/28/14	7:49	WSD
Vinyl Chloride	ND	0.10	U	ND	0.26	2	1/28/14	7:49	WSD
m&p-Xylene	0.56	0.20		2.4	0.87	2	1/28/14	7:49	WSD
o-Xylene	0.30	0.10		1.3	0.43	2	1/28/14	7:49	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	90.9	70-130	1/28/14 9:07
4-Bromofluorobenzene (1)	94.0	70-130	1/28/14 7:49
4-Bromofluorobenzene (2)	104	70-130	1/28/14 7:49

**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave.  
 Date Received: 1/17/2014  
 Field Sample #: H-005-BA  
 Sample ID: 14A0568-08  
 Sample Matrix: Indoor air  
 Sampled: 1/14/2014 00:00

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 2001  
 Canister Size: 6 liter  
 Flow Controller ID: 3466  
 Sample Type: 24 hr

**Work Order: 14A0568**  
 Initial Vacuum(in Hg): -29  
 Final Vacuum(in Hg): -8  
 Receipt Vacuum(in Hg): -8.7  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL		Analized		
Acetone	24	1.4	S	57	3.3	0.702	1/28/14 0:11	WSD	
Benzene	0.44	0.035		1.4	0.11	0.702	1/28/14 0:11	WSD	
Bromodichloromethane	ND	0.035	U	ND	0.24	0.702	1/28/14 0:11	WSD	
Bromoform	ND	0.035	U	ND	0.36	0.702	1/28/14 0:11	WSD	
Bromomethane	ND	0.035	U	ND	0.14	0.702	1/28/14 0:11	WSD	
2-Butanone (MEK)	2.4	1.4		7.1	4.1	0.702	1/28/14 0:11	WSD	
Carbon Disulfide	ND	0.35	U	ND	1.1	0.702	1/28/14 0:11	WSD	
Carbon Tetrachloride	0.084	0.035		0.53	0.22	0.702	1/28/14 0:11	WSD	
Chlorobenzene	ND	0.035	U	ND	0.16	0.702	1/28/14 0:11	WSD	
Chloroethane	ND	0.035	U	ND	0.093	0.702	1/28/14 0:11	WSD	
Chloroform	0.40	0.035		2.0	0.17	0.702	1/28/14 0:11	WSD	
Chloromethane	0.43	0.070		0.88	0.14	0.702	1/28/14 0:11	WSD	
Cyclohexane	0.15	0.035		0.51	0.12	0.702	1/28/14 0:11	WSD	
Dibromochloromethane	ND	0.035	U	ND	0.30	0.702	1/28/14 0:11	WSD	
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.046	U	ND	0.44	0.702	1/28/14 0:11	WSD	
1,2-Dibromoethane (EDB)	ND	0.035	U	ND	0.27	0.702	1/28/14 0:11	WSD	
1,2-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/28/14 0:11	WSD	
1,3-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/28/14 0:11	WSD	
1,4-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/28/14 0:11	WSD	
Dichlorodifluoromethane (Freon 12)	0.26	0.035		1.3	0.17	0.702	1/28/14 0:11	WSD	
1,1-Dichloroethane	ND	0.035	U	ND	0.14	0.702	1/28/14 0:11	WSD	
1,2-Dichloroethane	0.035	0.035	U	0.14	0.14	0.702	1/28/14 0:11	WSD	
1,1-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/28/14 0:11	WSD	
cis-1,2-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/28/14 0:11	WSD	
trans-1,2-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/28/14 0:11	WSD	
1,2-Dichloropropane	ND	0.035	U	ND	0.16	0.702	1/28/14 0:11	WSD	
cis-1,3-Dichloropropene	ND	0.035	U	ND	0.16	0.702	1/28/14 0:11	WSD	
trans-1,3-Dichloropropene	ND	0.035	U	ND	0.16	0.702	1/28/14 0:11	WSD	
Ethylbenzene	0.16	0.035		0.70	0.15	0.702	1/28/14 0:11	WSD	
2-Hexanone (MBK)	0.20	0.035		0.83	0.14	0.702	1/28/14 0:11	WSD	
Isopropylbenzene (Cumene)	ND	0.089	U	ND	0.44	0.702	1/28/14 0:11	WSD	
Methyl Acetate	ND	0.14	U	ND	0.44	0.702	1/28/14 0:11	WSD	
Methyl tert-Butyl Ether (MTBE)	ND	0.035	U	ND	0.13	0.702	1/28/14 0:11	WSD	
Methyl Cyclohexane	0.15	0.11		0.62	0.44	0.702	1/28/14 0:11	WSD	
Methylene Chloride	1.0	<del>0.35</del>	S	3.6	<del>1.2</del>	0.702	1/28/14 0:11	WSD	
4-Methyl-2-pentanone (MIBK)	0.11	0.035		0.43	0.14	0.702	1/28/14 0:11	WSD	
Styrene	0.042	0.035		0.18	0.15	0.702	1/28/14 0:11	WSD	

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**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave.  
 Date Received: 1/17/2014  
 Field Sample #: H-005-BA  
 Sample ID: 14A0568-08  
 Sample Matrix: Indoor air  
 Sampled: 1/14/2014 00:00

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 2001  
 Canister Size: 6 liter  
 Flow Controller ID: 3466  
 Sample Type: 24 hr

**Work Order: 14A0568**  
 Initial Vacuum(in Hg): -29  
 Final Vacuum(in Hg): -8  
 Receipt Vacuum(in Hg): -8.7  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL		Analized		
1,1,2,2-Tetrachloroethane	ND	0.035	U	ND	0.24	0.702	1/28/14 0:11	WSD	
Tetrachloroethylene	0.16	0.035		1.1	0.24	0.702	1/28/14 0:11	WSD	
Tetrahydrofuran	0.056	0.035		0.17	0.10	0.702	1/28/14 0:11	WSD	
Toluene	2.1	0.035		8.0	0.13	0.702	1/28/14 0:11	WSD	
1,2,4-Trichlorobenzene	ND	0.035	U	ND	0.26	0.702	1/28/14 0:11	WSD	
1,1,1-Trichloroethane	ND	0.035	U	ND	0.19	0.702	1/28/14 0:11	WSD	
1,1,2-Trichloroethane	ND	0.035	U	ND	0.19	0.702	1/28/14 0:11	WSD	
Trichloroethylene	0.049	0.035		0.26	0.19	0.702	1/28/14 0:11	WSD	
Trichlorofluoromethane (Freon 11)	0.29	0.035		1.7	0.20	0.702	1/28/14 0:11	WSD	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.091	0.035		0.70	0.27	0.702	1/28/14 0:11	WSD	
Vinyl Chloride	ND	0.035	U	ND	0.090	0.702	1/28/14 0:11	WSD	
m&p-Xylene	0.53	0.070		2.3	0.30	0.702	1/28/14 0:11	WSD	
o-Xylene	0.18	0.035		0.79	0.15	0.702	1/28/14 0:11	WSD	

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	95.9	70-130	1/28/14 0:11
4-Bromofluorobenzene (2)	110	70-130	1/28/14 0:11

ANALYTICAL RESULTS

Project Location: 100 Oser Ave.  
 Date Received: 1/17/2014  
 Field Sample #: H-005-OA  
 Sample ID: 14A0568-09  
 Sample Matrix: Ambient Air  
 Sampled: 1/14/2014 00:00

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 2003  
 Canister Size: 6 liter  
 Flow Controller ID: 3468  
 Sample Type: 24 hr

Work Order: 14A0568  
 Initial Vacuum(in Hg): -29  
 Final Vacuum(in Hg): -9  
 Receipt Vacuum(in Hg): -7.7  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv			ug/m3			Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL	Analized				
Acetone	11	1.4	3	27	3.3	3	0.702	1/28/14 0:56	WSD	
Benzene	0.31	0.035		0.99	0.11		0.702	1/28/14 0:56	WSD	
Bromodichloromethane	ND	0.035	U	ND	0.24		0.702	1/28/14 0:56	WSD	
Bromoform	ND	0.035	U	ND	0.36		0.702	1/28/14 0:56	WSD	
Bromomethane	ND	0.035	U	ND	0.14		0.702	1/28/14 0:56	WSD	
2-Butanone (MEK)	ND	1.4	U	ND	4.1		0.702	1/28/14 0:56	WSD	
Carbon Disulfide	ND	0.35	U	ND	1.1		0.702	1/28/14 0:56	WSD	
Carbon Tetrachloride	0.063	0.035		0.40	0.22		0.702	1/28/14 0:56	WSD	
Chlorobenzene	ND	0.035	U	ND	0.16		0.702	1/28/14 0:56	WSD	
Chloroethane	ND	0.035	U	ND	0.093		0.702	1/28/14 0:56	WSD	
Chloroform	ND	0.035	U	ND	0.17		0.702	1/28/14 0:56	WSD	
Chloromethane	0.41	0.070		0.85	0.14		0.702	1/28/14 0:56	WSD	
Cyclohexane	ND	0.035	U	ND	0.12		0.702	1/28/14 0:56	WSD	
Dibromochloromethane	ND	0.035	U	ND	0.30		0.702	1/28/14 0:56	WSD	
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.046	U	ND	0.44		0.702	1/28/14 0:56	WSD	
1,2-Dibromoethane (EDB)	ND	0.035	U	ND	0.27		0.702	1/28/14 0:56	WSD	
1,2-Dichlorobenzene	ND	0.035	U	ND	0.21		0.702	1/28/14 0:56	WSD	
1,3-Dichlorobenzene	ND	0.035	U	ND	0.21		0.702	1/28/14 0:56	WSD	
1,4-Dichlorobenzene	ND	0.035	U	ND	0.21		0.702	1/28/14 0:56	WSD	
Dichlorodifluoromethane (Freon 12)	0.26	0.035		1.3	0.17		0.702	1/28/14 0:56	WSD	
1,1-Dichloroethane	ND	0.035	U	ND	0.14		0.702	1/28/14 0:56	WSD	
1,2-Dichloroethane	ND	0.035	U	ND	0.14		0.702	1/28/14 0:56	WSD	
1,1-Dichloroethylene	ND	0.035	U	ND	0.14		0.702	1/28/14 0:56	WSD	
cis-1,2-Dichloroethylene	ND	0.035	U	ND	0.14		0.702	1/28/14 0:56	WSD	
trans-1,2-Dichloroethylene	ND	0.035	U	ND	0.14		0.702	1/28/14 0:56	WSD	
1,2-Dichloropropane	ND	0.035	U	ND	0.16		0.702	1/28/14 0:56	WSD	
cis-1,3-Dichloropropene	ND	0.035	U	ND	0.16		0.702	1/28/14 0:56	WSD	
trans-1,3-Dichloropropene	ND	0.035	U	ND	0.16		0.702	1/28/14 0:56	WSD	
Ethylbenzene	0.070	0.035		0.30	0.15		0.702	1/28/14 0:56	WSD	
2-Hexanone (MBK)	0.084	0.035		0.34	0.14		0.702	1/28/14 0:56	WSD	
Isopropylbenzene (Cumene)	ND	0.089	U	ND	0.44		0.702	1/28/14 0:56	WSD	
Methyl Acetate	ND	0.14	U	ND	0.44		0.702	1/28/14 0:56	WSD	
Methyl tert-Butyl Ether (MTBE)	ND	0.035	U	ND	0.13		0.702	1/28/14 0:56	WSD	
Methyl Cyclohexane	ND	0.11	U	ND	0.44		0.702	1/28/14 0:56	WSD	
Methylene Chloride	0.81	<del>0.35</del>	3	2.8	<del>1.2</del>	3	0.702	1/28/14 0:56	WSD	
4-Methyl-2-pentanone (MIBK)	0.049	0.035		0.20	0.14		0.702	1/28/14 0:56	WSD	
Styrene	ND	0.035	U	ND	0.15		0.702	1/28/14 0:56	WSD	

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**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave.  
 Date Received: 1/17/2014  
 Field Sample #: H-005-OA  
 Sample ID: 14A0568-09  
 Sample Matrix: Ambient Air  
 Sampled: 1/14/2014 00:00

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 2003  
 Canister Size: 6 liter  
 Flow Controller ID: 3468  
 Sample Type: 24 hr

**Work Order: 14A0568**  
 Initial Vacuum(in Hg): -29  
 Final Vacuum(in Hg): -9  
 Receipt Vacuum(in Hg): -7.7  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL		Analyzed		
1,1,2,2-Tetrachloroethane	ND	0.035	U	ND	0.24	0.702	1/28/14	0:56	WSD
Tetrachloroethylene	0.17	0.035		1.1	0.24	0.702	1/28/14	0:56	WSD
Tetrahydrofuran	0.042	0.035		0.12	0.10	0.702	1/28/14	0:56	WSD
Toluene	1.3	0.035		5.0	0.13	0.702	1/28/14	0:56	WSD
1,2,4-Trichlorobenzene	ND	0.035	U	ND	0.26	0.702	1/28/14	0:56	WSD
1,1,1-Trichloroethane	ND	0.035	U	ND	0.19	0.702	1/28/14	0:56	WSD
1,1,2-Trichloroethane	ND	0.035	U	ND	0.19	0.702	1/28/14	0:56	WSD
Trichloroethylene	0.049	0.035		0.26	0.19	0.702	1/28/14	0:56	WSD
Trichlorofluoromethane (Freon 11)	0.25	0.035		1.4	0.20	0.702	1/28/14	0:56	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.084	0.035		0.65	0.27	0.702	1/28/14	0:56	WSD
Vinyl Chloride	ND	0.035	U	ND	0.090	0.702	1/28/14	0:56	WSD
m&p-Xylene	0.20	0.070		0.88	0.30	0.702	1/28/14	0:56	WSD
o-Xylene	0.077	0.035		0.34	0.15	0.702	1/28/14	0:56	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	96.6	70-130	1/28/14 0:56
4-Bromofluorobenzene (2)	109	70-130	1/28/14 0:56

ANALYTICAL RESULTS

Project Location: 100 Oser Ave.  
 Date Received: 1/20/2014  
 Field Sample #: H-018-AS  
 Sample ID: 14A0619-02  
 Sample Matrix: Sub Slab  
 Sampled: 1/16/2014 17:43

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 2007  
 Canister Size: 6 liter  
 Flow Controller ID: 3473  
 Sample Type: 24 hr

Work Order: 14A0619  
 Initial Vacuum(in Hg): -29  
 Final Vacuum(in Hg): -8  
 Receipt Vacuum(in Hg): -9  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL		Analized		
Acetone	26	4.0		62	9.5	2	1/31/14 12:29	WSD	
Benzene	0.10	0.10		0.33	0.32	2	1/31/14 12:29	WSD	
Bromodichloromethane	ND	0.10	U	ND	0.67	2	1/31/14 12:29	WSD	
Bromoform	ND	0.10	U	ND	1.0	2	1/31/14 12:29	WSD	
Bromomethane	ND	0.10	U	ND	0.39	2	1/31/14 12:29	WSD	
2-Butanone (MEK)	ND	4.0	U	ND	12	2	1/31/14 12:29	WSD	
Carbon Disulfide	ND	1.0	U	ND	3.1	2	1/31/14 12:29	WSD	
Carbon Tetrachloride	ND	0.10	U	ND	0.63	2	1/31/14 12:29	WSD	
Chlorobenzene	ND	0.10	U	ND	0.46	2	1/31/14 12:29	WSD	
Chloroethane	ND	0.10	U	ND	0.26	2	1/31/14 12:29	WSD	
Chloroform	1.7	0.10		8.5	0.49	2	1/31/14 12:29	WSD	
Chloromethane	ND	0.20	U	ND	0.41	2	1/31/14 12:29	WSD	
Cyclohexane	ND	0.10	L-03, V-05, U	ND	0.34	2	1/31/14 12:29	WSD	
Dibromochloromethane	ND	0.10	U	ND	0.85	2	1/31/14 12:29	WSD	
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.13	L-03, U	ND	1.3	2	1/31/14 12:29	WSD	
1,2-Dibromoethane (EDB)	ND	0.10	U	ND	0.77	2	1/31/14 12:29	WSD	
1,2-Dichlorobenzene	ND	0.10	U	ND	0.60	2	1/31/14 12:29	WSD	
1,3-Dichlorobenzene	ND	0.10	U	ND	0.60	2	1/31/14 12:29	WSD	
1,4-Dichlorobenzene	ND	0.10	U	ND	0.60	2	1/31/14 12:29	WSD	
Dichlorodifluoromethane (Freon 12)	0.59	0.10		2.9	0.49	2	1/31/14 12:29	WSD	
1,1-Dichloroethane	ND	0.10	U	ND	0.40	2	1/31/14 12:29	WSD	
1,2-Dichloroethane	ND	0.10	U	ND	0.40	2	1/31/14 12:29	WSD	
1,1-Dichloroethylene	ND	0.10	U	ND	0.40	2	1/31/14 12:29	WSD	
cis-1,2-Dichloroethylene	ND	0.10	U	ND	0.40	2	1/31/14 12:29	WSD	
trans-1,2-Dichloroethylene	ND	0.10	U	ND	0.40	2	1/31/14 12:29	WSD	
1,2-Dichloropropane	ND	0.10	L-03, V-05, U	ND	0.46	2	1/31/14 12:29	WSD	
cis-1,3-Dichloropropene	ND	0.10	U	ND	0.45	2	1/31/14 12:29	WSD	
trans-1,3-Dichloropropene	ND	0.10	U	ND	0.45	2	1/31/14 12:29	WSD	
Ethylbenzene	0.12	0.10		0.51	0.43	2	1/31/14 12:29	WSD	
2-Hexanone (MBK)	0.47	0.10	L-03, V-05	1.9	0.41	2	1/31/14 12:29	WSD	
Isopropylbenzene (Cumene)	ND	0.25	L-03, U	ND	1.2	2	1/31/14 12:29	WSD	
Methyl Acetate	ND	0.41	L-03, U	ND	1.2	2	1/31/14 12:29	WSD	
Methyl tert-Butyl Ether (MTBE)	ND	0.10	U	ND	0.36	2	1/31/14 12:29	WSD	
Methyl Cyclohexane	ND	0.31	L-03, U	ND	1.3	2	1/31/14 12:29	WSD	
Methylene Chloride	ND	1.0	U	ND	3.5	2	1/31/14 12:29	WSD	
4-Methyl-2-pentanone (MIBK)	0.12	0.10	L-03	0.50	0.41	2	1/31/14 12:29	WSD	
Styrene	ND	0.10	U	ND	0.43	2	1/31/14 12:29	WSD	

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**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave  
 Date Received: 1/20/2014  
 Field Sample #: H-018-AS  
 Sample ID: 14A0619-02  
 Sample Matrix: Sub Slab  
 Sampled: 1/16/2014 17:43

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 2007  
 Canister Size: 6 liter  
 Flow Controller ID: 3473  
 Sample Type: 24 hr

**Work Order: 14A0619**  
 Initial Vacuum(in Hg): -29  
 Final Vacuum(in Hg): -8  
 Receipt Vacuum(in Hg): -9  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time Analyzed	Analyst
	Results	RL	Flag/Qual	Results	RL			
1,1,2,2-Tetrachloroethane	ND	0.10	U	ND	0.69	2	1/31/14 12:29	WSD
Tetrachloroethylene	5.7	0.10		39	0.68	2	1/31/14 12:29	WSD
Tetrahydrofuran	ND	0.10	U	ND	0.29	2	1/31/14 12:29	WSD
Toluene	20	0.10		75	0.38	2	1/31/14 12:29	WSD
1,2,4-Trichlorobenzene	ND	0.10	U 5	ND	0.74	2	1/31/14 12:29	WSD
1,1,1-Trichloroethane	0.14	0.10		0.79	0.55	2	1/31/14 12:29	WSD
1,1,2-Trichloroethane	ND	0.10	U	ND	0.55	2	1/31/14 12:29	WSD
Trichloroethylene	ND	0.10	U	ND	0.54	2	1/31/14 12:29	WSD
Trichlorofluoromethane (Freon 11)	0.40	0.10		2.2	0.56	2	1/31/14 12:29	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.47	0.10		3.6	0.77	2	1/31/14 12:29	WSD
Vinyl Chloride	ND	0.10	U	ND	0.26	2	1/31/14 12:29	WSD
m&p-Xylene	0.57	0.20		2.5	0.87	2	1/31/14 12:29	WSD
o-Xylene	0.31	0.10		1.3	0.43	2	1/31/14 12:29	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	115	70-130	1/31/14 12:29
4-Bromofluorobenzene (2)	110	70-130	1/31/14 12:29

*WSD  
1/31/14*

ANALYTICAL RESULTS

Project Location: 100 Oser Ave.  
 Date Received: 1/20/2014  
 Field Sample #: H-018-BA  
 Sample ID: 14A0619-03  
 Sample Matrix: Indoor air  
 Sampled: 1/16/2014 17:43

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 2010  
 Canister Size: 6 liter  
 Flow Controller ID: 3474  
 Sample Type: 24 hr

Work Order: 14A0619  
 Initial Vacuum(in Hg): -29  
 Final Vacuum(in Hg): -8.5  
 Receipt Vacuum(in Hg): -9.5  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL		Analized		
Acetone	16	1.4		38	3.3	0.702	1/31/14 11:09	WSD	
Benzene	0.31	0.035		0.99	0.11	0.702	1/31/14 11:09	WSD	
Bromodichloromethane	ND	0.035	U	ND	0.24	0.702	1/31/14 11:09	WSD	
Bromoform	ND	0.035	U	ND	0.36	0.702	1/31/14 11:09	WSD	
Bromomethane	ND	0.035	U	ND	0.14	0.702	1/31/14 11:09	WSD	
2-Butanone (MEK)	2.1	1.4		6.3	4.1	0.702	1/31/14 11:09	WSD	
Carbon Disulfide	ND	0.35	U	ND	1.1	0.702	1/31/14 11:09	WSD	
Carbon Tetrachloride	0.082	0.035		0.52	0.22	0.702	1/31/14 11:09	WSD	
Chlorobenzene	ND	0.035	U	ND	0.16	0.702	1/31/14 11:09	WSD	
Chloroethane	ND	0.035	U	ND	0.093	0.702	1/31/14 11:09	WSD	
Chloroform	ND	0.035	U	ND	0.17	0.702	1/31/14 11:09	WSD	
Chloromethane	0.53	0.070		1.1	0.14	0.702	1/31/14 11:09	WSD	
Cyclohexane	0.15	0.035	L-03, V-05 J	0.53	0.12 J	0.702	1/31/14 11:09	WSD	
Dibromochloromethane	ND	0.035	U	ND	0.30	0.702	1/31/14 11:09	WSD	
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.046	L-03, U J	ND	0.44 J	0.702	1/31/14 11:09	WSD	
1,2-Dibromoethane (EDB)	ND	0.035	U	ND	0.27	0.702	1/31/14 11:09	WSD	
1,2-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/31/14 11:09	WSD	
1,3-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/31/14 11:09	WSD	
1,4-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/31/14 11:09	WSD	
Dichlorodifluoromethane (Freon 12)	0.46	0.035		2.3	0.17	0.702	1/31/14 11:09	WSD	
1,1-Dichloroethane	ND	0.035	U	ND	0.14	0.702	1/31/14 11:09	WSD	
1,2-Dichloroethane	ND	0.035	U	ND	0.14	0.702	1/31/14 11:09	WSD	
1,1-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/31/14 11:09	WSD	
cis-1,2-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/31/14 11:09	WSD	
trans-1,2-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/31/14 11:09	WSD	
1,2-Dichloropropane	ND	0.035	L-03, V-05, U J	ND	0.16 J	0.702	1/31/14 11:09	WSD	
cis-1,3-Dichloropropene	ND	0.035	U	ND	0.16	0.702	1/31/14 11:09	WSD	
trans-1,3-Dichloropropene	ND	0.035	U	ND	0.16	0.702	1/31/14 11:09	WSD	
Ethylbenzene	0.048	0.035		0.21	0.15	0.702	1/31/14 11:09	WSD	
2-Hexanone (MBK)	0.095	0.035	L-03, V-05 J	0.39	0.14 J	0.702	1/31/14 11:09	WSD	
Isopropylbenzene (Cumene)	ND	0.089	L-03, U J	ND	0.44 J	0.702	1/31/14 11:09	WSD	
Methyl Acetate	ND	0.14	L-03, U J	ND	0.44 J	0.702	1/31/14 11:09	WSD	
Methyl tert-Butyl Ether (MTBE)	ND	0.035	U	ND	0.13	0.702	1/31/14 11:09	WSD	
Methyl Cyclohexane	0.14	0.11	L-03 J	0.57	0.44 J	0.702	1/31/14 11:09	WSD	
Methylene Chloride	0.54	0.35		1.9	1.2	0.702	1/31/14 11:09	WSD	
4-Methyl-2-pentanone (MIBK)	ND	0.035	L-03, U J	ND	0.14 J	0.702	1/31/14 11:09	WSD	
Styrene	ND	0.035	U	ND	0.15	0.702	1/31/14 11:09	WSD	

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**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave.  
 Date Received: 1/20/2014  
 Field Sample #: H-018-BA  
 Sample ID: 14A0619-03  
 Sample Matrix: Indoor air  
 Sampled: 1/16/2014 17:43

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 2010  
 Canister Size: 6 liter  
 Flow Controller ID: 3474  
 Sample Type: 24 hr

**Work Order: 14A0619**  
 Initial Vacuum(in Hg): -29  
 Final Vacuum(in Hg): -8.5  
 Receipt Vacuum(in Hg): -9.5  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time Analyzed	Analyst
	Results	RL	Flag/Qual	Results	RL			
1,1,2,2-Tetrachloroethane	ND	0.035	U	ND	0.24	0.702	1/31/14 11:09	WSD
Tetrachloroethylene	0.22	0.035		1.5	0.24	0.702	1/31/14 11:09	WSD
Tetrahydrofuran	1.5	0.035		4.3	0.10	0.702	1/31/14 11:09	WSD
Toluene	0.42	0.035		1.6	0.13	0.702	1/31/14 11:09	WSD
1,2,4-Trichlorobenzene	ND	0.035	L-03, U <i>5</i>	ND	0.26 <i>55</i>	0.702	1/31/14 11:09	WSD
1,1,1-Trichloroethane	ND	0.035	U	ND	0.19	0.702	1/31/14 11:09	WSD
1,1,2-Trichloroethane	ND	0.035	U	ND	0.19	0.702	1/31/14 11:09	WSD
Trichloroethylene	ND	0.035	U	ND	0.19	0.702	1/31/14 11:09	WSD
Trichlorofluoromethane (Freon 11)	0.36	0.035		2.0	0.20	0.702	1/31/14 11:09	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.11	0.035		0.86	0.27	0.702	1/31/14 11:09	WSD
Vinyl Chloride	ND	0.035	U	ND	0.090	0.702	1/31/14 11:09	WSD
m&p-Xylene	0.14	0.070		0.62	0.30	0.702	1/31/14 11:09	WSD
o-Xylene	0.054	0.035		0.23	0.15	0.702	1/31/14 11:09	WSD

Surrogates	% Recovery	% REC Limits	Date/Time Analyzed
4-Bromofluorobenzene (1)	114	70-130	1/31/14 11:09
4-Bromofluorobenzene (2)	109	70-130	1/31/14 11:09

*WSD  
1/31/14*

**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave.  
 Date Received: 1/20/2014  
 Field Sample #: H-018-OA  
 Sample ID: 14A0619-04  
 Sample Matrix: Ambient Air  
 Sampled: 1/16/2014 17:42

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 2011  
 Canister Size: 6 liter  
 Flow Controller ID: 3479  
 Sample Type: 24 hr

Work Order: 14A0619  
 Initial Vacuum(in Hg): -29  
 Final Vacuum(in Hg): -8  
 Receipt Vacuum(in Hg): -7.8  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL		Analized		
Acetone	7.3	1.4		17	3.3	0.702	1/31/14 11:51	WSD	
Benzene	0.26	0.035		0.84	0.11	0.702	1/31/14 11:51	WSD	
Bromodichloromethane	ND	0.035	U	ND	0.24	0.702	1/31/14 11:51	WSD	
Bromoform	ND	0.035	U	ND	0.36	0.702	1/31/14 11:51	WSD	
Bromomethane	ND	0.035	U	ND	0.14	0.702	1/31/14 11:51	WSD	
2-Butanone (MEK)	ND	1.4	U	ND	4.1	0.702	1/31/14 11:51	WSD	
Carbon Disulfide	ND	0.35	U	ND	1.1	0.702	1/31/14 11:51	WSD	
Carbon Tetrachloride	0.083	0.035		0.52	0.22	0.702	1/31/14 11:51	WSD	
Chlorobenzene	ND	0.035	U	ND	0.16	0.702	1/31/14 11:51	WSD	
Chloroethane	ND	0.035	U	ND	0.093	0.702	1/31/14 11:51	WSD	
Chloroform	ND	0.035	U	ND	0.17	0.702	1/31/14 11:51	WSD	
Chloromethane	0.55	0.070		1.1	0.14	0.702	1/31/14 11:51	WSD	
Cyclohexane	ND	0.035	L-03, V-05, U	ND	0.12	0.702	1/31/14 11:51	WSD	
Dibromochloromethane	ND	0.035	U	ND	0.30	0.702	1/31/14 11:51	WSD	
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.046	L-03, U	ND	0.44	0.702	1/31/14 11:51	WSD	
1,2-Dibromoethane (EDB)	ND	0.035	U	ND	0.27	0.702	1/31/14 11:51	WSD	
1,2-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/31/14 11:51	WSD	
1,3-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/31/14 11:51	WSD	
1,4-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/31/14 11:51	WSD	
Dichlorodifluoromethane (Freon 12)	0.49	0.035		2.4	0.17	0.702	1/31/14 11:51	WSD	
1,1-Dichloroethane	ND	0.035	U	ND	0.14	0.702	1/31/14 11:51	WSD	
1,2-Dichloroethane	ND	0.035	U	ND	0.14	0.702	1/31/14 11:51	WSD	
1,1-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/31/14 11:51	WSD	
cis-1,2-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/31/14 11:51	WSD	
trans-1,2-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/31/14 11:51	WSD	
1,2-Dichloropropane	ND	0.035	L-03, V-05, U	ND	0.16	0.702	1/31/14 11:51	WSD	
cis-1,3-Dichloropropene	ND	0.035	U	ND	0.16	0.702	1/31/14 11:51	WSD	
trans-1,3-Dichloropropene	ND	0.035	U	ND	0.16	0.702	1/31/14 11:51	WSD	
Ethylbenzene	0.040	0.035		0.17	0.15	0.702	1/31/14 11:51	WSD	
2-Hexanone (MBK)	0.064	0.035	L-03, V-05	0.26	0.14	0.702	1/31/14 11:51	WSD	
Isopropylbenzene (Cumene)	ND	0.089	L-03, U	ND	0.44	0.702	1/31/14 11:51	WSD	
Methyl Acetate	ND	0.14	L-03, U	ND	0.44	0.702	1/31/14 11:51	WSD	
Methyl tert-Butyl Ether (MTBE)	ND	0.035	U	ND	0.13	0.702	1/31/14 11:51	WSD	
Methyl Cyclohexane	ND	0.11	L-03, U	ND	0.44	0.702	1/31/14 11:51	WSD	
Methylene Chloride	0.44	0.35		1.5	1.2	0.702	1/31/14 11:51	WSD	
4-Methyl-2-pentanone (MIBK)	ND	0.035	L-03, U	ND	0.14	0.702	1/31/14 11:51	WSD	
Styrene	ND	0.035	U	ND	0.15	0.702	1/31/14 11:51	WSD	

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**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave  
 Date Received: 1/20/2014  
 Field Sample #: H-018-OA  
 Sample ID: 14A0619-04  
 Sample Matrix: Ambient Air  
 Sampled: 1/16/2014 17:42

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 2011  
 Canister Size: 6 liter  
 Flow Controller ID: 3479  
 Sample Type: 24 hr

**Work Order: 14A0619**  
 Initial Vacuum(in Hg): -29  
 Final Vacuum(in Hg): -8  
 Receipt Vacuum(in Hg): -7.8  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL		Analized		
1,1,2,2-Tetrachloroethane	ND	0.035	U	ND	0.24	0.702	1/31/14 11:51	WSD	
Tetrachloroethylene	0.040	0.035		0.27	0.24	0.702	1/31/14 11:51	WSD	
Tetrahydrofuran	ND	0.035	U	ND	0.10	0.702	1/31/14 11:51	WSD	
Toluene	0.29	0.035		1.1	0.13	0.702	1/31/14 11:51	WSD	
1,2,4-Trichlorobenzene	ND	0.035	L-03, U-5	ND	0.26	0.702	1/31/14 11:51	WSD	
1,1,1-Trichloroethane	ND	0.035	U	ND	0.19	0.702	1/31/14 11:51	WSD	
1,1,2-Trichloroethane	ND	0.035	U	ND	0.19	0.702	1/31/14 11:51	WSD	
Trichloroethylene	ND	0.035	U	ND	0.19	0.702	1/31/14 11:51	WSD	
Trichlorofluoromethane (Freon 11)	0.35	0.035		2.0	0.20	0.702	1/31/14 11:51	WSD	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.10	0.035		0.80	0.27	0.702	1/31/14 11:51	WSD	
Vinyl Chloride	ND	0.035	U	ND	0.090	0.702	1/31/14 11:51	WSD	
m&p-Xylene	0.11	0.070		0.48	0.30	0.702	1/31/14 11:51	WSD	
o-Xylene	0.046	0.035		0.20	0.15	0.702	1/31/14 11:51	WSD	

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	115	70-130	1/31/14 11:51
4-Bromofluorobenzene (2)	111	70-130	1/31/14 11:51

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**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave.  
 Date Received: 1/21/2014  
 Field Sample #: H-023-AS  
 Sample ID: 14A0620-01  
 Sample Matrix: Sub Slab  
 Sampled: 1/17/2014 08:10

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 2013  
 Canister Size: 6 liter  
 Flow Controller ID: 3481  
 Sample Type: 24 hr

Work Order: 14A0620  
 Initial Vacuum(in Hg): -30  
 Final Vacuum(in Hg): -8  
 Receipt Vacuum(in Hg): -7  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling:

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL		Analized		
Acetone	9.1	4.0	L-05, V-06 J	22	9.5 J	2	1/31/14 12:13	WSD	
Benzene	0.11	0.10		0.35	0.32	2	1/31/14 12:13	WSD	
Bromodichloromethane	ND	0.10	U	ND	0.67	2	1/31/14 12:13	WSD	
Bromoform	ND	0.10	U	ND	1.0	2	1/31/14 12:13	WSD	
Bromomethane	ND	0.10	U	ND	0.39	2	1/31/14 12:13	WSD	
2-Butanone (MEK)	ND	4.0	U	ND	12	2	1/31/14 12:13	WSD	
Carbon Disulfide	ND	1.0	U	ND	3.1	2	1/31/14 12:13	WSD	
Carbon Tetrachloride	ND	0.10	U	ND	0.63	2	1/31/14 12:13	WSD	
Chlorobenzene	ND	0.10	U	ND	0.46	2	1/31/14 12:13	WSD	
Chloroethane	ND	0.10	U	ND	0.26	2	1/31/14 12:13	WSD	
Chloroform	4.0	0.10		20	0.49	2	1/31/14 12:13	WSD	
Chloromethane	ND	0.20	U	ND	0.41	2	1/31/14 12:13	WSD	
Cyclohexane	ND	0.10	U	ND	0.34	2	1/31/14 12:13	WSD	
Dibromochloromethane	ND	0.10	U	ND	0.85	2	1/31/14 12:13	WSD	
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.13	U	ND	1.3	2	1/31/14 12:13	WSD	
1,2-Dibromoethane (EDB)	ND	0.10	U	ND	0.77	2	1/31/14 12:13	WSD	
1,2-Dichlorobenzene	ND	0.10	U	ND	0.60	2	1/31/14 12:13	WSD	
1,3-Dichlorobenzene	ND	0.10	U	ND	0.60	2	1/31/14 12:13	WSD	
1,4-Dichlorobenzene	ND	0.10	U	ND	0.60	2	1/31/14 12:13	WSD	
Dichlorodifluoromethane (Freon 12)	0.57	0.10		2.8	0.49	2	1/31/14 12:13	WSD	
1,1-Dichloroethane	ND	0.10	U	ND	0.40	2	1/31/14 12:13	WSD	
1,2-Dichloroethane	ND	0.10	U	ND	0.40	2	1/31/14 12:13	WSD	
1,1-Dichloroethylene	ND	0.10	U	ND	0.40	2	1/31/14 12:13	WSD	
cis-1,2-Dichloroethylene	ND	0.10	U	ND	0.40	2	1/31/14 12:13	WSD	
trans-1,2-Dichloroethylene	ND	0.10	U	ND	0.40	2	1/31/14 12:13	WSD	
1,2-Dichloropropane	ND	0.10	U	ND	0.46	2	1/31/14 12:13	WSD	
cis-1,3-Dichloropropene	ND	0.10	U	ND	0.45	2	1/31/14 12:13	WSD	
trans-1,3-Dichloropropene	ND	0.10	U	ND	0.45	2	1/31/14 12:13	WSD	
Ethylbenzene	ND	0.10	U	ND	0.43	2	1/31/14 12:13	WSD	
2-Hexanone (MBK)	ND	0.10	U	ND	0.41	2	1/31/14 12:13	WSD	
Isopropylbenzene (Cumene)	ND	0.25	L-09, U J	ND	1.2 J	2	1/31/14 12:13	WSD	
Methyl Acetate	ND	0.41	U	ND	1.2	2	1/31/14 12:13	WSD	
Methyl tert-Butyl Ether (MTBE)	ND	0.10	U	ND	0.36	2	1/31/14 12:13	WSD	
Methyl Cyclohexane	ND	0.31	U	ND	1.3	2	1/31/14 12:13	WSD	
Methylene Chloride	ND	1.0	U	ND	3.5	2	1/31/14 12:13	WSD	
4-Methyl-2-pentanone (MIBK)	ND	0.10	U	ND	0.41	2	1/31/14 12:13	WSD	
Styrene	ND	0.10	U	ND	0.43	2	1/31/14 12:13	WSD	

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**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave.  
 Date Received: 1/21/2014  
 Field Sample #: H-023-AS  
 Sample ID: 14A0620-01  
 Sample Matrix: Sub Slab  
 Sampled: 1/17/2014 08:10

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 2013  
 Canister Size: 6 liter  
 Flow Controller ID: 3481  
 Sample Type: 24 hr

Work Order: 14A0620  
 Initial Vacuum(in Hg): -30  
 Final Vacuum(in Hg): -8  
 Receipt Vacuum(in Hg): -7  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling:

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL		Analyzed		
1,1,2,2-Tetrachloroethane	ND	0.10	U	ND	0.69	2	1/31/14 12:13	WSD	
Tetrachloroethylene	0.71	0.10		4.8	0.68	2	1/31/14 12:13	WSD	
Tetrahydrofuran	ND	0.10	U	ND	0.29	2	1/31/14 12:13	WSD	
Toluene	1.1	0.10		4.1	0.38	2	1/31/14 12:13	WSD	
1,2,4-Trichlorobenzene	ND	0.10	U	ND	0.74	2	1/31/14 12:13	WSD	
1,1,1-Trichloroethane	0.15	0.10		0.82	0.55	2	1/31/14 12:13	WSD	
1,1,2-Trichloroethane	ND	0.10	U	ND	0.55	2	1/31/14 12:13	WSD	
Trichloroethylene	ND	0.10	U	ND	0.54	2	1/31/14 12:13	WSD	
Trichlorofluoromethane (Freon 11)	0.41	0.10		2.3	0.56	2	1/31/14 12:13	WSD	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.14	0.10		1.1	0.77	2	1/31/14 12:13	WSD	
Vinyl Chloride	ND	0.10	U	ND	0.26	2	1/31/14 12:13	WSD	
m&p-Xylene	0.20	0.20		0.88	0.87	2	1/31/14 12:13	WSD	
o-Xylene	ND	0.10	U	ND	0.43	2	1/31/14 12:13	WSD	

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	91.8	70-130	1/31/14 12:13
4-Bromofluorobenzene (2)	79.3	70-130	1/31/14 12:13

ANALYTICAL RESULTS

Project Location: 100 Oser Ave.  
 Date Received: 1/21/2014  
 Field Sample #: H-023-1A  
 Sample ID: 14A0620-02  
 Sample Matrix: Indoor air  
 Sampled: 1/17/2014 08:09

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 2016  
 Canister Size: 6 liter  
 Flow Controller ID: 3482  
 Sample Type: 24 hr

Work Order: 14A0620  
 Initial Vacuum(in Hg): -29  
 Final Vacuum(in Hg): -8  
 Receipt Vacuum(in Hg): -8  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL		Analyzed		
Acetone	33	1.4	L-05, V-06 JS	79	3.3 JS	0.702	1/31/14 0:14	WSD	
Benzene	0.49	0.035		1.6	0.11	0.702	1/31/14 0:14	WSD	
Bromodichloromethane	ND	0.035	U	ND	0.24	0.702	1/31/14 0:14	WSD	
Bromoform	ND	0.035	U	ND	0.36	0.702	1/31/14 0:14	WSD	
Bromomethane	ND	0.035	U	ND	0.14	0.702	1/31/14 0:14	WSD	
2-Butanone (MEK)	3.2	1.4		9.5	4.1	0.702	1/31/14 0:14	WSD	
Carbon Disulfide	ND	0.35	U	ND	1.1	0.702	1/31/14 0:14	WSD	
Carbon Tetrachloride	0.088	0.035		0.56	0.22	0.702	1/31/14 0:14	WSD	
Chlorobenzene	ND	0.035	U	ND	0.16	0.702	1/31/14 0:14	WSD	
Chloroethane	ND	0.035	U	ND	0.093	0.702	1/31/14 0:14	WSD	
Chloroform	0.040	0.035		0.20	0.17	0.702	1/31/14 0:14	WSD	
Chloromethane	0.50	0.070		1.0	0.14	0.702	1/31/14 0:14	WSD	
Cyclohexane	0.18	0.035		0.62	0.12	0.702	1/31/14 0:14	WSD	
Dibromochloromethane	ND	0.035	U	ND	0.30	0.702	1/31/14 0:14	WSD	
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.046	U	ND	0.44	0.702	1/31/14 0:14	WSD	
1,2-Dibromoethane (EDB)	ND	0.035	U	ND	0.27	0.702	1/31/14 0:14	WSD	
1,2-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/31/14 0:14	WSD	
1,3-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/31/14 0:14	WSD	
1,4-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/31/14 0:14	WSD	
Dichlorodifluoromethane (Freon 12)	0.51	0.035		2.5	0.17	0.702	1/31/14 0:14	WSD	
1,1-Dichloroethane	ND	0.035	U	ND	0.14	0.702	1/31/14 0:14	WSD	
1,2-Dichloroethane	0.081	0.035		0.33	0.14	0.702	1/31/14 0:14	WSD	
1,1-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/31/14 0:14	WSD	
cis-1,2-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/31/14 0:14	WSD	
trans-1,2-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/31/14 0:14	WSD	
1,2-Dichloropropane	ND	0.035	U	ND	0.16	0.702	1/31/14 0:14	WSD	
cis-1,3-Dichloropropene	ND	0.035	U	ND	0.16	0.702	1/31/14 0:14	WSD	
trans-1,3-Dichloropropene	ND	0.035	U	ND	0.16	0.702	1/31/14 0:14	WSD	
Ethylbenzene	0.47	0.035		2.0	0.15	0.702	1/31/14 0:14	WSD	
2-Hexanone (MBK)	0.10	0.035		0.42	0.14	0.702	1/31/14 0:14	WSD	
Isopropylbenzene (Cumene)	ND	0.089	L-03, U-5 JS	ND	0.44 JS	0.702	1/31/14 0:14	WSD	
Methyl Acetate	0.48	0.14		1.4	0.44	0.702	1/31/14 0:14	WSD	
Methyl tert-Butyl Ether (MTBE)	ND	0.035	U	ND	0.13	0.702	1/31/14 0:14	WSD	
Methyl Cyclohexane	0.45	0.11		1.8	0.44	0.702	1/31/14 0:14	WSD	
Methylene Chloride	8.9	0.35		31	1.2	0.702	1/31/14 0:14	WSD	
4-Methyl-2-pentanone (MIBK)	0.12	0.035		0.51	0.14	0.702	1/31/14 0:14	WSD	
Styrene	0.055	0.035		0.23	0.15	0.702	1/31/14 0:14	WSD	

*Handwritten signature and date: WSD 2/6/14*

**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave.  
 Date Received: 1/21/2014  
 Field Sample #: H-023-1A  
 Sample ID: 14A0620-02  
 Sample Matrix: Indoor air  
 Sampled: 1/17/2014 08:09

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 2016  
 Canister Size: 6 liter  
 Flow Controller ID: 3482  
 Sample Type: 24 hr

**Work Order: 14A0620**  
 Initial Vacuum(in Hg): -29  
 Final Vacuum(in Hg): -8  
 Receipt Vacuum(in Hg): -8  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling:

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL		Analized		
1,1,2,2-Tetrachloroethane	ND	0.035	U	ND	0.24	0.702	1/31/14	0:14	WSD
Tetrachloroethylene	0.11	0.035		0.75	0.24	0.702	1/31/14	0:14	WSD
Tetrahydrofuran	0.13	0.035		0.38	0.10	0.702	1/31/14	0:14	WSD
Toluene	4.1	0.035		16	0.13	0.702	1/31/14	0:14	WSD
1,2,4-Trichlorobenzene	ND	0.035	U	ND	0.26	0.702	1/31/14	0:14	WSD
1,1,1-Trichloroethane	ND	0.035	U	ND	0.19	0.702	1/31/14	0:14	WSD
1,1,2-Trichloroethane	ND	0.035	U	ND	0.19	0.702	1/31/14	0:14	WSD
Trichloroethylene	ND	0.035	U	ND	0.19	0.702	1/31/14	0:14	WSD
Trichlorofluoromethane (Freon 11)	0.46	0.035		2.6	0.20	0.702	1/31/14	0:14	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.076	0.035		0.58	0.27	0.702	1/31/14	0:14	WSD
Vinyl Chloride	ND	0.035	U	ND	0.090	0.702	1/31/14	0:14	WSD
m&p-Xylene	1.7	0.070		7.3	0.30	0.702	1/31/14	0:14	WSD
o-Xylene	0.58	0.035		2.5	0.15	0.702	1/31/14	0:14	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	104	70-130	1/31/14 0:14
4-Bromofluorobenzene (2)	85.9	70-130	1/31/14 0:14

ANALYTICAL RESULTS

Project Location: 100 Oser Ave.  
 Date Received: 1/21/2014  
 Field Sample #: H-023-OA  
 Sample ID: 14A0620-03  
 Sample Matrix: Ambient Air  
 Sampled: 1/17/2014 08:17

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 2017  
 Canister Size: 6 liter  
 Flow Controller ID: 3483  
 Sample Type: 24 hr

Work Order: 14A0620  
 Initial Vacuum(in Hg): -30  
 Final Vacuum(in Hg): -8  
 Receipt Vacuum(in Hg): -6  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Acetone	10	1.4	L-05, V-06	24	3.3	0.702	1/31/14 0:59	WSD	
Benzene	0.39	0.035		1.2	0.11	0.702	1/31/14 0:59	WSD	
Bromodichloromethane	ND	0.035	U	ND	0.24	0.702	1/31/14 0:59	WSD	
Bromoform	ND	0.035	U	ND	0.36	0.702	1/31/14 0:59	WSD	
Bromomethane	ND	0.035	U	ND	0.14	0.702	1/31/14 0:59	WSD	
2-Butanone (MEK)	ND	1.4	U	ND	4.1	0.702	1/31/14 0:59	WSD	
Carbon Disulfide	ND	0.35	U	ND	1.1	0.702	1/31/14 0:59	WSD	
Carbon Tetrachloride	0.092	0.035		0.58	0.22	0.702	1/31/14 0:59	WSD	
Chlorobenzene	ND	0.035	U	ND	0.16	0.702	1/31/14 0:59	WSD	
Chloroethane	ND	0.035	U	ND	0.093	0.702	1/31/14 0:59	WSD	
Chloroform	ND	0.035	U	ND	0.17	0.702	1/31/14 0:59	WSD	
Chloromethane	0.54	0.070		1.1	0.14	0.702	1/31/14 0:59	WSD	
Cyclohexane	ND	0.035	U	ND	0.12	0.702	1/31/14 0:59	WSD	
Dibromochloromethane	ND	0.035	U	ND	0.30	0.702	1/31/14 0:59	WSD	
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.046	U	ND	0.44	0.702	1/31/14 0:59	WSD	
1,2-Dibromoethane (EDB)	ND	0.035	U	ND	0.27	0.702	1/31/14 0:59	WSD	
1,2-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/31/14 0:59	WSD	
1,3-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/31/14 0:59	WSD	
1,4-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/31/14 0:59	WSD	
Dichlorodifluoromethane (Freon 12)	0.55	0.035		2.7	0.17	0.702	1/31/14 0:59	WSD	
1,1-Dichloroethane	ND	0.035	U	ND	0.14	0.702	1/31/14 0:59	WSD	
1,2-Dichloroethane	ND	0.035	U	ND	0.14	0.702	1/31/14 0:59	WSD	
1,1-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/31/14 0:59	WSD	
cis-1,2-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/31/14 0:59	WSD	
trans-1,2-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/31/14 0:59	WSD	
1,2-Dichloropropane	ND	0.035	U	ND	0.16	0.702	1/31/14 0:59	WSD	
cis-1,3-Dichloropropene	ND	0.035	U	ND	0.16	0.702	1/31/14 0:59	WSD	
trans-1,3-Dichloropropene	ND	0.035	U	ND	0.16	0.702	1/31/14 0:59	WSD	
Ethylbenzene	0.098	0.035		0.42	0.15	0.702	1/31/14 0:59	WSD	
2-Hexanone (MBK)	0.061	0.035		0.25	0.14	0.702	1/31/14 0:59	WSD	
Isopropylbenzene (Cumene)	ND	0.089	L-03, U-5	ND	0.44	0.702	1/31/14 0:59	WSD	
Methyl Acetate	ND	0.14	U	ND	0.44	0.702	1/31/14 0:59	WSD	
Methyl tert-Butyl Ether (MTBE)	ND	0.035	U	ND	0.13	0.702	1/31/14 0:59	WSD	
Methyl Cyclohexane	ND	0.11	U	ND	0.44	0.702	1/31/14 0:59	WSD	
Methylene Chloride	0.42	0.35		1.5	1.2	0.702	1/31/14 0:59	WSD	
4-Methyl-2-pentanone (MIBK)	ND	0.035	U	ND	0.14	0.702	1/31/14 0:59	WSD	
Styrene	ND	0.035	U	ND	0.15	0.702	1/31/14 0:59	WSD	

*Handwritten signature and date: WSD 1/31/14*

**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave.  
 Date Received: 1/21/2014  
 Field Sample #: H-023-OA  
 Sample ID: 14A0620-03  
 Sample Matrix: Ambient Air  
 Sampled: 1/17/2014 08:17

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 2017  
 Canister Size: 6 liter  
 Flow Controller ID: 3483  
 Sample Type: 24 hr

**Work Order: 14A0620**  
 Initial Vacuum(in Hg): -30  
 Final Vacuum(in Hg): -8  
 Receipt Vacuum(in Hg): -6  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling:

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL		Analyzed		
1,1,2,2-Tetrachloroethane	ND	0.035	U	ND	0.24	0.702	1/31/14	0:59	WSD
Tetrachloroethylene	0.10	0.035		0.69	0.24	0.702	1/31/14	0:59	WSD
Tetrahydrofuran	ND	0.035	U	ND	0.10	0.702	1/31/14	0:59	WSD
Toluene	0.81	0.035		3.0	0.13	0.702	1/31/14	0:59	WSD
1,2,4-Trichlorobenzene	ND	0.035	U	ND	0.26	0.702	1/31/14	0:59	WSD
1,1,1-Trichloroethane	ND	0.035	U	ND	0.19	0.702	1/31/14	0:59	WSD
1,1,2-Trichloroethane	ND	0.035	U	ND	0.19	0.702	1/31/14	0:59	WSD
Trichloroethylene	ND	0.035	U	ND	0.19	0.702	1/31/14	0:59	WSD
Trichlorofluoromethane (Freon 11)	0.29	0.035		1.6	0.20	0.702	1/31/14	0:59	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.080	0.035		0.61	0.27	0.702	1/31/14	0:59	WSD
Vinyl Chloride	ND	0.035	U	ND	0.090	0.702	1/31/14	0:59	WSD
m&p-Xylene	0.30	0.070		1.3	0.30	0.702	1/31/14	0:59	WSD
o-Xylene	0.11	0.035		0.48	0.15	0.702	1/31/14	0:59	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	101	70-130	1/31/14 0:59
4-Bromofluorobenzene (2)	84.6	70-130	1/31/14 0:59

**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave.  
 Date Received: 1/17/2014  
 Field Sample #: H-042-BA  
 Sample ID: 14A0570-03  
 Sample Matrix: Indoor air  
 Sampled: 1/16/2014 14:34

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 2009  
 Canister Size: 6 liter  
 Flow Controller ID: 3472  
 Sample Type: 24 hr

Work Order: 14A0570  
 Initial Vacuum(in Hg): -29  
 Final Vacuum(in Hg): -8  
 Receipt Vacuum(in Hg): -8.3  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

**EPA TO-15**

Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Acetone	28	1.4	L-05, V-06 JS	66	3.3 JS	0.702	1/31/14 4:04	WSD	
Benzene	0.48	0.035		1.5	0.11	0.702	1/31/14 4:04	WSD	
Bromodichloromethane	ND	0.035	U	ND	0.24	0.702	1/31/14 4:04	WSD	
Bromoform	ND	0.035	U	ND	0.36	0.702	1/31/14 4:04	WSD	
Bromomethane	ND	0.035	U	ND	0.14	0.702	1/31/14 4:04	WSD	
2-Butanone (MEK)	1.7	1.4		5.1	4.1	0.702	1/31/14 4:04	WSD	
Carbon Disulfide	ND	0.35	U	ND	1.1	0.702	1/31/14 4:04	WSD	
Carbon Tetrachloride	0.10	0.035		0.63	0.22	0.702	1/31/14 4:04	WSD	
Chlorobenzene	ND	0.035	U	ND	0.16	0.702	1/31/14 4:04	WSD	
Chloroethane	ND	0.035	U	ND	0.093	0.702	1/31/14 4:04	WSD	
Chloroform	ND	0.035	U	ND	0.17	0.702	1/31/14 4:04	WSD	
Chloromethane	0.56	0.070		1.2	0.14	0.702	1/31/14 4:04	WSD	
Cyclohexane	0.28	0.035		0.95	0.12	0.702	1/31/14 4:04	WSD	
Dibromochloromethane	ND	0.035	U	ND	0.30	0.702	1/31/14 4:04	WSD	
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.046	U	ND	0.44	0.702	1/31/14 4:04	WSD	
1,2-Dibromoethane (EDB)	ND	0.035	U	ND	0.27	0.702	1/31/14 4:04	WSD	
1,2-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/31/14 4:04	WSD	
1,3-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/31/14 4:04	WSD	
1,4-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/31/14 4:04	WSD	
Dichlorodifluoromethane (Freon 12)	0.57	0.035		2.8	0.17	0.702	1/31/14 4:04	WSD	
1,1-Dichloroethane	ND	0.035	U	ND	0.14	0.702	1/31/14 4:04	WSD	
1,2-Dichloroethane	0.038	0.035		0.15	0.14	0.702	1/31/14 4:04	WSD	
1,1-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/31/14 4:04	WSD	
cis-1,2-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/31/14 4:04	WSD	
trans-1,2-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/31/14 4:04	WSD	
1,2-Dichloropropane	ND	0.035	U	ND	0.16	0.702	1/31/14 4:04	WSD	
cis-1,3-Dichloropropene	ND	0.035	U	ND	0.16	0.702	1/31/14 4:04	WSD	
trans-1,3-Dichloropropene	ND	0.035	U	ND	0.16	0.702	1/31/14 4:04	WSD	
Ethylbenzene	0.36	0.035		1.5	0.15	0.702	1/31/14 4:04	WSD	
2-Hexanone (MBK)	0.091	0.035		0.37	0.14	0.702	1/31/14 4:04	WSD	
Isopropylbenzene (Cumene)	ND	0.089	L-03, U JS	ND	0.44 JS	0.702	1/31/14 4:04	WSD	
Methyl Acetate	ND	0.14	U	ND	0.44	0.702	1/31/14 4:04	WSD	
Methyl tert-Butyl Ether (MTBE)	ND	0.035	U	ND	0.13	0.702	1/31/14 4:04	WSD	
Methyl Cyclohexane	0.43	0.11		1.7	0.44	0.702	1/31/14 4:04	WSD	
Methylene Chloride	0.81	0.35		2.8	1.2	0.702	1/31/14 4:04	WSD	
4-Methyl-2-pentanone (MIBK)	0.10	0.035		0.41	0.14	0.702	1/31/14 4:04	WSD	
Styrene	ND	0.035	U	ND	0.15	0.702	1/31/14 4:04	WSD	

*Handwritten signature and date: WSD 3/5/14*

**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave.  
 Date Received: 1/17/2014  
 Field Sample #: H-042-BA  
 Sample ID: 14A0570-03  
 Sample Matrix: Indoor air  
 Sampled: 1/16/2014 14:34

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 2009  
 Canister Size: 6 liter  
 Flow Controller ID: 3472  
 Sample Type: 24 hr

Work Order: 14A0570  
 Initial Vacuum(in Hg): -29  
 Final Vacuum(in Hg): -8  
 Receipt Vacuum(in Hg): -8.3  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL		Analyzed		
1,1,2,2-Tetrachloroethane	ND	0.035	U	ND	0.24	0.702	1/31/14	4:04	WSD
Tetrachloroethylene	0.073	0.035		0.49	0.24	0.702	1/31/14	4:04	WSD
Tetrahydrofuran	0.056	0.035		0.17	0.10	0.702	1/31/14	4:04	WSD
Toluene	2.1	0.035		7.8	0.13	0.702	1/31/14	4:04	WSD
1,2,4-Trichlorobenzene	ND	0.035	U	ND	0.26	0.702	1/31/14	4:04	WSD
1,1,1-Trichloroethane	ND	0.035	U	ND	0.19	0.702	1/31/14	4:04	WSD
1,1,2-Trichloroethane	ND	0.035	U	ND	0.19	0.702	1/31/14	4:04	WSD
Trichloroethylene	ND	0.035	U	ND	0.19	0.702	1/31/14	4:04	WSD
Trichlorofluoromethane (Freon 11)	0.34	0.035		1.9	0.20	0.702	1/31/14	4:04	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.12	0.035		0.89	0.27	0.702	1/31/14	4:04	WSD
Vinyl Chloride	ND	0.035	U	ND	0.090	0.702	1/31/14	4:04	WSD
m&p-Xylene	1.2	0.070		5.3	0.30	0.702	1/31/14	4:04	WSD
o-Xylene	0.43	0.035		1.8	0.15	0.702	1/31/14	4:04	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	100	70-130	1/31/14 4:04
4-Bromofluorobenzene (2)	84.0	70-130	1/31/14 4:04

**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave.  
 Date Received: 1/17/2014  
 Field Sample #: H-042-AS  
 Sample ID: 14A0570-04  
 Sample Matrix: Sub Slab  
 Sampled: 1/16/2014 14:30

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 2008  
 Canister Size: 6 liter  
 Flow Controller ID: 3471  
 Sample Type: 24 hr

Work Order: 14A0570  
 Initial Vacuum(in Hg): -29  
 Final Vacuum(in Hg): -9  
 Receipt Vacuum(in Hg): -9  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

**EPA TO-15**

Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analized		
Acetone	22	4.0	1-05, V-06 J	53	9.5 J	2	1/31/14 11:33	WSD	
Benzene	0.13	0.10		0.40	0.32	2	1/31/14 11:33	WSD	
Bromodichloromethane	ND	0.10	U	ND	0.67	2	1/31/14 11:33	WSD	
Bromoform	ND	0.10	U	ND	1.0	2	1/31/14 11:33	WSD	
Bromomethane	ND	0.10	U	ND	0.39	2	1/31/14 11:33	WSD	
2-Butanone (MEK)	ND	4.0	U	ND	12	2	1/31/14 11:33	WSD	
Carbon Disulfide	ND	1.0	U	ND	3.1	2	1/31/14 11:33	WSD	
Carbon Tetrachloride	ND	0.10	U	ND	0.63	2	1/31/14 11:33	WSD	
Chlorobenzene	ND	0.10	U	ND	0.46	2	1/31/14 11:33	WSD	
Chloroethane	ND	0.10	U	ND	0.26	2	1/31/14 11:33	WSD	
Chloroform	ND	0.10	U	ND	0.49	2	1/31/14 11:33	WSD	
Chloromethane	ND	0.20	U	ND	0.41	2	1/31/14 11:33	WSD	
Cyclohexane	ND	0.10	U	ND	0.34	2	1/31/14 11:33	WSD	
Dibromochloromethane	ND	0.10	U	ND	0.85	2	1/31/14 11:33	WSD	
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.13	U	ND	1.3	2	1/31/14 11:33	WSD	
1,2-Dibromoethane (EDB)	ND	0.10	U	ND	0.77	2	1/31/14 11:33	WSD	
1,2-Dichlorobenzene	ND	0.10	U	ND	0.60	2	1/31/14 11:33	WSD	
1,3-Dichlorobenzene	ND	0.10	U	ND	0.60	2	1/31/14 11:33	WSD	
1,4-Dichlorobenzene	ND	0.10	U	ND	0.60	2	1/31/14 11:33	WSD	
Dichlorodifluoromethane (Freon 12)	0.50	0.10		2.5	0.49	2	1/31/14 11:33	WSD	
1,1-Dichloroethane	ND	0.10	U	ND	0.40	2	1/31/14 11:33	WSD	
1,2-Dichloroethane	ND	0.10	U	ND	0.40	2	1/31/14 11:33	WSD	
1,1-Dichloroethylene	ND	0.10	U	ND	0.40	2	1/31/14 11:33	WSD	
cis-1,2-Dichloroethylene	ND	0.10	U	ND	0.40	2	1/31/14 11:33	WSD	
trans-1,2-Dichloroethylene	ND	0.10	U	ND	0.40	2	1/31/14 11:33	WSD	
1,2-Dichloropropane	ND	0.10	U	ND	0.46	2	1/31/14 11:33	WSD	
cis-1,3-Dichloropropene	ND	0.10	U	ND	0.45	2	1/31/14 11:33	WSD	
trans-1,3-Dichloropropene	ND	0.10	U	ND	0.45	2	1/31/14 11:33	WSD	
Ethylbenzene	ND	0.10	U	ND	0.43	2	1/31/14 11:33	WSD	
2-Hexanone (MBK)	ND	0.10	U	ND	0.41	2	1/31/14 11:33	WSD	
Isopropylbenzene (Cumene)	ND	0.25	1-03, U J	ND	1.2 J	2	1/31/14 11:33	WSD	
Methyl Acetate	ND	0.41	U	ND	1.2	2	1/31/14 11:33	WSD	
Methyl tert-Butyl Ether (MTBE)	ND	0.10	U	ND	0.36	2	1/31/14 11:33	WSD	
Methyl Cyclohexane	ND	0.31	U	ND	1.3	2	1/31/14 11:33	WSD	
Methylene Chloride	ND	1.0	U	ND	3.5	2	1/31/14 11:33	WSD	
4-Methyl-2-pentanone (MIBK)	ND	0.10	U	ND	0.41	2	1/31/14 11:33	WSD	
Styrene	ND	0.10	U	ND	0.43	2	1/31/14 11:33	WSD	

*WSD  
3/5/14*

**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave.  
 Date Received: 1/17/2014  
 Field Sample #: H-042-AS  
 Sample ID: 14A0570-04  
 Sample Matrix: Sub Slab  
 Sampled: 1/16/2014 14:30

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 2008  
 Canister Size: 6 liter  
 Flow Controller ID: 3471  
 Sample Type: 24 hr

Work Order: 14A0570  
 Initial Vacuum(in Hg): -29  
 Final Vacuum(in Hg): -9  
 Receipt Vacuum(in Hg): -9  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time Analyzed	Analyst
	Results	RL	Flag/Qual	Results	RL			
1,1,2,2-Tetrachloroethane	ND	0.10	U	ND	0.69	2	1/31/14 11:33	WSD
Tetrachloroethylene	0.14	0.10		0.98	0.68	2	1/31/14 11:33	WSD
Tetrahydrofuran	ND	0.10	U	ND	0.29	2	1/31/14 11:33	WSD
Toluene	17	0.10		65	0.38	2	1/31/14 11:33	WSD
1,2,4-Trichlorobenzene	ND	0.10	U	ND	0.74	2	1/31/14 11:33	WSD
1,1,1-Trichloroethane	ND	0.10	U	ND	0.55	2	1/31/14 11:33	WSD
1,1,2-Trichloroethane	ND	0.10	U	ND	0.55	2	1/31/14 11:33	WSD
Trichloroethylene	ND	0.10	U	ND	0.54	2	1/31/14 11:33	WSD
Trichlorofluoromethane (Freon 11)	0.28	0.10		1.6	0.56	2	1/31/14 11:33	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.10	U	ND	0.77	2	1/31/14 11:33	WSD
Vinyl Chloride	ND	0.10	U	ND	0.26	2	1/31/14 11:33	WSD
m&p-Xylene	0.44	0.20		1.9	0.87	2	1/31/14 11:33	WSD
o-Xylene	0.22	0.10		0.96	0.43	2	1/31/14 11:33	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	95.4	70-130	1/31/14 11:33
4-Bromofluorobenzene (2)	79.7	70-130	1/31/14 11:33

ANALYTICAL RESULTS

Project Location: 100 Oser Ave.  
 Date Received: 1/20/2014  
 Field Sample #: H-042-OA  
 Sample ID: 14A0619-01  
 Sample Matrix: Ambient Air  
 Sampled: 1/16/2014 14:48

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 2012  
 Canister Size: 6 liter  
 Flow Controller ID: 3480  
 Sample Type: 24 hr

Work Order: 14A0619  
 Initial Vacuum(in Hg): -28  
 Final Vacuum(in Hg): -8.5  
 Receipt Vacuum(in Hg): -8  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL		Analized		
Acetone	11	1.4		25	3.3	0.702	1/31/14 10:26	WSD	
Benzene	0.28	0.035		0.91	0.11	0.702	1/31/14 10:26	WSD	
Bromodichloromethane	ND	0.035	U	ND	0.24	0.702	1/31/14 10:26	WSD	
Bromoform	ND	0.035	U	ND	0.36	0.702	1/31/14 10:26	WSD	
Bromomethane	ND	0.035	U	ND	0.14	0.702	1/31/14 10:26	WSD	
2-Butanone (MEK)	1.5	1.4		4.5	4.1	0.702	1/31/14 10:26	WSD	
Carbon Disulfide	ND	0.35	U	ND	1.1	0.702	1/31/14 10:26	WSD	
Carbon Tetrachloride	0.086	0.035		0.54	0.22	0.702	1/31/14 10:26	WSD	
Chlorobenzene	ND	0.035	U	ND	0.16	0.702	1/31/14 10:26	WSD	
Chloroethane	ND	0.035	U	ND	0.093	0.702	1/31/14 10:26	WSD	
Chloroform	ND	0.035	U	ND	0.17	0.702	1/31/14 10:26	WSD	
Chloromethane	0.56	0.070		1.1	0.14	0.702	1/31/14 10:26	WSD	
Cyclohexane	0.050	0.035	L-03, V-05 JS	0.17	0.12 JS	0.702	1/31/14 10:26	WSD	
Dibromochloromethane	ND	0.035	U	ND	0.30	0.702	1/31/14 10:26	WSD	
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.046	L-03, U JS	ND	0.44 JS	0.702	1/31/14 10:26	WSD	
1,2-Dibromoethane (EDB)	ND	0.035	U	ND	0.27	0.702	1/31/14 10:26	WSD	
1,2-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/31/14 10:26	WSD	
1,3-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/31/14 10:26	WSD	
1,4-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/31/14 10:26	WSD	
Dichlorodifluoromethane (Freon 12)	0.41	0.035		2.0	0.17	0.702	1/31/14 10:26	WSD	
1,1-Dichloroethane	ND	0.035	U	ND	0.14	0.702	1/31/14 10:26	WSD	
1,2-Dichloroethane	ND	0.035	U	ND	0.14	0.702	1/31/14 10:26	WSD	
1,1-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/31/14 10:26	WSD	
cis-1,2-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/31/14 10:26	WSD	
trans-1,2-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/31/14 10:26	WSD	
1,2-Dichloropropane	ND	0.035	L-03, V-05, U JS	ND	0.16 JS	0.702	1/31/14 10:26	WSD	
cis-1,3-Dichloropropene	ND	0.035	U	ND	0.16	0.702	1/31/14 10:26	WSD	
trans-1,3-Dichloropropene	ND	0.035	U	ND	0.16	0.702	1/31/14 10:26	WSD	
Ethylbenzene	0.045	0.035		0.20	0.15	0.702	1/31/14 10:26	WSD	
2-Hexanone (MBK)	0.11	0.035	L-03, V-05 JS	0.45	0.14 JS	0.702	1/31/14 10:26	WSD	
Isopropylbenzene (Cumene)	ND	0.089	L-03, U JS	ND	0.44 JS	0.702	1/31/14 10:26	WSD	
Methyl Acetate	ND	0.14	L-03, U JS	ND	0.44 JS	0.702	1/31/14 10:26	WSD	
Methyl tert-Butyl Ether (MTBE)	ND	0.035	U	ND	0.13	0.702	1/31/14 10:26	WSD	
Methyl Cyclohexane	ND	0.11	L-03, U JS	ND	0.44 JS	0.702	1/31/14 10:26	WSD	
Methylene Chloride	0.51	0.35		1.8	1.2	0.702	1/31/14 10:26	WSD	
4-Methyl-2-pentanone (MIBK)	ND	0.035	L-03, U JS	ND	0.14 JS	0.702	1/31/14 10:26	WSD	
Styrene	ND	0.035	U	ND	0.15	0.702	1/31/14 10:26	WSD	

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**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave.  
 Date Received: 1/20/2014  
 Field Sample #: H-042-OA  
 Sample ID: 14A0619-01  
 Sample Matrix: Ambient Air  
 Sampled: 1/16/2014 14:48

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 2012  
 Canister Size: 6 liter  
 Flow Controller ID: 3480  
 Sample Type: 24 hr

Work Order: 14A0619  
 Initial Vacuum(in Hg): -28  
 Final Vacuum(in Hg): -8.5  
 Receipt Vacuum(in Hg): -8  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time Analyzed	Analyst
	Results	RL	Flag/Qual	Results	RL			
1,1,2,2-Tetrachloroethane	ND	0.035	U	ND	0.24	0.702	1/31/14 10:26	WSD
Tetrachloroethylene	0.054	0.035		0.37	0.24	0.702	1/31/14 10:26	WSD
Tetrahydrofuran	ND	0.035	U	ND	0.10	0.702	1/31/14 10:26	WSD
Toluene	0.34	0.035		1.3	0.13	0.702	1/31/14 10:26	WSD
1,2,4-Trichlorobenzene	ND	0.035	U S	ND	0.26 S	0.702	1/31/14 10:26	WSD
1,1,1-Trichloroethane	ND	0.035	U	ND	0.19	0.702	1/31/14 10:26	WSD
1,1,2-Trichloroethane	ND	0.035	U	ND	0.19	0.702	1/31/14 10:26	WSD
Trichloroethylene	ND	0.035	U	ND	0.19	0.702	1/31/14 10:26	WSD
Trichlorofluoromethane (Freon 11)	0.36	0.035		2.0	0.20	0.702	1/31/14 10:26	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.13	0.035		1.0	0.27	0.702	1/31/14 10:26	WSD
Vinyl Chloride	ND	0.035	U	ND	0.090	0.702	1/31/14 10:26	WSD
m&p-Xylene	0.12	0.070		0.54	0.30	0.702	1/31/14 10:26	WSD
o-Xylene	0.050	0.035		0.22	0.15	0.702	1/31/14 10:26	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	115	70-130	1/31/14 10:26
4-Bromofluorobenzene (2)	112	70-130	1/31/14 10:26

*Handwritten signature and date: WSD 1/31/14*

**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave.  
 Date Received: 1/17/2014  
 Field Sample #: H-046-BA  
 Sample ID: 14A0568-03  
 Sample Matrix: Indoor air  
 Sampled: 1/14/2014 00:00

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 1983  
 Canister Size: 6 liter  
 Flow Controller ID: 3460  
 Sample Type: 24 hr

Work Order: 14A0568  
 Initial Vacuum(in Hg): -28  
 Final Vacuum(in Hg): -7  
 Receipt Vacuum(in Hg): -6.8  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

**EPA TO-15**

Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Acetone	9.9	1.4	J	24	3.3	0.702	1/27/14 21:55	WSD	
Benzene	4.7	0.035		15	0.11	0.702	1/27/14 21:55	WSD	
Bromodichloromethane	ND	0.035	U	ND	0.24	0.702	1/27/14 21:55	WSD	
Bromoform	ND	0.035	U	ND	0.36	0.702	1/27/14 21:55	WSD	
Bromomethane	ND	0.035	U	ND	0.14	0.702	1/27/14 21:55	WSD	
2-Butanone (MEK)	ND	1.4	U	ND	4.1	0.702	1/27/14 21:55	WSD	
Carbon Disulfide	ND	0.35	U	ND	1.1	0.702	1/27/14 21:55	WSD	
Carbon Tetrachloride	0.063	0.035		0.40	0.22	0.702	1/27/14 21:55	WSD	
Chlorobenzene	ND	0.035	U	ND	0.16	0.702	1/27/14 21:55	WSD	
Chloroethane	ND	0.035	U	ND	0.093	0.702	1/27/14 21:55	WSD	
Chloroform	0.084	0.035		0.41	0.17	0.702	1/27/14 21:55	WSD	
Chloromethane	0.39	0.070		0.81	0.14	0.702	1/27/14 21:55	WSD	
Cyclohexane	1.7	0.035		5.7	0.12	0.702	1/27/14 21:55	WSD	
Dibromochloromethane	ND	0.035	U	ND	0.30	0.702	1/27/14 21:55	WSD	
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.046	U	ND	0.44	0.702	1/27/14 21:55	WSD	
1,2-Dibromoethane (EDB)	ND	0.035	U	ND	0.27	0.702	1/27/14 21:55	WSD	
1,2-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/27/14 21:55	WSD	
1,3-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/27/14 21:55	WSD	
1,4-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/27/14 21:55	WSD	
Dichlorodifluoromethane (Freon 12)	0.28	0.035		1.4	0.17	0.702	1/27/14 21:55	WSD	
1,1-Dichloroethane	ND	0.035	U	ND	0.14	0.702	1/27/14 21:55	WSD	
1,2-Dichloroethane	0.077	0.035		0.31	0.14	0.702	1/27/14 21:55	WSD	
1,1-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/27/14 21:55	WSD	
cis-1,2-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/27/14 21:55	WSD	
trans-1,2-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/27/14 21:55	WSD	
1,2-Dichloropropane	ND	0.035	U	ND	0.16	0.702	1/27/14 21:55	WSD	
cis-1,3-Dichloropropene	ND	0.035	U	ND	0.16	0.702	1/27/14 21:55	WSD	
trans-1,3-Dichloropropene	ND	0.035	U	ND	0.16	0.702	1/27/14 21:55	WSD	
Ethylbenzene	2.9	0.035		13	0.15	0.702	1/27/14 21:55	WSD	
2-Hexanone (MBK)	ND	0.035	U	ND	0.14	0.702	1/27/14 21:55	WSD	
Isopropylbenzene (Cumene)	0.29	0.089		1.4	0.44	0.702	1/27/14 21:55	WSD	
Methyl Acetate	0.23	0.14		0.70	0.44	0.702	1/27/14 21:55	WSD	
Methyl tert-Butyl Ether (MTBE)	ND	0.035	U	ND	0.13	0.702	1/27/14 21:55	WSD	
Methyl Cyclohexane	1.8	0.11		7.2	0.44	0.702	1/27/14 21:55	WSD	
Methylene Chloride	0.85	0.35	B	2.9	1.2	0.702	1/27/14 21:55	WSD	
4-Methyl-2-pentanone (MIBK)	ND	0.035	U	ND	0.14	0.702	1/27/14 21:55	WSD	
Styrene	0.049	0.035		0.21	0.15	0.702	1/27/14 21:55	WSD	

*Handwritten notes:*  
 1/14/14  
 1/27/14

**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave.  
 Date Received: 1/17/2014  
 Field Sample #: H-046-BA  
 Sample ID: 14A0568-03  
 Sample Matrix: Indoor air  
 Sampled: 1/14/2014 00:00

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 1983  
 Canister Size: 6 liter  
 Flow Controller ID: 3460  
 Sample Type: 24 hr

Work Order: 14A0568  
 Initial Vacuum(in Hg): -28  
 Final Vacuum(in Hg): -7  
 Receipt Vacuum(in Hg): -6.8  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL		Analized		
1,1,2,2-Tetrachloroethane	ND	0.035	U	ND	0.24	0.702	1/27/14 21:55	WSD	
Tetrachloroethylene	0.035	0.035	U	0.24	0.24	0.702	1/27/14 21:55	WSD	
Tetrahydrofuran	0.091	0.035		0.27	0.10	0.702	1/27/14 21:55	WSD	
Toluene	24	0.035		92	0.13	0.702	1/27/14 21:55	WSD	
1,2,4-Trichlorobenzene	ND	0.035	U	ND	0.26	0.702	1/27/14 21:55	WSD	
1,1,1-Trichloroethane	0.39	0.035		2.1	0.19	0.702	1/27/14 21:55	WSD	
1,1,2-Trichloroethane	ND	0.035	U	ND	0.19	0.702	1/27/14 21:55	WSD	
Trichloroethylene	ND	0.035	U	ND	0.19	0.702	1/27/14 21:55	WSD	
Trichlorofluoromethane (Freon 11)	0.79	0.035		4.5	0.20	0.702	1/27/14 21:55	WSD	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.084	0.035		0.65	0.27	0.702	1/27/14 21:55	WSD	
Vinyl Chloride	ND	0.035	U	ND	0.090	0.702	1/27/14 21:55	WSD	
m&p-Xylene	10	0.070		45	0.30	0.702	1/27/14 21:55	WSD	
o-Xylene	3.4	0.035		15	0.15	0.702	1/27/14 21:55	WSD	

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	95.4	70-130	1/27/14 21:55
4-Bromofluorobenzene (2)	108	70-130	1/27/14 21:55

H-046-BA

ANALYTICAL RESULTS

Project Location: 100 Oser Ave.  
 Date Received: 1/17/2014  
 Field Sample #: 2014-01-13-BA  
 Sample ID: 14A0568-11  
 Sample Matrix: Indoor air  
 Sampled: 1/14/2014 00:00

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 1981  
 Canister Size: 6 liter  
 Flow Controller ID: 3458  
 Sample Type: 24 hr

Work Order: 14A0568  
 Initial Vacuum(in Hg): -29  
 Final Vacuum(in Hg): -6  
 Receipt Vacuum(in Hg): -6.5  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analized		
Acetone	9.9	1.4	J	24	3.3	0.702	1/28/14	1:41	WSD
Benzene	4.6	0.035		15	0.11	0.702	1/28/14	1:41	WSD
Bromodichloromethane	ND	0.035	U	ND	0.24	0.702	1/28/14	1:41	WSD
Bromoform	ND	0.035	U	ND	0.36	0.702	1/28/14	1:41	WSD
Bromomethane	ND	0.035	U	ND	0.14	0.702	1/28/14	1:41	WSD
2-Butanone (MEK)	ND	1.4	U	ND	4.1	0.702	1/28/14	1:41	WSD
Carbon Disulfide	ND	0.35	U	ND	1.1	0.702	1/28/14	1:41	WSD
Carbon Tetrachloride	0.063	0.035		0.40	0.22	0.702	1/28/14	1:41	WSD
Chlorobenzene	ND	0.035	U	ND	0.16	0.702	1/28/14	1:41	WSD
Chloroethane	ND	0.035	U	ND	0.093	0.702	1/28/14	1:41	WSD
Chloroform	0.084	0.035		0.41	0.17	0.702	1/28/14	1:41	WSD
Chloromethane	0.39	0.070		0.81	0.14	0.702	1/28/14	1:41	WSD
Cyclohexane	1.6	0.035		5.7	0.12	0.702	1/28/14	1:41	WSD
Dibromochloromethane	ND	0.035	U	ND	0.30	0.702	1/28/14	1:41	WSD
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.046	U	ND	0.44	0.702	1/28/14	1:41	WSD
1,2-Dibromoethane (EDB)	ND	0.035	U	ND	0.27	0.702	1/28/14	1:41	WSD
1,2-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/28/14	1:41	WSD
1,3-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/28/14	1:41	WSD
1,4-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/28/14	1:41	WSD
Dichlorodifluoromethane (Freon 12)	0.29	0.035		1.5	0.17	0.702	1/28/14	1:41	WSD
1,1-Dichloroethane	ND	0.035	U	ND	0.14	0.702	1/28/14	1:41	WSD
1,2-Dichloroethane	0.070	0.035		0.28	0.14	0.702	1/28/14	1:41	WSD
1,1-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/28/14	1:41	WSD
cis-1,2-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/28/14	1:41	WSD
trans-1,2-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/28/14	1:41	WSD
1,2-Dichloropropane	ND	0.035	U	ND	0.16	0.702	1/28/14	1:41	WSD
cis-1,3-Dichloropropene	ND	0.035	U	ND	0.16	0.702	1/28/14	1:41	WSD
trans-1,3-Dichloropropene	ND	0.035	U	ND	0.16	0.702	1/28/14	1:41	WSD
Ethylbenzene	2.8	0.035		12	0.15	0.702	1/28/14	1:41	WSD
2-Hexanone (MBK)	ND	0.035	U	ND	0.14	0.702	1/28/14	1:41	WSD
Isopropylbenzene (Cumene)	0.29	0.089		1.4	0.44	0.702	1/28/14	1:41	WSD
Methyl Acetate	0.23	0.14		0.70	0.44	0.702	1/28/14	1:41	WSD
Methyl tert-Butyl Ether (MTBE)	ND	0.035	U	ND	0.13	0.702	1/28/14	1:41	WSD
Methyl Cyclohexane	1.8	0.11		7.3	0.44	0.702	1/28/14	1:41	WSD
Methylene Chloride	0.84	0.35	B U	2.9	1.2	0.702	1/28/14	1:41	WSD
4-Methyl-2-pentanone (MIBK)	0.070	0.035		0.29	0.14	0.702	1/28/14	1:41	WSD
Styrene	0.042	0.035		0.18	0.15	0.702	1/28/14	1:41	WSD

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H-016-BA

**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave,  
 Date Received: 1/17/2014  
 Field Sample #: 2014-01-13-BA  
 Sample ID: 14A0568-11  
 Sample Matrix: Indoor air  
 Sampled: 1/14/2014 00:00

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 1981  
 Canister Size: 6 liter  
 Flow Controller ID: 3458  
 Sample Type: 24 hr

**Work Order: 14A0568**  
 Initial Vacuum(in Hg): -29  
 Final Vacuum(in Hg): -6  
 Receipt Vacuum(in Hg): -6.5  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL		Analized		
1,1,2,2-Tetrachloroethane	ND	0.035	U	ND	0.24	0.702	1/28/14	1:41	WSD
Tetrachloroethylene	0.035	0.035	U	0.24	0.24	0.702	1/28/14	1:41	WSD
Tetrahydrofuran	0.077	0.035		0.23	0.10	0.702	1/28/14	1:41	WSD
Toluene	24	0.035		91	0.13	0.702	1/28/14	1:41	WSD
1,2,4-Trichlorobenzene	ND	0.035	U	ND	0.26	0.702	1/28/14	1:41	WSD
1,1,1-Trichloroethane	0.39	0.035		2.1	0.19	0.702	1/28/14	1:41	WSD
1,1,2-Trichloroethane	ND	0.035	U	ND	0.19	0.702	1/28/14	1:41	WSD
Trichloroethylene	ND	0.035	U	ND	0.19	0.702	1/28/14	1:41	WSD
Trichlorofluoromethane (Freon 11)	0.70	0.035		3.9	0.20	0.702	1/28/14	1:41	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.084	0.035		0.65	0.27	0.702	1/28/14	1:41	WSD
Vinyl Chloride	ND	0.035	U	ND	0.090	0.702	1/28/14	1:41	WSD
m&p-Xylene	10	0.070		45	0.30	0.702	1/28/14	1:41	WSD
o-Xylene	3.4	0.035		15	0.15	0.702	1/28/14	1:41	WSD

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	96.5	70-130	1/28/14	1:41
4-Bromofluorobenzene (2)	109	70-130	1/28/14	1:41

**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave.  
 Date Received: 1/17/2014  
 Field Sample #: H-046-AS  
 Sample ID: 14A0568-02  
 Sample Matrix: Sub Slab  
 Sampled: 1/14/2014 00:00

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 1984  
 Canister Size: 6 liter  
 Flow Controller ID: 3461  
 Sample Type: 24 hr

**Work Order: 14A0568**  
 Initial Vacuum(in Hg): -30  
 Final Vacuum(in Hg): -7  
 Receipt Vacuum(in Hg): -7  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL		Analized		
Acetone	ND	4.0	U	ND	9.5	2	1/28/14	6:31	WSD
Benzene	0.12	0.10		0.38	0.32	2	1/28/14	6:31	WSD
Bromodichloromethane	ND	0.10	U	ND	0.67	2	1/28/14	6:31	WSD
Bromoform	ND	0.10	U	ND	1.0	2	1/28/14	6:31	WSD
Bromomethane	ND	0.10	U	ND	0.39	2	1/28/14	6:31	WSD
2-Butanone (MEK)	ND	4.0	U	ND	12	2	1/28/14	6:31	WSD
Carbon Disulfide	ND	1.0	U	ND	3.1	2	1/28/14	6:31	WSD
Carbon Tetrachloride	ND	0.10	U	ND	0.63	2	1/28/14	6:31	WSD
Chlorobenzene	ND	0.10	U	ND	0.46	2	1/28/14	6:31	WSD
Chloroethane	ND	0.10	U	ND	0.26	2	1/28/14	6:31	WSD
Chloroform	ND	0.10	U	ND	0.49	2	1/28/14	6:31	WSD
Chloromethane	ND	0.20	U	ND	0.41	2	1/28/14	6:31	WSD
Cyclohexane	ND	0.10	U	ND	0.34	2	1/28/14	6:31	WSD
Dibromochloromethane	ND	0.10	U	ND	0.85	2	1/28/14	6:31	WSD
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.13	U	ND	1.3	2	1/28/14	6:31	WSD
1,2-Dibromoethane (EDB)	ND	0.10	U	ND	0.77	2	1/28/14	6:31	WSD
1,2-Dichlorobenzene	ND	0.10	U	ND	0.60	2	1/28/14	6:31	WSD
1,3-Dichlorobenzene	ND	0.10	U	ND	0.60	2	1/28/14	6:31	WSD
1,4-Dichlorobenzene	ND	0.10	U	ND	0.60	2	1/28/14	6:31	WSD
Dichlorodifluoromethane (Freon 12)	0.38	0.10		1.9	0.49	2	1/28/14	6:31	WSD
1,1-Dichloroethane	ND	0.10	U	ND	0.40	2	1/28/14	6:31	WSD
1,2-Dichloroethane	ND	0.10	U	ND	0.40	2	1/28/14	6:31	WSD
1,1-Dichloroethylene	ND	0.10	U	ND	0.40	2	1/28/14	6:31	WSD
cis-1,2-Dichloroethylene	ND	0.10	U	ND	0.40	2	1/28/14	6:31	WSD
trans-1,2-Dichloroethylene	ND	0.10	U	ND	0.40	2	1/28/14	6:31	WSD
1,2-Dichloropropane	ND	0.10	U	ND	0.46	2	1/28/14	6:31	WSD
cis-1,3-Dichloropropene	ND	0.10	U	ND	0.45	2	1/28/14	6:31	WSD
trans-1,3-Dichloropropene	ND	0.10	U	ND	0.45	2	1/28/14	6:31	WSD
Ethylbenzene	0.10	0.10		0.43	0.43	2	1/28/14	6:31	WSD
2-Hexanone (MBK)	0.12	0.10		0.49	0.41	2	1/28/14	6:31	WSD
Isopropylbenzene (Cumene)	ND	0.25	U	ND	1.2	2	1/28/14	6:31	WSD
Methyl Acetate	ND	0.41	U	ND	1.2	2	1/28/14	6:31	WSD
Methyl tert-Butyl Ether (MTBE)	ND	0.10	U	ND	0.36	2	1/28/14	6:31	WSD
Methyl Cyclohexane	ND	0.31	U	ND	1.3	2	1/28/14	6:31	WSD
Methylene Chloride	1.2	<del>1.0</del>	B/U	4.0	<del>3.5</del>	2	1/28/14	6:31	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.10	U	ND	0.41	2	1/28/14	6:31	WSD
Styrene	ND	0.10	U	ND	0.43	2	1/28/14	6:31	WSD

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**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave,  
 Date Received: 1/17/2014  
 Field Sample #: H-046-AS  
 Sample ID: 14A0568-02  
 Sample Matrix: Sub Slab  
 Sampled: 1/14/2014 00:00

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 1984  
 Canister Size: 6 liter  
 Flow Controller ID: 3461  
 Sample Type: 24 hr

**Work Order: 14A0568**  
 Initial Vacuum(in Hg): -30  
 Final Vacuum(in Hg): -7  
 Receipt Vacuum(in Hg): -7  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL		Analized		
1,1,2,2-Tetrachloroethane	ND	0.10	U	ND	0.69	2	1/28/14	6:31	WSD
Tetrachloroethylene	0.70	0.10		4.7	0.68	2	1/28/14	6:31	WSD
Tetrahydrofuran	ND	0.10	U	ND	0.29	2	1/28/14	6:31	WSD
Toluene	7.8	0.10		29	0.38	2	1/28/14	6:31	WSD
1,2,4-Trichlorobenzene	ND	0.10	U	ND	0.74	2	1/28/14	6:31	WSD
1,1,1-Trichloroethane	0.12	0.10		0.65	0.55	2	1/28/14	6:31	WSD
1,1,2-Trichloroethane	ND	0.10	U	ND	0.55	2	1/28/14	6:31	WSD
Trichloroethylene	ND	0.10	U	ND	0.54	2	1/28/14	6:31	WSD
Trichlorofluoromethane (Freon 11)	0.28	0.10		1.6	0.56	2	1/28/14	6:31	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.10	U	ND	0.77	2	1/28/14	6:31	WSD
Vinyl Chloride	ND	0.10	U	ND	0.26	2	1/28/14	6:31	WSD
m&p-Xylene	0.44	0.20		1.9	0.87	2	1/28/14	6:31	WSD
o-Xylene	0.22	0.10		0.96	0.43	2	1/28/14	6:31	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	94.5	70-130	1/28/14 6:31
4-Bromofluorobenzene (2)	105	70-130	1/28/14 6:31

H-046-125

ANALYTICAL RESULTS

Project Location: 100 Oser Ave.  
 Date Received: 1/17/2014  
 Field Sample #: 2014-01-13-AS  
 Sample ID: 14A0568-10  
 Sample Matrix: Sub Slab  
 Sampled: 1/14/2014 00:00

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 1982  
 Canister Size: 6 liter  
 Flow Controller ID: 3459  
 Sample Type: 24 hr

Work Order: 14A0568  
 Initial Vacuum(in Hg): -28  
 Final Vacuum(in Hg): -7  
 Receipt Vacuum(in Hg): -7.4  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Acetone	15	4.0	J	35	9.5	2	1/28/14 8:29	WSD	
Benzene	0.10	0.10		0.32	0.32	2	1/28/14 8:29	WSD	
Bromodichloromethane	ND	0.10	U	ND	0.67	2	1/28/14 8:29	WSD	
Bromoform	ND	0.10	U	ND	1.0	2	1/28/14 8:29	WSD	
Bromomethane	ND	0.10	U	ND	0.39	2	1/28/14 8:29	WSD	
2-Butanone (MEK)	ND	4.0	U	ND	12	2	1/28/14 8:29	WSD	
Carbon Disulfide	ND	1.0	U	ND	3.1	2	1/28/14 8:29	WSD	
Carbon Tetrachloride	ND	0.10	U	ND	0.63	2	1/28/14 8:29	WSD	
Chlorobenzene	ND	0.10	U	ND	0.46	2	1/28/14 8:29	WSD	
Chloroethane	ND	0.10	U	ND	0.26	2	1/28/14 8:29	WSD	
Chloroform	ND	0.10	U	ND	0.49	2	1/28/14 8:29	WSD	
Chloromethane	ND	0.20	U	ND	0.41	2	1/28/14 8:29	WSD	
Cyclohexane	ND	0.10	U	ND	0.34	2	1/28/14 8:29	WSD	
Dibromochloromethane	ND	0.10	U	ND	0.85	2	1/28/14 8:29	WSD	
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.13	U	ND	1.3	2	1/28/14 8:29	WSD	
1,2-Dibromoethane (EDB)	ND	0.10	U	ND	0.77	2	1/28/14 8:29	WSD	
1,2-Dichlorobenzene	ND	0.10	U	ND	0.60	2	1/28/14 8:29	WSD	
1,3-Dichlorobenzene	ND	0.10	U	ND	0.60	2	1/28/14 8:29	WSD	
1,4-Dichlorobenzene	ND	0.10	U	ND	0.60	2	1/28/14 8:29	WSD	
Dichlorodifluoromethane (Freon 12)	0.38	0.10		1.9	0.49	2	1/28/14 8:29	WSD	
1,1-Dichloroethane	ND	0.10	U	ND	0.40	2	1/28/14 8:29	WSD	
1,2-Dichloroethane	ND	0.10	U	ND	0.40	2	1/28/14 8:29	WSD	
1,1-Dichloroethylene	ND	0.10	U	ND	0.40	2	1/28/14 8:29	WSD	
cis-1,2-Dichloroethylene	ND	0.10	U	ND	0.40	2	1/28/14 8:29	WSD	
trans-1,2-Dichloroethylene	ND	0.10	U	ND	0.40	2	1/28/14 8:29	WSD	
1,2-Dichloropropane	ND	0.10	U	ND	0.46	2	1/28/14 8:29	WSD	
cis-1,3-Dichloropropene	ND	0.10	U	ND	0.45	2	1/28/14 8:29	WSD	
trans-1,3-Dichloropropene	ND	0.10	U	ND	0.45	2	1/28/14 8:29	WSD	
Ethylbenzene	0.10	0.10		0.43	0.43	2	1/28/14 8:29	WSD	
2-Hexanone (MBK)	0.32	0.10		1.3	0.41	2	1/28/14 8:29	WSD	
Isopropylbenzene (Cumene)	ND	0.25	U	ND	1.2	2	1/28/14 8:29	WSD	
Methyl Acetate	ND	0.41	U	ND	1.2	2	1/28/14 8:29	WSD	
Methyl tert-Butyl Ether (MTBE)	ND	0.10	U	ND	0.36	2	1/28/14 8:29	WSD	
Methyl Cyclohexane	ND	0.31	U	ND	1.3	2	1/28/14 8:29	WSD	
Methylene Chloride	1.4	<del>1.0</del>	U	4.9	<del>3.5</del>	2	1/28/14 8:29	WSD	
4-Methyl-2-pentanone (MIBK)	0.10	0.10		0.41	0.41	2	1/28/14 8:29	WSD	
Styrene	ND	0.10	U	ND	0.43	2	1/28/14 8:29	WSD	

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H-046-1A5

**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave  
 Date Received: 1/17/2014  
 Field Sample #: 2014-01-13-AS  
 Sample ID: 14A0568-10  
 Sample Matrix: Sub Slab  
 Sampled: 1/14/2014 00:00

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 1982  
 Canister Size: 6 liter  
 Flow Controller ID: 3459  
 Sample Type: 24 hr

Work Order: 14A0568  
 Initial Vacuum(in Hg): -28  
 Final Vacuum(in Hg): -7  
 Receipt Vacuum(in Hg): -7.4  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL		Analized		
1,1,2,2-Tetrachloroethane	ND	0.10	U	ND	0.69	2	1/28/14	8:29	WSD
Tetrachloroethylene	0.74	0.10		5.0	0.68	2	1/28/14	8:29	WSD
Tetrahydrofuran	ND	0.10	U	ND	0.29	2	1/28/14	8:29	WSD
Toluene	8.0	0.10		30	0.38	2	1/28/14	8:29	WSD
1,2,4-Trichlorobenzene	ND	0.10	U	ND	0.74	2	1/28/14	8:29	WSD
1,1,1-Trichloroethane	0.14	0.10		0.76	0.55	2	1/28/14	8:29	WSD
1,1,2-Trichloroethane	ND	0.10	U	ND	0.55	2	1/28/14	8:29	WSD
Trichloroethylene	ND	0.10	U	ND	0.54	2	1/28/14	8:29	WSD
Trichlorofluoromethane (Freon 11)	0.28	0.10		1.6	0.56	2	1/28/14	8:29	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.10	U	ND	0.77	2	1/28/14	8:29	WSD
Vinyl Chloride	ND	0.10	U	ND	0.26	2	1/28/14	8:29	WSD
m&p-Xylene	0.46	0.20		2.0	0.87	2	1/28/14	8:29	WSD
o-Xylene	0.24	0.10		1.0	0.43	2	1/28/14	8:29	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	94.1	70-130	1/28/14 8:29
4-Bromofluorobenzene (2)	105	70-130	1/28/14 8:29

**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave.  
 Date Received: 1/17/2014  
 Field Sample #: H-046-0A  
 Sample ID: 14A0568-04  
 Sample Matrix: Ambient Air  
 Sampled: 1/14/2014 00:00

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 1986  
 Canister Size: 6 liter  
 Flow Controller ID: 3463  
 Sample Type: 24 hr

Work Order: 14A0568  
 Initial Vacuum(in Hg): -30  
 Final Vacuum(in Hg): -8  
 Receipt Vacuum(in Hg): -7  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL		Analized		
Acetone	5.5	1.4	S	13	3.3	0.702	1/27/14 22:40	WSD	
Benzene	0.15	0.035		0.49	0.11	0.702	1/27/14 22:40	WSD	
Bromodichloromethane	ND	0.035	U	ND	0.24	0.702	1/27/14 22:40	WSD	
Bromoform	ND	0.035	U	ND	0.36	0.702	1/27/14 22:40	WSD	
Bromomethane	ND	0.035	U	ND	0.14	0.702	1/27/14 22:40	WSD	
2-Butanone (MEK)	ND	1.4	U	ND	4.1	0.702	1/27/14 22:40	WSD	
Carbon Disulfide	ND	0.35	U	ND	1.1	0.702	1/27/14 22:40	WSD	
Carbon Tetrachloride	0.063	0.035		0.40	0.22	0.702	1/27/14 22:40	WSD	
Chlorobenzene	ND	0.035	U	ND	0.16	0.702	1/27/14 22:40	WSD	
Chloroethane	ND	0.035	U	ND	0.093	0.702	1/27/14 22:40	WSD	
Chloroform	ND	0.035	U	ND	0.17	0.702	1/27/14 22:40	WSD	
Chloromethane	0.43	0.070		0.88	0.14	0.702	1/27/14 22:40	WSD	
Cyclohexane	ND	0.035	U	ND	0.12	0.702	1/27/14 22:40	WSD	
Dibromochloromethane	ND	0.035	U	ND	0.30	0.702	1/27/14 22:40	WSD	
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.046	U	ND	0.44	0.702	1/27/14 22:40	WSD	
1,2-Dibromoethane (EDB)	ND	0.035	U	ND	0.27	0.702	1/27/14 22:40	WSD	
1,2-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/27/14 22:40	WSD	
1,3-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/27/14 22:40	WSD	
1,4-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/27/14 22:40	WSD	
Dichlorodifluoromethane (Freon 12)	0.28	0.035		1.4	0.17	0.702	1/27/14 22:40	WSD	
1,1-Dichloroethane	ND	0.035	U	ND	0.14	0.702	1/27/14 22:40	WSD	
1,2-Dichloroethane	ND	0.035	U	ND	0.14	0.702	1/27/14 22:40	WSD	
1,1-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/27/14 22:40	WSD	
cis-1,2-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/27/14 22:40	WSD	
trans-1,2-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/27/14 22:40	WSD	
1,2-Dichloropropane	ND	0.035	U	ND	0.16	0.702	1/27/14 22:40	WSD	
cis-1,3-Dichloropropene	ND	0.035	U	ND	0.16	0.702	1/27/14 22:40	WSD	
trans-1,3-Dichloropropene	ND	0.035	U	ND	0.16	0.702	1/27/14 22:40	WSD	
Ethylbenzene	ND	0.035	U	ND	0.15	0.702	1/27/14 22:40	WSD	
2-Hexanone (MBK)	0.042	0.035		0.17	0.14	0.702	1/27/14 22:40	WSD	
Isopropylbenzene (Cumene)	ND	0.089	U	ND	0.44	0.702	1/27/14 22:40	WSD	
Methyl Acetate	ND	0.14	U	ND	0.44	0.702	1/27/14 22:40	WSD	
Methyl tert-Butyl Ether (MTBE)	ND	0.035	U	ND	0.13	0.702	1/27/14 22:40	WSD	
Methyl Cyclohexane	ND	0.11	U	ND	0.44	0.702	1/27/14 22:40	WSD	
Methylene Chloride	0.89	0.35	S	3.1	1.2	0.702	1/27/14 22:40	WSD	
4-Methyl-2-pentanone (MIBK)	ND	0.035	U	ND	0.14	0.702	1/27/14 22:40	WSD	
Styrene	ND	0.035	U	ND	0.15	0.702	1/27/14 22:40	WSD	

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**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave  
 Date Received: 1/17/2014  
 Field Sample #: H-046-0A  
 Sample ID: 14A0568-04  
 Sample Matrix: Ambient Air  
 Sampled: 1/14/2014 00:00

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 1986  
 Canister Size: 6 liter  
 Flow Controller ID: 3463  
 Sample Type: 24 hr

Work Order: 14A0568  
 Initial Vacuum(in Hg): -30  
 Final Vacuum(in Hg): -8  
 Receipt Vacuum(in Hg): -7  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL		Analized		
1,1,2,2-Tetrachloroethane	ND	0.035	U	ND	0.24	0.702	1/27/14 22:40	WSD	
Tetrachloroethylene	0.035	0.035	U	0.24	0.24	0.702	1/27/14 22:40	WSD	
Tetrahydrofuran	ND	0.035	U	ND	0.10	0.702	1/27/14 22:40	WSD	
Toluene	0.55	0.035		2.1	0.13	0.702	1/27/14 22:40	WSD	
1,2,4-Trichlorobenzene	ND	0.035	U	ND	0.26	0.702	1/27/14 22:40	WSD	
1,1,1-Trichloroethane	ND	0.035	U	ND	0.19	0.702	1/27/14 22:40	WSD	
1,1,2-Trichloroethane	ND	0.035	U	ND	0.19	0.702	1/27/14 22:40	WSD	
Trichloroethylene	ND	0.035	U	ND	0.19	0.702	1/27/14 22:40	WSD	
Trichlorofluoromethane (Freon 11)	0.30	0.035		1.7	0.20	0.702	1/27/14 22:40	WSD	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.23	0.035		1.8	0.27	0.702	1/27/14 22:40	WSD	
Vinyl Chloride	ND	0.035	U	ND	0.090	0.702	1/27/14 22:40	WSD	
m&p-Xylene	0.084	0.070		0.37	0.30	0.702	1/27/14 22:40	WSD	
o-Xylene	ND	0.035	U	ND	0.15	0.702	1/27/14 22:40	WSD	

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	94.5	70-130	1/27/14 22:40
4-Bromofluorobenzene (2)	107	70-130	1/27/14 22:40

H-016-OA

ANALYTICAL RESULTS

Project Location: 100 Oser Ave.  
 Date Received: 1/17/2014  
 Field Sample #: 2014-01-13-OA  
 Sample ID: 14A0568-12  
 Sample Matrix: Ambient Air  
 Sampled: 1/14/2014 00:00

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 1985  
 Canister Size: 6 liter  
 Flow Controller ID: 3462  
 Sample Type: 24 hr

Work Order: 14A0568  
 Initial Vacuum(in Hg): -30  
 Final Vacuum(in Hg): -8  
 Receipt Vacuum(in Hg): -6.9  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL		Analized		
Acetone	7.2	1.4		17	3.3	0.702	1/28/14 2:25	WSD	
Benzene	0.14	0.035		0.45	0.11	0.702	1/28/14 2:25	WSD	
Bromodichloromethane	ND	0.035	U	ND	0.24	0.702	1/28/14 2:25	WSD	
Bromoform	ND	0.035	U	ND	0.36	0.702	1/28/14 2:25	WSD	
Bromomethane	ND	0.035	U	ND	0.14	0.702	1/28/14 2:25	WSD	
2-Butanone (MEK)	ND	1.4	U	ND	4.1	0.702	1/28/14 2:25	WSD	
Carbon Disulfide	ND	0.35	U	ND	1.1	0.702	1/28/14 2:25	WSD	
Carbon Tetrachloride	0.063	0.035		0.40	0.22	0.702	1/28/14 2:25	WSD	
Chlorobenzene	ND	0.035	U	ND	0.16	0.702	1/28/14 2:25	WSD	
Chloroethane	ND	0.035	U	ND	0.093	0.702	1/28/14 2:25	WSD	
Chloroform	ND	0.035	U	ND	0.17	0.702	1/28/14 2:25	WSD	
Chloromethane	0.42	0.070		0.87	0.14	0.702	1/28/14 2:25	WSD	
Cyclohexane	0.035	0.035	U	0.12	0.12	0.702	1/28/14 2:25	WSD	
Dibromochloromethane	ND	0.035	U	ND	0.30	0.702	1/28/14 2:25	WSD	
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.046	U	ND	0.44	0.702	1/28/14 2:25	WSD	
1,2-Dibromoethane (EDB)	ND	0.035	U	ND	0.27	0.702	1/28/14 2:25	WSD	
1,2-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/28/14 2:25	WSD	
1,3-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/28/14 2:25	WSD	
1,4-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/28/14 2:25	WSD	
Dichlorodifluoromethane (Freon 12)	0.27	0.035		1.3	0.17	0.702	1/28/14 2:25	WSD	
1,1-Dichloroethane	ND	0.035	U	ND	0.14	0.702	1/28/14 2:25	WSD	
1,2-Dichloroethane	ND	0.035	U	ND	0.14	0.702	1/28/14 2:25	WSD	
1,1-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/28/14 2:25	WSD	
cis-1,2-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/28/14 2:25	WSD	
trans-1,2-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/28/14 2:25	WSD	
1,2-Dichloropropane	ND	0.035	U	ND	0.16	0.702	1/28/14 2:25	WSD	
cis-1,3-Dichloropropene	ND	0.035	U	ND	0.16	0.702	1/28/14 2:25	WSD	
trans-1,3-Dichloropropene	ND	0.035	U	ND	0.16	0.702	1/28/14 2:25	WSD	
Ethylbenzene	ND	0.035	U	ND	0.15	0.702	1/28/14 2:25	WSD	
2-Hexanone (MBK)	0.13	0.035		0.55	0.14	0.702	1/28/14 2:25	WSD	
Isopropylbenzene (Cumene)	ND	0.089	U	ND	0.44	0.702	1/28/14 2:25	WSD	
Methyl Acetate	ND	0.14	U	ND	0.44	0.702	1/28/14 2:25	WSD	
Methyl tert-Butyl Ether (MTBE)	ND	0.035	U	ND	0.13	0.702	1/28/14 2:25	WSD	
Methyl Cyclohexane	ND	0.11	U	ND	0.44	0.702	1/28/14 2:25	WSD	
Methylene Chloride	0.99	<del>0.35</del>	B U	3.4	<del>1.2</del>	0.702	1/28/14 2:25	WSD	
4-Methyl-2-pentanone (MIBK)	0.042	0.035		0.17	0.14	0.702	1/28/14 2:25	WSD	
Styrene	ND	0.035	U	ND	0.15	0.702	1/28/14 2:25	WSD	

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H-046-0A

ANALYTICAL RESULTS

Project Location: 100 Oser Ave.  
 Date Received: 1/17/2014  
 Field Sample #: 2014-01-13-OA  
 Sample ID: 14A0568-12  
 Sample Matrix: Ambient Air  
 Sampled: 1/14/2014 00:00

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 1985  
 Canister Size: 6 liter  
 Flow Controller ID: 3462  
 Sample Type: 24 hr

Work Order: 14A0568  
 Initial Vacuum(in Hg): -30  
 Final Vacuum(in Hg): -8  
 Receipt Vacuum(in Hg): -6.9  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL		Analyzed		
1,1,2,2-Tetrachloroethane	ND	0.035	U	ND	0.24	0.702	1/28/14	2:25	WSD
Tetrachloroethylene	0.035	0.035	U	0.24	0.24	0.702	1/28/14	2:25	WSD
Tetrahydrofuran	ND	0.035	U	ND	0.10	0.702	1/28/14	2:25	WSD
Toluene	0.55	0.035		2.1	0.13	0.702	1/28/14	2:25	WSD
1,2,4-Trichlorobenzene	ND	0.035	U	ND	0.26	0.702	1/28/14	2:25	WSD
1,1,1-Trichloroethane	ND	0.035	U	ND	0.19	0.702	1/28/14	2:25	WSD
1,1,2-Trichloroethane	ND	0.035	U	ND	0.19	0.702	1/28/14	2:25	WSD
Trichloroethylene	ND	0.035	U	ND	0.19	0.702	1/28/14	2:25	WSD
Trichlorofluoromethane (Freon 11)	0.25	0.035		1.4	0.20	0.702	1/28/14	2:25	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.091	0.035		0.70	0.27	0.702	1/28/14	2:25	WSD
Vinyl Chloride	ND	0.035	U	ND	0.090	0.702	1/28/14	2:25	WSD
m&p-Xylene	0.084	0.070		0.37	0.30	0.702	1/28/14	2:25	WSD
o-Xylene	0.035	0.035	U	0.15	0.15	0.702	1/28/14	2:25	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	95.2	70-130	1/28/14 2:25
4-Bromofluorobenzene (2)	108	70-130	1/28/14 2:25

ANALYTICAL RESULTS

Project Location: 100 Oser Ave.  
 Date Received: 1/17/2014  
 Field Sample #: H-057-AS  
 Sample ID: 14A0568-05  
 Sample Matrix: Sub Slab  
 Sampled: 1/14/2014 00:00

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 1987  
 Canister Size: 6 liter  
 Flow Controller ID: 3464  
 Sample Type: 24 hr

Work Order: 14A0568  
 Initial Vacuum(in Hg): -30  
 Final Vacuum(in Hg): -10  
 Receipt Vacuum(in Hg): -9  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Acetone	9.3	4.0	J	22	9.5	2	1/28/14 7:10	WSD	
Benzene	0.10	0.10		0.32	0.32	2	1/28/14 7:10	WSD	
Bromodichloromethane	ND	0.10	U	ND	0.67	2	1/28/14 7:10	WSD	
Bromoform	ND	0.10	U	ND	1.0	2	1/28/14 7:10	WSD	
Bromomethane	ND	0.10	U	ND	0.39	2	1/28/14 7:10	WSD	
2-Butanone (MEK)	ND	4.0	U	ND	12	2	1/28/14 7:10	WSD	
Carbon Disulfide	ND	1.0	U	ND	3.1	2	1/28/14 7:10	WSD	
Carbon Tetrachloride	ND	0.10	U	ND	0.63	2	1/28/14 7:10	WSD	
Chlorobenzene	ND	0.10	U	ND	0.46	2	1/28/14 7:10	WSD	
Chloroethane	ND	0.10	U	ND	0.26	2	1/28/14 7:10	WSD	
Chloroform	64	0.10		310	0.49	2	1/28/14 7:10	WSD	
Chloromethane	ND	0.20	U	ND	0.41	2	1/28/14 7:10	WSD	
Cyclohexane	0.12	0.10		0.41	0.34	2	1/28/14 7:10	WSD	
Dibromochloromethane	ND	0.10	U	ND	0.85	2	1/28/14 7:10	WSD	
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.13	U	ND	1.3	2	1/28/14 7:10	WSD	
1,2-Dibromoethane (EDB)	ND	0.10	U	ND	0.77	2	1/28/14 7:10	WSD	
1,2-Dichlorobenzene	ND	0.10	U	ND	0.60	2	1/28/14 7:10	WSD	
1,3-Dichlorobenzene	ND	0.10	U	ND	0.60	2	1/28/14 7:10	WSD	
1,4-Dichlorobenzene	0.10	0.10		0.60	0.60	2	1/28/14 7:10	WSD	
Dichlorodifluoromethane (Freon 12)	0.40	0.10		2.0	0.49	2	1/28/14 7:10	WSD	
1,1-Dichloroethane	ND	0.10	U	ND	0.40	2	1/28/14 7:10	WSD	
1,2-Dichloroethane	ND	0.10	U	ND	0.40	2	1/28/14 7:10	WSD	
1,1-Dichloroethylene	ND	0.10	U	ND	0.40	2	1/28/14 7:10	WSD	
cis-1,2-Dichloroethylene	ND	0.10	U	ND	0.40	2	1/28/14 7:10	WSD	
trans-1,2-Dichloroethylene	ND	0.10	U	ND	0.40	2	1/28/14 7:10	WSD	
1,2-Dichloropropane	ND	0.10	U	ND	0.46	2	1/28/14 7:10	WSD	
cis-1,3-Dichloropropene	ND	0.10	U	ND	0.45	2	1/28/14 7:10	WSD	
trans-1,3-Dichloropropene	ND	0.10	U	ND	0.45	2	1/28/14 7:10	WSD	
Ethylbenzene	ND	0.10	U	ND	0.43	2	1/28/14 7:10	WSD	
2-Hexanone (MBK)	ND	0.10	U	ND	0.41	2	1/28/14 7:10	WSD	
Isopropylbenzene (Cumene)	ND	0.25	U	ND	1.2	2	1/28/14 7:10	WSD	
Methyl Acetate	ND	0.41	U	ND	1.2	2	1/28/14 7:10	WSD	
Methyl tert-Butyl Ether (MTBE)	ND	0.10	U	ND	0.36	2	1/28/14 7:10	WSD	
Methyl Cyclohexane	ND	0.31	U	ND	1.3	2	1/28/14 7:10	WSD	
Methylene Chloride	1.4	<del>1.0</del>	J	4.7	<del>3.5</del>	2	1/28/14 7:10	WSD	
4-Methyl-2-pentanone (MIBK)	ND	0.10	U	ND	0.41	2	1/28/14 7:10	WSD	
Styrene	ND	0.10	U	ND	0.43	2	1/28/14 7:10	WSD	

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**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave  
 Date Received: 1/17/2014  
 Field Sample #: H-057-AS  
 Sample ID: 14A0568-05  
 Sample Matrix: Sub Slab  
 Sampled: 1/14/2014 00:00

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 1987  
 Canister Size: 6 liter  
 Flow Controller ID: 3464  
 Sample Type: 24 hr

**Work Order: 14A0568**  
 Initial Vacuum(in Hg): -30  
 Final Vacuum(in Hg): -10  
 Receipt Vacuum(in Hg): -9  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL		Analyzed		
1,1,2,2-Tetrachloroethane	ND	0.10	U	ND	0.69	2	1/28/14	7:10	WSD
Tetrachloroethylene	0.12	0.10		0.81	0.68	2	1/28/14	7:10	WSD
Tetrahydrofuran	ND	0.10	U	ND	0.29	2	1/28/14	7:10	WSD
Toluene	3.1	0.10		12	0.38	2	1/28/14	7:10	WSD
1,2,4-Trichlorobenzene	ND	0.10	U	ND	0.74	2	1/28/14	7:10	WSD
1,1,1-Trichloroethane	ND	0.10	U	ND	0.55	2	1/28/14	7:10	WSD
1,1,2-Trichloroethane	ND	0.10	U	ND	0.55	2	1/28/14	7:10	WSD
Trichloroethylene	ND	0.10	U	ND	0.54	2	1/28/14	7:10	WSD
Trichlorofluoromethane (Freon 11)	0.60	0.10		3.4	0.56	2	1/28/14	7:10	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.14	0.10		1.1	0.77	2	1/28/14	7:10	WSD
Vinyl Chloride	ND	0.10	U	ND	0.26	2	1/28/14	7:10	WSD
m&p-Xylene	0.42	0.20		1.8	0.87	2	1/28/14	7:10	WSD
o-Xylene	0.14	0.10		0.61	0.43	2	1/28/14	7:10	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	93.6	70-130	1/28/14 7:10
4-Bromofluorobenzene (2)	103	70-130	1/28/14 7:10

ANALYTICAL RESULTS

Project Location: 100 Oser Ave.  
 Date Received: 1/17/2014  
 Field Sample #: H-057-BA  
 Sample ID: 14A0568-06  
 Sample Matrix: Indoor air  
 Sampled: 1/14/2014 00:00

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 2000  
 Canister Size: 6 liter  
 Flow Controller ID: 3465  
 Sample Type: 24 hr

Work Order: 14A0568  
 Initial Vacuum(in Hg): -28  
 Final Vacuum(in Hg): -7  
 Receipt Vacuum(in Hg): -7.6  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL		Analized		
Acetone	27	1.4	J	65	3.3	0.702	1/27/14 23:25	WSD	
Benzene	1.6	0.035		5.1	0.11	0.702	1/27/14 23:25	WSD	
Bromodichloromethane	ND	0.035	U	ND	0.24	0.702	1/27/14 23:25	WSD	
Bromoform	ND	0.035	U	ND	0.36	0.702	1/27/14 23:25	WSD	
Bromomethane	ND	0.035	U	ND	0.14	0.702	1/27/14 23:25	WSD	
2-Butanone (MEK)	ND	1.4	U	ND	4.1	0.702	1/27/14 23:25	WSD	
Carbon Disulfide	ND	0.35	U	ND	1.1	0.702	1/27/14 23:25	WSD	
Carbon Tetrachloride	0.070	0.035		0.44	0.22	0.702	1/27/14 23:25	WSD	
Chlorobenzene	ND	0.035	U	ND	0.16	0.702	1/27/14 23:25	WSD	
Chloroethane	ND	0.035	U	ND	0.093	0.702	1/27/14 23:25	WSD	
Chloroform	0.45	0.035		2.2	0.17	0.702	1/27/14 23:25	WSD	
Chloromethane	0.42	0.070		0.87	0.14	0.702	1/27/14 23:25	WSD	
Cyclohexane	1.1	0.035		3.8	0.12	0.702	1/27/14 23:25	WSD	
Dibromochloromethane	ND	0.035	U	ND	0.30	0.702	1/27/14 23:25	WSD	
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.046	U	ND	0.44	0.702	1/27/14 23:25	WSD	
1,2-Dibromoethane (EDB)	ND	0.035	U	ND	0.27	0.702	1/27/14 23:25	WSD	
1,2-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/27/14 23:25	WSD	
1,3-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/27/14 23:25	WSD	
1,4-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/27/14 23:25	WSD	
Dichlorodifluoromethane (Freon 12)	0.26	0.035		1.3	0.17	0.702	1/27/14 23:25	WSD	
1,1-Dichloroethane	ND	0.035	U	ND	0.14	0.702	1/27/14 23:25	WSD	
1,2-Dichloroethane	0.38	0.035		1.5	0.14	0.702	1/27/14 23:25	WSD	
1,1-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/27/14 23:25	WSD	
cis-1,2-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/27/14 23:25	WSD	
trans-1,2-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/27/14 23:25	WSD	
1,2-Dichloropropane	ND	0.035	U	ND	0.16	0.702	1/27/14 23:25	WSD	
cis-1,3-Dichloropropene	ND	0.035	U	ND	0.16	0.702	1/27/14 23:25	WSD	
trans-1,3-Dichloropropene	ND	0.035	U	ND	0.16	0.702	1/27/14 23:25	WSD	
Ethylbenzene	1.0	0.035		4.5	0.15	0.702	1/27/14 23:25	WSD	
2-Hexanone (MBK)	0.17	0.035		0.69	0.14	0.702	1/27/14 23:25	WSD	
Isopropylbenzene (Cumene)	ND	0.089	U	ND	0.44	0.702	1/27/14 23:25	WSD	
Methyl Acetate	0.32	0.14		0.98	0.44	0.702	1/27/14 23:25	WSD	
Methyl tert-Butyl Ether (MTBE)	ND	0.035	U	ND	0.13	0.702	1/27/14 23:25	WSD	
Methyl Cyclohexane	1.2	0.11		4.8	0.44	0.702	1/27/14 23:25	WSD	
Methylene Chloride	0.96	0.35	J	3.3	1.2	0.702	1/27/14 23:25	WSD	
4-Methyl-2-pentanone (MIBK)	0.091	0.035		0.37	0.14	0.702	1/27/14 23:25	WSD	
Styrene	0.042	0.035		0.18	0.15	0.702	1/27/14 23:25	WSD	

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**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave.  
 Date Received: 1/17/2014  
 Field Sample #: H-057-BA  
 Sample ID: 14A0568-06  
 Sample Matrix: Indoor air  
 Sampled: 1/14/2014 00:00

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 2000  
 Canister Size: 6 liter  
 Flow Controller ID: 3465  
 Sample Type: 24 hr

Work Order: 14A0568  
 Initial Vacuum(in Hg): -28  
 Final Vacuum(in Hg): -7  
 Receipt Vacuum(in Hg): -7.6  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL		Analyzed		
1,1,2,2-Tetrachloroethane	ND	0.035	U	ND	0.24	0.702	1/27/14 23:25	WSD	
Tetrachloroethylene	0.035	0.035	U	0.24	0.24	0.702	1/27/14 23:25	WSD	
Tetrahydrofuran	0.035	0.035	U	0.10	0.10	0.702	1/27/14 23:25	WSD	
Toluene	8.9	0.035		34	0.13	0.702	1/27/14 23:25	WSD	
1,2,4-Trichlorobenzene	ND	0.035	U	ND	0.26	0.702	1/27/14 23:25	WSD	
1,1,1-Trichloroethane	0.15	0.035		0.84	0.19	0.702	1/27/14 23:25	WSD	
1,1,2-Trichloroethane	ND	0.035	U	ND	0.19	0.702	1/27/14 23:25	WSD	
Trichloroethylene	ND	0.035	U	ND	0.19	0.702	1/27/14 23:25	WSD	
Trichlorofluoromethane (Freon 11)	0.24	0.035		1.3	0.20	0.702	1/27/14 23:25	WSD	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.084	0.035		0.65	0.27	0.702	1/27/14 23:25	WSD	
Vinyl Chloride	ND	0.035	U	ND	0.090	0.702	1/27/14 23:25	WSD	
m&p-Xylene	3.1	0.070		14	0.30	0.702	1/27/14 23:25	WSD	
o-Xylene	1.1	0.035		4.8	0.15	0.702	1/27/14 23:25	WSD	

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	96.2	70-130	1/27/14 23:25
4-Bromofluorobenzene (2)	110	70-130	1/27/14 23:25

ANALYTICAL RESULTS

Project Location: 100 Oser Ave.  
 Date Received: 1/21/2014  
 Field Sample #: H-124-AS  
 Sample ID: 14A0620-04  
 Sample Matrix: Sub Slab  
 Sampled: 1/17/2014 06:10

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 2030  
 Canister Size: 6 liter  
 Flow Controller ID: 3485  
 Sample Type: 24 hr

Work Order: 14A0620  
 Initial Vacuum(in Hg): -29  
 Final Vacuum(in Hg): -0.5  
 Receipt Vacuum(in Hg): -0  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Acetone	12	4.0	L-05, V-06 J	28	9.5 J	2	1/31/14 12:53	WSD	
Benzene	0.29	0.10		0.93	0.32	2	1/31/14 12:53	WSD	
Bromodichloromethane	0.29	0.10		2.0	0.67	2	1/31/14 12:53	WSD	
Bromoform	ND	0.10	U	ND	1.0	2	1/31/14 12:53	WSD	
Bromomethane	ND	0.10	U	ND	0.39	2	1/31/14 12:53	WSD	
2-Butanone (MEK)	ND	4.0	U	ND	12	2	1/31/14 12:53	WSD	
Carbon Disulfide	ND	1.0	U	ND	3.1	2	1/31/14 12:53	WSD	
Carbon Tetrachloride	ND	0.10	U	ND	0.63	2	1/31/14 12:53	WSD	
Chlorobenzene	ND	0.10	U	ND	0.46	2	1/31/14 12:53	WSD	
Chloroethane	ND	0.10	U	ND	0.26	2	1/31/14 12:53	WSD	
Chloroform	8.8	0.10		43	0.49	2	1/31/14 12:53	WSD	
Chloromethane	ND	0.20	U	ND	0.41	2	1/31/14 12:53	WSD	
Cyclohexane	ND	0.10	U	ND	0.34	2	1/31/14 12:53	WSD	
Dibromochloromethane	ND	0.10	U	ND	0.85	2	1/31/14 12:53	WSD	
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.13	U	ND	1.3	2	1/31/14 12:53	WSD	
1,2-Dibromoethane (EDB)	ND	0.10	U	ND	0.77	2	1/31/14 12:53	WSD	
1,2-Dichlorobenzene	ND	0.10	U	ND	0.60	2	1/31/14 12:53	WSD	
1,3-Dichlorobenzene	ND	0.10	U	ND	0.60	2	1/31/14 12:53	WSD	
1,4-Dichlorobenzene	ND	0.10	U	ND	0.60	2	1/31/14 12:53	WSD	
Dichlorodifluoromethane (Freon 12)	0.58	0.10		2.9	0.49	2	1/31/14 12:53	WSD	
1,1-Dichloroethane	ND	0.10	U	ND	0.40	2	1/31/14 12:53	WSD	
1,2-Dichloroethane	ND	0.10	U	ND	0.40	2	1/31/14 12:53	WSD	
1,1-Dichloroethylene	ND	0.10	U	ND	0.40	2	1/31/14 12:53	WSD	
cis-1,2-Dichloroethylene	ND	0.10	U	ND	0.40	2	1/31/14 12:53	WSD	
trans-1,2-Dichloroethylene	ND	0.10	U	ND	0.40	2	1/31/14 12:53	WSD	
1,2-Dichloropropane	ND	0.10	U	ND	0.46	2	1/31/14 12:53	WSD	
cis-1,3-Dichloropropene	ND	0.10	U	ND	0.45	2	1/31/14 12:53	WSD	
trans-1,3-Dichloropropene	ND	0.10	U	ND	0.45	2	1/31/14 12:53	WSD	
Ethylbenzene	0.10	0.10		0.44	0.43	2	1/31/14 12:53	WSD	
2-Hexanone (MBK)	0.16	0.10		0.66	0.41	2	1/31/14 12:53	WSD	
Isopropylbenzene (Cumene)	ND	0.25	L-03, U-5	ND	1.2 J	2	1/31/14 12:53	WSD	
Methyl Acetate	ND	0.41	U	ND	1.2	2	1/31/14 12:53	WSD	
Methyl tert-Butyl Ether (MTBE)	ND	0.10	U	ND	0.36	2	1/31/14 12:53	WSD	
Methyl Cyclohexane	ND	0.31	U	ND	1.3	2	1/31/14 12:53	WSD	
Methylene Chloride	ND	1.0	U	ND	3.5	2	1/31/14 12:53	WSD	
4-Methyl-2-pentanone (MIBK)	ND	0.10	U	ND	0.41	2	1/31/14 12:53	WSD	
Styrene	ND	0.10	U	ND	0.43	2	1/31/14 12:53	WSD	

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3/16/14

**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave.  
 Date Received: 1/21/2014  
 Field Sample #: H-124-AS  
 Sample ID: 14A0620-04  
 Sample Matrix: Sub Slab  
 Sampled: 1/17/2014 06:10

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 2030  
 Canister Size: 6 liter  
 Flow Controller ID: 3485  
 Sample Type: 24 hr

Work Order: 14A0620  
 Initial Vacuum(in Hg): -29  
 Final Vacuum(in Hg): -0.5  
 Receipt Vacuum(in Hg): -0  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling:

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL		Analized		
1,1,2,2-Tetrachloroethane	ND	0.10	U	ND	0.69	2	1/31/14	12:53	WSD
Tetrachloroethylene	3.1	0.10		21	0.68	2	1/31/14	12:53	WSD
Tetrahydrofuran	ND	0.10	U	ND	0.29	2	1/31/14	12:53	WSD
Toluene	18	0.10		68	0.38	2	1/31/14	12:53	WSD
1,2,4-Trichlorobenzene	ND	0.10	U	ND	0.74	2	1/31/14	12:53	WSD
1,1,1-Trichloroethane	0.48	0.10		2.6	0.55	2	1/31/14	12:53	WSD
1,1,2-Trichloroethane	ND	0.10	U	ND	0.55	2	1/31/14	12:53	WSD
Trichloroethylene	ND	0.10	U	ND	0.54	2	1/31/14	12:53	WSD
Trichlorofluoromethane (Freon 11)	0.36	0.10		2.0	0.56	2	1/31/14	12:53	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.24	0.10		1.8	0.77	2	1/31/14	12:53	WSD
Vinyl Chloride	ND	0.10	U	ND	0.26	2	1/31/14	12:53	WSD
m&p-Xylene	0.55	0.20		2.4	0.87	2	1/31/14	12:53	WSD
o-Xylene	0.30	0.10		1.3	0.43	2	1/31/14	12:53	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	94.0	70-130	1/31/14 12:53
4-Bromofluorobenzene (2)	78.3	70-130	1/31/14 12:53

**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave.  
 Date Received: 1/21/2014  
 Field Sample #: H-124-BA  
 Sample ID: 14A0620-05  
 Sample Matrix: Indoor air  
 Sampled: 1/17/2014 06:11

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 2031  
 Canister Size: 6 liter  
 Flow Controller ID: 3486  
 Sample Type: 24 hr

Work Order: 14A0620  
 Initial Vacuum(in Hg): -29  
 Final Vacuum(in Hg): -9.5  
 Receipt Vacuum(in Hg): -9.6  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling:

**EPA TO-15**

Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analized		
Acetone	23	1.4	L-05, V-06 J	55	3.3 J	0.702	1/31/14	1:46	WSD
Benzene	0.58	0.035		1.9	0.11	0.702	1/31/14	1:46	WSD
Bromodichloromethane	ND	0.035	U	ND	0.24	0.702	1/31/14	1:46	WSD
Bromoform	ND	0.035	U	ND	0.36	0.702	1/31/14	1:46	WSD
Bromomethane	ND	0.035	U	ND	0.14	0.702	1/31/14	1:46	WSD
2-Butanone (MEK)	1.8	1.4		5.2	4.1	0.702	1/31/14	1:46	WSD
Carbon Disulfide	ND	0.35	U	ND	1.1	0.702	1/31/14	1:46	WSD
Carbon Tetrachloride	0.086	0.035		0.54	0.22	0.702	1/31/14	1:46	WSD
Chlorobenzene	ND	0.035	U	ND	0.16	0.702	1/31/14	1:46	WSD
Chloroethane	ND	0.035	U	ND	0.093	0.702	1/31/14	1:46	WSD
Chloroform	0.063	0.035		0.31	0.17	0.702	1/31/14	1:46	WSD
Chloromethane	0.70	0.070		1.4	0.14	0.702	1/31/14	1:46	WSD
Cyclohexane	ND	0.035	U	ND	0.12	0.702	1/31/14	1:46	WSD
Dibromochloromethane	ND	0.035	U	ND	0.30	0.702	1/31/14	1:46	WSD
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.046	U	ND	0.44	0.702	1/31/14	1:46	WSD
1,2-Dibromoethane (EDB)	ND	0.035	U	ND	0.27	0.702	1/31/14	1:46	WSD
1,2-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/31/14	1:46	WSD
1,3-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/31/14	1:46	WSD
1,4-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/31/14	1:46	WSD
Dichlorodifluoromethane (Freon 12)	0.51	0.035		2.5	0.17	0.702	1/31/14	1:46	WSD
1,1-Dichloroethane	ND	0.035	U	ND	0.14	0.702	1/31/14	1:46	WSD
1,2-Dichloroethane	0.16	0.035		0.63	0.14	0.702	1/31/14	1:46	WSD
1,1-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/31/14	1:46	WSD
cis-1,2-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/31/14	1:46	WSD
trans-1,2-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/31/14	1:46	WSD
1,2-Dichloropropane	ND	0.035	U	ND	0.16	0.702	1/31/14	1:46	WSD
cis-1,3-Dichloropropene	ND	0.035	U	ND	0.16	0.702	1/31/14	1:46	WSD
trans-1,3-Dichloropropene	ND	0.035	U	ND	0.16	0.702	1/31/14	1:46	WSD
Ethylbenzene	0.092	0.035		0.40	0.15	0.702	1/31/14	1:46	WSD
2-Hexanone (MBK)	0.18	0.035		0.73	0.14	0.702	1/31/14	1:46	WSD
Isopropylbenzene (Cumene)	ND	0.089	L-03, U-3	ND	0.44 J	0.702	1/31/14	1:46	WSD
Methyl Acetate	ND	0.14	U	ND	0.44	0.702	1/31/14	1:46	WSD
Methyl tert-Butyl Ether (MTBE)	ND	0.035	U	ND	0.13	0.702	1/31/14	1:46	WSD
Methyl Cyclohexane	ND	0.11	U	ND	0.44	0.702	1/31/14	1:46	WSD
Methylene Chloride	0.55	0.35		1.9	1.2	0.702	1/31/14	1:46	WSD
4-Methyl-2-pentanone (MIBK)	0.091	0.035		0.37	0.14	0.702	1/31/14	1:46	WSD
Styrene	0.054	0.035		0.23	0.15	0.702	1/31/14	1:46	WSD

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**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave.  
 Date Received: 1/21/2014  
 Field Sample #: H-124-BA  
 Sample ID: 14A0620-05  
 Sample Matrix: Indoor air  
 Sampled: 1/17/2014 06:11

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 2031  
 Canister Size: 6 liter  
 Flow Controller ID: 3486  
 Sample Type: 24 hr

**Work Order: 14A0620**  
 Initial Vacuum(in Hg): -29  
 Final Vacuum(in Hg): -9.5  
 Receipt Vacuum(in Hg): -9.6  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling:

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL		Analyzed		
1,1,2,2-Tetrachloroethane	ND	0.035	U	ND	0.24	0.702	1/31/14	1:46	WSD
Tetrachloroethylene	0.12	0.035		0.81	0.24	0.702	1/31/14	1:46	WSD
Tetrahydrofuran	0.049	0.035		0.14	0.10	0.702	1/31/14	1:46	WSD
Toluene	1.1	0.035		4.1	0.13	0.702	1/31/14	1:46	WSD
1,2,4-Trichlorobenzene	ND	0.035	U	ND	0.26	0.702	1/31/14	1:46	WSD
1,1,1-Trichloroethane	ND	0.035	U	ND	0.19	0.702	1/31/14	1:46	WSD
1,1,2-Trichloroethane	ND	0.035	U	ND	0.19	0.702	1/31/14	1:46	WSD
Trichloroethylene	ND	0.035	U	ND	0.19	0.702	1/31/14	1:46	WSD
Trichlorofluoromethane (Freon 11)	0.30	0.035		1.7	0.20	0.702	1/31/14	1:46	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.077	0.035		0.59	0.27	0.702	1/31/14	1:46	WSD
Vinyl Chloride	ND	0.035	U	ND	0.090	0.702	1/31/14	1:46	WSD
m&p-Xylene	0.27	0.070		1.2	0.30	0.702	1/31/14	1:46	WSD
o-Xylene	0.098	0.035		0.42	0.15	0.702	1/31/14	1:46	WSD

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	102	70-130	1/31/14	1:46
4-Bromofluorobenzene (2)	84.0	70-130	1/31/14	1:46

**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave.  
 Date Received: 1/21/2014  
 Field Sample #: H-124-OA  
 Sample ID: 14A0620-06  
 Sample Matrix: Ambient Air  
 Sampled: 1/17/2014 06:26

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 2032  
 Canister Size: 6 liter  
 Flow Controller ID: 3489  
 Sample Type: 24 hr

**Work Order: 14A0620**  
 Initial Vacuum(in Hg): -29  
 Final Vacuum(in Hg): -8.0  
 Receipt Vacuum(in Hg): -7.1  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling:

**EPA TO-15**

Analyte	ppbv			ug/m3			Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL	Analyzed				
Acetone	12	1.4	L-05, V-06 JS	29	3.3 JS	0.702	1/31/14	2:31	WSD	
Benzene	0.33	0.035		1.0	0.11	0.702	1/31/14	2:31	WSD	
Bromodichloromethane	ND	0.035	U	ND	0.24	0.702	1/31/14	2:31	WSD	
Bromoform	ND	0.035	U	ND	0.36	0.702	1/31/14	2:31	WSD	
Bromomethane	ND	0.035	U	ND	0.14	0.702	1/31/14	2:31	WSD	
2-Butanone (MEK)	ND	1.4	U	ND	4.1	0.702	1/31/14	2:31	WSD	
Carbon Disulfide	ND	0.35	U	ND	1.1	0.702	1/31/14	2:31	WSD	
Carbon Tetrachloride	0.084	0.035		0.53	0.22	0.702	1/31/14	2:31	WSD	
Chlorobenzene	ND	0.035	U	ND	0.16	0.702	1/31/14	2:31	WSD	
Chloroethane	ND	0.035	U	ND	0.093	0.702	1/31/14	2:31	WSD	
Chloroform	ND	0.035	U	ND	0.17	0.702	1/31/14	2:31	WSD	
Chloromethane	0.56	0.070		1.2	0.14	0.702	1/31/14	2:31	WSD	
Cyclohexane	ND	0.035	U	ND	0.12	0.702	1/31/14	2:31	WSD	
Dibromochloromethane	ND	0.035	U	ND	0.30	0.702	1/31/14	2:31	WSD	
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.046	U	ND	0.44	0.702	1/31/14	2:31	WSD	
1,2-Dibromoethane (EDB)	ND	0.035	U	ND	0.27	0.702	1/31/14	2:31	WSD	
1,2-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/31/14	2:31	WSD	
1,3-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/31/14	2:31	WSD	
1,4-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/31/14	2:31	WSD	
Dichlorodifluoromethane (Freon 12)	0.53	0.035		2.6	0.17	0.702	1/31/14	2:31	WSD	
1,1-Dichloroethane	ND	0.035	U	ND	0.14	0.702	1/31/14	2:31	WSD	
1,2-Dichloroethane	ND	0.035	U	ND	0.14	0.702	1/31/14	2:31	WSD	
1,1-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/31/14	2:31	WSD	
cis-1,2-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/31/14	2:31	WSD	
trans-1,2-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/31/14	2:31	WSD	
1,2-Dichloropropane	ND	0.035	U	ND	0.16	0.702	1/31/14	2:31	WSD	
cis-1,3-Dichloropropene	ND	0.035	U	ND	0.16	0.702	1/31/14	2:31	WSD	
trans-1,3-Dichloropropene	ND	0.035	U	ND	0.16	0.702	1/31/14	2:31	WSD	
Ethylbenzene	0.084	0.035		0.36	0.15	0.702	1/31/14	2:31	WSD	
2-Hexanone (MBK)	0.089	0.035		0.37	0.14	0.702	1/31/14	2:31	WSD	
Isopropylbenzene (Cumene)	ND	0.089	L-03, U JS	ND	0.44 JS	0.702	1/31/14	2:31	WSD	
Methyl Acetate	ND	0.14	U	ND	0.44	0.702	1/31/14	2:31	WSD	
Methyl tert-Butyl Ether (MTBE)	ND	0.035	U	ND	0.13	0.702	1/31/14	2:31	WSD	
Methyl Cyclohexane	ND	0.11	U	ND	0.44	0.702	1/31/14	2:31	WSD	
Methylene Chloride	0.52	0.35		1.8	1.2	0.702	1/31/14	2:31	WSD	
4-Methyl-2-pentanone (MIBK)	0.055	0.035		0.22	0.14	0.702	1/31/14	2:31	WSD	
Styrene	ND	0.035	U	ND	0.15	0.702	1/31/14	2:31	WSD	

*CAMP 3/6/14*

**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave.  
 Date Received: 1/21/2014  
 Field Sample #: H-124-OA  
 Sample ID: 14A0620-06  
 Sample Matrix: Ambient Air  
 Sampled: 1/17/2014 06:26

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 2032  
 Canister Size: 6 liter  
 Flow Controller ID: 3489  
 Sample Type: 24 hr

Work Order: 14A0620  
 Initial Vacuum(in Hg): -29  
 Final Vacuum(in Hg): -8.0  
 Receipt Vacuum(in Hg): -7.1  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling:

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL		Analyzed		
1,1,2,2-Tetrachloroethane	ND	0.035	U	ND	0.24	0.702	1/31/14	2:31	WSD
Tetrachloroethylene	0.12	0.035		0.79	0.24	0.702	1/31/14	2:31	WSD
Tetrahydrofuran	ND	0.035	U	ND	0.10	0.702	1/31/14	2:31	WSD
Toluene	0.82	0.035		3.1	0.13	0.702	1/31/14	2:31	WSD
1,2,4-Trichlorobenzene	ND	0.035	U	ND	0.26	0.702	1/31/14	2:31	WSD
1,1,1-Trichloroethane	ND	0.035	U	ND	0.19	0.702	1/31/14	2:31	WSD
1,1,2-Trichloroethane	ND	0.035	U	ND	0.19	0.702	1/31/14	2:31	WSD
Trichloroethylene	0.035	0.035	U	0.19	0.19	0.702	1/31/14	2:31	WSD
Trichlorofluoromethane (Freon 11)	0.28	0.035		1.6	0.20	0.702	1/31/14	2:31	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.076	0.035		0.58	0.27	0.702	1/31/14	2:31	WSD
Vinyl Chloride	ND	0.035	U	ND	0.090	0.702	1/31/14	2:31	WSD
m&p-Xylene	0.26	0.070		1.1	0.30	0.702	1/31/14	2:31	WSD
o-Xylene	0.087	0.035		0.38	0.15	0.702	1/31/14	2:31	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	101	70-130	1/31/14 2:31
4-Bromofluorobenzene (2)	83.9	70-130	1/31/14 2:31

ANALYTICAL RESULTS

Project Location: 100 Oser Ave  
 Date Received: 1/15/2014  
 Field Sample #: H-152-BA  
 Sample ID: 14A0426-03  
 Sample Matrix: Indoor air  
 Sampled: 1/13/2014 05:44

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 1964  
 Canister Size: 6 liter  
 Flow Controller ID: 3452  
 Sample Type: 24 hr

Work Order: 14A0426  
 Initial Vacuum(in Hg): -30  
 Final Vacuum(in Hg): -9.5  
 Receipt Vacuum(in Hg): -8.9  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL		Analized		
Acetone	11	1.4	S	26	3.3	0.702	1/27/14 17:58	WSD	
Benzene	1.4	0.035		4.3	0.11	0.702	1/27/14 17:58	WSD	
Bromodichloromethane	0.056	0.035		0.38	0.24	0.702	1/27/14 17:58	WSD	
Bromoform	ND	0.035	U	ND	0.36	0.702	1/27/14 17:58	WSD	
Bromomethane	ND	0.035	U	ND	0.14	0.702	1/27/14 17:58	WSD	
2-Butanone (MEK)	ND	1.4	U	ND	4.1	0.702	1/27/14 17:58	WSD	
Carbon Disulfide	ND	0.35	U	ND	1.1	0.702	1/27/14 17:58	WSD	
Carbon Tetrachloride	0.063	0.035		0.40	0.22	0.702	1/27/14 17:58	WSD	
Chlorobenzene	ND	0.035	U	ND	0.16	0.702	1/27/14 17:58	WSD	
Chloroethane	ND	0.035	U	ND	0.093	0.702	1/27/14 17:58	WSD	
Chloroform	ND	0.035	U	ND	0.17	0.702	1/27/14 17:58	WSD	
Chloromethane	0.44	0.070		0.90	0.14	0.702	1/27/14 17:58	WSD	
Cyclohexane	0.88	0.035		3.0	0.12	0.702	1/27/14 17:58	WSD	
Dibromochloromethane	ND	0.035	U	ND	0.30	0.702	1/27/14 17:58	WSD	
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.046	U	ND	0.44	0.702	1/27/14 17:58	WSD	
1,2-Dibromoethane (EDB)	ND	0.035	U	ND	0.27	0.702	1/27/14 17:58	WSD	
1,2-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/27/14 17:58	WSD	
1,3-Dichlorobenzene	2.0	0.035		12	0.21	0.702	1/27/14 17:58	WSD	
1,4-Dichlorobenzene	2.9	0.035		17	0.21	0.702	1/27/14 17:58	WSD	
Dichlorodifluoromethane (Freon 12)	0.29	0.035		1.4	0.17	0.702	1/27/14 17:58	WSD	
1,1-Dichloroethane	ND	0.035	U	ND	0.14	0.702	1/27/14 17:58	WSD	
1,2-Dichloroethane	ND	0.035	U	ND	0.14	0.702	1/27/14 17:58	WSD	
1,1-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/27/14 17:58	WSD	
cis-1,2-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/27/14 17:58	WSD	
trans-1,2-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/27/14 17:58	WSD	
1,2-Dichloropropane	ND	0.035	U	ND	0.16	0.702	1/27/14 17:58	WSD	
cis-1,3-Dichloropropene	ND	0.035	U	ND	0.16	0.702	1/27/14 17:58	WSD	
trans-1,3-Dichloropropene	ND	0.035	U	ND	0.16	0.702	1/27/14 17:58	WSD	
Ethylbenzene	1.2	0.035		5.3	0.15	0.702	1/27/14 17:58	WSD	
2-Hexanone (MBK)	0.15	0.035		0.63	0.14	0.702	1/27/14 17:58	WSD	
Isopropylbenzene (Cumene)	0.11	0.089		0.55	0.44	0.702	1/27/14 17:58	WSD	
Methyl Acetate	ND	0.14	U	ND	0.44	0.702	1/27/14 17:58	WSD	
Methyl tert-Butyl Ether (MTBE)	ND	0.035	U	ND	0.13	0.702	1/27/14 17:58	WSD	
Methyl Cyclohexane	1.1	0.11		4.6	0.44	0.702	1/27/14 17:58	WSD	
Methylene Chloride	0.83	0.35	S	2.9	1.2	0.702	1/27/14 17:58	WSD	
4-Methyl-2-pentanone (MIBK)	0.070	0.035		0.29	0.14	0.702	1/27/14 17:58	WSD	
Styrene	ND	0.035	U	ND	0.15	0.702	1/27/14 17:58	WSD	

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**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave.  
 Date Received: 1/15/2014  
 Field Sample #: H-152-BA  
 Sample ID: 14A0426-03  
 Sample Matrix: Indoor air  
 Sampled: 1/13/2014 05:44

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 1964  
 Canister Size: 6 liter  
 Flow Controller ID: 3452  
 Sample Type: 24 hr

Work Order: 14A0426  
 Initial Vacuum(in Hg): -30  
 Final Vacuum(in Hg): -9.5  
 Receipt Vacuum(in Hg): -8.9  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time Analyzed	Analyst
	Results	RL	Flag/Qual	Results	RL			
1,1,2,2-Tetrachloroethane	ND	0.035	U	ND	0.24	0.702	1/27/14 17:58	WSD
Tetrachloroethylene	0.55	0.035		3.8	0.24	0.702	1/27/14 17:58	WSD
Tetrahydrofuran	ND	0.035	U	ND	0.10	0.702	1/27/14 17:58	WSD
Toluene	6.8	0.035		26	0.13	0.702	1/27/14 17:58	WSD
1,2,4-Trichlorobenzene	ND	0.035	U	ND	0.26	0.702	1/27/14 17:58	WSD
1,1,1-Trichloroethane	0.21	0.035		1.1	0.19	0.702	1/27/14 17:58	WSD
1,1,2-Trichloroethane	ND	0.035	U	ND	0.19	0.702	1/27/14 17:58	WSD
Trichloroethylene	ND	0.035	U	ND	0.19	0.702	1/27/14 17:58	WSD
Trichlorofluoromethane (Freon 11)	0.29	0.035		1.7	0.20	0.702	1/27/14 17:58	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.077	0.035		0.59	0.27	0.702	1/27/14 17:58	WSD
Vinyl Chloride	ND	0.035	U	ND	0.090	0.702	1/27/14 17:58	WSD
m&p-Xylene	4.0	0.070		17	0.30	0.702	1/27/14 17:58	WSD
o-Xylene	1.6	0.035		7.2	0.15	0.702	1/27/14 17:58	WSD

Surrogates	% Recovery	% REC Limits	Date/Time Analyzed
4-Bromofluorobenzene (1)	96.1	70-130	1/27/14 17:58
4-Bromofluorobenzene (2)	105	70-130	1/27/14 17:58

**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave.  
 Date Received: 1/15/2014  
 Field Sample #: H-152-AS  
 Sample ID: 14A0426-04  
 Sample Matrix: Sub Slab  
 Sampled: 1/13/2014 05:42

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 1963  
 Canister Size: 6 liter  
 Flow Controller ID: 3451  
 Sample Type: 24 hr

**Work Order: 14A0426**  
 Initial Vacuum(in Hg): -30  
 Final Vacuum(in Hg): -15  
 Receipt Vacuum(in Hg): -14.9  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL		Analized		
Acetone	17	4.0	S	41	9.5	2	1/28/14 5:12	WSD	
Benzene	0.24	0.10		0.77	0.32	2	1/28/14 5:12	WSD	
Bromodichloromethane	ND	0.10	U	ND	0.67	2	1/28/14 5:12	WSD	
Bromoform	ND	0.10	U	ND	1.0	2	1/28/14 5:12	WSD	
Bromomethane	ND	0.10	U	ND	0.39	2	1/28/14 5:12	WSD	
2-Butanone (MEK)	ND	4.0	U	ND	12	2	1/28/14 5:12	WSD	
Carbon Disulfide	ND	1.0	U	ND	3.1	2	1/28/14 5:12	WSD	
Carbon Tetrachloride	ND	0.10	U	ND	0.63	2	1/28/14 5:12	WSD	
Chlorobenzene	ND	0.10	U	ND	0.46	2	1/28/14 5:12	WSD	
Chloroethane	ND	0.10	U	ND	0.26	2	1/28/14 5:12	WSD	
Chloroform	0.24	0.10		1.2	0.49	2	1/28/14 5:12	WSD	
Chloromethane	ND	0.20	U	ND	0.41	2	1/28/14 5:12	WSD	
Cyclohexane	ND	0.10	U	ND	0.34	2	1/28/14 5:12	WSD	
Dibromochloromethane	ND	0.10	U	ND	0.85	2	1/28/14 5:12	WSD	
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.13	U	ND	1.3	2	1/28/14 5:12	WSD	
1,2-Dibromoethane (EDB)	ND	0.10	U	ND	0.77	2	1/28/14 5:12	WSD	
1,2-Dichlorobenzene	ND	0.10	U	ND	0.60	2	1/28/14 5:12	WSD	
1,3-Dichlorobenzene	0.12	0.10		0.72	0.60	2	1/28/14 5:12	WSD	
1,4-Dichlorobenzene	0.12	0.10		0.72	0.60	2	1/28/14 5:12	WSD	
Dichlorodifluoromethane (Freon 12)	0.40	0.10		2.0	0.49	2	1/28/14 5:12	WSD	
1,1-Dichloroethane	ND	0.10	U	ND	0.40	2	1/28/14 5:12	WSD	
1,2-Dichloroethane	ND	0.10	U	ND	0.40	2	1/28/14 5:12	WSD	
1,1-Dichloroethylene	ND	0.10	U	ND	0.40	2	1/28/14 5:12	WSD	
cis-1,2-Dichloroethylene	ND	0.10	U	ND	0.40	2	1/28/14 5:12	WSD	
trans-1,2-Dichloroethylene	ND	0.10	U	ND	0.40	2	1/28/14 5:12	WSD	
1,2-Dichloropropane	ND	0.10	U	ND	0.46	2	1/28/14 5:12	WSD	
cis-1,3-Dichloropropene	ND	0.10	U	ND	0.45	2	1/28/14 5:12	WSD	
trans-1,3-Dichloropropene	ND	0.10	U	ND	0.45	2	1/28/14 5:12	WSD	
Ethylbenzene	0.16	0.10		0.69	0.43	2	1/28/14 5:12	WSD	
2-Hexanone (MBK)	0.22	0.10		0.90	0.41	2	1/28/14 5:12	WSD	
Isopropylbenzene (Cumene)	ND	0.25	U	ND	1.2	2	1/28/14 5:12	WSD	
Methyl Acetate	ND	0.41	U	ND	1.2	2	1/28/14 5:12	WSD	
Methyl tert-Butyl Ether (MTBE)	ND	0.10	U	ND	0.36	2	1/28/14 5:12	WSD	
Methyl Cyclohexane	ND	0.31	U	ND	1.3	2	1/28/14 5:12	WSD	
Methylene Chloride	1.4	1.0	B	4.8	3.5	2	1/28/14 5:12	WSD	
4-Methyl-2-pentanone (MIBK)	0.10	0.10		0.41	0.41	2	1/28/14 5:12	WSD	
Styrene	ND	0.10	U	ND	0.43	2	1/28/14 5:12	WSD	

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**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave.  
 Date Received: 1/15/2014  
 Field Sample #: H-152-AS  
 Sample ID: 14A0426-04  
 Sample Matrix: Sub Slab  
 Sampled: 1/13/2014 05:42

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 1963  
 Canister Size: 6 liter  
 Flow Controller ID: 3451  
 Sample Type: 24 hr

**Work Order: 14A0426**  
 Initial Vacuum(in Hg): -30  
 Final Vacuum(in Hg): -15  
 Receipt Vacuum(in Hg): -14.9  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL		Analized		
1,1,2,2-Tetrachloroethane	ND	0.10	U	ND	0.69	2	1/28/14	5:12	WSD
Tetrachloroethylene	0.24	0.10		1.6	0.68	2	1/28/14	5:12	WSD
Tetrahydrofuran	ND	0.10	U	ND	0.29	2	1/28/14	5:12	WSD
Toluene	3.2	0.10		12	0.38	2	1/28/14	5:12	WSD
1,2,4-Trichlorobenzene	ND	0.10	U	ND	0.74	2	1/28/14	5:12	WSD
1,1,1-Trichloroethane	ND	0.10	U	ND	0.55	2	1/28/14	5:12	WSD
1,1,2-Trichloroethane	ND	0.10	U	ND	0.55	2	1/28/14	5:12	WSD
Trichloroethylene	ND	0.10	U	ND	0.54	2	1/28/14	5:12	WSD
Trichlorofluoromethane (Freon 11)	0.26	0.10		1.5	0.56	2	1/28/14	5:12	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.12	0.10		0.92	0.77	2	1/28/14	5:12	WSD
Vinyl Chloride	ND	0.10	U	ND	0.26	2	1/28/14	5:12	WSD
m&p-Xylene	0.64	0.20		2.8	0.87	2	1/28/14	5:12	WSD
o-Xylene	0.26	0.10		1.1	0.43	2	1/28/14	5:12	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	94.0	70-130	1/28/14 5:12
4-Bromofluorobenzene (2)	105	70-130	1/28/14 5:12

**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave.  
 Date Received: 1/15/2014  
**Field Sample #: H-152-OA**  
**Sample ID: 14A0426-02**  
 Sample Matrix: Ambient Air  
 Sampled: 1/13/2014 05:48

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 1961  
 Canister Size: 6 liter  
 Flow Controller ID: 3450  
 Sample Type: 24 hr

**Work Order: 14A0426**  
 Initial Vacuum(in Hg): -30  
 Final Vacuum(in Hg): -8.5  
 Receipt Vacuum(in Hg): -7.4  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

**EPA TO-15**

Analyte	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
	Results	RL	Flag/Qual	Results	RL				
Acetone	8.7	1.4	S	21	3.3	S	0.702	1/27/14 17:13	WSD
Benzene	0.34	0.035		1.1	0.11		0.702	1/27/14 17:13	WSD
Bromodichloromethane	ND	0.035	U	ND	0.24		0.702	1/27/14 17:13	WSD
Bromoform	ND	0.035	U	ND	0.36		0.702	1/27/14 17:13	WSD
Bromomethane	ND	0.035	U	ND	0.14		0.702	1/27/14 17:13	WSD
2-Butanone (MEK)	ND	1.4	U	ND	4.1		0.702	1/27/14 17:13	WSD
Carbon Disulfide	ND	0.35	U	ND	1.1		0.702	1/27/14 17:13	WSD
Carbon Tetrachloride	0.063	0.035		0.40	0.22		0.702	1/27/14 17:13	WSD
Chlorobenzene	ND	0.035	U	ND	0.16		0.702	1/27/14 17:13	WSD
Chloroethane	ND	0.035	U	ND	0.093		0.702	1/27/14 17:13	WSD
Chloroform	ND	0.035	U	ND	0.17		0.702	1/27/14 17:13	WSD
Chloromethane	0.41	0.070		0.84	0.14		0.702	1/27/14 17:13	WSD
Cyclohexane	0.063	0.035		0.22	0.12		0.702	1/27/14 17:13	WSD
Dibromochloromethane	ND	0.035	U	ND	0.30		0.702	1/27/14 17:13	WSD
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.046	U	ND	0.44		0.702	1/27/14 17:13	WSD
1,2-Dibromoethane (EDB)	ND	0.035	U	ND	0.27		0.702	1/27/14 17:13	WSD
1,2-Dichlorobenzene	ND	0.035	U	ND	0.21		0.702	1/27/14 17:13	WSD
1,3-Dichlorobenzene	ND	0.035	U	ND	0.21		0.702	1/27/14 17:13	WSD
1,4-Dichlorobenzene	ND	0.035	U	ND	0.21		0.702	1/27/14 17:13	WSD
Dichlorodifluoromethane (Freon 12)	0.27	0.035		1.3	0.17		0.702	1/27/14 17:13	WSD
1,1-Dichloroethane	ND	0.035	U	ND	0.14		0.702	1/27/14 17:13	WSD
1,2-Dichloroethane	ND	0.035	U	ND	0.14		0.702	1/27/14 17:13	WSD
1,1-Dichloroethylene	ND	0.035	U	ND	0.14		0.702	1/27/14 17:13	WSD
cis-1,2-Dichloroethylene	ND	0.035	U	ND	0.14		0.702	1/27/14 17:13	WSD
trans-1,2-Dichloroethylene	ND	0.035	U	ND	0.14		0.702	1/27/14 17:13	WSD
1,2-Dichloropropane	ND	0.035	U	ND	0.16		0.702	1/27/14 17:13	WSD
cis-1,3-Dichloropropene	ND	0.035	U	ND	0.16		0.702	1/27/14 17:13	WSD
trans-1,3-Dichloropropene	ND	0.035	U	ND	0.16		0.702	1/27/14 17:13	WSD
Ethylbenzene	0.056	0.035		0.24	0.15		0.702	1/27/14 17:13	WSD
2-Hexanone (MBK)	0.070	0.035		0.29	0.14		0.702	1/27/14 17:13	WSD
Isopropylbenzene (Cumene)	ND	0.089	U	ND	0.44		0.702	1/27/14 17:13	WSD
Methyl Acetate	ND	0.14	U	ND	0.44		0.702	1/27/14 17:13	WSD
Methyl tert-Butyl Ether (MTBE)	ND	0.035	U	ND	0.13		0.702	1/27/14 17:13	WSD
Methyl Cyclohexane	ND	0.11	U	ND	0.44		0.702	1/27/14 17:13	WSD
Methylene Chloride	0.68	0.35	S	2.4	1.2	S	0.702	1/27/14 17:13	WSD
4-Methyl-2-pentanone (MIBK)	0.035	0.035	U	0.14	0.14		0.702	1/27/14 17:13	WSD
Styrene	ND	0.035	U	ND	0.15		0.702	1/27/14 17:13	WSD

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**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave  
 Date Received: 1/15/2014  
 Field Sample #: H-152-OA  
 Sample ID: 14A0426-02  
 Sample Matrix: Ambient Air  
 Sampled: 1/13/2014 05:48

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 1961  
 Canister Size: 6 liter  
 Flow Controller ID: 3450  
 Sample Type: 24 hr

Work Order: 14A0426  
 Initial Vacuum(in Hg): -30  
 Final Vacuum(in Hg): -8.5  
 Receipt Vacuum(in Hg): -7.4  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time Analyzed	Analyst
	Results	RL	Flag/Qual	Results	RL			
1,1,2,2-Tetrachloroethane	ND	0.035	U	ND	0.24	0.702	1/27/14 17:13	WSD
Tetrachloroethylene	0.063	0.035		0.43	0.24	0.702	1/27/14 17:13	WSD
Tetrahydrofuran	ND	0.035	U	ND	0.10	0.702	1/27/14 17:13	WSD
Toluene	0.44	0.035		1.7	0.13	0.702	1/27/14 17:13	WSD
1,2,4-Trichlorobenzene	ND	0.035	U	ND	0.26	0.702	1/27/14 17:13	WSD
1,1,1-Trichloroethane	ND	0.035	U	ND	0.19	0.702	1/27/14 17:13	WSD
1,1,2-Trichloroethane	ND	0.035	U	ND	0.19	0.702	1/27/14 17:13	WSD
Trichloroethylene	ND	0.035	U	ND	0.19	0.702	1/27/14 17:13	WSD
Trichlorofluoromethane (Freon 11)	0.22	0.035		1.3	0.20	0.702	1/27/14 17:13	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.077	0.035		0.59	0.27	0.702	1/27/14 17:13	WSD
Vinyl Chloride	ND	0.035	U	ND	0.090	0.702	1/27/14 17:13	WSD
m&p-Xylene	0.18	0.070		0.76	0.30	0.702	1/27/14 17:13	WSD
o-Xylene	0.070	0.035		0.30	0.15	0.702	1/27/14 17:13	WSD

Surrogates	% Recovery	% REC Limits	Date/Time Analyzed
4-Bromofluorobenzene (1)	94.6	70-130	1/27/14 17:13
4-Bromofluorobenzene (2)	104	70-130	1/27/14 17:13

ANALYTICAL RESULTS

Project Location: 100 Oser Ave.  
 Date Received: 1/15/2014  
 Field Sample #: H-154-AS  
 Sample ID: 14A0426-07  
 Sample Matrix: Sub Slab  
 Sampled: 1/14/2014 12:50

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 1967  
 Canister Size: 6 liter  
 Flow Controller ID: 3456  
 Sample Type: 24 hr

Work Order: 14A0426  
 Initial Vacuum(in Hg): -30  
 Final Vacuum(in Hg): -12  
 Receipt Vacuum(in Hg): -12.3  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analized		
Acetone	26	4.0	J	62	9.5	2	1/28/14	5:52	WSD
Benzene	0.56	0.10		1.8	0.32	2	1/28/14	5:52	WSD
Bromodichloromethane	ND	0.10	U	ND	0.67	2	1/28/14	5:52	WSD
Bromoform	ND	0.10	U	ND	1.0	2	1/28/14	5:52	WSD
Bromomethane	ND	0.10	U	ND	0.39	2	1/28/14	5:52	WSD
2-Butanone (MEK)	ND	4.0	U	ND	12	2	1/28/14	5:52	WSD
Carbon Disulfide	ND	1.0	U	ND	3.1	2	1/28/14	5:52	WSD
Carbon Tetrachloride	ND	0.10	U	ND	0.63	2	1/28/14	5:52	WSD
Chlorobenzene	ND	0.10	U	ND	0.46	2	1/28/14	5:52	WSD
Chloroethane	ND	0.10	U	ND	0.26	2	1/28/14	5:52	WSD
Chloroform	ND	0.10	U	ND	0.49	2	1/28/14	5:52	WSD
Chloromethane	ND	0.20	U	ND	0.41	2	1/28/14	5:52	WSD
Cyclohexane	ND	0.10	U	ND	0.34	2	1/28/14	5:52	WSD
Dibromochloromethane	ND	0.10	U	ND	0.85	2	1/28/14	5:52	WSD
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.13	U	ND	1.3	2	1/28/14	5:52	WSD
1,2-Dibromoethane (EDB)	ND	0.10	U	ND	0.77	2	1/28/14	5:52	WSD
1,2-Dichlorobenzene	ND	0.10	U	ND	0.60	2	1/28/14	5:52	WSD
1,3-Dichlorobenzene	ND	0.10	U	ND	0.60	2	1/28/14	5:52	WSD
1,4-Dichlorobenzene	ND	0.10	U	ND	0.60	2	1/28/14	5:52	WSD
Dichlorodifluoromethane (Freon 12)	0.46	0.10		2.3	0.49	2	1/28/14	5:52	WSD
1,1-Dichloroethane	ND	0.10	U	ND	0.40	2	1/28/14	5:52	WSD
1,2-Dichloroethane	ND	0.10	U	ND	0.40	2	1/28/14	5:52	WSD
1,1-Dichloroethylene	ND	0.10	U	ND	0.40	2	1/28/14	5:52	WSD
cis-1,2-Dichloroethylene	ND	0.10	U	ND	0.40	2	1/28/14	5:52	WSD
trans-1,2-Dichloroethylene	ND	0.10	U	ND	0.40	2	1/28/14	5:52	WSD
1,2-Dichloropropane	ND	0.10	U	ND	0.46	2	1/28/14	5:52	WSD
cis-1,3-Dichloropropene	ND	0.10	U	ND	0.45	2	1/28/14	5:52	WSD
trans-1,3-Dichloropropene	ND	0.10	U	ND	0.45	2	1/28/14	5:52	WSD
Ethylbenzene	ND	0.10	U	ND	0.43	2	1/28/14	5:52	WSD
2-Hexanone (MBK)	0.22	0.10		0.90	0.41	2	1/28/14	5:52	WSD
Isopropylbenzene (Cumene)	ND	0.25	U	ND	1.2	2	1/28/14	5:52	WSD
Methyl Acetate	ND	0.41	U	ND	1.2	2	1/28/14	5:52	WSD
Methyl tert-Butyl Ether (MTBE)	ND	0.10	U	ND	0.36	2	1/28/14	5:52	WSD
Methyl Cyclohexane	ND	0.31	U	ND	1.3	2	1/28/14	5:52	WSD
Methylene Chloride	1.3	<del>1.0</del>	B	4.4	<del>3.5</del>	2	1/28/14	5:52	WSD
4-Methyl-2-pentanone (MIBK)	0.14	0.10		0.57	0.41	2	1/28/14	5:52	WSD
Styrene	ND	0.10	U	ND	0.43	2	1/28/14	5:52	WSD

*Handwritten signature and date: 01/28/14*

**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave.  
 Date Received: 1/15/2014  
 Field Sample #: H-154-AS  
 Sample ID: 14A0426-07  
 Sample Matrix: Sub Slab  
 Sampled: 1/14/2014 12:50

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 1967  
 Canister Size: 6 liter  
 Flow Controller ID: 3456  
 Sample Type: 24 hr

**Work Order: 14A0426**  
 Initial Vacuum(in Hg): -30  
 Final Vacuum(in Hg): -12  
 Receipt Vacuum(in Hg): -12.3  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL		Analized		
1,1,2,2-Tetrachloroethane	ND	0.10	U	ND	0.69	2	1/28/14	5:52	WSD
Tetrachloroethylene	0.14	0.10		0.95	0.68	2	1/28/14	5:52	WSD
Tetrahydrofuran	ND	0.10	U	ND	0.29	2	1/28/14	5:52	WSD
Toluene	7.3	0.10		27	0.38	2	1/28/14	5:52	WSD
1,2,4-Trichlorobenzene	ND	0.10	U	ND	0.74	2	1/28/14	5:52	WSD
1,1,1-Trichloroethane	0.16	0.10		0.87	0.55	2	1/28/14	5:52	WSD
1,1,2-Trichloroethane	ND	0.10	U	ND	0.55	2	1/28/14	5:52	WSD
Trichloroethylene	ND	0.10	U	ND	0.54	2	1/28/14	5:52	WSD
Trichlorofluoromethane (Freon 11)	0.34	0.10		1.9	0.56	2	1/28/14	5:52	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.22	0.10		1.7	0.77	2	1/28/14	5:52	WSD
Vinyl Chloride	ND	0.10	U	ND	0.26	2	1/28/14	5:52	WSD
m&p-Xylene	0.36	0.20		1.6	0.87	2	1/28/14	5:52	WSD
o-Xylene	0.22	0.10		0.96	0.43	2	1/28/14	5:52	WSD

Surrogates	% Recovery	% REC Limits	Date/Time
4-Bromofluorobenzene (1)	94.0	70-130	1/28/14 5:52
4-Bromofluorobenzene (2)	104	70-130	1/28/14 5:52

ANALYTICAL RESULTS

Project Location: 100 Oser Ave.  
 Date Received: 1/15/2014  
 Field Sample #: H-154-BA  
 Sample ID: 14A0426-08  
 Sample Matrix: Indoor air  
 Sampled: 1/14/2014 12:57

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 1968  
 Canister Size: 6 liter  
 Flow Controller ID: 3455  
 Sample Type: 24 hr

Work Order: 14A0426  
 Initial Vacuum(in Hg): -29  
 Final Vacuum(in Hg): -13  
 Receipt Vacuum(in Hg): -13.6  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv			ug/m3		Dilution	Date/Time Analyzed	Analyst
	Results	RL	Flag/Qual	Results	RL			
Acetone	32	1.4	J	76	3.3	J	0.702 1/27/14 20:25	WSD
Benzene	1.0	0.035		3.2	0.11		0.702 1/27/14 20:25	WSD
Bromodichloromethane	ND	0.035	U	ND	0.24		0.702 1/27/14 20:25	WSD
Bromoform	ND	0.035	U	ND	0.36		0.702 1/27/14 20:25	WSD
Bromomethane	ND	0.035	U	ND	0.14		0.702 1/27/14 20:25	WSD
2-Butanone (MEK)	3.4	1.4		10	4.1		0.702 1/27/14 20:25	WSD
Carbon Disulfide	ND	0.35	U	ND	1.1		0.702 1/27/14 20:25	WSD
Carbon Tetrachloride	0.070	0.035		0.44	0.22		0.702 1/27/14 20:25	WSD
Chlorobenzene	ND	0.035	U	ND	0.16		0.702 1/27/14 20:25	WSD
Chloroethane	ND	0.035	U	ND	0.093		0.702 1/27/14 20:25	WSD
Chloroform	0.042	0.035		0.21	0.17		0.702 1/27/14 20:25	WSD
Chloromethane	0.48	0.070		0.99	0.14		0.702 1/27/14 20:25	WSD
Cyclohexane	0.69	0.035		2.4	0.12		0.702 1/27/14 20:25	WSD
Dibromochloromethane	ND	0.035	U	ND	0.30		0.702 1/27/14 20:25	WSD
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.046	U	ND	0.44		0.702 1/27/14 20:25	WSD
1,2-Dibromoethane (EDB)	ND	0.035	U	ND	0.27		0.702 1/27/14 20:25	WSD
1,2-Dichlorobenzene	ND	0.035	U	ND	0.21		0.702 1/27/14 20:25	WSD
1,3-Dichlorobenzene	ND	0.035	U	ND	0.21		0.702 1/27/14 20:25	WSD
1,4-Dichlorobenzene	ND	0.035	U	ND	0.21		0.702 1/27/14 20:25	WSD
Dichlorodifluoromethane (Freon 12)	0.39	0.035		1.9	0.17		0.702 1/27/14 20:25	WSD
1,1-Dichloroethane	ND	0.035	U	ND	0.14		0.702 1/27/14 20:25	WSD
1,2-Dichloroethane	ND	0.035	U	ND	0.14		0.702 1/27/14 20:25	WSD
1,1-Dichloroethylene	ND	0.035	U	ND	0.14		0.702 1/27/14 20:25	WSD
cis-1,2-Dichloroethylene	ND	0.035	U	ND	0.14		0.702 1/27/14 20:25	WSD
trans-1,2-Dichloroethylene	ND	0.035	U	ND	0.14		0.702 1/27/14 20:25	WSD
1,2-Dichloropropane	ND	0.035	U	ND	0.16		0.702 1/27/14 20:25	WSD
cis-1,3-Dichloropropene	ND	0.035	U	ND	0.16		0.702 1/27/14 20:25	WSD
trans-1,3-Dichloropropene	ND	0.035	U	ND	0.16		0.702 1/27/14 20:25	WSD
Ethylbenzene	0.75	0.035		3.3	0.15		0.702 1/27/14 20:25	WSD
2-Hexanone (MBK)	0.21	0.035		0.86	0.14		0.702 1/27/14 20:25	WSD
Isopropylbenzene (Cumene)	ND	0.089	U	ND	0.44		0.702 1/27/14 20:25	WSD
Methyl Acetate	0.30	0.14		0.91	0.44		0.702 1/27/14 20:25	WSD
Methyl tert-Butyl Ether (MTBE)	ND	0.035	U	ND	0.13		0.702 1/27/14 20:25	WSD
Methyl Cyclohexane	1.2	0.11		5.0	0.44		0.702 1/27/14 20:25	WSD
Methylene Chloride	1.1	0.35	J	3.7	1.2	J	0.702 1/27/14 20:25	WSD
4-Methyl-2-pentanone (MIBK)	0.084	0.035		0.34	0.14		0.702 1/27/14 20:25	WSD
Styrene	ND	0.035	U	ND	0.15		0.702 1/27/14 20:25	WSD

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**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave.  
 Date Received: 1/15/2014  
**Field Sample #: H-154-BA**  
**Sample ID: 14A0426-08**  
 Sample Matrix: Indoor air  
 Sampled: 1/14/2014 12:57

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 1968  
 Canister Size: 6 liter  
 Flow Controller ID: 3455  
 Sample Type: 24 hr

**Work Order: 14A0426**  
 Initial Vacuum(in Hg): -29  
 Final Vacuum(in Hg): -13  
 Receipt Vacuum(in Hg): -13.6  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL		Analized		
1,1,2,2-Tetrachloroethane	ND	0.035	U	ND	0.24	0.702	1/27/14 20:25	WSD	
Tetrachloroethylene	0.28	0.035		1.9	0.24	0.702	1/27/14 20:25	WSD	
Tetrahydrofuran	0.62	0.035		1.8	0.10	0.702	1/27/14 20:25	WSD	
Toluene	5.0	0.035		19	0.13	0.702	1/27/14 20:25	WSD	
1,2,4-Trichlorobenzene	ND	0.035	U	ND	0.26	0.702	1/27/14 20:25	WSD	
1,1,1-Trichloroethane	0.25	0.035		1.3	0.19	0.702	1/27/14 20:25	WSD	
1,1,2-Trichloroethane	ND	0.035	U	ND	0.19	0.702	1/27/14 20:25	WSD	
Trichloroethylene	0.22	0.035		1.2	0.19	0.702	1/27/14 20:25	WSD	
Trichlorofluoromethane (Freon 11)	0.55	0.035		3.1	0.20	0.702	1/27/14 20:25	WSD	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.55	0.035		4.2	0.27	0.702	1/27/14 20:25	WSD	
Vinyl Chloride	ND	0.035	U	ND	0.090	0.702	1/27/14 20:25	WSD	
m&p-Xylene	2.5	0.070		11	0.30	0.702	1/27/14 20:25	WSD	
o-Xylene	0.93	0.035		4.0	0.15	0.702	1/27/14 20:25	WSD	

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	96.4	70-130	1/27/14 20:25
4-Bromofluorobenzene (2)	109	70-130	1/27/14 20:25

**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave.  
 Date Received: 1/17/2014  
 Field Sample #: H-154-OA  
 Sample ID: 14A0568-01  
 Sample Matrix: Ambient Air  
 Sampled: 1/14/2014 00:00

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 1980  
 Canister Size: 6 liter  
 Flow Controller ID: 3457  
 Sample Type: 24 hr

**Work Order: 14A0568**  
 Initial Vacuum(in Hg): -30  
 Final Vacuum(in Hg): -10  
 Receipt Vacuum(in Hg): -9.6  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time Analyzed	Analyst
	Results	RL	Flag/Qual	Results	RL			
Acetone	12	1.4	J	29	3.3	0.702	1/27/14 21:10	WSD
Benzene	0.15	0.035		0.47	0.11	0.702	1/27/14 21:10	WSD
Bromodichloromethane	ND	0.035	U	ND	0.24	0.702	1/27/14 21:10	WSD
Bromoform	ND	0.035	U	ND	0.36	0.702	1/27/14 21:10	WSD
Bromomethane	ND	0.035	U	ND	0.14	0.702	1/27/14 21:10	WSD
2-Butanone (MEK)	1.4	1.4		4.2	4.1	0.702	1/27/14 21:10	WSD
Carbon Disulfide	ND	0.35	U	ND	1.1	0.702	1/27/14 21:10	WSD
Carbon Tetrachloride	0.063	0.035		0.40	0.22	0.702	1/27/14 21:10	WSD
Chlorobenzene	ND	0.035	U	ND	0.16	0.702	1/27/14 21:10	WSD
Chloroethane	ND	0.035	U	ND	0.093	0.702	1/27/14 21:10	WSD
Chloroform	ND	0.035	U	ND	0.17	0.702	1/27/14 21:10	WSD
Chloromethane	0.41	0.070		0.84	0.14	0.702	1/27/14 21:10	WSD
Cyclohexane	0.035	0.035	U	0.12	0.12	0.702	1/27/14 21:10	WSD
Dibromochloromethane	ND	0.035	U	ND	0.30	0.702	1/27/14 21:10	WSD
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.046	U	ND	0.44	0.702	1/27/14 21:10	WSD
1,2-Dibromoethane (EDB)	ND	0.035	U	ND	0.27	0.702	1/27/14 21:10	WSD
1,2-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/27/14 21:10	WSD
1,3-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/27/14 21:10	WSD
1,4-Dichlorobenzene	ND	0.035	U	ND	0.21	0.702	1/27/14 21:10	WSD
Dichlorodifluoromethane (Freon 12)	0.25	0.035		1.2	0.17	0.702	1/27/14 21:10	WSD
1,1-Dichloroethane	ND	0.035	U	ND	0.14	0.702	1/27/14 21:10	WSD
1,2-Dichloroethane	ND	0.035	U	ND	0.14	0.702	1/27/14 21:10	WSD
1,1-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/27/14 21:10	WSD
cis-1,2-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/27/14 21:10	WSD
trans-1,2-Dichloroethylene	ND	0.035	U	ND	0.14	0.702	1/27/14 21:10	WSD
1,2-Dichloropropane	ND	0.035	U	ND	0.16	0.702	1/27/14 21:10	WSD
cis-1,3-Dichloropropene	ND	0.035	U	ND	0.16	0.702	1/27/14 21:10	WSD
trans-1,3-Dichloropropene	ND	0.035	U	ND	0.16	0.702	1/27/14 21:10	WSD
Ethylbenzene	ND	0.035	U	ND	0.15	0.702	1/27/14 21:10	WSD
2-Hexanone (MBK)	0.12	0.035		0.49	0.14	0.702	1/27/14 21:10	WSD
Isopropylbenzene (Cumene)	ND	0.089	U	ND	0.44	0.702	1/27/14 21:10	WSD
Methyl Acetate	ND	0.14	U	ND	0.44	0.702	1/27/14 21:10	WSD
Methyl tert-Butyl Ether (MTBE)	ND	0.035	U	ND	0.13	0.702	1/27/14 21:10	WSD
Methyl Cyclohexane	ND	0.11	U	ND	0.44	0.702	1/27/14 21:10	WSD
Methylene Chloride	0.86	<del>0.35</del>	J	3.0	<del>1.2</del>	0.702	1/27/14 21:10	WSD
4-Methyl-2-pentanone (MIBK)	0.049	0.035		0.20	0.14	0.702	1/27/14 21:10	WSD
Styrene	ND	0.035	U	ND	0.15	0.702	1/27/14 21:10	WSD

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**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave  
 Date Received: 1/17/2014  
 Field Sample #: H-154-OA  
 Sample ID: 14A0568-01  
 Sample Matrix: Ambient Air  
 Sampled: 1/14/2014 00:00

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 1980  
 Canister Size: 6 liter  
 Flow Controller ID: 3457  
 Sample Type: 24 hr

**Work Order: 14A0568**  
 Initial Vacuum(in Hg): -30  
 Final Vacuum(in Hg): -10  
 Receipt Vacuum(in Hg): -9.6  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL		Analyzed		
1,1,2,2-Tetrachloroethane	ND	0.035	U	ND	0.24	0.702	1/27/14 21:10	WSD	
Tetrachloroethylene	0.32	0.035		2.1	0.24	0.702	1/27/14 21:10	WSD	
Tetrahydrofuran	ND	0.035	U	ND	0.10	0.702	1/27/14 21:10	WSD	
Toluene	0.17	0.035		0.63	0.13	0.702	1/27/14 21:10	WSD	
1,2,4-Trichlorobenzene	ND	0.035	U	ND	0.26	0.702	1/27/14 21:10	WSD	
1,1,1-Trichloroethane	ND	0.035	U	ND	0.19	0.702	1/27/14 21:10	WSD	
1,1,2-Trichloroethane	ND	0.035	U	ND	0.19	0.702	1/27/14 21:10	WSD	
Trichloroethylene	ND	0.035	U	ND	0.19	0.702	1/27/14 21:10	WSD	
Trichlorofluoromethane (Freon 11)	0.22	0.035		1.3	0.20	0.702	1/27/14 21:10	WSD	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.077	0.035		0.59	0.27	0.702	1/27/14 21:10	WSD	
Vinyl Chloride	ND	0.035	U	ND	0.090	0.702	1/27/14 21:10	WSD	
m&p-Xylene	ND	0.070	U	ND	0.30	0.702	1/27/14 21:10	WSD	
o-Xylene	ND	0.035	U	ND	0.15	0.702	1/27/14 21:10	WSD	

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	95.2	70-130	1/27/14 21:10
4-Bromofluorobenzene (2)	108	70-130	1/27/14 21:10

ANALYTICAL RESULTS

Project Location: 100 Oser Ave.  
 Date Received: 1/17/2014  
 Field Sample #: H-155-BA  
 Sample ID: 14A0570-01  
 Sample Matrix: Indoor air  
 Sampled: 1/15/2014 18:13

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 2006  
 Canister Size: 6 liter  
 Flow Controller ID: 3470  
 Sample Type: 24 hr

Work Order: 14A0570  
 Initial Vacuum(in Hg): -29  
 Final Vacuum(in Hg): -8  
 Receipt Vacuum(in Hg): -7  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv			ug/m3			Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL	Analized				
Acetone	41	1.4	L-05, V-06 J	98	3.3	J	0.702	1/31/14 3:17	WSD	
Benzene	0.95	0.035		3.0	0.11		0.702	1/31/14 3:17	WSD	
Bromodichloromethane	ND	0.035	U	ND	0.24		0.702	1/31/14 3:17	WSD	
Bromoform	ND	0.035	U	ND	0.36		0.702	1/31/14 3:17	WSD	
Bromomethane	ND	0.035	U	ND	0.14		0.702	1/31/14 3:17	WSD	
2-Butanone (MEK)	4.6	1.4		13	4.1		0.702	1/31/14 3:17	WSD	
Carbon Disulfide	ND	0.35	U	ND	1.1		0.702	1/31/14 3:17	WSD	
Carbon Tetrachloride	0.12	0.035		0.73	0.22		0.702	1/31/14 3:17	WSD	
Chlorobenzene	ND	0.035	U	ND	0.16		0.702	1/31/14 3:17	WSD	
Chloroethane	ND	0.035	U	ND	0.093		0.702	1/31/14 3:17	WSD	
Chloroform	0.039	0.035		0.19	0.17		0.702	1/31/14 3:17	WSD	
Chloromethane	0.51	0.070		1.1	0.14		0.702	1/31/14 3:17	WSD	
Cyclohexane	0.40	0.035		1.4	0.12		0.702	1/31/14 3:17	WSD	
Dibromochloromethane	ND	0.035	U	ND	0.30		0.702	1/31/14 3:17	WSD	
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.046	U	ND	0.44		0.702	1/31/14 3:17	WSD	
1,2-Dibromoethane (EDB)	ND	0.035	U	ND	0.27		0.702	1/31/14 3:17	WSD	
1,2-Dichlorobenzene	ND	0.035	U	ND	0.21		0.702	1/31/14 3:17	WSD	
1,3-Dichlorobenzene	ND	0.035	U	ND	0.21		0.702	1/31/14 3:17	WSD	
1,4-Dichlorobenzene	ND	0.035	U	ND	0.21		0.702	1/31/14 3:17	WSD	
Dichlorodifluoromethane (Freon 12)	0.53	0.035		2.6	0.17		0.702	1/31/14 3:17	WSD	
1,1-Dichloroethane	ND	0.035	U	ND	0.14		0.702	1/31/14 3:17	WSD	
1,2-Dichloroethane	ND	0.035	U	ND	0.14		0.702	1/31/14 3:17	WSD	
1,1-Dichloroethylene	ND	0.035	U	ND	0.14		0.702	1/31/14 3:17	WSD	
cis-1,2-Dichloroethylene	ND	0.035	U	ND	0.14		0.702	1/31/14 3:17	WSD	
trans-1,2-Dichloroethylene	ND	0.035	U	ND	0.14		0.702	1/31/14 3:17	WSD	
1,2-Dichloropropane	ND	0.035	U	ND	0.16		0.702	1/31/14 3:17	WSD	
cis-1,3-Dichloropropene	ND	0.035	U	ND	0.16		0.702	1/31/14 3:17	WSD	
trans-1,3-Dichloropropene	ND	0.035	U	ND	0.16		0.702	1/31/14 3:17	WSD	
Ethylbenzene	0.51	0.035		2.2	0.15		0.702	1/31/14 3:17	WSD	
2-Hexanone (MBK)	0.71	0.035		2.9	0.14		0.702	1/31/14 3:17	WSD	
Isopropylbenzene (Cumene)	ND	0.089	L-03, U J	ND	0.44	J	0.702	1/31/14 3:17	WSD	
Methyl Acetate	0.35	0.14		1.0	0.44		0.702	1/31/14 3:17	WSD	
Methyl tert-Butyl Ether (MTBE)	ND	0.035	U	ND	0.13		0.702	1/31/14 3:17	WSD	
Methyl Cyclohexane	0.57	0.11		2.3	0.44		0.702	1/31/14 3:17	WSD	
Methylene Chloride	0.67	0.35		2.3	1.2		0.702	1/31/14 3:17	WSD	
4-Methyl-2-pentanone (MIBK)	0.24	0.035		0.96	0.14		0.702	1/31/14 3:17	WSD	
Styrene	0.14	0.035		0.59	0.15		0.702	1/31/14 3:17	WSD	

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**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave.  
 Date Received: 1/17/2014  
 Field Sample #: H-155-BA  
 Sample ID: 14A0570-01  
 Sample Matrix: Indoor air  
 Sampled: 1/15/2014 18:13

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 2006  
 Canister Size: 6 liter  
 Flow Controller ID: 3470  
 Sample Type: 24 hr

**Work Order: 14A0570**  
 Initial Vacuum(in Hg): -29  
 Final Vacuum(in Hg): -8  
 Receipt Vacuum(in Hg): -7  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL		Analyzed		
1,1,2,2-Tetrachloroethane	ND	0.035	U	ND	0.24	0.702	1/31/14	3:17	WSD
Tetrachloroethylene	0.22	0.035		1.5	0.24	0.702	1/31/14	3:17	WSD
Tetrahydrofuran	0.048	0.035		0.14	0.10	0.702	1/31/14	3:17	WSD
Toluene	5.6	0.035		21	0.13	0.702	1/31/14	3:17	WSD
1,2,4-Trichlorobenzene	ND	0.035	U	ND	0.26	0.702	1/31/14	3:17	WSD
1,1,1-Trichloroethane	0.067	0.035		0.36	0.19	0.702	1/31/14	3:17	WSD
1,1,2-Trichloroethane	ND	0.035	U	ND	0.19	0.702	1/31/14	3:17	WSD
Trichloroethylene	0.067	0.035		0.36	0.19	0.702	1/31/14	3:17	WSD
Trichlorofluoromethane (Freon 11)	0.33	0.035		1.8	0.20	0.702	1/31/14	3:17	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.096	0.035		0.74	0.27	0.702	1/31/14	3:17	WSD
Vinyl Chloride	ND	0.035	U	ND	0.090	0.702	1/31/14	3:17	WSD
m&p-Xylene	1.8	0.070		7.6	0.30	0.702	1/31/14	3:17	WSD
o-Xylene	0.59	0.035		2.5	0.15	0.702	1/31/14	3:17	WSD

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	102	70-130	1/31/14	3:17
4-Bromofluorobenzene (2)	85.3	70-130	1/31/14	3:17

**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave.  
 Date Received: 1/17/2014  
 Field Sample #: H-155-AS  
 Sample ID: 14A0570-02  
 Sample Matrix: Sub Slab  
 Sampled: 1/15/2014 18:13

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 2005  
 Canister Size: 6 liter  
 Flow Controller ID: 3469  
 Sample Type: 24 hr

**Work Order: 14A0570**  
 Initial Vacuum(in Hg): -30  
 Final Vacuum(in Hg): -8  
 Receipt Vacuum(in Hg): -7.6  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

**EPA TO-15**

Analyte	ppbv			ug/m3			Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL	Analyzed				
Acetone	23	4.0	L-05, V-06 JS	54	9.5	JS	2	1/31/14 10:52	WSD	
Benzene	ND	0.10	U	ND	0.32		2	1/31/14 10:52	WSD	
Bromodichloromethane	ND	0.10	U	ND	0.67		2	1/31/14 10:52	WSD	
Bromoform	ND	0.10	U	ND	1.0		2	1/31/14 10:52	WSD	
Bromomethane	ND	0.10	U	ND	0.39		2	1/31/14 10:52	WSD	
2-Butanone (MEK)	ND	4.0	U	ND	12		2	1/31/14 10:52	WSD	
Carbon Disulfide	ND	1.0	U	ND	3.1		2	1/31/14 10:52	WSD	
Carbon Tetrachloride	ND	0.10	U	ND	0.63		2	1/31/14 10:52	WSD	
Chlorobenzene	ND	0.10	U	ND	0.46		2	1/31/14 10:52	WSD	
Chloroethane	ND	0.10	U	ND	0.26		2	1/31/14 10:52	WSD	
Chloroform	0.20	0.10		0.99	0.49		2	1/31/14 10:52	WSD	
Chloromethane	ND	0.20	U	ND	0.41		2	1/31/14 10:52	WSD	
Cyclohexane	ND	0.10	U	ND	0.34		2	1/31/14 10:52	WSD	
Dibromochloromethane	ND	0.10	U	ND	0.85		2	1/31/14 10:52	WSD	
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.13	U	ND	1.3		2	1/31/14 10:52	WSD	
1,2-Dibromoethane (EDB)	ND	0.10	U	ND	0.77		2	1/31/14 10:52	WSD	
1,2-Dichlorobenzene	ND	0.10	U	ND	0.60		2	1/31/14 10:52	WSD	
1,3-Dichlorobenzene	ND	0.10	U	ND	0.60		2	1/31/14 10:52	WSD	
1,4-Dichlorobenzene	ND	0.10	U	ND	0.60		2	1/31/14 10:52	WSD	
Dichlorodifluoromethane (Freon 12)	0.52	0.10		2.6	0.49		2	1/31/14 10:52	WSD	
1,1-Dichloroethane	ND	0.10	U	ND	0.40		2	1/31/14 10:52	WSD	
1,2-Dichloroethane	ND	0.10	U	ND	0.40		2	1/31/14 10:52	WSD	
1,1-Dichloroethylene	ND	0.10	U	ND	0.40		2	1/31/14 10:52	WSD	
cis-1,2-Dichloroethylene	ND	0.10	U	ND	0.40		2	1/31/14 10:52	WSD	
trans-1,2-Dichloroethylene	ND	0.10	U	ND	0.40		2	1/31/14 10:52	WSD	
1,2-Dichloropropane	ND	0.10	U	ND	0.46		2	1/31/14 10:52	WSD	
cis-1,3-Dichloropropene	ND	0.10	U	ND	0.45		2	1/31/14 10:52	WSD	
trans-1,3-Dichloropropene	ND	0.10	U	ND	0.45		2	1/31/14 10:52	WSD	
Ethylbenzene	ND	0.10	U	ND	0.43		2	1/31/14 10:52	WSD	
2-Hexanone (MBK)	0.21	0.10		0.86	0.41		2	1/31/14 10:52	WSD	
Isopropylbenzene (Cumene)	ND	0.25	L-03, U JS	ND	1.2	JS	2	1/31/14 10:52	WSD	
Methyl Acetate	ND	0.41	U	ND	1.2		2	1/31/14 10:52	WSD	
Methyl tert-Butyl Ether (MTBE)	ND	0.10	U	ND	0.36		2	1/31/14 10:52	WSD	
Methyl Cyclohexane	ND	0.31	U	ND	1.3		2	1/31/14 10:52	WSD	
Methylene Chloride	ND	1.0	U	ND	3.5		2	1/31/14 10:52	WSD	
4-Methyl-2-pentanone (MIBK)	ND	0.10	U	ND	0.41		2	1/31/14 10:52	WSD	
Styrene	ND	0.10	U	ND	0.43		2	1/31/14 10:52	WSD	

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**ANALYTICAL RESULTS**

Project Location: 100 Oser Ave.  
 Date Received: 1/17/2014  
 Field Sample #: H-155-AS  
 Sample ID: 14A0570-02  
 Sample Matrix: Sub Slab  
 Sampled: 1/15/2014 18:13

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 2005  
 Canister Size: 6 liter  
 Flow Controller ID: 3469  
 Sample Type: 24 hr

**Work Order: 14A0570**  
 Initial Vacuum(in Hg): -30  
 Final Vacuum(in Hg): -8  
 Receipt Vacuum(in Hg): -7.6  
 Flow Controller Type: Fixed-Orifice  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling: <20%

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag/Qual	Results	RL		Analyzed		
1,1,2,2-Tetrachloroethane	ND	0.10	U	ND	0.69	2	1/31/14 10:52	WSD	
Tetrachloroethylene	4.2	0.10		29	0.68	2	1/31/14 10:52	WSD	
Tetrahydrofuran	ND	0.10	U	ND	0.29	2	1/31/14 10:52	WSD	
Toluene	1.6	0.10		5.9	0.38	2	1/31/14 10:52	WSD	
1,2,4-Trichlorobenzene	ND	0.10	U	ND	0.74	2	1/31/14 10:52	WSD	
1,1,1-Trichloroethane	0.11	0.10		0.62	0.55	2	1/31/14 10:52	WSD	
1,1,2-Trichloroethane	ND	0.10	U	ND	0.55	2	1/31/14 10:52	WSD	
Trichloroethylene	ND	0.10	U	ND	0.54	2	1/31/14 10:52	WSD	
Trichlorofluoromethane (Freon 11)	0.27	0.10		1.5	0.56	2	1/31/14 10:52	WSD	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.10	0.10		0.78	0.77	2	1/31/14 10:52	WSD	
Vinyl Chloride	ND	0.10	U	ND	0.26	2	1/31/14 10:52	WSD	
m&p-Xylene	0.45	0.20		2.0	0.87	2	1/31/14 10:52	WSD	
o-Xylene	0.17	0.10		0.73	0.43	2	1/31/14 10:52	WSD	

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	92.2	70-130	1/31/14 10:52
4-Bromofluorobenzene (2)	77.6	70-130	1/31/14 10:52

**ATTACHMENT B**  
**SUPPORT DOCUMENTATION**

14A0426

# AIR SAMPLE CHAIN OF CUSTODY RECORD

URS CORPORATION  
77 GODDELL STREET  
BUFFALO, NY 14203  
PHONE: 716-856-5636

URS CONTACT: George Kisilek

PROJECT NUMBER: 11176692.0005  
 SITE NAME: 100 Dser Ave  
 SAMPLERS (PRINT/SIGNATURE): George Kisilek/Anders Brunelle

LAB: CONTEST  
 SHIPPING CONTAINER: 172 of 2  
 PAGE: 1 of 1

DELIVERY SERVICE: FedEx AIRBILL NO.:

SAMPLE INFORMATION		REQUIRED ANALYSIS		LAB RECEIPT (Hg)		PRESSURE/VACUUM UPON		LAB RECEIPT (Hg)		REQUIRED ANALYSIS	
CANISTER ID	FLOW CONTROLLER ID	INITIAL PRESSURE/ VACUUM (Hg)	FINAL PRESSURE/ VACUUM (Hg)	INITIAL PRESSURE/ VACUUM (Hg)	FINAL PRESSURE/ VACUUM (Hg)	TCL-VOC Level	TCL-VOCs	REMARKS	SAMPLE TYPE		
1962	3449	-30	-10	-30	-10	X	X		NI		
1961	3450	-30	-12	-30	-12	X	X		NI		
1964	3452	-30	-15	-30	-15	X	X		NI		
1963	3451	-30	-15	-30	-15	X	X		NI		
1966	3453	-30	-12	-30	-12	X	X		NI		
1965	3454	-29	-12	-29	-12	X	X		NI		
1967	3456	-30	-12	-30	-12	X	X		NI		
1968	3455	-29	-13	-29	-13	X	X		NI		

MATRIX CODES	AA - AMBIENT AIR	AI - INDOOR AIR	AG - FIELD QC	AS - SUB-SLAB AIR	GS - SOIL GAS
SAMPLE TYPE CODES	N# - NORMAL ENVIRONMENTAL SAMPLE	FD# - FIELD DUPLICATE	MS# - MATRIX SPIKE	# - SEQUENTIAL NUMBER (FROM 1 TO 9) TO ACCOMMODATE MULTIPLE SAMPLES IN A SINGLE DAY	
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
<i>[Signature]</i>	1/14/14	1700	<i>Paula K...</i>	1/15/14	10:10
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED FOR LAB BY (SIGNATURE)	DATE	TIME
<i>[Signature]</i>					

SPECIAL INSTRUCTIONS  
 Low level = 0.25 µg/m³ for TCE, CCl₄, VC  
 all other reporting limits 1 µg/m³  
 Full deliverables EDD in µg/m³

Distribution: Original accompanies shipment, copy to project file

## CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

## EPA TO-15

## Qualifications:

Analyte is found in the associated blank as well as in the sample.

## Analyte &amp; Samples(s) Qualified:

## Methylene Chloride

14A0426-01[H-002-AS], 14A0426-02[H-152-OA], 14A0426-03[H-152-BA], 14A0426-04[H-152-AS], 14A0426-05[H-002-BA], 14A0426-06[H-002-OA],  
14A0426-07[H-154-AS], 14A0426-08[H-154-BA], B089468-BS1

Methylene chloride is a common laboratory contaminant

## Analyte &amp; Samples(s) Qualified:

## Methylene Chloride

B089468-BLK1

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Michael A. Erickson  
Laboratory Director



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL 413/525-2332

## 4 - FORM IV METHOD BLANK SUMMARY

### EPA TO-15

Laboratory: Con-Test Analytical Laboratory      Work Order: 14A0426  
Client: URS Corporation      Project: Oser Ave.  
Blank ID: B089468-BLK1      Batch: B089468      Prepared: 01/27/2014 11:36

Client Sample ID	Laboratory Sample ID	Lab File ID	Time Analyzed
LCS	B089468-BS1	B012704.D	12:42
LCS	B089468-BS1	B012702.D	12:42
H-154-BA	14A0426-08	B012712.D	20:25
H-154-AS	14A0426-07	B012725.D	05:52
H-002-OA	14A0426-06	B012711.D	19:35
H-002-BA	14A0426-05	B012710.D	18:48
H-152-AS	14A0426-04	B012724.D	05:12
H-152-BA	14A0426-03	B012709.D	17:58
H-152-OA	14A0426-02	B012708.D	17:13
H-002-AS	14A0426-01	B012723.D	04:30



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

# 1 - FORM I ANALYSIS DATA SHEET

Blank

Laboratory: Con-Test Analytical Laboratory      Work Order: 14A0426  
Client: URS Corporation      Project: Oser Ave.  
Matrix: Air      Laboratory ID: B089468-BLK1      File ID: B012707.D  
Sampled:      Prepared: 01/27/14 11:36      Analyzed: 01/27/14 16:14  
Solids:      Preparation: TO-15 Prep      Dilution:  
Batch: B089468      Sequence: S005357      Calibration: 1200079      Instrument: SYSB  
Column: 1

CAS NO.	COMPOUND	CONC. (ppbv)	MDL	RL	Q
78-87-5	1,2-Dichloropropane		0.0069	0.020	U
10061-01-5	cis-1,3-Dichloropropene		0.0053	0.020	U
10061-02-6	trans-1,3-Dichloropropene		0.0054	0.020	U
100-41-4	Ethylbenzene		0.0055	0.020	U
591-78-6	2-Hexanone (MBK)		0.0051	0.020	U
98-82-8	Isopropylbenzene (Cumene)		0.016	0.051	U
79-20-9	Methyl Acetate		0.034	0.082	U
1634-04-4	Methyl tert-Butyl Ether (MTBE)		0.0062	0.020	U
108-87-2	Methyl Cyclohexane		0.018	0.062	U
75-09-2	Methylene Chloride	0.23	0.024	0.20	B-01
108-10-1	4-Methyl-2-pentanone (MIBK)		0.0048	0.020	U
100-42-5	Styrene		0.0039	0.020	U
79-34-5	1,1,2,2-Tetrachloroethane		0.0048	0.020	U
127-18-4	Tetrachloroethylene		0.0057	0.020	U
109-99-9	Tetrahydrofuran		0.0084	0.020	U
108-88-3	Toluene		0.0062	0.020	U
120-82-1	1,2,4-Trichlorobenzene		0.0076	0.020	U
71-55-6	1,1,1-Trichloroethane		0.0036	0.020	U
79-00-5	1,1,2-Trichloroethane		0.0061	0.020	U
79-01-6	Trichloroethylene		0.0059	0.020	U
75-69-4	Trichlorofluoromethane (Freon 11)		0.0070	0.020	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 1		0.0056	0.020	U
75-01-4	Vinyl Chloride		0.0086	0.020	U
1330-20-7P/M	m&p-Xylene		0.010	0.040	U
95-47-6	o-Xylene		0.0058	0.020	U



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

## 6 - FORM VI INITIAL CALIBRATION DATA SHEET (Continued)

### EPA TO-15

Laboratory: Con-Test Analytical Laboratory

Work Order: 14A0426

Client: URS Corporation

Project: Oser Ave.

Calibration: 1200079

Instrument: SYSB

Calibration Date: 5/24/2010 12:00:49AM

COMPOUND	Mean RF	RF RSD	Linear r	Quad COD	LIMIT	Q
Acetone	0.8283546	37.5			40	
Benzene	0.9413509	25.8			30	
Bromodichloromethane	0.6896837	8.8			30	
Bromoform	0.6450373	6.2			30	
Bromomethane	0.6831357	22.2			30	
2-Butanone (MEK)	1.545372	24.7			30	
Carbon Disulfide	1.787941	12.8			30	
Carbon Tetrachloride	0.5349463	8.6			30	
Chlorobenzene	0.7508891	11.8			30	
Chloroethane	0.2783443	7.3			30	
Chloroform	1.212155	14.4			30	
Chloromethane	0.5418058	20.5			30	
Cyclohexane	0.3674421	16.6			30	
Dibromochloromethane	0.7473385	7.7			30	
1,2-Dibromo-3-chloropropane (DBCP)	1.787612	3.1			30	
1,2-Dibromoethane (EDB)	0.6600501	9.8			30	
1,2-Dichlorobenzene	0.6481301	8.9			30	
1,3-Dichlorobenzene	0.7015668	8.4			30	
1,4-Dichlorobenzene	0.7096668	8.6			30	
Dichlorodifluoromethane (Freon 12)	1.429498	18.9			30	
1,1-Dichloroethane	1.092829	13.6			30	
1,2-Dichloroethane	0.7865236	12.4			30	
1,1-Dichloroethylene	0.9569238	13.8			30	
cis-1,2-Dichloroethylene	0.8321314	13.5			30	
trans-1,2-Dichloroethylene	0.8759026	11.0			30	
1,2-Dichloropropane	0.360087	14.1			30	
cis-1,3-Dichloropropene	0.523818	9.0			30	

14A0568

# AIR SAMPLE CHAIN OF CUSTODY RECORD

PROJECT NUMBER: 1117692.0005  
 SAMPERS (PRINT/SIGNATURE): George Kislak / Anders Brunelle

SITE NAME: \_\_\_\_\_  
 AIRBILL NO.: \_\_\_\_\_

DELIVERY SERVICE: FedEx

LOCATION IDENTIFIER	SAMPLE DATE	SAMPLE TIME	SAMPLE ID	MATRIX CODE	CANISTER SIZE (LITERS)
H-154	1-14-14	1249	H-154-OA	AA	6
H-046		1719	H-046-AS	AS	6
		1720	H-046-BA	AI	6
		1709	H-046-OA	AA	6
H-057		1815	H-057-AS	AS	6
		1816	H-057-BA	AI	6
H-005	1/15/14	1400	H-005-AS	AS	6
		1401	H-005-BA	AI	6
		1409	H-005-OA	AA	6
FIELD DUP	1/14/14	0000	2014-01-13-AS	AS	6
		0000	2014-01-13-BA	AI	6
		0000	2014-01-13OA	AA	6

MATRIX CODES	AA - AMBIENT AIR	AI - INDOOR AIR	AG - FIELD OC	AS - SUB-SLAB AIR	GS - SOIL GAS
SAMPLE TYPE CODES	NP - NORMAL ENVIRONMENTAL SAMPLE	FD* - FIELD DUPLICATE	MS* - MATRIX SPIKE	(# - SEQUENTIAL NUMBER (FROM 1 TO 9) TO ACCOMMODATE MULTIPLE SAMPLES IN A SINGLE DAY)	
RELINQUISHED BY (SIGNATURE)	DATE: 1-15-14	TIME: 9:30pm	RECEIVED BY (SIGNATURE)	DATE: 1/18/14	TIME: 0931
RELINQUISHED BY (SIGNATURE)	DATE:	TIME:	RECEIVED FOR LAB BY (SIGNATURE)	DATE:	TIME:

URS CORPORATION  
 77 GOODELL STREET  
 BUFFALO, NY 14203  
 PHONE: 716-855-5636

URS CONTACT: George Kislak  
 LAB: CON TEST  
 SHIPPING CONTAINER: 123 of 3  
 PAGE: 1 of 1

CANISTER ID	FLOW CONTROLLER ID	INITIAL PRESSURE/VACUUM (HG)	FINAL PRESSURE/VACUUM (HG)	PRESSURE/VACUUM UPON LAB RECEIPT (HG)	REQUIRED ANALYSIS	REMARKS	SAMPLE TYPE CODE
1980	3457	30-10	96	X	TCL-VDA Level		-01
1984	3461	30-7	7	X	TCL-VDA		-02
1983	3460	28-7	6.8	X			-03
1986	3463	30-8	7	X			-04
1987	3464	30-10	9	X			-05
2000	3465	28-7	76	X			-06
2002	3467	29-7	66	X			-07
2001	3466	29-8	87	X			-08
2003	3468	29-9	77	X			-09
1982	3459	28-7	74	X			-10
1981	3458	29-6	6.9	X			-11
1985	3462	30-8	6.9	X			-12

SPECIAL INSTRUCTIONS:  
 Low Level = 0.25 µg/m³ RL for TCE, CCL4, VC  
 all others 1 µg/m³  
 Full deliverables, EDD in µg/m³

Distribution: Original accompanies shipment, copy to project file

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report

EPA TO-15

Qualifications:

---

Analyte is found in the associated blank as well as in the sample.

Analyte & Samples(s) Qualified:

**Methylene Chloride**

14A0568-01[H-154-OA], 14A0568-02[H-046-AS], 14A0568-03[H-046-BA], 14A0568-04[H-046-OA], 14A0568-05[H-057-AS], 14A0568-06[H-057-BA],  
14A0568-07[H-005-AS], 14A0568-08[H-005-BA], 14A0568-09[H-005-OA], 14A0568-10[2014-01-13-AS], 14A0568-11[2014-01-13-BA], 14A0568-12[2014-01-13-OA],  
B089468-BS1, B089468-DUP1

---

Methylene chloride is a common laboratory contaminant.

Analyte & Samples(s) Qualified:

**Methylene Chloride**

B089468-BLK1

---

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Michael A. Erickson  
Laboratory Director



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

## 4 - FORM IV METHOD BLANK SUMMARY

### EPA TO-15

Laboratory: Con-Test Analytical Laboratory      Work Order: 14A0568  
Client: URS Corporation      Project: Oser Ave.  
Blank ID: B089468-BLK1      Batch: B089468      Prepared: 01/27/2014 11:36

Client Sample ID	Laboratory Sample ID	Lab File ID	Time Analyzed
H-005-BA	14A0568-08	B012717.D	00:11
H-046-AS	14A0568-02	B012726.D	06:31
H-046-BA	14A0568-03	B012714.D	21:55
H-046-OA	14A0568-04	B012715.D	22:40
H-057-AS	14A0568-05	B012727.D	07:10
H-057-BA	14A0568-06	B012716.D	23:25
H-154-OA	14A0568-01	B012713.D	21:10
H-005-AS	14A0568-07RE1	B012730.D	09:07
Duplicate	B089468-DUP1	B012721.D	03:12
H-005-OA	14A0568-09	B012718.D	00:56
2014-01-13-AS	14A0568-10	B012729.D	08:29
2014-01-13-BA	14A0568-11	B012719.D	01:41
2014-01-13-OA	14A0568-12	B012720.D	02:25
LCS	B089468-BS1	B012702.D	12:42
LCS	B089468-BS1	B012704.D	12:42
H-005-AS	14A0568-07	B012728.D	07:49

# 1 - FORM I ANALYSIS DATA SHEET

Blank

Laboratory:	Con-Test Analytical Laboratory	Work Order:	14A0568
Client:	URS Corporation	Project:	Oser Ave.
Matrix:	Air	Laboratory ID:	B089468-BLK1
Sampled:		Prepared:	01/27/14 11:36
Solids:		Preparation:	TO-15 Prep
Batch:	B089468	Sequence:	S005357
Column:	1	Calibration:	1200079
		Instrument:	SYSB

CAS NO.	COMPOUND	CONC. (ppbv)	MDL	RL	Q
78-87-5	1,2-Dichloropropane		0.0069	0.020	U
10061-01-5	cis-1,3-Dichloropropene		0.0053	0.020	U
10061-02-6	trans-1,3-Dichloropropene		0.0054	0.020	U
100-41-4	Ethylbenzene		0.0055	0.020	U
591-78-6	2-Hexanone (MBK)		0.0051	0.020	U
98-82-8	Isopropylbenzene (Cumene)		0.016	0.051	U
79-20-9	Methyl Acetate		0.034	0.082	U
1634-04-4	Methyl tert-Butyl Ether (MTBE)		0.0062	0.020	U
108-87-2	Methyl Cyclohexane		0.018	0.062	U
75-09-2	Methylene Chloride	0.23	0.024	0.20	B-01
108-10-1	4-Methyl-2-pentanone (MIBK)		0.0048	0.020	U
100-42-5	Styrene		0.0039	0.020	U
79-34-5	1,1,2,2-Tetrachloroethane		0.0048	0.020	U
127-18-4	Tetrachloroethylene		0.0057	0.020	U
109-99-9	Tetrahydrofuran		0.0084	0.020	U
108-88-3	Toluene		0.0062	0.020	U
120-82-1	1,2,4-Trichlorobenzene		0.0076	0.020	U
71-55-6	1,1,1-Trichloroethane		0.0036	0.020	U
79-00-5	1,1,2-Trichloroethane		0.0061	0.020	U
79-01-6	Trichloroethylene		0.0059	0.020	U
75-69-4	Trichlorofluoromethane (Freon 11)		0.0070	0.020	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 1		0.0056	0.020	U
75-01-4	Vinyl Chloride		0.0086	0.020	U
1330-20-7P/M	m&p-Xylene		0.010	0.040	U
95-47-6	o-Xylene		0.0058	0.020	U



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

## 6 - FORM VI INITIAL CALIBRATION DATA SHEET (Continued)

### EPA TO-15

Laboratory: Con-Test Analytical Laboratory      Work Order: 14A0568  
Client: URS Corporation      Project: Oser Ave.  
Calibration: 1200079      Instrument: SYSB  
Calibration Date: 5/24/2010 12:00:49AM

COMPOUND	Mean RF	RF RSD	Linear r	Quad COD	LIMIT	Q
Acetone	0.8283546	37.5			40	
Benzene	0.9413509	25.8			30	
Bromodichloromethane	0.6896837	8.8			30	
Bromoform	0.6450373	6.2			30	
Bromomethane	0.6831357	22.2			30	
2-Butanone (MEK)	1.545372	24.7			30	
Carbon Disulfide	1.787941	12.8			30	
Carbon Tetrachloride	0.5349463	8.6			30	
Chlorobenzene	0.7508891	11.8			30	
Chloroethane	0.2783443	7.3			30	
Chloroform	1.212155	14.4			30	
Chloromethane	0.5418058	20.5			30	
Cyclohexane	0.3674421	16.6			30	
Dibromochloromethane	0.7473385	7.7			30	
1,2-Dibromo-3-chloropropane (DBCP)	1.787612	3.1			30	
1,2-Dibromoethane (EDB)	0.6600501	9.8			30	
1,2-Dichlorobenzene	0.6481301	8.9			30	
1,3-Dichlorobenzene	0.7015668	8.4			30	
1,4-Dichlorobenzene	0.7096668	8.6			30	
Dichlorodifluoromethane (Freon 12)	1.429498	18.9			30	
1,1-Dichloroethane	1.092829	13.6			30	
1,2-Dichloroethane	0.7865236	12.4			30	
1,1-Dichloroethylene	0.9569238	13.8			30	
cis-1,2-Dichloroethylene	0.8321314	13.5			30	
trans-1,2-Dichloroethylene	0.8759026	11.0			30	
1,2-Dichloropropane	0.360087	14.1			30	
cis-1,3-Dichloropropene	0.523818	9.0			30	

14A0570

# AIR SAMPLE CHAIN OF CUSTODY RECORD

URS CORPORATION  
77 GOODELL STREET  
BUFFALO, NY 14203  
PHONE: 716-856-5636

URS CONTACT: George Kisluk

PROJECT NUMBER: 11176692.00005  
SITE NAME: 100 OSEL AVE  
SAMPLERS (PRINT/SIGNATURE): George Kisluk/Anders Brunelle

LAB: CONTEST  
SHIPPING CONTAINER: 1 of 1  
PAGE: 1 of 1

DELIVERY SERVICE: FedEx AIRBILL NO.:

LOCATION IDENTIFIER	SAMPLE DATE	SAMPLE TIME	SAMPLE ID	MATRIX CODE	CANISTER SIZE (LITERS)	CANISTER ID	FLOW CONTROLLER ID	SAMPLE INFORMATION				REMARKS	SAMPLE TYPE	
								INITIAL PRESSURE/VACUUM (Hg)	FINAL PRESSURE/VACUUM (Hg)	PRESSURE/VACUUM UPON LAB RECEIPT (Hg)	REQUIRED ANALYSIS			
H-155	1-15-14	1813	H-155-BA	AT	6	2006	3470	29-8-7						NI
↓	↓	1813	H-155-AS	AS	6	2005	3469	30-8-76						NI
H-042	1-16-14	1434	H-042-BA	AT	6	2009	3472	29-8-87						NI
↓	↓	1430	H-042-AS	AS	6	2008	3471	29-8-9						NI

MATRIX CODES: AA - AMBIENT AIR, AI - INDOOR AIR, AG - FIELD QC, AS - SUB-SLAB AIR, GS - SOIL GAS

SAMPLE TYPE CODES	RELINQUISHED BY (SIGNATURE)		RECEIVED BY (SIGNATURE)		SPECIAL INSTRUCTIONS	
	DATE	TIME	DATE	TIME	DATE	TIME
NI	1-16-14	1500	1-17-14	0931		

Low level = 0.25ug/m<sup>3</sup> RL for TCE, CE1, VC  
all others byug/m<sup>3</sup> RL

Full deliverables, EAD in pg 13

Distribution: Original accompanies shipment, copy to project file

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

EPA TO-15

**Qualifications:**

---

Laboratory fortified blank/laboratory control sample recovery is outside of control limits. Reported value for this compound is likely to be biased on the low side.

**Analyte & Samples(s) Qualified:**

**Isopropylbenzene (Cumene)**

14A0570-01[H-155-BA], 14A0570-02[H-155-AS], 14A0570-03[H-042-BA], 14A0570-04[H-042-AS], B089763-BLK1, B089763-BS1, B089763-DUP1

---

Laboratory fortified blank/laboratory control sample recovery is outside of control limits. Reported value for this compound is likely to be biased on the high side.

**Analyte & Samples(s) Qualified:**

**Acetone**

14A0570-01[H-155-BA], 14A0570-02[H-155-AS], 14A0570-03[H-042-BA], 14A0570-04[H-042-AS], B089763-BS1, B089763-DUP1, S005379-CCV1

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Continuing calibration did not meet method specifications and was biased on the high side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the high side.

**Analyte & Samples(s) Qualified:**

**Acetone**

14A0570-01[H-155-BA], 14A0570-02[H-155-AS], 14A0570-03[H-042-BA], 14A0570-04[H-042-AS], B089763-BS1, B089763-DUP1, S005379-CCV1

---

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Michael A. Erickson  
Laboratory Director

### 3 - FORM III

## LCS / LCS DUPLICATE RECOVERY

### EPA TO-15

Laboratory:	Con-Test Analytical Laboratory	Work Order:	14A0570
Client:	URS Corporation	Project:	Oser Ave.
Matrix:	Air	Preparation:	TO-15 Prep
Batch:	B089763	Laboratory ID:	B089763-BS1
Column:		Initial/Final:	400 mL / 400 mL

ANALYTE	SPIKE ADDED (ppbv)	LCS CONCENTRATION (ppbv)	LCS % REC.	QC LIMITS REC.
Acetone	5.00	7.52	150 *	70 - 130
Benzene	5.00	3.92	78.3	70 - 130
Bromodichloromethane	5.00	4.73	94.7	70 - 130
Bromoform	5.00	5.23	105	70 - 130
Bromomethane	5.00	4.29	85.8	70 - 130
2-Butanone (MEK)	5.00	4.74	94.8	70 - 130
Carbon Disulfide	5.00	3.92	78.3	70 - 130
Carbon Tetrachloride	5.00	4.78	95.7	70 - 130
Chlorobenzene	5.00	4.48	89.7	70 - 130
Chloroethane	5.00	4.85	97.0	70 - 130
Chloroform	5.00	4.24	84.8	70 - 130
Chloromethane	5.00	3.97	79.3	70 - 130
Cyclohexane	5.00	3.95	79.0	70 - 130
Dibromochloromethane	5.00	5.13	103	70 - 130
1,2-Dibromo-3-chloropropane (DBCP)	0.647	0.584	90.3	70 - 130
1,2-Dibromoethane (EDB)	5.00	4.57	91.4	70 - 130
1,2-Dichlorobenzene	5.00	4.97	99.4	70 - 130
1,3-Dichlorobenzene	5.00	4.97	99.4	70 - 130
1,4-Dichlorobenzene	5.00	4.98	99.5	70 - 130
Dichlorodifluoromethane (Freon 12)	5.00	4.54	90.8	70 - 130
1,1-Dichloroethane	5.00	3.96	79.3	70 - 130
1,2-Dichloroethane	5.00	4.87	97.4	70 - 130
1,1-Dichloroethylene	5.00	4.27	85.4	70 - 130
cis-1,2-Dichloroethylene	5.00	4.22	84.4	70 - 130
trans-1,2-Dichloroethylene	5.00	4.16	83.2	70 - 130
1,2-Dichloropropane	5.00	3.78	75.6	70 - 130
cis-1,3-Dichloropropene	5.00	4.73	94.6	70 - 130
trans-1,3-Dichloropropene	5.00	5.23	105	70 - 130
Ethylbenzene	5.00	5.07	101	70 - 130
2-Hexanone (MBK)	5.00	4.24	84.9	70 - 130
Isopropylbenzene (Cumene)	1.27	0.865	68.1 *	70 - 130

## 5 - FORM V INSTRUMENT PERFORMANCE CHECK

### EPA TO-15

Laboratory:	Con-Test Analytical Laboratory	Work Order:	14A0570
Client:	URS Corporation	Project:	Oser Ave.
Lab File ID:	G013001.D	Injection Date:	01/30/14
Instrument ID:	SYSG	Injection Time:	18:05
Sequence:	S005379	Lab Sample ID:	S005379-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	PASS/FAIL
50	8 - 40% of 95	20.6	PASS
75	30 - 66% of 95	51.5	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.71	PASS
173	Less than 2% of 174	0	PASS
174	50 - 120% of 95	75.5	PASS
175	4 - 9% of 174	7.68	PASS
176	93 - 101% of 174	95.9	PASS
177	5 - 9% of 176	6.66	PASS

Client ID	Sample ID	File ID	Date Analyzed	Time Analyzed
Calibration Check	S005379-CCV1	G013002.D	01/30/2014	18:43:00
Calibration Check	S005379-CCV1	G013004.D	01/30/2014	18:43:00
LCS	B089763-BS1	G013005.D	01/30/2014	19:21:00
LCS	B089763-BS1	G013003.D	01/30/2014	19:21:00
Blank	B089763-BLK1	G013007.D	01/30/2014	22:05:00
H-155-BA	14A0570-01	G013014.D	01/31/2014	3:17:00
H-042-BA	14A0570-03	G013015.D	01/31/2014	4:04:00
Duplicate	B089763-DUP1	G013016.D	01/31/2014	4:54:00
H-155-AS	14A0570-02	G013025.D	01/31/2014	10:52:00
H-042-AS	14A0570-04	G013026.D	01/31/2014	11:33:00

## 7 - FORM VII

### CONTINUING CALIBRATION VERIFICATION

#### EPA TO-15

Laboratory:	Con-Test Analytical Laboratory	Work Order:	14A0570
Client:	URS Corporation	Project:	Oser Ave.
Instrument ID:	SYSG	Calibration:	1300117
Lab File ID:	G013002.D	Calibration Date:	11/13/13 10:03
Sequence:	S005379	Injection Date:	01/30/14
Lab Sample ID:	S005379-CCV1	Injection Time:	18:43

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	5.00	7.92	0.6517469	1.032798		58.5	30 *
Benzene	A	5.00	4.64	0.8942447	0.8295399		-7.2	30
Bromodichloromethane	A	5.00	5.44	0.6024274	0.6556642		8.8	30
Bromoform	A	5.00	5.00	0.5251071	0.5245559		-0.1	30
Bromomethane	A	5.00	5.20	0.628712	0.6542432		4.1	30
2-Butanone (MEK)	A	5.00	5.50	1.267082	1.393266		10.0	30
Carbon Disulfide	A	5.00	4.45	2.143665	1.908736		-11.0	30
Carbon Tetrachloride	A	5.00	5.83	0.4914556	0.5729685		16.6	30
Chlorobenzene	A	5.00	4.20	0.884138	0.7420872		-16.1	30
Chloroethane	A	5.00	5.87	0.2819568	0.3310081		17.4	30
Chloroform	A	5.00	5.12	1.57814	1.616674		2.4	30
Chloromethane	A	5.00	4.78	0.5481299	0.5245694		-4.3	30
Cyclohexane	A	5.00	4.59	0.3737589	0.3433648		-8.1	30
Dibromochloromethane	A	5.00	4.97	0.5874548	0.5837242		-0.6	30
1,2-Dibromo-3-chloropropane (DBCP)	A	0.647	0.484	1.435621	1.074564		-25.1	30
1,2-Dibromoethane (EDB)	A	5.00	4.41	0.6051551	0.5337241		-11.8	30
1,2-Dichlorobenzene	A	5.00	4.61	0.7348896	0.6781598		-7.7	30
1,3-Dichlorobenzene	A	5.00	4.59	0.7874897	0.7228237		-8.2	30
1,4-Dichlorobenzene	A	5.00	4.55	0.7922155	0.7205299		-9.0	30
Dichlorodifluoromethane (Freon 12)	A	5.00	5.44	1.784229	1.940867		8.8	30
1,1-Dichloroethane	A	5.00	4.89	1.419752	1.389314		-2.1	30
1,2-Dichloroethane	A	5.00	5.66	1.008311	1.142467		13.3	30
1,1-Dichloroethylene	A	5.00	5.46	1.096519	1.197855		9.2	30
cis-1,2-Dichloroethylene	A	5.00	4.95	1.067416	1.056402		-1.0	30

14A0619

# AIR SAMPLE CHAIN OF CUSTODY RECORD

URS CORPORATION  
77 GODDOLL STREET  
BUFFALO, NY 14203  
PHONE: 716-856-5636

URS CONTACT: George Kislik

PROJECT NUMBER: 11176692.0005 SITE NAME: 100 OSER AVE

SAMPLERS (PRINT/SIGNATURE): George Kislik Anders Brunelle

DELIVERY SERVICE: Fed-Ex AIRBILL NO.: 8045 48046199

LAB: CONTEST  
SHIPPING CONTAINER: 1 of 1  
PAGE: 1 of 1

LOCATION IDENTIFIER	SAMPLE DATE	SAMPLE TIME	SAMPLE ID	MATRIX CODE	CANISTER SIZE (LITERS)	CANISTER ID	FLOW CONTROLLER ID	SAMPLE INFORMATION				REMARKS	SAMPLE TYPE CODE
								INITIAL PRESSURE/ VACUUM (" Hg)	FINAL PRESSURE/ VACUUM (" Hg)	PRESSURE/VACUUM UPON LAB RECEIPT (" Hg)	REQUIRED ANALYSIS		
01 H-042	1-16-14	1448	H-042-DA	AA	6	2012	3480	24.85.0	24.85.0	X	TCL VOCs	NI	
02 H-018	1-16-14	1743	H-018-AS	AS	6	2007	3473	29.8.0	29.8.0	X	TCL VOCs	NI	
03 ↓	↓	1743	H-018-BA	AI	6	2010	3474	29.85.0	29.85.0	X		NI	
04 ↓	↓	1742	H-018-DA	AA	6	2011	3479	24.8.0	24.8.0	X		NI	
H-023	1-17-14												
↓													

MATRIX CODES	AA - AMBIENT AIR	AI - INDOOR AIR	AG - FIELD OC	AS - SUB-SLAB AIR	GS - SOIL GAS
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SAMPLE TYPE CODES	N# - NORMAL ENVIRONMENTAL SAMPLE	FD# - FIELD DUPLICATE	MS# - MATRIX SPIKE	(# - SEQUENTIAL NUMBER (FROM 1 TO 9) TO ACCOMMODATE MULTIPLE SAMPLES IN A SINGLE DAY)		
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME	SPECIAL INSTRUCTIONS
<u>[Signature]</u>	1-16-14	9 PM	<u>[Signature]</u>	1/20/14	1039	Low level = 0.25 µg/m <sup>3</sup> RL for TOE, CC4, VC all other RL = 4 µg/m <sup>3</sup>
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED FOR LAB BY (SIGNATURE)	DATE	TIME	
<u>[Signature]</u>						

Distribution: Original accompanies shipment, copy to project file

Full deliverable, EDD in µg/m<sup>3</sup>

## CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

## EPA TO-15

## Qualifications:

Laboratory fortified blank/laboratory control sample recovery is outside of control limits. Reported value for this compound is likely to be biased on the low side.

## Analyte &amp; Samples(s) Qualified:

1,2,4-Trichlorobenzene, 1,2-Dibromo-3-chloropropane (DBCP), 1,2-Dichloropropane, 2-Hexanone (MBK), 4-Methyl-2-pentanone (MIBK), Cyclohexane, Isopropylbenzene (Cumene), Methyl Acetate, Methyl Cyclohexane  
14A0619-03[H-018-BA], 14A0619-04[H-018-OA], B089808-BLK1, B089808-BS1, 14A0619-01[H-042-OA], 14A0619-02[H-018-AS]

Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.

## Analyte &amp; Samples(s) Qualified:

1,2-Dichloropropane, 2-Hexanone (MBK), Cyclohexane

14A0619-01[H-042-OA], 14A0619-02[H-018-AS], 14A0619-03[H-018-BA], 14A0619-04[H-018-OA], B089808-BLK1, B089808-BS1, S005385-CCV1

Continuing calibration did not meet method specifications and was biased on the high side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the high side.

## Analyte &amp; Samples(s) Qualified:

1,2,4-Trichlorobenzene, 1,2-Dibromo-3-chloropropane (DBCP), 4-Methyl-2-pentanone (MIBK)

S005385-CCV1, B089808-BLK1, B089808-BS1

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Michael A. Erickson  
Laboratory Director

### 3 - FORM III

## LCS / LCS DUPLICATE RECOVERY

### EPA TO-15

Laboratory:	Con-Test Analytical Laboratory	Work Order:	14A0619
Client:	URS Corporation	Project:	Oser Ave.
Matrix:	Air	Preparation:	TO-15 Prep
Batch:	B089808	Laboratory ID:	B089808-BS1
Column:		Initial/Final:	400 mL / 400 mL

ANALYTE	SPIKE ADDED (ppbv)	LCS CONCENTRATION (ppbv)	LCS % REC.	QC LIMITS REC.
Acetone	5.00	5.11	102	70 - 130
Benzene	5.00	3.61	72.1	70 - 130
Bromodichloromethane	5.00	4.43	88.6	70 - 130
Bromoform	5.00	6.12	122	70 - 130
Bromomethane	5.00	5.58	112	70 - 130
2-Butanone (MEK)	5.00	4.05	81.0	70 - 130
Carbon Disulfide	5.00	5.38	108	70 - 130
Carbon Tetrachloride	5.00	5.18	104	70 - 130
Chlorobenzene	5.00	4.64	92.9	70 - 130
Chloroethane	5.00	4.96	99.1	70 - 130
Chloroform	5.00	5.79	116	70 - 130
Chloromethane	5.00	4.48	89.6	70 - 130
Cyclohexane	5.00	3.50	69.9	70 - 130
Dibromochloromethane	5.00	5.29	106	70 - 130
1,2-Dibromo-3-chloropropane (DBCP)	0.650	0.00	0	70 - 130 *
1,2-Dibromoethane (EDB)	5.00	4.78	95.7	70 - 130
1,2-Dichlorobenzene	5.00	5.08	102	70 - 130
1,3-Dichlorobenzene	5.00	5.19	104	70 - 130
1,4-Dichlorobenzene	5.00	5.10	102	70 - 130
Dichlorodifluoromethane (Freon 12)	5.00	5.89	118	70 - 130
1,1-Dichloroethane	5.00	4.92	98.5	70 - 130
1,2-Dichloroethane	5.00	5.62	112	70 - 130
1,1-Dichloroethylene	5.00	4.80	96.0	70 - 130
cis-1,2-Dichloroethylene	5.00	5.21	104	70 - 130
trans-1,2-Dichloroethylene	5.00	4.98	99.7	70 - 130
1,2-Dichloropropane	5.00	3.45	69.0	70 - 130 *
cis-1,3-Dichloropropene	5.00	3.87	77.5	70 - 130
trans-1,3-Dichloropropene	5.00	4.12	82.3	70 - 130
Ethylbenzene	5.00	4.30	86.1	70 - 130
2-Hexanone (MBK)	5.00	2.80	56.0	70 - 130 *
Isopropylbenzene (Cumene)	1.27	0.00	0	70 - 130 *

### 3 - FORM III

## LCS / LCS DUPLICATE RECOVERY

### EPA TO-15

Laboratory:	Con-Test Analytical Laboratory	Work Order:	14A0619
Client:	URS Corporation	Project:	Oser Ave.
Matrix:	Air	Preparation:	TO-15 Prep
Batch:	B089808	Laboratory ID:	B089808-BS1
Column:		Initial/Final:	400 mL / 400 mL

ANALYTE	SPIKE ADDED (ppbv)	LCS CONCENTRATION (ppbv)	LCS % REC.	QC LIMITS REC.
Methyl Acetate	2.06	0.00	0 *	70 - 130
Methyl tert-Butyl Ether (MTBE)	5.00	5.25	105	70 - 130
Methyl Cyclohexane	1.56	0.00	0 *	70 - 130
Methylene Chloride	5.00	4.42	88.4	70 - 130
4-Methyl-2-pentanone (MIBK)	5.00	3.19	63.8 *	70 - 130
Styrene	5.00	4.59	91.9	70 - 130
1,1,2,2-Tetrachloroethane	5.00	4.22	84.5	70 - 130
Tetrachloroethylene	5.00	5.64	113	70 - 130
Tetrahydrofuran	5.00	4.07	81.3	70 - 130
Toluene	5.00	4.21	84.2	70 - 130
1,2,4-Trichlorobenzene	5.00	2.72	54.4 *	70 - 130
1,1,1-Trichloroethane	5.00	4.55	91.0	70 - 130
1,1,2-Trichloroethane	5.00	4.58	91.6	70 - 130
Trichloroethylene	5.00	4.28	85.6	70 - 130
Trichlorofluoromethane (Freon 11)	5.00	6.46	129	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	5.00	5.50	110	70 - 130
Vinyl Chloride	5.00	4.88	97.6	70 - 130
m&p-Xylene	10.0	8.90	89.0	70 - 130
o-Xylene	5.00	4.42	88.3	70 - 130



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

## 5 - FORM V INSTRUMENT PERFORMANCE CHECK

### EPA TO-15

Laboratory:	Con-Test Analytical Laboratory	Work Order:	14A0619
Client:	URS Corporation	Project:	Oser Ave.
Lab File ID:	F013003.D	Injection Date:	01/30/14
Instrument ID:	SYSF	Injection Time:	20:29
Sequence:	S005385	Lab Sample ID:	S005385-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	PASS/FAIL
50	8 - 40% of 95	13.5	PASS
75	30 - 66% of 95	43.9	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.61	PASS
173	Less than 2% of 174	0.5	PASS
174	50 - 120% of 95	111	PASS
175	4 - 9% of 174	7.01	PASS
176	93 - 101% of 174	97.7	PASS
177	5 - 9% of 176	6.58	PASS

Client ID	Sample ID	File ID	Date Analyzed	Time Analyzed
Calibration Check	S005385-CCV1	F013004.D	01/30/2014	21:07:00
Calibration Check	S005385-CCV1	F013006.D	01/30/2014	21:07:00
LCS	B089808-BS1	F013005.D	01/30/2014	21:46:00
Blank	B089808-BLK1	F013019.D	01/31/2014	6:55:00
H-042-OA	14A0619-01	F013024.D	01/31/2014	10:26:00
H-018-BA	14A0619-03	F013025.D	01/31/2014	11:09:00
H-018-OA	14A0619-04	F013026.D	01/31/2014	11:51:00
H-018-AS	14A0619-02	F013027.D	01/31/2014	12:29:00

## 7 - FORM VII

### CONTINUING CALIBRATION VERIFICATION

#### EPA TO-15

Laboratory:	Con-Test Analytical Laboratory	Work Order:	14A0619
Client:	URS Corporation	Project:	Oser Ave.
Instrument ID:	SYSF	Calibration:	1200127
Lab File ID:	F013004.D	Calibration Date:	05/18/10 00:00
Sequence:	S005385	Injection Date:	01/30/14
Lab Sample ID:	S005385-CCV1	Injection Time:	21:07

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	5.00	4.88	0.9572932	0.9352264		-2.3	30
Benzene	A	5.00	3.58	0.7445976	0.5334822		-28.4	30
Bromodichloromethane	A	5.00	4.46	0.5037588	0.449758		-10.7	30
Bromoform	A	5.00	6.48	0.5202506	0.674332		29.6	30
Bromomethane	A	5.00	5.50	0.6800857	0.7478046		10.0	30
2-Butanone (MEK)	A	5.00	3.90	1.442287	1.124839		-22.0	30
Carbon Disulfide	A	5.00	4.94	1.990114	1.965024		-1.3	30
Carbon Tetrachloride	A	5.00	5.12	0.4616211	0.4729249		2.4	30
Chlorobenzene	A	5.00	4.63	0.7711919	0.7145018		-7.4	30
Chloroethane	A	5.00	4.84	0.3673746	0.3555475		-3.2	30
Chloroform	A	5.00	5.73	1.424879	1.632583		14.6	30
Chloromethane	A	5.00	4.47	0.6045946	0.5405166		-10.6	30
Cyclohexane	A	5.00	3.47	0.3404812	0.2361433		-30.6	30 *
Dibromochloromethane	A	5.00	5.35	0.5565529	0.5960117		7.1	30
1,2-Dibromo-3-chloropropane (DBCP)	A	0.647	1.11	1.901665	3.275027		72.2	30 *
1,2-Dibromoethane (EDB)	A	5.00	4.81	0.5224367	0.5023059		-3.9	30
1,2-Dichlorobenzene	A	5.00	5.74	0.7350193	0.843799		14.8	30
1,3-Dichlorobenzene	A	5.00	5.64	0.774909	0.8744664		12.8	30
1,4-Dichlorobenzene	A	5.00	5.56	0.7899202	0.8780226		11.2	30
Dichlorodifluoromethane (Freon 12)	A	5.00	5.79	1.676061	1.941166		15.8	30
1,1-Dichloroethane	A	5.00	4.87	1.265918	1.233257		-2.6	30
1,2-Dichloroethane	A	5.00	5.47	0.9102673	0.9966354		9.5	30
1,1-Dichloroethylene	A	5.00	4.96	1.036199	1.027507		-0.8	30
cis-1,2-Dichloroethylene	A	5.00	5.04	0.9291754	0.9374891		0.9	30

## 7 - FORM VII

### CONTINUING CALIBRATION VERIFICATION

#### EPA TO-15

Laboratory:	Con-Test Analytical Laboratory	Work Order:	14A0619
Client:	URS Corporation	Project:	Oser Ave.
Instrument ID:	SYSF	Calibration:	1200127
Lab File ID:	F013004.D	Calibration Date:	05/18/10 00:00
Sequence:	S005385	Injection Date:	01/30/14
Lab Sample ID:	S005385-CCV1	Injection Time:	21:07

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
trans-1,2-Dichloroethylene	A	5.00	4.80	0.994264	0.9548845		-4.0	30
1,2-Dichloropropane	A	5.00	3.46	0.2704444	0.1869299		-30.9	30 *
cis-1,3-Dichloropropene	A	5.00	3.98	0.4016621	0.3197565		-20.4	30
trans-1,3-Dichloropropene	A	5.00	4.16	0.4003214	0.3327187		-16.9	30
Ethylbenzene	A	5.00	4.29	1.276998	1.096044		-14.2	30
2-Hexanone (MBK)	A	5.00	2.92	0.6180448	0.3611061		-41.6	30 *
Isopropylbenzene (Cumene)	A	1.27	1.40	7.982492	8.796235		10.2	30
Methyl Acetate	A	2.06	1.60	0.3636984	0.2816937		-22.5	30
Methyl tert-Butyl Ether (MTBE)	A	5.00	5.06	1.981639	2.004829		1.2	30
Methyl Cyclohexane	A	1.56	1.22	0.4592571	0.3580366		-22.0	30
Methylene Chloride	A	5.00	4.49	0.764772	0.687527		-10.1	30
4-Methyl-2-pentanone (MIBK)	A	5.00	3.32	0.2259675	0.1502693		-33.5	30 *
Styrene	A	5.00	4.57	0.7668346	0.7007871		-8.6	30
1,1,2,2-Tetrachloroethane	A	5.00	4.39	0.697533	0.6126944		-12.2	30
Tetrachloroethylene	A	5.00	5.61	0.4642605	0.5211868		12.3	30
Tetrahydrofuran	A	5.00	3.88	0.7981852	0.6203256		-22.3	30
Toluene	A	5.00	4.20	0.9857128	0.8272375		-16.1	30
1,2,4-Trichlorobenzene	A	5.00	7.33	0.5310595	0.7788147		46.7	30 *
1,1,1-Trichloroethane	A	5.00	4.56	0.4743502	0.4327966		-8.8	30
1,1,2-Trichloroethane	A	5.00	4.56	0.3284759	0.2995366		-8.8	30
Trichloroethylene	A	5.00	4.26	0.3129761	0.2666071		-14.8	30
Trichlorofluoromethane (Freon 11)	A	5.00	6.37	1.706165	2.172538		27.3	30
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	A	5.00	5.80	1.350825	1.567761		16.1	30
Vinyl Chloride	A	5.00	4.76	0.6972394	0.6644658		-4.7	30

14 A0620

# AIR SAMPLE CHAIN OF CUSTODY RECORD

PROJECT NUMBER: 11176692.00005  
 SITE NAME: 100 OSER AVE  
 SAMPLERS (PRINT/SIGNATURE): George Kislok / Andres Branelle

URS CORPORATION  
 77 GODELL STREET  
 BUFFALO, NY 14203  
 PHONE: 716-856-5636

URS CONTACT: George Kislok

DELIVERY SERVICE: Fed Ex AIRBILL NO.:  
 LAB CON-TEST  
 SHIPPING CONTAINER: \_\_\_\_\_ of \_\_\_\_\_  
 PAGE: \_\_\_\_\_ of \_\_\_\_\_

LOCATION IDENTIFIER	SAMPLE DATE	SAMPLE TIME	SAMPLE ID	MATRIX CODE	CANISTER SIZE (LITERS)	CANISTER ID	FLOW CONTROLLER ID	INITIAL PRESSURE/VACUUM ("Hg)	FINAL PRESSURE/VACUUM ("Hg)	PRESSURE/VACUUM UPON LAB RECEIPT ("Hg)	REQUIRED ANALYSIS	REMARKS	SAMPLE TYPE
H-023	1-17-14	8:10AM	H-023-AS	AS	6	2013	3481	30-8	8	8	TCL VDA's Low		NI
↓	↓	8:09AM	H-023-IA	AI	6	2016	3482	29-8	8	8	TCL VDA's		NI
↓	↓	8:17AM	H-023-DA	AA	6	2017	3483	30-8.5	8.5	8.5			NI
H-124	1-17-14	6:10PM	H-124-AS	AS	6	2030	3485	29-0.5	0.5	0.5			NI
↓	↓	6:11PM	H-124-BA	AI	6	2031	3486	29-95.9	95.9	95.9			NI
↓	↓	6:26PM	H-124-DA	AA	6	2032	3489	29-80	80	80			NI
Returning unused canisters/regulators - see attached.													

MATRIX CODES: AA - AMBIENT AIR, AI - INDOOR AIR, AQ - FIELD OC, AS - SUB-SLAB AIR, GS - SOIL GAS

SAMPLE TYPE CODES	N# - NORMAL ENVIRONMENTAL SAMPLE	FD# - FIELD DUPLICATE	MS# - MATRIX SPIKE	(# - SEQUENTIAL NUMBER (FROM 1 TO 9) TO ACCOMMODATE MULTIPLE SAMPLES IN A SINGLE DAY)		
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME	SPECIAL INSTRUCTIONS
Andres Branelle	1/17/14	7:20	Paula Blatnik	1-20-13	12:39	Low Level = 0.25 µg/m³ for TCE, OC4, VC all other AL = 1 µg/m³
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED FOR LAB BY (SIGNATURE)	DATE	TIME	
						Full deliverable, EDD is µg/m³

Distribution: Original accompanies shipment, copy to project file

## CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

## EPA TO-15

**Qualifications:**

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Laboratory fortified blank/laboratory control sample recovery is outside of control limits. Reported value for this compound is likely to be biased on the low side.

**Analyte & Samples(s) Qualified:****Isopropylbenzene (Cumene)**

14A0620-01[H-023-AS], 14A0620-02[H-023-IA], 14A0620-03[H-023-OA], 14A0620-04[H-124-AS], 14A0620-05[H-124-BA], 14A0620-06[H-124-OA], B089763-BLK1, B089763-BS1

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Laboratory fortified blank/laboratory control sample recovery is outside of control limits. Reported value for this compound is likely to be biased on the high side.

**Analyte & Samples(s) Qualified:****Acetone**

14A0620-01[H-023-AS], 14A0620-02[H-023-IA], 14A0620-03[H-023-OA], 14A0620-04[H-124-AS], 14A0620-05[H-124-BA], 14A0620-06[H-124-OA], B089763-BS1, S005379-CCV1

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Continuing calibration did not meet method specifications and was biased on the high side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the high side.

**Analyte & Samples(s) Qualified:****Acetone**

14A0620-01[H-023-AS], 14A0620-02[H-023-IA], 14A0620-03[H-023-OA], 14A0620-04[H-124-AS], 14A0620-05[H-124-BA], 14A0620-06[H-124-OA], B089763-BS1, S005379-CCV1

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The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Michael A. Erickson  
Laboratory Director



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

### 3 - FORM III

## LCS / LCS DUPLICATE RECOVERY

### EPA TO-15

Laboratory:	Con-Test Analytical Laboratory	Work Order:	14A0620
Client:	URS Corporation	Project:	Oser Ave.
Matrix:	Air	Preparation:	TO-15 Prep
Batch:	B089763	Laboratory ID:	B089763-BS1
Column:		Initial/Final:	400 mL / 400 mL

ANALYTE	SPIKE ADDED (ppbv)	LCS CONCENTRATION (ppbv)	LCS % REC.	QC LIMITS REC.
Acetone	5.00	7.52	150 *	70 - 130
Benzene	5.00	3.92	78.3	70 - 130
Bromodichloromethane	5.00	4.73	94.7	70 - 130
Bromoform	5.00	5.23	105	70 - 130
Bromomethane	5.00	4.29	85.8	70 - 130
2-Butanone (MEK)	5.00	4.74	94.8	70 - 130
Carbon Disulfide	5.00	3.92	78.3	70 - 130
Carbon Tetrachloride	5.00	4.78	95.7	70 - 130
Chlorobenzene	5.00	4.48	89.7	70 - 130
Chloroethane	5.00	4.85	97.0	70 - 130
Chloroform	5.00	4.24	84.8	70 - 130
Chloromethane	5.00	3.97	79.3	70 - 130
Cyclohexane	5.00	3.95	79.0	70 - 130
Dibromochloromethane	5.00	5.13	103	70 - 130
1,2-Dibromo-3-chloropropane (DBCP)	0.647	0.584	90.3	70 - 130
1,2-Dibromoethane (EDB)	5.00	4.57	91.4	70 - 130
1,2-Dichlorobenzene	5.00	4.97	99.4	70 - 130
1,3-Dichlorobenzene	5.00	4.97	99.4	70 - 130
1,4-Dichlorobenzene	5.00	4.98	99.5	70 - 130
Dichlorodifluoromethane (Freon 12)	5.00	4.54	90.8	70 - 130
1,1-Dichloroethane	5.00	3.96	79.3	70 - 130
1,2-Dichloroethane	5.00	4.87	97.4	70 - 130
1,1-Dichloroethylene	5.00	4.27	85.4	70 - 130
cis-1,2-Dichloroethylene	5.00	4.22	84.4	70 - 130
trans-1,2-Dichloroethylene	5.00	4.16	83.2	70 - 130
1,2-Dichloropropane	5.00	3.78	75.6	70 - 130
cis-1,3-Dichloropropene	5.00	4.73	94.6	70 - 130
trans-1,3-Dichloropropene	5.00	5.23	105	70 - 130
Ethylbenzene	5.00	5.07	101	70 - 130
2-Hexanone (MBK)	5.00	4.24	84.9	70 - 130
Isopropylbenzene (Cumene)	1.27	0.865	68.1 *	70 - 130



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## 7 - FORM VII

### CONTINUING CALIBRATION VERIFICATION

#### EPA TO-15

Laboratory:	Con-Test Analytical Laboratory	Work Order:	14A0620
Client:	URS Corporation	Project:	Oser Ave.
Instrument ID:	SYSG	Calibration:	1300117
Lab File ID:	G013002.D	Calibration Date:	11/13/13 10:03
Sequence:	S005379	Injection Date:	01/30/14
Lab Sample ID:	S005379-CCV1	Injection Time:	18:43

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	5.00	7.92	0.6517469	1.032798		58.5	30 *
Benzene	A	5.00	4.64	0.8942447	0.8295399		-7.2	30
Bromodichloromethane	A	5.00	5.44	0.6024274	0.6556642		8.8	30
Bromoform	A	5.00	5.00	0.5251071	0.5245559		-0.1	30
Bromomethane	A	5.00	5.20	0.628712	0.6542432		4.1	30
2-Butanone (MEK)	A	5.00	5.50	1.267082	1.393266		10.0	30
Carbon Disulfide	A	5.00	4.45	2.143665	1.908736		-11.0	30
Carbon Tetrachloride	A	5.00	5.83	0.4914556	0.5729685		16.6	30
Chlorobenzene	A	5.00	4.20	0.884138	0.7420872		-16.1	30
Chloroethane	A	5.00	5.87	0.2819568	0.3310081		17.4	30
Chloroform	A	5.00	5.12	1.57814	1.616674		2.4	30
Chloromethane	A	5.00	4.78	0.5481299	0.5245694		-4.3	30
Cyclohexane	A	5.00	4.59	0.3737589	0.3433648		-8.1	30
Dibromochloromethane	A	5.00	4.97	0.5874548	0.5837242		-0.6	30
1,2-Dibromo-3-chloropropane (DBCP)	A	0.647	0.484	1.435621	1.074564		-25.1	30
1,2-Dibromoethane (EDB)	A	5.00	4.41	0.6051551	0.5337241		-11.8	30
1,2-Dichlorobenzene	A	5.00	4.61	0.7348896	0.6781598		-7.7	30
1,3-Dichlorobenzene	A	5.00	4.59	0.7874897	0.7228237		-8.2	30
1,4-Dichlorobenzene	A	5.00	4.55	0.7922155	0.7205299		-9.0	30
Dichlorodifluoromethane (Freon 12)	A	5.00	5.44	1.784229	1.940867		8.8	30
1,1-Dichloroethane	A	5.00	4.89	1.419752	1.389314		-2.1	30
1,2-Dichloroethane	A	5.00	5.66	1.008311	1.142467		13.3	30
1,1-Dichloroethylene	A	5.00	5.46	1.096519	1.197855		9.2	30
cis-1,2-Dichloroethylene	A	5.00	4.95	1.067416	1.056402		-1.0	30