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DATA SUMMARY REPORT SOIL VAPOR INTRUSION INVESTIGATION PECONIC RIVER SPORTSMAN CLUB NWIRP CALVERTON NY

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TETRA TECH NUS

DATA SUMMARY REPORT

SOIL VAPOR INTRUSION INVESTIGATION

PECONIC RIVER SPORTSMAN CLUB

NWIRP Calverton

Calverton, New York

Naval Facilities Engineering Command
Mid-Atlantic

Contract No. N62470-08-D-1001
Contract Task Order WE08

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TETRA TECH

DATA SUMMARY REPORT
SOIL VAPOR INTRUSION INVESTIGATION
PECONIC RIVER SPORTSMAN CLUB

NAVAL WEAPONS INDUSTRIAL RESERVE PLANT
CALVERTON, NEW YORK

COMPREHENSIVE LONG-TERM
ENVIRONMENTAL ACTION NAVY (CLEAN) CONTRACT

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ACRONYMS

CA	chloroethane
CLEAN	Comprehensive Long-Term Environmental Action Navy
COC	Chain of Custody
CTO	Contract Task Order
DCA	1,1-Dichloroethane
DCE	1,1-dichloroethene
ER	Environmental Restoration
°F	Degrees Fahrenheit
GAC	Granular Activated Carbon
mL	Milliliter
NWIRP	Naval Weapons Industrial Reserve Plant
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
PCB	Poly-chlorinated Biphenyl
PID	Photoionization Detector
PRSC	Peconic River Sportsman's Club
RSLs	Regional Screening Levels
TCA	1,1,1-trichloroethane
Tetra Tech	Tetra Tech NUS, Inc.
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound
µg/L	micrograms per Liter
$\mu g/m^3$	micrograms per cubic meter

1.0 INTRODUCTION

Tetra Tech NUS Inc. (Tetra Tech) under Contract Task Order (CTO) WE08 prepared this Data Summary Report for the Naval Facilities Engineering Command Mid-Atlantic under the Comprehensive Long-Term Environmental Action Navy (CLEAN) contract number N62470-08-D-1001. This Report summarizes the field activities and sampling results for the soil vapor intrusion investigation at the Peconic River Sportsman Club (PRSC). The activities included indoor air, outdoor air, crawl space, and sub-slab vapor sampling conducted at the PRSC in February 2011.

Air samples were analyzed for Volatile Organic Compounds (VOCs) via United States Environmental Protection Agency (USEPA) TO-15 method. The work for this investigation was conducted with concurrence of the New York State Department of Health (NYSDOH) and the New York State Department of Environmental Conservation (NYSDEC). This work was also conducted in accordance with the NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York (NYSDOH, 2006).

1.1 SITE HISTORY

The Navy's Calverton facility is located in Suffolk County on Long Island, approximately 70 miles east of New York City (Figure 1). Formerly engaged in the manufacture of aircraft parts and subassemblies, the property known as Naval Weapons Industrial Reserve Plant (NWIRP) Calverton, New York was a Government-Owned Contractor-Operated installation leased by the Navy to the Northrop Grumman Corporation until 1996. Since that time, all the property within the perimeter fence has been conveyed to the Town of Riverhead, with the exception of three noncontiguous parcels of land totaling approximately 209 acres that are being retained by the Navy to continue the Environmental Restoration (ER) program activities at Sites 2, Site 7, Site 6A, Site 10B, and the Southern Area (Figure 2). There are currently no operational activities being conducted on the Navy's 209 acres.

Site 6A-Fuel Calibration Area

Site 6A is located in the south-central portion of the former NWIRP Calverton facility, approximately 2,000 feet north of River Road and 1,500 feet west of the southern gate (Figure 2). Site 6A and related facilities were used in the testing of aircraft fuel and engine systems, which may have resulted in frequent, small fuel spills onto the area's pavement. Minor maintenance and repairs to the fuel and engine systems were also conducted at the site and solvents were used during these activities and were likely spilled during their use.

A remedial action was conducted in 2009 and 2010 which removed 21,000 tons of PCB-contaminated, solvent/petroleum contaminated, and petroleum contaminated soil.

Southern Area

The Southern Area is located southeast of Site 6A and extends to the Peconic River (Figure 2). This area was originally investigated because chlorinated solvents were detected in a Suffolk County monitoring well down gradient of the facility. There are no known or suspected contaminant sources within this area. However, the area is hydraulically downgradient of Site 6A.

Groundwater flow is predominantly to the southeast in the Southern Area, with fluctuations more east and/or south depending on the rise and fall of the water table due to precipitation events, and the local effects of Donahue Pond on PRSC property. The groundwater contamination in the Southern Area primarily consists of a chlorinated solvent 1,1,1-trichloroethane (TCA) and its breakdown products 1,1-dichloroethane (DCA), 1,1-dichloroethene (DCE), and chloroethane (CA). Some petroleum related VOCs have also been detected in Southern Area groundwater. Based on the groundwater flow in the Southern Area and the detections of VOCs in the groundwater on the PRSC property, soil vapor intrusion into buildings at the PRSC was identified as a concern.

2.0 FIELD AND SAMPLING ACTIVITIES

This section summarizes the field activities at the PRSC. The three occupied structures on the PRSC property (Main Lodge, Activity Center, and Private Residence) were the focus of this soil vapor intrusion investigation. On November 4, 2010, the NYSDOH, NYSDEC, Suffolk County Department of Health Services (SCDHS), and the Navy conducted a preliminary inspection to determine potential sample locations. A work plan was developed that identified the proposed sampling at the PRSC (TtNUS, 2011) and the sampling activities were conducted on February 15 and 16, 2011. Figures 3 and 4 depict the sampling locations at the PRSC. An indoor air quality questionnaire and building inventory form was completed for each of the three buildings (Appendix A). The basement floor of the Main Lodge was inspected and penetrations including cracks, drains, utilities, and sumps were documented in the questionnaire and/or field logbook.

Indoor air, crawl space air, sub-slab vapor, and outdoor air samples were collected over a 24-hour time period. A sample list description is presented in Table 2-1. Information pertaining to sample collection was recorded on the air sampling log sheets (Appendix B).

2.1 Sub-Slab Sampling

Two sub-slab samples were collected from the basement areas of the Main Lodge. A 0.5 inch diameter hole was drilled into the basement slab to provide annular space for the installation of a temporary sampling probe. The temporary probes were constructed of polyethylene tubing and extended approximately 2 inches into the sub-slab material. The probes were sealed to the slab surface with inert modeling clay. Prior to collecting the sample, three tubing volumes of vapor were purged to ensure collection of a representative sample. Purged air was collected in 60 milliliter (mL) syringes and screened with a Photoionization Detector (PID) outdoors. Photographs #2 and #3 in the Photo-Log presented in Appendix C depict the two sub-slab sample locations collected at the Main Lodge. Each temporary probe was removed after the sub-slab vapor sampling was complete. The sub-slab probe hole was abandoned by removing the polyethylene tubing and filling/sealing the probe hole with a cement/grout mixture.

2.2 Crawl Space Sampling

A total of five crawl space samples were collected at the PRSC. Three crawl space samples were collected from the Main Lodge, one from the Activity Center, and one from the Private Residence. The Activity Center and Private Residence structures were mostly constructed on a crawl space (see sketch maps presented in Appendix A). Prior to collecting the crawl space samples, exterior openings in the crawl space (such as vents or access points) were sealed in order to limit natural ventilation of the area. At four of the five crawl space sample locations, polyethylene tubing was extended approximately 20 to

25 feet into the crawl space via extension rod. The attached tubing was then purged (approximately three tubing volumes) and collected in 60 mL syringes. A PID was used to screen the purged vapors from the tubing. Sample CA-PRSC-ML-CRL-02 was collected by directly placing a SUMMA® Canister into position with an extension rod into the crawl space at the Main Lodge. The five crawl space samples collected during the investigation are depicted on Figures 3 and 4.

2.3 Indoor Air and Outdoor Air Sampling

A total of eight indoor air samples were collected during the investigation at the three PRSC buildings. Two basement and three first floor indoor air samples were collected at the Main Lodge. Two indoor air samples were collected at the Activity Center and one indoor air sample was collected at the Private Residence. SUMMA® canisters were placed at the designated sample locations presented in the work plan in each of the three buildings and samples were collected over a 24-hour period. Figures 3 and 4 depict the sampling locations.

An outdoor air sample was also obtained to evaluate the potential influence of outdoor air on indoor air quality. The outdoor air sample was placed in an upwind direction, at an area northwest of the three buildings targeted for the investigation. The outdoor air sampling location is presented on Figure 3 and depicted in Photograph #1 in Appendix C. Indoor and outdoor air samples were obtained over approximately the same 24-hour time period.

The average temperature during the February 2011 sampling event was 30 degrees Fahrenheit (°F). The predominant wind direction ranged from north to northwest, with variable wind speeds up to 17 - 29 miles per hour. There was no precipitation during this two-day sampling event.

2.4 Sample Management

The air and soil vapor samples collected during this investigation were shipped to Air Toxics Ltd. in Folsom, California via overnight carrier (Federal Express) for TO-15 analysis. The sampling procedures for indoor air, outdoor air, sub slab samples, and crawl space samples were in accordance with the work plan (TtNUS, 2011) and the NYSDOH Guidance for Evaluating Soil Vapor Intrusion (NYSDOH, 2006).

The field sampling team maintained air sampling log sheets and a field logbook that summarized the following information:

- sample identification
- date and time of sample collection
- sample location description

- identity of samplers
- sampling methods and devices (including canister and regulator ID numbers)
- vacuum before and after samples were collected
- wind speed and direction (for outdoor air sampling)
- ambient temperature (for outdoor air sampling)

Table 2-1 presents a sample summary of the indoor air, outdoor air, sub-slab soil vapor, and crawl space samples collected. Sample date corresponds to the end of the sample collection period (i.e., 24-hour for all samples). Sample containers were labeled with a unique sample identifier as presented on Table 2-1. The sample identification code consisted of up to 15 characters, as described below.

- The first two characters indicated the associated facility from which the sample is to be collected: CA (NWIRP Calverton)
- The next four characters indicated the site from which the sample is to be collected: CA-PRSC (Peconic River Sportsmans Club)
- The next two characters indicated the PRSC building being sampled: CA-PRSC-ML (ML:Main Lodge, AC:Activity Center, and RE:Residence)
- The next three or four characters indicate the type of sample location: CA-PRSC-ML-SSB (SSB:sub-slab vapor, INDB:basement air, INDL:living space air, CRL:crawl space air, and ODA:outdoor air)
- The next two characters indicate the sample number: CA-PRSC-ML-SSB-01 (First sub-slab sample location at the Main lodge)

Additional information regarding sample identification and sample collection was recorded in the field logbook and/or on the corresponding sample log sheets. Sample log sheets were completed for each sample collected and are provided as Appendix B. Chain of Custody (COC) Forms are provided in Appendix D.

3.0 ANALYTICAL RESULTS

This section presents the analytical results from the indoor air, outdoor air, crawl space, and sub-slab soil vapor sampling conducted on February 15, and 16, 2011 at the PRSC. The sample results are summarized and presented in Table 3-1 (Main Lodge), Table 3-2 (Activity Center), and Table 3-3 (Private Residence). Details for each of the samples that were collected are presented on the air sample log sheets provided in Appendix B. A photographic log depicting representative sample locations is provided in Appendix C. COC forms and the laboratory analytical reports are provided in Appendix D and E, respectively. Data validation summaries are presented in Appendix F.

Analytical results from the indoor air sampling were initially screened based on the following screening values:

- Comparison to the NYSDOH Air Guideline Values and Matrices, and
- Comparison to USEPA Regional Screening Levels (RSLs) for Residential Air (USEPA, 2010), Carcinogenic Target Risk of $1X10^{-6}$ and Noncancer Hazard Index of 1.0

If analytical results were less than the screening values presented above, no further evaluation of that constituent was conducted. For those VOCs that exceeded the screening values, further evaluation was conducted as follows:

- Comparison to the USEPA Carcinogenic Target Risk Range for residential air ($1X10^{-6}$ to $1X10^{-4}$)
- Comparison to outdoor air results to evaluate potential ambient sources
- Comparison of indoor air results to associated sub-slab and/or crawl space results to evaluate potential indoor air sources

The NYSDOH Air Guideline Values used for evaluation of indoor air and sub-slab soil vapor are presented in the table below.

Air Guideline Values for Indoor Air and Sub-Slab Values

Chemical	Indoor Air Guideline Value ($\mu g/m^3$)	Sub-Slab Guidance Value ($\mu g/m^3$)
Tetrachloroethene	100[1]	1,000[2]
Trichloroethane	5[1]	250[2]
1,1,1-Trichloroethane	100[2]	1,000[2]
Methylene Chloride	60	NA
Carbon Tetrachloride	5[1]	250[2]

[1]= Value derived from NYSDOH guidance (2006), Table 3.1
[2] = Value derived from NYSDOH guidance (2006), Table 3.3 (Matrix 1 and 2)

µg/m^3 = micrograms per cubic meter of air

3.1 PRSC – Main Lodge

The analytical results from the Main Lodge sampling are presented in Table 3-1. A total of 27 VOCs were detected in the indoor air samples. None of the detections observed in the indoor air samples exceeded the NYSDOH Air Guideline Values and 22 of the compounds were less than the USEPA Carcinogenic Target Risk value of 1X10^{-6} and the Hazard Index of 1.0. The remaining detected VOC concentrations (benzene, 1,2-dichloroethane, methylene chloride, chloroform, and carbon tetrachloride) presented in the table below were within the acceptable USEPA Carcinogenic Target Risk Range and less than the Hazard Index of 1.0. In addition, benzene and carbon tetrachloride were detected at concentrations similar to the outdoor air sample, indicating that there may be an ambient source for these compounds. With the exception of one indoor living space sample (CA-PRSC-ML-INDL-01), the concentrations of 1,2-dichloroethane were similar to the concentration of 1,2-dichloroethane detected in the outdoor air sample. The concentration of 0.11 µg/m^3 for 1,2-dichloroethane detected in CA-PRSC-ML-INDL-01 was two times higher than the concentration detected in associated crawl space sample CA-PRSC-ML-CRL-01. Chloroform was also detected in indoor air sample CA-PRSC-ML-INDL-01 and was not detected in the associated crawl space sample. These results suggest a potential indoor air source for these concentrations of 1,2-dichloroethane and chloroform observed in CA-PRSC-ML-INDL-01.

Compounds Detected Within the USEPA Risk Range at the PRSC – Main Lodge

VOC (µg/m^3)	USEPA Regional Screening Levels (Residential Air)[1] Risk Ranges	NYSDOH Air Guideline Values[2] (µg/m^3)	Outdoor Air	Indoor Air	
				MIN	MAX
Benzene	0.31 - 31	NE	**0.43**	**0.37**	**0.42**
1,2-Dichloroethane	0.094 - 2,500	NE	0.045 J	0.039 J	**0.11 J**
Methylene Chloride	5.2 - 1,100	60	0.42 J	0.43 J	**14**
Chloroform	0.11 - 100	NE	ND	**0.33 J**	**0.33 J**
Carbon Tetrachloride	0.41 - 100	5 *	**0.42 J**	0.40 J	**0.50 J**

Bold - Indoor air concentration is within the Carcinogenic Target Risk Range of 1x10^{-6} to 1x10^{-4} for residential air

Shaded - indoor air concentration is within the USEPA Target Risk Range, but greater than outdoor air concentrations

[1] United State Environmental Protection Agency (USEPA) Regional Screening Levels (RSLs) - Residential Air Supporting Table, November 2010 (in µg/m3). (Carcinogenic Target Risk [TR]=1E-06 and 1E-04, Noncancer Hazard Index [HI]=1)

[2] New York State Department of Health (NYSDOH), 2006. Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York. October.

Two of the indoor living space air samples collected in the central and eastern portion of the Main Lodge (CA-PRSC-ML-INDL-02 and CA-PRSC-ML-INDL-03) had concentrations of methylene chloride that were

two or three times greater than the associated crawl space samples (CA-PRSC-ML-CRL-02 and CA-PRSC-ML-CRL-03). These results for methylene chloride indicate that there is a potential indoor source, rather than a result of vapor intrusion.

3.2 PRSC – Activity Center

The analytical results from the Activity Center sampling are presented in Table 3-2. A total of 22 compounds were detected in indoor air samples. None of the detections exceeded the NYSDOH Air Guideline Values and 20 of the compounds were less than the USEPA Carcinogenic Target Risk Value of $1X10^{-6}$ and less than the Hazard Index of 1.0. Benzene and chloroform were detected at concentrations within the acceptable USEPA Carcinogenic Target Risk Range and less than the Hazard Index of 1.0 and details are presented in the table below. The concentrations of benzene in both of the indoor air samples (CA-PRSC-AC-INDL-01 and CA-PRSC-AC-INDL-02) were slightly greater than the concentration detected in the associated crawl space sample and the concentration of benzene observed in the outdoor air. These results indicate that there could be an indoor and/or ambient source for the benzene detections. Chloroform was detected in indoor air sample CA-PRSC-AC-INDL-01 at 0.15 J µg/m^3; however, it was not detected in the associated crawl space sample or in the outdoor air sample. These results indicate that there is an indoor source for the detection of chloroform in the Activity Center.

Compounds Detected Within the USEPA Risk Range at the PRSC - Activity Center

VOC (µg/m^3)	USEPA Regional Screening Levels (Residential Air)[1] Risk Ranges	NYSDOH Air Guideline Values[2] (µg/m^3)	Outdoor Air	Indoor Air	
				MIN	MAX
Benzene	0.31 - 31	NE	**0.43**	**0.60**	**0.93**
Chloroform	0.11 - 100	NE	ND	**0.15 J**	**0.15 J**
Carbon Tetrachloride	0.41 - 100	5 *	**0.42 J**	0.40 J	0.40 J

Bold - Indoor air concentration is within the Carcinogenic Target Risk Range of $1x10^{-6}$ to $1x10^{-4}$ for residential air

Shaded - indoor air concentration is within the USEPA Target Risk Range, but greater than outdoor air concentrations

[1] United State Environmental Protection Agency (USEPA) Regional Screening Levels (RSLs) - Residential Air Supporting Table, November 2010 (in µg/m3). (Carcinogenic Target Risk [TR]=1E-06 and 1E-04, Noncancer Hazard Index [HI]=1)

[2] New York State Department of Health (NYSDOH), 2006. Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York. October.

3.3 PRSC – Private Residence

The analytical results for the Private Residence are presented in Table 3-3. A total of 19 compounds were detected in the indoor air samples. None of the detections exceeded the NYSDOH Air Guideline Values and 16 of the compounds were less than the USEPA Carcinogenic Target Risk Value of $1X10^{-6}$

and less than the Hazard Index of 1.0. The remaining detected VOC concentrations (1,4-dichlorobenzene, benzene, and 1,2-dichloroethane) presented in the table below were within the acceptable USEPA Carcinogenic Target Risk Range and less than the Hazard Index of 1.0. Benzene was detected in the indoor air sample CA-PRSC-RE-INDL-01 and the associated duplicate sample at concentrations slightly greater than the concentrations observed in the outdoor air sample and in the associated crawl space sample. These benzene detections indicate that there is a potential indoor and/or ambient source for the benzene detections at the private residence.

Compounds Detected Within the USEPA Risk Range at the PRSC - Private Residence

VOC (µg/m^3)	USEPA Regional Screening Levels (Residential Air)[1] Risk Ranges	NYSDOH Air Guideline Values[2] (µg/m^3)	Outdoor Air	Indoor Air	
				MIN	MAX
1,4-Dichlorobenzene	0.22 - 830	NE	ND	0.26 J	**4.8**
Benzene	0.31 - 31	NE	**0.43**	0.64	**0.97**
1,2-Dichloroethane	0.094 - 2,500	NE	0.045 J	0.069 J	**3.2**

Bold - Indoor air concentration is within the Carcinogenic Target Risk Range of $1x10^{-6}$ to $1x10^{-4}$ for residential air

Shaded - indoor air concentration is within the USEPA Target Risk Range, but greater than outdoor air concentrations

[1] United State Environmental Protection Agency (USEPA) Regional Screening Levels (RSLs) - Residential Air Supporting Table, November 2010 (in µg/m3). (Carcinogenic Target Risk [TR]=1E-06 and 1E-04, Noncancer Hazard Index [HI]=1)

[2] New York State Department of Health (NYSDOH), 2006. Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York. October.

The concentration of 1,4-dichlorobenzene detected in the indoor air sample CA-PRSC-RE-INDL-01, and the associated duplicate sample, was approximately 18 times greater than the associated crawl space sample and was not detected in the outdoor air sample. The indoor air concentration for 1,2-dichloroethane was approximately 40 to 60 times greater than the associated crawl space and outdoor air concentration. These results indicate that there is an indoor source for these detections of 1,4-dichlorobenzene and 1,2-dichloroethane in indoor air at the private residence.

4.0 CONCLUSIONS

Based on the sampling results from the soil vapor intrusion investigation at the PRSC, the following conclusions were developed:

- A total of 29 VOCs were detected in indoor air collected at the PRSC.
- None of the VOC detections in indoor air exceeded the NYSDOH Air Guideline Values. Based on the NYSDOH matrices, no further action is warranted at the PRSC.
- All sample results for indoor air were less than or within the acceptable USEPA Target Risk Range and less than the Hazard Index of 1.0
- A total of 23 VOCs were detected in indoor air at concentrations less than the USEPA Carcinogenic Target Risk Value of $1X10^{-6}$ and less than the Hazard Index of 1.0; these constituents were screened out from further evaluation
- Six VOCs (benzene, 1,4-dichlorobenzene, 1,2-dichloroethane, methylene chloride, chloroform, and carbon tetrachloride) were detected within the acceptable USEPA Carcinogenic Risk Range for residential air ($1X10^{-6}$ to $1X10^{-4}$).
- Of these six VOCs, four were also detected in the outdoor ambient air sample (benzene, 1,2-dichloroethane, methylene chloride, and carbon tetrachloride).
- Since the concentrations in the crawl space or sub-slab samples were either not detected or lower than the concentrations detected in the indoor air samples for these six VOCs these compounds appear to result from indoor and/or ambient sources and not from soil vapor intrusion.

REFERENCES

New York State Department of Health (NYSDOH), 2006. Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York. October.

United States Environmental Protection Agency (USEPA), 1999. Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air Second Edition Compendium Method TO-15 Determination Of Volatile Organic Compounds (VOCs) In Air Collected In Specially- Prepared Canisters And Analyzed By Gas Chromatography/ Mass Spectrometry (GC/MS). January.

United States Environmental Protection Agency (USEPA), 2010. Regional Screening Levels (RSLs), Resident Air Supporting Table. May.

Tetra Tech NUS (TtNUS), 2011. Soil Vapor Intrusion Investigation Work Plan (Peconic River Sportsman Club). January.

TABLES

Table 2-1
Sample Summary
Soil Vapor Intrusion Investigation
Peconic River Sporstman's Club (PRSC)
NWIRP Calverton, New York

LOCATION	SAMPLE ID	SAMPLE TYPE	VOCs-TO15[1]
Main Lodge	CA-PRSC-ML-SSB-01	SUBSLAB	X
	CA-PRSC-ML-SSB-02	SUBSLAB	X
	CA-PRSC-ML-INDB-01	BASEMENT	X
	CA-PRSC-ML-INDB-02	BASEMENT	X
	CA-PRSC-ML-INDL-01	LIVING SPACE	X
	CA-PRSC-ML-INDL-02	LIVING SPACE	X
	CA-PRSC-ML-INDL-03	LIVING SPACE	X
	CA-PRSC-ML-CRL-01	CRAWL SPACE	X
	CA-PRSC-ML-CRL-02	CRAWL SPACE	X
	CA-PRSC-ML-CRL-03	CRAWL SPACE	X
Activity Center	CA-PRSC-AC-INDL-01	LIVING SPACE	X
	CA-PRSC-AC-INDL-02	LIVING SPACE	X
	CA-PRSC-AC-CRL-01	CRAWL SPACE	X
Residence	CA-PRSC-RE-INDL-01	LIVING SPACE	X
	CA-PRSC-RE-CRL-01	CRAWL SPACE	X
Outdoor	CA-PRSC-ODA-01	OUTDOOR	X

Notes:
VOCs: Volatile Organic Compounds (Site specific compound list).
[1] 21-Day results from Navy-approved laboratory via method TO-15
AC - Activity Center
CRL - crawl space sample
INDB - Indoor air basement
INDL - Indoor Air Living Space
ML - Main Lodge
ODA - outdoor air
RE - Residence
SSB - sub-slab sample

Table 3-1
Analytical Summary - Main Lodge
Soil Vapor Intrusion Investigation
Peconic River Sportsman's Club (PRSC)
NWIRP Calverton, New York

	USEPA Regional Screening Levels (Residential Air)[1]			NYSDOH Air Guideline Values[2] ($\mu g/m^3$)	Outdoor Air	Main Lodge					Main Lodge - CRL				Main Lodge - SSB		
VOC ($\mu g/m^3$)	Carcinogenic Target Risk ($1x10^{-6}$)	Carcinogenic Target Risk ($1x10^{-4}$)	Noncancer Hazard Index		CA-PRSC-ODA-01	CA-PRSC-ML-INDL-01	CA-PRSC-ML-INDL-02	CA-PRSC-ML-INDL-03	CA-PRSC-ML-INDB-01	CA-PRSC-ML-INDB-02	CA-PRSC-ML-CRL-01	CA-PRSC-ML-CRL-01 DUP	CA-PRSC-ML-CRL-02	CA-PRSC-ML-CRL-03	CA-PRSC-ML-SSB-01	CA-PRSC-ML-SSB-01 DUP	CA-PRSC-ML-SSB-02
1,1-Dichloroethene	NE	NE	210	NE		0.036 J											
1,1-Dichloroethane	1.5	150	NE	NE	0.014 J	0.013 J				0.018 J				0.015 J	0.013 J	0.013 J	
cis-1,2-Dichloroethene	NE	NE	NE	NE											0.028 J		
trans-1,2-Dichloroethene	NE	NE	63	NE		0.026 J											
1,1,1-Trichloroethane	NE	NE	5,200	100 *	0.038 J	0.20	0.041 J	0.049 J	0.051 J	0.036 J	0.055 J	0.046 J	0.050 J	0.054 J	0.050 J	0.047 J	0.041 J
Benzene	0.31	31	31	NE	**0.43**	**0.41**	**0.42**	**0.39**	**0.37**	**0.41**	0.54	0.56	0.42	0.52	0.37	0.37	0.59
1,2-Dichloroethane	0.094	9.4	2,500	NE	0.045 J	**0.11 J**	0.039 J	0.042 J	0.050 J	0.042 J	0.053 J	0.056 J	0.054 J	0.033 J	0.052 J	0.041 J	0.037 J
Trichloroethene	1.2	120	NE	5		0.017 J	0.058 J	0.10 J			0.044 J	0.038 J	0.10 J	0.046 J			0.029 J
Toluene	NE	NE	5,200	NE	0.30	2.8	1.3	0.78	0.61	0.61	2.7	2.5	0.59	2.6	30	29	1.40
Tetrachloroethene	0.41	41	280	100	0.042 J	0.12 J	0.088 J	0.070 J	0.14 J	0.041 J	0.22	0.19	0.11 J	0.10 J	0.18 J	0.17 J	0.10 J
Chloromethane	NE	NE	94	NE	0.95	0.98	0.91	0.82	0.70	0.79	0.80	0.87	0.77	0.73		0.26 J	0.28 J
Freon 12 (Dichlorofluoromethane)	NE	NE	210	NE	2.0	2.1	1.7	2.0	2.1	2.0	2.2	1.9	2.1	1.6	1.9	1.9	1.8
Freon 11 (trichloromonofluoromethane)	NE	NE	730	NE	1.20	1.3	1.1	0.98 J	1.2	1.2	1.1	1.0	1.1	1.2	1.2	1.1	1.1
Ethanol	NE	NE	NE	NE	1.1 J	210 J	120 J	35	23	4.70	21	2.0	24	9.5	8.9	10	16
Freon 113 (1,1,2-trichlorotrifluoroethane)	NE	NE	31000	NE	0.58 J	0.56 J	0.54 J	0.39 J	0.54 J	0.41 J	0.43 J	0.36 J	0.32 J	0.48 J	0.39 J	0.41 J	0.40 J
Methylene Chloride	5.2	520	1100	60	0.42 J	0.43 J	**13**	**14**	0.89 J	**6.40**	0.41 J	1.4	4.5	4.9	0.60 J	0.52 J	6.20
Hexane	NE	NE	730	NE	0.12 J	0.29 J	0.27 J	0.23 J	0.41 J	0.14 J	0.23 J	0.35 J	0.14 J	0.57	0.22 J		0.28 J
2-Butanone (Methyl Ethyl Ketone)	NE	NE	5200	NE	1.2	3.5	0.94	0.59	1.0	0.85	1.2	1.3	0.57	2.7	4.4	4.9	6.3
Chloroform	0.11	11	100	NE		**0.33 J**									0.21 J	0.26 J	
Cyclohexane	NE	NE	6300	NE		0.28 J								0.24 J			
Carbon Tetrachloride	0.41	41	100	5 *	**0.42 J**	**0.48 J**	**0.55 J**		0.40 J	**0.50 J**		0.38 J	0.49 J	0.40 J			0.61 J
4-Methyl-2-pentanone	NE	NE	3100	NE		0.94		0.17 J	0.23 J	0.35 J	0.18 J		0.30 J	0.26 J	0.26 J	0.31 J	0.26 J
Styrene	NE	NE	1000	NE			0.61 J										0.18 J
1,3,5-Trimethylbenzene	NE	NE	NE	NE				0.10 J	0.082 J		0.32 J	0.23 J			0.22 J	0.24 J	
1,2,4-Trimethylbenzene	NE	NE	7.3	NE			0.73						0.25 J	0.28 J			0.59 J
Ethyl Benzene	0.97	97	1000	NE	0.068 J	0.41	0.15	0.10 J	0.13 J	0.069 J	0.65	0.56	0.092 J	0.35	0.250	0.230	0.31
m,p-Xylene	NE	NE	730	NE		1.4	0.43		0.38		2	1.8	0.29	0.90	0.86	0.84	1.0
o-Xylene	NE	NE	730	NE		0.37			0.12 J		0.62	0.54	0.12 J	0.28	0.280	0.280	0.46
Methyl tert-butyl ether	9.4	940	NE	NE													0.022 J
1,3-Dichlorobenzene	NE	NE	NE	NE											0.24 J		0.46 J

Notes:
Bold - Indoor air concentration is within the Carcinogenic Target Risk Range of $1x10^{-6}$ to $1x10^{-4}$ for residential air
Shaded - indoor air concentration is within the USEPA Target Risk Range, but greater than outdoor air concentrations
Blank cell - Chemical not detected above reporting limit.
[1] United State Environmental Protection Agency (USEPA) Regional Screening Levels (RSLs) - Residential Air
Supporting Table, November 2010 (in µg/m3). (Carcinogenic Target Risk [TR]=1E-06 and 1E-04, Noncancer Hazard Index [HI]=1)
[2] New York State Department of Health (NYSDOH), 2006. Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York. October.
* - Value derived from NYSDOH Matrices
CRL - Crawl Space Sample
SSB - Sub-Slab Soil Vapor
DUP - Duplicate Air Sample
INDB - Indoor Air Sample - Basement
INDL - Indoor Air Sample - Living Space
NE - Not Established
ODA - Outdoor Air Sample
VOC - Volatile Organic Compound
$\mu g/m^3$ - Microgram per meter cubed

Table 3-2
Analytical Summary - Activity Center
Soil Vapor Intrusion Investigation
Peconic River Sportsman's Club (PRSC)
NWIRP Calverton, New York

	USEPA Regional Screening Levels (Residential Air)[1]			NYSDOH Air Guideline Values[2]	Outdoor Air	Activity Center		
VOC (µg/m^3)	Carcinogenic Target Risk ($1x10^{-6}$)	Carcinogenic Target Risk ($1x10^{-4}$)	Noncancer Hazard Index	(µg/m^3)	CA-PRSC-ODA-01	CA-PRSC-AC-INDL-01	CA-PRSC-AC-INDL-02	CA-PRSC-AC-CRL-01
1,1-Dichloroethene	NE	NE	210	NE		0.028 J		
1,1-Dichloroethane	1.5	150	NE	NE	0.014 J	0.011 J		0.037 J
1,1,1-Trichloroethane	NE	NE	5,200	100 *	0.038 J	0.044 J	0.036 J	0.037 J
Benzene	0.31	31	31	NE	**0.43**	***0.60***	***0.93***	0.56
1,2-Dichloroethane	0.094	9.4	2,500	NE	0.045 J	0.05 J	0.045 J	0.042 J
Trichloroethene	1.2	120	NE	5		0.12 J	0.042 J	0.067 J
Toluene	NE	NE	5,200	NE	0.30	1.0	2.3	2.5
Tetrachloroethene	0.41	41	280	100	0.042 J	0.074 J	0.074 J	0.19 J
Chloromethane	NE	NE	94	NE	0.95	0.8	0.86	0.61
Freon 12 (Dichlorofluoromethane)	NE	NE	210	NE	2.0	2.0	1.9	1.9
Freon 11 (trichloromonofluoromethane)	NE	NE	730	NE	1.20	1.1	1.1	1.0
Ethanol	NE	NE	NE	NE	1.1 J	2.0	2.60	2.50
Freon 113 (1,1,2-trichlorotrifluoroethane)	NE	NE	31000	NE	0.58 J	0.47 J	0.40 J	0.50 J
Methylene Chloride	5.2	520	1100	60	0.42 J	0.47 J	0.41 J	0.44 J
Hexane	NE	NE	730	NE	0.12 J	0.94	2.0	0.67
2-Butanone (Methyl Ethyl Ketone)	NE	NE	5200	NE	1.2	0.76	0.66	0.89
Chloroform	0.11	11	100	NE		**0.15 J**		
Cyclohexane	NE	NE	6300	NE		0.52 J	1.3	0.21 J
Carbon Tetrachloride	0.41	41	100	5 *	**0.42 J**	0.40 J		
4-Methyl-2-pentanone	NE	NE	3100	NE			0.16 J	
1,3,5-Trimethylbenzene	NE	NE	NE	NE				0.22 J
Ethyl Benzene	0.97	97	1000	NE	0.068 J	0.2	0.39	0.53
m,p-Xylene	NE	NE	730	NE		0.58	1.2	1.60
o-Xylene	NE	NE	730	NE		0.19	0.41	0.50
Methyl tert-butyl ether	9.4	940	NE	NE				0.029 J

Notes:

Bold - Indoor air concentration is within the Carcinogenic Target Risk Range of $1x10^{-6}$ to $1x10^{-4}$ for residential air

Shaded - indoor air concentration is within the USEPA Target Risk Range, but greater than outdoor air concentrations

Blank cell - Chemical not detected above reporting limit.

[1] United State Environmental Protection Agency (USEPA) Regional Screening Levels (RSLs) - Residential Air Supporting Table, November 2010 (in µg/m3). (Carcinogenic Target Risk [TR]=1E-06 and 1E-04, Noncancer Hazard Index [HI]=1)

[2] New York State Department of Health (NYSDOH), 2006. Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York. October.

* - Value derived from NYSDOH Matrices

CRL - Crawl Space Sample
DUP - Duplicate Air Sample
INDB - Indoor Air Sample - Basement
INDL - Indoor Air Sample - Living Space
NE - Not Established
ODA - Outdoor Air Sample
VOC - Volatile Organic Compound
µg/m^3 - Microgram per meter cubed

Table 3-3
Analytical Summary - Private Residence
Soil Vapor Intrusion Investigation
Peconic River Sportsman's Club (PRSC)
NWIRP Calverton, New York

	USEPA Regional Screening Levels (Residential Air)[1]			NYSDOH Air Guideline Values[2] ($\mu g/m^3$)	Outdoor Air	Private Residence		
VOC ($\mu g/m^3$)	**Carcinogenic Target Risk ($1x10^{-6}$)**	**Carcinogenic Target Risk ($1x10^{-4}$)**	**Noncancer Hazard Index**		**CA-PRSC-ODA-01**	**CA-PRSC-RE-INDL-01**	**CA-PRSC-RE-INDL-01 DUP**	**CA-PRSC-RE-CRL-01**
1,4-Dichlorobenzene	0.22	22	830	NE		**3.3**	**4.8**	0.26 J
1,1-Dichloroethane	1.5	150	NE	NE	0.014 J		0.011 J	
1,1,1-Trichloroethane	NE	NE	5,200	100 *	0.038 J	0.076 J	0.038 J	0.043 J
Benzene	0.31	31	31	NE	**0.43**	**0.97**	**0.94**	0.64
1,2-Dichloroethane	0.094	9.4	2,500	NE	0.045 J	**2.8**	**3.2**	0.069 J
Trichloroethene	1.2	120	NE	5		0.043 J	0.020 J	0.070 J
Toluene	NE	NE	5,200	NE	0.30	2.1	2.2	4.2
Tetrachloroethene	0.41	41	280	100	0.042 J	0.052 J	0.053 J	0.31
Chloromethane	NE	NE	94	NE	0.95	1.6	1.7	0.69
Freon 12 (Dichlorofluoromethane)	NE	NE	210	NE	2.0	2.0	2.3	2.0
Freon 11 (trichloromonofluoromethane)	NE	NE	730	NE	1.20	1.2	1.5	1.1
Ethanol	NE	NE	NE	NE	1.1 J	49	51	3.3
Freon 113 (1,1,2-trichlorotrifluoroethane)	NE	NE	31000	NE	0.58 J	0.38 J	0.43 J	0.48 J
Methylene Chloride	5.2	520	1100	60	0.42 J	0.39 J	0.46 J	0.34 J
Hexane	NE	NE	730	NE	0.12 J	0.45 J	0.50 J	0.47 J
2-Butanone (Methyl Ethyl Ketone)	NE	NE	5200	NE	1.2	0.86	0.93	2.0
Cyclohexane	NE	NE	6300	NE				0.19 J
Carbon Tetrachloride	0.41	41	100	5 *	**0.42 J**			
1,3,5-Trimethylbenzene	NE	NE	NE	NE				0.42 J
Ethyl Benzene	0.97	97	1000	NE	0.068 J	0.23	0.27	0.98
m,p-Xylene	NE	NE	730	NE		0.56	0.62	3.3
o-Xylene	NE	NE	730	NE		0.17	0.17	1
Methyl tert-butyl ether	9.4	940	NE	NE				0.014 J
Hexachlorobutadiene	0.11	11	NE	NE				

Notes:

Bold - Indoor air concentration is within the Carcinogenic Target Risk Range of $1x10^{-6}$ to $1x10^{-4}$ for residential air

Shaded - indoor air concentration is within the USEPA Target Risk Range, but greater than outdoor air concentrations

Blank cell - Chemical not detected above reporting limit.

[1] United State Environmental Protection Agency (USEPA) Regional Screening Levels (RSLs) - Residential Air Supporting Table, November 2010 (in µg/m3). (Carcinogenic Target Risk [TR]=1E-06 and 1E-04, Noncancer Hazard Index [HI]=1)

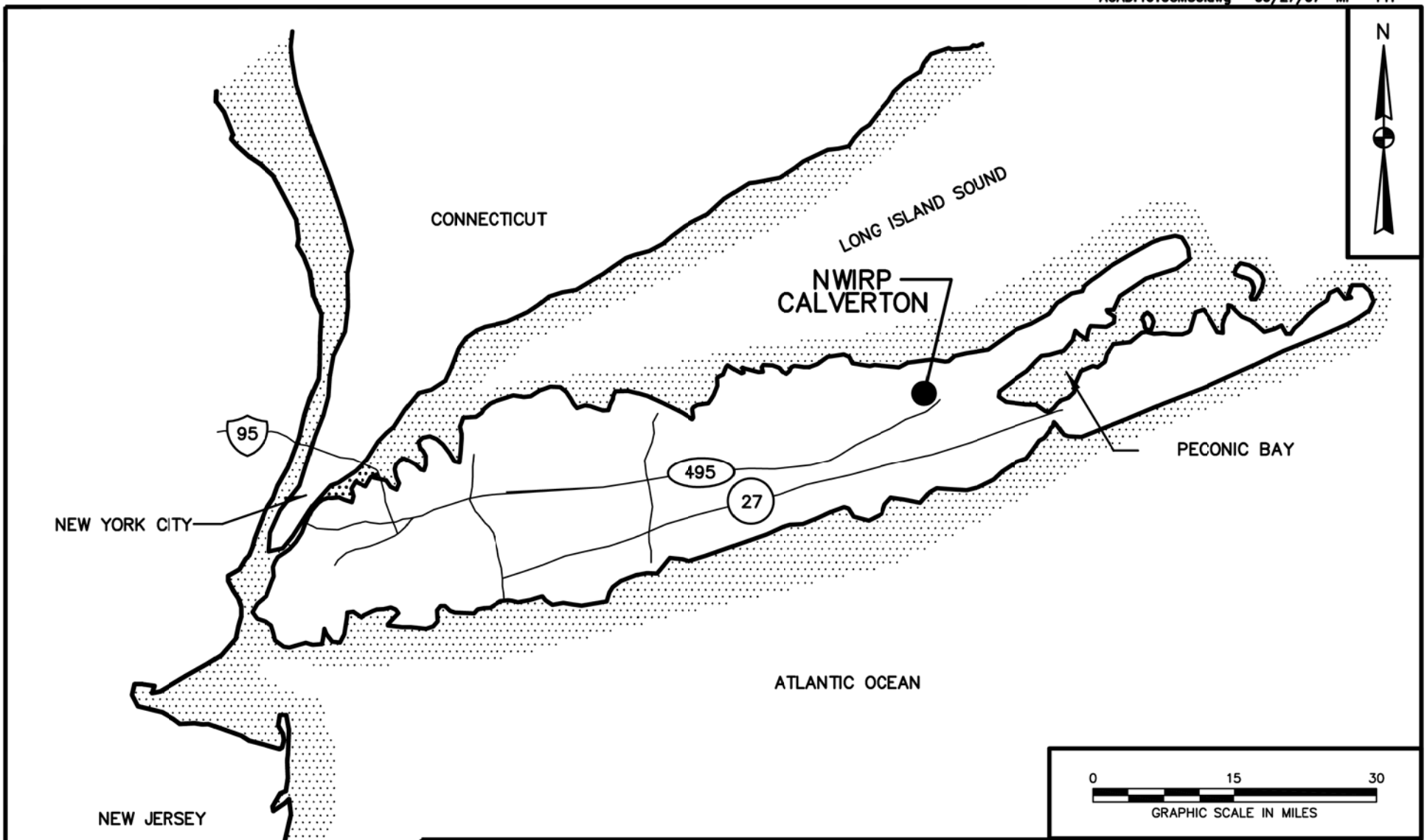
[2] New York State Department of Health (NYSDOH), 2006. Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York. October.

* - Value derived from NYSDOH Matrices

CRL - Crawl Space Sample
DUP - Duplicate Air Sample
INDB - Indoor Air Sample - Basement
INDL - Indoor Air Sample - Living Space
NE - Not Established
ODA - Outdoor Air Sample
VOC - Volatile Organic Compound
$\mu g/m^3$ - Microgram per meter cubed

FIGURES

ACAD:1610CM30.dwg 06/27/07 MF PIT



DRAWN BY MF	DATE 6/27/07	Tetra Tech NUS, Inc.	GENERAL LOCATION MAP NWIRP CALVERTON, NEW YORK
CHECKED BY	DATE		
REVISED BY	DATE		
SCALE AS NOTED			

CONTRACT NO. 0804	
OWNER NO.	
APPROVED BY	DATE
DRAWING NO. FIGURE 1	REV. 0

FORM CADD NO. TTNUS-AH.DWG - REV 1 -9/10/98

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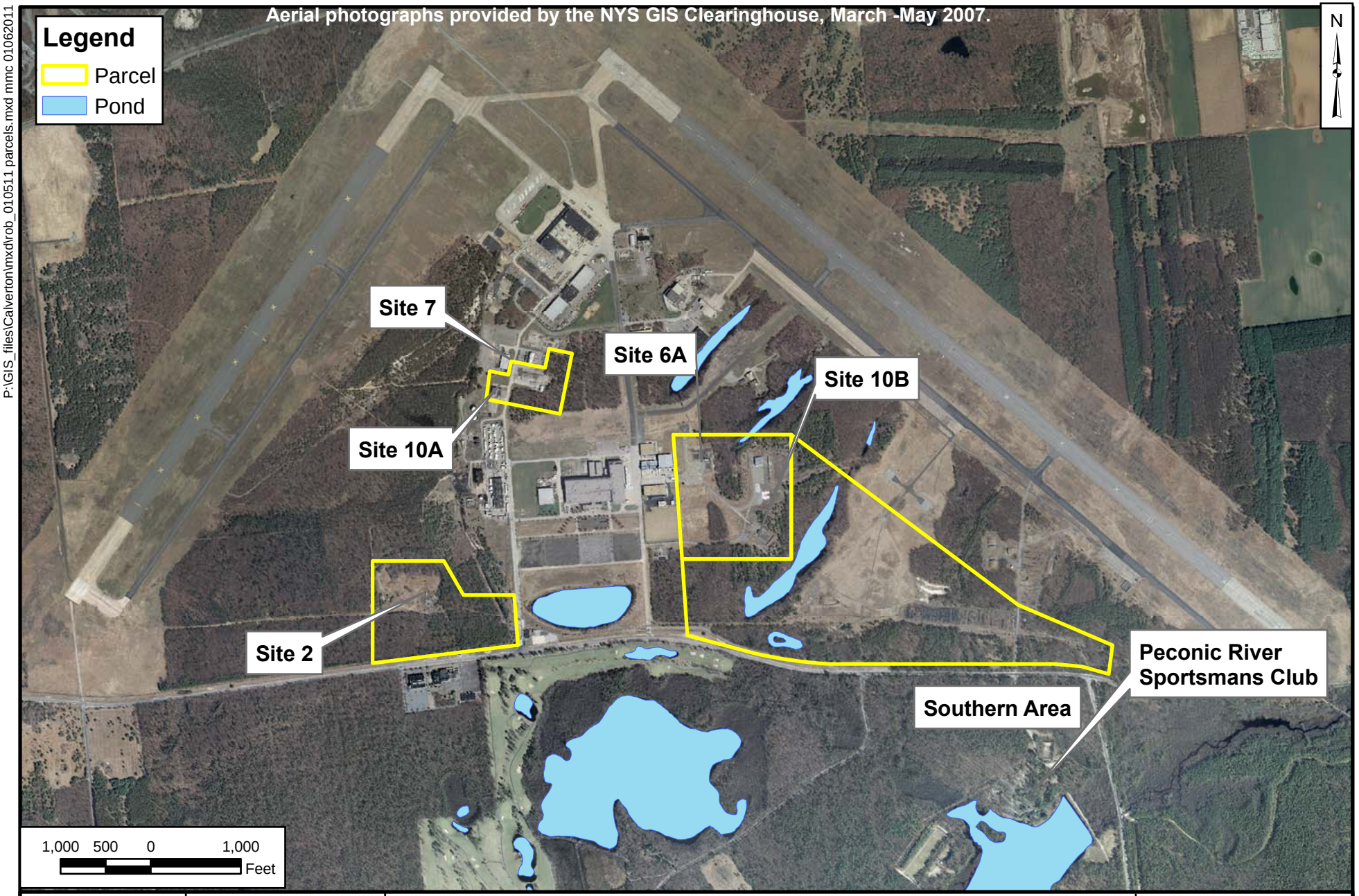


DRAWN BY M. CUSHING	DATE 1/6/11	TETRA TECH	CONTRACT NUMBER 112G01655
CHECKED BY ___	DATE ___	**SITE LOCATION MAP**	APPROVED BY ___ DATE 1/6/11
REVISED BY ___	DATE ___	**NWIRP Calverton, New York**	APPROVED BY ___ DATE ___
SCALE AS NOTED			FIGURE NO. 2 REV 0

Aerial photographs provided by the NYS GIS Clearinghouse, March -May 2007.
N
CA-PRSC-ODA-01
Activity Center
Storage Shed
CA-PRSC-AC-INDL-01
CA-PRSC-RE-INDL-01
CA-PRSC-RE-CRL-01
CA-PRSC-AC-CRL-01
Residence
CA-PRSC-AC-INDL-02
Main Lodge
CA-PRSC-ML-CRL-02
CA-PRSC-ML-INDB-02
CA-PRSC-ML-SSB-02
CA-PRSC-ML-SSB-01
CA-PRSC-ML-INDL-01
CA-PRSC-ML-CRL-01
CA-PRSC-ML-INDL-03
[SEE FIGURE 4]
CA-PRSC-ML-CRL-03
CA-PRSC-ML-INDL-02
CA-PRSC-ML-INDB-01
Legend
Sample Location
Buildings
0
50
100
Feet
SCALE IN FEET
TETRA TECH NUS, INC
PECONIC RIVER SPORTSMANS CLUB
SOIL VAPOR INVESTIGATION
SAMPLE LOCATIONS
NWIRP CALVERTON, NEW YORK
FILE
SCALE
AS NOTED
FIGURE NO.
3
REV
DATE
4/21/11
P:\GIS_files\Calverton\MapDocs\MXD\PRSC PRSC_110210.mxd created 04212011 MMC

P:\GIS_files\Calverton\MapDocs\MXD\PRSC PRSC_010411_zoom.mxd created 04202011 MMC

TETRA TECH NUS, INC

PECONIC RIVER SPORTSMANS CLUB
SOIL VAPOR INVESTIGATION
MAIN LODGE
SAMPLE LOCATIONS
NWIRP CALVERTON, NEW YORK

FILE	SCALE AS NOTED
FIGURE NO. 4	REV / DATE 4/20/11

APPENDIX A

NYSDOH QUESTIONNAIRES

JCR-3

Main Lodge

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

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

Preparer's Name Robert Sok Date/Time Prepared 2-15-11 @ 1400

Preparer's Affiliation Tetra Tech Phone No. 757-466-4904

Purpose of Investigation Soil Vapor Investigation - PRSC

1. OCCUPANT:

Interviewed: Y / (N)

Last Name: Schuman First Name: Paul

Address: 389 River Road Manorville, NY 11949

County: Suffolk

Home Phone: NA Office Phone: 631-727-5248

Number of Occupants/persons at this location 1 Age of Occupants Unknown

* Apartment in western portion of Main Lodge for PRSC Manager

2. OWNER OR LANDLORD: (Check if same as occupant ___)

Interviewed: (Y) / N

Last Name: Daniels First Name: Dean (PRSC Maintenance)

Address: 389 River Road Manorville, NY 11949

County: Suffolk

Home Phone: NA Office Phone: 631-727-5248

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

(Residential) School (Commercial/Multi-use)
Industrial Church Other: Peconic River Sportsman Club
Multi-use club / Residential

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

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

★ See sketch maps

If multiple units, how many? _____

If the property is commercial, type?

Business Type(s) Sportsman Club

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

If yes, how many? ~~2~~ ① Main Lodge apartment ② Onsite Residence

Other characteristics:

Number of floors 1

Building age ~ 1920's

Is the building insulated? (Y) N

How air tight? Tight / (Average) / Not Tight

4. AIRFLOW

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

Airflow between floors

Hot air circulation → up from basement

Airflow near source

NA

Outdoor air infiltration

Older doors & windows → infiltration likely

Infiltration into air ducts

? duct integrity

(15-20yrs, New boiler)

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

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

j. Sump present? Y / N Mutiple sumps (3 total)

k. Water in sump? Y / N / not applicable

Basement/Lowest level depth below grade: 8 (feet)

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

Several potential entry points → See sketch map for some locations

NE corner → water lines come into basement

* Sumps in both basement areas

Boiler room #1 (western) → Power enters there

* Cracks & holes observed throughout basement floor (high water table - basement gets some flooding)

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

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

Hot air circulation	Heat pump	Hot water baseboard	
Space Heaters	Stream radiation	Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	Other _____

The primary type of fuel used is:

Natural Gas	Fuel Oil	Kerosene
Electric	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: _____

Boiler/furnace located in: Basement x2 Outdoors Main Floor Other _____

Air conditioning: Central Air Window units Open Windows None

board room & temp rooms & apartment?

Are there air distribution ducts present? (Y) / N

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

Ductwork in good condition where visable

7. OCCUPANCY

Is basement/lowest level occupied? Full-time Occasionally (Seldom) Almost Never

2-3 times a year

Level	**General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)**
Basement	Boiler rooms & storage
1st Floor	Meeting room (Elephant), board room, 2x kitchens, storage, bedrooms (4) + residence → Paul's Apt
2nd Floor	
3rd Floor	
4th Floor	

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? Y / (N)

b. Does the garage have a separate heating unit? Y / N (NA)

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) Y / N / (NA) Please specify _____

d. Has the building ever had a fire? Y / (N) When? _____

e. Is a kerosene or unvented gas space heater present? Y / (N) Where? _____

f. Is there a workshop or hobby/craft area? Y (N) Where & Type? _____

g. Is there smoking in the building? Y (N) How frequently? _____

h. Have cleaning products been used recently? ? (Y) N When & Type? typical household cleaners bleach / Air fresheners / carpet cleaners etc.

i. Have cosmetic products been used recently? Y (N) When & Type? _____

j. Has painting/staining been done in the last 6 months? (Y) / N Where & When? white room back kitchen

k. Is there new carpet, drapes or other textiles? Y / (N) Where & When? _____

l. Have air fresheners been used recently? (Y) / N When & Type? _____

m. Is there a kitchen exhaust fan? (Y) / N If yes, where vented? Both

n. Is there a bathroom exhaust fan? (Y) / N If yes, where vented? near front door

o. Is there a clothes dryer? Y / (N) If yes, is it vented outside? Y / N

p. Has there been a pesticide application? (Y) / N When & Type? Bait traps

Are there odors in the building? Y / (N)
If yes, please describe: _____

Do any of the building occupants use solvents at work? Y / N Unknown (700 members)
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? Y / N

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly) (No)
Yes, use dry-cleaning infrequently (monthly or less) Unknown
Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y / (N) Date of Installation: _____
Is the system active or passive? Active/Passive

9. WATER AND SEWAGE

Water Supply: Public Water (Drilled Well) Driven Well Dug Well Other: _____

Sewage Disposal: Public Sewer (Septic Tank) Leach Field Dry Well Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: Not Applicable

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

c. Responsibility for costs associated with reimbursement explained? Y / N

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

11. FLOOR PLANS

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

Basement:

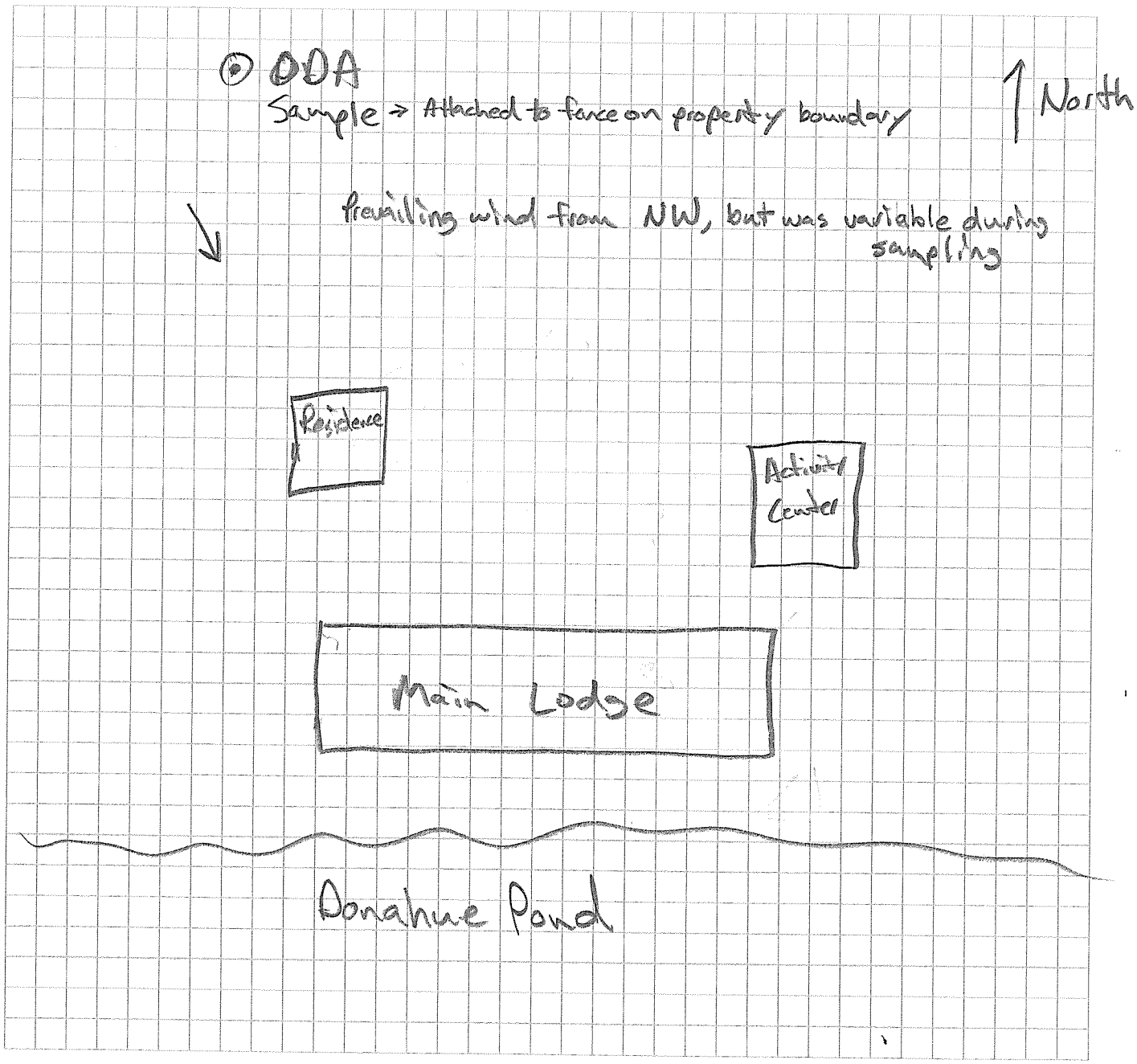
SEE FIELD LOG BOOK - (Scanned versions of maps are attached) Original Sketch maps

First Floor:

12. OUTDOOR PLOT

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

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



13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: Mini Rae 2000

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

Location Main Lodge	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo** Y / N
Western Basement	Paint	1 Gallon Cans	U - most all cans	(40+ cans of paint) several brands	NA	N
Storage	Kem-Brite Brunswick	1 gallon	U			
	Cer Lac (? thinner)	1 Gallon	U			
	Concrete Etcher (Behr)	1 gallon	U			
	Joint compound	5 gal x 2	U			
	Concrete bonding agent	1 gallon	U			
	Vinyl adhesive	1 gallon	U			
	Paint thinner	2 gallons	UO to U			
	Stains - urethane wood stain	several used cans	U	(Minwax)		
	Super hide - latex paint	5 gallon	U			
	3M - Compublend II Base U	2 x 2 gal	U			
	IPC - SFOS (wetting Agent)	5 gal	U	Biodegradable / Non Toxic / Non-flammable or corrosive		
	3M - Compublend II Base R	2 gal	U			
	* Work being conducted in the kitchen (eastern side of club - first floor)					
	- Renovation work included wall patching that was ongoing during					
	sampling (using adhesives, patching compound, and possible primer paint)					
	Brunswick → lane cleaner	1 gal Jug	U			
	Brunswick → lane wax	5 gal	U			

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

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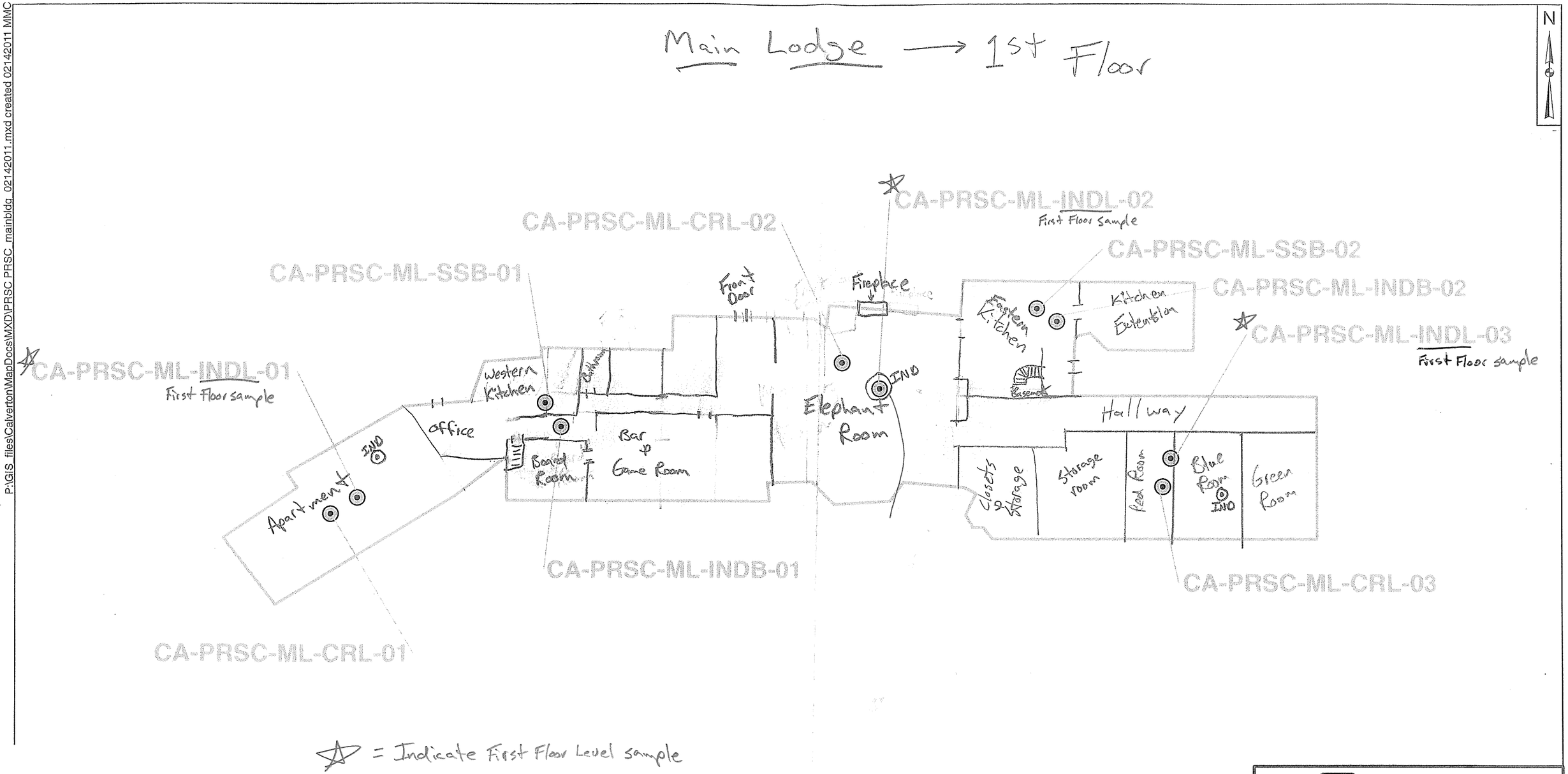
Main Lodge → 1st Floor



☆ = Indicate First Floor Level sample

0 25 50 Feet

1 in = 25 feet

TETRA TECH NUS, INC

PECONIC RIVER SPORTSMANS CLUB
SOIL VAPOR INVESTIGATION
PROPOSED SAMPLE LOCATIONS
MAIN LODGE
NWIRP CALVERTON, NEW YORK

FILE	SCALE AS NOTED
FIGURE NO. 5	REV / DATE 1/5/11

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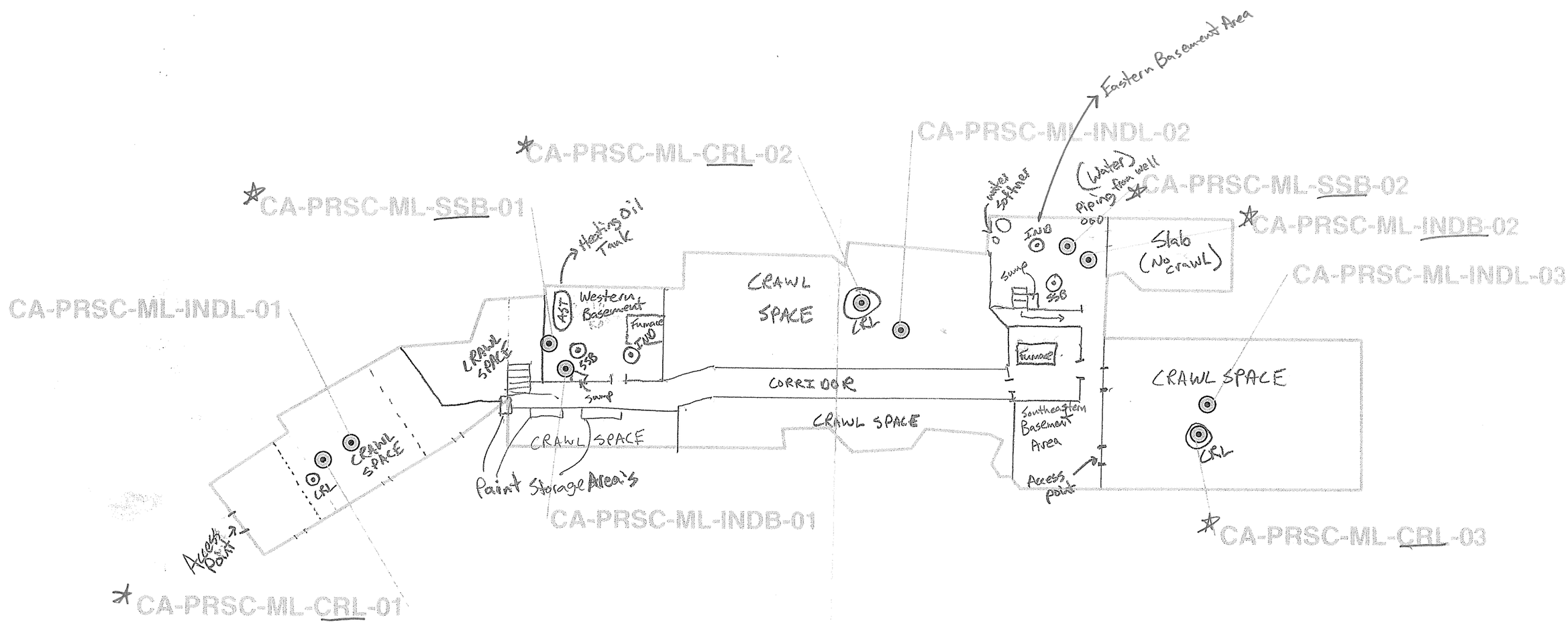
Main Lodge → Basement Level



☆ = Indicates basement level sample

0 25 50 Feet

1 in = 25 feet

TETRA TECH NUS, INC

PECONIC RIVER SRORTSMANS CLUB
SOIL VAPOR INVESTIGATION
PROPOSED SAMPLE LOCATIONS
MAIN LODGE
NWIRP CALVERTON, NEW YORK

FILE	SCALE AS NOTED
FIGURE NO. 5	REV / DATE 1/5/11

OSR – 3

Activity Center

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

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

Preparer's Name Robert Sok Date/Time Prepared 2/15/11 @ 1400

Preparer's Affiliation Tetra Tech Phone No. 757-466-4904

Purpose of Investigation Soil vapor Intrusion - PRSC

1. OCCUPANT: ☆ No occupants in Activity Center

Interviewed: (Y) N

Last Name: Daniels First Name: Dean

Address: 389 River Road Manorville, NY 11949

County: Suffolk

Home Phone: NA Office Phone: 631-727-5248

Number of Occupants/persons at this location Ø Age of Occupants NA

2. OWNER OR LANDLORD: (Check if same as occupant ___)

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

Residential	School	Commercial/Multi-use
Industrial	Church	Other: Indoor Archery Range Squash, game room (pool table, shuffleboard

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

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

If multiple units, how many? _____

If the property is commercial, type?

Business Type(s) Sportsman Club

Does it include residences (i.e., multi-use)? Y / N If yes, how many? _____

Other characteristics:

Number of floors 1 Building age 1935

Is the building insulated? Y / N How air tight? Tight / Average / Not Tight

4. AIRFLOW

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

Airflow between floors

Hot Air circulation → NA

Airflow near source

NA

Outdoor air infiltration

Older doors + windows

Infiltration into air ducts

? duct integrity

(10yrs → New boiler)

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

a. Above grade construction:	wood frame	concrete	stone	brick
b. Basement type:	full	crawlspace	slab squash court	other _____
c. Basement floor:	concrete	dirt	stone	other _____
d. Basement floor: NA	uncovered	covered	covered with _____	
e. Concrete floor: NA	unsealed	sealed	sealed with _____	
f. Foundation walls:	poured	block	stone	other _____
g. Foundation walls:	unsealed	sealed	sealed with _____	
h. The basement is: NA	wet	damp	dry	moldy
i. The basement is: NA	finished	unfinished	partially finished	
j. Sump present?	Y / N			
k. Water in sump?	Y / N / not applicable			

Basement/Lowest level depth below grade: 2 (feet)

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

Well room → water line from well

Heating Oil room → Power entrance

- Direct entry thru crawl space

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

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

Hot air circulation	Heat pump	Hot water baseboard	
Space Heaters	Stream radiation	Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	Other _____

The primary type of fuel used is:

Natural Gas	Fuel Oil	Kerosene
Electric	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: _____

Boiler/furnace located in:	Basement	Outdoors	Main Floor → near bathroom	Other_____
Air conditioning:	Central Air	Window units	Open Windows	None

Are there air distribution ducts present? Y / N

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

No visible ductwork

7. OCCUPANCY

Is basement/lowest level occupied? Full-time Occasionally Seldom Almost Never

Level	**General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)**
Basement	NA
1st Floor	Game room, Archery range, squash court, pump room, boiler room, bathroom
2nd Floor	
3rd Floor	
4th Floor	

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? Y / N

b. Does the garage have a separate heating unit? Y / N / NA

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) Y / N / NA Please specify_____

d. Has the building ever had a fire? Y / N When?_____

e. Is a kerosene or unvented gas space heater present? Y / N Where?_____

f. Is there a workshop or hobby/craft area? Y / N Where & Type?_____

g. Is there smoking in the building? Y / N How frequently?_____

h. Have cleaning products been used recently? Y / N When & Type?_____

i. Have cosmetic products been used recently? Y / N When & Type?_____

j. Has painting/staining been done in the last 6 months? Y / N Where & When? _____

k. Is there new carpet, drapes or other textiles? Y / N Where & When? _____

l. Have air fresheners been used recently? Y / N When & Type? bathroom _____

m. Is there a kitchen exhaust fan? NA Y / N If yes, where vented? _____

n. Is there a bathroom exhaust fan? Y / N If yes, where vented? _____

o. Is there a clothes dryer? Y / N If yes, is it vented outside? Y / N

p. Has there been a pesticide application? Y / N When & Type? _____
→ bait traps

Are there odors in the building? Y / N
If yes, please describe: _____

Do any of the building occupants use solvents at work? Y / N
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? Y / N

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly)
Yes, use dry-cleaning infrequently (monthly or less)
Yes, work at a dry-cleaning service
No
Unknown

Is there a radon mitigation system for the building/structure? Y / N Date of Installation: _____
Is the system active or passive? Active/Passive

9. WATER AND SEWAGE

Water Supply: Public Water Drilled Well Driven Well Dug Well Other: _____

Sewage Disposal: Public Sewer Septic Tank Leach Field Dry Well Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: _____

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

c. Responsibility for costs associated with reimbursement explained? Y / N

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

11. FLOOR PLANS

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

Basement:

NA

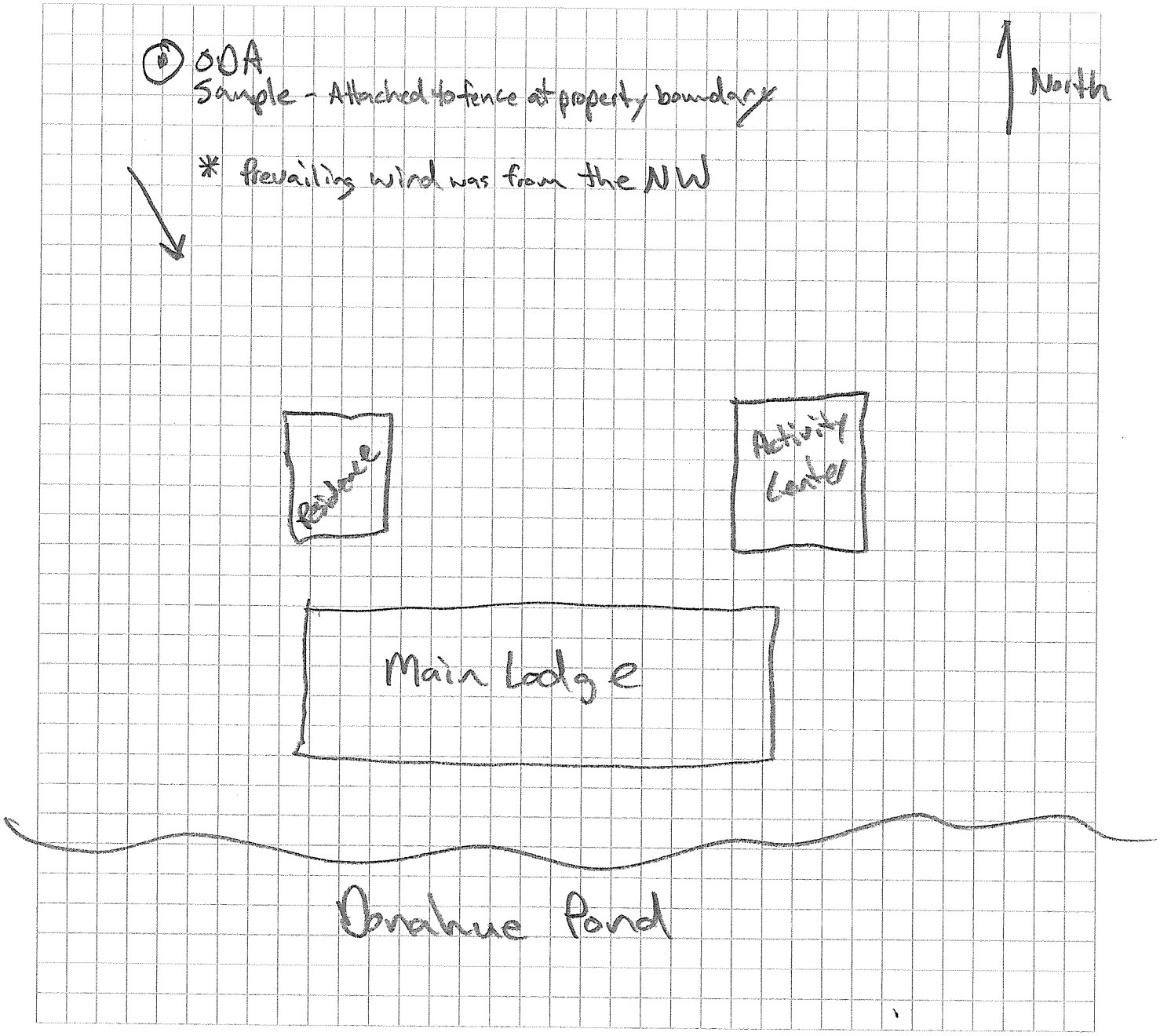
First Floor:

SEE Attached Sketch Map

12. OUTDOOR PLOT

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

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



13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: _____

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

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo** Y / N
Bathroom + storage room	* Only typical house hold cleaning products observed in the Activity Center					
+ sink area	Hand soaps					
↓	Air freshners	few cans	U			
	disinfectants (bowl cleaner, etc)					

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

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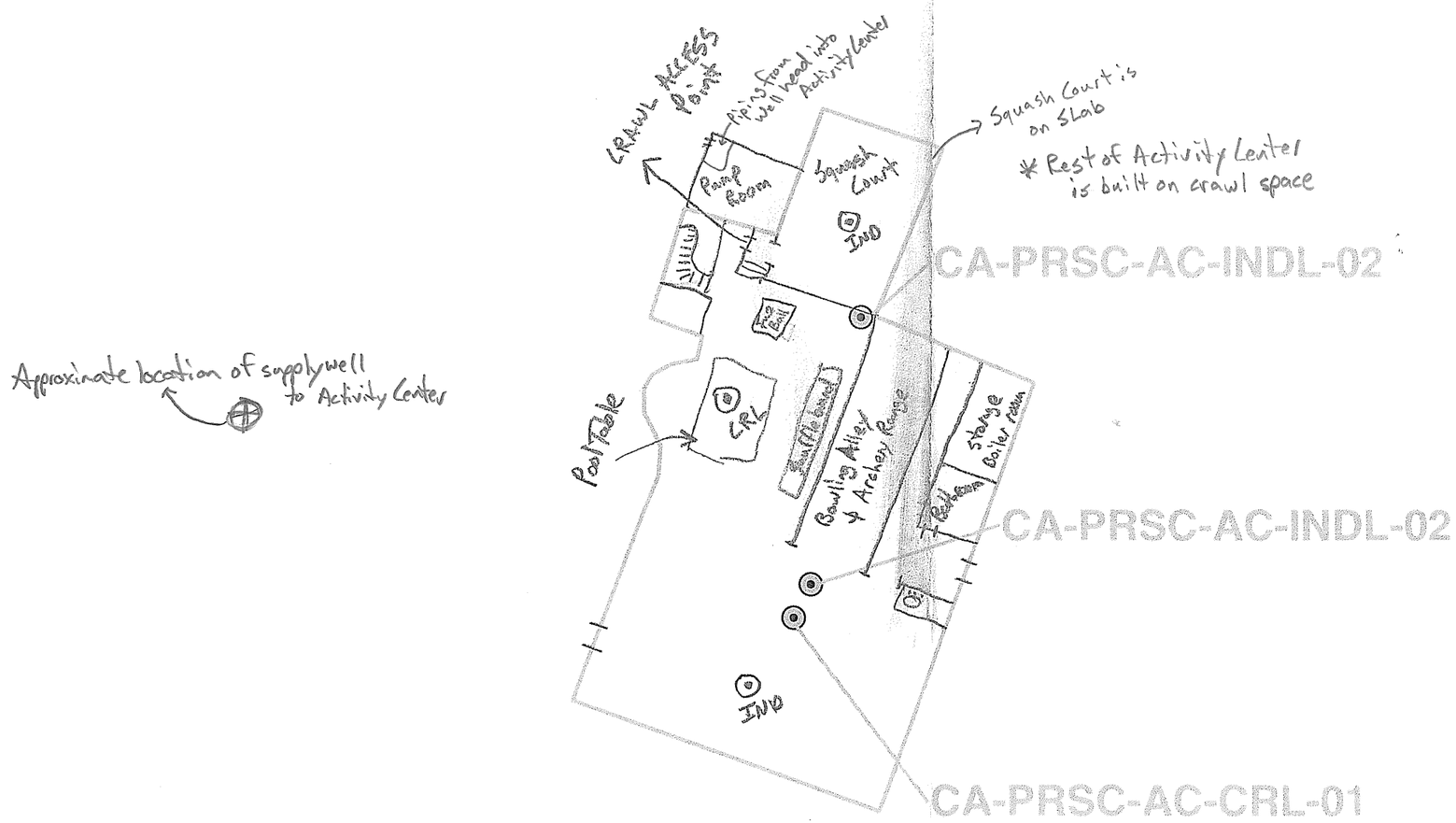
Activity Center



Legend

- Proposed Sample Location
- Buildings

0 25 50 Feet

SCALE IN FEET

1 in = 25 feet

TETRA TECH NUS, INC

PECONIC RIVER SPORTSMANS CLUB
SOIL VAPOR INVESTIGATION
PROPOSED SAMPLE LOCATIONS
NWIRP CALVERTON, NEW YORK

FILE	SCALE AS NOTED
FIGURE NO. 4	REV / DATE 2/14/11

Residence

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

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

Preparer's Name Robert Sok Date/Time Prepared 2/15/11 @ 1400

Preparer's Affiliation TetraTech Phone No. 757-466-4904

Purpose of Investigation Soil vapor Intrusion - PRSC

1. OCCUPANT:

Interviewed: (Y) / N (PRSC Maintenance/groundskeeper)

Last Name: Daniels First Name: Dean

Address: 389 River Road Manorville, NY 11949

County: Suffolk

Home Phone: NA Office Phone: 631-727-5248

Number of Occupants/persons at this location 1 Age of Occupants 49

2. OWNER OR LANDLORD: (Check if same as occupant ___)

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

(Residential) School Commercial/Multi-use
Industrial Church Other: _____

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

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

If multiple units, how many? 2

If the property is commercial, type?

Business Type(s) NA

Does it include residences (i.e., multi-use)? Y / N If yes, how many? _____

Other characteristics:

Number of floors 1 Building age Unknown (Was garage prior likely 1930's?)

Is the building insulated? Y / N How air tight? Tight / Average / Not Tight

4. AIRFLOW

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

Airflow between floors

NA

Airflow near source

NA

Outdoor air infiltration

Older Windows & Doors → some infiltration likely

Infiltration into air ducts

NA

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

a. Above grade construction:	wood frame	concrete	stone	brick
b. Basement type:	full	crawlspace	slab Garage + second unit	other _____
c. Basement floor:	concrete Slab	dirt crawl space	stone	other _____
d. Basement floor: NA	uncovered	covered	covered with _____	
e. Concrete floor: Slab	unsealed	sealed	sealed with _____	
f. Foundation walls:	poured	block	stone	other _____
g. Foundation walls:	unsealed	sealed	sealed with _____	
h. The basement is: NA	wet	damp	dry	moldy
i. The basement is: NA	finished	unfinished	partially finished	
j. Sump present? NA	Y / N			
k. Water in sump?	Y / N / not applicable			

Basement/Lowest level depth below grade: 0 (feet)

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

Entry points → Floor above crawl space
utilities → water lines, drain lines, hot water baseboard heating lines

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

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

Hot air circulation	Heat pump	Hot water baseboard	
Space Heaters	Stream radiation	Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	Other _____

The primary type of fuel used is:

Natural Gas	Fuel Oil	Kerosene
Electric	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: Fuel Oil

Boiler/furnace located in:	Basement	Outdoors	Main Floor Utility/ Laundry room	Other _____
Air conditioning:	Central Air	Window units 3 units	Open Windows	None

Are there air distribution ducts present? Y / N

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

NA

7. OCCUPANCY

Is basement/lowest level occupied? Full-time Occasionally Seldom Almost Never

Level	**General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)**
Basement	NA
1st Floor	bedroom, kitchen, storage Recessed utility room → laundry
2nd Floor	NA
3rd Floor	NA
4th Floor	NA

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? Y / N

b. Does the garage have a separate heating unit? Y / N / NA

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) Y / N / NA Please specify Mowers/car/tractor

d. Has the building ever had a fire? Y / N When?

e. Is a kerosene or unvented gas space heater present? Y / N Where?

f. Is there a workshop or hobby/craft area? Y / N Where & Type?

g. Is there smoking in the building? Y / N How frequently?

h. Have cleaning products been used recently? Y / N When & Type? lysol, bathroomcleaner resolve in living space yesterday

i. Have cosmetic products been used recently? Y / N When & Type?

j. Has painting/staining been done in the last 6 months? Y / N Where & When? _____

k. Is there new carpet, drapes or other textiles? Y / N Where & When? _____

l. Have air fresheners been used recently? Y / N When & Type? lysol, air freshener in bathroom

m. Is there a kitchen exhaust fan? Y / N If yes, where vented? _____

n. Is there a bathroom exhaust fan? Y / N If yes, where vented? _____

o. Is there a clothes dryer? In garage Y / N If yes, is it vented outside? Y / N

p. Has there been a pesticide application? Y / N When & Type? but mice (decon) used

Are there odors in the building? Y / N
If yes, please describe: _____

Do any of the building occupants use solvents at work? Y / N
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? Y / N

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly)
Yes, use dry-cleaning infrequently (monthly or less)
Yes, work at a dry-cleaning service

No
Unknown

Is there a radon mitigation system for the building/structure? Y / N Date of Installation: _____
Is the system active or passive? Active/Passive

9. WATER AND SEWAGE

Water Supply: Public Water Drilled Well Driven Well Dug Well Other: _____

Sewage Disposal: Public Sewer Septic Tank Leach Field Dry Well Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: NA

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

c. Responsibility for costs associated with reimbursement explained? Y / N

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

11. FLOOR PLANS

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

Basement:

NA

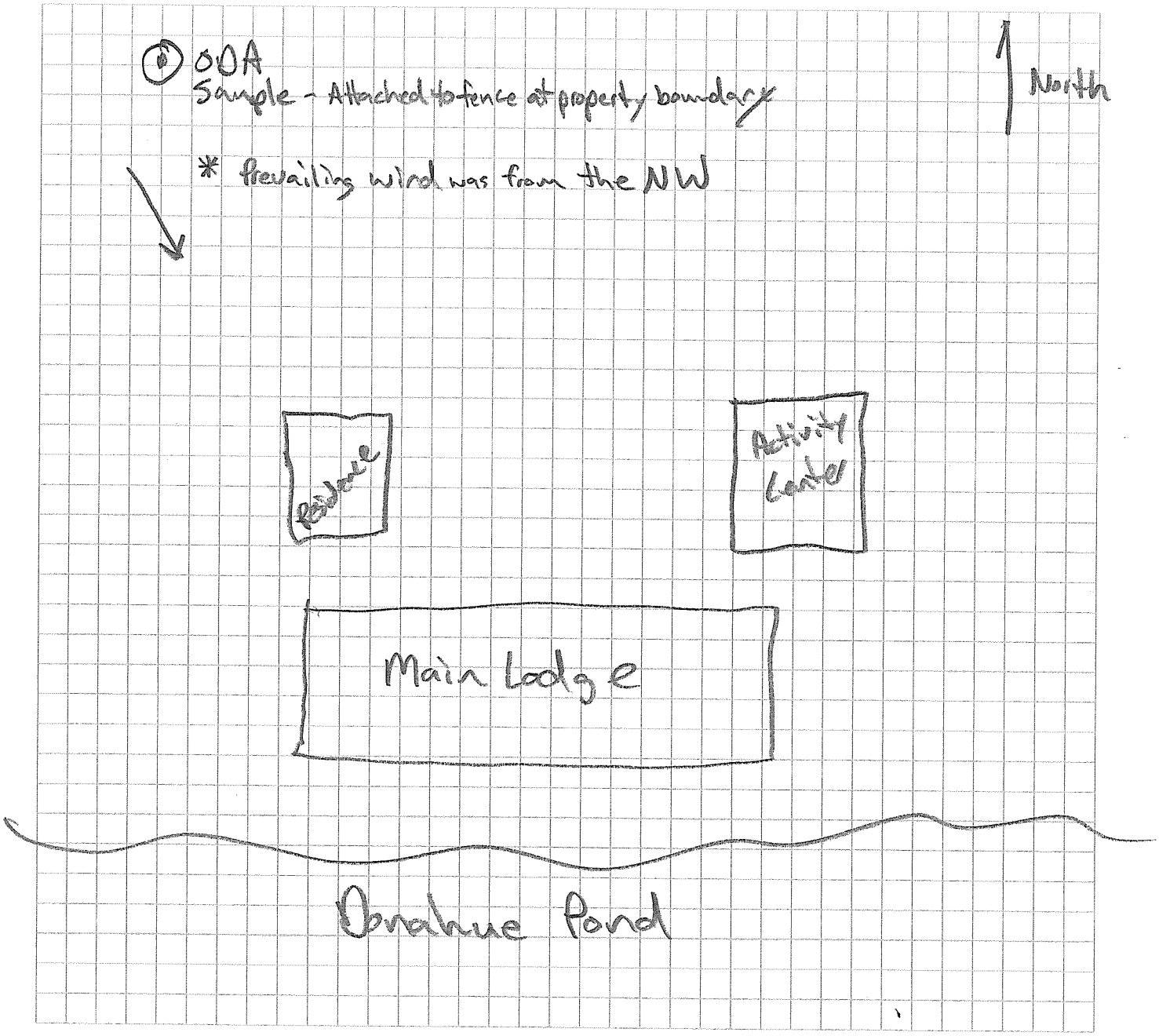
First Floor:

See attached sketch

12. OUTDOOR PLOT

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

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



13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: NA

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

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y / N
Laundry Room	laundry detergent	6 gallons	U		NA	
	bleach	1 gal	U			
	caulking	5-6 tubes	U + UO			
	greased lightning	1 bottle	U			
Apartment	Air Freshners	few cans				
	Resolve					
	toilet cleaners + kitchen cleaners					
	* Interview → resident used resolve + air freshners the night prior to sampling					

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

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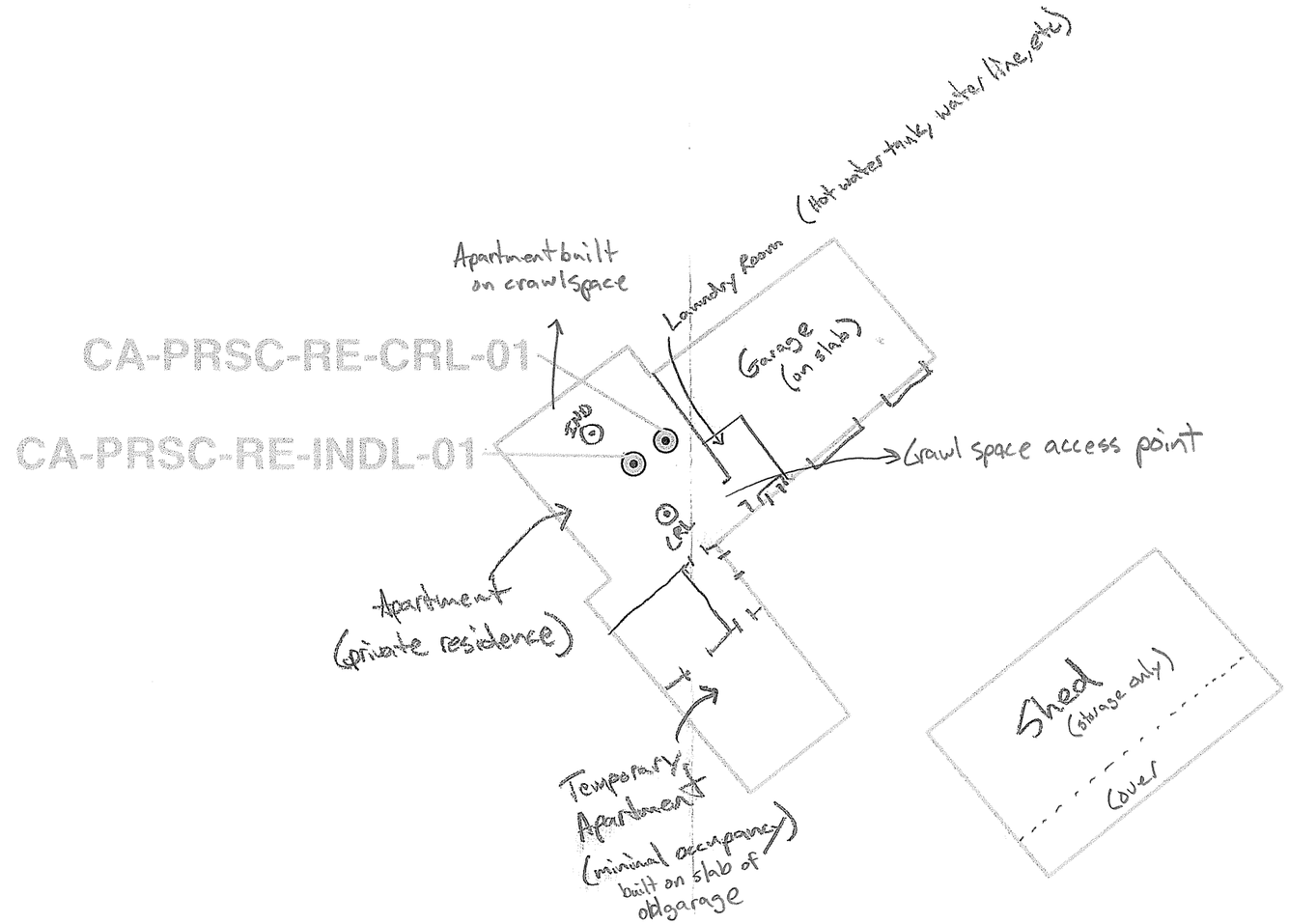

Legend

- Proposed Sample Location
- Buildings

0 25 50 Feet

SCALE IN FEET

1 in = 25 feet

TETRA TECH NUS, INC

PECONIC RIVER SPORTSMANS CLUB
SOIL VAPOR INVESTIGATION
PROPOSED SAMPLE LOCATIONS
NWIRP CALVERTON, NEW YORK

FILE	SCALE AS NOTED
FIGURE NO. 4	REV / DATE 2/14/11

APPENDIX B

AIR SAMPLING LOG SHEETS

Tetra Tech NUS, Inc. **AIR SAMPLING LOG SHEET**

Project Site Name: NWIRP Calverton - PRSC
Project No.: 112G02045

Sample ID No.: CA-PRSC-ML-SSB-01
Sample Location: Main Lodge Basement (West side)
Sampled By: VS / JB

SAMPLING DATA:	Wind speed (Visual)	Wind Direction (estimated)	Ambient temperature (°F)	Barometric Pressure (in.)	Relative Humidity (%)	Other
Date: 2-16-11						
Time: 0930						
Method: Summa canisters	—	—	—	—	—	—

Summa Canister #	34330
Filter Type/Flow	24 hour

	TIME	VACUUM			Duplicate (if collected) TIME	VACUUM		
					CA-PRSC-ML-DUP-01			
					# 5616			
Start Time Vacuum	1006	-31	in Hg	2-15-11	1006	-21	in Hg	2-15-11
End Time Vacuum	0930	-7.5	in Hg	2-16-11	0930	-6.5	in Hg	2-16-11

Purge Data	Start	Stop	Notes:
→	1002	1005	See below

Purge Readings:

1 @ 0.2 ppm
2 @ 0.6 ppm
3 @ 0.4 ppm
/ @ /

(60 ML per purge)

Notes:

- Sample located in Main Lodge Basement (~~West~~ West side) JB 4-22-11
- Sub slab sample point

Dup reported as collected at 1000 on tag

Tetra Tech NUS, Inc. **AIR SAMPLING LOG SHEET**

Project Site Name: NWIRP Calverton - PRSC
Project No.: 112G02045

Sample ID No.: CA-PRSC-ML-SSB-02
Sample Location: Main Lodge Basement
Sampled By: VS / JB

SAMPLING DATA:

	Wind speed (Visual)	Wind Direction (estimated)	Ambient temperature (°F)	Barometric Pressure (in.)	Relative Humidity (%)	Other
Date: 2-16-11						
Time: 0905						
Method: Summa Cannister	—	—	—	—	—	—

Summa Canister #	34733
Filter Type/Flow	24 hour

	TIME	VACUUM		
Start Time Vacuum	0927	-28	in Hg	2-15-11
End Time Vacuum	0905	-5.5	in Hg	2-16-11

Duplicate (if collected)

TIME	VACUUM	
—	—	in Hg
—	—	in Hg

Purge Data	Start	Stop	Notes:
—	—	—	—

Purge Readings:
1 @ 0.3ppm (60 ML per purge volume)
2 @ 0.5 ppm
3 @ 0.2 ppm
/ @ /

Notes:

JB 4-22-11

- Sample located in Main Lodge Basement (~~East~~ East side)
- Sub slab sample location

Tetra Tech NUS, Inc. **AIR SAMPLING LOG SHEET**

Project Site Name: NWIRP Calverton - PRSC
Project No.: 112G02045

Sample ID No.: CA-PRSC-ML-CRL-01
Sample Location: Main Lodge (western portion)
Sampled By: JB/VS

SAMPLING DATA:

	Wind speed (Visual)	Wind Direction (estimated)	Ambient temperature (°F)	Barometric Pressure (in.)	Relative Humidity (%)	Other
Date: 2-16-11						
Time: 1018						
Method: Summa canister	—	—	—	—	—	—

Summa Canister #	#20944
Filter Type/Flow	24 hour

	TIME	VACUUM		
Start Time Vacuum	1108	-26.5	in Hg	2-15-11
End Time Vacuum	1018	-4.5	in Hg	2-16-11

Duplicate (if collected)

	CA-PRSC-ML-DUP-02
	#9559

	TIME	VACUUM		
	1108	-28.5	in Hg	2-15-11
	1018	-4.5	in Hg	2-16-11

Purge Data	Start	Stop	Notes:
→	1100	1105	Purged ~ 600 ML from PE Tubing

Purge Readings:

1 @ 0.0 ppm
2 @ 0.1 ppm
3 @ 0.0 ppm
/ @ /

Notes:

- Sample located near center of Crawl space at western end of Main Lodge
- PE Tubing extended to 25' from Crawl space vent (near center of Crawl)

Dup 02 Time = 1030

Tetra Tech NUS, Inc. **AIR SAMPLING LOG SHEET**

Project Site Name: NWIRP Calverton - PRSC
Project No.: 112G02045

Sample ID No.: CA-PRSC-ML-CRL-02
Sample Location: Main Lodge Crawl space
Sampled By: VS/JB

SAMPLING DATA:

	Wind speed (Visual)	Wind Direction (estimated)	Ambient temperature (°F)	Barometric Pressure (in.)	Relative Humidity (%)	Other
Date: 2-16-11						
Time: 0908						
Method: 24 hour summa	—	—	—	—	—	—

Summa Canister #	923
Filter Type/Flow	24 hour

	TIME	VACUUM		
Start Time Vacuum	0906	-31	in Hg	2-15-11
End Time Vacuum	0908	-7	in Hg	2-16-11

Duplicate (if collected)

TIME	VACUUM	
—	—	in Hg
—	—	in Hg

Purge Data	Start	Stop	Notes:
NA			

Purge Readings:

NA @ ____
____ @ ____
____ @ ____
____ @ ____

Notes:

- Sample located in main lodge Crawl space (Central portion of Crawl)
- Canister set directly into sample area (No Tubing used)

Tetra Tech NUS, Inc. **AIR SAMPLING LOG SHEET**

Project Site Name: NWIRP Calverton - PRSC
Project No.: 112G02045

Sample ID No.: CA-PRSC-ML-CRL-03
Sample Location: Main Lodge Crawl space
Sampled By: VS / JB

SAMPLING DATA:

	Wind speed (Visual)	Wind Direction (estimated)	Ambient temperature (°F)	Barometric Pressure (in.)	Relative Humidity (%)	Other
Date: 2-16-11						
Time: 0835						
Method: Summa Canister	—	—	—	—	—	—

Summa Canister #	33961
Filter Type/Flow	24 hour

Duplicate (if collected)

	—
	—

	TIME	VACUUM			TIME	VACUUM	
Start Time Vacuum	0855	-29	in Hg	2-15-11	—	—	in Hg
End Time Vacuum	0835	-6	in Hg	2-16-11	—	—	in Hg

Purge Data	Start	Stop	Notes:
→	0850	0852	purged ~600 mL from Tubing

Purge Readings:

1 @ 0.0 ppm
2 @ 0.0 ppm
3 @ 0.0 ppm
/ @ /

Notes:

- Sample located in Crawl space (west end of Main Lodge)
- ~25' of 1/4" PE Tubing placed into Crawl to draw from central area of space

Tetra Tech NUS, Inc. **AIR SAMPLING LOG SHEET**

Project Site Name: NWIRP Calverton - PRSC
Project No.: 112G02045

Sample ID No.: CA-PRSC-ML-INDL-01
Sample Location: Main Lodge (Residence Area)
Sampled By: VS / JB

SAMPLING DATA:

	Wind speed (Visual)	Wind Direction (estimated)	Ambient temperature (°F)	Barometric Pressure (in.)	Relative Humidity (%)	Other
Date: 2-16-11						
Time: 1035						
Method: summa canister	—	—	—	—	—	—

JB 4-22-11

Summa Canister #	~~34~~ 34439
Filter Type/Flow	24 hour

Duplicate (if collected)

	—
	—

	TIME	VACUUM			TIME	VACUUM	
Start Time Vacuum	1254	-30	in Hg	2-15-11	—	—	in Hg
End Time Vacuum	1035	-9	in Hg	2-16-11	—	—	in Hg

Purge Data	Start	Stop	Notes:
NA			

Purge Readings:

NA @ _____
_____ @ _____
_____ @ _____
_____ @ _____

Notes:

- Sample located in Main Lodge (west end Residence). Placed on Dining Room Table North central portion of Apartment.
- Resident would not be available later in day, so shut cannister off early

Tetra Tech NUS, Inc. **AIR SAMPLING LOG SHEET**

Project Site Name: NWIRP Calverton - PRSC
Project No.: 112G02045

Sample ID No.: CA-PRSC-ML-INDL-02
Sample Location: Main Lodge (meeting room)
Sampled By: VS / JB

SAMPLING DATA:

	Wind speed (Visual)	Wind Direction (estimated)	Ambient temperature (°F)	Barometric Pressure (in.)	Relative Humidity (%)	Other
Date: 2-16-11						
Time: 0833						
Method: Summa canister	—	—	—	—	—	—

Summa Canister #	33992
Filter Type/Flow	24 hour

Duplicate (if collected)

	—
	—

	TIME	VACUUM			TIME	VACUUM	
Start Time Vacuum	1023	-30.5	in Hg	2-15-11	—	—	in Hg
End Time Vacuum	0833	-4	in Hg	2-16-11	—	—	in Hg

Purge Data	Start	Stop	Notes:
NA			—

Purge Readings:

NA @ _____
_____ @ _____
_____ @ _____
_____ @ _____

Notes:

- Sample located in upstairs Area of Main Lodge (meeting room - elephant Room)

Tetra Tech NUS, Inc. **AIR SAMPLING LOG SHEET**

Project Site Name: NWIRP Calverton - PRSC
Project No.: 112G02045

Sample ID No.: CA-PRSC-ML-INDL-03
Sample Location: Main Lodge upstairs (Blue Room)
Sampled By: VS / JJB

SAMPLING DATA:

	Wind speed (Visual)	Wind Direction (estimated)	Ambient temperature (°F)	Barometric Pressure (in.)	Relative Humidity (%)	Other
Date: 2-16-11						
Time: 1015						
Method: Summa canister	—	—	—	—	—	—

Summa Canister #	936
Filter Type/Flow	24 hour

	TIME	VACUUM		
Start Time Vacuum	1029	-30	in Hg	2-15-11
End Time Vacuum	1015	-9	in Hg	2-16-11

Duplicate (if collected)

	TIME	VACUUM	
	—	—	in Hg
	—	—	in Hg

Purge Data	Start	Stop	Notes:
NA			

Purge Readings:
NA @ ____
____ @ ____
____ @ ____
____ @ ____

Notes:
-Sample located in upper floor of Main Lodge (Blue Room)

Tetra Tech NUS, Inc. **AIR SAMPLING LOG SHEET**

Project Site Name: NWIRP Calverton - PRSC
Project No.: 112G02045

Sample ID No.: CA-PRSC-ML-INDB-01 JB 4-22-11
Sample Location: Main Lodge Basement ~~(West side)~~ Eastside
Sampled By: VS/JB

SAMPLING DATA:

Date: 2-16-11 Time: 0945	Wind speed (Visual)	Wind Direction (estimated)	Ambient temperature (°F)	Barometric Pressure (in.)	Relative Humidity (%)	Other
Method: Summa canister	—	—	—	—	—	—

Summa Canister #	4338
Filter Type/Flow	24 hour

Duplicate (if collected)

					—	—	
					—	—	
	TIME	VACUUM			TIME	VACUUM	
Start Time Vacuum	1012	-31	in Hg	2-15-11	—	—	in Hg
End Time Vacuum	0945	-8	in Hg	2-16-11	—	—	in Hg

Purge Data	Start	Stop	Notes:
NA			

Purge Readings:

NA @ _____
_____ @ _____
_____ @ _____
_____ @ _____

Notes:

- Sample located in Main Lodge Basement ~~(West side)~~ West side) JB 4-22-11

Tetra Tech NUS, Inc. **AIR SAMPLING LOG SHEET**

Project Site Name: NWIRP Calverton - PRSC
Project No.: 112G02045

Sample ID No.: CA-PRSC-ML-INDB-02
Sample Location: Main Lodge Basement (East)
Sampled By: VS / JB

SAMPLING DATA:

	Wind speed (Visual)	Wind Direction (estimated)	Ambient temperature (°F)	Barometric Pressure (in.)	Relative Humidity (%)	Other
Date: 2-16-11						
Time: 0755						
Method: Summa canister	—	—	—	—	—	—

Summa Canister #	33982
Filter Type/Flow	24 hour

	TIME	VACUUM			TIME	VACUUM	
Start Time Vacuum	0938	-29	in Hg	2-15-11	—	—	in Hg
End Time Vacuum	0755	0	in Hg	2-16-11	—	—	in Hg

Duplicate (if collected)

	—
	—

Purge Data	Start	Stop	Notes:
NA			

Purge Readings:

NA @ _____
_____ @ _____
_____ @ _____
_____ @ _____

Notes:

- Sample located in main Lodge Basement (East side)

Tetra Tech NUS, Inc. **AIR SAMPLING LOG SHEET**

Project Site Name: NWIRP Calverton - PRSC
Project No.: 112G02045

Sample ID No.: CA-PRSC-AC-CRL-01
Sample Location: Activity Center Crawl Space
Sampled By: VS + JB

SAMPLING DATA:

	Wind speed (Visual)	Wind Direction (estimated)	Ambient temperature (°F)	Barometric Pressure (in.)	Relative Humidity (%)	Other
Date: 2-16-11						
Time: 0959						
Method: Summa Canister	—	—	—	—	—	—

Summa Canister #	25277
Filter Type/Flow	24 hour

Duplicate (if collected)

	—
	—

	TIME	VACUUM			TIME	VACUUM	
Start Time Vacuum	1140	-31	in Hg	2-15-11	—	—	in Hg
End Time Vacuum	0959	-7	in Hg	2-16-11	—	—	in Hg

Purge Data	Start	Stop	Notes: Total of 600 ML purged From PE Tubing
→	1137	1139	

Purge Readings:

1 @ 0.0 ppm (60ML per purge)
2 @ 0.0 ppm
3 @ 0.0 ppm
\ @ \

Notes:

- Sample located in crawl space of Activity Center (near south-central portion of crawl)
- PE Tubing extended ~ 25' into crawl space for sampling

Tetra Tech NUS, Inc. **AIR SAMPLING LOG SHEET**

Project Site Name: NWIRP Calverton - PRSC
Project No.: 112G02045

Sample ID No.: CA-PRSC-AC-INDL-01
Sample Location: Activity Center (Squash Court)
Sampled By: VS / JB

SAMPLING DATA:

	Wind speed (Visual)	Wind Direction (estimated)	Ambient temperature (°F)	Barometric Pressure (in.)	Relative Humidity (%)	Other
Date: 2-16-11						
Time: 1001						
Method: Summa canister	—	—	—	—	—	—

Summa Canister #	34401
Filter Type/Flow	24 hour

	TIME	VACUUM		
Start Time Vacuum	1150	-29	in Hg	2-15-11
End Time Vacuum	1001	-6.5	in Hg	2-16-11

Duplicate (if collected)

TIME	VACUUM	
—	—	in Hg
—	—	in Hg

Purge Data	Start	Stop	Notes:
NA			

Purge Readings:

NA @ _____
_____ @ _____
_____ @ _____
_____ @ _____

Notes:

- Sample located in Activity Center (squash court)

Tetra Tech NUS, Inc. **AIR SAMPLING LOG SHEET**

Project Site Name: NWIRP Calverton - PRSC
Project No.: 112G02045

Sample ID No.: CA-PRSC-AC-INDL-02
Sample Location: Activity Center (Main Room)
Sampled By: VS/JB

SAMPLING DATA:

	Wind speed (Visual)	Wind Direction (estimated)	Ambient temperature (°F)	Barometric Pressure (in.)	Relative Humidity (%)	Other
Date: 2-16-11						
Time: 1100						
Method: Summa Canister	—	—	—	—	—	—

Summa Canister #	33378
Filter Type/Flow	24 hour

	TIME	VACUUM		
Start Time Vacuum	1157	-29	in Hg	2-15-11
End Time Vacuum	1100	-9	in Hg	2-16-11

Duplicate (if collected)

	TIME	VACUUM	
	—	—	in Hg
	—	—	in Hg

Purge Data	Start	Stop	Notes:
NA			

Purge Readings:

NA @ _____
_____ @ _____
_____ @ _____
_____ @ _____

Notes:

Sample location is in Activity Center (Main Room area)

Tetra Tech NUS, Inc. **AIR SAMPLING LOG SHEET**

Project Site Name: NWIRP Calverton - PRSC
Project No.: 112G02045

Sample ID No.: CA-PRSC-RE-CRL-01
Sample Location: Private Residence
Sampled By: VS / JB

SAMPLING DATA:

	Wind speed (Visual)	Wind Direction (estimated)	Ambient temperature (°F)	Barometric Pressure (in.)	Relative Humidity (%)	Other
Date: 2-16-11						
Time: 1110						
Method: Summa canister	—	—	—	—	—	—

Summa Canister #	5569
Filter Type/Flow	24 hour

	TIME	VACUUM		
Start Time Vacuum	1225	-31	in Hg	2-15-11
End Time Vacuum	1110	-8.5	in Hg	2-16-11

Duplicate (if collected)

TIME	VACUUM	
—	—	in Hg
—	—	in Hg

Purge Data	Start	Stop	Notes:
→	1218	1222	Purged ~ 600 ML From Poly Tubing

Purge Readings:

1 @ 0.0 ppm
2 @ 0.0 ppm
3 @ 0.0 ppm
___ @ ___

(60 ML per purge)

Notes:

- Sample located in Crawl space of Private residence
- PE Tubing extended ~ 20' into crawl space
  Resident would not be available later in day, so summa pulled early

Tetra Tech NUS, Inc. **AIR SAMPLING LOG SHEET**

Project Site Name: NWIRP Calverton - PRSC
Project No.: 112G02045

Sample ID No.: CA-PRSC-RE-INDL-01
Sample Location: Private Residence (Living Room)
Sampled By: VS/JB

SAMPLING DATA:

	Wind speed (Visual)	Wind Direction (estimated)	Ambient temperature (°F)	Barometric Pressure (in.)	Relative Humidity (%)	Other
Date: 2-16-11						
Time: 1108						
Method: summa canister	—	—	—	—	—	—

Summa Canister #	9929
Filter Type/Flow	24 hour

Duplicate (if collected)

CA-PRSC-RE-DUP-03	
# 34764	

	TIME	VACUUM			TIME	VACUUM		
Start Time Vacuum	1248	-30	in Hg	2-15-11	1248	-31	in Hg	2-15-11
End Time Vacuum	1108	-8.5	in Hg	2-16-11	1108	-10	in Hg	2-16-11

Purge Data	Start	Stop	Notes:
NA			

Purge Readings:

NA @ _____
_____ @ _____
_____ @ _____
_____ @ _____

Notes:

- Sample located in private residence (Living Room Area). Near North end of residence
- Resident would not be around later shut off early
  Dup time sent to lab as 1101

Tetra Tech NUS, Inc. **AIR SAMPLING LOG SHEET**

Project Site Name: NWIRP Calverton - PRSC
Project No.: 112G02045

Sample ID No.: CA-PRSC-0DA-01
Sample Location: PRSC property (North end)
Sampled By: VS/JB

SAMPLING DATA:

	Wind speed (Visual)	Wind Direction (estimated)	Ambient temperature (°F)	Barometric Pressure (in.)	Relative Humidity (%)	Other
Date: 2-16-11						
Time: 0718						
Method: Summa	~ 20 mph	NW	26° - 34°F	30.16 - 30.40	24 - 78	–

Summa Canister #	1564
Filter Type/Flow	24 hour

	TIME	VACUUM		
Start Time Vacuum	0825	-29	in Hg	2-15-11
End Time Vacuum	0718	-4.5	in Hg	2-16-11

Duplicate (if collected)

TIME	VACUUM	
—	—	in Hg
—	—	in Hg

Purge Data	Start	Stop	Notes:
NA			—

Purge Readings:
NA @ ____
____ @ ____
____ @ ____
____ @ ____

Notes:
- Sample located on north end of PRSC area on chain link fence

APPENDIX C

PHOTOGRAPHIC LOG

PRSC Soil Vapor Intrusion Investigation
Sampling Photos
February 2011

Photo 1: Outdoor air sample – CA-PRSC-ODA-01
(NNE) at PRSC property boundary

Photo 2: Western Main Lodge (ML) - basement sub-slab sample/duplicate

PRSC Soil Vapor Intrusion Investigation
Sampling Photos
February 2011

Photo 3: Eastern Main Lodge (ML) - basement sub-slab sample

Photo 4: Eastern Main Lodge (ML) basement indoor air sample

PRSC Soil Vapor Intrusion Investigation
Sampling Photos
February 2011

Photo 5: Eastern Main Lodge (ML) - basement crawl space sample

Photo 6: Central Main Lodge (ML) - first floor indoor air sample

PRSC Soil Vapor Intrusion Investigation
Sampling Photos
February 2011

Photo 7: Eastern Main Lodge (ML) - first floor (Blue Room) indoor air sample

Photo 8: Western Main Lodge (ML) - crawl space sample/duplicate

Photo 9: Activity Center - crawl space sample

Photo 10: Activity Center – squash court indoor air sample

Photo 11: Activity Center – main area indoor air sample

Photo 12: Onsite Residence – crawl space sample

APPENDIX D

CHAIN OF CUSTODY RECORDS

Air Toxics LTD.

CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Project Manager: Dave Brayack
Collected by: (Print and Sign) Vince Shickora
Company: TetraTech NUS Email:
Address: 5700 Lake Wright Drive Suite 309 City: Norfolk State: VA Zip: 23502
Phone: (757) 461-3824 Fax: (757) 461-4148

Project Info:
P.O. #:
Project #: CTO-160
Project Name: NWIRP Colverton

Turn Around Time:
☐ Normal
☐ Rush
specify

Lab Use Only
Pressurized by:
Date:
Pressurization Gas: N_2 He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
01AB	CA-PRSC-ODA-01	1564	2-16-11	0718	TO-15 (* See below)	-29	-4.5		
02AB	CA-PRSC-ML-INDB-02	33982	2-16-11	0755		-29	0		
03AB	CA-PRSC-ML-CRL-03	33961	2-16-11	0835		-29	-6		
04AB	CA-PRSC-ML-INDL-02	33992	2-16-11	0838		-30.5	-4		
05AB	CA-PRSC-ML-SSB-02	34733	2-16-11	0905		-28	-5.5		
06AB	CA-PRSC-ML-CRL-02	923	2-16-11	0908		-31	-7		
07AB	CA-PRSC-ML-SSB-01	34330	2-16-11	0930		-31	-7.5		
08AB	CA-PRSC-ML-INDB-01	4338	2-16-11	0945		-31	-8		
09AB	CA-PRSC-AC-CRL-01	25277	2-16-11	0959		-31	-7		
10AB	CA-PRSC-ML-DUP-01	5616	2-16-11	1000		-21	-6.5		

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
[signature]	2-16-11 1600	[signature] ATL	02/17/11 0900

Notes: * See Attached Modified TO-15 List

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	FED EX		NA	GOOD	Yes No None	1102328

Form 1293 rev.11

Air Toxics LTD.

CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Project Manager: Dave Brayack
Collected by: (Print and Sign) Vince Shickora (initial)
Company: Tetra Tech NUS Email:
Address: 5700 Lake Wright Drive Suite 309 City: Norfolk State: VA Zip: 23502
Phone: (757) 461-3824 Fax: (757) 461-

Project Info:
P.O. #:
Project #: CTO-160
Project Name: NWIRP Calverton

Turn Around Time:
❑ Normal
❑ Rush
specify

Lab Use Only
Pressurized by:
Date:
Pressurization Gas: N_2 He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
11AB	CA-PRSC-AC-INDL-01	34401	2-16-11	1001	TO-15 (*See below)	-29	-6.5		
12AB	CA-PRSC-ML-INDL-03	936	2-16-11	1015		-30	-9		
13AB	CA-PRSC-ML-CRL-01	20944	2-16-11	1018		-26.5	-4.5		
14AB	CA-PRSC-ML-DUP-02	9559	2-16-11	1030		-28.5	-4.5		
15AB	CA-PRSC-ML-INDL-01	34439	2-16-11	1035		-30	-9		
16AB	CA-PRSC-AC-INDL-02	33878	2-16-11	1100		-29	-9		
17AB	CA-PRSC-RE-INDL-01	9929	2-16-11	1108		-30	-8.5		
18AB	CA-PRSC-RE-DUP-03	34764	2-16-11	1101		-31	-10		
19AB	CA-PRSC-RE-CRL-01	5569	2-16-11	1110		-31	-8.5		

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
(initial)	2-16-11 1600	THJ AR	02/17/11 0900
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Notes: (*) See Attached Modified TO-15 List

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	FED EX		NA	GOOD	Yes No None	1102328

Form 1293 rev.11

APPENDIX E

DATA ANALYTICAL REPORTS

Air Toxics LTD.
Laboratory Services Since 1989

3/3/2011
Mr. David Brayack
Tetra Tech
Twin Oaks I, Suite 309
5700 Lake Wright Drive
Norfolk VA 23502

Project Name: NWIRP Calverton
Project #: CTO-160
Workorder #: 1102328B

Dear Mr. David Brayack

The following report includes the data for the above referenced project for sample(s) received on 2/17/2011 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

Air Toxics LTD.
Laboratory Services Since 1989

WORK ORDER #: 1102328B

Work Order Summary

CLIENT:	Mr. David Brayack Tetra Tech Twin Oaks I, Suite 309 5700 Lake Wright Drive Norfolk, VA 23502	**BILL TO:**	Accounts Payable/Pittsburg Tetra Tech EC, Inc. Foster Plaza 7 661 Anderson Drive Pittsburgh, PA 15220-2745
PHONE:	(757) 461-3824	**P.O. #**	112G03016
FAX:	(757) 461-4148	**PROJECT #**	CTO-160 NWIRP Calverton
DATE RECEIVED:	02/17/2011	**CONTACT:**	Ausha Scott
DATE COMPLETED:	03/01/2011		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
11A	CA-PRSC-AC-INDL-01	Modified TO-15	5.0 "Hg	5 psi
11B	CA-PRSC-AC-INDL-01	Modified TO-15	5.0 "Hg	5 psi
12A	CA-PRSC-ML-INDL-03	Modified TO-15	8.0 "Hg	5 psi
12AA	CA-PRSC-ML-INDL-03 Lab Duplicate	Modified TO-15	8.0 "Hg	5 psi
12B	CA-PRSC-ML-INDL-03	Modified TO-15	8.0 "Hg	5 psi
12BB	CA-PRSC-ML-INDL-03 Lab Duplicate	Modified TO-15	8.0 "Hg	5 psi
13A	CA-PRSC-ML-CRL-01	Modified TO-15	5.0 "Hg	5 psi
13B	CA-PRSC-ML-CRL-01	Modified TO-15	5.0 "Hg	5 psi
14A	CA-PRSC-ML-DUP-02	Modified TO-15	1.0 "Hg	5 psi
14B	CA-PRSC-ML-DUP-02	Modified TO-15	1.0 "Hg	5 psi
15A	CA-PRSC-ML-INDL-01	Modified TO-15	7.5 "Hg	5 psi
15B	CA-PRSC-ML-INDL-01	Modified TO-15	7.5 "Hg	5 psi
16A	CA-PRSC-AC-INDL-02	Modified TO-15	8.0 "Hg	5 psi
16B	CA-PRSC-AC-INDL-02	Modified TO-15	8.0 "Hg	5 psi
17A	CA-PRSC-RE-INDL-01	Modified TO-15	7.0 "Hg	5 psi
17B	CA-PRSC-RE-INDL-01	Modified TO-15	7.0 "Hg	5 psi
18A	CA-PRSC-RE-DUP-03	Modified TO-15	7.5 "Hg	5 psi

Continued on next page

Air Toxics LTD.
Laboratory Services Since 1989

WORK ORDER #: 1102328B

Work Order Summary

CLIENT:	Mr. David Brayack Tetra Tech Twin Oaks I, Suite 309 5700 Lake Wright Drive Norfolk, VA 23502	**BILL TO:**	Accounts Payable/Pittsburg Tetra Tech EC, Inc. Foster Plaza 7 661 Anderson Drive Pittsburgh, PA 15220-2745
PHONE:	(757) 461-3824	**P.O. #**	112G03016
FAX:	(757) 461-4148	**PROJECT #**	CTO-160 NWIRP Calverton
DATE RECEIVED:	02/17/2011	**CONTACT:**	Ausha Scott
DATE COMPLETED:	03/01/2011		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
18B	CA-PRSC-RE-DUP-03	Modified TO-15	7.5 "Hg	5 psi
19A	CA-PRSC-RE-CRL-01	Modified TO-15	5.5 "Hg	5 psi
19B	CA-PRSC-RE-CRL-01	Modified TO-15	5.5 "Hg	5 psi
20A	Lab Blank	Modified TO-15	NA	NA
20B	Lab Blank	Modified TO-15	NA	NA
20C	Lab Blank	Modified TO-15	NA	NA
20D	Lab Blank	Modified TO-15	NA	NA
21A	CCV	Modified TO-15	NA	NA
21B	CCV	Modified TO-15	NA	NA
21C	CCV	Modified TO-15	NA	NA
21D	CCV	Modified TO-15	NA	NA
22A	LCS	Modified TO-15	NA	NA
22AA	LCSD	Modified TO-15	NA	NA
22B	LCS	Modified TO-15	NA	NA
22BB	LCSD	Modified TO-15	NA	NA
22C	LCS	Modified TO-15	NA	NA
22CC	LCSD	Modified TO-15	NA	NA
22D	LCS	Modified TO-15	NA	NA
22DD	LCSD	Modified TO-15	NA	NA

CERTIFIED BY: Linda L. Freeman

DATE: 03/02/11

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763,
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/09, Expiration date: 06/30/11
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Air Toxics Ltd.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-15 Full Scan/SIM
Tetra Tech
Workorder# 1102328B

Nine 6 Liter Summa Canister (SIM Certified) samples were received on February 17, 2011. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the Full Scan and SIM acquisition modes. The method involves concentrating up to 1.0 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	***TO-15***	***ATL Modifications***
ICAL %RSD acceptance criteria	</=30% RSD with 2 compounds allowed out to < 40% RSD	For Full Scan: 30% RSD with 4 compounds allowed out to < 40% RSD For SIM: Project specific; default criteria is </=30% RSD with 10% of compounds allowed out to < 40% RSD
Daily Calibration	+- 30% Difference	For Full Scan: </= 30% Difference with four allowed out up to </=40%.; flag and narrate outliers For SIM: Project specific; default criteria is </= 30% Difference with 10% of compounds allowed out up to </=40%.; flag and narrate outliers
Blank and standards	Zero air	Nitrogen
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The results for each sample in this report were acquired from two separate data files originating from the same analytical run. The two data files have the same base file name and are differentiated with a "sim" extension on the SIM data file.

As per project specific client request the laboratory has reported estimated values for target compound hits that are below the Reporting Limit but greater than the Method Detection Limit. All The canisters used for this project have been certified to the Reporting Limit for the target analytes included in this workorder. Concentrations that are below the level at which the canister was certified may be false positives.

The per analytical batch duplicate analysis required for this project is associated with work order 1102328A.

1,3,5-Trimethylbenzene was manually integrated in the CCV, LCS and LCSD on February 22 and 25, 2011. 1,3,5-Trimethylbenzene was also manaully integrated in sample CA-PRSC-RE-CRL-01.

Freon 12 and Chloromethane were manually integrated in sample CA-PRSC-ML-INDL-03 Lab Duplicate (12AA).

Freon 12 were manually integrated in sample CA-PRSC-ML-INDL-01.

Ethanol exceeded the calibration range for sample CA-PRSC-ML-INDL-01.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

UJ- Non-detected compound associated with low bias in the CCV and/or LCS.

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: CA-PRSC-AC-INDL-01

Lab ID#: 1102328B-11A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.16	0.40	0.80	2.0
Chloromethane	0.16	0.39	0.33	0.80
Freon 11	0.16	0.19	0.90	1.1
Ethanol	0.80	1.1	1.5	2.0
Freon 113	0.16	0.061 J	1.2	0.47 J
Methylene Chloride	0.32	0.13 J	1.1	0.47 J
Hexane	0.16	0.27	0.57	0.94
2-Butanone (Methyl Ethyl Ketone)	0.16	0.26	0.47	0.76
Chloroform	0.16	0.032 J	0.79	0.15 J
Cyclohexane	0.16	0.15 J	0.55	0.52 J
Carbon Tetrachloride	0.16	0.064 J	1.0	0.40 J

Client Sample ID: CA-PRSC-AC-INDL-01

Lab ID#: 1102328B-11B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	0.016	0.0071 J	0.064	0.028 J
1,1-Dichloroethane	0.032	0.0027 J	0.13	0.011 J
1,1,1-Trichloroethane	0.032	0.0080 J	0.18	0.044 J
Benzene	0.080	0.19	0.26	0.60
1,2-Dichloroethane	0.032	0.012 J	0.13	0.050 J
Trichloroethene	0.032	0.021 J	0.17	0.12 J
Toluene	0.032	0.27	0.12	1.0
Tetrachloroethene	0.032	0.011 J	0.22	0.074 J
Ethyl Benzene	0.032	0.046	0.14	0.20
m,p-Xylene	0.064	0.13	0.28	0.58
o-Xylene	0.032	0.044	0.14	0.19

Client Sample ID: CA-PRSC-ML-INDL-03

Lab ID#: 1102328B-12A

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: CA-PRSC-ML-INDL-03

Lab ID#: 1102328B-12A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.18	0.41	0.90	2.0
Chloromethane	0.18	0.40	0.38	0.82
Freon 11	0.18	0.17 J	1.0	0.98 J
Ethanol	0.92	18	1.7	35
Freon 113	0.18	0.051 J	1.4	0.39 J
Methylene Chloride	0.37	4.0	1.3	14
Hexane	0.18	0.066 J	0.64	0.23 J
2-Butanone (Methyl Ethyl Ketone)	0.18	0.20	0.54	0.59
4-Methyl-2-pentanone	0.18	0.041 J	0.75	0.17 J
1,3,5-Trimethylbenzene	0.18	0.021 J	0.90	0.10 J

Client Sample ID: CA-PRSC-ML-INDL-03 Lab Duplicate

Lab ID#: 1102328B-12AA

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.18	0.41	0.90	2.0
Chloromethane	0.18	0.43	0.38	0.89
Freon 11	0.18	0.20	1.0	1.1
Ethanol	0.92	18	1.7	34
Freon 113	0.18	0.048 J	1.4	0.37 J
Methylene Chloride	0.37	3.8	1.3	13
Hexane	0.18	0.070 J	0.64	0.25 J
2-Butanone (Methyl Ethyl Ketone)	0.18	0.18 J	0.54	0.52 J

Client Sample ID: CA-PRSC-ML-INDL-03

Lab ID#: 1102328B-12B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1-Trichloroethane	0.037	0.0089 J	0.20	0.049 J
Benzene	0.092	0.12	0.29	0.39
1,2-Dichloroethane	0.037	0.010 J	0.15	0.042 J

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: CA-PRSC-ML-INDL-03

Lab ID#: 1102328B-12B

Trichloroethene	0.037	0.019 J	0.20	0.10 J
Toluene	0.037	0.20	0.14	0.78
Tetrachloroethene	0.037	0.010 J	0.25	0.070 J
Ethyl Benzene	0.037	0.023 J	0.16	0.10 J
m,p-Xylene	0.073	0.053 J	0.32	0.23 J
o-Xylene	0.037	0.021 J	0.16	0.093 J

Client Sample ID: CA-PRSC-ML-INDL-03 Lab Duplicate

Lab ID#: 1102328B-12BB

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1-Trichloroethane	0.037	0.0070 J	0.20	0.038 J
Benzene	0.092	0.12	0.29	0.38
1,2-Dichloroethane	0.037	0.010 J	0.15	0.041 J
Trichloroethene	0.037	0.018 J	0.20	0.10 J
Toluene	0.037	0.20	0.14	0.77
Tetrachloroethene	0.037	0.0094 J	0.25	0.064 J
Ethyl Benzene	0.037	0.024 J	0.16	0.10 J
m,p-Xylene	0.073	0.056 J	0.32	0.24 J
o-Xylene	0.037	0.019 J	0.16	0.082 J

Client Sample ID: CA-PRSC-ML-CRL-01

Lab ID#: 1102328B-13A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.16	0.45	0.80	2.2
Chloromethane	0.16	0.39	0.33	0.80
Freon 11	0.16	0.20	0.90	1.1
Ethanol	0.80	11	1.5	21
Freon 113	0.16	0.056 J	1.2	0.43 J
Methylene Chloride	0.32	0.12 J	1.1	0.41 J
Hexane	0.16	0.064 J	0.57	0.23 J
2-Butanone (Methyl Ethyl Ketone)	0.16	0.42	0.47	1.2

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: CA-PRSC-ML-CRL-01

Lab ID#: 1102328B-13A

4-Methyl-2-pentanone	0.16	0.045 J	0.66	0.18 J
1,3,5-Trimethylbenzene	0.16	0.065 J	0.79	0.32 J

Client Sample ID: CA-PRSC-ML-CRL-01

Lab ID#: 1102328B-13B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1-Trichloroethane	0.032	0.010 J	0.18	0.055 J
Benzene	0.080	0.17	0.26	0.54
1,2-Dichloroethane	0.032	0.013 J	0.13	0.053 J
Trichloroethene	0.032	0.0082 J	0.17	0.044 J
Toluene	0.032	0.72	0.12	2.7
Tetrachloroethene	0.032	0.033	0.22	0.22
Ethyl Benzene	0.032	0.15	0.14	0.65
m,p-Xylene	0.064	0.47	0.28	2.0
o-Xylene	0.032	0.14	0.14	0.62

Client Sample ID: CA-PRSC-ML-DUP-02

Lab ID#: 1102328B-14A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.14	0.38	0.69	1.9
Chloromethane	0.14	0.42	0.29	0.87
Freon 11	0.14	0.18	0.78	1.0
Ethanol	0.70	11	1.3	20
Freon 113	0.14	0.047 J	1.1	0.36 J
Methylene Chloride	0.28	0.41	0.96	1.4
Hexane	0.14	0.098 J	0.49	0.35 J
2-Butanone (Methyl Ethyl Ketone)	0.14	0.44	0.41	1.3
Carbon Tetrachloride	0.14	0.060 J	0.87	0.38 J
1,3,5-Trimethylbenzene	0.14	0.048 J	0.68	0.23 J

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: CA-PRSC-ML-DUP-02

Lab ID#: 1102328B-14B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1-Trichloroethane	0.028	0.0084 J	0.15	0.046 J
Benzene	0.070	0.17	0.22	0.56
1,2-Dichloroethane	0.028	0.014 J	0.11	0.056 J
Trichloroethene	0.028	0.0071 J	0.15	0.038 J
Toluene	0.028	0.67	0.10	2.5
Tetrachloroethene	0.028	0.028	0.19	0.19
Ethyl Benzene	0.028	0.13	0.12	0.56
m,p-Xylene	0.056	0.41	0.24	1.8
o-Xylene	0.028	0.12	0.12	0.54

Client Sample ID: CA-PRSC-ML-INDL-01

Lab ID#: 1102328B-15A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.18	0.42	0.88	2.1
Chloromethane	0.18	0.47	0.37	0.98
Freon 11	0.18	0.24	1.0	1.3
Ethanol	0.90	110 E	1.7	210 E
Freon 113	0.18	0.073 J	1.4	0.56 J
Methylene Chloride	0.36	0.12 J	1.2	0.43 J
Hexane	0.18	0.081 J	0.63	0.29 J
2-Butanone (Methyl Ethyl Ketone)	0.18	1.2	0.53	3.5
Chloroform	0.18	0.067 J	0.87	0.33 J
Cyclohexane	0.18	0.080 J	0.62	0.28 J
Carbon Tetrachloride	0.18	0.076 J	1.1	0.48 J
4-Methyl-2-pentanone	0.18	0.23	0.73	0.94

Client Sample ID: CA-PRSC-ML-INDL-01

Lab ID#: 1102328B-15B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: CA-PRSC-ML-INDL-01

Lab ID#: 1102328B-15B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	0.018	0.0092 J	0.071	0.036 J
1,1-Dichloroethane	0.036	0.0032 J	0.14	0.013 J
1,1,1-Trichloroethane	0.036	0.036	0.20	0.20
Benzene	0.090	0.13	0.28	0.41
1,2-Dichloroethane	0.036	0.028 J	0.14	0.11 J
Trichloroethene	0.036	0.0032 J	0.19	0.017 J
Toluene	0.036	0.75	0.13	2.8
Tetrachloroethene	0.036	0.018 J	0.24	0.12 J
Ethyl Benzene	0.036	0.096	0.16	0.41
m,p-Xylene	0.072	0.32	0.31	1.4
o-Xylene	0.036	0.084	0.16	0.37
trans-1,2-Dichloroethene	0.18	0.0066 J	0.71	0.026 J

Client Sample ID: CA-PRSC-AC-INDL-02

Lab ID#: 1102328B-16A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.18	0.39	0.90	1.9
Chloromethane	0.18	0.42	0.38	0.86
Freon 11	0.18	0.20	1.0	1.1
Ethanol	0.92	1.4	1.7	2.6
Freon 113	0.18	0.053 J	1.4	0.40 J
Methylene Chloride	0.37	0.12 J	1.3	0.41 J
Hexane	0.18	0.56	0.64	2.0
2-Butanone (Methyl Ethyl Ketone)	0.18	0.22	0.54	0.66
Cyclohexane	0.18	0.37	0.63	1.3
4-Methyl-2-pentanone	0.18	0.038 J	0.75	0.16 J

Client Sample ID: CA-PRSC-AC-INDL-02

Lab ID#: 1102328B-16B

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Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: CA-PRSC-AC-INDL-02

Lab ID#: 1102328B-16B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1-Trichloroethane	0.037	0.0065 J	0.20	0.036 J
Benzene	0.092	0.29	0.29	0.93
1,2-Dichloroethane	0.037	0.011 J	0.15	0.045 J
Trichloroethene	0.037	0.0079 J	0.20	0.042 J
Toluene	0.037	0.60	0.14	2.3
Tetrachloroethene	0.037	0.011 J	0.25	0.074 J
Ethyl Benzene	0.037	0.089	0.16	0.39
m,p-Xylene	0.073	0.29	0.32	1.2
o-Xylene	0.037	0.095	0.16	0.41

Client Sample ID: CA-PRSC-RE-INDL-01

Lab ID#: 1102328B-17A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.18	0.41	0.86	2.0
Chloromethane	0.18	0.77	0.36	1.6
Freon 11	0.18	0.22	0.98	1.2
Ethanol	0.88	26	1.6	49
Freon 113	0.18	0.050 J	1.3	0.38 J
Methylene Chloride	0.35	0.11 J	1.2	0.39 J
Hexane	0.18	0.13 J	0.62	0.45 J
2-Butanone (Methyl Ethyl Ketone)	0.18	0.29	0.52	0.86
1,4-Dichlorobenzene	0.18	0.55	1.0	3.3

Client Sample ID: CA-PRSC-RE-INDL-01

Lab ID#: 1102328B-17B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1-Trichloroethane	0.035	0.014 J	0.19	0.076 J
Benzene	0.088	0.30	0.28	0.97
1,2-Dichloroethane	0.035	0.68	0.14	2.8

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: CA-PRSC-RE-INDL-01

Lab ID#: 1102328B-17B

Trichloroethene	0.035	0.0080 J	0.19	0.043 J
Toluene	0.035	0.57	0.13	2.1
Tetrachloroethene	0.035	0.0077 J	0.24	0.052 J
Ethyl Benzene	0.035	0.054	0.15	0.23
m,p-Xylene	0.070	0.13	0.30	0.56
o-Xylene	0.035	0.038	0.15	0.17

Client Sample ID: CA-PRSC-RE-DUP-03

Lab ID#: 1102328B-18A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.18	0.46	0.88	2.3
Chloromethane	0.18	0.84	0.37	1.7
Freon 11	0.18	0.27	1.0	1.5
Ethanol	0.90	27	1.7	51
Freon 113	0.18	0.056 J	1.4	0.43 J
Methylene Chloride	0.36	0.13 J	1.2	0.46 J
Hexane	0.18	0.14 J	0.63	0.50 J
2-Butanone (Methyl Ethyl Ketone)	0.18	0.32	0.53	0.93
1,4-Dichlorobenzene	0.18	0.81	1.1	4.8

Client Sample ID: CA-PRSC-RE-DUP-03

Lab ID#: 1102328B-18B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethane	0.036	0.0028 J	0.14	0.011 J
1,1,1-Trichloroethane	0.036	0.0070 J	0.20	0.038 J
Benzene	0.090	0.30	0.28	0.94
1,2-Dichloroethane	0.036	0.78	0.14	3.2
Trichloroethene	0.036	0.0038 J	0.19	0.020 J
Toluene	0.036	0.59	0.13	2.2
Tetrachloroethene	0.036	0.0079 J	0.24	0.053 J
Ethyl Benzene	0.036	0.062	0.16	0.27

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: CA-PRSC-RE-DUP-03

Lab ID#: 1102328B-18B

m,p-Xylene	0.072	0.14	0.31	0.62
o-Xylene	0.036	0.040	0.16	0.17

Client Sample ID: CA-PRSC-RE-CRL-01

Lab ID#: 1102328B-19A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.16	0.40	0.81	2.0
Chloromethane	0.16	0.33	0.34	0.69
Freon 11	0.16	0.19	0.92	1.1
Ethanol	0.82	1.7	1.5	3.3
Freon 113	0.16	0.062 J	1.2	0.48 J
Methylene Chloride	0.33	0.098 J	1.1	0.34 J
Hexane	0.16	0.13 J	0.58	0.47 J
2-Butanone (Methyl Ethyl Ketone)	0.16	0.67	0.48	2.0
Cyclohexane	0.16	0.054 J	0.56	0.19 J
1,3,5-Trimethylbenzene	0.16	0.085 J	0.81	0.42 J
1,4-Dichlorobenzene	0.16	0.043 J	0.99	0.26 J

Client Sample ID: CA-PRSC-RE-CRL-01

Lab ID#: 1102328B-19B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1-Trichloroethane	0.033	0.0078 J	0.18	0.043 J
Benzene	0.082	0.20	0.26	0.64
1,2-Dichloroethane	0.033	0.017 J	0.13	0.069 J
Trichloroethene	0.033	0.013 J	0.18	0.070 J
Toluene	0.033	1.1	0.12	4.2
Tetrachloroethene	0.033	0.046	0.22	0.31
Ethyl Benzene	0.033	0.23	0.14	0.98
m,p-Xylene	0.066	0.75	0.28	3.3
o-Xylene	0.033	0.24	0.14	1.0
Methyl tert-butyl ether	0.16	0.0040 J	0.59	0.014 J

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-AC-INDL-01

Lab ID#: 1102328B-11A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022208**	**Date of Collection:**	**2/16/11 10:01:00 AM**
Dil. Factor:	**1.61**	**Date of Analysis:**	**2/22/11 01:40 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.16	0.40	0.80	2.0
Freon 114	0.16	Not Detected U	1.1	Not Detected U
Chloromethane	0.16	0.39	0.33	0.80
Bromomethane	0.16	Not Detected U	0.62	Not Detected U
Chloroethane	0.16	Not Detected U	0.42	Not Detected U
Freon 11	0.16	0.19	0.90	1.1
Ethanol	0.80	1.1	1.5	2.0
Freon 113	0.16	0.061 J	1.2	0.47 J
Methylene Chloride	0.32	0.13 J	1.1	0.47 J
Hexane	0.16	0.27	0.57	0.94
2-Butanone (Methyl Ethyl Ketone)	0.16	0.26	0.47	0.76
Chloroform	0.16	0.032 J	0.79	0.15 J
Cyclohexane	0.16	0.15 J	0.55	0.52 J
Carbon Tetrachloride	0.16	0.064 J	1.0	0.40 J
1,2-Dichloropropane	0.16	Not Detected U	0.74	Not Detected U
1,4-Dioxane	0.16	Not Detected U	0.58	Not Detected U
Bromodichloromethane	0.16	Not Detected U	1.1	Not Detected U
cis-1,3-Dichloropropene	0.16	Not Detected U	0.73	Not Detected U
4-Methyl-2-pentanone	0.16	Not Detected U	0.66	Not Detected U
trans-1,3-Dichloropropene	0.16	Not Detected U	0.73	Not Detected U
Dibromochloromethane	0.16	Not Detected U	1.4	Not Detected U
1,2-Dibromoethane (EDB)	0.16	Not Detected U	1.2	Not Detected U
Chlorobenzene	0.16	Not Detected U	0.74	Not Detected U
Styrene	0.16	Not Detected U	0.68	Not Detected U
Bromoform	0.16	Not Detected U	1.7	Not Detected U
1,3,5-Trimethylbenzene	0.16	Not Detected U	0.79	Not Detected U
1,2,4-Trimethylbenzene	0.16	Not Detected U	0.79	Not Detected U
1,3-Dichlorobenzene	0.16	Not Detected U	0.97	Not Detected U
1,4-Dichlorobenzene	0.16	Not Detected U	0.97	Not Detected U
alpha-Chlorotoluene	0.16	Not Detected U	0.83	Not Detected U
1,2-Dichlorobenzene	0.16	Not Detected U	0.97	Not Detected U
1,2,4-Trichlorobenzene	0.80	Not Detected U	6.0	Not Detected U
Hexachlorobutadiene	0.80	Not Detected U	8.6	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	107	80-129
Toluene-d8	99	93-108

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-AC-INDL-01

Lab ID#: 1102328B-11A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022208**	**Date of Collection: 2/16/11 10:01:00 AM**
Dil. Factor:	**1.61**	**Date of Analysis: 2/22/11 01:40 PM**

Surrogates	**%Recovery**	**Method Limits**
4-Bromofluorobenzene	98	82-112

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-AC-INDL-01

Lab ID#: 1102328B-11B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022208sim**	**Date of Collection:**	**2/16/11 10:01:00 AM**
Dil. Factor:	**1.61**	**Date of Analysis:**	**2/22/11 01:40 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.016	Not Detected U	0.041	Not Detected U
1,1-Dichloroethene	0.016	0.0071 J	0.064	0.028 J
1,1-Dichloroethane	0.032	0.0027 J	0.13	0.011 J
cis-1,2-Dichloroethene	0.032	Not Detected U	0.13	Not Detected U
1,1,1-Trichloroethane	0.032	0.0080 J	0.18	0.044 J
Benzene	0.080	0.19	0.26	0.60
1,2-Dichloroethane	0.032	0.012 J	0.13	0.050 J
Trichloroethene	0.032	0.021 J	0.17	0.12 J
Toluene	0.032	0.27	0.12	1.0
1,1,2-Trichloroethane	0.032	Not Detected U	0.18	Not Detected U
Tetrachloroethene	0.032	0.011 J	0.22	0.074 J
Ethyl Benzene	0.032	0.046	0.14	0.20
m,p-Xylene	0.064	0.13	0.28	0.58
o-Xylene	0.032	0.044	0.14	0.19
1,1,2,2-Tetrachloroethane	0.032	Not Detected U	0.22	Not Detected U
trans-1,2-Dichloroethene	0.16	Not Detected U	0.64	Not Detected U
Methyl tert-butyl ether	0.16	Not Detected U	0.58	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	77-131
Toluene-d8	99	94-109
4-Bromofluorobenzene	97	84-112

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ML-INDL-03

Lab ID#: 1102328B-12A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022209**	**Date of Collection:**	**2/16/11 10:15:00 AM**
Dil. Factor:	**1.83**	**Date of Analysis:**	**2/22/11 02:42 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.18	0.41	0.90	2.0
Freon 114	0.18	Not Detected U	1.3	Not Detected U
Chloromethane	0.18	0.40	0.38	0.82
Bromomethane	0.18	Not Detected U	0.71	Not Detected U
Chloroethane	0.18	Not Detected U	0.48	Not Detected U
Freon 11	0.18	0.17 J	1.0	0.98 J
Ethanol	0.92	18	1.7	35
Freon 113	0.18	0.051 J	1.4	0.39 J
Methylene Chloride	0.37	4.0	1.3	14
Hexane	0.18	0.066 J	0.64	0.23 J
2-Butanone (Methyl Ethyl Ketone)	0.18	0.20	0.54	0.59
Chloroform	0.18	Not Detected U	0.89	Not Detected U
Cyclohexane	0.18	Not Detected U	0.63	Not Detected U
Carbon Tetrachloride	0.18	Not Detected U	1.2	Not Detected U
1,2-Dichloropropane	0.18	Not Detected U	0.84	Not Detected U
1,4-Dioxane	0.18	Not Detected U	0.66	Not Detected U
Bromodichloromethane	0.18	Not Detected U	1.2	Not Detected U
cis-1,3-Dichloropropene	0.18	Not Detected U	0.83	Not Detected U
4-Methyl-2-pentanone	0.18	0.041 J	0.75	0.17 J
trans-1,3-Dichloropropene	0.18	Not Detected U	0.83	Not Detected U
Dibromochloromethane	0.18	Not Detected U	1.6	Not Detected U
1,2-Dibromoethane (EDB)	0.18	Not Detected U	1.4	Not Detected U
Chlorobenzene	0.18	Not Detected U	0.84	Not Detected U
Styrene	0.18	Not Detected U	0.78	Not Detected U
Bromoform	0.18	Not Detected U	1.9	Not Detected U
1,3,5-Trimethylbenzene	0.18	0.021 J	0.90	0.10 J
1,2,4-Trimethylbenzene	0.18	Not Detected U	0.90	Not Detected U
1,3-Dichlorobenzene	0.18	Not Detected U	1.1	Not Detected U
1,4-Dichlorobenzene	0.18	Not Detected U	1.1	Not Detected U
alpha-Chlorotoluene	0.18	Not Detected U	0.95	Not Detected U
1,2-Dichlorobenzene	0.18	Not Detected U	1.1	Not Detected U
1,2,4-Trichlorobenzene	0.92	Not Detected U	6.8	Not Detected U
Hexachlorobutadiene	0.92	Not Detected U	9.8	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	80-129
Toluene-d8	100	93-108

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ML-INDL-03

Lab ID#: 1102328B-12A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022209**	**Date of Collection:**	**2/16/11 10:15:00 AM**
Dil. Factor:	**1.83**	**Date of Analysis:**	**2/22/11 02:42 PM**

Surrogates	**%Recovery**	**Method Limits**
4-Bromofluorobenzene	97	82-112

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ML-INDL-03 Lab Duplicate

Lab ID#: 1102328B-12AA

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022210**	**Date of Collection:**	**2/16/11 10:15:00 AM**
Dil. Factor:	**1.83**	**Date of Analysis:**	**2/22/11 03:59 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.18	0.41	0.90	2.0
Freon 114	0.18	Not Detected U	1.3	Not Detected U
Chloromethane	0.18	0.43	0.38	0.89
Bromomethane	0.18	Not Detected U	0.71	Not Detected U
Chloroethane	0.18	Not Detected U	0.48	Not Detected U
Freon 11	0.18	0.20	1.0	1.1
Ethanol	0.92	18	1.7	34
Freon 113	0.18	0.048 J	1.4	0.37 J
Methylene Chloride	0.37	3.8	1.3	13
Hexane	0.18	0.070 J	0.64	0.25 J
2-Butanone (Methyl Ethyl Ketone)	0.18	0.18 J	0.54	0.52 J
Chloroform	0.18	Not Detected U	0.89	Not Detected U
Cyclohexane	0.18	Not Detected U	0.63	Not Detected U
Carbon Tetrachloride	0.18	Not Detected U	1.2	Not Detected U
1,2-Dichloropropane	0.18	Not Detected U	0.84	Not Detected U
1,4-Dioxane	0.18	Not Detected U	0.66	Not Detected U
Bromodichloromethane	0.18	Not Detected U	1.2	Not Detected U
cis-1,3-Dichloropropene	0.18	Not Detected U	0.83	Not Detected U
4-Methyl-2-pentanone	0.18	Not Detected U	0.75	Not Detected U
trans-1,3-Dichloropropene	0.18	Not Detected U	0.83	Not Detected U
Dibromochloromethane	0.18	Not Detected U	1.6	Not Detected U
1,2-Dibromoethane (EDB)	0.18	Not Detected U	1.4	Not Detected U
Chlorobenzene	0.18	Not Detected U	0.84	Not Detected U
Styrene	0.18	Not Detected U	0.78	Not Detected U
Bromoform	0.18	Not Detected U	1.9	Not Detected U
1,3,5-Trimethylbenzene	0.18	Not Detected U	0.90	Not Detected U
1,2,4-Trimethylbenzene	0.18	Not Detected U	0.90	Not Detected U
1,3-Dichlorobenzene	0.18	Not Detected U	1.1	Not Detected U
1,4-Dichlorobenzene	0.18	Not Detected U	1.1	Not Detected U
alpha-Chlorotoluene	0.18	Not Detected U	0.95	Not Detected U
1,2-Dichlorobenzene	0.18	Not Detected U	1.1	Not Detected U
1,2,4-Trichlorobenzene	0.92	Not Detected U	6.8	Not Detected U
Hexachlorobutadiene	0.92	Not Detected U	9.8	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	80-129
Toluene-d8	98	93-108

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ML-INDL-03 Lab Duplicate

Lab ID#: 1102328B-12AA

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022210**	**Date of Collection:**	**2/16/11 10:15:00 AM**
Dil. Factor:	**1.83**	**Date of Analysis:**	**2/22/11 03:59 PM**

Surrogates	**%Recovery**	**Method Limits**
4-Bromofluorobenzene	94	82-112

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ML-INDL-03

Lab ID#: 1102328B-12B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022209sim**	**Date of Collection:**	**2/16/11 10:15:00 AM**
Dil. Factor:	**1.83**	**Date of Analysis:**	**2/22/11 02:42 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.018	Not Detected U	0.047	Not Detected U
1,1-Dichloroethene	0.018	Not Detected U	0.072	Not Detected U
1,1-Dichloroethane	0.037	Not Detected U	0.15	Not Detected U
cis-1,2-Dichloroethene	0.037	Not Detected U	0.14	Not Detected U
1,1,1-Trichloroethane	0.037	0.0089 J	0.20	0.049 J
Benzene	0.092	0.12	0.29	0.39
1,2-Dichloroethane	0.037	0.010 J	0.15	0.042 J
Trichloroethene	0.037	0.019 J	0.20	0.10 J
Toluene	0.037	0.20	0.14	0.78
1,1,2-Trichloroethane	0.037	Not Detected U	0.20	Not Detected U
Tetrachloroethene	0.037	0.010 J	0.25	0.070 J
Ethyl Benzene	0.037	0.023 J	0.16	0.10 J
m,p-Xylene	0.073	0.053 J	0.32	0.23 J
o-Xylene	0.037	0.021 J	0.16	0.093 J
1,1,2,2-Tetrachloroethane	0.037	Not Detected U	0.25	Not Detected U
trans-1,2-Dichloroethene	0.18	Not Detected U	0.72	Not Detected U
Methyl tert-butyl ether	0.18	Not Detected U	0.66	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	77-131
Toluene-d8	98	94-109
4-Bromofluorobenzene	97	84-112

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ML-INDL-03 Lab Duplicate

Lab ID#: 1102328B-12BB

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022210sim**	**Date of Collection:**	**2/16/11 10:15:00 AM**
Dil. Factor:	**1.83**	**Date of Analysis:**	**2/22/11 03:59 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.018	Not Detected U	0.047	Not Detected U
1,1-Dichloroethene	0.018	Not Detected U	0.072	Not Detected U
1,1-Dichloroethane	0.037	Not Detected U	0.15	Not Detected U
cis-1,2-Dichloroethene	0.037	Not Detected U	0.14	Not Detected U
1,1,1-Trichloroethane	0.037	0.0070 J	0.20	0.038 J
Benzene	0.092	0.12	0.29	0.38
1,2-Dichloroethane	0.037	0.010 J	0.15	0.041 J
Trichloroethene	0.037	0.018 J	0.20	0.10 J
Toluene	0.037	0.20	0.14	0.77
1,1,2-Trichloroethane	0.037	Not Detected U	0.20	Not Detected U
Tetrachloroethene	0.037	0.0094 J	0.25	0.064 J
Ethyl Benzene	0.037	0.024 J	0.16	0.10 J
m,p-Xylene	0.073	0.056 J	0.32	0.24 J
o-Xylene	0.037	0.019 J	0.16	0.082 J
1,1,2,2-Tetrachloroethane	0.037	Not Detected U	0.25	Not Detected U
trans-1,2-Dichloroethene	0.18	Not Detected U	0.72	Not Detected U
Methyl tert-butyl ether	0.18	Not Detected U	0.66	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	77-131
Toluene-d8	98	94-109
4-Bromofluorobenzene	98	84-112

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ML-CRL-01

Lab ID#: 1102328B-13A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022211**	**Date of Collection:**	**2/16/11 10:18:00 AM**
Dil. Factor:	**1.61**	**Date of Analysis:**	**2/22/11 04:56 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.16	0.45	0.80	2.2
Freon 114	0.16	Not Detected U	1.1	Not Detected U
Chloromethane	0.16	0.39	0.33	0.80
Bromomethane	0.16	Not Detected U	0.62	Not Detected U
Chloroethane	0.16	Not Detected U	0.42	Not Detected U
Freon 11	0.16	0.20	0.90	1.1
Ethanol	0.80	11	1.5	21
Freon 113	0.16	0.056 J	1.2	0.43 J
Methylene Chloride	0.32	0.12 J	1.1	0.41 J
Hexane	0.16	0.064 J	0.57	0.23 J
2-Butanone (Methyl Ethyl Ketone)	0.16	0.42	0.47	1.2
Chloroform	0.16	Not Detected U	0.79	Not Detected U
Cyclohexane	0.16	Not Detected U	0.55	Not Detected U
Carbon Tetrachloride	0.16	Not Detected U	1.0	Not Detected U
1,2-Dichloropropane	0.16	Not Detected U	0.74	Not Detected U
1,4-Dioxane	0.16	Not Detected U	0.58	Not Detected U
Bromodichloromethane	0.16	Not Detected U	1.1	Not Detected U
cis-1,3-Dichloropropene	0.16	Not Detected U	0.73	Not Detected U
4-Methyl-2-pentanone	0.16	0.045 J	0.66	0.18 J
trans-1,3-Dichloropropene	0.16	Not Detected U	0.73	Not Detected U
Dibromochloromethane	0.16	Not Detected U	1.4	Not Detected U
1,2-Dibromoethane (EDB)	0.16	Not Detected U	1.2	Not Detected U
Chlorobenzene	0.16	Not Detected U	0.74	Not Detected U
Styrene	0.16	Not Detected U	0.68	Not Detected U
Bromoform	0.16	Not Detected U	1.7	Not Detected U
1,3,5-Trimethylbenzene	0.16	0.065 J	0.79	0.32 J
1,2,4-Trimethylbenzene	0.16	Not Detected U	0.79	Not Detected U
1,3-Dichlorobenzene	0.16	Not Detected U	0.97	Not Detected U
1,4-Dichlorobenzene	0.16	Not Detected U	0.97	Not Detected U
alpha-Chlorotoluene	0.16	Not Detected U	0.83	Not Detected U
1,2-Dichlorobenzene	0.16	Not Detected U	0.97	Not Detected U
1,2,4-Trichlorobenzene	0.80	Not Detected U	6.0	Not Detected U
Hexachlorobutadiene	0.80	Not Detected U	8.6	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	106	80-129
Toluene-d8	100	93-108

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ML-CRL-01

Lab ID#: 1102328B-13A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022211**	**Date of Collection: 2/16/11 10:18:00 AM**
Dil. Factor:	**1.61**	**Date of Analysis: 2/22/11 04:56 PM**

Surrogates	**%Recovery**	**Method Limits**
4-Bromofluorobenzene	97	82-112

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ML-CRL-01

Lab ID#: 1102328B-13B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022211sim**	**Date of Collection:**	**2/16/11 10:18:00 AM**
Dil. Factor:	**1.61**	**Date of Analysis:**	**2/22/11 04:56 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.016	Not Detected U	0.041	Not Detected U
1,1-Dichloroethene	0.016	Not Detected U	0.064	Not Detected U
1,1-Dichloroethane	0.032	Not Detected U	0.13	Not Detected U
cis-1,2-Dichloroethene	0.032	Not Detected U	0.13	Not Detected U
1,1,1-Trichloroethane	0.032	0.010 J	0.18	0.055 J
Benzene	0.080	0.17	0.26	0.54
1,2-Dichloroethane	0.032	0.013 J	0.13	0.053 J
Trichloroethene	0.032	0.0082 J	0.17	0.044 J
Toluene	0.032	0.72	0.12	2.7
1,1,2-Trichloroethane	0.032	Not Detected U	0.18	Not Detected U
Tetrachloroethene	0.032	0.033	0.22	0.22
Ethyl Benzene	0.032	0.15	0.14	0.65
m,p-Xylene	0.064	0.47	0.28	2.0
o-Xylene	0.032	0.14	0.14	0.62
1,1,2,2-Tetrachloroethane	0.032	Not Detected U	0.22	Not Detected U
trans-1,2-Dichloroethene	0.16	Not Detected U	0.64	Not Detected U
Methyl tert-butyl ether	0.16	Not Detected U	0.58	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	77-131
Toluene-d8	99	94-109
4-Bromofluorobenzene	98	84-112

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ML-DUP-02

Lab ID#: 1102328B-14A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022212**	**Date of Collection:**	**2/16/11 10:30:00 AM**
Dil. Factor:	**1.39**	**Date of Analysis:**	**2/22/11 05:42 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.14	0.38	0.69	1.9
Freon 114	0.14	Not Detected U	0.97	Not Detected U
Chloromethane	0.14	0.42	0.29	0.87
Bromomethane	0.14	Not Detected U	0.54	Not Detected U
Chloroethane	0.14	Not Detected U	0.37	Not Detected U
Freon 11	0.14	0.18	0.78	1.0
Ethanol	0.70	11	1.3	20
Freon 113	0.14	0.047 J	1.1	0.36 J
Methylene Chloride	0.28	0.41	0.96	1.4
Hexane	0.14	0.098 J	0.49	0.35 J
2-Butanone (Methyl Ethyl Ketone)	0.14	0.44	0.41	1.3
Chloroform	0.14	Not Detected U	0.68	Not Detected U
Cyclohexane	0.14	Not Detected U	0.48	Not Detected U
Carbon Tetrachloride	0.14	0.060 J	0.87	0.38 J
1,2-Dichloropropane	0.14	Not Detected U	0.64	Not Detected U
1,4-Dioxane	0.14	Not Detected U	0.50	Not Detected U
Bromodichloromethane	0.14	Not Detected U	0.93	Not Detected U
cis-1,3-Dichloropropene	0.14	Not Detected U	0.63	Not Detected U
4-Methyl-2-pentanone	0.14	Not Detected U	0.57	Not Detected U
trans-1,3-Dichloropropene	0.14	Not Detected U	0.63	Not Detected U
Dibromochloromethane	0.14	Not Detected U	1.2	Not Detected U
1,2-Dibromoethane (EDB)	0.14	Not Detected U	1.1	Not Detected U
Chlorobenzene	0.14	Not Detected U	0.64	Not Detected U
Styrene	0.14	Not Detected U	0.59	Not Detected U
Bromoform	0.14	Not Detected U	1.4	Not Detected U
1,3,5-Trimethylbenzene	0.14	0.048 J	0.68	0.23 J
1,2,4-Trimethylbenzene	0.14	Not Detected U	0.68	Not Detected U
1,3-Dichlorobenzene	0.14	Not Detected U	0.84	Not Detected U
1,4-Dichlorobenzene	0.14	Not Detected U	0.84	Not Detected U
alpha-Chlorotoluene	0.14	Not Detected U	0.72	Not Detected U
1,2-Dichlorobenzene	0.14	Not Detected U	0.84	Not Detected U
1,2,4-Trichlorobenzene	0.70	Not Detected U	5.2	Not Detected U
Hexachlorobutadiene	0.70	Not Detected U	7.4	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	80-129
Toluene-d8	98	93-108

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ML-DUP-02

Lab ID#: 1102328B-14A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022212**	**Date of Collection:**	**2/16/11 10:30:00 AM**
Dil. Factor:	**1.39**	**Date of Analysis:**	**2/22/11 05:42 PM**

Surrogates	**%Recovery**	**Method Limits**
4-Bromofluorobenzene	98	82-112

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ML-DUP-02

Lab ID#: 1102328B-14B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022212sim**	**Date of Collection:**	**2/16/11 10:30:00 AM**
Dil. Factor:	**1.39**	**Date of Analysis:**	**2/22/11 05:42 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.014	Not Detected U	0.036	Not Detected U
1,1-Dichloroethene	0.014	Not Detected U	0.055	Not Detected U
1,1-Dichloroethane	0.028	Not Detected U	0.11	Not Detected U
cis-1,2-Dichloroethene	0.028	Not Detected U	0.11	Not Detected U
1,1,1-Trichloroethane	0.028	0.0084 J	0.15	0.046 J
Benzene	0.070	0.17	0.22	0.56
1,2-Dichloroethane	0.028	0.014 J	0.11	0.056 J
Trichloroethene	0.028	0.0071 J	0.15	0.038 J
Toluene	0.028	0.67	0.10	2.5
1,1,2-Trichloroethane	0.028	Not Detected U	0.15	Not Detected U
Tetrachloroethene	0.028	0.028	0.19	0.19
Ethyl Benzene	0.028	0.13	0.12	0.56
m,p-Xylene	0.056	0.41	0.24	1.8
o-Xylene	0.028	0.12	0.12	0.54
1,1,2,2-Tetrachloroethane	0.028	Not Detected U	0.19	Not Detected U
trans-1,2-Dichloroethene	0.14	Not Detected U	0.55	Not Detected U
Methyl tert-butyl ether	0.14	Not Detected U	0.50	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	77-131
Toluene-d8	100	94-109
4-Bromofluorobenzene	98	84-112

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ML-INDL-01

Lab ID#: 1102328B-15A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022213**	**Date of Collection:**	**2/16/11 10:35:00 AM**
Dil. Factor:	**1.79**	**Date of Analysis:**	**2/22/11 06:28 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.18	0.42	0.88	2.1
Freon 114	0.18	Not Detected U	1.2	Not Detected U
Chloromethane	0.18	0.47	0.37	0.98
Bromomethane	0.18	Not Detected U	0.70	Not Detected U
Chloroethane	0.18	Not Detected U	0.47	Not Detected U
Freon 11	0.18	0.24	1.0	1.3
Ethanol	0.90	110 E	1.7	210 E
Freon 113	0.18	0.073 J	1.4	0.56 J
Methylene Chloride	0.36	0.12 J	1.2	0.43 J
Hexane	0.18	0.081 J	0.63	0.29 J
2-Butanone (Methyl Ethyl Ketone)	0.18	1.2	0.53	3.5
Chloroform	0.18	0.067 J	0.87	0.33 J
Cyclohexane	0.18	0.080 J	0.62	0.28 J
Carbon Tetrachloride	0.18	0.076 J	1.1	0.48 J
1,2-Dichloropropane	0.18	Not Detected U	0.83	Not Detected U
1,4-Dioxane	0.18	Not Detected U	0.64	Not Detected U
Bromodichloromethane	0.18	Not Detected U	1.2	Not Detected U
cis-1,3-Dichloropropene	0.18	Not Detected U	0.81	Not Detected U
4-Methyl-2-pentanone	0.18	0.23	0.73	0.94
trans-1,3-Dichloropropene	0.18	Not Detected U	0.81	Not Detected U
Dibromochloromethane	0.18	Not Detected U	1.5	Not Detected U
1,2-Dibromoethane (EDB)	0.18	Not Detected U	1.4	Not Detected U
Chlorobenzene	0.18	Not Detected U	0.82	Not Detected U
Styrene	0.18	Not Detected U	0.76	Not Detected U
Bromoform	0.18	Not Detected U	1.8	Not Detected U
1,3,5-Trimethylbenzene	0.18	Not Detected U	0.88	Not Detected U
1,2,4-Trimethylbenzene	0.18	Not Detected U	0.88	Not Detected U
1,3-Dichlorobenzene	0.18	Not Detected U	1.1	Not Detected U
1,4-Dichlorobenzene	0.18	Not Detected U	1.1	Not Detected U
alpha-Chlorotoluene	0.18	Not Detected U	0.93	Not Detected U
1,2-Dichlorobenzene	0.18	Not Detected U	1.1	Not Detected U
1,2,4-Trichlorobenzene	0.90	Not Detected U	6.6	Not Detected U
Hexachlorobutadiene	0.90	Not Detected U	9.5	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
E = Exceeds instrument calibration range.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	80-129

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ML-INDL-01

Lab ID#: 1102328B-15A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022213**	**Date of Collection:**	**2/16/11 10:35:00 AM**
Dil. Factor:	**1.79**	**Date of Analysis:**	**2/22/11 06:28 PM**

Surrogates	**%Recovery**	**Method Limits**
Toluene-d8	98	93-108
4-Bromofluorobenzene	99	82-112

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ML-INDL-01

Lab ID#: 1102328B-15B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022213sim**	**Date of Collection:**	**2/16/11 10:35:00 AM**
Dil. Factor:	**1.79**	**Date of Analysis:**	**2/22/11 06:28 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.018	Not Detected U	0.046	Not Detected U
1,1-Dichloroethene	0.018	0.0092 J	0.071	0.036 J
1,1-Dichloroethane	0.036	0.0032 J	0.14	0.013 J
cis-1,2-Dichloroethene	0.036	Not Detected U	0.14	Not Detected U
1,1,1-Trichloroethane	0.036	0.036	0.20	0.20
Benzene	0.090	0.13	0.28	0.41
1,2-Dichloroethane	0.036	0.028 J	0.14	0.11 J
Trichloroethene	0.036	0.0032 J	0.19	0.017 J
Toluene	0.036	0.75	0.13	2.8
1,1,2-Trichloroethane	0.036	Not Detected U	0.20	Not Detected U
Tetrachloroethene	0.036	0.018 J	0.24	0.12 J
Ethyl Benzene	0.036	0.096	0.16	0.41
m,p-Xylene	0.072	0.32	0.31	1.4
o-Xylene	0.036	0.084	0.16	0.37
1,1,2,2-Tetrachloroethane	0.036	Not Detected U	0.24	Not Detected U
trans-1,2-Dichloroethene	0.18	0.0066 J	0.71	0.026 J
Methyl tert-butyl ether	0.18	Not Detected U	0.64	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	77-131
Toluene-d8	99	94-109
4-Bromofluorobenzene	99	84-112

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-AC-INDL-02

Lab ID#: 1102328B-16A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022214**	**Date of Collection:**	**2/16/11 11:00:00 AM**
Dil. Factor:	**1.83**	**Date of Analysis:**	**2/22/11 07:16 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.18	0.39	0.90	1.9
Freon 114	0.18	Not Detected U	1.3	Not Detected U
Chloromethane	0.18	0.42	0.38	0.86
Bromomethane	0.18	Not Detected U	0.71	Not Detected U
Chloroethane	0.18	Not Detected U	0.48	Not Detected U
Freon 11	0.18	0.20	1.0	1.1
Ethanol	0.92	1.4	1.7	2.6
Freon 113	0.18	0.053 J	1.4	0.40 J
Methylene Chloride	0.37	0.12 J	1.3	0.41 J
Hexane	0.18	0.56	0.64	2.0
2-Butanone (Methyl Ethyl Ketone)	0.18	0.22	0.54	0.66
Chloroform	0.18	Not Detected U	0.89	Not Detected U
Cyclohexane	0.18	0.37	0.63	1.3
Carbon Tetrachloride	0.18	Not Detected U	1.2	Not Detected U
1,2-Dichloropropane	0.18	Not Detected U	0.84	Not Detected U
1,4-Dioxane	0.18	Not Detected U	0.66	Not Detected U
Bromodichloromethane	0.18	Not Detected U	1.2	Not Detected U
cis-1,3-Dichloropropene	0.18	Not Detected U	0.83	Not Detected U
4-Methyl-2-pentanone	0.18	0.038 J	0.75	0.16 J
trans-1,3-Dichloropropene	0.18	Not Detected U	0.83	Not Detected U
Dibromochloromethane	0.18	Not Detected U	1.6	Not Detected U
1,2-Dibromoethane (EDB)	0.18	Not Detected U	1.4	Not Detected U
Chlorobenzene	0.18	Not Detected U	0.84	Not Detected U
Styrene	0.18	Not Detected U	0.78	Not Detected U
Bromoform	0.18	Not Detected U	1.9	Not Detected U
1,3,5-Trimethylbenzene	0.18	Not Detected U	0.90	Not Detected U
1,2,4-Trimethylbenzene	0.18	Not Detected U	0.90	Not Detected U
1,3-Dichlorobenzene	0.18	Not Detected U	1.1	Not Detected U
1,4-Dichlorobenzene	0.18	Not Detected U	1.1	Not Detected U
alpha-Chlorotoluene	0.18	Not Detected U	0.95	Not Detected U
1,2-Dichlorobenzene	0.18	Not Detected U	1.1	Not Detected U
1,2,4-Trichlorobenzene	0.92	Not Detected U	6.8	Not Detected U
Hexachlorobutadiene	0.92	Not Detected U	9.8	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	80-129
Toluene-d8	100	93-108

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-AC-INDL-02

Lab ID#: 1102328B-16A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022214**	**Date of Collection:**	**2/16/11 11:00:00 AM**
Dil. Factor:	**1.83**	**Date of Analysis:**	**2/22/11 07:16 PM**

Surrogates	**%Recovery**	**Method Limits**
4-Bromofluorobenzene	95	82-112

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-AC-INDL-02

Lab ID#: 1102328B-16B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022214sim**	**Date of Collection:**	**2/16/11 11:00:00 AM**
Dil. Factor:	**1.83**	**Date of Analysis:**	**2/22/11 07:16 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.018	Not Detected U	0.047	Not Detected U
1,1-Dichloroethene	0.018	Not Detected U	0.072	Not Detected U
1,1-Dichloroethane	0.037	Not Detected U	0.15	Not Detected U
cis-1,2-Dichloroethene	0.037	Not Detected U	0.14	Not Detected U
1,1,1-Trichloroethane	0.037	0.0065 J	0.20	0.036 J
Benzene	0.092	0.29	0.29	0.93
1,2-Dichloroethane	0.037	0.011 J	0.15	0.045 J
Trichloroethene	0.037	0.0079 J	0.20	0.042 J
Toluene	0.037	0.60	0.14	2.3
1,1,2-Trichloroethane	0.037	Not Detected U	0.20	Not Detected U
Tetrachloroethene	0.037	0.011 J	0.25	0.074 J
Ethyl Benzene	0.037	0.089	0.16	0.39
m,p-Xylene	0.073	0.29	0.32	1.2
o-Xylene	0.037	0.095	0.16	0.41
1,1,2,2-Tetrachloroethane	0.037	Not Detected U	0.25	Not Detected U
trans-1,2-Dichloroethene	0.18	Not Detected U	0.72	Not Detected U
Methyl tert-butyl ether	0.18	Not Detected U	0.66	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	77-131
Toluene-d8	99	94-109
4-Bromofluorobenzene	99	84-112

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-RE-INDL-01

Lab ID#: 1102328B-17A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022215**	**Date of Collection:**	**2/16/11 11:08:00 AM**
Dil. Factor:	**1.75**	**Date of Analysis:**	**2/22/11 08:00 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.18	0.41	0.86	2.0
Freon 114	0.18	Not Detected U	1.2	Not Detected U
Chloromethane	0.18	0.77	0.36	1.6
Bromomethane	0.18	Not Detected U	0.68	Not Detected U
Chloroethane	0.18	Not Detected U	0.46	Not Detected U
Freon 11	0.18	0.22	0.98	1.2
Ethanol	0.88	26	1.6	49
Freon 113	0.18	0.050 J	1.3	0.38 J
Methylene Chloride	0.35	0.11 J	1.2	0.39 J
Hexane	0.18	0.13 J	0.62	0.45 J
2-Butanone (Methyl Ethyl Ketone)	0.18	0.29	0.52	0.86
Chloroform	0.18	Not Detected U	0.85	Not Detected U
Cyclohexane	0.18	Not Detected U	0.60	Not Detected U
Carbon Tetrachloride	0.18	Not Detected U	1.1	Not Detected U
1,2-Dichloropropane	0.18	Not Detected U	0.81	Not Detected U
1,4-Dioxane	0.18	Not Detected U	0.63	Not Detected U
Bromodichloromethane	0.18	Not Detected U	1.2	Not Detected U
cis-1,3-Dichloropropene	0.18	Not Detected U	0.79	Not Detected U
4-Methyl-2-pentanone	0.18	Not Detected U	0.72	Not Detected U
trans-1,3-Dichloropropene	0.18	Not Detected U	0.79	Not Detected U
Dibromochloromethane	0.18	Not Detected U	1.5	Not Detected U
1,2-Dibromoethane (EDB)	0.18	Not Detected U	1.3	Not Detected U
Chlorobenzene	0.18	Not Detected U	0.80	Not Detected U
Styrene	0.18	Not Detected U	0.74	Not Detected U
Bromoform	0.18	Not Detected U	1.8	Not Detected U
1,3,5-Trimethylbenzene	0.18	Not Detected U	0.86	Not Detected U
1,2,4-Trimethylbenzene	0.18	Not Detected U	0.86	Not Detected U
1,3-Dichlorobenzene	0.18	Not Detected U	1.0	Not Detected U
1,4-Dichlorobenzene	0.18	0.55	1.0	3.3
alpha-Chlorotoluene	0.18	Not Detected U	0.90	Not Detected U
1,2-Dichlorobenzene	0.18	Not Detected U	1.0	Not Detected U
1,2,4-Trichlorobenzene	0.88	Not Detected U	6.5	Not Detected U
Hexachlorobutadiene	0.88	Not Detected U	9.3	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	80-129
Toluene-d8	100	93-108

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-RE-INDL-01

Lab ID#: 1102328B-17A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022215**	**Date of Collection:**	**2/16/11 11:08:00 AM**
Dil. Factor:	**1.75**	**Date of Analysis:**	**2/22/11 08:00 PM**

Surrogates	**%Recovery**	**Method Limits**
4-Bromofluorobenzene	98	82-112

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-RE-INDL-01

Lab ID#: 1102328B-17B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022215sim**	**Date of Collection:**	**2/16/11 11:08:00 AM**
Dil. Factor:	**1.75**	**Date of Analysis:**	**2/22/11 08:00 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.018	Not Detected U	0.045	Not Detected U
1,1-Dichloroethene	0.018	Not Detected U	0.069	Not Detected U
1,1-Dichloroethane	0.035	Not Detected U	0.14	Not Detected U
cis-1,2-Dichloroethene	0.035	Not Detected U	0.14	Not Detected U
1,1,1-Trichloroethane	0.035	0.014 J	0.19	0.076 J
Benzene	0.088	0.30	0.28	0.97
1,2-Dichloroethane	0.035	0.68	0.14	2.8
Trichloroethene	0.035	0.0080 J	0.19	0.043 J
Toluene	0.035	0.57	0.13	2.1
1,1,2-Trichloroethane	0.035	Not Detected U	0.19	Not Detected U
Tetrachloroethene	0.035	0.0077 J	0.24	0.052 J
Ethyl Benzene	0.035	0.054	0.15	0.23
m,p-Xylene	0.070	0.13	0.30	0.56
o-Xylene	0.035	0.038	0.15	0.17
1,1,2,2-Tetrachloroethane	0.035	Not Detected U	0.24	Not Detected U
trans-1,2-Dichloroethene	0.18	Not Detected U	0.69	Not Detected U
Methyl tert-butyl ether	0.18	Not Detected U	0.63	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	77-131
Toluene-d8	98	94-109
4-Bromofluorobenzene	98	84-112

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-RE-DUP-03

Lab ID#: 1102328B-18A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022512**	**Date of Collection:**	**2/16/11 11:01:00 AM**
Dil. Factor:	**1.79**	**Date of Analysis:**	**2/25/11 05:39 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.18	0.46	0.88	2.3
Freon 114	0.18	Not Detected U	1.2	Not Detected U
Chloromethane	0.18	0.84	0.37	1.7
Bromomethane	0.18	Not Detected U	0.70	Not Detected U
Chloroethane	0.18	Not Detected U	0.47	Not Detected U
Freon 11	0.18	0.27	1.0	1.5
Ethanol	0.90	27	1.7	51
Freon 113	0.18	0.056 J	1.4	0.43 J
Methylene Chloride	0.36	0.13 J	1.2	0.46 J
Hexane	0.18	0.14 J	0.63	0.50 J
2-Butanone (Methyl Ethyl Ketone)	0.18	0.32	0.53	0.93
Chloroform	0.18	Not Detected U	0.87	Not Detected U
Cyclohexane	0.18	Not Detected U	0.62	Not Detected U
Carbon Tetrachloride	0.18	Not Detected U	1.1	Not Detected U
1,2-Dichloropropane	0.18	Not Detected U	0.83	Not Detected U
1,4-Dioxane	0.18	Not Detected U	0.64	Not Detected U
Bromodichloromethane	0.18	Not Detected U	1.2	Not Detected U
cis-1,3-Dichloropropene	0.18	Not Detected U	0.81	Not Detected U
4-Methyl-2-pentanone	0.18	Not Detected U	0.73	Not Detected U
trans-1,3-Dichloropropene	0.18	Not Detected U	0.81	Not Detected U
Dibromochloromethane	0.18	Not Detected U	1.5	Not Detected U
1,2-Dibromoethane (EDB)	0.18	Not Detected U	1.4	Not Detected U
Chlorobenzene	0.18	Not Detected U	0.82	Not Detected U
Styrene	0.18	Not Detected U	0.76	Not Detected U
Bromoform	0.18	Not Detected U	1.8	Not Detected U
1,3,5-Trimethylbenzene	0.18	Not Detected U	0.88	Not Detected U
1,2,4-Trimethylbenzene	0.18	Not Detected U	0.88	Not Detected U
1,3-Dichlorobenzene	0.18	Not Detected U	1.1	Not Detected U
1,4-Dichlorobenzene	0.18	0.81	1.1	4.8
alpha-Chlorotoluene	0.18	Not Detected U	0.93	Not Detected U
1,2-Dichlorobenzene	0.18	Not Detected U	1.1	Not Detected U
1,2,4-Trichlorobenzene	0.90	Not Detected U	6.6	Not Detected U
Hexachlorobutadiene	0.90	Not Detected U	9.5	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	108	80-129
Toluene-d8	96	93-108

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-RE-DUP-03

Lab ID#: 1102328B-18A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022512**	**Date of Collection: 2/16/11 11:01:00 AM**
Dil. Factor:	**1.79**	**Date of Analysis: 2/25/11 05:39 PM**

Surrogates	**%Recovery**	**Method Limits**
4-Bromofluorobenzene	104	82-112

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-RE-DUP-03

Lab ID#: 1102328B-18B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022512sim**	**Date of Collection:**	**2/16/11 11:01:00 AM**
Dil. Factor:	**1.79**	**Date of Analysis:**	**2/25/11 05:39 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.018	Not Detected U	0.046	Not Detected U
1,1-Dichloroethene	0.018	Not Detected U	0.071	Not Detected U
1,1-Dichloroethane	0.036	0.0028 J	0.14	0.011 J
cis-1,2-Dichloroethene	0.036	Not Detected U	0.14	Not Detected U
1,1,1-Trichloroethane	0.036	0.0070 J	0.20	0.038 J
Benzene	0.090	0.30	0.28	0.94
1,2-Dichloroethane	0.036	0.78	0.14	3.2
Trichloroethene	0.036	0.0038 J	0.19	0.020 J
Toluene	0.036	0.59	0.13	2.2
1,1,2-Trichloroethane	0.036	Not Detected U	0.20	Not Detected U
Tetrachloroethene	0.036	0.0079 J	0.24	0.053 J
Ethyl Benzene	0.036	0.062	0.16	0.27
m,p-Xylene	0.072	0.14	0.31	0.62
o-Xylene	0.036	0.040	0.16	0.17
1,1,2,2-Tetrachloroethane	0.036	Not Detected U	0.24	Not Detected U
trans-1,2-Dichloroethene	0.18	Not Detected U	0.71	Not Detected U
Methyl tert-butyl ether	0.18	Not Detected U	0.64	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	109	77-131
Toluene-d8	98	94-109
4-Bromofluorobenzene	100	84-112

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-RE-CRL-01

Lab ID#: 1102328B-19A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022513**	**Date of Collection:**	**2/16/11 11:10:00 AM**
Dil. Factor:	**1.64**	**Date of Analysis:**	**2/25/11 06:18 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.16	0.40	0.81	2.0
Freon 114	0.16	Not Detected U	1.1	Not Detected U
Chloromethane	0.16	0.33	0.34	0.69
Bromomethane	0.16	Not Detected U	0.64	Not Detected U
Chloroethane	0.16	Not Detected U	0.43	Not Detected U
Freon 11	0.16	0.19	0.92	1.1
Ethanol	0.82	1.7	1.5	3.3
Freon 113	0.16	0.062 J	1.2	0.48 J
Methylene Chloride	0.33	0.098 J	1.1	0.34 J
Hexane	0.16	0.13 J	0.58	0.47 J
2-Butanone (Methyl Ethyl Ketone)	0.16	0.67	0.48	2.0
Chloroform	0.16	Not Detected U	0.80	Not Detected U
Cyclohexane	0.16	0.054 J	0.56	0.19 J
Carbon Tetrachloride	0.16	Not Detected U	1.0	Not Detected U
1,2-Dichloropropane	0.16	Not Detected U	0.76	Not Detected U
1,4-Dioxane	0.16	Not Detected U	0.59	Not Detected U
Bromodichloromethane	0.16	Not Detected U	1.1	Not Detected U
cis-1,3-Dichloropropene	0.16	Not Detected U	0.74	Not Detected U
4-Methyl-2-pentanone	0.16	Not Detected U	0.67	Not Detected U
trans-1,3-Dichloropropene	0.16	Not Detected U	0.74	Not Detected U
Dibromochloromethane	0.16	Not Detected U	1.4	Not Detected U
1,2-Dibromoethane (EDB)	0.16	Not Detected U	1.3	Not Detected U
Chlorobenzene	0.16	Not Detected U	0.76	Not Detected U
Styrene	0.16	Not Detected U	0.70	Not Detected U
Bromoform	0.16	Not Detected U	1.7	Not Detected U
1,3,5-Trimethylbenzene	0.16	0.085 J	0.81	0.42 J
1,2,4-Trimethylbenzene	0.16	Not Detected U	0.81	Not Detected U
1,3-Dichlorobenzene	0.16	Not Detected U	0.99	Not Detected U
1,4-Dichlorobenzene	0.16	0.043 J	0.99	0.26 J
alpha-Chlorotoluene	0.16	Not Detected U	0.85	Not Detected U
1,2-Dichlorobenzene	0.16	Not Detected U	0.99	Not Detected U
1,2,4-Trichlorobenzene	0.82	Not Detected U	6.1	Not Detected U
Hexachlorobutadiene	0.82	Not Detected U	8.7	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	80-129
Toluene-d8	99	93-108

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-RE-CRL-01

Lab ID#: 1102328B-19A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022513**	**Date of Collection: 2/16/11 11:10:00 AM**
Dil. Factor:	**1.64**	**Date of Analysis: 2/25/11 06:18 PM**

Surrogates	**%Recovery**	**Method Limits**
4-Bromofluorobenzene	102	82-112

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-RE-CRL-01

Lab ID#: 1102328B-19B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022513sim**	**Date of Collection:**	**2/16/11 11:10:00 AM**
Dil. Factor:	**1.64**	**Date of Analysis:**	**2/25/11 06:18 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.016	Not Detected U	0.042	Not Detected U
1,1-Dichloroethene	0.016	Not Detected U	0.065	Not Detected U
1,1-Dichloroethane	0.033	Not Detected U	0.13	Not Detected U
cis-1,2-Dichloroethene	0.033	Not Detected U	0.13	Not Detected U
1,1,1-Trichloroethane	0.033	0.0078 J	0.18	0.043 J
Benzene	0.082	0.20	0.26	0.64
1,2-Dichloroethane	0.033	0.017 J	0.13	0.069 J
Trichloroethene	0.033	0.013 J	0.18	0.070 J
Toluene	0.033	1.1	0.12	4.2
1,1,2-Trichloroethane	0.033	Not Detected U	0.18	Not Detected U
Tetrachloroethene	0.033	0.046	0.22	0.31
Ethyl Benzene	0.033	0.23	0.14	0.98
m,p-Xylene	0.066	0.75	0.28	3.3
o-Xylene	0.033	0.24	0.14	1.0
1,1,2,2-Tetrachloroethane	0.033	Not Detected U	0.22	Not Detected U
trans-1,2-Dichloroethene	0.16	Not Detected U	0.65	Not Detected U
Methyl tert-butyl ether	0.16	0.0040 J	0.59	0.014 J

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	109	77-131
Toluene-d8	100	94-109
4-Bromofluorobenzene	102	84-112

Air Toxics LTD.
Laboratory Services Since 1989

3/2/2011
Mr. David Brayack
Tetra Tech
Twin Oaks I, Suite 309
5700 Lake Wright Drive
Norfolk VA 23502

Project Name: NWIRP Calverton
Project #: CTO-160
Workorder #: 1102328AR1

Dear Mr. David Brayack

The following report includes the data for the above referenced project for sample(s) received on 2/17/2011 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager

Air Toxics LTD.
Laboratory Services Since 1989

WORK ORDER #: 1102328AR1

Work Order Summary

CLIENT:	Mr. David Brayack Tetra Tech Twin Oaks I, Suite 309 5700 Lake Wright Drive Norfolk, VA 23502	**BILL TO:**	Accounts Payable/Pittsburg Tetra Tech EC, Inc. Foster Plaza 7 661 Anderson Drive Pittsburgh, PA 15220-2745
PHONE:	(757) 461-3824	**P.O. #**	112G03016
FAX:	(757) 461-4148	**PROJECT #**	CTO-160 NWIRP Calverton
DATE RECEIVED:	02/17/2011	**CONTACT:**	Ausha Scott
DATE COMPLETED:	02/28/2011		
DATE REISSUED:	03/01/2011		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	CA-PRSC-ODA-01	Modified TO-15	1.0 "Hg	5 psi
01AA	CA-PRSC-ODA-01 Lab Duplicate	Modified TO-15	1.0 "Hg	5 psi
01B	CA-PRSC-ODA-01	Modified TO-15	1.0 "Hg	5 psi
01BB	CA-PRSC-ODA-01 Lab Duplicate	Modified TO-15	1.0 "Hg	5 psi
02A	CA-PRSC-ML-INDB-02	Modified TO-15	0.8 psi	5 psi
02B	CA-PRSC-ML-INDB-02	Modified TO-15	0.8 psi	5 psi
03A	CA-PRSC-ML-CRL-03	Modified TO-15	3.5 "Hg	5 psi
03B	CA-PRSC-ML-CRL-03	Modified TO-15	3.5 "Hg	5 psi
04A	CA-PRSC-ML-INDL-02	Modified TO-15	2.5 "Hg	5 psi
04B	CA-PRSC-ML-INDL-02	Modified TO-15	2.5 "Hg	5 psi
05A	CA-PRSC-ML-SSB-02	Modified TO-15	4.0 "Hg	5 psi
05B	CA-PRSC-ML-SSB-02	Modified TO-15	4.0 "Hg	5 psi
06A	CA-PRSC-ML-CRL-02	Modified TO-15	4.5 "Hg	5 psi
06B	CA-PRSC-ML-CRL-02	Modified TO-15	4.5 "Hg	5 psi
07A	CA-PRSC-ML-SSB-01	Modified TO-15	6.0 "Hg	5 psi
07AA	CA-PRSC-ML-SSB-01 Lab Duplicate	Modified TO-15	6.0 "Hg	5 psi
07B	CA-PRSC-ML-SSB-01	Modified TO-15	6.0 "Hg	5 psi

Continued on next page

Air Toxics LTD.
Laboratory Services Since 1989

WORK ORDER #: 1102328AR1

Work Order Summary

CLIENT:	Mr. David Brayack Tetra Tech Twin Oaks I, Suite 309 5700 Lake Wright Drive Norfolk, VA 23502	**BILL TO:**	Accounts Payable/Pittsburg Tetra Tech EC, Inc. Foster Plaza 7 661 Anderson Drive Pittsburgh, PA 15220-2745
PHONE:	(757) 461-3824	**P.O. #**	112G03016
FAX:	(757) 461-4148	**PROJECT #**	CTO-160 NWIRP Calverton
DATE RECEIVED:	02/17/2011	**CONTACT:**	Ausha Scott
DATE COMPLETED:	02/28/2011		
DATE REISSUED:	03/01/2011		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
07BB	CA-PRSC-ML-SSB-01 Lab Duplicate	Modified TO-15	6.0 "Hg	5 psi
08A	CA-PRSC-ML-INDB-01	Modified TO-15	5.5 "Hg	5 psi
08B	CA-PRSC-ML-INDB-01	Modified TO-15	5.5 "Hg	5 psi
09A	CA-PRSC-AC-CRL-01	Modified TO-15	4.0 "Hg	5 psi
09B	CA-PRSC-AC-CRL-01	Modified TO-15	4.0 "Hg	5 psi
10A	CA-PRSC-ML-DUP-01	Modified TO-15	4.5 "Hg	5 psi
10B	CA-PRSC-ML-DUP-01	Modified TO-15	4.5 "Hg	5 psi
11A	Lab Blank	Modified TO-15	NA	NA
11B	Lab Blank	Modified TO-15	NA	NA
11C	Lab Blank	Modified TO-15	NA	NA
11D	Lab Blank	Modified TO-15	NA	NA
12A	CCV	Modified TO-15	NA	NA
12B	CCV	Modified TO-15	NA	NA
12C	CCV	Modified TO-15	NA	NA
12D	CCV	Modified TO-15	NA	NA
13A	LCS	Modified TO-15	NA	NA
13AA	LCSD	Modified TO-15	NA	NA
13B	LCS	Modified TO-15	NA	NA
13BB	LCSD	Modified TO-15	NA	NA
13C	LCS	Modified TO-15	NA	NA

Continued on next page

Air Toxics LTD.
Laboratory Services Since 1989

WORK ORDER #: 1102328AR1

Work Order Summary

CLIENT:	Mr. David Brayack Tetra Tech Twin Oaks I, Suite 309 5700 Lake Wright Drive Norfolk, VA 23502	**BILL TO:**	Accounts Payable/Pittsburg Tetra Tech EC, Inc. Foster Plaza 7 661 Anderson Drive Pittsburgh, PA 15220-2745
PHONE:	(757) 461-3824	**P.O. #**	112G03016
FAX:	(757) 461-4148	**PROJECT #**	CTO-160 NWIRP Calverton
DATE RECEIVED:	02/17/2011	**CONTACT:**	Ausha Scott
DATE COMPLETED:	02/28/2011		
DATE REISSUED:	03/01/2011		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
13CC	LCSD	Modified TO-15	NA	NA
13D	LCS	Modified TO-15	NA	NA
13DD	LCSD	Modified TO-15	NA	NA

CERTIFIED BY: Linda L. Freeman

Laboratory Director

DATE: 03/02/11

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763,
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/09, Expiration date: 06/30/11
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Air Toxics Ltd.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-15 Full Scan/SIM
Tetra Tech
Workorder# 1102328AR1

Ten 6 Liter Summa Canister (SIM Certified) samples were received on February 17, 2011. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the Full Scan and SIM acquisition modes. The method involves concentrating up to 1.0 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	***TO-15***	***ATL Modifications***
ICAL %RSD acceptance criteria	</=30% RSD with 2 compounds allowed out to < 40% RSD	For Full Scan: 30% RSD with 4 compounds allowed out to < 40% RSD For SIM: Project specific; default criteria is </=30% RSD with 10% of compounds allowed out to < 40% RSD
Daily Calibration	+- 30% Difference	For Full Scan: </= 30% Difference with four allowed out up to </=40%.; flag and narrate outliers For SIM: Project specific; default criteria is </= 30% Difference with 10% of compounds allowed out up to </=40%.; flag and narrate outliers
Blank and standards	Zero air	Nitrogen
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The results for each sample in this report were acquired from two separate data files originating from the same analytical run. The two data files have the same base file name and are differentiated with a "sim" extension on the SIM data file.

As per project specific client request the laboratory has reported estimated values for target compound hits that are below the Reporting Limit but greater than the Method Detection Limit. All The canisters used for this project have been certified to the Reporting Limit for the target analytes included in this workorder. Concentrations that are below the level at which the canister was certified may be false positives.

1,1-Dichloroethene, m,p-Xylene and o-Xylene were manually integrated in sample CA-PRSC-0DA-01 (01B).

Tetrachloroethene was manually integrated in sample CA-PRSC-0DA-01 Lab Duplicate (01BB).

Tetrachloroethene was manually integrated in sample CA-PRSC-ML-INDB-02 (02B).

1,2-Dichloroethane was manually integrated in sample CA-PRSC-ML-CRL-02 (06B).

1,2-Dichloroethane and m,p-Xylene were manually integrated in the Lab blank on February 22, 2011.

Ethanol exceeded the calibration range for sample CA-PRSC-ML-INDL-02.

THE WORK ORDER WAS REISSUED ON MARCH 01, 2011 AS FOLLOWS:

1) TO REPORT THE CORRECT DATA FOR SAMPLES CA-PRSC-ML-SSB-01, CA-PRSC-ML-INDB-01, CA-PRSC-AC-CRL-01 AND CA-PRSC-ML-DUP-01. THE PREVIOUSLY REPORTED DATA WAS INADVERTENTLY PROCESSED WITH AN INCORRECT INTERNAL AND SURROGATE STANDARD MIX.

2) TO REMOVE THE DUPLICATE PER ANALYTICAL BATCH NARRATIVE AS IT NO LONGER APPLIES TO THIS REPORT.

3) TO REPORT RESULTS IN PPBV AND UG/M3, PER CLIENT'S REQUEST.

4) 1,3,5-TRIMETHYLBENZENE WAS MANUALLY INTEGRATED IN THE CCV, LCS AND LCSD ON FEBRUARY 25, 2011.

5) FREON 12 AND CHLOROMETHANE WERE MANUALLY INTEGRATED IN SAMPLE CA-PRSC-ML-INDB-01 (08A).

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

UJ- Non-detected compound associated with low bias in the CCV and/or LCS.
N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: CA-PRSC-ODA-01

Lab ID#: 1102328AR1-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.14	0.40	0.69	2.0
Chloromethane	0.14	0.46	0.29	0.95
Freon 11	0.14	0.21	0.78	1.2
Ethanol	0.70	0.58 J	1.3	1.1 J
Freon 113	0.14	0.076 J	1.1	0.58 J
Methylene Chloride	0.28	0.12 J	0.96	0.42 J
Hexane	0.14	0.034 J	0.49	0.12 J
2-Butanone (Methyl Ethyl Ketone)	0.14	0.39	0.41	1.2
Carbon Tetrachloride	0.14	0.067 J	0.87	0.42 J

Client Sample ID: CA-PRSC-ODA-01 Lab Duplicate

Lab ID#: 1102328AR1-01AA

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.14	0.38	0.69	1.9
Chloromethane	0.14	0.40	0.29	0.83
Freon 11	0.14	0.21	0.78	1.2
Ethanol	0.70	0.53 J	1.3	1.0 J
Freon 113	0.14	0.048 J	1.1	0.37 J
Methylene Chloride	0.28	0.085 J	0.96	0.29 J
Hexane	0.14	0.046 J	0.49	0.16 J
2-Butanone (Methyl Ethyl Ketone)	0.14	0.33	0.41	0.98
Carbon Tetrachloride	0.14	0.053 J	0.87	0.33 J
1,2,4-Trimethylbenzene	0.14	0.059 J	0.68	0.29 J

Client Sample ID: CA-PRSC-ODA-01

Lab ID#: 1102328AR1-01B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethane	0.028	0.0036 J	0.11	0.014 J
1,1,1-Trichloroethane	0.028	0.0070 J	0.15	0.038 J

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: CA-PRSC-ODA-01

Lab ID#: 1102328AR1-01B

Benzene	0.070	0.13	0.22	0.43
1,2-Dichloroethane	0.028	0.011 J	0.11	0.045 J
Toluene	0.028	0.079	0.10	0.30
Tetrachloroethene	0.028	0.0062 J	0.19	0.042 J
Ethyl Benzene	0.028	0.016 J	0.12	0.068 J
m,p-Xylene	0.056	0.039 J	0.24	0.17 J
o-Xylene	0.028	0.018 J	0.12	0.076 J

Client Sample ID: CA-PRSC-ODA-01 Lab Duplicate

Lab ID#: 1102328AR1-01BB

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1-Trichloroethane	0.028	0.0067 J	0.15	0.036 J
Benzene	0.070	0.14	0.22	0.43
1,2-Dichloroethane	0.028	0.011 J	0.11	0.045 J
Toluene	0.028	0.079	0.10	0.30
Tetrachloroethene	0.028	0.0058 J	0.19	0.039 J
Ethyl Benzene	0.028	0.018 J	0.12	0.076 J
m,p-Xylene	0.056	0.042 J	0.24	0.18 J
o-Xylene	0.028	0.020 J	0.12	0.086 J

Client Sample ID: CA-PRSC-ML-INDB-02

Lab ID#: 1102328AR1-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.13	0.40	0.63	2.0
Chloromethane	0.13	0.38	0.26	0.79
Freon 11	0.13	0.22	0.71	1.2
Ethanol	0.64	2.5	1.2	4.7
Freon 113	0.13	0.054 J	0.97	0.41 J
Methylene Chloride	0.25	1.8	0.88	6.4
Hexane	0.13	0.041 J	0.45	0.14 J
2-Butanone (Methyl Ethyl Ketone)	0.13	0.29	0.37	0.85

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: CA-PRSC-ML-INDB-02

Lab ID#: 1102328AR1-02A

Carbon Tetrachloride	0.13	0.080 J	0.80	0.50 J
4-Methyl-2-pentanone	0.13	0.085 J	0.52	0.35 J

Client Sample ID: CA-PRSC-ML-INDB-02

Lab ID#: 1102328AR1-02B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethane	0.025	0.0043 J	0.10	0.018 J
1,1,1-Trichloroethane	0.025	0.0067 J	0.14	0.036 J
Benzene	0.064	0.13	0.20	0.41
1,2-Dichloroethane	0.025	0.010 J	0.10	0.042 J
Toluene	0.025	0.16	0.096	0.61
Tetrachloroethene	0.025	0.0060 J	0.17	0.041 J
Ethyl Benzene	0.025	0.016 J	0.11	0.069 J
m,p-Xylene	0.051	0.043 J	0.22	0.19 J
o-Xylene	0.025	0.018 J	0.11	0.076 J

Client Sample ID: CA-PRSC-ML-CRL-03

Lab ID#: 1102328AR1-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.15	0.33	0.75	1.6
Chloromethane	0.15	0.35	0.31	0.73
Freon 11	0.15	0.21	0.85	1.2
Ethanol	0.76	5.0	1.4	9.5
Freon 113	0.15	0.063 J	1.2	0.48 J
Methylene Chloride	0.30	1.4	1.0	4.9
Hexane	0.15	0.16	0.54	0.57
2-Butanone (Methyl Ethyl Ketone)	0.15	0.92	0.45	2.7
Cyclohexane	0.15	0.068 J	0.52	0.24 J
Carbon Tetrachloride	0.15	0.064 J	0.96	0.40 J
4-Methyl-2-pentanone	0.15	0.064 J	0.62	0.26 J
1,2,4-Trimethylbenzene	0.15	0.056 J	0.75	0.28 J

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: CA-PRSC-ML-CRL-03

Lab ID#: 1102328AR1-03B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethane	0.030	0.0037 J	0.12	0.015 J
1,1,1-Trichloroethane	0.030	0.010 J	0.16	0.054 J
Benzene	0.076	0.16	0.24	0.52
1,2-Dichloroethane	0.030	0.0083 J	0.12	0.033 J
Trichloroethene	0.030	0.0086 J	0.16	0.046 J
Toluene	0.030	0.70	0.11	2.6
Tetrachloroethene	0.030	0.015 J	0.21	0.10 J
Ethyl Benzene	0.030	0.080	0.13	0.35
m,p-Xylene	0.061	0.21	0.26	0.90
o-Xylene	0.030	0.065	0.13	0.28

Client Sample ID: CA-PRSC-ML-INDL-02

Lab ID#: 1102328AR1-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.15	0.35	0.72	1.7
Chloromethane	0.15	0.44	0.30	0.91
Freon 11	0.15	0.20	0.82	1.1
Ethanol	0.73	66 E	1.4	120 E
Freon 113	0.15	0.071 J	1.1	0.54 J
Methylene Chloride	0.29	3.8	1.0	13
Hexane	0.15	0.078 J	0.51	0.27 J
2-Butanone (Methyl Ethyl Ketone)	0.15	0.32	0.43	0.94
Carbon Tetrachloride	0.15	0.087 J	0.92	0.55 J
Styrene	0.15	0.14 J	0.62	0.61 J
1,2,4-Trimethylbenzene	0.15	0.15	0.72	0.73

Client Sample ID: CA-PRSC-ML-INDL-02

Lab ID#: 1102328AR1-04B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: CA-PRSC-ML-INDL-02

Lab ID#: 1102328AR1-04B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1-Trichloroethane	0.029	0.0075 J	0.16	0.041 J
Benzene	0.073	0.13	0.23	0.42
1,2-Dichloroethane	0.029	0.0096 J	0.12	0.039 J
Trichloroethene	0.029	0.011 J	0.16	0.058 J
Toluene	0.029	0.35	0.11	1.3
Tetrachloroethene	0.029	0.013 J	0.20	0.088 J
Ethyl Benzene	0.029	0.034	0.13	0.15
m,p-Xylene	0.058	0.098	0.25	0.43
o-Xylene	0.029	0.034	0.13	0.15

Client Sample ID: CA-PRSC-ML-SSB-02

Lab ID#: 1102328AR1-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.16	0.37	0.77	1.8
Chloromethane	0.16	0.14 J	0.32	0.28 J
Freon 11	0.16	0.19	0.87	1.1
Ethanol	0.78	8.4	1.5	16
Freon 113	0.16	0.052 J	1.2	0.40 J
Methylene Chloride	0.31	1.8	1.1	6.2
Hexane	0.16	0.079 J	0.55	0.28 J
2-Butanone (Methyl Ethyl Ketone)	0.16	2.1	0.46	6.3
Carbon Tetrachloride	0.16	0.098 J	0.98	0.61 J
4-Methyl-2-pentanone	0.16	0.064 J	0.63	0.26 J
Styrene	0.16	0.044 J	0.66	0.18 J
1,2,4-Trimethylbenzene	0.16	0.12 J	0.76	0.59 J
1,3-Dichlorobenzene	0.16	0.077 J	0.93	0.46 J

Client Sample ID: CA-PRSC-ML-SSB-02

Lab ID#: 1102328AR1-05B

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: CA-PRSC-ML-SSB-02

Lab ID#: 1102328AR1-05B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1-Trichloroethane	0.031	0.0075 J	0.17	0.041 J
Benzene	0.078	0.18	0.25	0.59
1,2-Dichloroethane	0.031	0.0091 J	0.12	0.037 J
Trichloroethene	0.031	0.0053 J	0.17	0.029 J
Toluene	0.031	0.38	0.12	1.4
Tetrachloroethene	0.031	0.015 J	0.21	0.10 J
Ethyl Benzene	0.031	0.072	0.13	0.31
m,p-Xylene	0.062	0.24	0.27	1.0
o-Xylene	0.031	0.11	0.13	0.46
Methyl tert-butyl ether	0.16	0.0060 J	0.56	0.022 J

Client Sample ID: CA-PRSC-ML-CRL-02

Lab ID#: 1102328AR1-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.16	0.42	0.78	2.1
Chloromethane	0.16	0.37	0.33	0.77
Freon 11	0.16	0.20	0.89	1.1
Ethanol	0.79	13	1.5	24
Freon 113	0.16	0.041 J	1.2	0.32 J
Methylene Chloride	0.32	1.3	1.1	4.5
Hexane	0.16	0.040 J	0.56	0.14 J
2-Butanone (Methyl Ethyl Ketone)	0.16	0.19	0.46	0.57
Carbon Tetrachloride	0.16	0.078 J	0.99	0.49 J
4-Methyl-2-pentanone	0.16	0.073 J	0.65	0.30 J
1,2,4-Trimethylbenzene	0.16	0.051 J	0.78	0.25 J

Client Sample ID: CA-PRSC-ML-CRL-02

Lab ID#: 1102328AR1-06B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: CA-PRSC-ML-CRL-02

Lab ID#: 1102328AR1-06B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1-Trichloroethane	0.032	0.0092 J	0.17	0.050 J
Benzene	0.079	0.13	0.25	0.42
1,2-Dichloroethane	0.032	0.013 J	0.13	0.054 J
Trichloroethene	0.032	0.019 J	0.17	0.10 J
Toluene	0.032	0.16	0.12	0.59
Tetrachloroethene	0.032	0.016 J	0.21	0.11 J
Ethyl Benzene	0.032	0.021 J	0.14	0.092 J
m,p-Xylene	0.063	0.068	0.27	0.29
o-Xylene	0.032	0.027 J	0.14	0.12 J

Client Sample ID: CA-PRSC-ML-SSB-01

Lab ID#: 1102328AR1-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.17	0.39	0.83	1.9
Freon 11	0.17	0.21	0.94	1.2
Ethanol	0.84	4.7	1.6	8.9
Freon 113	0.17	0.051 J	1.3	0.39 J
Methylene Chloride	0.34	0.17 J	1.2	0.60 J
Hexane	0.17	0.062 J	0.59	0.22 J
2-Butanone (Methyl Ethyl Ketone)	0.17	1.5	0.50	4.4
Chloroform	0.17	0.043 J	0.82	0.21 J
4-Methyl-2-pentanone	0.17	0.063 J	0.69	0.26 J
1,3,5-Trimethylbenzene	0.17	0.045 J	0.82	0.22 J
1,3-Dichlorobenzene	0.17	0.040 J	1.0	0.24 J

Client Sample ID: CA-PRSC-ML-SSB-01 Lab Duplicate

Lab ID#: 1102328AR1-07AA

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.17	0.40	0.83	2.0

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: CA-PRSC-ML-SSB-01 Lab Duplicate

Lab ID#: 1102328AR1-07AA

Freon 11	0.17	0.19	0.94	1.1
Ethanol	0.84	4.7	1.6	8.8
Freon 113	0.17	0.072 J	1.3	0.55 J
Methylene Chloride	0.34	0.16 J	1.2	0.54 J
2-Butanone (Methyl Ethyl Ketone)	0.17	1.6	0.50	4.9
Chloroform	0.17	0.039 J	0.82	0.19 J
4-Methyl-2-pentanone	0.17	0.059 J	0.69	0.24 J
1,3,5-Trimethylbenzene	0.17	0.048 J	0.82	0.23 J

Client Sample ID: CA-PRSC-ML-SSB-01

Lab ID#: 1102328AR1-07B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethane	0.034	0.0033 J	0.14	0.013 J
cis-1,2-Dichloroethene	0.034	0.0070 J	0.13	0.028 J
1,1,1-Trichloroethane	0.034	0.0092 J	0.18	0.050 J
Benzene	0.084	0.12	0.27	0.37
1,2-Dichloroethane	0.034	0.013 J	0.14	0.052 J
Trichloroethene	0.034	0.0049 J	0.18	0.026 J
Toluene	0.034	7.9	0.13	30
Tetrachloroethene	0.034	0.026 J	0.23	0.18 J
Ethyl Benzene	0.034	0.057	0.14	0.25
m,p-Xylene	0.067	0.20	0.29	0.86
o-Xylene	0.034	0.065	0.14	0.28
1,1,2,2-Tetrachloroethane	0.034	0.0052 J	0.23	0.036 J

Client Sample ID: CA-PRSC-ML-SSB-01 Lab Duplicate

Lab ID#: 1102328AR1-07BB

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethane	0.034	0.0026 J	0.14	0.010 J
1,1,1-Trichloroethane	0.034	0.0084 J	0.18	0.046 J
Benzene	0.084	0.12	0.27	0.37

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: CA-PRSC-ML-SSB-01 Lab Duplicate

Lab ID#: 1102328AR1-07BB

1,2-Dichloroethane	0.034	0.013 J	0.14	0.052 J
Trichloroethene	0.034	0.0055 J	0.18	0.029 J
Toluene	0.034	7.9	0.13	30
Tetrachloroethene	0.034	0.025 J	0.23	0.17 J
Ethyl Benzene	0.034	0.053	0.14	0.23
m,p-Xylene	0.067	0.20	0.29	0.85
o-Xylene	0.034	0.062	0.14	0.27
trans-1,2-Dichloroethene	0.17	0.0058 J	0.67	0.023 J
Methyl tert-butyl ether	0.17	0.0038 J	0.60	0.014 J

Client Sample ID: CA-PRSC-ML-INDB-01

Lab ID#: 1102328AR1-08A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.16	0.42	0.81	2.1
Chloromethane	0.16	0.34	0.34	0.70
Freon 11	0.16	0.20	0.92	1.2
Ethanol	0.82	12	1.5	23
Freon 113	0.16	0.070 J	1.2	0.54 J
Methylene Chloride	0.33	0.26 J	1.1	0.89 J
Hexane	0.16	0.12 J	0.58	0.41 J
2-Butanone (Methyl Ethyl Ketone)	0.16	0.35	0.48	1.0
Carbon Tetrachloride	0.16	0.064 J	1.0	0.40 J
4-Methyl-2-pentanone	0.16	0.056 J	0.67	0.23 J
1,3,5-Trimethylbenzene	0.16	0.017 J	0.81	0.082 J

Client Sample ID: CA-PRSC-ML-INDB-01

Lab ID#: 1102328AR1-08B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1-Trichloroethane	0.033	0.0094 J	0.18	0.051 J
Benzene	0.082	0.12	0.26	0.37
1,2-Dichloroethane	0.033	0.012 J	0.13	0.050 J

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: CA-PRSC-ML-INDB-01

Lab ID#: 1102328AR1-08B

Trichloroethene	0.033	0.0030 J	0.18	0.016 J
Toluene	0.033	0.16	0.12	0.61
Tetrachloroethene	0.033	0.020 J	0.22	0.14 J
Ethyl Benzene	0.033	0.030 J	0.14	0.13 J
m,p-Xylene	0.066	0.088	0.28	0.38
o-Xylene	0.033	0.028 J	0.14	0.12 J

Client Sample ID: CA-PRSC-AC-CRL-01

Lab ID#: 1102328AR1-09A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.16	0.38	0.77	1.9
Chloromethane	0.16	0.29	0.32	0.61
Freon 11	0.16	0.19	0.87	1.0
Ethanol	0.78	1.3	1.5	2.5
Freon 113	0.16	0.065 J	1.2	0.50 J
Methylene Chloride	0.31	0.12 J	1.1	0.44 J
Hexane	0.16	0.19	0.55	0.67
2-Butanone (Methyl Ethyl Ketone)	0.16	0.30	0.46	0.89
Cyclohexane	0.16	0.062 J	0.53	0.21 J
1,3,5-Trimethylbenzene	0.16	0.044 J	0.76	0.22 J

Client Sample ID: CA-PRSC-AC-CRL-01

Lab ID#: 1102328AR1-09B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethane	0.031	0.0092 J	0.12	0.037 J
1,1,1-Trichloroethane	0.031	0.0068 J	0.17	0.037 J
Benzene	0.078	0.18	0.25	0.56
1,2-Dichloroethane	0.031	0.010 J	0.12	0.042 J
Trichloroethene	0.031	0.012 J	0.17	0.067 J
Toluene	0.031	0.67	0.12	2.5
Tetrachloroethene	0.031	0.028 J	0.21	0.19 J

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: CA-PRSC-AC-CRL-01

Lab ID#: 1102328AR1-09B

Ethyl Benzene	0.031	0.12	0.13	0.53
m,p-Xylene	0.062	0.37	0.27	1.6
o-Xylene	0.031	0.11	0.13	0.50
1,1,2,2-Tetrachloroethane	0.031	0.0083 J	0.21	0.057 J
Methyl tert-butyl ether	0.16	0.0080 J	0.56	0.029 J

Client Sample ID: CA-PRSC-ML-DUP-01

Lab ID#: 1102328AR1-10A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.16	0.39	0.78	1.9
Chloromethane	0.16	0.13 J	0.33	0.26 J
Freon 11	0.16	0.19	0.89	1.1
Ethanol	0.79	5.5	1.5	10
Freon 113	0.16	0.053 J	1.2	0.41 J
Methylene Chloride	0.32	0.15 J	1.1	0.52 J
2-Butanone (Methyl Ethyl Ketone)	0.16	1.7	0.46	4.9
Chloroform	0.16	0.053 J	0.77	0.26 J
4-Methyl-2-pentanone	0.16	0.076 J	0.65	0.31 J
1,3,5-Trimethylbenzene	0.16	0.049 J	0.78	0.24 J
1,3-Dichlorobenzene	0.16	0.046 J	0.95	0.28 J

Client Sample ID: CA-PRSC-ML-DUP-01

Lab ID#: 1102328AR1-10B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethane	0.032	0.0031 J	0.13	0.013 J
1,1,1-Trichloroethane	0.032	0.0086 J	0.17	0.047 J
Benzene	0.079	0.12	0.25	0.37
1,2-Dichloroethane	0.032	0.010 J	0.13	0.041 J
Trichloroethene	0.032	0.0055 J	0.17	0.029 J
Toluene	0.032	7.8	0.12	29
Tetrachloroethene	0.032	0.025 J	0.21	0.17 J

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: CA-PRSC-ML-DUP-01

Lab ID#: 1102328AR1-10B

Ethyl Benzene	0.032	0.053	0.14	0.23
m,p-Xylene	0.063	0.19	0.27	0.84
o-Xylene	0.032	0.064	0.14	0.28

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ODA-01

Lab ID#: 1102328AR1-01A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022209**	**Date of Collection:**	**2/16/11 7:18:00 AM**
Dil. Factor:	**1.39**	**Date of Analysis:**	**2/22/11 03:03 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.14	0.40	0.69	2.0
Freon 114	0.14	Not Detected U	0.97	Not Detected U
Chloromethane	0.14	0.46	0.29	0.95
Bromomethane	0.14	Not Detected U	0.54	Not Detected U
Chloroethane	0.14	Not Detected U	0.37	Not Detected U
Freon 11	0.14	0.21	0.78	1.2
Ethanol	0.70	0.58 J	1.3	1.1 J
Freon 113	0.14	0.076 J	1.1	0.58 J
Methylene Chloride	0.28	0.12 J	0.96	0.42 J
Hexane	0.14	0.034 J	0.49	0.12 J
2-Butanone (Methyl Ethyl Ketone)	0.14	0.39	0.41	1.2
Chloroform	0.14	Not Detected U	0.68	Not Detected U
Cyclohexane	0.14	Not Detected U	0.48	Not Detected U
Carbon Tetrachloride	0.14	0.067 J	0.87	0.42 J
1,2-Dichloropropane	0.14	Not Detected U	0.64	Not Detected U
1,4-Dioxane	0.14	Not Detected U	0.50	Not Detected U
Bromodichloromethane	0.14	Not Detected U	0.93	Not Detected U
cis-1,3-Dichloropropene	0.14	Not Detected U	0.63	Not Detected U
4-Methyl-2-pentanone	0.14	Not Detected U	0.57	Not Detected U
trans-1,3-Dichloropropene	0.14	Not Detected U	0.63	Not Detected U
Dibromochloromethane	0.14	Not Detected U	1.2	Not Detected U
1,2-Dibromoethane (EDB)	0.14	Not Detected U	1.1	Not Detected U
Chlorobenzene	0.14	Not Detected U	0.64	Not Detected U
Styrene	0.14	Not Detected U	0.59	Not Detected U
Bromoform	0.14	Not Detected U	1.4	Not Detected U
1,3,5-Trimethylbenzene	0.14	Not Detected U	0.68	Not Detected U
1,2,4-Trimethylbenzene	0.14	Not Detected U	0.68	Not Detected U
1,3-Dichlorobenzene	0.14	Not Detected U	0.84	Not Detected U
1,4-Dichlorobenzene	0.14	Not Detected U	0.84	Not Detected U
alpha-Chlorotoluene	0.14	Not Detected U	0.72	Not Detected U
1,2-Dichlorobenzene	0.14	Not Detected U	0.84	Not Detected U
1,2,4-Trichlorobenzene	0.70	Not Detected U	5.2	Not Detected U
Hexachlorobutadiene	0.70	Not Detected U	7.4	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	95	80-129
Toluene-d8	97	93-108

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ODA-01

Lab ID#: 1102328AR1-01A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022209**	**Date of Collection:**	**2/16/11 7:18:00 AM**
Dil. Factor:	**1.39**	**Date of Analysis:**	**2/22/11 03:03 PM**

Surrogates	**%Recovery**	**Method Limits**
4-Bromofluorobenzene	88	82-112

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ODA-01 Lab Duplicate

Lab ID#: 1102328AR1-01AA

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022210**	**Date of Collection:**	**2/16/11 7:18:00 AM**
Dil. Factor:	**1.39**	**Date of Analysis:**	**2/22/11 04:24 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.14	0.38	0.69	1.9
Freon 114	0.14	Not Detected U	0.97	Not Detected U
Chloromethane	0.14	0.40	0.29	0.83
Bromomethane	0.14	Not Detected U	0.54	Not Detected U
Chloroethane	0.14	Not Detected U	0.37	Not Detected U
Freon 11	0.14	0.21	0.78	1.2
Ethanol	0.70	0.53 J	1.3	1.0 J
Freon 113	0.14	0.048 J	1.1	0.37 J
Methylene Chloride	0.28	0.085 J	0.96	0.29 J
Hexane	0.14	0.046 J	0.49	0.16 J
2-Butanone (Methyl Ethyl Ketone)	0.14	0.33	0.41	0.98
Chloroform	0.14	Not Detected U	0.68	Not Detected U
Cyclohexane	0.14	Not Detected U	0.48	Not Detected U
Carbon Tetrachloride	0.14	0.053 J	0.87	0.33 J
1,2-Dichloropropane	0.14	Not Detected U	0.64	Not Detected U
1,4-Dioxane	0.14	Not Detected U	0.50	Not Detected U
Bromodichloromethane	0.14	Not Detected U	0.93	Not Detected U
cis-1,3-Dichloropropene	0.14	Not Detected U	0.63	Not Detected U
4-Methyl-2-pentanone	0.14	Not Detected U	0.57	Not Detected U
trans-1,3-Dichloropropene	0.14	Not Detected U	0.63	Not Detected U
Dibromochloromethane	0.14	Not Detected U	1.2	Not Detected U
1,2-Dibromoethane (EDB)	0.14	Not Detected U	1.1	Not Detected U
Chlorobenzene	0.14	Not Detected U	0.64	Not Detected U
Styrene	0.14	Not Detected U	0.59	Not Detected U
Bromoform	0.14	Not Detected U	1.4	Not Detected U
1,3,5-Trimethylbenzene	0.14	Not Detected U	0.68	Not Detected U
1,2,4-Trimethylbenzene	0.14	0.059 J	0.68	0.29 J
1,3-Dichlorobenzene	0.14	Not Detected U	0.84	Not Detected U
1,4-Dichlorobenzene	0.14	Not Detected U	0.84	Not Detected U
alpha-Chlorotoluene	0.14	Not Detected U	0.72	Not Detected U
1,2-Dichlorobenzene	0.14	Not Detected U	0.84	Not Detected U
1,2,4-Trichlorobenzene	0.70	Not Detected U	5.2	Not Detected U
Hexachlorobutadiene	0.70	Not Detected U	7.4	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	95	80-129
Toluene-d8	98	93-108

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ODA-01 Lab Duplicate

Lab ID#: 1102328AR1-01AA

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022210**	**Date of Collection:**	**2/16/11 7:18:00 AM**
Dil. Factor:	**1.39**	**Date of Analysis:**	**2/22/11 04:24 PM**

Surrogates	**%Recovery**	**Method Limits**
4-Bromofluorobenzene	98	82-112

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ODA-01

Lab ID#: 1102328AR1-01B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022209sim**	**Date of Collection:**	**2/16/11 7:18:00 AM**
Dil. Factor:	**1.39**	**Date of Analysis:**	**2/22/11 03:03 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.014	Not Detected U	0.036	Not Detected U
1,1-Dichloroethene	0.014	Not Detected U	0.055	Not Detected U
1,1-Dichloroethane	0.028	0.0036 J	0.11	0.014 J
cis-1,2-Dichloroethene	0.028	Not Detected U	0.11	Not Detected U
1,1,1-Trichloroethane	0.028	0.0070 J	0.15	0.038 J
Benzene	0.070	0.13	0.22	0.43
1,2-Dichloroethane	0.028	0.011 J	0.11	0.045 J
Trichloroethene	0.028	Not Detected U	0.15	Not Detected U
Toluene	0.028	0.079	0.10	0.30
1,1,2-Trichloroethane	0.028	Not Detected U	0.15	Not Detected U
Tetrachloroethene	0.028	0.0062 J	0.19	0.042 J
Ethyl Benzene	0.028	0.016 J	0.12	0.068 J
m,p-Xylene	0.056	0.039 J	0.24	0.17 J
o-Xylene	0.028	0.018 J	0.12	0.076 J
1,1,2,2-Tetrachloroethane	0.028	Not Detected U	0.19	Not Detected U
trans-1,2-Dichloroethene	0.14	Not Detected U	0.55	Not Detected U
Methyl tert-butyl ether	0.14	Not Detected U	0.50	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	77-131
Toluene-d8	98	94-109
4-Bromofluorobenzene	93	84-112

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ODA-01 Lab Duplicate

Lab ID#: 1102328AR1-01BB

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022210sim**	**Date of Collection:**	**2/16/11 7:18:00 AM**
Dil. Factor:	**1.39**	**Date of Analysis:**	**2/22/11 04:24 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.014	Not Detected U	0.036	Not Detected U
1,1-Dichloroethene	0.014	Not Detected U	0.055	Not Detected U
1,1-Dichloroethane	0.028	Not Detected U	0.11	Not Detected U
cis-1,2-Dichloroethene	0.028	Not Detected U	0.11	Not Detected U
1,1,1-Trichloroethane	0.028	0.0067 J	0.15	0.036 J
Benzene	0.070	0.14	0.22	0.43
1,2-Dichloroethane	0.028	0.011 J	0.11	0.045 J
Trichloroethene	0.028	Not Detected U	0.15	Not Detected U
Toluene	0.028	0.079	0.10	0.30
1,1,2-Trichloroethane	0.028	Not Detected U	0.15	Not Detected U
Tetrachloroethene	0.028	0.0058 J	0.19	0.039 J
Ethyl Benzene	0.028	0.018 J	0.12	0.076 J
m,p-Xylene	0.056	0.042 J	0.24	0.18 J
o-Xylene	0.028	0.020 J	0.12	0.086 J
1,1,2,2-Tetrachloroethane	0.028	Not Detected U	0.19	Not Detected U
trans-1,2-Dichloroethene	0.14	Not Detected U	0.55	Not Detected U
Methyl tert-butyl ether	0.14	Not Detected U	0.50	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	77-131
Toluene-d8	97	94-109
4-Bromofluorobenzene	101	84-112

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ML-INDB-02

Lab ID#: 1102328AR1-02A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022211**	**Date of Collection:**	**2/16/11 7:55:00 AM**
Dil. Factor:	**1.27**	**Date of Analysis:**	**2/22/11 05:21 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.13	0.40	0.63	2.0
Freon 114	0.13	Not Detected U	0.89	Not Detected U
Chloromethane	0.13	0.38	0.26	0.79
Bromomethane	0.13	Not Detected U	0.49	Not Detected U
Chloroethane	0.13	Not Detected U	0.34	Not Detected U
Freon 11	0.13	0.22	0.71	1.2
Ethanol	0.64	2.5	1.2	4.7
Freon 113	0.13	0.054 J	0.97	0.41 J
Methylene Chloride	0.25	1.8	0.88	6.4
Hexane	0.13	0.041 J	0.45	0.14 J
2-Butanone (Methyl Ethyl Ketone)	0.13	0.29	0.37	0.85
Chloroform	0.13	Not Detected U	0.62	Not Detected U
Cyclohexane	0.13	Not Detected U	0.44	Not Detected U
Carbon Tetrachloride	0.13	0.080 J	0.80	0.50 J
1,2-Dichloropropane	0.13	Not Detected U	0.59	Not Detected U
1,4-Dioxane	0.13	Not Detected U	0.46	Not Detected U
Bromodichloromethane	0.13	Not Detected U	0.85	Not Detected U
cis-1,3-Dichloropropene	0.13	Not Detected U	0.58	Not Detected U
4-Methyl-2-pentanone	0.13	0.085 J	0.52	0.35 J
trans-1,3-Dichloropropene	0.13	Not Detected U	0.58	Not Detected U
Dibromochloromethane	0.13	Not Detected U	1.1	Not Detected U
1,2-Dibromoethane (EDB)	0.13	Not Detected U	0.98	Not Detected U
Chlorobenzene	0.13	Not Detected U	0.58	Not Detected U
Styrene	0.13	Not Detected U	0.54	Not Detected U
Bromoform	0.13	Not Detected U	1.3	Not Detected U
1,3,5-Trimethylbenzene	0.13	Not Detected U	0.62	Not Detected U
1,2,4-Trimethylbenzene	0.13	Not Detected U	0.62	Not Detected U
1,3-Dichlorobenzene	0.13	Not Detected U	0.76	Not Detected U
1,4-Dichlorobenzene	0.13	Not Detected U	0.76	Not Detected U
alpha-Chlorotoluene	0.13	Not Detected U	0.66	Not Detected U
1,2-Dichlorobenzene	0.13	Not Detected U	0.76	Not Detected U
1,2,4-Trichlorobenzene	0.64	Not Detected U	4.7	Not Detected U
Hexachlorobutadiene	0.64	Not Detected U	6.8	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	97	80-129
Toluene-d8	97	93-108

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ML-INDB-02

Lab ID#: 1102328AR1-02A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022211**	**Date of Collection:**	**2/16/11 7:55:00 AM**
Dil. Factor:	**1.27**	**Date of Analysis:**	**2/22/11 05:21 PM**

Surrogates	**%Recovery**	**Method Limits**
4-Bromofluorobenzene	90	82-112

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ML-INDB-02

Lab ID#: 1102328AR1-02B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022211sim**	**Date of Collection:**	**2/16/11 7:55:00 AM**
Dil. Factor:	**1.27**	**Date of Analysis:**	**2/22/11 05:21 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.013	Not Detected U	0.032	Not Detected U
1,1-Dichloroethene	0.013	Not Detected U	0.050	Not Detected U
1,1-Dichloroethane	0.025	0.0043 J	0.10	0.018 J
cis-1,2-Dichloroethene	0.025	Not Detected U	0.10	Not Detected U
1,1,1-Trichloroethane	0.025	0.0067 J	0.14	0.036 J
Benzene	0.064	0.13	0.20	0.41
1,2-Dichloroethane	0.025	0.010 J	0.10	0.042 J
Trichloroethene	0.025	Not Detected U	0.14	Not Detected U
Toluene	0.025	0.16	0.096	0.61
1,1,2-Trichloroethane	0.025	Not Detected U	0.14	Not Detected U
Tetrachloroethene	0.025	0.0060 J	0.17	0.041 J
Ethyl Benzene	0.025	0.016 J	0.11	0.069 J
m,p-Xylene	0.051	0.043 J	0.22	0.19 J
o-Xylene	0.025	0.018 J	0.11	0.076 J
1,1,2,2-Tetrachloroethane	0.025	Not Detected U	0.17	Not Detected U
trans-1,2-Dichloroethene	0.13	Not Detected U	0.50	Not Detected U
Methyl tert-butyl ether	0.13	Not Detected U	0.46	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	77-131
Toluene-d8	98	94-109
4-Bromofluorobenzene	95	84-112

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ML-CRL-03

Lab ID#: 1102328AR1-03A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022212**	**Date of Collection:**	**2/16/11 8:35:00 AM**
Dil. Factor:	**1.52**	**Date of Analysis:**	**2/22/11 06:13 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.15	0.33	0.75	1.6
Freon 114	0.15	Not Detected U	1.1	Not Detected U
Chloromethane	0.15	0.35	0.31	0.73
Bromomethane	0.15	Not Detected U	0.59	Not Detected U
Chloroethane	0.15	Not Detected U	0.40	Not Detected U
Freon 11	0.15	0.21	0.85	1.2
Ethanol	0.76	5.0	1.4	9.5
Freon 113	0.15	0.063 J	1.2	0.48 J
Methylene Chloride	0.30	1.4	1.0	4.9
Hexane	0.15	0.16	0.54	0.57
2-Butanone (Methyl Ethyl Ketone)	0.15	0.92	0.45	2.7
Chloroform	0.15	Not Detected U	0.74	Not Detected U
Cyclohexane	0.15	0.068 J	0.52	0.24 J
Carbon Tetrachloride	0.15	0.064 J	0.96	0.40 J
1,2-Dichloropropane	0.15	Not Detected U	0.70	Not Detected U
1,4-Dioxane	0.15	Not Detected U	0.55	Not Detected U
Bromodichloromethane	0.15	Not Detected U	1.0	Not Detected U
cis-1,3-Dichloropropene	0.15	Not Detected U	0.69	Not Detected U
4-Methyl-2-pentanone	0.15	0.064 J	0.62	0.26 J
trans-1,3-Dichloropropene	0.15	Not Detected U	0.69	Not Detected U
Dibromochloromethane	0.15	Not Detected U	1.3	Not Detected U
1,2-Dibromoethane (EDB)	0.15	Not Detected U	1.2	Not Detected U
Chlorobenzene	0.15	Not Detected U	0.70	Not Detected U
Styrene	0.15	Not Detected U	0.65	Not Detected U
Bromoform	0.15	Not Detected U	1.6	Not Detected U
1,3,5-Trimethylbenzene	0.15	Not Detected U	0.75	Not Detected U
1,2,4-Trimethylbenzene	0.15	0.056 J	0.75	0.28 J
1,3-Dichlorobenzene	0.15	Not Detected U	0.91	Not Detected U
1,4-Dichlorobenzene	0.15	Not Detected U	0.91	Not Detected U
alpha-Chlorotoluene	0.15	Not Detected U	0.79	Not Detected U
1,2-Dichlorobenzene	0.15	Not Detected U	0.91	Not Detected U
1,2,4-Trichlorobenzene	0.76	Not Detected U	5.6	Not Detected U
Hexachlorobutadiene	0.76	Not Detected U	8.1	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J = Estimated value.
The over-range result for Ethanol was flagged "E" for estimated.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	80-129

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ML-CRL-03

Lab ID#: 1102328AR1-03A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022212**	**Date of Collection:**	**2/16/11 8:35:00 AM**
Dil. Factor:	**1.52**	**Date of Analysis:**	**2/22/11 06:13 PM**

Surrogates	**%Recovery**	**Method Limits**
Toluene-d8	99	93-108
4-Bromofluorobenzene	92	82-112

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ML-CRL-03

Lab ID#: 1102328AR1-03B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022212sim**	**Date of Collection:**	**2/16/11 8:35:00 AM**
Dil. Factor:	**1.52**	**Date of Analysis:**	**2/22/11 06:13 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.015	Not Detected U	0.039	Not Detected U
1,1-Dichloroethene	0.015	Not Detected U	0.060	Not Detected U
1,1-Dichloroethane	0.030	0.0037 J	0.12	0.015 J
cis-1,2-Dichloroethene	0.030	Not Detected U	0.12	Not Detected U
1,1,1-Trichloroethane	0.030	0.010 J	0.16	0.054 J
Benzene	0.076	0.16	0.24	0.52
1,2-Dichloroethane	0.030	0.0083 J	0.12	0.033 J
Trichloroethene	0.030	0.0086 J	0.16	0.046 J
Toluene	0.030	0.70	0.11	2.6
1,1,2-Trichloroethane	0.030	Not Detected U	0.16	Not Detected U
Tetrachloroethene	0.030	0.015 J	0.21	0.10 J
Ethyl Benzene	0.030	0.080	0.13	0.35
m,p-Xylene	0.061	0.21	0.26	0.90
o-Xylene	0.030	0.065	0.13	0.28
1,1,2,2-Tetrachloroethane	0.030	Not Detected U	0.21	Not Detected U
trans-1,2-Dichloroethene	0.15	Not Detected U	0.60	Not Detected U
Methyl tert-butyl ether	0.15	Not Detected U	0.55	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	77-131
Toluene-d8	98	94-109
4-Bromofluorobenzene	97	84-112

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ML-INDL-02

Lab ID#: 1102328AR1-04A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022213**	**Date of Collection:**	**2/16/11 8:38:00 AM**
Dil. Factor:	**1.46**	**Date of Analysis:**	**2/22/11 06:54 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.15	0.35	0.72	1.7
Freon 114	0.15	Not Detected U	1.0	Not Detected U
Chloromethane	0.15	0.44	0.30	0.91
Bromomethane	0.15	Not Detected U	0.57	Not Detected U
Chloroethane	0.15	Not Detected U	0.38	Not Detected U
Freon 11	0.15	0.20	0.82	1.1
Ethanol	0.73	66 E	1.4	120 E
Freon 113	0.15	0.071 J	1.1	0.54 J
Methylene Chloride	0.29	3.8	1.0	13
Hexane	0.15	0.078 J	0.51	0.27 J
2-Butanone (Methyl Ethyl Ketone)	0.15	0.32	0.43	0.94
Chloroform	0.15	Not Detected U	0.71	Not Detected U
Cyclohexane	0.15	Not Detected U	0.50	Not Detected U
Carbon Tetrachloride	0.15	0.087 J	0.92	0.55 J
1,2-Dichloropropane	0.15	Not Detected U	0.67	Not Detected U
1,4-Dioxane	0.15	Not Detected U	0.53	Not Detected U
Bromodichloromethane	0.15	Not Detected U	0.98	Not Detected U
cis-1,3-Dichloropropene	0.15	Not Detected U	0.66	Not Detected U
4-Methyl-2-pentanone	0.15	Not Detected U	0.60	Not Detected U
trans-1,3-Dichloropropene	0.15	Not Detected U	0.66	Not Detected U
Dibromochloromethane	0.15	Not Detected U	1.2	Not Detected U
1,2-Dibromoethane (EDB)	0.15	Not Detected U	1.1	Not Detected U
Chlorobenzene	0.15	Not Detected U	0.67	Not Detected U
Styrene	0.15	0.14 J	0.62	0.61 J
Bromoform	0.15	Not Detected U	1.5	Not Detected U
1,3,5-Trimethylbenzene	0.15	Not Detected U	0.72	Not Detected U
1,2,4-Trimethylbenzene	0.15	0.15	0.72	0.73
1,3-Dichlorobenzene	0.15	Not Detected U	0.88	Not Detected U
1,4-Dichlorobenzene	0.15	Not Detected U	0.88	Not Detected U
alpha-Chlorotoluene	0.15	Not Detected U	0.76	Not Detected U
1,2-Dichlorobenzene	0.15	Not Detected U	0.88	Not Detected U
1,2,4-Trichlorobenzene	0.73	Not Detected U	5.4	Not Detected U
Hexachlorobutadiene	0.73	Not Detected U	7.8	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
E = Exceeds instrument calibration range.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	80-129

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ML-INDL-02

Lab ID#: 1102328AR1-04A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022213**	**Date of Collection:**	**2/16/11 8:38:00 AM**
Dil. Factor:	**1.46**	**Date of Analysis:**	**2/22/11 06:54 PM**

Surrogates	**%Recovery**	**Method Limits**
Toluene-d8	97	93-108
4-Bromofluorobenzene	90	82-112

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ML-INDL-02

Lab ID#: 1102328AR1-04B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022213sim**	**Date of Collection:**	**2/16/11 8:38:00 AM**
Dil. Factor:	**1.46**	**Date of Analysis:**	**2/22/11 06:54 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.015	Not Detected U	0.037	Not Detected U
1,1-Dichloroethene	0.015	Not Detected U	0.058	Not Detected U
1,1-Dichloroethane	0.029	Not Detected U	0.12	Not Detected U
cis-1,2-Dichloroethene	0.029	Not Detected U	0.12	Not Detected U
1,1,1-Trichloroethane	0.029	0.0075 J	0.16	0.041 J
Benzene	0.073	0.13	0.23	0.42
1,2-Dichloroethane	0.029	0.0096 J	0.12	0.039 J
Trichloroethene	0.029	0.011 J	0.16	0.058 J
Toluene	0.029	0.35	0.11	1.3
1,1,2-Trichloroethane	0.029	Not Detected U	0.16	Not Detected U
Tetrachloroethene	0.029	0.013 J	0.20	0.088 J
Ethyl Benzene	0.029	0.034	0.13	0.15
m,p-Xylene	0.058	0.098	0.25	0.43
o-Xylene	0.029	0.034	0.13	0.15
1,1,2,2-Tetrachloroethane	0.029	Not Detected U	0.20	Not Detected U
trans-1,2-Dichloroethene	0.15	Not Detected U	0.58	Not Detected U
Methyl tert-butyl ether	0.15	Not Detected U	0.53	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	77-131
Toluene-d8	97	94-109
4-Bromofluorobenzene	95	84-112

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ML-SSB-02

Lab ID#: 1102328AR1-05A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022214**	**Date of Collection:**	**2/16/11 9:05:00 AM**
Dil. Factor:	**1.55**	**Date of Analysis:**	**2/22/11 07:36 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.16	0.37	0.77	1.8
Freon 114	0.16	Not Detected U	1.1	Not Detected U
Chloromethane	0.16	0.14 J	0.32	0.28 J
Bromomethane	0.16	Not Detected U	0.60	Not Detected U
Chloroethane	0.16	Not Detected U	0.41	Not Detected U
Freon 11	0.16	0.19	0.87	1.1
Ethanol	0.78	8.4	1.5	16
Freon 113	0.16	0.052 J	1.2	0.40 J
Methylene Chloride	0.31	1.8	1.1	6.2
Hexane	0.16	0.079 J	0.55	0.28 J
2-Butanone (Methyl Ethyl Ketone)	0.16	2.1	0.46	6.3
Chloroform	0.16	Not Detected U	0.76	Not Detected U
Cyclohexane	0.16	Not Detected U	0.53	Not Detected U
Carbon Tetrachloride	0.16	0.098 J	0.98	0.61 J
1,2-Dichloropropane	0.16	Not Detected U	0.72	Not Detected U
1,4-Dioxane	0.16	Not Detected U	0.56	Not Detected U
Bromodichloromethane	0.16	Not Detected U	1.0	Not Detected U
cis-1,3-Dichloropropene	0.16	Not Detected U	0.70	Not Detected U
4-Methyl-2-pentanone	0.16	0.064 J	0.63	0.26 J
trans-1,3-Dichloropropene	0.16	Not Detected U	0.70	Not Detected U
Dibromochloromethane	0.16	Not Detected U	1.3	Not Detected U
1,2-Dibromoethane (EDB)	0.16	Not Detected U	1.2	Not Detected U
Chlorobenzene	0.16	Not Detected U	0.71	Not Detected U
Styrene	0.16	0.044 J	0.66	0.18 J
Bromoform	0.16	Not Detected U	1.6	Not Detected U
1,3,5-Trimethylbenzene	0.16	Not Detected U	0.76	Not Detected U
1,2,4-Trimethylbenzene	0.16	0.12 J	0.76	0.59 J
1,3-Dichlorobenzene	0.16	0.077 J	0.93	0.46 J
1,4-Dichlorobenzene	0.16	Not Detected U	0.93	Not Detected U
alpha-Chlorotoluene	0.16	Not Detected U	0.80	Not Detected U
1,2-Dichlorobenzene	0.16	Not Detected U	0.93	Not Detected U
1,2,4-Trichlorobenzene	0.78	Not Detected U	5.8	Not Detected U
Hexachlorobutadiene	0.78	Not Detected U	8.3	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	80-129
Toluene-d8	95	93-108

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ML-SSB-02

Lab ID#: 1102328AR1-05A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022214**	**Date of Collection:**	**2/16/11 9:05:00 AM**
Dil. Factor:	**1.55**	**Date of Analysis:**	**2/22/11 07:36 PM**

Surrogates	**%Recovery**	**Method Limits**
4-Bromofluorobenzene	87	82-112

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ML-SSB-02

Lab ID#: 1102328AR1-05B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022214sim**	**Date of Collection:**	**2/16/11 9:05:00 AM**
Dil. Factor:	**1.55**	**Date of Analysis:**	**2/22/11 07:36 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.016	Not Detected U	0.040	Not Detected U
1,1-Dichloroethene	0.016	Not Detected U	0.061	Not Detected U
1,1-Dichloroethane	0.031	Not Detected U	0.12	Not Detected U
cis-1,2-Dichloroethene	0.031	Not Detected U	0.12	Not Detected U
1,1,1-Trichloroethane	0.031	0.0075 J	0.17	0.041 J
Benzene	0.078	0.18	0.25	0.59
1,2-Dichloroethane	0.031	0.0091 J	0.12	0.037 J
Trichloroethene	0.031	0.0053 J	0.17	0.029 J
Toluene	0.031	0.38	0.12	1.4
1,1,2-Trichloroethane	0.031	Not Detected U	0.17	Not Detected U
Tetrachloroethene	0.031	0.015 J	0.21	0.10 J
Ethyl Benzene	0.031	0.072	0.13	0.31
m,p-Xylene	0.062	0.24	0.27	1.0
o-Xylene	0.031	0.11	0.13	0.46
1,1,2,2-Tetrachloroethane	0.031	Not Detected U	0.21	Not Detected U
trans-1,2-Dichloroethene	0.16	Not Detected U	0.61	Not Detected U
Methyl tert-butyl ether	0.16	0.0060 J	0.56	0.022 J

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	77-131
Toluene-d8	96	94-109
4-Bromofluorobenzene	93	84-112

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ML-CRL-02

Lab ID#: 1102328AR1-06A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022215**	**Date of Collection:**	**2/16/11 9:08:00 AM**
Dil. Factor:	**1.58**	**Date of Analysis:**	**2/22/11 08:14 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.16	0.42	0.78	2.1
Freon 114	0.16	Not Detected U	1.1	Not Detected U
Chloromethane	0.16	0.37	0.33	0.77
Bromomethane	0.16	Not Detected U	0.61	Not Detected U
Chloroethane	0.16	Not Detected U	0.42	Not Detected U
Freon 11	0.16	0.20	0.89	1.1
Ethanol	0.79	13	1.5	24
Freon 113	0.16	0.041 J	1.2	0.32 J
Methylene Chloride	0.32	1.3	1.1	4.5
Hexane	0.16	0.040 J	0.56	0.14 J
2-Butanone (Methyl Ethyl Ketone)	0.16	0.19	0.46	0.57
Chloroform	0.16	Not Detected U	0.77	Not Detected U
Cyclohexane	0.16	Not Detected U	0.54	Not Detected U
Carbon Tetrachloride	0.16	0.078 J	0.99	0.49 J
1,2-Dichloropropane	0.16	Not Detected U	0.73	Not Detected U
1,4-Dioxane	0.16	Not Detected U	0.57	Not Detected U
Bromodichloromethane	0.16	Not Detected U	1.0	Not Detected U
cis-1,3-Dichloropropene	0.16	Not Detected U	0.72	Not Detected U
4-Methyl-2-pentanone	0.16	0.073 J	0.65	0.30 J
trans-1,3-Dichloropropene	0.16	Not Detected U	0.72	Not Detected U
Dibromochloromethane	0.16	Not Detected U	1.3	Not Detected U
1,2-Dibromoethane (EDB)	0.16	Not Detected U	1.2	Not Detected U
Chlorobenzene	0.16	Not Detected U	0.73	Not Detected U
Styrene	0.16	Not Detected U	0.67	Not Detected U
Bromoform	0.16	Not Detected U	1.6	Not Detected U
1,3,5-Trimethylbenzene	0.16	Not Detected U	0.78	Not Detected U
1,2,4-Trimethylbenzene	0.16	0.051 J	0.78	0.25 J
1,3-Dichlorobenzene	0.16	Not Detected U	0.95	Not Detected U
1,4-Dichlorobenzene	0.16	Not Detected U	0.95	Not Detected U
alpha-Chlorotoluene	0.16	Not Detected U	0.82	Not Detected U
1,2-Dichlorobenzene	0.16	Not Detected U	0.95	Not Detected U
1,2,4-Trichlorobenzene	0.79	Not Detected U	5.9	Not Detected U
Hexachlorobutadiene	0.79	Not Detected U	8.4	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	80-129
Toluene-d8	98	93-108

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ML-CRL-02

Lab ID#: 1102328AR1-06A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022215**	**Date of Collection:**	**2/16/11 9:08:00 AM**
Dil. Factor:	**1.58**	**Date of Analysis:**	**2/22/11 08:14 PM**

Surrogates	**%Recovery**	**Method Limits**
4-Bromofluorobenzene	89	82-112

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ML-CRL-02

Lab ID#: 1102328AR1-06B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022215sim**	**Date of Collection:**	**2/16/11 9:08:00 AM**
Dil. Factor:	**1.58**	**Date of Analysis:**	**2/22/11 08:14 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.016	Not Detected U	0.040	Not Detected U
1,1-Dichloroethene	0.016	Not Detected U	0.063	Not Detected U
1,1-Dichloroethane	0.032	Not Detected U	0.13	Not Detected U
cis-1,2-Dichloroethene	0.032	Not Detected U	0.12	Not Detected U
1,1,1-Trichloroethane	0.032	0.0092 J	0.17	0.050 J
Benzene	0.079	0.13	0.25	0.42
1,2-Dichloroethane	0.032	0.013 J	0.13	0.054 J
Trichloroethene	0.032	0.019 J	0.17	0.10 J
Toluene	0.032	0.16	0.12	0.59
1,1,2-Trichloroethane	0.032	Not Detected U	0.17	Not Detected U
Tetrachloroethene	0.032	0.016 J	0.21	0.11 J
Ethyl Benzene	0.032	0.021 J	0.14	0.092 J
m,p-Xylene	0.063	0.068	0.27	0.29
o-Xylene	0.032	0.027 J	0.14	0.12 J
1,1,2,2-Tetrachloroethane	0.032	Not Detected U	0.22	Not Detected U
trans-1,2-Dichloroethene	0.16	Not Detected U	0.63	Not Detected U
Methyl tert-butyl ether	0.16	Not Detected U	0.57	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	77-131
Toluene-d8	96	94-109
4-Bromofluorobenzene	94	84-112

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ML-SSB-01

Lab ID#: 1102328AR1-07A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022507**	**Date of Collection:**	**2/16/11 9:30:00 AM**
Dil. Factor:	**1.68**	**Date of Analysis:**	**2/25/11 01:28 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.17	0.39	0.83	1.9
Freon 114	0.17	Not Detected U	1.2	Not Detected U
Chloromethane	0.17	Not Detected U	0.35	Not Detected U
Bromomethane	0.17	Not Detected U	0.65	Not Detected U
Chloroethane	0.17	Not Detected U	0.44	Not Detected U
Freon 11	0.17	0.21	0.94	1.2
Ethanol	0.84	4.7	1.6	8.9
Freon 113	0.17	0.051 J	1.3	0.39 J
Methylene Chloride	0.34	0.17 J	1.2	0.60 J
Hexane	0.17	0.062 J	0.59	0.22 J
2-Butanone (Methyl Ethyl Ketone)	0.17	1.5	0.50	4.4
Chloroform	0.17	0.043 J	0.82	0.21 J
Cyclohexane	0.17	Not Detected U	0.58	Not Detected U
Carbon Tetrachloride	0.17	Not Detected U	1.0	Not Detected U
1,2-Dichloropropane	0.17	Not Detected U	0.78	Not Detected U
1,4-Dioxane	0.17	Not Detected U	0.60	Not Detected U
Bromodichloromethane	0.17	Not Detected U	1.1	Not Detected U
cis-1,3-Dichloropropene	0.17	Not Detected U	0.76	Not Detected U
4-Methyl-2-pentanone	0.17	0.063 J	0.69	0.26 J
trans-1,3-Dichloropropene	0.17	Not Detected U	0.76	Not Detected U
Dibromochloromethane	0.17	Not Detected U	1.4	Not Detected U
1,2-Dibromoethane (EDB)	0.17	Not Detected U	1.3	Not Detected U
Chlorobenzene	0.17	Not Detected U	0.77	Not Detected U
Styrene	0.17	Not Detected U	0.72	Not Detected U
Bromoform	0.17	Not Detected U	1.7	Not Detected U
1,3,5-Trimethylbenzene	0.17	0.045 J	0.82	0.22 J
1,2,4-Trimethylbenzene	0.17	Not Detected U	0.82	Not Detected U
1,3-Dichlorobenzene	0.17	0.040 J	1.0	0.24 J
1,4-Dichlorobenzene	0.17	Not Detected U	1.0	Not Detected U
alpha-Chlorotoluene	0.17	Not Detected U	0.87	Not Detected U
1,2-Dichlorobenzene	0.17	Not Detected U	1.0	Not Detected U
1,2,4-Trichlorobenzene	0.84	Not Detected U	6.2	Not Detected U
Hexachlorobutadiene	0.84	Not Detected U	9.0	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	108	80-129
Toluene-d8	100	93-108

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ML-SSB-01

Lab ID#: 1102328AR1-07A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022507**	**Date of Collection:**	**2/16/11 9:30:00 AM**
Dil. Factor:	**1.68**	**Date of Analysis:**	**2/25/11 01:28 PM**

Surrogates	**%Recovery**	**Method Limits**
4-Bromofluorobenzene	103	82-112

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ML-SSB-01 Lab Duplicate

Lab ID#: 1102328AR1-07AA

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022511**	**Date of Collection:**	**2/16/11 9:30:00 AM**
Dil. Factor:	**1.68**	**Date of Analysis:**	**2/25/11 04:52 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.17	0.40	0.83	2.0
Freon 114	0.17	Not Detected U	1.2	Not Detected U
Chloromethane	0.17	Not Detected U	0.35	Not Detected U
Bromomethane	0.17	Not Detected U	0.65	Not Detected U
Chloroethane	0.17	Not Detected U	0.44	Not Detected U
Freon 11	0.17	0.19	0.94	1.1
Ethanol	0.84	4.7	1.6	8.8
Freon 113	0.17	0.072 J	1.3	0.55 J
Methylene Chloride	0.34	0.16 J	1.2	0.54 J
Hexane	0.17	Not Detected U	0.59	Not Detected U
2-Butanone (Methyl Ethyl Ketone)	0.17	1.6	0.50	4.9
Chloroform	0.17	0.039 J	0.82	0.19 J
Cyclohexane	0.17	Not Detected U	0.58	Not Detected U
Carbon Tetrachloride	0.17	Not Detected U	1.0	Not Detected U
1,2-Dichloropropane	0.17	Not Detected U	0.78	Not Detected U
1,4-Dioxane	0.17	Not Detected U	0.60	Not Detected U
Bromodichloromethane	0.17	Not Detected U	1.1	Not Detected U
cis-1,3-Dichloropropene	0.17	Not Detected U	0.76	Not Detected U
4-Methyl-2-pentanone	0.17	0.059 J	0.69	0.24 J
trans-1,3-Dichloropropene	0.17	Not Detected U	0.76	Not Detected U
Dibromochloromethane	0.17	Not Detected U	1.4	Not Detected U
1,2-Dibromoethane (EDB)	0.17	Not Detected U	1.3	Not Detected U
Chlorobenzene	0.17	Not Detected U	0.77	Not Detected U
Styrene	0.17	Not Detected U	0.72	Not Detected U
Bromoform	0.17	Not Detected U	1.7	Not Detected U
1,3,5-Trimethylbenzene	0.17	0.048 J	0.82	0.23 J
1,2,4-Trimethylbenzene	0.17	Not Detected U	0.82	Not Detected U
1,3-Dichlorobenzene	0.17	Not Detected U	1.0	Not Detected U
1,4-Dichlorobenzene	0.17	Not Detected U	1.0	Not Detected U
alpha-Chlorotoluene	0.17	Not Detected U	0.87	Not Detected U
1,2-Dichlorobenzene	0.17	Not Detected U	1.0	Not Detected U
1,2,4-Trichlorobenzene	0.84	Not Detected U	6.2	Not Detected U
Hexachlorobutadiene	0.84	Not Detected U	9.0	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	80-129
Toluene-d8	97	93-108

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ML-SSB-01 Lab Duplicate

Lab ID#: 1102328AR1-07AA

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022511**	**Date of Collection:**	**2/16/11 9:30:00 AM**
Dil. Factor:	**1.68**	**Date of Analysis:**	**2/25/11 04:52 PM**

Surrogates	**%Recovery**	**Method Limits**
4-Bromofluorobenzene	100	82-112

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ML-SSB-01

Lab ID#: 1102328AR1-07B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022507sim**	**Date of Collection:**	**2/16/11 9:30:00 AM**
Dil. Factor:	**1.68**	**Date of Analysis:**	**2/25/11 01:28 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.017	Not Detected U	0.043	Not Detected U
1,1-Dichloroethene	0.017	Not Detected U	0.067	Not Detected U
1,1-Dichloroethane	0.034	0.0033 J	0.14	0.013 J
cis-1,2-Dichloroethene	0.034	0.0070 J	0.13	0.028 J
1,1,1-Trichloroethane	0.034	0.0092 J	0.18	0.050 J
Benzene	0.084	0.12	0.27	0.37
1,2-Dichloroethane	0.034	0.013 J	0.14	0.052 J
Trichloroethene	0.034	0.0049 J	0.18	0.026 J
Toluene	0.034	7.9	0.13	30
1,1,2-Trichloroethane	0.034	Not Detected U	0.18	Not Detected U
Tetrachloroethene	0.034	0.026 J	0.23	0.18 J
Ethyl Benzene	0.034	0.057	0.14	0.25
m,p-Xylene	0.067	0.20	0.29	0.86
o-Xylene	0.034	0.065	0.14	0.28
1,1,2,2-Tetrachloroethane	0.034	0.0052 J	0.23	0.036 J
trans-1,2-Dichloroethene	0.17	Not Detected U	0.67	Not Detected U
Methyl tert-butyl ether	0.17	Not Detected U	0.60	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	108	77-131
Toluene-d8	98	94-109
4-Bromofluorobenzene	101	84-112

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ML-SSB-01 Lab Duplicate

Lab ID#: 1102328AR1-07BB

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022511sim**	**Date of Collection:**	**2/16/11 9:30:00 AM**
Dil. Factor:	**1.68**	**Date of Analysis:**	**2/25/11 04:52 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.017	Not Detected U	0.043	Not Detected U
1,1-Dichloroethene	0.017	Not Detected U	0.067	Not Detected U
1,1-Dichloroethane	0.034	0.0026 J	0.14	0.010 J
cis-1,2-Dichloroethene	0.034	Not Detected U	0.13	Not Detected U
1,1,1-Trichloroethane	0.034	0.0084 J	0.18	0.046 J
Benzene	0.084	0.12	0.27	0.37
1,2-Dichloroethane	0.034	0.013 J	0.14	0.052 J
Trichloroethene	0.034	0.0055 J	0.18	0.029 J
Toluene	0.034	7.9	0.13	30
1,1,2-Trichloroethane	0.034	Not Detected U	0.18	Not Detected U
Tetrachloroethene	0.034	0.025 J	0.23	0.17 J
Ethyl Benzene	0.034	0.053	0.14	0.23
m,p-Xylene	0.067	0.20	0.29	0.85
o-Xylene	0.034	0.062	0.14	0.27
1,1,2,2-Tetrachloroethane	0.034	Not Detected U	0.23	Not Detected U
trans-1,2-Dichloroethene	0.17	0.0058 J	0.67	0.023 J
Methyl tert-butyl ether	0.17	0.0038 J	0.60	0.014 J

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	108	77-131
Toluene-d8	98	94-109
4-Bromofluorobenzene	102	84-112

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ML-INDB-01

Lab ID#: 1102328AR1-08A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022508**	**Date of Collection:**	**2/16/11 9:45:00 AM**
Dil. Factor:	**1.64**	**Date of Analysis:**	**2/25/11 02:25 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.16	0.42	0.81	2.1
Freon 114	0.16	Not Detected U	1.1	Not Detected U
Chloromethane	0.16	0.34	0.34	0.70
Bromomethane	0.16	Not Detected U	0.64	Not Detected U
Chloroethane	0.16	Not Detected U	0.43	Not Detected U
Freon 11	0.16	0.20	0.92	1.2
Ethanol	0.82	12	1.5	23
Freon 113	0.16	0.070 J	1.2	0.54 J
Methylene Chloride	0.33	0.26 J	1.1	0.89 J
Hexane	0.16	0.12 J	0.58	0.41 J
2-Butanone (Methyl Ethyl Ketone)	0.16	0.35	0.48	1.0
Chloroform	0.16	Not Detected U	0.80	Not Detected U
Cyclohexane	0.16	Not Detected U	0.56	Not Detected U
Carbon Tetrachloride	0.16	0.064 J	1.0	0.40 J
1,2-Dichloropropane	0.16	Not Detected U	0.76	Not Detected U
1,4-Dioxane	0.16	Not Detected U	0.59	Not Detected U
Bromodichloromethane	0.16	Not Detected U	1.1	Not Detected U
cis-1,3-Dichloropropene	0.16	Not Detected U	0.74	Not Detected U
4-Methyl-2-pentanone	0.16	0.056 J	0.67	0.23 J
trans-1,3-Dichloropropene	0.16	Not Detected U	0.74	Not Detected U
Dibromochloromethane	0.16	Not Detected U	1.4	Not Detected U
1,2-Dibromoethane (EDB)	0.16	Not Detected U	1.3	Not Detected U
Chlorobenzene	0.16	Not Detected U	0.76	Not Detected U
Styrene	0.16	Not Detected U	0.70	Not Detected U
Bromoform	0.16	Not Detected U	1.7	Not Detected U
1,3,5-Trimethylbenzene	0.16	0.017 J	0.81	0.082 J
1,2,4-Trimethylbenzene	0.16	Not Detected U	0.81	Not Detected U
1,3-Dichlorobenzene	0.16	Not Detected U	0.99	Not Detected U
1,4-Dichlorobenzene	0.16	Not Detected U	0.99	Not Detected U
alpha-Chlorotoluene	0.16	Not Detected U	0.85	Not Detected U
1,2-Dichlorobenzene	0.16	Not Detected U	0.99	Not Detected U
1,2,4-Trichlorobenzene	0.82	Not Detected U	6.1	Not Detected U
Hexachlorobutadiene	0.82	Not Detected U	8.7	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	108	80-129
Toluene-d8	99	93-108

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ML-INDB-01

Lab ID#: 1102328AR1-08A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022508**	**Date of Collection:**	**2/16/11 9:45:00 AM**
Dil. Factor:	**1.64**	**Date of Analysis:**	**2/25/11 02:25 PM**

Surrogates	**%Recovery**	**Method Limits**
4-Bromofluorobenzene	102	82-112

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ML-INDB-01

Lab ID#: 1102328AR1-08B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022508sim**	**Date of Collection:**	**2/16/11 9:45:00 AM**
Dil. Factor:	**1.64**	**Date of Analysis:**	**2/25/11 02:25 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.016	Not Detected U	0.042	Not Detected U
1,1-Dichloroethene	0.016	Not Detected U	0.065	Not Detected U
1,1-Dichloroethane	0.033	Not Detected U	0.13	Not Detected U
cis-1,2-Dichloroethene	0.033	Not Detected U	0.13	Not Detected U
1,1,1-Trichloroethane	0.033	0.0094 J	0.18	0.051 J
Benzene	0.082	0.12	0.26	0.37
1,2-Dichloroethane	0.033	0.012 J	0.13	0.050 J
Trichloroethene	0.033	0.0030 J	0.18	0.016 J
Toluene	0.033	0.16	0.12	0.61
1,1,2-Trichloroethane	0.033	Not Detected U	0.18	Not Detected U
Tetrachloroethene	0.033	0.020 J	0.22	0.14 J
Ethyl Benzene	0.033	0.030 J	0.14	0.13 J
m,p-Xylene	0.066	0.088	0.28	0.38
o-Xylene	0.033	0.028 J	0.14	0.12 J
1,1,2,2-Tetrachloroethane	0.033	Not Detected U	0.22	Not Detected U
trans-1,2-Dichloroethene	0.16	Not Detected U	0.65	Not Detected U
Methyl tert-butyl ether	0.16	Not Detected U	0.59	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	110	77-131
Toluene-d8	99	94-109
4-Bromofluorobenzene	100	84-112

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-AC-CRL-01

Lab ID#: 1102328AR1-09A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022509**	**Date of Collection:**	**2/16/11 9:59:00 AM**
Dil. Factor:	**1.55**	**Date of Analysis:**	**2/25/11 03:13 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.16	0.38	0.77	1.9
Freon 114	0.16	Not Detected U	1.1	Not Detected U
Chloromethane	0.16	0.29	0.32	0.61
Bromomethane	0.16	Not Detected U	0.60	Not Detected U
Chloroethane	0.16	Not Detected U	0.41	Not Detected U
Freon 11	0.16	0.19	0.87	1.0
Ethanol	0.78	1.3	1.5	2.5
Freon 113	0.16	0.065 J	1.2	0.50 J
Methylene Chloride	0.31	0.12 J	1.1	0.44 J
Hexane	0.16	0.19	0.55	0.67
2-Butanone (Methyl Ethyl Ketone)	0.16	0.30	0.46	0.89
Chloroform	0.16	Not Detected U	0.76	Not Detected U
Cyclohexane	0.16	0.062 J	0.53	0.21 J
Carbon Tetrachloride	0.16	Not Detected U	0.98	Not Detected U
1,2-Dichloropropane	0.16	Not Detected U	0.72	Not Detected U
1,4-Dioxane	0.16	Not Detected U	0.56	Not Detected U
Bromodichloromethane	0.16	Not Detected U	1.0	Not Detected U
cis-1,3-Dichloropropene	0.16	Not Detected U	0.70	Not Detected U
4-Methyl-2-pentanone	0.16	Not Detected U	0.63	Not Detected U
trans-1,3-Dichloropropene	0.16	Not Detected U	0.70	Not Detected U
Dibromochloromethane	0.16	Not Detected U	1.3	Not Detected U
1,2-Dibromoethane (EDB)	0.16	Not Detected U	1.2	Not Detected U
Chlorobenzene	0.16	Not Detected U	0.71	Not Detected U
Styrene	0.16	Not Detected U	0.66	Not Detected U
Bromoform	0.16	Not Detected U	1.6	Not Detected U
1,3,5-Trimethylbenzene	0.16	0.044 J	0.76	0.22 J
1,2,4-Trimethylbenzene	0.16	Not Detected U	0.76	Not Detected U
1,3-Dichlorobenzene	0.16	Not Detected U	0.93	Not Detected U
1,4-Dichlorobenzene	0.16	Not Detected U	0.93	Not Detected U
alpha-Chlorotoluene	0.16	Not Detected U	0.80	Not Detected U
1,2-Dichlorobenzene	0.16	Not Detected U	0.93	Not Detected U
1,2,4-Trichlorobenzene	0.78	Not Detected U	5.8	Not Detected U
Hexachlorobutadiene	0.78	Not Detected U	8.3	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	107	80-129
Toluene-d8	100	93-108

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-AC-CRL-01

Lab ID#: 1102328AR1-09A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022509**	**Date of Collection:**	**2/16/11 9:59:00 AM**
Dil. Factor:	**1.55**	**Date of Analysis:**	**2/25/11 03:13 PM**

Surrogates	**%Recovery**	**Method Limits**
4-Bromofluorobenzene	96	82-112

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-AC-CRL-01

Lab ID#: 1102328AR1-09B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022509sim**	**Date of Collection:**	**2/16/11 9:59:00 AM**
Dil. Factor:	**1.55**	**Date of Analysis:**	**2/25/11 03:13 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.016	Not Detected U	0.040	Not Detected U
1,1-Dichloroethene	0.016	Not Detected U	0.061	Not Detected U
1,1-Dichloroethane	0.031	0.0092 J	0.12	0.037 J
cis-1,2-Dichloroethene	0.031	Not Detected U	0.12	Not Detected U
1,1,1-Trichloroethane	0.031	0.0068 J	0.17	0.037 J
Benzene	0.078	0.18	0.25	0.56
1,2-Dichloroethane	0.031	0.010 J	0.12	0.042 J
Trichloroethene	0.031	0.012 J	0.17	0.067 J
Toluene	0.031	0.67	0.12	2.5
1,1,2-Trichloroethane	0.031	Not Detected U	0.17	Not Detected U
Tetrachloroethene	0.031	0.028 J	0.21	0.19 J
Ethyl Benzene	0.031	0.12	0.13	0.53
m,p-Xylene	0.062	0.37	0.27	1.6
o-Xylene	0.031	0.11	0.13	0.50
1,1,2,2-Tetrachloroethane	0.031	0.0083 J	0.21	0.057 J
trans-1,2-Dichloroethene	0.16	Not Detected U	0.61	Not Detected U
Methyl tert-butyl ether	0.16	0.0080 J	0.56	0.029 J

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	109	77-131
Toluene-d8	98	94-109
4-Bromofluorobenzene	100	84-112

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ML-DUP-01

Lab ID#: 1102328AR1-10A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022510**	**Date of Collection:**	**2/16/11 10:00:00 AM**
Dil. Factor:	**1.58**	**Date of Analysis:**	**2/25/11 04:09 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.16	0.39	0.78	1.9
Freon 114	0.16	Not Detected U	1.1	Not Detected U
Chloromethane	0.16	0.13 J	0.33	0.26 J
Bromomethane	0.16	Not Detected U	0.61	Not Detected U
Chloroethane	0.16	Not Detected U	0.42	Not Detected U
Freon 11	0.16	0.19	0.89	1.1
Ethanol	0.79	5.5	1.5	10
Freon 113	0.16	0.053 J	1.2	0.41 J
Methylene Chloride	0.32	0.15 J	1.1	0.52 J
Hexane	0.16	Not Detected U	0.56	Not Detected U
2-Butanone (Methyl Ethyl Ketone)	0.16	1.7	0.46	4.9
Chloroform	0.16	0.053 J	0.77	0.26 J
Cyclohexane	0.16	Not Detected U	0.54	Not Detected U
Carbon Tetrachloride	0.16	Not Detected U	0.99	Not Detected U
1,2-Dichloropropane	0.16	Not Detected U	0.73	Not Detected U
1,4-Dioxane	0.16	Not Detected U	0.57	Not Detected U
Bromodichloromethane	0.16	Not Detected U	1.0	Not Detected U
cis-1,3-Dichloropropene	0.16	Not Detected U	0.72	Not Detected U
4-Methyl-2-pentanone	0.16	0.076 J	0.65	0.31 J
trans-1,3-Dichloropropene	0.16	Not Detected U	0.72	Not Detected U
Dibromochloromethane	0.16	Not Detected U	1.3	Not Detected U
1,2-Dibromoethane (EDB)	0.16	Not Detected U	1.2	Not Detected U
Chlorobenzene	0.16	Not Detected U	0.73	Not Detected U
Styrene	0.16	Not Detected U	0.67	Not Detected U
Bromoform	0.16	Not Detected U	1.6	Not Detected U
1,3,5-Trimethylbenzene	0.16	0.049 J	0.78	0.24 J
1,2,4-Trimethylbenzene	0.16	Not Detected U	0.78	Not Detected U
1,3-Dichlorobenzene	0.16	0.046 J	0.95	0.28 J
1,4-Dichlorobenzene	0.16	Not Detected U	0.95	Not Detected U
alpha-Chlorotoluene	0.16	Not Detected U	0.82	Not Detected U
1,2-Dichlorobenzene	0.16	Not Detected U	0.95	Not Detected U
1,2,4-Trichlorobenzene	0.79	Not Detected U	5.9	Not Detected U
Hexachlorobutadiene	0.79	Not Detected U	8.4	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	114	80-129
Toluene-d8	98	93-108

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ML-DUP-01

Lab ID#: 1102328AR1-10A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022510**	**Date of Collection:**	**2/16/11 10:00:00 AM**
Dil. Factor:	**1.58**	**Date of Analysis:**	**2/25/11 04:09 PM**

Surrogates	**%Recovery**	**Method Limits**
4-Bromofluorobenzene	101	82-112

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CA-PRSC-ML-DUP-01

Lab ID#: 1102328AR1-10B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e022510sim**	**Date of Collection:**	**2/16/11 10:00:00 AM**
Dil. Factor:	**1.58**	**Date of Analysis:**	**2/25/11 04:09 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.016	Not Detected U	0.040	Not Detected U
1,1-Dichloroethene	0.016	Not Detected U	0.063	Not Detected U
1,1-Dichloroethane	0.032	0.0031 J	0.13	0.013 J
cis-1,2-Dichloroethene	0.032	Not Detected U	0.12	Not Detected U
1,1,1-Trichloroethane	0.032	0.0086 J	0.17	0.047 J
Benzene	0.079	0.12	0.25	0.37
1,2-Dichloroethane	0.032	0.010 J	0.13	0.041 J
Trichloroethene	0.032	0.0055 J	0.17	0.029 J
Toluene	0.032	7.8	0.12	29
1,1,2-Trichloroethane	0.032	Not Detected U	0.17	Not Detected U
Tetrachloroethene	0.032	0.025 J	0.21	0.17 J
Ethyl Benzene	0.032	0.053	0.14	0.23
m,p-Xylene	0.063	0.19	0.27	0.84
o-Xylene	0.032	0.064	0.14	0.28
1,1,2,2-Tetrachloroethane	0.032	Not Detected U	0.22	Not Detected U
trans-1,2-Dichloroethene	0.16	Not Detected U	0.63	Not Detected U
Methyl tert-butyl ether	0.16	Not Detected U	0.57	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	108	77-131
Toluene-d8	97	94-109
4-Bromofluorobenzene	103	84-112

APPENDIX F

DATA VALIDATION SUMMARIES

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO:	**D.BRAYACK**	**DATE:**	**APRIL 14, 2011**
FROM:	**A. COGNETTI**	**COPIES:**	**DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION – VOC**
NWIRP CALVERTON CTO WE08
SAMPLE DELIVERY GROUP (SDG) - 1102328A

SAMPLES: 10/Air/VOC

CA-PRSC-AC-CRL-01	CA-PRSC-ML-CRL-02	CA-PRSC-ML-CRL-03
CA-PRSC-ML-DUP-01	CA-PRSC-ML-INDB-01	CA-PRSC-ML-INDB-02
CA-PRSC-ML-INDL-02	CA-PRSC-SSB-01	CA-PRSC-SSB-02
CA-PRSC-ODA-01		

Overview

The sample set for NWIRP Calverton, SDG 1102328A consists of ten (10) air environmental samples. All samples were analyzed for volatile organic compounds (VOC). There is one (1) field duplicate pair associated with this SDG: CA-PRSC-ML-SSB-01/CA-PRSC-ML-DUP-01.

The samples were collected by Tetra Tech on February 16, 2011 and analyzed by Air Toxics, Ltd. All analyses were conducted in accordance with EPA Method TO-15 analytical and reporting protocols. The results for each sample in this report were acquired from two separate data files originating from the same analytical run (Full scan and Selective Ion Monitoring (SIM)). The following compounds were analyzed using TO-15 SIM: vinyl chloride, 1,1-dichloroethene, 1,1-dichloroethane, cis-1,2-dichloroethane, 1,1,1-trichloroethane, benzene, 1,2-dichloroethane, trichloroethene, toluene, 1,1,2-trichloroethane, tetrachloroethene, ethylbenzene, m,p-xylene, o-xylene, 1,1,2,2-tetrachloroethane, trans-1,2-dichloroethene and methyl tert-butyl ether. . The data contained in this SDG were validated with regard to the following parameters:

*	•	Data completeness
*	•	Holding times
	•	Initial/continuing calibrations
*	•	GC/MS Tuning
	•	Laboratory Method Blank Results
*	•	Surrogate Recoveries
*	•	Matrix Spike / Matrix Spike Duplicate Recoveries
*	•	Laboratory Control Sample Recoveries
*	•	Field Duplicate Precision
*	•	Internal Standard Recoveries
*	•	Compound Quantitation
*	•	Compound Identification
*	•	Detection Limits

The symbol (*) indicates that all quality control criteria were met for this parameter. Qualified analytical results are presented in Appendix A, results as reported by the laboratory are presented in Appendix B, Region II data validation forms are presented in Appendix C, and documentation supporting these findings is presented in Appendix D.

Volatile Organic Compounds

The following contaminants were detected in the laboratory method blank 1102328AR1-11B, associated with samples analyzed February 22, 2011 on instrument MSD-A via SIM.

Contaminant	Maximum Concentration (ug/m^3)	Action Level (ug/m^3)
Benzene	0.021	0.105
Toluene	0.039	0.195
m&p xylene	0.052	0.26
o-xylene	0.029	0.145

An action level of 5X the maximum concentration of contaminant was established in order to evaluate the affected samples for laboratory method blank contamination. Sample aliquot and dilution factors were taken into consideration during application of the action level. Positive results less than the action level were qualified as (U) and raised to the reporting limit in the affected samples. The affected samples were CA-PRSC-ML-CRL-02, CA-PRSC-ML-CRL-03, CA-PRSC-ML-INDB-02, CA-PRSC-ML-INDL-02, CA-PRSC-ML-SSB-02 and CA-PRSC-ODA-01.

The following contaminants were detected in the laboratory method blank, 1102328AR1-11D, associated with samples analyzed on February 25, 2011 on instrument MSD-E SIM.

Contaminant	Maximum Concentration (ug/m^3)	Action Level (ug/m^3)
Benzene	0.021	0.105
Trichloroethene	0.011	0.055
Toluene	0.0077	0.0385
Ethylbenzene	0.014	0.07
m&p xylene	0.0099	0.0495
o-xylene	0.013	0.065
1,1,2,2-tetrachloroethane	0.033	0.165

An action level of 5X the maximum concentration of contaminant was established in order to evaluate the affected samples for laboratory blank contamination. Sample aliquot and dilution factors were taken into consideration during application of the action level. Positive results less than the action level were qualified as (U) and raised to the reporting limit in the affected samples. The affected samples were CA-PRSC- AC-CRL-01, CA-PRSC-ML-DUP-01, CA-PRSC-ML-INDB-01 and CA-PRSC-ML-SSB-01.

An initial calibration percent relative standard deviation (%RSD) was greater than the 30% quality control limit for 1,2,4-trichlorobenzene on 02/17/11 on instrument MSD-E affecting the full scan results. The nondetected 1,2,4-trichlorobenzene results were qualified as estimated (UJ in the affected samples CA-PRSC- AC-CRL-01, CA-PRSC-ML-DUP-01, CA-PRSC-ML-INDB-01 and CA-PRSC-ML-SSB-01.

The compound ethanol had a concentration greater than the linear calibration range of the instrument in sample CA-PRSC-ML-INDL-02. The positive ethanol result in sample CA-PRSC-ML-INDL-02 was qualified as estimated (J).

Additional Comments

The following contaminants were detected in the laboratory method blank, 1102328AR1-11C,

associated with samples analyzed on February 25, 2011 on instrument MSD-E for full scan analysis:

Contaminant	Maximum Concentration (ug/m^3)	Action Level (ug/m^3)
1,2-dichlorobenzene	0.24	1.2
1,2,4-trichlorobenzene	0.35	1.75

An action level of 5X the maximum concentration of contaminant was established in order to evaluate the affected samples for laboratory method blank contamination. Sample aliquot and dilution factors were taken into consideration during application of action level. No action was taken on the nondetected results in the affected samples CA-PRSC-AC-CRL-01, CA-PRSC-ML-DUP-01, CA-PRSC-ML-INDB-01 and CA-PRSC-ML-SSB-01.

Canister certification analyses indicated all canisters were nondetected for the target analyte list.

Nondetected results were reported to the reporting limit (RL).

Positive results below the reporting limit (RL) and above the method detection limit (MDL) were qualified as estimated, (J), due to uncertainty near the detection limit.

EXECUTIVE SUMMARY

Laboratory Performance Issues: Blank contamination resulted in the qualification of several results in the SIM scan. Initial calibration %RSD noncompliance resulted in the qualification of 1,2,4-trichlorobenzene results. Ethanol concentration exceeded the linear calibration range of the instrument in sample CA-PRSC-ML-INDL-02 resulting in qualification of the data.

Other Factors Affecting Data Quality: None.

The data for these analyses were reviewed with reference to the USEPA Region II Standard Operating Procedure for Validating Volatile Organic Compounds by SW-846 Method 8260B HW-24 Revision #2 (October 2006) and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (April 2009).

The text of this report has been formulated to address only those problem areas affecting data quality.

TetraTech NUS
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Chemist/Data Validator

TetraTech NUS
Joseph A. Samchuck
Data Validation Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as Reported by the Laboratory
3. Appendix C – Region II Data Validation Forms
4. Appendix D - Support Documentation

Appendix A

Qualified Analytical Results

Data Validation Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (e.g. % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = GFAA PDS - GFAA MSA's $r < 0.995$
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (e.g. base-line drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can be any number of issues; e.g. poor chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = % Difference between columns/detectors >25% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient $r < 0.995$
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 sigma deviation is greater than sample activity

PROJ_NO: 02045	NSAMPLE	CA-PRSC-AC-CRL-01			CA-PRSC-ML-CRL-02			CA-PRSC-ML-CRL-03			CA-PRSC-ML-DUP-01		
SDG: 1102328A	LAB_ID	1102328AR1-09A			1102328AR1-06A			1102328AR1-03A			1102328AR1-10A		
FRACTION: OV-M3	SAMP_DATE	2/16/2011			2/16/2011			2/16/2011			2/16/2011		
MEDIA: AIR	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/M3			UG/M3			UG/M3			UG/M3		
	PCT_SOLIDS												
	DUP_OF										CA-PRSC-ML-SSB-01		
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		0.037	J	P	0.05	J	P	0.054	J	P	0.047	J	P
1,1,2,2-TETRACHLOROETHANE		0.21	U	A	0.22	U		0.21	U		0.22	U	
1,1,2-TRICHLOROETHANE		0.17	U		0.17	U		0.16	U		0.17	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.5	J	P	0.32	J	P	0.48	J	P	0.41	J	P
1,1-DICHLOROETHANE		0.037	J	P	0.13	U		0.015	J	P	0.013	J	P
1,1-DICHLOROETHENE		0.061	U		0.063	U		0.06	U		0.063	U	
1,2,4-TRICHLOROBENZENE		5.8	UJ	C	5.9	U		5.6	U		5.9	UJ	C
1,2,4-TRIMETHYLBENZENE		0.76	U		0.25	J	P	0.28	J	P	0.78	U	
1,2-DIBROMOETHANE		1.2	U		1.2	U		1.2	U		1.2	U	
1,2-DICHLOROBENZENE		0.93	U		0.95	U		0.91	U		0.95	U	
1,2-DICHLOROETHANE		0.042	J	P	0.054	J	P	0.033	J	P	0.041	J	P
1,2-DICHLOROPROPANE		0.72	U		0.73	U		0.7	U		0.73	U	
1,2-DICHLOROTETRAFLUOROETHANE		1.1	U		1.1	U		1.1	U		1.1	U	
1,3,5-TRIMETHYLBENZENE		0.22	J	P	0.78	U		0.75	U		0.24	J	P
1,3-DICHLOROBENZENE		0.93	U		0.95	U		0.91	U		0.28	J	P
1,4-DICHLOROBENZENE		0.93	U		0.95	U		0.91	U		0.95	U	
1,4-DIOXANE		0.56	U		0.57	U		0.55	U		0.57	U	
2-BUTANONE		0.89			0.57			2.7			4.9		
4-METHYL-2-PENTANONE		0.63	U		0.3	J	P	0.26	J	P	0.31	J	P
BENZENE		0.56			0.42			0.52			0.37		
BENZYL CHLORIDE		0.8	U		0.82	U		0.79	U		0.82	U	
BROMODICHLOROMETHANE		1	U		1	U		1	U		1	U	
BROMOFORM		1.6	U		1.6	U		1.6	U		1.6	U	
BROMOMETHANE		0.6	U		0.61	U		0.59	U		0.61	U	
CARBON TETRACHLORIDE		0.98	U		0.49	J	P	0.4	J	P	0.99	U	
CHLOROBENZENE		0.71	U		0.73	U		0.7	U		0.73	U	
CHLORODIBROMOMETHANE		1.3	U		1.3	U		1.3	U		1.3	U	
CHLOROETHANE		0.41	U		0.42	U		0.4	U		0.42	U	
CHLOROFORM		0.76	U		0.77	U		0.74	U		0.26	J	P
CHLOROMETHANE		0.61			0.77			0.73			0.26	J	P
CIS-1,2-DICHLOROETHENE		0.12	U		0.12	U		0.12	U		0.12	U	
CIS-1,3-DICHLOROPROPENE		0.7	U		0.72	U		0.69	U		0.72	U	
CYCLOHEXANE		0.21	J	P	0.54	U		0.24	J	P	0.54	U	
DICHLORODIFLUOROMETHANE		1.9			2.1			1.6			1.9		
ETHANOL		2.5			24			9.5			10		

PROJ_NO: 02045	NSAMPLE	CA-PRSC-ML-INDB-01			CA-PRSC-ML-INDB-02			CA-PRSC-ML-INDL-02			CA-PRSC-ML-SSB-01		
SDG: 1102328A	LAB_ID	1102328AR1-08A			1102328AR1-02A			1102328AR1-04A			1102328AR1-07A		
FRACTION: OV-M3	SAMP_DATE	2/16/2011			2/16/2011			2/16/2011			2/16/2011		
MEDIA: AIR	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/M3			UG/M3			UG/M3			UG/M3		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		0.051	J	P	0.036	J	P	0.041	J	P	0.05	J	P
1,1,2,2-TETRACHLOROETHANE		0.22	U		0.17	U		0.2	U		0.23	U	A
1,1,2-TRICHLOROETHANE		0.18	U		0.14	U		0.16	U		0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.54	J	P	0.41	J	P	0.54	J	P	0.39	J	P
1,1-DICHLOROETHANE		0.13	U		0.018	J	P	0.12	U		0.013	J	P
1,1-DICHLOROETHENE		0.065	U		0.05	U		0.058	U		0.067	U	
1,2,4-TRICHLOROBENZENE		6.1	UJ	C	4.7	U		5.4	U		6.2	UJ	C
1,2,4-TRIMETHYLBENZENE		0.81	U		0.62	U		0.73			0.82	U	
1,2-DIBROMOETHANE		1.3	U		0.98	U		1.1	U		1.3	U	
1,2-DICHLOROBENZENE		0.99	U		0.76	U		0.88	U		1	U	
1,2-DICHLOROETHANE		0.05	J	P	0.042	J	P	0.039	J	P	0.052	J	P
1,2-DICHLOROPROPANE		0.76	U		0.59	U		0.67	U		0.78	U	
1,2-DICHLOROTETRAFLUOROETHANE		1.1	U		0.89	U		1	U		1.2	U	
1,3,5-TRIMETHYLBENZENE		0.082	J	P	0.62	U		0.72	U		0.22	J	P
1,3-DICHLOROBENZENE		0.99	U		0.76	U		0.88	U		0.24	J	P
1,4-DICHLOROBENZENE		0.99	U		0.76	U		0.88	U		1	U	
1,4-DIOXANE		0.59	U		0.46	U		0.53	U		0.6	U	
2-BUTANONE		1			0.85			0.94			4.4		
4-METHYL-2-PENTANONE		0.23	J	P	0.35	J	P	0.6	U		0.26	J	P
BENZENE		0.37			0.41			0.42			0.37		
BENZYL CHLORIDE		0.85	U		0.66	U		0.76	U		0.87	U	
BROMODICHLOROMETHANE		1.1	U		0.85	U		0.98	U		1.1	U	
BROMOFORM		1.7	U		1.3	U		1.5	U		1.7	U	
BROMOMETHANE		0.64	U		0.49	U		0.57	U		0.65	U	
CARBON TETRACHLORIDE		0.4	J	P	0.5	J	P	0.55	J	P	1	U	
CHLOROBENZENE		0.76	U		0.58	U		0.67	U		0.77	U	
CHLORODIBROMOMETHANE		1.4	U		1.1	U		1.2	U		1.4	U	
CHLOROETHANE		0.43	U		0.34	U		0.38	U		0.44	U	
CHLOROFORM		0.8	U		0.62	U		0.71	U		0.21	J	P
CHLOROMETHANE		0.7			0.79			0.91			0.35	U	
CIS-1,2-DICHLOROETHENE		0.13	U		0.1	U		0.12	U		0.028	J	P
CIS-1,3-DICHLOROPROPENE		0.74	U		0.58	U		0.66	U		0.76	U	
CYCLOHEXANE		0.56	U		0.44	U		0.5	U		0.58	U	
DICHLORODIFLUOROMETHANE		2.1			2			1.7			1.9		
ETHANOL		23			4.7			120	J	L	8.9		

PROJ_NO: 02045	NSAMPLE	CA-PRSC-ML-SSB-02			CA-PRSC-ODA-01		
SDG: 1102328A	LAB_ID	1102328AR1-05A			1102328AR1-01A		
FRACTION: OV-M3	SAMP_DATE	2/16/2011			2/16/2011		
MEDIA: AIR	QC_TYPE	NM			NM		
	UNITS	UG/M3			UG/M3		
	PCT_SOLIDS						
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		0.041	J	P	0.038	J	P
1,1,2,2-TETRACHLOROETHANE		0.21	U		0.19	U	
1,1,2-TRICHLOROETHANE		0.17	U		0.15	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.4	J	P	0.58	J	P
1,1-DICHLOROETHANE		0.12	U		0.014	J	P
1,1-DICHLOROETHENE		0.061	U		0.055	U	
1,2,4-TRICHLOROBENZENE		5.8	U		5.2	U	
1,2,4-TRIMETHYLBENZENE		0.59	J	P	0.68	U	
1,2-DIBROMOETHANE		1.2	U		1.1	U	
1,2-DICHLOROBENZENE		0.93	U		0.84	U	
1,2-DICHLOROETHANE		0.037	J	P	0.045	J	P
1,2-DICHLOROPROPANE		0.72	U		0.64	U	
1,2-DICHLOROTETRAFLUOROETHANE		1.1	U		0.97	U	
1,3,5-TRIMETHYLBENZENE		0.76	U		0.68	U	
1,3-DICHLOROBENZENE		0.46	J	P	0.84	U	
1,4-DICHLOROBENZENE		0.93	U		0.84	U	
1,4-DIOXANE		0.56	U		0.5	U	
2-BUTANONE		6.3			1.2		
4-METHYL-2-PENTANONE		0.26	J	P	0.57	U	
BENZENE		0.59			0.43		
BENZYL CHLORIDE		0.8	U		0.72	U	
BROMODICHLOROMETHANE		1	U		0.93	U	
BROMOFORM		1.6	U		1.4	U	
BROMOMETHANE		0.6	U		0.54	U	
CARBON TETRACHLORIDE		0.61	J	P	0.42	J	P
CHLOROBENZENE		0.71	U		0.64	U	
CHLORODIBROMOMETHANE		1.3	U		1.2	U	
CHLOROETHANE		0.41	U		0.37	U	
CHLOROFORM		0.76	U		0.68	U	
CHLOROMETHANE		0.28	J	P	0.95		
CIS-1,2-DICHLOROETHENE		0.12	U		0.11	U	
CIS-1,3-DICHLOROPROPENE		0.7	U		0.63	U	
CYCLOHEXANE		0.53	U		0.48	U	
DICHLORODIFLUOROMETHANE		1.8			2		
ETHANOL		16			1.1	J	P

PROJ_NO: 02045	NSAMPLE	CA-PRSC-AC-CRL-01			CA-PRSC-ML-CRL-02			CA-PRSC-ML-CRL-03			CA-PRSC-ML-DUP-01		
SDG: 1102328A	LAB_ID	1102328AR1-09A			1102328AR1-06A			1102328AR1-03A			1102328AR1-10A		
FRACTION: OV-M3	SAMP_DATE	2/16/2011			2/16/2011			2/16/2011			2/16/2011		
MEDIA: AIR	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/M3			UG/M3			UG/M3			UG/M3		
	PCT_SOLIDS												
	DUP_OF										CA-PRSC-ML-SSB-01		
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ETHYLBENZENE		0.53			0.092	J	P	0.35			0.23		
HEXACHLOROBUTADIENE		8.3	U		8.4	U		8.1	U		8.4	U	
HEXANE		0.67			0.14	J	P	0.57			0.56	U	
M+P-XYLENES		1.6			0.29	U	A	0.9			0.84		
METHYL TERT-BUTYL ETHER		0.029	J	P	0.57	U		0.55	U		0.57	U	
METHYLENE CHLORIDE		0.44	J	P	4.5			4.9			0.52	J	P
O-XYLENE		0.5			0.14	U	A	0.28			0.28		
STYRENE		0.66	U		0.67	U		0.65	U		0.67	U	
TETRACHLOROETHENE		0.19	J	P	0.11	J	P	0.1	J	P	0.17	J	P
TOLUENE		2.5			0.59			2.6			29		
TRANS-1,2-DICHLOROETHENE		0.61	U		0.63	U		0.6	U		0.63	U	
TRANS-1,3-DICHLOROPROPENE		0.7	U		0.72	U		0.69	U		0.72	U	
TRICHLOROETHENE		0.17	U	A	0.1	J	P	0.046	J	P	0.17	U	A
TRICHLOROFLUOROMETHANE		1			1.1			1.2			1.1		
VINYL CHLORIDE		0.04	U		0.04	U		0.039	U		0.04	U	

PROJ_NO: 02045	NSAMPLE	CA-PRSC-ML-INDB-01			CA-PRSC-ML-INDB-02			CA-PRSC-ML-INDL-02			CA-PRSC-ML-SSB-01		
SDG: 1102328A	LAB_ID	1102328AR1-08A			1102328AR1-02A			1102328AR1-04A			1102328AR1-07A		
FRACTION: OV-M3	SAMP_DATE	2/16/2011			2/16/2011			2/16/2011			2/16/2011		
MEDIA: AIR	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/M3			UG/M3			UG/M3			UG/M3		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ETHYLBENZENE		0.13	J	P	0.069	J	P	0.15			0.25		
HEXACHLOROBUTADIENE		8.7	U		6.8	U		7.8	U		9	U	
HEXANE		0.41	J	P	0.14	J	P	0.27	J	P	0.22	J	P
M+P-XYLENES		0.38			0.22	U	A	0.43			0.86		
METHYL TERT-BUTYL ETHER		0.59	U		0.46	U		0.53	U		0.6	U	
METHYLENE CHLORIDE		0.89	J	P	6.4			13			0.6	J	P
O-XYLENE		0.12	J	P	0.11	U	A	0.15	U	A	0.28		
STYRENE		0.7	U		0.54	U		0.61	J	P	0.72	U	
TETRACHLOROETHENE		0.14	J	P	0.041	J	P	0.088	J	P	0.18	J	P
TOLUENE		0.61			0.61			1.3			30		
TRANS-1,2-DICHLOROETHENE		0.65	U		0.5	U		0.58	U		0.67	U	
TRANS-1,3-DICHLOROPROPENE		0.74	U		0.58	U		0.66	U		0.76	U	
TRICHLOROETHENE		0.18	U	A	0.14	U		0.058	J	P	0.18	U	A
TRICHLOROFLUOROMETHANE		1.2			1.2			1.1			1.2		
VINYL CHLORIDE		0.042	U		0.032	U		0.037	U		0.043	U	

PROJ_NO: 02045	NSAMPLE	CA-PRSC-ML-SSB-02			CA-PRSC-ODA-01		
SDG: 1102328A	LAB_ID	1102328AR1-05A			1102328AR1-01A		
FRACTION: OV-M3	SAMP_DATE	2/16/2011			2/16/2011		
MEDIA: AIR	QC_TYPE	NM			NM		
	UNITS	UG/M3			UG/M3		
	PCT_SOLIDS						
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
ETHYLBENZENE		0.31			0.068	J	P
HEXACHLOROBUTADIENE		8.3	U		7.4	U	
HEXANE		0.28	J	P	0.12	J	P
M+P-XYLENES		1			0.24	U	A
METHYL TERT-BUTYL ETHER		0.022	J	P	0.5	U	
METHYLENE CHLORIDE		6.2			0.42	J	P
O-XYLENE		0.46			0.12	U	A
STYRENE		0.18	J	P	0.59	U	
TETRACHLOROETHENE		0.1	J	P	0.042	J	P
TOLUENE		1.4			0.3		
TRANS-1,2-DICHLOROETHENE		0.61	U		0.55	U	
TRANS-1,3-DICHLOROPROPENE		0.7	U		0.63	U	
TRICHLOROETHENE		0.029	J	P	0.15	U	
TRICHLOROFLUOROMETHANE		1.1			1.2		
VINYL CHLORIDE		0.04	U		0.036	U	

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO:	**D. BRAYACK**	**DATE:**	**APRIL 11, 2011**
FROM:	**EDWARD SEDLMYER**	**COPIES:**	**DV FILE**
SUBJECT:	**ORGANIC DATA VALIDATION – VOC NWIRP CALVERTON CTO WE08 SDG 1102328B**		
SAMPLES:	9 / Air / VOC		

CA-PRSC-AC-INDL-01	CA-PRSC-AC-INDL-02	CA-PRSC-ML-CRL-01
CA-PRSC-ML-DUP-02	CA-PRSC-ML-INDL-01	CA-PRSC-ML-INDL-03
CA-PRSC-RE-CRL-01	CA-PRSC-RE-DUP-03	CA-PRSC-RE-INDL-01

Overview

The sample set for NWIRP Calverton, SDG 1102328B consists of nine (9) air environmental samples. All samples were analyzed for volatile organic compounds (VOC). There were two field duplicate pairs associated with this sample data group (SDG): CA-PRSC-ML-CRL-01 / CA-PRSC-ML-DUP-02 and CA-PRSC-RE-INDL-01 / CA-PRSC-RE-DUP-03.

The samples were collected by Tetra Tech on February 16, 2011 and analyzed by Air Toxics, Ltd. All analyses were conducted in accordance with EPA Method TO-15 analytical and reporting protocols. The following compounds were analyzed using TO-15 SIM: vinyl chloride, cis-1,2-dichloroethene, 1,1,2-trichloroethane, 1,1-dichloroethene, 1,1-dichloroethane, 1,1,1-trichloroethane, benzene, 1,2-dichloroethane, trichloroethene, toluene, 1,1,2,2-tetrachloroethane, trans-1,2-dichloroethene, methyl t-butyl ether, tetrachloroethene, ethylbenzene, m,p-xylene, and o-xylene. The data contained in this SDG were validated with regard to the following parameters:

*	•	Data completeness
*	•	Holding times
	•	Initial/continuing calibrations
*	•	GC/MS Tuning
	•	Laboratory Method Blank Results
*	•	Surrogate Recoveries
*	•	Matrix Spike / Matrix Spike Duplicate Recoveries
*	•	Laboratory Control Sample Recoveries
*	•	Field Duplicate Precision
*	•	Internal Standard Recoveries
*	•	Compound Quantitation
*	•	Compound Identification
*	•	Detection Limits

The symbol (*) indicates that all quality control criteria were met for this parameter. Qualified analytical results are presented in Appendix A, results as reported by the laboratory are presented in Appendix B, Region II data validation forms are presented in Appendix C, and documentation supporting these findings is presented in Appendix D.

Volatile Organic Compounds

The following contaminants were detected in the laboratory method blank associated with samples analyzed on 2/22/11 at the following maximum concentrations:

Contaminant	Maximum Concentration (ug/m^3)	Action Level (ug/m^3)
1,2-Dichlorobenzene	0.13	0.65
1,2,4-Trichlorobenzene	0.28	1.4
Benzene	0.025	0.13
Toluene	0.014	0.07
m&p Xylene	0.029	0.15
o-Xylene	0.015	0.075
1,1,2,2-Tetrachloroethane	0.015	0.075
trans-1,2-Dichloroethene	0.013	0.065

An action level of 5X for was established to evaluate the affected samples for laboratory method blank contamination. Sample aliquot and dilution factors were taken into consideration during application of the blank action level. Detected concentrations for any of the above referenced compounds less than the blank action levels were qualified (U) due to blank contamination.

The following contaminants were detected in the laboratory method blank associated with samples analyzed on 2/25/11 at the following maximum concentrations:

Contaminant	Maximum Concentration (ug/m^3)	Action Level (ug/m^3)
1,2-Dichlorobenzene	0.24	1.2
1,2,4-Trichlorobenzene	0.35	1.75
Benzene	0.021	0.11
Toluene	0.0077	0.039
Trichloroethene	0.011	0.055
Ethylbenzene	0.014	0.07
m&p Xylene	0.0099	0.050
o-Xylene	0.0.013	0.065
1,1,2,2-Tetrachloroethane	0.0.033	0.165

An action level of 5X for was established to evaluate the affected samples for laboratory method blank contamination. Sample aliquot and dilution factors were taken into consideration during application of the blank action level. No action was taken on this basis because all the results were less than the action limit or nondetected.

An initial calibration percent relative standard deviation (%RSD) was greater than the 30% quality control limit for 1,2,4-trichlorobenzene on 02/17/11. The non-detected results for 1,2,4-trichlorobenzene were qualified as estimated (UJ) in all samples.

The compound ethanol had a concentration greater than the linear calibration range of the instrument in sample CA-PRSC-ML-INDL-01. The ethanol result for sample CA-PRSC-ML-INDL-01 was qualified as estimated (J).

Additional Comments

Positive results below the reporting limit (RL) and above the method detection limit (MDL) were qualified as estimated, (J), due to uncertainty near the detection limit.

EXECUTIVE SUMMARY

Laboratory Performance Issues: Blank contamination resulted in the qualification of m/p-xylenes, o-xylene and/or trans-1,2-dichloroethene in two samples. Initial calibration %RSD noncompliance resulted in the qualification of 1,2,4-trichlorobenzene in all samples. Ethanol concentration exceeded the linear calibration range of the instrument for one sample resulting in qualification of the data.

Other Factors Affecting Data Quality: None.

The data for these analyses were reviewed with reference to the USEPA Region II Standard Operating Procedures for Validating Air Samples Volatile Organic Analysis of Ambient Air In Canister by Method TO-15 HW-31 Revision #4 (October 2006) and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (April 2009).

The text of this report has been formulated to address only those problem areas affecting data quality.

TetraTech NUS
Edward Sedlmyer
Chemist/Data Validator

TetraTech NUS
Joseph A. Samchuck
Data Validation Quality Assurance Officer

Attachments:
1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as Reported by the Laboratory
3. Appendix C – Region II Data Validation Forms
4. Appendix D - Support Documentation

Appendix A

Qualified Analytical Results

Data Validation Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (e.g. % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = GFAA PDS - GFAA MSA's $r < 0.995$ / ICP PDS Recovery Noncompliance
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (e.g. base-line drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; e.g. chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = % Difference between columns/detectors >25% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient $r < 0.995$
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 sigma deviation is greater than sample activity

PROJ_NO: 02045	NSAMPLE	CA-PRSC-AC-INDL-01			CA-PRSC-AC-INDL-02			CA-PRSC-ML-CRL-01			CA-PRSC-ML-DUP-02		
SDG: 1102328B	LAB_ID	1102328B-11A			1102328B-16A			1102328B-13A			1102328B-14A		
FRACTION: OV-M3	SAMP_DATE	2/16/2011			2/16/2011			2/16/2011			2/16/2011		
MEDIA: AIR	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/M3			UG/M3			UG/M3			UG/M3		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF										CA-PRSC-ML-CRL-01		
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		0.044	J	P	0.036	J	P	0.055	J	P	0.046	J	P
1,1,2,2-TETRACHLOROETHANE		0.22	U		0.25	U		0.22	U		0.19	U	
1,1,2-TRICHLOROETHANE		0.18	U		0.2	U		0.18	U		0.15	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.47	J	P	0.4	J	P	0.43	J	P	0.36	J	P
1,1-DICHLOROETHANE		0.011	J	P	0.15	U		0.13	U		0.11	U	
1,1-DICHLOROETHENE		0.028	J	P	0.072	U		0.064	U		0.055	U	
1,2,4-TRICHLOROBENZENE		6	UJ	C	6.8	UJ	C	6	UJ	C	5.2	UJ	C
1,2,4-TRIMETHYLBENZENE		0.79	U		0.9	U		0.79	U		0.68	U	
1,2-DIBROMOETHANE		1.2	U		1.4	U		1.2	U		1.1	U	
1,2-DICHLOROBENZENE		0.97	U		1.1	U		0.97	U		0.84	U	
1,2-DICHLOROETHANE		0.05	J	P	0.045	J	P	0.053	J	P	0.056	J	P
1,2-DICHLOROPROPANE		0.74	U		0.84	U		0.74	U		0.64	U	
1,2-DICHLOROTETRAFLUOROETHANE		1.1	U		1.3	U		1.1	U		0.97	U	
1,3,5-TRIMETHYLBENZENE		0.79	U		0.9	U		0.32	J	P	0.23	J	P
1,3-DICHLOROBENZENE		0.97	U		1.1	U		0.97	U		0.84	U	
1,4-DICHLOROBENZENE		0.97	U		1.1	U		0.97	U		0.84	U	
1,4-DIOXANE		0.58	U		0.66	U		0.58	U		0.5	U	
2-BUTANONE		0.76			0.66			1.2			1.3		
4-METHYL-2-PENTANONE		0.66	U		0.16	J	P	0.18	J	P	0.57	U	
BENZENE		0.6			0.93			0.54			0.56		
BENZYL CHLORIDE		0.83	U		0.95	U		0.83	U		0.72	U	
BROMODICHLOROMETHANE		1.1	U		1.2	U		1.1	U		0.93	U	
BROMOFORM		1.7	U		1.9	U		1.7	U		1.4	U	
BROMOMETHANE		0.62	U		0.71	U		0.62	U		0.54	U	
CARBON TETRACHLORIDE		0.4	J	P	1.2	U		1	U		0.38	J	P
CHLOROBENZENE		0.74	U		0.84	U		0.74	U		0.64	U	
CHLORODIBROMOMETHANE		1.4	U		1.6	U		1.4	U		1.2	U	
CHLOROETHANE		0.42	U		0.48	U		0.42	U		0.37	U	
CHLOROFORM		0.15	J	P	0.89	U		0.79	U		0.68	U	
CHLOROMETHANE		0.8			0.86			0.8			0.87		
CIS-1,2-DICHLOROETHENE		0.13	U		0.14	U		0.13	U		0.11	U	
CIS-1,3-DICHLOROPROPENE		0.73	U		0.83	U		0.73	U		0.63	U	
CYCLOHEXANE		0.52	J	P	1.3			0.55	U		0.48	U	
DICHLORODIFLUOROMETHANE		2			1.9			2.2			1.9		
ETHANOL		2			2.6			21			20		

PROJ_NO: 02045	NSAMPLE	CA-PRSC-ML-INDL-01			CA-PRSC-ML-INDL-03			CA-PRSC-RE-CRL-01			CA-PRSC-RE-DUP-03		
SDG: 1102328B	LAB_ID	1102328B-15A			1102328B-12A			1102328B-19A			1102328B-18A		
FRACTION: OV-M3	SAMP_DATE	2/16/2011			2/16/2011			2/16/2011			2/16/2011		
MEDIA: AIR	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/M3			UG/M3			UG/M3			UG/M3		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF										CA-PRSC-RE-INDL-01		
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		0.2			0.049	J	P	0.043	J	P	0.038	J	P
1,1,2,2-TETRACHLOROETHANE		0.24	U		0.25	U		0.22	U		0.24	U	
1,1,2-TRICHLOROETHANE		0.2	U		0.2	U		0.18	U		0.2	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.56	J	P	0.39	J	P	0.48	J	P	0.43	J	P
1,1-DICHLOROETHANE		0.013	J	P	0.15	U		0.13	U		0.011	J	P
1,1-DICHLOROETHENE		0.036	J	P	0.072	U		0.065	U		0.071	U	
1,2,4-TRICHLOROBENZENE		6.6	UJ	C	6.8	UJ	C	6.1	UJ	C	6.6	UJ	C
1,2,4-TRIMETHYLBENZENE		0.88	U		0.9	U		0.81	U		0.88	U	
1,2-DIBROMOETHANE		1.4	U		1.4	U		1.3	U		1.4	U	
1,2-DICHLOROBENZENE		1.1	U		1.1	U		0.99	U		1.1	U	
1,2-DICHLOROETHANE		0.11	J	P	0.042	J	P	0.069	J	P	3.2		
1,2-DICHLOROPROPANE		0.83	U		0.84	U		0.76	U		0.83	U	
1,2-DICHLOROTETRAFLUOROETHANE		1.2	U		1.3	U		1.1	U		1.2	U	
1,3,5-TRIMETHYLBENZENE		0.88	U		0.1	J	P	0.42	J	P	0.88	U	
1,3-DICHLOROBENZENE		1.1	U		1.1	U		0.99	U		1.1	U	
1,4-DICHLOROBENZENE		1.1	U		1.1	U		0.26	J	P	4.8		
1,4-DIOXANE		0.64	U		0.66	U		0.59	U		0.64	U	
2-BUTANONE		3.5			0.59			2			0.93		
4-METHYL-2-PENTANONE		0.94			0.17	J	P	0.67	U		0.73	U	
BENZENE		0.41			0.39			0.64			0.94		
BENZYL CHLORIDE		0.93	U		0.95	U		0.85	U		0.93	U	
BROMODICHLOROMETHANE		1.2	U		1.2	U		1.1	U		1.2	U	
BROMOFORM		1.8	U		1.9	U		1.7	U		1.8	U	
BROMOMETHANE		0.7	U		0.71	U		0.64	U		0.7	U	
CARBON TETRACHLORIDE		0.48	J	P	1.2	U		1	U		1.1	U	
CHLOROBENZENE		0.82	U		0.84	U		0.76	U		0.82	U	
CHLORODIBROMOMETHANE		1.5	U		1.6	U		1.4	U		1.5	U	
CHLOROETHANE		0.47	U		0.48	U		0.43	U		0.47	U	
CHLOROFORM		0.33	J	P	0.89	U		0.8	U		0.87	U	
CHLOROMETHANE		0.98			0.82			0.69			1.7		
CIS-1,2-DICHLOROETHENE		0.14	U		0.14	U		0.13	U		0.14	U	
CIS-1,3-DICHLOROPROPENE		0.81	U		0.83	U		0.74	U		0.81	U	
CYCLOHEXANE		0.28	J	P	0.63	U		0.19	J	P	0.62	U	
DICHLORODIFLUOROMETHANE		2.1			2			2			2.3		
ETHANOL		210	J	L	35			3.3			51		

PROJ_NO: 02045	NSAMPLE	CA-PRSC-RE-INDL-01
SDG: 1102328B	LAB_ID	1102328B-17A
FRACTION: OV-M3	SAMP_DATE	2/16/2011
MEDIA: AIR	QC_TYPE	NM
	UNITS	UG/M3
	PCT_SOLIDS	0.0
	DUP_OF	

PARAMETER	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE	0.076	J	P
1,1,2,2-TETRACHLOROETHANE	0.24	U	
1,1,2-TRICHLOROETHANE	0.19	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.38	J	P
1,1-DICHLOROETHANE	0.14	U	
1,1-DICHLOROETHENE	0.069	U	
1,2,4-TRICHLOROBENZENE	6.5	UJ	C
1,2,4-TRIMETHYLBENZENE	0.86	U	
1,2-DIBROMOETHANE	1.3	U	
1,2-DICHLOROBENZENE	1	U	
1,2-DICHLOROETHANE	2.8		
1,2-DICHLOROPROPANE	0.81	U	
1,2-DICHLOROTETRAFLUOROETHANE	1.2	U	
1,3,5-TRIMETHYLBENZENE	0.86	U	
1,3-DICHLOROBENZENE	1	U	
1,4-DICHLOROBENZENE	3.3		
1,4-DIOXANE	0.63	U	
2-BUTANONE	0.86		
4-METHYL-2-PENTANONE	0.72	U	
BENZENE	0.97		
BENZYL CHLORIDE	0.9	U	
BROMODICHLOROMETHANE	1.2	U	
BROMOFORM	1.8	U	
BROMOMETHANE	0.68	U	
CARBON TETRACHLORIDE	1.1	U	
CHLOROBENZENE	0.8	U	
CHLORODIBROMOMETHANE	1.5	U	
CHLOROETHANE	0.46	U	
CHLOROFORM	0.85	U	
CHLOROMETHANE	1.6		
CIS-1,2-DICHLOROETHENE	0.14	U	
CIS-1,3-DICHLOROPROPENE	0.79	U	
CYCLOHEXANE	0.6	U	
DICHLORODIFLUOROMETHANE	2		
ETHANOL	49		

PROJ_NO: 02045	NSAMPLE	CA-PRSC-AC-INDL-01			CA-PRSC-AC-INDL-02			CA-PRSC-ML-CRL-01			CA-PRSC-ML-DUP-02		
SDG: 1102328B	LAB_ID	1102328B-11A			1102328B-16A			1102328B-13A			1102328B-14A		
FRACTION: OV-M3	SAMP_DATE	2/16/2011			2/16/2011			2/16/2011			2/16/2011		
MEDIA: AIR	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/M3			UG/M3			UG/M3			UG/M3		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF										CA-PRSC-ML-CRL-01		
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ETHYLBENZENE		0.2			0.39			0.65			0.56		
HEXACHLOROBUTADIENE		8.6	U		9.8	U		8.6	U		7.4	U	
HEXANE		0.94			2			0.23	J	P	0.35	J	P
M+P-XYLENES		0.58			1.2			2			1.8		
METHYL TERT-BUTYL ETHER		0.58	U		0.66	U		0.58	U		0.5	U	
METHYLENE CHLORIDE		0.47	J	P	0.41	J	P	0.41	J	P	1.4		
O-XYLENE		0.19			0.41			0.62			0.54		
STYRENE		0.68	U		0.78	U		0.68	U		0.59	U	
TETRACHLOROETHENE		0.074	J	P	0.074	J	P	0.22			0.19		
TOLUENE		1			2.3			2.7			2.5		
TRANS-1,2-DICHLOROETHENE		0.64	U		0.72	U		0.64	U		0.55	U	
TRANS-1,3-DICHLOROPROPENE		0.73	U		0.83	U		0.73	U		0.63	U	
TRICHLOROETHENE		0.12	J	P	0.042	J	P	0.044	J	P	0.038	J	P
TRICHLOROFLUOROMETHANE		1.1			1.1			1.1			1		
VINYL CHLORIDE		0.041	U		0.047	U		0.041	U		0.036	U	

PROJ_NO: 02045	NSAMPLE	CA-PRSC-ML-INDL-01			CA-PRSC-ML-INDL-03			CA-PRSC-RE-CRL-01			CA-PRSC-RE-DUP-03		
SDG: 1102328B	LAB_ID	1102328B-15A			1102328B-12A			1102328B-19A			1102328B-18A		
FRACTION: OV-M3	SAMP_DATE	2/16/2011			2/16/2011			2/16/2011			2/16/2011		
MEDIA: AIR	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/M3			UG/M3			UG/M3			UG/M3		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF										CA-PRSC-RE-INDL-01		
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ETHYLBENZENE		0.41			0.1	J	P	0.98			0.27		
HEXACHLOROBUTADIENE		9.5	U		9.8	U		8.7	U		9.5	U	
HEXANE		0.29	J	P	0.23	J	P	0.47	J	P	0.5	J	P
M+P-XYLENES		1.4			0.32	U	A	3.3			0.62		
METHYL TERT-BUTYL ETHER		0.64	U		0.66	U		0.014	J	P	0.64	U	
METHYLENE CHLORIDE		0.43	J	P	14			0.34	J	P	0.46	J	P
O-XYLENE		0.37			0.16	U	A	1			0.17		
STYRENE		0.76	U		0.78	U		0.7	U		0.76	U	
TETRACHLOROETHENE		0.12	J	P	0.07	J	P	0.31			0.053	J	P
TOLUENE		2.8			0.78			4.2			2.2		
TRANS-1,2-DICHLOROETHENE		0.71	U	A	0.72	U		0.65	U		0.71	U	
TRANS-1,3-DICHLOROPROPENE		0.81	U		0.83	U		0.74	U		0.81	U	
TRICHLOROETHENE		0.017	J	P	0.1	J	P	0.11	U	A	0.11	U	A
TRICHLOROFLUOROMETHANE		1.3			0.98	J	P	1.1			1.5		
VINYL CHLORIDE		0.046	U		0.047	U		0.042	U		0.046	U	

PROJ_NO: 02045	NSAMPLE	CA-PRSC-RE-INDL-01
SDG: 1102328B	LAB_ID	1102328B-17A
FRACTION: OV-M3	SAMP_DATE	2/16/2011
MEDIA: AIR	QC_TYPE	NM
	UNITS	UG/M3
	PCT_SOLIDS	0.0
	DUP_OF	

PARAMETER	RESULT	VQL	QLCD
ETHYLBENZENE	0.23		
HEXACHLOROBUTADIENE	9.3	U	
HEXANE	0.45	J	P
M+P-XYLENES	0.56		
METHYL TERT-BUTYL ETHER	0.63	U	
METHYLENE CHLORIDE	0.39	J	P
O-XYLENE	0.17		
STYRENE	0.74	U	
TETRACHLOROETHENE	0.052	J	P
TOLUENE	2.1		
TRANS-1,2-DICHLOROETHENE	0.69	U	
TRANS-1,3-DICHLOROPROPENE	0.79	U	
TRICHLOROETHENE	0.043	J	P
TRICHLOROFLUOROMETHANE	1.2		
VINYL CHLORIDE	0.045	U	