APPROVED

Memorandum

06/04/HB

To: *Chris Carey and Holly Burke*

From: *Monica Williams*

Date: *May 2, 2014*

Subject: *Phase 2 Results and Recommendations, NIC Site Vapor Intrusion Assessment at Schools*

The Kansas Department of Health and Environment (KDHE) retained CDM Smith to perform a vapor intrusion (VI) assessment for three schools within the North Industrial Corridor (NIC) Site in Wichita, Kansas. The VI assessment of the schools discussed in this document is an extension of VI sampling previously conducted for the NIC Site on behalf of the City of Wichita (City) in January-March 2012. Additional information on the NIC Site-wide VI sampling and results from the previous assessment activities may be found in the NIC Site-wide VI report (CDM Smith 2012a). CDM Smith conducted the VI assessment of the schools described herein in January-February 2014 in accordance with the KDHE's VI guidance document (KDHE 2007), the KDHE-approved NIC Site-wide VI Work Plan (CDM 2011a) and Addendum #1 (CDM 2012b), and additional investigative techniques as previously discussed between CDM Smith, the City, and the KDHE.

This document discusses field activities (including any deviations from the Work Plan), and provides data tables summarizing results from the Phase 2 sampling at the schools (including direct comparisons to the KDHE's Tier 2 Levels for Indoor Air), laboratory reports (**Appendix A**), field notes (**Appendix B**), and field photographs (**Appendix C**). School locations are shown on **Figure 1**; layouts for the three sampled schools are shown on **Figures 2** through **4** (L'Ouverture Computer Tech Elementary, Park Elementary, Washington Elementary, respectively). Contours shown on **Figure 1** are discussed below. **Figures 2** through **4** also show which rooms were sampled as well as detected concentrations for the NIC Site-wide contaminants of concern. This document also includes conclusions and recommendations for future actions.

Chemicals of Potential Concern and Regulatory Limits

Chemicals of potential concern (COPCs) for NIC Site-wide groundwater, indoor air, surface water, and sediment, as selected based on findings during the City's Site-wide Remedial Investigation [RI] (CDM 2007a and CDM 2007b), were discussed in Section 1.5 of the NIC Site-wide Groundwater Feasibility Study [FS] (CDM 2011b). Ten of the recognized COPCs were previously identified as Site groundwater and VI pathway target compounds and are listed in **Table 1**.

Table 1 NIC Site-wide COPCs

Compound	Compound	Compound
Tetrachloroethene (PCE)	1,1,1-Trichloroethane (111TCA)	Carbon tetrachloride (CT)
Trichloroethene (TCE)	1,1-Dichloroethane (11DCA)	Chloroform (CFM)
cis-1,2-Dichloroethene (C12DCE)	1,1-Dichloroethene (11DCE)	Benzene (BEN)
Vinyl chloride (VC)		

The COPCs were identified based on frequency of detection, exceedance of maximum contaminant levels (MCLs)/KDHE Tier 2 cleanup goals, extent of contamination, usability in source identification, and importance as a biodegradation product. Of the above compounds, TCE is the most widespread in both extent and mass present, with C12DCE and PCE the second and third-most widespread, respectively. The remaining target compounds are fairly localized in extent and minimal in mass. Because TCE, C12DCE, and PCE are the most widespread, a sum of the concentrations of these three compounds was used to create a contour map for the VI Work Plan (CDM 2011a, Figure 2-2) showing the anticipated worst extent of NIC Site-wide groundwater contamination for volatile organic compounds (VOCs). Contours for the summed concentrations of TCE, C12DCE, and PCE are shown on **Figure 1**. The extent of these three COPCs (TCE + C12DCE + PCE), combined with land use information, was used to develop the approach for evaluating the VI pathway at the NIC Site.

Based on values established in the *Kansas Vapor Intrusion Guidance, Chemical Vapor Intrusion and Residential Indoor Air, June 2007* (KDHE 2007), the *Risk-Based Standards for Kansas, RSK Manual* (KDHE 2014), and additional correspondence with the KDHE, the Tier 2 cleanup goals used during this investigation for the COPCs are:

Table 2 Tier 2 Cleanup Goals for COPCs

Compound	Tier 2 Cleanup Goal (µg/m^3)	Compound	Tier 2 Cleanup Goal (µg/m^3)
PCE	41.7	111TCA	5,210
TCE	2.09	11DCA	15.2
C12DCE	7.3	11DCE	209
VC	5.53	CT	4.06
BEN	3.12	CFM	1.06

Phase 2 Sampling at the Schools – Objectives and Overview

The primary goal of a VI assessment is to identify whether vapors emanating from soil and groundwater pose a risk to building inhabitants via indoor air. As discussed in the VI Work Plan (CDM 2011a), the specific objectives for the NIC Site are:

1. Evaluate the VI pathway using a phased approach to target properties most at-risk for a complete pathway and also evaluate a sampling of properties with less presumed risk, to understand potential VI conditions for the entire NIC Site. Final decisions regarding risk for the VI pathway are based on comparing analytical results to the KDHE's Tier 2 risk-based indoor air cleanup goals. Cleanup goals for this investigation are provided in **Table 2**.

2. Based on the results of the evaluation, determine if any additional actions are needed.

In 2012 and on behalf of the City, CDM Smith conducted the NIC Site-wide VI assessment in a 3-phase approach. Phases 1 and 2 were building selection and sample screening using passive diffusion samplers, respectively. As discussed in the NIC Site-wide VI report (CDM Smith 2012a), building selection (***Phase 1***) included: identification of residences, schools, and daycares overlying shallow groundwater contamination for the COPCs and division of the buildings into four groups based on the estimated combined concentrations of TCE, C12DCE, and PCE in shallow groundwater underneath the buildings: 1-5 micrograms per liter (µg/L), 5-20 µg/L, 20-100 µg/L, and >100 µg/L. **Figure 1** shows the distribution of the contaminant concentrations within the site. The screening evaluation (***Phase 2***) consisted of collecting indoor and outdoor air samples from the residences and daycares within the four groups. The verification sampling (***Phase 3***) consisted of collecting additional indoor and outdoor air samples from select locations. Additional information on the NIC Site-wide VI sampling from 2012 and results of the assessment may be found in the NIC Site-wide VI report (CDM Smith 2012a).

During the 2012 VI assessment activities, the City had planned to sample the three schools located above the shallow groundwater contaminant plume areas with concentrations greater than 1 µg/L: Park Elementary, Washington Elementary, and L'Ouverture Computer Tech Elementary (**Figure 1**); however, the Unified School District did not grant access to the City to sample the identified schools as planned. The KDHE later obtained access. This memorandum provides the results of the Phase 2 assessment at the NIC schools. Two of the schools (L'Ouverture and Park), are co-located with daycare/child care facilities so the child care areas within the schools were included in this assessment. This Phase 2 assessment consisted of collection of six outdoor air samples from six ambient air monitoring stations situated near the schools using passive samplers deployed for seven days. CDM Smith also collected 22 indoor air samples from 22 sampling locations within the schools using passive samplers deployed for seven days and six indoor air samples from six locations using 6-liter stainless steel canisters. Results are not reported for one of the indoor air passive samples because the extract was lost during a laboratory accident (Park Elementary, Room 110).

Results for the VI sampling at the schools are discussed below. CDM Smith has performed a data verification review (discussed below). No data quality issues for the COPCs have been identified.

Field Activities

As proposed in the VI Work Plan and Addendum #1 (CDM 2011a and CDM 2012b), CDM Smith collected indoor and outdoor air samples at the schools using passive diffusion samplers. CDM Smith planned to use the SKC Ultra III passive diffusion samplers with Carbograph 5 sorbent as proposed in the work plan and used during the 2012 Site-wide VI sampling; however, the Ultra III samplers were not available for the sampling event at the schools due to a problem with the sorbent manufacturer. As an alternate and with KDHE approval, CDM Smith used Radiello 130 passive samplers to sample the schools. The Radiello 130 samplers provided for uptake and analysis of the 10 NIC Site COPCs at concentrations less than KDHE Tier 2 cleanup goals.

All collected air samples were analyzed for VOCs. Analysis of the passive samplers was conducted by GC/MS using EPA Method TO-17 to extract and analyze adsorbed VOCs from the sorbent. Air samples collected in stainless steel canisters were analyzed by GC/MS using EPA method TO-15. Eurofins AirToxics of Folsom, California conducted the analyses for both the passive and canister samples. Appendix E of the VI Work Plan (CDM 2011a) presented laboratory reporting limits (RLs) for TO-15. Eurofins AirToxics provided RLs for the Radiello 130 passive samples on January 28 and those limits are listed in **Table 3**.

Table 3 Reporting Limits for Radiello 130

Compound	RL at 7 days (µg/m^3)	Compound	RL at 7 days (µg/m^3)
11DCE *	0.48	Cyclohexane	0.18
C12DCE *	0.12	Ethylbenzene (EBN)	0.15
trans-1,2-dichloroethene (T12DCE) *	0.24	Heptane	0.17
11DCA *	0.13	Hexane	0.15
1,2-Dichloroethane (12DCA)	0.13	MTBE	0.15
111TCA	0.16	PCE	0.17
2-Butanone (MEK)	1.3	Toluene (TOL)	0.13
Acetone	0.26	TCE	0.14
BEN	0.25	VC	0.39
CT	0.15	m,p-Xylene	0.14
CFM	0.13	o-Xylene	0.15

Note from Eurofins AirToxics: * = Estimated sampling rate, will be flagged as "C" on the final report.

Under this Phase 2 investigation, CDM Smith deployed the passive samplers for approximately seven days each, from January 31 through February 7, 2014, to better accommodate fluctuations in building and environmental conditions that have been shown to affect indoor and outdoor air concentrations related to VI. The samplers were deployed in locations of frequent use by students and staff such as classrooms. The exact locations were based on school features and an attempt to equally distribute samples across each school building. **Figures 2** through **4** show layouts for the schools with sample locations marked on each figure. CDM Smith clipped each sampler to an existing structure inside the classroom or other building area or used a metal, manufacturer-supplied sampling stand for indoor sample locations. The samplers were elevated to be reasonably out of reach of the school children.

CDM Smith also deployed six passive samplers for outdoor air evaluation for approximately seven days each during the same time frame as the indoor samples. Approximate outdoor air sample locations are shown on **Figures 2** through **4**. Manufacturer-supplied shelters surrounded the outdoor air samplers to prevent direct exposure to moisture, but still allow unobstructed access to ambient air conditions. Outdoor air samples were located in the proximity of the schools being sampled. During retrieval of the outdoor samplers, field staff found that the duplicate sample at the Washington Elementary southwest location had fallen into the snow and was partially buried. In addition, the outdoor sample at the Park Elementary west location had fallen into the snow and was buried. It is

not clear exactly when the samplers fell; however, the snow storm occurred approximately three days prior to sampler pickup and it is likely the samplers fell during the storm.

During the Phase 2 sampling, CDM Smith also collected six indoor air samples using 100% certified clean, 6-liter, stainless steel canisters; these canister samples were each co-located with a passive sampler at select locations. A dedicated, calibrated flow controller provided time integration over 24 hours for each canister. Collection of the canister samples helped provide an understanding of the correlation between the sampling and analytical techniques.

Results

This section discusses results from the Phase 2 sampling at the schools. Analytical laboratory data from the investigation are included in **Appendix A**; **Figures 2** through **4** show the layouts for the schools with sample locations marked; results for detected COPCs are posted on the figures.

Passive Sample Results

Tables 4 and 5 provide summaries of indoor and outdoor air results, respectively, for the passive samplers.

- None of the results exceed the Tier 2 cleanup goals.
- Of the COPCs, TCE, PCE, C12DCE, VC, 111TCA, 11DCA, and 11DCE were non-detect (less than 0.55 $\mu g/m^3$). Tier 2 cleanup goals for these seven COPCs range from 2.09 $\mu g/m^3$ (TCE) to 5,210 $\mu g/m^3$ (111TCA).
- BEN was detected in 20 of the 21 indoor air samples at concentrations ranging from 0.52 $\mu g/m^3$ to 0.71 $\mu g/m^3$. None of the detected concentrations exceeded the Tier 2 cleanup goal (3.12 $\mu g/m^3$). While groundwater plumes of BEN are present at the NIC Site, they are localized and occur mostly near the former Coastal Derby Refinery. BEN has not been regularly detected in groundwater in the southern portion of the NIC Site where the sampled schools are located. It is well documented that there are many dilute indoor sources for BEN, and petroleum hydrocarbons in general, that frequently impact indoor air quality and it is therefore unlikely that the detected BEN concentrations are attributable to VI. In addition, BEN was detected in five of the six outdoor air samples at concentrations ranging from 0.64 $\mu g/m^3$ to 0.73 $\mu g/m^3$. Indoor and outdoor air concentrations for BEN are shown on **Figures 2** through **4**. Samples containing BEN also showed detections of hexane, ethylbenzene, toluene, and/or xylenes. This pattern of multiple hydrocarbons in indoor air suggests a complex mixture of indoor and ambient sources and not VI of a single COPC. The weight of evidence indicates that BEN does not pose a risk for VI at the NIC Site.
- CT was detected in all 21 indoor air samples at concentrations ranging from 0.3 $\mu g/m^3$ to 0.4 $\mu g/m^3$. None of the detected concentrations exceeded the Tier 2 cleanup goal (4.06 $\mu g/m^3$). CT in groundwater within the NIC Site is localized and occurs mainly near the grain elevator locations with limited downgradient migration. CT has not been regularly detected in groundwater near

the sampled schools. Carbon tetrachloride is a common contaminant of indoor air; the sources of exposure appear to be building materials or products such as cleaning agents. It is therefore unlikely that the detected CT concentrations in the schools are attributable to VI. In addition, CT was detected in all six outdoor air samples at concentrations ranging from 0.26 μg/m^3 to 0.44 μg/m^3. Indoor and outdoor air concentrations for CT are shown on **Figures 2** through **4**. The weight of evidence indicates that CT does not pose a risk for VI at the NIC Site.

- CFM was detected in six of the 21 indoor air samples at concentrations ranging from 0.14 μg/m^3 to 0.22 μg/m^3. None of the detected concentrations exceeded the Tier 2 cleanup goal (1.06 μg/m^3) and the potential that CFM in indoor air is attributable to VI is unlikely. It is well documented that CFM has many common indoor sources such as treated municipal tap water, air fresheners, and detergents. Results from the 2012 VI NIC Site VI assessment showed that the detected CFM concentrations at that time were attributable to indoor air sources. CFM was not detected in the outdoor air samples (less than 0.13 μg/m^3). Indoor and outdoor air concentrations for CFM are shown on **Figures 2** through **4**. The weight of evidence indicates that CFM does not pose a risk for VI at the NIC Site.

Several non-COPC compounds were detected in the passive diffusion samples during Phase 2 including: acetone (ACE), cyclohexane (CHEX), 12DCA, EBN, hexane (HEX), heptane (HP), 2-butanone [methyl ethyl ketone] (MEK), TOL, m,p-xylene (XYLMP), and o-xylene (XYLO). All of the detected concentrations for these compounds were below their respective Tier 2 cleanup goals.

Canister Sample Results

Table 6 summarizes results for the six indoor air canister samples collected during Phase 2. BEN was the only COPC detected in any of the canister samples (detected in four of the six samples) and detected concentrations ranged from 0.59 μg/m^3 to 0.66 μg/m^3. None of the detected BEN concentrations exceeded the Tier 2 action limit (3.12 μg/m^3).

Several non-COPC compounds were detected in the canister samples during Phase 2 including: ACE, chloromethane (CM), dichlorodifluoromethane / Freon 12 (DCDFM), ethanol (ETH), EBN, HEX, HP, methyl isobutyl ketone / 4-methyl-2-pentanone (MIBK), isopropyl alcohol / 2-Propanol (IPA), TOL, trichlorofluoromethane / Freon 11 (TCFM), and XYLMP. All of the detected concentrations for these compounds were below their respective Tier 2 cleanup goals.

Data Quality for Passive Samplers and Canisters

Field quality assurance (QA)/quality control (QC) procedures included verification of canister integrity prior to and post sample collection and the use of chain-of-custody controls for sample management. Field QA/QC samples included collection of two field duplicates using the passive samplers. Duplicate samples were co-located with the primary/original samples (i.e., side-by-side); however, due to a field issue, there was a delay of approximately 19 hours between deployment of the original samples and deployment of the duplicate samples. The duplicate samples were handled and packaged in a manner identical to the other samples collected and were analyzed for the same parameters as for the original samples. A discussion of original vs. duplicate results is provided

below. The laboratory followed standard QC procedures designated for methods TO-15 and TO-17, including analysis of laboratory blanks, laboratory control samples, surrogate standards, and laboratory duplicates. CDM Smith reviewed the analytical data to assess analytical quality.

Reporting Limit Issues

Canister samples were collected during Phase 2 for co-located comparability with the passive samplers. Reporting limits for all canister and passive sampler compounds were below the KDHE Tier 2 cleanup goals; therefore, no issues were noted.

Qualifiers

Qualifiers used by laboratory and/or CDM Smith:

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

  This qualifier was applied to cyclohexane in seven indoor and two outdoor air passive diffusion samples (from Washington Elementary). The lab blank concentration for CHEX was 1.3 $\mu g/m^3$. The two corresponding outdoor air samples contained CHEX at 1.2 $\mu g/m^3$ each; six of the seven corresponding indoor air samples contained CHEX at 1.2 to 1.3 $\mu g/m^3$. The seventh corresponding indoor air sample contained CHEX at 1.5 $\mu g/m^3$. No additional qualification of the data is warranted other than the "B" qualifier used by the laboratory.

- C = Estimated concentration due to calculated sampling rate

  This qualifier was applied to C12DCE, VC, 11DCA, and 11DCE in all indoor and outdoor air passive diffusion samples. These compounds were non-detect in all samples; therefore, no additional qualification of the data is warranted other than the "C" qualifier used by the laboratory.

Relative Percent Differences for Original and Duplicate Samples

Table 7 shows that duplicate pairs for the passive samplers have good precision, thereby supporting the reproducibility of collecting data using passive diffusion samplers. Relative Percent Differences (RPDs) for the analytical pairs in the two duplicate sample sets remained below the data quality objective of 30% relative difference.

RPDs for the non-COPCs were also generally below 30%. The RPD for HEX at the OA2 location at Washington Elementary was 53%, exceeding the limit. The duplicate sample at this location is one of the samples that had fallen into the snow and this is likely the cause for the discrepancy. No data were qualified.

Comparison of Passive vs. Canister Results

Table 8 shows the comparison between the six co-located, indoor air passive and canister samples. Sample duration between these samplers is not equal, seven days for the passive samples and 24 hours for the canister samples; therefore, the results are not fully comparable. **Table 8** shows that the

results for the samples were either comparable or the passive sample provided a more sensitive RL than the canister sample. The similarity of results between the passive and canister samples at each location provides confidence that chemical uptake in the passive diffusion sampler is sufficient to demonstrate that the passive sampler is not potentially under-estimating risk.

Data Usability

The following data issues were noted during the review:

- CFM – The percent recoveries for CFM in the laboratory control sample (LCS) and LCS duplicate (LCSD) in data packet 1402126A [passive samples] (95% and 127%, respectively) were within the method control limits (70-130%); however, the analytical laboratory noted that the RPD of the LCS/LCSD exceeded the acceptance limits. No data were qualified on this basis alone.

- CHEX – The percent recoveries for CHEX in the LCS and LCSD in data packet 1402126B [passive samples] (105% and 97%, respectively) were within the method control limits (70-130%); however, the analytical laboratory noted that the RPD of the LCS/LCSD exceeded the acceptance limits. No data were qualified on this basis alone.

A review of the remaining laboratory data indicates the data are useable with no further qualifications beyond those provided by the analytical laboratory in the data reports.

Conclusions

During this investigation, three schools (and co-located daycare facilities) were tested.

- None of the detected concentrations for the NIC Site COPCs for either indoor or outdoor air exceeded their respective Tier 2 cleanup goals.

- Of the 10 COPCs identified for the NIC Site, TCE is the most widespread in both extent and mass present, with C12DCE and PCE the second and third-most widespread, respectively. The remaining target compounds are fairly localized in extent and minimal in mass. TCE, PCE, and C12DCE were not detected in any of the indoor or outdoor air samples. Given that these three compounds have the most mass and spatial distribution of all the groundwater COPCs at the NIC Site, the absence of potentially unacceptable risk for TCE, C12DCE, and PCE in indoor or outdoor air results indicates that the VI pathway likely does not pose a health threat.

- BEN was detected in 20 of the 21 indoor air samples and five of the six outdoor air samples, CT was detected in all 21 indoor air samples and all six outdoor air samples, and CFM was detected in six of the 21 indoor air samples and none of the outdoor air samples. All detected concentrations for these three compounds remained well below Tier 2 cleanup goals. The maximum detected BEN concentration was 0.71 $\mu g/m^3$ (vs. the cleanup goal of 3.12 $\mu g/m^3$). The maximum detected CT concentration was 0.4 $\mu g/m^3$ (vs. the cleanup goal of 4.06 $\mu g/m^3$); RLs for CT for the non-detect canister samples (less than 1.2 $\mu g/m^3$) also remained well below the cleanup goal. The maximum detected CFM concentration was 0.22 $\mu g/m^3$ (vs. the cleanup goal of 1.06 $\mu g/m^3$); RLs

for CFM for the non-detect canister samples (less than 0.91 μg/m^3) also remained below the cleanup goal. Groundwater plumes for BEN, CT, and CFM are localized and these compounds have not been regularly detected in groundwater near the schools. It is well documented that there are many sources for all three compounds that frequently impact air quality; therefore, the weight of evidence indicates that BEN, CT, and CFM do not pose a risk for VI at the NIC Site schools.

- None of the concentrations for the additional detected compounds for either indoor or outdoor air exceeded their respective Tier 2 cleanup goals. Detected concentrations for compounds not identified as COPCs are likely due to indoor air sources.

Recommendations

The VI Work Plan (CDM 2011a) outlines the process for evaluating the results of Phase 2 and proceeding to Phase 3. In particular, "*a building with an indoor air concentration for a COPC that exceeds its corresponding KDHE Tier 2 risk-based indoor air cleanup goal, and the result is potentially attributable to VI, will be targeted in the Phase 3 evaluation*." Based on the data evaluation discussed above, none of the sampled schools meet these criteria; therefore, the work plan calls for re-sampling indoor air during Phase 3 using stainless steel canisters to confirm the Phase 2 results obtained by passive samplers.

If the KDHE chooses to proceed, the specific actions for Phase 3 based on the work plan are as follows; however, CDM Smith believes that the results from this assessment show that no further sampling is needed.

- For the Phase 3 sampling of schools and co-located child care facilities, the number of indoor air samples collected will be 10% of the number of samples collected using the passive diffusion samplers in Phase 2 (CDM 2012b).

  Twenty-one indoor air samples were collected during Phase 2 using passive samplers; therefore, Phase 3 sampling would consist of collecting two stainless steel canister samples.

- Re-sample one outdoor air location in conjunction with the Phase 3 sampling. If the two indoor air samples are collected at more than one school, collect one outdoor air sample at each location.

References

CDM Smith[1]. 2012a. *North Industrial Corridor Site-wide Vapor Intrusion Assessment Report*. May.

Camp Dresser &McKee Inc. (CDM). 2012b. *Addendum #1, Vapor Intrusion Assessment Work Plan for the North Industrial Corridor Site, Wichita, Kansas*. January 13.

CDM. 2011a. *Vapor Intrusion Assessment Work Plan, North Industrial Corridor Site, Wichita, Kansas*. December.

CDM. 2011b. *Site-wide Groundwater Feasibility Study, North Industrial Corridor Site*. June.

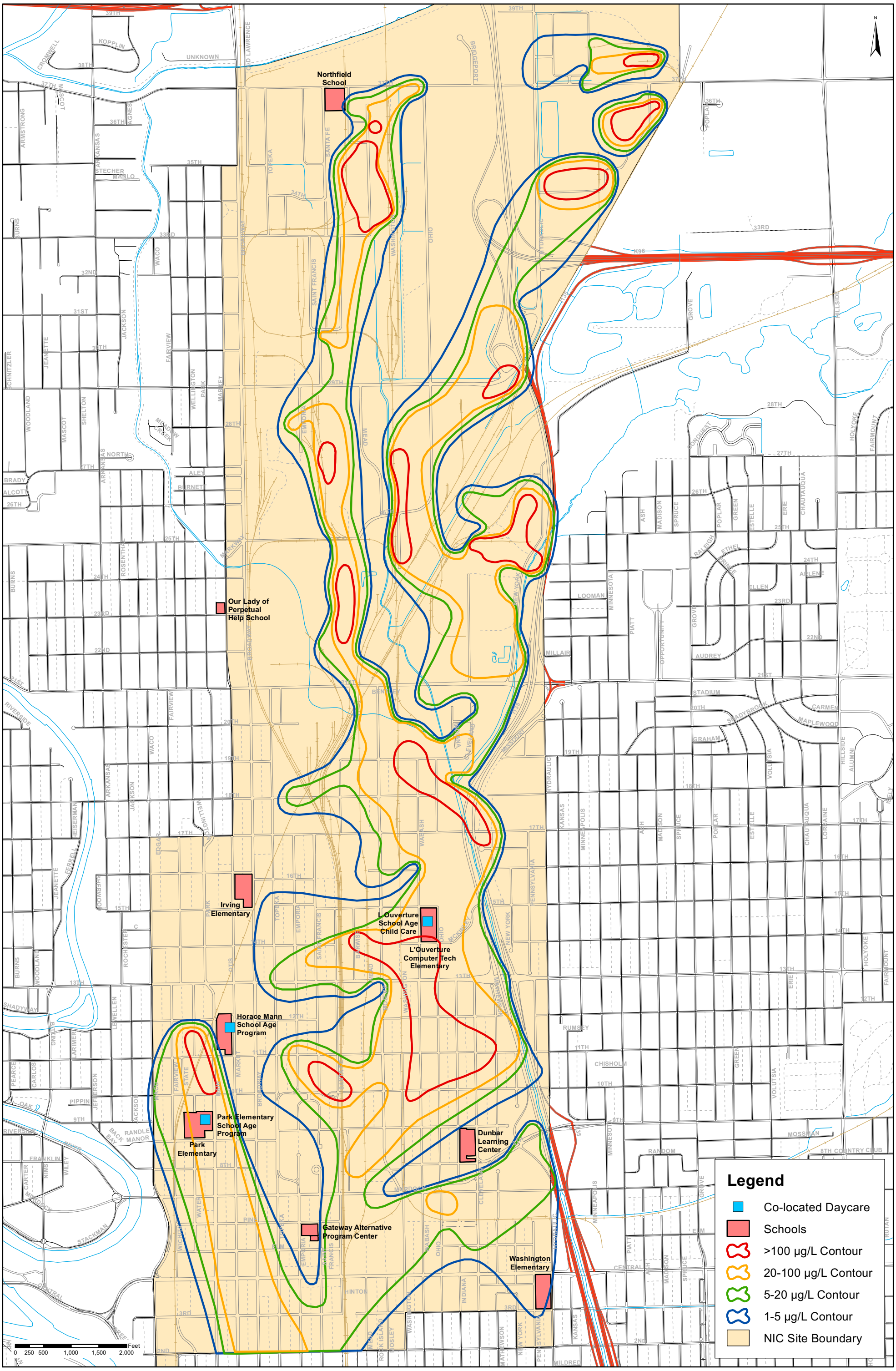
CDM. 2007a. *North Industrial Corridor (NIC) Site Remedial Investigation Addendum*. February.

CDM. 2007b. *North Industrial Corridor (NIC) Site Remedial Investigation Report*. February.

Kansas Department of Health and Environment (KDHE). 2014. *Risk Based Standards for Kansas: RSK Manual*. March.

KDHE. 2007. *Kansas Vapor Intrusion Guidance: Chemical Vapor Intrusion and Residential Indoor Air*. June.

[1] CDM Smith formerly Camp Dresser & McKee Inc.



CDM Smith

Figure 1
North Industrial Corridor (NIC) Site
Schools and Co-located Daycares

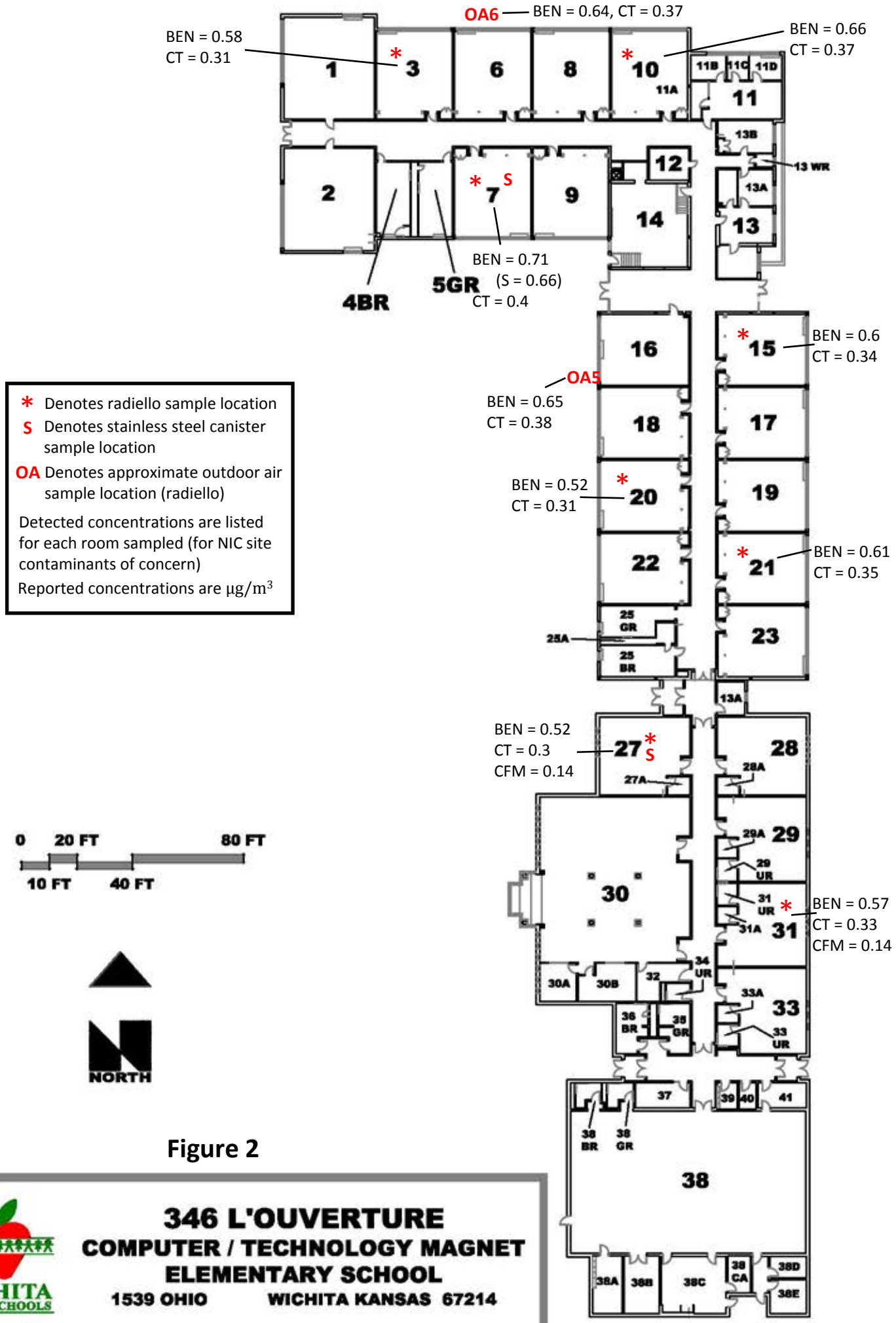


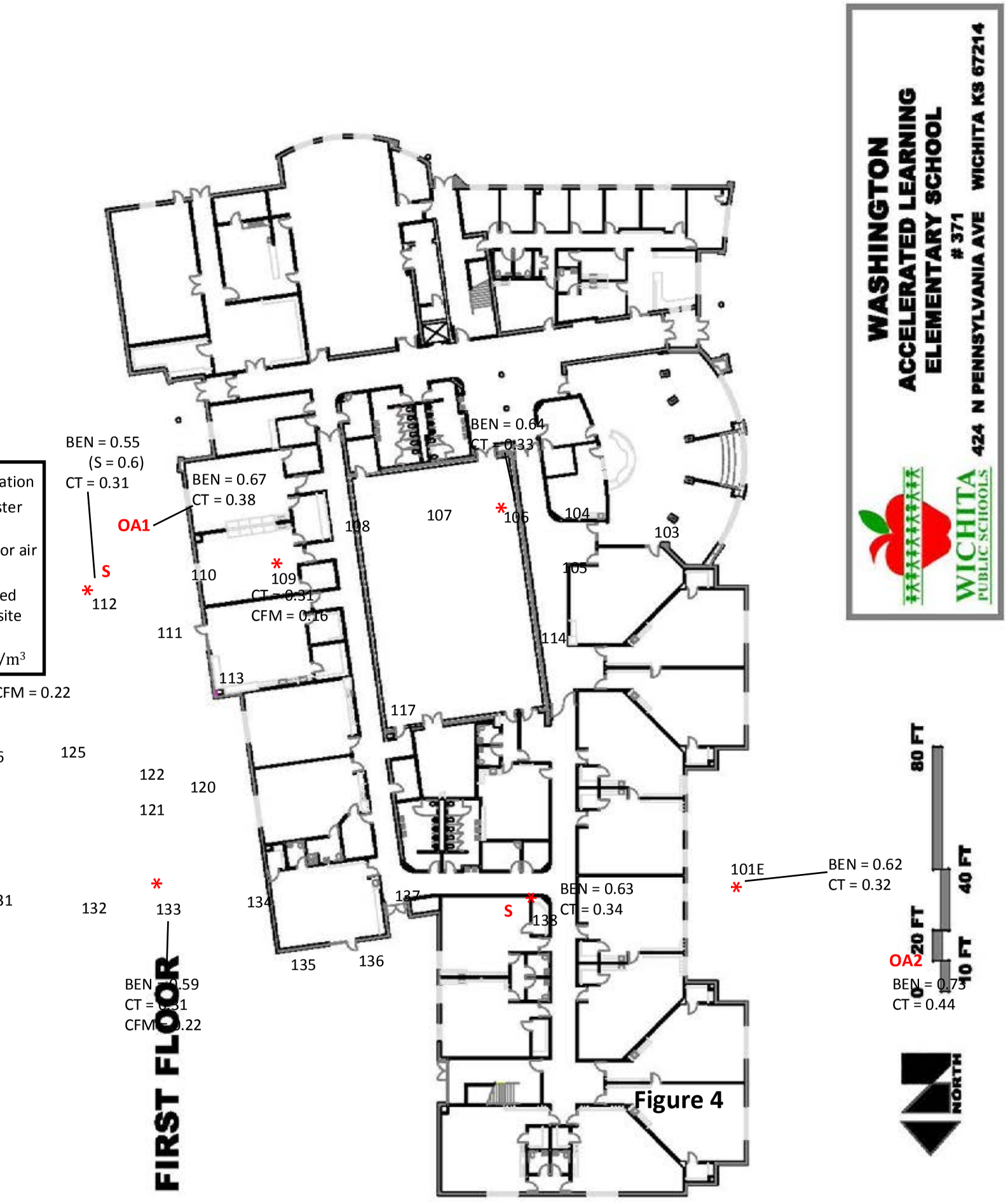
Figure 2

346 L'OUVERTURE
COMPUTER / TECHNOLOGY MAGNET ELEMENTARY SCHOOL
1539 OHIO WICHITA KANSAS 67214

WICHITA PUBLIC SCHOOLS

MEZZANINE
SECOND FLOOR
BEN = 0.59
CT = 0.32
BEN = 0.59 (S = 0.59)
CT = 0.32
BEN = 0.64 (S = 0.59)
CT = 0.34
Sample lost
OA4 CT = 0.26
OA3 BEN = 0.66
CT = 0.37
NORTH
0 25 FT 100 FT
50 FT
PARK
ELEMENTARY SCHOOL
357
1025 N MAIN WICHITA KANSAS 67203
WICHITA
PUBLIC SCHOOLS

Figure 3


WASHINGTON
ACCELERATED LEARNING
ELEMENTARY SCHOOL
371
424 N PENNSYLVANIA AVE WICHITA KS 67214
WICHITA
PUBLIC SCHOOLS
FIRST FLOOR
BEN = 0.55
(S = 0.6)
CT = 0.31
S
112
BEN = 0.67
CT = 0.38
OA1
110
109
CT = 0.31
CFM = 0.16
111
113
BEN = 0.64
CT = 0.33
108
107
106
104
103
105
114
117
125
122
120
121
132
133
134
135
136
127
138
S
BEN = 0.63
CT = 0.34
101E
BEN = 0.62
CT = 0.32
OA2
BEN = 0.75
CT = 0.44
0
10 FT
20 FT
40 FT
80 FT
NORTH
Figure 4

Tables 1 through 3 are within text

Table 1 – NIC Site-wide COPCs ..... p. 2

Table 2 – Tier 2 Cleanup Goals for COPCs ..... p. 2

Table 3 – Reporting Limits for Radiello 130 ..... p. 4

Table 4
North Industrial Corridor (NIC) Site
Site-wide Vapor Intrusion Investigation - Indoor Air Results, Passive Samplers

Location	Year Built	Sublevel Type						Address					
	TCE (µg/m3)	PCE (µg/m3)	C12DCE (µg/m3)	VC (µg/m3)	111TCA (µg/m3)	11DCA (µg/m3)	11DCE (µg/m3)	BEN (µg/m3)	CT (µg/m3)	CFM (µg/m3)	Other Compounds (µg/m3)		Notes
KDHE Tier 2 IA Std	**2.09**	**41.7**	**7.3**	**5.53**	**5,210**	**15.2**	**209**	**3.12**	**4.06**	**1.06**			
SC-L-10_Ph2	Slab			L'Ouverture Computer Tech Elementary				1539 N. Ohio Ave.					Rm 10 (hanging from TV)
	<0.14	<0.17	<0.16 C	<0.44 C	<0.16	<0.16 C	<0.52 C	**0. 66**	**0.37**	<0.13	ACE	6.4	
											CHEX	0.23	
											EBN	0.14	
											HEX	0.74	
											HP	0.5	
											MEK	0.37	
											TOL	1	
											XYLMP	0.39	
SC-L-15_Ph2	Slab			L'Ouverture Computer Tech Elementary				1539 N. Ohio Ave.					Rm 15 (hanging from TV)
	<0.14	<0.17	<0.16 C	<0.44 C	<0.16	<0.16 C	<0.52 C	**0.6**	**0.34**	<0.13	ACE	22	
											HEX	0.33	
											HP	0.24	
											MEK	0.4	
											TOL	0.74	
											XYLMP	0.19	
SC-L-20_Ph2	Slab			L'Ouverture Computer Tech Elementary				1539 N. Ohio Ave.					Rm 20 (on top of filing cabinet)
	<0.14	<0.17	<0.16 C	<0.44 C	<0.16	<0.16 C	<0.52 C	**0. 52**	**0.31**	<0.13	ACE	11	
											CHEX	0.19	
											HEX	0.42	
											HP	0.34	
											MEK	0.44	
											TOL	0.58	
											XYLMP	0.2	

Table 4
North Industrial Corridor (NIC) Site
Site-wide Vapor Intrusion Investigation - Indoor Air Results, Passive Samplers

Location	Year Built	Sublevel Type							Address					
	TCE (µg/m3)	PCE (µg/m3)	C12DCE (µg/m3)	VC (µg/m3)	111TCA (µg/m3)	11DCA (µg/m3)	11DCE (µg/m3)	BEN (µg/m3)	CT (µg/m3)	CFM (µg/m3)	Other Compounds (µg/m3)		Notes
KDHE Tier 2 IA Std	**2.09**	**41.7**	**7.3**	**5.53**	**5,210**	**15.2**	**209**	**3.12**	**4.06**	**1.06**			
SC-L-21_Ph2	Slab			L'Ouverture Computer Tech Elementary				1539 N. Ohio Ave.					Rm 21 (hanging from nail near top of open closet)
	<0.14	<0.17	<0.16 C	<0.44 C	<0.16	<0.16 C	<0.52 C	**0. 61**	**0.35**	<0.13	ACE	13	
											HEX	0.31	
											HP	0.19	
											MEK	0.4	
											TOL	0.56	
											XYLMP	0.19	
SC-L-27_p/c_Ph2	Slab			L'Ouverture Computer Tech Elementary				1539 N. Ohio Ave.					Rm 27 (top shelf of bookcase)
	<0.14	<0.17	<0.16 C	<0.44 C	<0.16	<0.16 C	<0.52 C	**0. 52**	**0.3**	**0.14**	12DCA	0.18	
											ACE	59	
											HEX	0.52	
											HP	0.26	
											MEK	0.48	
											TOL	1.6	
											XYLMP	0.29	
SC-L-3_Ph2	Slab			L'Ouverture Computer Tech Elementary				1539 N. Ohio Ave.					Rm 3 (hanging from TV)
	<0.14	<0.17	<0.16 C	<0.44 C	<0.16	<0.16 C	<0.52 C	**0. 58**	**0.31**	<0.13	ACE	4.5	
											HEX	0.44	
											HP	0.26	
											MEK	0.3	
											TOL	0.63	
											XYLMP	0.2	

Table 4
North Industrial Corridor (NIC) Site
Site-wide Vapor Intrusion Investigation - Indoor Air Results, Passive Samplers

Location	Year Built	Sublevel Type						Address					
	TCE (µg/m3)	PCE (µg/m3)	C12DCE (µg/m3)	VC (µg/m3)	111TCA (µg/m3)	11DCA (µg/m3)	11DCE (µg/m3)	BEN (µg/m3)	CT (µg/m3)	CFM (µg/m3)	Other Compounds (µg/m3)		Notes
KDHE Tier 2 IA Std	**2.09**	**41.7**	**7.3**	**5.53**	**5,210**	**15.2**	**209**	**3.12**	**4.06**	**1.06**			
SC-L-31_Ph2	Slab			L'Ouverture Computer Tech Elementary				1539 N. Ohio Ave.					Rm 31 (on top of small refrigerator)
	<0.14	<0.17	<0.16 C	<0.44 C	<0.16	<0.16 C	<0.52 C	**0. 57**	**0.33**	**0.14**	12DCA	0.19	
											ACE	60	
											CHEX	1.3	
											EBN	0.25	
											HEX	0.38	
											HP	0.35	
											MEK	0.51	
											TOL	1.6	
											XYLMP	0.79	
											XYLO	0.24	
SC-L-7_p/c_Ph2	Slab			L'Ouverture Computer Tech Elementary				1539 N. Ohio Ave.					Rm 7 (hanging from TV)
	<0.14	<0.17	<0.16 C	<0.44 C	<0.16	<0.16 C	<0.52 C	**0. 71**	**0.4**	<0.13	ACE	7.3	
											CHEX	0.19	
											HEX	0.57	
											HP	0.21	
											MEK	0.38	
											TOL	0.76	
											XYLMP	0.25	
SC-P-107_p/c_Ph2	Slab			Park Elementary				1025 N. Main St					Rm 107 (clipped to bulletin board)
	<0.14	<0.17	<0.16 C	<0.44 C	<0.16	<0.16 C	<0.52 C	**0. 64**	**0.34**	<0.13	ACE	3.6	
											CHEX	1.7	
											EBN	0.36	
											HEX	0.43	
											HP	0.26	
											MEK	0.4	
											TOL	0.57	
											XYLMP	0.56	
											XYLO	0.23	

Table 4
North Industrial Corridor (NIC) Site
Site-wide Vapor Intrusion Investigation - Indoor Air Results, Passive Samplers

Location	Year Built	Sublevel Type							Address					
	TCE (µg/m3)	PCE (µg/m3)	C12DCE (µg/m3)	VC (µg/m3)	111TCA (µg/m3)	11DCA (µg/m3)	11DCE (µg/m3)	BEN (µg/m3)	CT (µg/m3)	CFM (µg/m3)	Other Compounds (µg/m3)		Notes
KDHE Tier 2 IA Std	**2.09**	**41.7**	**7.3**	**5.53**	**5,210**	**15.2**	**209**	**3.12**	**4.06**	**1.06**			
SC-P-128_Ph2	Slab			Park Elementary				1025 N. Main St					Rm 128 (on top of shelf)
	<0.14	<0.17	<0.16 C	<0.44 C	<0.16	<0.16 C	<0.52 C	**0. 59**	**0.32**	<0.13	ACE	8.3	
											CHEX	1.3	
											HEX	0.32	
											HP	0.34	
											MEK	0.48	
											TOL	0.66	
											XYLMP	0.28	
SC-P-131_p/c_Ph2	Slab			Park Elementary				1025 N. Main St					Rm 131 (on top of teacher's desk)
	<0.14	<0.17	<0.16 C	<0.44 C	<0.16	<0.16 C	<0.52 C	**0. 59**	**0.32**	<0.13	ACE	6.4	
											CHEX	1.4	
											HEX	0.33	
											HP	0.4	
											MEK	0.49	
											TOL	0.62	
											XYLMP	0.26	
SC-P-135_Ph2	Slab			Park Elementary				1025 N. Main St					Rm 135 (clipped to bulletin board behind computers)
	<0.14	<0.17	<0.16 C	<0.44 C	<0.16	<0.16 C	<0.52 C	**0. 68**	**0.38**	<0.13	ACE	6.7	
											CHEX	1.5	
											HEX	0.52	
											HP	0.37	
											MEK	0.49	
											TOL	0.63	
											XYLMP	0.3	

Table 4
North Industrial Corridor (NIC) Site
Site-wide Vapor Intrusion Investigation - Indoor Air Results, Passive Samplers

Location	Year Built	Sublevel Type						Address					
	TCE (µg/m3)	PCE (µg/m3)	C12DCE (µg/m3)	VC (µg/m3)	111TCA (µg/m3)	11DCA (µg/m3)	11DCE (µg/m3)	BEN (µg/m3)	CT (µg/m3)	CFM (µg/m3)	Other Compounds (µg/m3)		Notes
KDHE Tier 2 IA Std	**2.09**	**41.7**	**7.3**	**5.53**	**5,210**	**15.2**	**209**	**3.12**	**4.06**	**1.06**			
SC-P-138_Ph2	Slab			Park Elementary				1025 N. Main St					Rm 138 (on top of boockcase)
	<0.14	<0.17	<0.16 C	<0.44 C	<0.16	<0.16 C	<0.52 C	**0. 64**	**0.35**	<0.13	ACE	8.1	
											CHEX	1.4	
											EBN	0.17	
											HEX	0.36	
											HP	0.54	
											MEK	0.52	
											TOL	0.57	
											XYLMP	0.42	
											XYLO	0.16	
SC-W-101E_Ph2	Slab			Washington Elementary				424 N. Pennsylvania Ave.					Rm 101E (office, on top of filing cabinet). Sample mis-labeled as Park.
	<0.14	<0.17	<0.16 C	<0.44 C	<0.16	<0.16 C	<0.52 C	**0. 62**	**0.32**	<0.13	ACE	8.6	
											CHEX	1.5	
											EBN	0.19	
											HEX	0.42	
											HP	0.89	
											MEK	0.48	
											TOL	1.6	
											XYLMP	0.47	
											XYLO	0.2	

Table 4
North Industrial Corridor (NIC) Site
Site-wide Vapor Intrusion Investigation - Indoor Air Results, Passive Samplers

Location	Year Built	Sublevel Type						Address					
	TCE (µg/m3)	PCE (µg/m3)	C12DCE (µg/m3)	VC (µg/m3)	111TCA (µg/m3)	11DCA (µg/m3)	11DCE (µg/m3)	BEN (µg/m3)	CT (µg/m3)	CFM (µg/m3)	Other Compounds (µg/m3)		Notes
KDHE Tier 2 IA Std	**2.09**	**41.7**	**7.3**	**5.53**	**5,210**	**15.2**	**209**	**3.12**	**4.06**	**1.06**			
SC-W-106_Ph2	Slab			Washington Elementary				424 N. Pennsylvania Ave.					Rm 106 (hanging from TV in corner)
	<0.14	<0.17	<0.16 C	<0.44 C	<0.16	<0.16 C	<0.52 C	**0. 64**	**0.33**	<0.13	12DCA	0.14	
											ACE	14	
											CHEX	1.3 B	
											EBN	0.27	
											HEX	0.3	
											HP	0.72	
											MEK	0.6	
											TOL	2.1	
											XYLMP	0.63	
											XYLO	0.24	
SC-W-109_Ph2	Slab			Washington Elementary				424 N. Pennsylvania Ave.					Rm 109 (hanging from TV in corner)
	<0.14	<0.17	<0.16 C	<0.44 C	<0.16	<0.16 C	<0.52 C	<0.5	**0.31**	**0.16**	ACE	7.6	
											CHEX	1.5 B	
											EBN	0.18	
											HEX	0.25	
											HP	0.9	
											MEK	0.47	
											TOL	1.3	
											XYLMP	0.43	
											XYLO	0.19	

Table 4
North Industrial Corridor (NIC) Site
Site-wide Vapor Intrusion Investigation - Indoor Air Results, Passive Samplers

Location	Year Built	Sublevel Type						Address					
	TCE (µg/m3)	PCE (µg/m3)	C12DCE (µg/m3)	VC (µg/m3)	111TCA (µg/m3)	11DCA (µg/m3)	11DCE (µg/m3)	BEN (µg/m3)	CT (µg/m3)	CFM (µg/m3)	Other Compounds (µg/m3)		Notes
KDHE Tier 2 IA Std	**2.09**	**41.7**	**7.3**	**5.53**	**5,210**	**15.2**	**209**	**3.12**	**4.06**	**1.06**			
SC-W-112_p/c_Ph2	Slab			Washington Elementary				424 N. Pennsylvania Ave.					Rm 112 (hanging from TV)
	<0.14	<0.17	<0.16 C	<0.44 C	<0.16	<0.16 C	<0.52 C	**0. 55**	**0.31**	<0.13	ACE	8	
											CHEX	1.2 B	
											EBN	0.18	
											HEX	0.3	
											HP	0.54	
											MEK	0.48	
											TOL	1.2	
											XYLMP	0.43	
											XYLO	0.18	
SC-W-126_Ph2	Slab			Washington Elementary				424 N. Pennsylvania Ave.					Rm 126 (hanging from TV in corner)
	<0.14	<0.17	<0.16 C	<0.44 C	<0.16	<0.16 C	<0.52 C	**0. 56**	**0.31**	**0.22**	ACE	10	
											CHEX	1.3 B	
											EBN	0.17	
											HEX	0.44	
											HP	1.2	
											MEK	0.57	
											TOL	1.2	
											XYLMP	0.4	
											XYLO	0.16	
SC-W-129_Ph2	Slab			Washington Elementary				424 N. Pennsylvania Ave.					Rm 129 (hanging from TV in corner)
	<0.14	<0.17	<0.16 C	<0.44 C	<0.16	<0.16 C	<0.52 C	**0. 64**	**0.35**	**0.19**	ACE	13	
											CHEX	1.3 B	
											EBN	0.2	
											HEX	0.36	
											HP	1.1	
											MEK	0.62	
											TOL	1.4	
											XYLMP	0.47	
											XYLO	0.18	

Table 4
North Industrial Corridor (NIC) Site
Site-wide Vapor Intrusion Investigation - Indoor Air Results, Passive Samplers

Location	Year Built	Sublevel Type							Address					
	TCE (µg/m3)	PCE (µg/m3)	C12DCE (µg/m3)	VC (µg/m3)	111TCA (µg/m3)	11DCA (µg/m3)	11DCE (µg/m3)	BEN (µg/m3)	CT (µg/m3)	CFM (µg/m3)	Other Compounds (µg/m3)		Notes
KDHE Tier 2 IA Std	**2.09**	**41.7**	**7.3**	**5.53**	**5,210**	**15.2**	**209**	**3.12**	**4.06**	**1.06**			
SC-W-133_Ph2	Slab			Washington Elementary				424 N. Pennsylvania Ave.					Rm 133 (hanging from TV in corner)
	<0.14	<0.17	<0.16 C	<0.44 C	<0.16	<0.16 C	<0.52 C	**0. 59**	**0.31**	**0.22**	ACE	14	
											CHEX	1.3 B	
											EBN	0.4	
											HEX	0.46	
											HP	1.4	
											MEK	0.64	
											TOL	1.4	
											XYLMP	1	
											XYLO	0.26	
SC-W-138_p/c_Ph2	Slab			Washington Elementary				424 N. Pennsylvania Ave.					Rm 138 (library, at librarian's desk)
	<0.14	<0.17	<0.16 C	<0.44 C	<0.16	<0.16 C	<0.52 C	**0. 63**	**0.34**	<0.13	ACE	8.4	
											CHEX	1.3 B	
											EBN	0.22	
											HEX	0.36	
											HP	0.69	
											MEK	0.48	
											TOL	2.1	
											XYLMP	0.49	
											XYLO	0.22	

Table 4
North Industrial Corridor (NIC) Site
Site-wide Vapor Intrusion Investigation - Indoor Air Results, Passive Samplers

Location	Year Built	Sublevel Type						Address				
	TCE (µg/m3)	PCE (µg/m3)	C12DCE (µg/m3)	VC (µg/m3)	111TCA (µg/m3)	11DCA (µg/m3)	11DCE (µg/m3)	BEN (µg/m3)	CT (µg/m3)	CFM (µg/m3)	Other Compounds (µg/m3)	Notes
KDHE Tier 2 IA Std	**2.09**	**41.7**	**7.3**	**5.53**	**5,210**	**15.2**	**209**	**3.12**	**4.06**	**1.06**		

Sample IAP-NIC-Park-110 not reported because extract was lost in a laboratory accident.

IA = Indoor Air. From Risk-Based Standards for Kansas (RSK) Manual, 5th Edition. March 2014. Kansas Department of Health and Environment, Bureau of Remediation.

Primary Contaminants of Concern

BEN = Benzene
CT = Carbon Tetrachloride
CFM = Chloroform
C12DCE = cis-1,2-Dichloroethene
11DCA = 1,1-Dichloroethane
11DCE = 1,1-Dichloroethene
PCE = Tetrachloroethene
111TCA = 1,1,1-Trichloroethane
TCE = Trichloroethene
VC = Vinyl chloride

Other Detects & IA Standard

ACE = Acetone (32,300 µg/m3)
CHEX = Cyclohexane (6,260 µg/m3)
12DCA = 1,2-Dichloroethane (0.936 µg/m3)
EBN = Ethylbenzene (9.73 µg/m3)
HEX = Hexane (730.0 µg/m3)
HP = Heptane (NL)
MEK = 2-Butanone (Methyl ethyl ketone) (5,210.0 µg/m3)
TOL = Toluene (5,210.0 µg/m3)
XYLMP = m,p-Xylene (104.0 µg/m3)
XYLO = o-Xylene (104.0 µg/m3)

Qualifiers

B = Compound present in laboratory blank greater than reporting limit (background subtraction not performed)
C = Estimated concentration due to calculated sampling rate.

Table 5
North Industrial Corridor (NIC) Site
Site-wide Vapor Intrusion Investigation - Outdoor Air Results

Location	TCE (µg/m3)	PCE (µg/m3)	C12DCE (µg/m3)	VC (µg/m3)	111TCA (µg/m3)	11DCA (µg/m3)	11DCE (µg/m3)	BEN (µg/m3)	CT (µg/m3)	CFM (µg/m3)	Other Compounds (µg/m3)		Notes
KDHE Tier 2 IA Std	**2.09**	**41.7**	**7.3**	**5.53**	**5,210**	**15.2**	**209**	**3.12**	**4.06**	**1.06**			
OA1-W_Ph2	= *OAP-NIC-Wash-OA1*		Slab			Washington Elementary				424 N. Pennsylvania Ave.			Tied to chain link fence, northeast side, b/w parking lot & playground
	<0.15	<0.17	<0.16 C	<0.45 C	<0.16	<0.16 C	<0.53 C	**0. 67**	**0.38**	<0.13	ACE	0.87	
											CHEX	1.2 B	
											HEX	0.36	
											HP	0.2	
											MEK	0.27	
											TOL	0.44	
											XYLMP	0.18	
OA2-W_Ph2	= *OAP-NIC-Wash-OA2*		Slab			Washington Elementary				424 N. Pennsylvania Ave.			Tied to chain link fence, southwest side, b/w parking lot & playground
	<0.14	<0.17	<0.16 C	<0.45 C	<0.16	<0.16 C	<0.53 C	**0. 73**	**0.44**	<0.13	ACE	0.86	
											CHEX	1.2 B	
											HEX	0.39	
											HP	0.22	
											MEK	0.29	
											TOL	0.47	
											XYLMP	0.18	
OA3-P_Ph2	= *OAP-NIC-Park-OA1*		Slab			Park Elementary				1025 N. Main St			Tied to chain link fence northeast of building
	<0.14	<0.17	<0.16 C	<0.44 C	<0.16	<0.16 C	<0.52 C	**0. 66**	**0.37**	<0.13	ACE	0.79	
											CHEX	1.2	
											HEX	0.43	
											HP	0.17	
											MEK	0.31	
											TOL	0.38	
											XYLMP	0.16	
OA4-P_Ph2	= *OAP-NIC-Park-OA2*		Slab			Park Elementary				1025 N. Main St			Tied to chain link fence west of building, south side of playground
	<0.14	<0.17	<0.16 C	<0.44 C	<0.16	<0.16 C	<0.52 C	<0.5	**0.26**	<0.13	ACE	0.52	
											CHEX	1.4	
											HEX	0.23	
											MEK	0.24	
											TOL	0.34	
											XYLMP	0.16	

Table 5
North Industrial Corridor (NIC) Site
Site-wide Vapor Intrusion Investigation - Outdoor Air Results

Location	TCE (µg/m3)	PCE (µg/m3)	C12DCE (µg/m3)	VC (µg/m3)	111TCA (µg/m3)	11DCA (µg/m3)	11DCE (µg/m3)	BEN (µg/m3)	CT (µg/m3)	CFM (µg/m3)	Other Compounds (µg/m3)		Notes
KDHE Tier 2 IA Std	**2.09**	**41.7**	**7.3**	**5.53**	**5,210**	**15.2**	**209**	**3.12**	**4.06**	**1.06**			
OA5-L_Ph2	= *OAP-NIC-LOUV-OA1*		Slab			L'Ouverture Computer Tech Elementary				1539 N. Ohio Ave.			Tied to chain link fence, west side, b/w parking lot & playground
	<0.14	<0.17	<0.16 C	<0.44 C	<0.16	<0.16 C	<0.52 C	**0. 65**	**0.38**	<0.13	ACE	0.82	
											HEX	0.38	
											MEK	0.28	
											TOL	0.36	
OA6-L_Ph2	= *OAP-NIC-LOUV-OA2*		Slab			L'Ouverture Computer Tech Elementary				1539 N. Ohio Ave.			Tied to drain pipe on north side of building
	<0.14	<0.17	<0.16 C	<0.44 C	<0.16	<0.16 C	<0.52 C	**0. 64**	**0.37**	<0.13	ACE	0.81	
											HEX	0.25	
											MEK	0.28	
											TOL	0.34	

IA = Indoor Air. From Risk-Based Standards for Kansas (RSK) Manual, 5th Edition. March 2014. Kansas Department of Health and Environment, Bureau of Remediation.

Primary Contaminants of Concern

BEN = Benzene
CT = Carbon Tetrachloride
CFM = Chloroform
C12DCE = cis-1,2-Dichloroethene
11DCA = 1,1-Dichloroethane
11DCE = 1,1-Dichloroethene
PCE = Tetrachloroethene
111TCA = 1,1,1-Trichloroethane
TCE = Trichloroethene
VC = Vinyl chloride

Other Detects & IA Standard

ACE = Acetone (32,300 µg/m3)
CHEX = Cyclohexane (6,260 µg/m3)
HEX = Hexane (730.0 µg/m3)
HP = Heptane (NL)
MEK = 2-Butanone (Methyl ethyl ketone) (5,210.0 µg/m3)
TOL = Toluene (5,210.0 µg/m3)
XYLMP = m,p-Xylene (104.0 µg/m3)

Qualifiers

B = Compound present in laboratory blank greater than reporting limit (background subtraction not performed).
C = Estimated concentration due to calculated sampling rate.

Table 6
North Industrial Corridor (NIC) Site
Site-wide Vapor Intrusion Investigation - Indoor Air Results, Canister Samples

Location	Sublevel Type			School				Address					Notes
	TCE (µg/m3)	PCE (µg/m3)	C12DCE (µg/m3)	VC (µg/m3)	111TCA (µg/m3)	11DCA (µg/m3)	11DCE (µg/m3)	BEN (µg/m3)	CT (µg/m3)	CFM (µg/m3)	Other Compounds (µg/m3)		
KDHE Tier 2 IA Std	**2.09**	**41.7**	**7.3**	**5.53**	**5,210**	**15.2**	**209**	**3.12**	**4.06**	**1.06**			
SC-L-27_p/c_Ph2	Slab			L'Ouverture Computer Tech Elementary				1539 N. Ohio Ave.					Rm 27 (on desk next to bookcase)
	<0.94	<1.2	<0.7	<0.45	<0.96	<0.71	<0.7	<0.56	<1.1	<0.86	ACE	83	
											CM	1.8	
											DCDFM	2.5	
											ETH	780 E	
											IPA	45	
											MIBK	1.2	
											TCFM	1.2	
											TOL	2.8	
SC-L-7_p/c_Ph2	Slab			L'Ouverture Computer Tech Elementary				1539 N. Ohio Ave.					Rm 7 (on bookcase below TV)
	<0.99	<1.2	<0.73	<0.47	<1	<0.74	<0.73	**0.66**	<1.2	<0.9	ACE	12	
											DCDFM	2.4	
											ETH	55	
											IPA	3.9	
											TCFM	1.4	
											TOL	1.2	
SC-P-107_p/c_Ph2	Slab			Park Elementary				1025 N. Main St					Rm 107 (on table below bulletin board)
	<0.92	<1.2	<0.68	<0.44	<0.94	<0.7	<0.68	**0.59**	<1.1	<0.84	ACE	14	
											DCDFM	3	
											EBN	0.86	
											ETH	260 E	
											HEX	0.72	
											IPA	32	
											TCFM	1.4	
											TOL	1.2	
											XYLMP	1.1	

Table 6
North Industrial Corridor (NIC) Site
Site-wide Vapor Intrusion Investigation - Indoor Air Results, Canister Samples

Location	Sublevel Type			School				Address					Notes
	TCE (µg/m3)	PCE (µg/m3)	C12DCE (µg/m3)	VC (µg/m3)	111TCA (µg/m3)	11DCA (µg/m3)	11DCE (µg/m3)	BEN (µg/m3)	CT (µg/m3)	CFM (µg/m3)	Other Compounds (µg/m3)		
KDHE Tier 2 IA Std	**2.09**	**41.7**	**7.3**	**5.53**	**5,210**	**15.2**	**209**	**3.12**	**4.06**	**1.06**			
SC-P-131_p/c_Ph2	Slab			Park Elementary				1025 N. Main St					Rm 131 (on teacher's desk)
	<0.94	<1.2	<0.69	<0.44	<0.95	<0.7	<0.69	**0.59**	<1.1	<0.85	ACE	23	
											DCDFM	2.5	
											ETH	540 E	
											HEX	0.68	
											IPA	160	
											TCFM	1.2	
											TOL	1.2	
SC-W-112_p/c_Ph2	Slab			Washington Elementary				424 N. Pennsylvania Ave.					Rm 112 (set on shelf underneath TV)
	<0.93	<1.2	<0.68	<0.44	<0.94	<0.7	<0.68	**0.6**	<1.1	<0.84	ACE	29	
											DCDFM	2.8	
											ETH	690 E	
											HEX	0.68	
											IPA	68	
											TCFM	1.3	
											TOL	3.8	
SC-W-138_p/c_Ph2	Slab			Washington Elementary				424 N. Pennsylvania Ave.					Rm 138 (library, at librarian's desk)
	<1	<1.3	<0.74	<0.48	<1	<0.75	<0.74	<0.59	<1.2	<0.91	ACE	34	
											DCDFM	2.7	
											ETH	850 E	
											HP	1.2	
											IPA	26	
											TCFM	1.3	
											TOL	10	
											XYLMP	1	

Table 6
North Industrial Corridor (NIC) Site
Site-wide Vapor Intrusion Investigation - Indoor Air Results, Canister Samples

Location	Sublevel Type	School	Address

	TCE (µg/m3)	PCE (µg/m3)	C12DCE (µg/m3)	VC (µg/m3)	111TCA (µg/m3)	11DCA (µg/m3)	11DCE (µg/m3)	BEN (µg/m3)	CT (µg/m3)	CFM (µg/m3)	Other Compounds (µg/m3)	Notes
KDHE Tier 2 IA Std	**2.09**	**41.7**	**7.3**	**5.53**	**5,210**	**15.2**	**209**	**3.12**	**4.06**	**1.06**		

IA = Indoor Air. From Risk-Based Standards for Kansas (RSK) Manual, 5th Edition. March 2014. Kansas Department of Health and Environment, Bureau of Remediation.

Primary Contaminants of Concern

BEN = Benzene
CT = Carbon Tetrachloride
CFM = Chloroform
C12DCE = cis-1,2-Dichloroethene
11DCA = 1,1-Dichloroethane
11DCE = 1,1-Dichloroethene
PCE = Tetrachloroethene
111TCA = 1,1,1-Trichloroethane
TCE = Trichloroethene
VC = Vinyl chloride

Other Detects & IA Standard

ACE = Acetone (32,300 µg/m3)
CM = Chloromethane (93.9 µg/m3)
DCDFM = Dichlorodifluoromethane = Freon 12 (209.0 µg/m3)
ETH = Ethanol (NL)
EBN = Ethylbenzene (9.73 µg/m3)
HEX = Hexane (730.0 µg/m3)
HP = Heptane (NL)
IPA = Isopropylalcohol = 2-Propanol (NL)
MIBK = 4-Methyl-2-pentanone (Methyl isobutyl ketone) (3,130.0 µg/m3)
TOL = Toluene (5,210.0 µg/m3)
TCFM = Trichlorofluoromethane = Freon 11 (730.0 µg/m3)
XYLMP = m,p-Xylene (104.0 µg/m3)

Qualifiers

E = Exceeds instrument calibration range.
J = Estimated value.

Table 7
North Industrial Corridor (NIC) Site
Site-wide Vapor Intrusion Investigation - RPDs for Original and Duplicate Samples for Contaminants of Concern

Location		TCE (µg/m3)	PCE (µg/m3)	C12DCE (µg/m3)	VC (µg/m3)	111TCA (µg/m3)	11DCA (µg/m3)	11DCE (µg/m3)	BEN (µg/m3)	CT (µg/m3)	CFM (µg/m3)
OA2-W_PH2	= *OAP-NIC-Wash-OA2*			Washington Elementary			424 N. Pennsylvania Ave.				
	Original	<0.14	<0.17	<0.16C	<0.45C	<0.16	<0.16C	<0.53C	0.73	0.44	<0.13
	Duplicate	<0.16	<0.19	<0.18C	<0.5C	<0.18	<0.18C	<0.6C	0.64	0.34	<0.15
	RPD	----%	----%	----%	----%	----%	----%	----%	13%	26%	----%
OA5-L_PH2	= *OAP-NIC-Louv-OA1*			L'Ouverture Computer Tech Elementary			1539 N. Ohio Ave.				
	Original	<0.14	<0.17	<0.16C	<0.44C	<0.16	<0.16C	<0.52C	0.65	0.38	<0.13
	Duplicate	<0.16	<0.19	<0.18C	<0.5C	<0.18	<0.18C	<0.59C	0.7	0.39	<0.15
	RPD	----%	----%	----%	----%	----%	----%	----%	7%	3%	----%

Qualifiers

C = Estimated concentration due to calculated sampling rate.

Table 8
North Industrial Corridor (NIC) Site
Site-wide Vapor Intrusion Investigation - Comparison of Passive and Canister Samples for Contaminants of Concern

Location	TCE (µg/m3)	PCE (µg/m3)	C12DCE (µg/m3)	VC (µg/m3)	111TCA (µg/m3)	11DCA (µg/m3)	11DCE (µg/m3)	BEN (µg/m3)	CT (µg/m3)	CFM (µg/m3)
SC-L-27_P/C_PH2										
Passive	<0.14	<0.17	<0.16 C	<0.44 C	<0.16	<0.16 C	<0.52 C	0.52	0.3	0.14
Canister	<0.94	<1.2	<0.7	<0.45	<0.96	<0.71	<0.7	<0.56	<1.1	<0.86
SC-L-7_P/C_PH2										
Passive	<0.14	<0.17	<0.16 C	<0.44 C	<0.16	<0.16 C	<0.52 C	0.71	0.4	<0.13
Canister	<0.99	<1.2	<0.73	<0.47	<1	<0.74	<0.73	0.66	<1.2	<0.9
SC-P-107_P/C_PH2										
Passive	<0.14	<0.17	<0.16 C	<0.44 C	<0.16	<0.16 C	<0.52 C	0.64	0.34	<0.13
Canister	<0.92	<1.2	<0.68	<0.44	<0.94	<0.7	<0.68	0.59	<1.1	<0.84
SC-P-131_P/C_PH2										
Passive	<0.14	<0.17	<0.16 C	<0.44 C	<0.16	<0.16 C	<0.52 C	0.59	0.32	<0.13
Canister	<0.94	<1.2	<0.69	<0.44	<0.95	<0.7	<0.69	0.59	<1.1	<0.85
SC-W-112_P/C_PH2										
Passive	<0.14	<0.17	<0.16 C	<0.44 C	<0.16	<0.16 C	<0.52 C	0.55	0.31	<0.13
Canister	<0.93	<1.2	<0.68	<0.44	<0.94	<0.7	<0.68	0.6	<1.1	<0.84
SC-W-138_P/C_PH2										
Passive	<0.14	<0.17	<0.16 C	<0.44 C	<0.16	<0.16 C	<0.52 C	0.63	0.34	<0.13
Canister	<1	<1.3	<0.74	<0.48	<1	<0.75	<0.74	<0.59	<1.2	<0.91

Qualifiers

C = Estimated concentration due to calculated sampling rate.

Appendix A
Laboratory Analytical Data –
NIC Schools Vapor Intrusion Phase 2

eurofins | Air Toxics

2/14/2014
Ms. Monica Williams
CDM Smith Inc.
345 Riverview
Suite 520
Wichita KS 67203

Project Name: KOHE-NKVI
Project #:
Workorder #: 1402063

Dear Ms. Monica Williams

The following report includes the data for the above referenced project for sample(s) received on 2/5/2014 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: Kelly Buettner at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Kelly Buettner

Project Manager

eurofins | Air Toxics

WORK ORDER #: 1402063

Work Order Summary

CLIENT:	Ms. Monica Williams CDM Smith Inc. 345 Riverview Suite 520 Wichita, KS 67203	**BILL TO:**	Ms. Monica Williams CDM Smith Inc. 345 Riverview Suite 520 Wichita, KS 67203
PHONE:	316-660-6716	**P.O. #**	
FAX:	316-264-3025	**PROJECT #**	KOHE-NKVI
DATE RECEIVED:	02/05/2014	**CONTACT:**	Kelly Buettner
DATE COMPLETED:	02/14/2014		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	IAS-NIC-Park-107	Modified TO-15	6.3 "Hg	5.2 psi
02A	IAS-NIC-Park-131	Modified TO-15	6.9 "Hg	5 psi
03A	IAS-NIC-Louv-7	Modified TO-15	7.8 "Hg	5.4 psi
04A	IAS-NIC-Louv-27	Modified TO-15	7.6 "Hg	4.7 psi
05A	IAS-NIC-Wash-138	Modified TO-15	8.6 "Hg	4.8 psi
06A	IAS-NIC-Wash-112	Modified TO-15	7.1 "Hg	4.7 psi
07A	Lab Blank	Modified TO-15	NA	NA
08A	CCV	Modified TO-15	NA	NA
09A	LCS	Modified TO-15	NA	NA
09AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY: Heidi Hayes

Technical Director

DATE: 02/14/14

Certification numbers: AZ Licensure AZ0775, CA NELAP - 12282CA, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-13-6, UT NELAP CA009332013-4, VA NELAP - 460197, WA NELAP - C935
Name of Accrediting Agency: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2013, Expiration date: 10/17/2014.
Eurofins Air Toxics Inc.. 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 Eurofins Air Toxics, Inc.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 9563
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-15
CDM Smith Inc.
Workorder# 1402063

Six 6 Liter Summa Canister (100% Certified) samples were received on February 05, 2014. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode.

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***
Initial Calibration	</=30% RSD with 2 compounds allowed out to < 40% RSD	</=30% RSD with 4 compounds allowed out to < 40% RSD
Blank and standards	Zero Air	UHP Nitrogen provides a higher purity gas matrix than zero air

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

All Quality Control Limit exceedances and affected sample results are noted by flags. Each flag is defined at the bottom of this Case Narrative and on each Sample Result Summary page.

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, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

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

eurofins | Air Toxics

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

Client Sample ID: IAS-NIC-Park-107

Lab ID#: 1402063-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.17	0.60	0.85	3.0
Freon 11	0.17	0.25	0.97	1.4
Ethanol	0.86	140 E	1.6	260 E
Acetone	0.86	5.8	2.0	14
2-Propanol	0.86	13	2.1	32
Hexane	0.17	0.20	0.61	0.72
Benzene	0.17	0.18	0.55	0.59
Toluene	0.17	0.33	0.65	1.2
Ethyl Benzene	0.17	0.20	0.75	0.86
m,p-Xylene	0.17	0.26	0.75	1.1

Client Sample ID: IAS-NIC-Park-131

Lab ID#: 1402063-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.17	0.50	0.86	2.5
Freon 11	0.17	0.21	0.98	1.2
Ethanol	0.87	280 E	1.6	540 E
Acetone	0.87	9.8	2.1	23
2-Propanol	0.87	67	2.1	160
Hexane	0.17	0.19	0.61	0.68
Benzene	0.17	0.18	0.56	0.59
Toluene	0.17	0.32	0.66	1.2

Client Sample ID: IAS-NIC-Louv-7

Lab ID#: 1402063-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.18	0.48	0.91	2.4
Freon 11	0.18	0.25	1.0	1.4
Ethanol	0.92	29	1.7	55
Acetone	0.92	5.3	2.2	12
2-Propanol	0.92	1.6	2.3	3.9

eurofins | Air Toxics

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

Client Sample ID: IAS-NIC-Louv-7

Lab ID#: 1402063-03A

Benzene	0.18	0.20	0.59	0.66
Toluene	0.18	0.31	0.69	1.2

Client Sample ID: IAS-NIC-Louv-27

Lab ID#: 1402063-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.18	0.50	0.87	2.5
Chloromethane	0.88	0.88	1.8	1.8
Freon 11	0.18	0.22	0.99	1.2
Ethanol	0.88	410 E	1.6	780 E
Acetone	0.88	35	2.1	83
2-Propanol	0.88	18	2.2	45
4-Methyl-2-pentanone	0.18	0.29	0.72	1.2
Toluene	0.18	0.74	0.66	2.8

Client Sample ID: IAS-NIC-Wash-138

Lab ID#: 1402063-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.19	0.54	0.92	2.7
Freon 11	0.19	0.23	1.0	1.3
Ethanol	0.93	450 E	1.8	850 E
Acetone	0.93	14	2.2	34
2-Propanol	0.93	10	2.3	26
Heptane	0.19	0.30	0.76	1.2
Toluene	0.19	2.7	0.70	10
m,p-Xylene	0.19	0.23	0.81	1.0

Client Sample ID: IAS-NIC-Wash-112

Lab ID#: 1402063-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.17	0.56	0.86	2.8

eurofins | Air Toxics

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

Client Sample ID: IAS-NIC-Wash-112

Lab ID#: 1402063-06A

Freon 11	0.17	0.24	0.97	1.3
Ethanol	0.86	360 E	1.6	690 E
Acetone	0.86	12	2.0	29
2-Propanol	0.86	28	2.1	68
Hexane	0.17	0.19	0.61	0.68
Benzene	0.17	0.19	0.55	0.60
Toluene	0.17	1.0	0.65	3.8

eurofins | Air Toxics

Client Sample ID: IAS-NIC-Park-107

Lab ID#: 1402063-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**c020713**	**Date of Collection:**	**1/31/14 4:48:00 PM**
Dil. Factor:	**1.72**	**Date of Analysis:**	**2/8/14 07:10 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.17	0.60	0.85	3.0
Freon 114	0.17	Not Detected	1.2	Not Detected
Chloromethane	0.86	Not Detected	1.8	Not Detected
Vinyl Chloride	0.17	Not Detected	0.44	Not Detected
1,3-Butadiene	0.17	Not Detected	0.38	Not Detected
Bromomethane	0.86	Not Detected	3.3	Not Detected
Chloroethane	0.86	Not Detected	2.3	Not Detected
Freon 11	0.17	0.25	0.97	1.4
Ethanol	0.86	140 E	1.6	260 E
Freon 113	0.17	Not Detected	1.3	Not Detected
1,1-Dichloroethene	0.17	Not Detected	0.68	Not Detected
Acetone	0.86	5.8	2.0	14
2-Propanol	0.86	13	2.1	32
Carbon Disulfide	0.86	Not Detected	2.7	Not Detected
3-Chloropropene	0.86	Not Detected	2.7	Not Detected
Methylene Chloride	0.34	Not Detected	1.2	Not Detected
Methyl tert-butyl ether	0.17	Not Detected	0.62	Not Detected
trans-1,2-Dichloroethene	0.17	Not Detected	0.68	Not Detected
Hexane	0.17	0.20	0.61	0.72
1,1-Dichloroethane	0.17	Not Detected	0.70	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.86	Not Detected	2.5	Not Detected
cis-1,2-Dichloroethene	0.17	Not Detected	0.68	Not Detected
Tetrahydrofuran	0.86	Not Detected	2.5	Not Detected
Chloroform	0.17	Not Detected	0.84	Not Detected
1,1,1-Trichloroethane	0.17	Not Detected	0.94	Not Detected
Cyclohexane	0.17	Not Detected	0.59	Not Detected
Carbon Tetrachloride	0.17	Not Detected	1.1	Not Detected
2,2,4-Trimethylpentane	0.86	Not Detected	4.0	Not Detected
Benzene	0.17	0.18	0.55	0.59
1,2-Dichloroethane	0.17	Not Detected	0.70	Not Detected
Heptane	0.17	Not Detected	0.70	Not Detected
Trichloroethene	0.17	Not Detected	0.92	Not Detected
1,2-Dichloropropane	0.17	Not Detected	0.79	Not Detected
1,4-Dioxane	0.17	Not Detected	0.62	Not Detected
Bromodichloromethane	0.17	Not Detected	1.2	Not Detected
cis-1,3-Dichloropropene	0.17	Not Detected	0.78	Not Detected
4-Methyl-2-pentanone	0.17	Not Detected	0.70	Not Detected
Toluene	0.17	0.33	0.65	1.2
trans-1,3-Dichloropropene	0.17	Not Detected	0.78	Not Detected
1,1,2-Trichloroethane	0.17	Not Detected	0.94	Not Detected
Tetrachloroethene	0.17	Not Detected	1.2	Not Detected
2-Hexanone	0.86	Not Detected	3.5	Not Detected

eurofins | Air Toxics

Client Sample ID: IAS-NIC-Park-107

Lab ID#: 1402063-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**c020713**	**Date of Collection:**	**1/31/14 4:48:00 PM**
Dil. Factor:	**1.72**	**Date of Analysis:**	**2/8/14 07:10 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.17	Not Detected	1.5	Not Detected
1,2-Dibromoethane (EDB)	0.17	Not Detected	1.3	Not Detected
Chlorobenzene	0.17	Not Detected	0.79	Not Detected
Ethyl Benzene	0.17	0.20	0.75	0.86
m,p-Xylene	0.17	0.26	0.75	1.1
o-Xylene	0.17	Not Detected	0.75	Not Detected
Styrene	0.17	Not Detected	0.73	Not Detected
Bromoform	0.17	Not Detected	1.8	Not Detected
Cumene	0.17	Not Detected	0.84	Not Detected
1,1,2,2-Tetrachloroethane	0.17	Not Detected	1.2	Not Detected
Propylbenzene	0.17	Not Detected	0.84	Not Detected
4-Ethyltoluene	0.17	Not Detected	0.84	Not Detected
1,3,5-Trimethylbenzene	0.17	Not Detected	0.84	Not Detected
1,2,4-Trimethylbenzene	0.17	Not Detected	0.84	Not Detected
1,3-Dichlorobenzene	0.17	Not Detected	1.0	Not Detected
1,4-Dichlorobenzene	0.17	Not Detected	1.0	Not Detected
alpha-Chlorotoluene	0.17	Not Detected	0.89	Not Detected
1,2-Dichlorobenzene	0.17	Not Detected	1.0	Not Detected
1,2,4-Trichlorobenzene	0.86	Not Detected	6.4	Not Detected
Hexachlorobutadiene	0.86	Not Detected UJ	9.2	Not Detected UJ

E = Exceeds instrument calibration range.
UJ = Non-detected compound associated with low bias in the CCV and/or LCS.
Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	99	70-130

eurofins | Air Toxics

Client Sample ID: IAS-NIC-Park-131

Lab ID#: 1402063-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**c020714**	**Date of Collection:**	**1/31/14 4:57:00 PM**
Dil. Factor:	**1.74**	**Date of Analysis:**	**2/8/14 07:49 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.17	0.50	0.86	2.5
Freon 114	0.17	Not Detected	1.2	Not Detected
Chloromethane	0.87	Not Detected	1.8	Not Detected
Vinyl Chloride	0.17	Not Detected	0.44	Not Detected
1,3-Butadiene	0.17	Not Detected	0.38	Not Detected
Bromomethane	0.87	Not Detected	3.4	Not Detected
Chloroethane	0.87	Not Detected	2.3	Not Detected
Freon 11	0.17	0.21	0.98	1.2
Ethanol	0.87	280 E	1.6	540 E
Freon 113	0.17	Not Detected	1.3	Not Detected
1,1-Dichloroethene	0.17	Not Detected	0.69	Not Detected
Acetone	0.87	9.8	2.1	23
2-Propanol	0.87	67	2.1	160
Carbon Disulfide	0.87	Not Detected	2.7	Not Detected
3-Chloropropene	0.87	Not Detected	2.7	Not Detected
Methylene Chloride	0.35	Not Detected	1.2	Not Detected
Methyl tert-butyl ether	0.17	Not Detected	0.63	Not Detected
trans-1,2-Dichloroethene	0.17	Not Detected	0.69	Not Detected
Hexane	0.17	0.19	0.61	0.68
1,1-Dichloroethane	0.17	Not Detected	0.70	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.87	Not Detected	2.6	Not Detected
cis-1,2-Dichloroethene	0.17	Not Detected	0.69	Not Detected
Tetrahydrofuran	0.87	Not Detected	2.6	Not Detected
Chloroform	0.17	Not Detected	0.85	Not Detected
1,1,1-Trichloroethane	0.17	Not Detected	0.95	Not Detected
Cyclohexane	0.17	Not Detected	0.60	Not Detected
Carbon Tetrachloride	0.17	Not Detected	1.1	Not Detected
2,2,4-Trimethylpentane	0.87	Not Detected	4.1	Not Detected
Benzene	0.17	0.18	0.56	0.59
1,2-Dichloroethane	0.17	Not Detected	0.70	Not Detected
Heptane	0.17	Not Detected	0.71	Not Detected
Trichloroethene	0.17	Not Detected	0.94	Not Detected
1,2-Dichloropropane	0.17	Not Detected	0.80	Not Detected
1,4-Dioxane	0.17	Not Detected	0.63	Not Detected
Bromodichloromethane	0.17	Not Detected	1.2	Not Detected
cis-1,3-Dichloropropene	0.17	Not Detected	0.79	Not Detected
4-Methyl-2-pentanone	0.17	Not Detected	0.71	Not Detected
Toluene	0.17	0.32	0.66	1.2
trans-1,3-Dichloropropene	0.17	Not Detected	0.79	Not Detected
1,1,2-Trichloroethane	0.17	Not Detected	0.95	Not Detected
Tetrachloroethene	0.17	Not Detected	1.2	Not Detected
2-Hexanone	0.87	Not Detected	3.6	Not Detected

eurofins | Air Toxics

Client Sample ID: IAS-NIC-Park-131

Lab ID#: 1402063-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**c020714**	**Date of Collection:**	**1/31/14 4:57:00 PM**
Dil. Factor:	**1.74**	**Date of Analysis:**	**2/8/14 07:49 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.17	Not Detected	1.5	Not Detected
1,2-Dibromoethane (EDB)	0.17	Not Detected	1.3	Not Detected
Chlorobenzene	0.17	Not Detected	0.80	Not Detected
Ethyl Benzene	0.17	Not Detected	0.76	Not Detected
m,p-Xylene	0.17	Not Detected	0.76	Not Detected
o-Xylene	0.17	Not Detected	0.76	Not Detected
Styrene	0.17	Not Detected	0.74	Not Detected
Bromoform	0.17	Not Detected	1.8	Not Detected
Cumene	0.17	Not Detected	0.86	Not Detected
1,1,2,2-Tetrachloroethane	0.17	Not Detected	1.2	Not Detected
Propylbenzene	0.17	Not Detected	0.86	Not Detected
4-Ethyltoluene	0.17	Not Detected	0.86	Not Detected
1,3,5-Trimethylbenzene	0.17	Not Detected	0.86	Not Detected
1,2,4-Trimethylbenzene	0.17	Not Detected	0.86	Not Detected
1,3-Dichlorobenzene	0.17	Not Detected	1.0	Not Detected
1,4-Dichlorobenzene	0.17	Not Detected	1.0	Not Detected
alpha-Chlorotoluene	0.17	Not Detected	0.90	Not Detected
1,2-Dichlorobenzene	0.17	Not Detected	1.0	Not Detected
1,2,4-Trichlorobenzene	0.87	Not Detected	6.4	Not Detected
Hexachlorobutadiene	0.87	Not Detected UJ	9.3	Not Detected UJ

E = Exceeds instrument calibration range.
UJ = Non-detected compound associated with low bias in the CCV and/or LCS.
Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	96	70-130

eurofins | Air Toxics

Client Sample ID: IAS-NIC-Louv-7

Lab ID#: 1402063-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**c020715**	**Date of Collection:**	**1/31/14 5:20:00 PM**
Dil. Factor:	**1.84**	**Date of Analysis:**	**2/8/14 08:26 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.18	0.48	0.91	2.4
Freon 114	0.18	Not Detected	1.3	Not Detected
Chloromethane	0.92	Not Detected	1.9	Not Detected
Vinyl Chloride	0.18	Not Detected	0.47	Not Detected
1,3-Butadiene	0.18	Not Detected	0.41	Not Detected
Bromomethane	0.92	Not Detected	3.6	Not Detected
Chloroethane	0.92	Not Detected	2.4	Not Detected
Freon 11	0.18	0.25	1.0	1.4
Ethanol	0.92	29	1.7	55
Freon 113	0.18	Not Detected	1.4	Not Detected
1,1-Dichloroethene	0.18	Not Detected	0.73	Not Detected
Acetone	0.92	5.3	2.2	12
2-Propanol	0.92	1.6	2.3	3.9
Carbon Disulfide	0.92	Not Detected	2.9	Not Detected
3-Chloropropene	0.92	Not Detected	2.9	Not Detected
Methylene Chloride	0.37	Not Detected	1.3	Not Detected
Methyl tert-butyl ether	0.18	Not Detected	0.66	Not Detected
trans-1,2-Dichloroethene	0.18	Not Detected	0.73	Not Detected
Hexane	0.18	Not Detected	0.65	Not Detected
1,1-Dichloroethane	0.18	Not Detected	0.74	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.92	Not Detected	2.7	Not Detected
cis-1,2-Dichloroethene	0.18	Not Detected	0.73	Not Detected
Tetrahydrofuran	0.92	Not Detected	2.7	Not Detected
Chloroform	0.18	Not Detected	0.90	Not Detected
1,1,1-Trichloroethane	0.18	Not Detected	1.0	Not Detected
Cyclohexane	0.18	Not Detected	0.63	Not Detected
Carbon Tetrachloride	0.18	Not Detected	1.2	Not Detected
2,2,4-Trimethylpentane	0.92	Not Detected	4.3	Not Detected
Benzene	0.18	0.20	0.59	0.66
1,2-Dichloroethane	0.18	Not Detected	0.74	Not Detected
Heptane	0.18	Not Detected	0.75	Not Detected
Trichloroethene	0.18	Not Detected	0.99	Not Detected
1,2-Dichloropropane	0.18	Not Detected	0.85	Not Detected
1,4-Dioxane	0.18	Not Detected	0.66	Not Detected
Bromodichloromethane	0.18	Not Detected	1.2	Not Detected
cis-1,3-Dichloropropene	0.18	Not Detected	0.84	Not Detected
4-Methyl-2-pentanone	0.18	Not Detected	0.75	Not Detected
Toluene	0.18	0.31	0.69	1.2
trans-1,3-Dichloropropene	0.18	Not Detected	0.84	Not Detected
1,1,2-Trichloroethane	0.18	Not Detected	1.0	Not Detected
Tetrachloroethene	0.18	Not Detected	1.2	Not Detected
2-Hexanone	0.92	Not Detected	3.8	Not Detected

eurofins | Air Toxics

Client Sample ID: IAS-NIC-Louv-7

Lab ID#: 1402063-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**c020715**	**Date of Collection:**	**1/31/14 5:20:00 PM**
Dil. Factor:	**1.84**	**Date of Analysis:**	**2/8/14 08:26 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.18	Not Detected	1.6	Not Detected
1,2-Dibromoethane (EDB)	0.18	Not Detected	1.4	Not Detected
Chlorobenzene	0.18	Not Detected	0.85	Not Detected
Ethyl Benzene	0.18	Not Detected	0.80	Not Detected
m,p-Xylene	0.18	Not Detected	0.80	Not Detected
o-Xylene	0.18	Not Detected	0.80	Not Detected
Styrene	0.18	Not Detected	0.78	Not Detected
Bromoform	0.18	Not Detected	1.9	Not Detected
Cumene	0.18	Not Detected	0.90	Not Detected
1,1,2,2-Tetrachloroethane	0.18	Not Detected	1.3	Not Detected
Propylbenzene	0.18	Not Detected	0.90	Not Detected
4-Ethyltoluene	0.18	Not Detected	0.90	Not Detected
1,3,5-Trimethylbenzene	0.18	Not Detected	0.90	Not Detected
1,2,4-Trimethylbenzene	0.18	Not Detected	0.90	Not Detected
1,3-Dichlorobenzene	0.18	Not Detected	1.1	Not Detected
1,4-Dichlorobenzene	0.18	Not Detected	1.1	Not Detected
alpha-Chlorotoluene	0.18	Not Detected	0.95	Not Detected
1,2-Dichlorobenzene	0.18	Not Detected	1.1	Not Detected
1,2,4-Trichlorobenzene	0.92	Not Detected	6.8	Not Detected
Hexachlorobutadiene	0.92	Not Detected UJ	9.8	Not Detected UJ

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

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	102	70-130

eurofins | Air Toxics

Client Sample ID: IAS-NIC-Louv-27

Lab ID#: 1402063-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**c020716**	**Date of Collection:**	**1/31/14 5:35:00 PM**
Dil. Factor:	**1.76**	**Date of Analysis:**	**2/8/14 09:05 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.18	0.50	0.87	2.5
Freon 114	0.18	Not Detected	1.2	Not Detected
Chloromethane	0.88	0.88	1.8	1.8
Vinyl Chloride	0.18	Not Detected	0.45	Not Detected
1,3-Butadiene	0.18	Not Detected	0.39	Not Detected
Bromomethane	0.88	Not Detected	3.4	Not Detected
Chloroethane	0.88	Not Detected	2.3	Not Detected
Freon 11	0.18	0.22	0.99	1.2
Ethanol	0.88	410 E	1.6	780 E
Freon 113	0.18	Not Detected	1.3	Not Detected
1,1-Dichloroethene	0.18	Not Detected	0.70	Not Detected
Acetone	0.88	35	2.1	83
2-Propanol	0.88	18	2.2	45
Carbon Disulfide	0.88	Not Detected	2.7	Not Detected
3-Chloropropene	0.88	Not Detected	2.8	Not Detected
Methylene Chloride	0.35	Not Detected	1.2	Not Detected
Methyl tert-butyl ether	0.18	Not Detected	0.63	Not Detected
trans-1,2-Dichloroethene	0.18	Not Detected	0.70	Not Detected
Hexane	0.18	Not Detected	0.62	Not Detected
1,1-Dichloroethane	0.18	Not Detected	0.71	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.88	Not Detected	2.6	Not Detected
cis-1,2-Dichloroethene	0.18	Not Detected	0.70	Not Detected
Tetrahydrofuran	0.88	Not Detected	2.6	Not Detected
Chloroform	0.18	Not Detected	0.86	Not Detected
1,1,1-Trichloroethane	0.18	Not Detected	0.96	Not Detected
Cyclohexane	0.18	Not Detected	0.60	Not Detected
Carbon Tetrachloride	0.18	Not Detected	1.1	Not Detected
2,2,4-Trimethylpentane	0.88	Not Detected	4.1	Not Detected
Benzene	0.18	Not Detected	0.56	Not Detected
1,2-Dichloroethane	0.18	Not Detected	0.71	Not Detected
Heptane	0.18	Not Detected	0.72	Not Detected
Trichloroethene	0.18	Not Detected	0.94	Not Detected
1,2-Dichloropropane	0.18	Not Detected	0.81	Not Detected
1,4-Dioxane	0.18	Not Detected	0.63	Not Detected
Bromodichloromethane	0.18	Not Detected	1.2	Not Detected
cis-1,3-Dichloropropene	0.18	Not Detected	0.80	Not Detected
4-Methyl-2-pentanone	0.18	0.29	0.72	1.2
Toluene	0.18	0.74	0.66	2.8
trans-1,3-Dichloropropene	0.18	Not Detected	0.80	Not Detected
1,1,2-Trichloroethane	0.18	Not Detected	0.96	Not Detected
Tetrachloroethene	0.18	Not Detected	1.2	Not Detected
2-Hexanone	0.88	Not Detected	3.6	Not Detected

eurofins | Air Toxics

Client Sample ID: IAS-NIC-Louv-27

Lab ID#: 1402063-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**c020716**	**Date of Collection:**	**1/31/14 5:35:00 PM**
Dil. Factor:	**1.76**	**Date of Analysis:**	**2/8/14 09:05 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.18	Not Detected	1.5	Not Detected
1,2-Dibromoethane (EDB)	0.18	Not Detected	1.4	Not Detected
Chlorobenzene	0.18	Not Detected	0.81	Not Detected
Ethyl Benzene	0.18	Not Detected	0.76	Not Detected
m,p-Xylene	0.18	Not Detected	0.76	Not Detected
o-Xylene	0.18	Not Detected	0.76	Not Detected
Styrene	0.18	Not Detected	0.75	Not Detected
Bromoform	0.18	Not Detected	1.8	Not Detected
Cumene	0.18	Not Detected	0.86	Not Detected
1,1,2,2-Tetrachloroethane	0.18	Not Detected	1.2	Not Detected
Propylbenzene	0.18	Not Detected	0.86	Not Detected
4-Ethyltoluene	0.18	Not Detected	0.86	Not Detected
1,3,5-Trimethylbenzene	0.18	Not Detected	0.86	Not Detected
1,2,4-Trimethylbenzene	0.18	Not Detected	0.86	Not Detected
1,3-Dichlorobenzene	0.18	Not Detected	1.0	Not Detected
1,4-Dichlorobenzene	0.18	Not Detected	1.0	Not Detected
alpha-Chlorotoluene	0.18	Not Detected	0.91	Not Detected
1,2-Dichlorobenzene	0.18	Not Detected	1.0	Not Detected
1,2,4-Trichlorobenzene	0.88	Not Detected	6.5	Not Detected
Hexachlorobutadiene	0.88	Not Detected UJ	9.4	Not Detected UJ

E = Exceeds instrument calibration range.
UJ = Non-detected compound associated with low bias in the CCV and/or LCS.
Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	94	70-130

eurofins | Air Toxics

Client Sample ID: IAS-NIC-Wash-138

Lab ID#: 1402063-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**c020717**	**Date of Collection:**	**1/31/14 6:10:00 PM**
Dil. Factor:	**1.86**	**Date of Analysis:**	**2/8/14 09:43 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.19	0.54	0.92	2.7
Freon 114	0.19	Not Detected	1.3	Not Detected
Chloromethane	0.93	Not Detected	1.9	Not Detected
Vinyl Chloride	0.19	Not Detected	0.48	Not Detected
1,3-Butadiene	0.19	Not Detected	0.41	Not Detected
Bromomethane	0.93	Not Detected	3.6	Not Detected
Chloroethane	0.93	Not Detected	2.4	Not Detected
Freon 11	0.19	0.23	1.0	1.3
Ethanol	0.93	450 E	1.8	850 E
Freon 113	0.19	Not Detected	1.4	Not Detected
1,1-Dichloroethene	0.19	Not Detected	0.74	Not Detected
Acetone	0.93	14	2.2	34
2-Propanol	0.93	10	2.3	26
Carbon Disulfide	0.93	Not Detected	2.9	Not Detected
3-Chloropropene	0.93	Not Detected	2.9	Not Detected
Methylene Chloride	0.37	Not Detected	1.3	Not Detected
Methyl tert-butyl ether	0.19	Not Detected	0.67	Not Detected
trans-1,2-Dichloroethene	0.19	Not Detected	0.74	Not Detected
Hexane	0.19	Not Detected	0.66	Not Detected
1,1-Dichloroethane	0.19	Not Detected	0.75	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.93	Not Detected	2.7	Not Detected
cis-1,2-Dichloroethene	0.19	Not Detected	0.74	Not Detected
Tetrahydrofuran	0.93	Not Detected	2.7	Not Detected
Chloroform	0.19	Not Detected	0.91	Not Detected
1,1,1-Trichloroethane	0.19	Not Detected	1.0	Not Detected
Cyclohexane	0.19	Not Detected	0.64	Not Detected
Carbon Tetrachloride	0.19	Not Detected	1.2	Not Detected
2,2,4-Trimethylpentane	0.93	Not Detected	4.3	Not Detected
Benzene	0.19	Not Detected	0.59	Not Detected
1,2-Dichloroethane	0.19	Not Detected	0.75	Not Detected
Heptane	0.19	0.30	0.76	1.2
Trichloroethene	0.19	Not Detected	1.0	Not Detected
1,2-Dichloropropane	0.19	Not Detected	0.86	Not Detected
1,4-Dioxane	0.19	Not Detected	0.67	Not Detected
Bromodichloromethane	0.19	Not Detected	1.2	Not Detected
cis-1,3-Dichloropropene	0.19	Not Detected	0.84	Not Detected
4-Methyl-2-pentanone	0.19	Not Detected	0.76	Not Detected
Toluene	0.19	2.7	0.70	10
trans-1,3-Dichloropropene	0.19	Not Detected	0.84	Not Detected
1,1,2-Trichloroethane	0.19	Not Detected	1.0	Not Detected
Tetrachloroethene	0.19	Not Detected	1.3	Not Detected
2-Hexanone	0.93	Not Detected	3.8	Not Detected

eurofins | Air Toxics

Client Sample ID: IAS-NIC-Wash-138

Lab ID#: 1402063-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**c020717**	**Date of Collection:**	**1/31/14 6:10:00 PM**
Dil. Factor:	**1.86**	**Date of Analysis:**	**2/8/14 09:43 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.19	Not Detected	1.6	Not Detected
1,2-Dibromoethane (EDB)	0.19	Not Detected	1.4	Not Detected
Chlorobenzene	0.19	Not Detected	0.86	Not Detected
Ethyl Benzene	0.19	Not Detected	0.81	Not Detected
m,p-Xylene	0.19	0.23	0.81	1.0
o-Xylene	0.19	Not Detected	0.81	Not Detected
Styrene	0.19	Not Detected	0.79	Not Detected
Bromoform	0.19	Not Detected	1.9	Not Detected
Cumene	0.19	Not Detected	0.91	Not Detected
1,1,2,2-Tetrachloroethane	0.19	Not Detected	1.3	Not Detected
Propylbenzene	0.19	Not Detected	0.91	Not Detected
4-Ethyltoluene	0.19	Not Detected	0.91	Not Detected
1,3,5-Trimethylbenzene	0.19	Not Detected	0.91	Not Detected
1,2,4-Trimethylbenzene	0.19	Not Detected	0.91	Not Detected
1,3-Dichlorobenzene	0.19	Not Detected	1.1	Not Detected
1,4-Dichlorobenzene	0.19	Not Detected	1.1	Not Detected
alpha-Chlorotoluene	0.19	Not Detected	0.96	Not Detected
1,2-Dichlorobenzene	0.19	Not Detected	1.1	Not Detected
1,2,4-Trichlorobenzene	0.93	Not Detected	6.9	Not Detected
Hexachlorobutadiene	0.93	Not Detected UJ	9.9	Not Detected UJ

E = Exceeds instrument calibration range.
UJ = Non-detected compound associated with low bias in the CCV and/or LCS.
Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	98	70-130

eurofins | Air Toxics

Client Sample ID: IAS-NIC-Wash-112

Lab ID#: 1402063-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**c020718**	**Date of Collection:**	**1/31/14 6:21:00 PM**
Dil. Factor:	**1.73**	**Date of Analysis:**	**2/8/14 10:47 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.17	0.56	0.86	2.8
Freon 114	0.17	Not Detected	1.2	Not Detected
Chloromethane	0.86	Not Detected	1.8	Not Detected
Vinyl Chloride	0.17	Not Detected	0.44	Not Detected
1,3-Butadiene	0.17	Not Detected	0.38	Not Detected
Bromomethane	0.86	Not Detected	3.4	Not Detected
Chloroethane	0.86	Not Detected	2.3	Not Detected
Freon 11	0.17	0.24	0.97	1.3
Ethanol	0.86	360 E	1.6	690 E
Freon 113	0.17	Not Detected	1.3	Not Detected
1,1-Dichloroethene	0.17	Not Detected	0.68	Not Detected
Acetone	0.86	12	2.0	29
2-Propanol	0.86	28	2.1	68
Carbon Disulfide	0.86	Not Detected	2.7	Not Detected
3-Chloropropene	0.86	Not Detected	2.7	Not Detected
Methylene Chloride	0.35	Not Detected	1.2	Not Detected
Methyl tert-butyl ether	0.17	Not Detected	0.62	Not Detected
trans-1,2-Dichloroethene	0.17	Not Detected	0.68	Not Detected
Hexane	0.17	0.19	0.61	0.68
1,1-Dichloroethane	0.17	Not Detected	0.70	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.86	Not Detected	2.6	Not Detected
cis-1,2-Dichloroethene	0.17	Not Detected	0.68	Not Detected
Tetrahydrofuran	0.86	Not Detected	2.6	Not Detected
Chloroform	0.17	Not Detected	0.84	Not Detected
1,1,1-Trichloroethane	0.17	Not Detected	0.94	Not Detected
Cyclohexane	0.17	Not Detected	0.60	Not Detected
Carbon Tetrachloride	0.17	Not Detected	1.1	Not Detected
2,2,4-Trimethylpentane	0.86	Not Detected	4.0	Not Detected
Benzene	0.17	0.19	0.55	0.60
1,2-Dichloroethane	0.17	Not Detected	0.70	Not Detected
Heptane	0.17	Not Detected	0.71	Not Detected
Trichloroethene	0.17	Not Detected	0.93	Not Detected
1,2-Dichloropropane	0.17	Not Detected	0.80	Not Detected
1,4-Dioxane	0.17	Not Detected	0.62	Not Detected
Bromodichloromethane	0.17	Not Detected	1.2	Not Detected
cis-1,3-Dichloropropene	0.17	Not Detected	0.78	Not Detected
4-Methyl-2-pentanone	0.17	Not Detected	0.71	Not Detected
Toluene	0.17	1.0	0.65	3.8
trans-1,3-Dichloropropene	0.17	Not Detected	0.78	Not Detected
1,1,2-Trichloroethane	0.17	Not Detected	0.94	Not Detected
Tetrachloroethene	0.17	Not Detected	1.2	Not Detected
2-Hexanone	0.86	Not Detected	3.5	Not Detected

eurofins | Air Toxics

Client Sample ID: IAS-NIC-Wash-112

Lab ID#: 1402063-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**c020718**	**Date of Collection:**	**1/31/14 6:21:00 PM**
Dil. Factor:	**1.73**	**Date of Analysis:**	**2/8/14 10:47 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.17	Not Detected	1.5	Not Detected
1,2-Dibromoethane (EDB)	0.17	Not Detected	1.3	Not Detected
Chlorobenzene	0.17	Not Detected	0.80	Not Detected
Ethyl Benzene	0.17	Not Detected	0.75	Not Detected
m,p-Xylene	0.17	Not Detected	0.75	Not Detected
o-Xylene	0.17	Not Detected	0.75	Not Detected
Styrene	0.17	Not Detected	0.74	Not Detected
Bromoform	0.17	Not Detected	1.8	Not Detected
Cumene	0.17	Not Detected	0.85	Not Detected
1,1,2,2-Tetrachloroethane	0.17	Not Detected	1.2	Not Detected
Propylbenzene	0.17	Not Detected	0.85	Not Detected
4-Ethyltoluene	0.17	Not Detected	0.85	Not Detected
1,3,5-Trimethylbenzene	0.17	Not Detected	0.85	Not Detected
1,2,4-Trimethylbenzene	0.17	Not Detected	0.85	Not Detected
1,3-Dichlorobenzene	0.17	Not Detected	1.0	Not Detected
1,4-Dichlorobenzene	0.17	Not Detected	1.0	Not Detected
alpha-Chlorotoluene	0.17	Not Detected	0.90	Not Detected
1,2-Dichlorobenzene	0.17	Not Detected	1.0	Not Detected
1,2,4-Trichlorobenzene	0.86	Not Detected	6.4	Not Detected
Hexachlorobutadiene	0.86	Not Detected UJ	9.2	Not Detected UJ

E = Exceeds instrument calibration range.
UJ = Non-detected compound associated with low bias in the CCV and/or LCS.
Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	107	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	99	70-130

eurofins | Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1402063-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**c020706**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/7/14 06:12 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.10	Not Detected	0.49	Not Detected
Freon 114	0.10	Not Detected	0.70	Not Detected
Chloromethane	0.50	Not Detected	1.0	Not Detected
Vinyl Chloride	0.10	Not Detected	0.26	Not Detected
1,3-Butadiene	0.10	Not Detected	0.22	Not Detected
Bromomethane	0.50	Not Detected	1.9	Not Detected
Chloroethane	0.50	Not Detected	1.3	Not Detected
Freon 11	0.10	Not Detected	0.56	Not Detected
Ethanol	0.50	Not Detected	0.94	Not Detected
Freon 113	0.10	Not Detected	0.77	Not Detected
1,1-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Acetone	0.50	Not Detected	1.2	Not Detected
2-Propanol	0.50	Not Detected	1.2	Not Detected
Carbon Disulfide	0.50	Not Detected	1.6	Not Detected
3-Chloropropene	0.50	Not Detected	1.6	Not Detected
Methylene Chloride	0.20	Not Detected	0.69	Not Detected
Methyl tert-butyl ether	0.10	Not Detected	0.36	Not Detected
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Hexane	0.10	Not Detected	0.35	Not Detected
1,1-Dichloroethane	0.10	Not Detected	0.40	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.50	Not Detected	1.5	Not Detected
cis-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.10	Not Detected	0.49	Not Detected
1,1,1-Trichloroethane	0.10	Not Detected	0.54	Not Detected
Cyclohexane	0.10	Not Detected	0.34	Not Detected
Carbon Tetrachloride	0.10	Not Detected	0.63	Not Detected
2,2,4-Trimethylpentane	0.50	Not Detected	2.3	Not Detected
Benzene	0.10	Not Detected	0.32	Not Detected
1,2-Dichloroethane	0.10	Not Detected	0.40	Not Detected
Heptane	0.10	Not Detected	0.41	Not Detected
Trichloroethene	0.10	Not Detected	0.54	Not Detected
1,2-Dichloropropane	0.10	Not Detected	0.46	Not Detected
1,4-Dioxane	0.10	Not Detected	0.36	Not Detected
Bromodichloromethane	0.10	Not Detected	0.67	Not Detected
cis-1,3-Dichloropropene	0.10	Not Detected	0.45	Not Detected
4-Methyl-2-pentanone	0.10	Not Detected	0.41	Not Detected
Toluene	0.10	Not Detected	0.38	Not Detected
trans-1,3-Dichloropropene	0.10	Not Detected	0.45	Not Detected
1,1,2-Trichloroethane	0.10	Not Detected	0.54	Not Detected
Tetrachloroethene	0.10	Not Detected	0.68	Not Detected
2-Hexanone	0.50	Not Detected	2.0	Not Detected

eurofins | Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1402063-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**c020706**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/7/14 06:12 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.10	Not Detected	0.85	Not Detected
1,2-Dibromoethane (EDB)	0.10	Not Detected	0.77	Not Detected
Chlorobenzene	0.10	Not Detected	0.46	Not Detected
Ethyl Benzene	0.10	Not Detected	0.43	Not Detected
m,p-Xylene	0.10	Not Detected	0.43	Not Detected
o-Xylene	0.10	Not Detected	0.43	Not Detected
Styrene	0.10	Not Detected	0.42	Not Detected
Bromoform	0.10	Not Detected	1.0	Not Detected
Cumene	0.10	Not Detected	0.49	Not Detected
1,1,2,2-Tetrachloroethane	0.10	Not Detected	0.69	Not Detected
Propylbenzene	0.10	Not Detected	0.49	Not Detected
4-Ethyltoluene	0.10	Not Detected	0.49	Not Detected
1,3,5-Trimethylbenzene	0.10	Not Detected	0.49	Not Detected
1,2,4-Trimethylbenzene	0.10	Not Detected	0.49	Not Detected
1,3-Dichlorobenzene	0.10	Not Detected	0.60	Not Detected
1,4-Dichlorobenzene	0.10	Not Detected	0.60	Not Detected
alpha-Chlorotoluene	0.10	Not Detected	0.52	Not Detected
1,2-Dichlorobenzene	0.10	Not Detected	0.60	Not Detected
1,2,4-Trichlorobenzene	0.50	Not Detected	3.7	Not Detected
Hexachlorobutadiene	0.50	Not Detected UJ	5.3	Not Detected UJ

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

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	96	70-130

eurofins | Air Toxics

Client Sample ID: CCV

Lab ID#: 1402063-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**c020702**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 2/7/14 02:41 PM**

Compound	%Recovery
Freon 12	107
Freon 114	100
Chloromethane	88
Vinyl Chloride	101
1,3-Butadiene	98
Bromomethane	106
Chloroethane	109
Freon 11	103
Ethanol	98
Freon 113	103
1,1-Dichloroethene	105
Acetone	99
2-Propanol	110
Carbon Disulfide	104
3-Chloropropene	130
Methylene Chloride	101
Methyl tert-butyl ether	117
trans-1,2-Dichloroethene	108
Hexane	112
1,1-Dichloroethane	105
2-Butanone (Methyl Ethyl Ketone)	111
cis-1,2-Dichloroethene	110
Tetrahydrofuran	107
Chloroform	106
1,1,1-Trichloroethane	110
Cyclohexane	115
Carbon Tetrachloride	119
2,2,4-Trimethylpentane	111
Benzene	101
1,2-Dichloroethane	104
Heptane	114
Trichloroethene	110
1,2-Dichloropropane	104
1,4-Dioxane	117
Bromodichloromethane	104
cis-1,3-Dichloropropene	114
4-Methyl-2-pentanone	119
Toluene	108
trans-1,3-Dichloropropene	113
1,1,2-Trichloroethane	101
Tetrachloroethene	105
2-Hexanone	120

eurofins | Air Toxics

Client Sample ID: CCV

Lab ID#: 1402063-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**c020702**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 2/7/14 02:41 PM**

Compound	%Recovery
Dibromochloromethane	112
1,2-Dibromoethane (EDB)	108
Chlorobenzene	104
Ethyl Benzene	113
m,p-Xylene	116
o-Xylene	117
Styrene	122
Bromoform	116
Cumene	116
1,1,2,2-Tetrachloroethane	106
Propylbenzene	112
4-Ethyltoluene	108
1,3,5-Trimethylbenzene	112
1,2,4-Trimethylbenzene	103
1,3-Dichlorobenzene	110
1,4-Dichlorobenzene	99
alpha-Chlorotoluene	108
1,2-Dichlorobenzene	103
1,2,4-Trichlorobenzene	70
Hexachlorobutadiene	66 Q

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	105	70-130

eurofins | Air Toxics

Client Sample ID: LCS

Lab ID#: 1402063-09A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**c020703**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/7/14 03:37 PM**	

Compound	%Recovery	Method Limits
Freon 12	108	70-130
Freon 114	102	70-130
Chloromethane	88	70-130
Vinyl Chloride	102	70-130
1,3-Butadiene	97	70-130
Bromomethane	108	70-130
Chloroethane	104	70-130
Freon 11	102	70-130
Ethanol	109	70-130
Freon 113	115	70-130
1,1-Dichloroethene	118	70-130
Acetone	96	70-130
2-Propanol	107	70-130
Carbon Disulfide	94	70-130
3-Chloropropene	111	70-130
Methylene Chloride	111	70-130
Methyl tert-butyl ether	111	70-130
trans-1,2-Dichloroethene	90	70-130
Hexane	110	70-130
1,1-Dichloroethane	102	70-130
2-Butanone (Methyl Ethyl Ketone)	103	70-130
cis-1,2-Dichloroethene	117	70-130
Tetrahydrofuran	104	70-130
Chloroform	106	70-130
1,1,1-Trichloroethane	105	70-130
Cyclohexane	112	70-130
Carbon Tetrachloride	109	70-130
2,2,4-Trimethylpentane	105	70-130
Benzene	102	70-130
1,2-Dichloroethane	103	70-130
Heptane	114	70-130
Trichloroethene	109	70-130
1,2-Dichloropropane	104	70-130
1,4-Dioxane	116	70-130
Bromodichloromethane	106	70-130
cis-1,3-Dichloropropene	120	70-130
4-Methyl-2-pentanone	125	70-130
Toluene	106	70-130
trans-1,3-Dichloropropene	102	70-130
1,1,2-Trichloroethane	97	70-130
Tetrachloroethene	102	70-130
2-Hexanone	122	70-130

eurofins | Air Toxics

Client Sample ID: LCS

Lab ID#: 1402063-09A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**c020703**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/7/14 03:37 PM**	

Compound	**%Recovery**	**Method Limits**
Dibromochloromethane	112	70-130
1,2-Dibromoethane (EDB)	104	70-130
Chlorobenzene	98	70-130
Ethyl Benzene	107	70-130
m,p-Xylene	115	70-130
o-Xylene	112	70-130
Styrene	120	70-130
Bromoform	115	70-130
Cumene	116	70-130
1,1,2,2-Tetrachloroethane	102	70-130
Propylbenzene	115	70-130
4-Ethyltoluene	111	70-130
1,3,5-Trimethylbenzene	111	70-130
1,2,4-Trimethylbenzene	98	70-130
1,3-Dichlorobenzene	109	70-130
1,4-Dichlorobenzene	101	70-130
alpha-Chlorotoluene	118	70-130
1,2-Dichlorobenzene	105	70-130
1,2,4-Trichlorobenzene	71	70-130
Hexachlorobutadiene	67 Q	70-130

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	106	70-130

eurofins | Air Toxics

Client Sample ID: LCSD

Lab ID#: 1402063-09AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**c020704**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/7/14 04:23 PM**	

Compound	%Recovery	Method Limits
Freon 12	106	70-130
Freon 114	101	70-130
Chloromethane	86	70-130
Vinyl Chloride	100	70-130
1,3-Butadiene	96	70-130
Bromomethane	109	70-130
Chloroethane	105	70-130
Freon 11	102	70-130
Ethanol	106	70-130
Freon 113	118	70-130
1,1-Dichloroethene	120	70-130
Acetone	101	70-130
2-Propanol	112	70-130
Carbon Disulfide	99	70-130
3-Chloropropene	123	70-130
Methylene Chloride	111	70-130
Methyl tert-butyl ether	112	70-130
trans-1,2-Dichloroethene	93	70-130
Hexane	110	70-130
1,1-Dichloroethane	105	70-130
2-Butanone (Methyl Ethyl Ketone)	113	70-130
cis-1,2-Dichloroethene	123	70-130
Tetrahydrofuran	107	70-130
Chloroform	110	70-130
1,1,1-Trichloroethane	109	70-130
Cyclohexane	118	70-130
Carbon Tetrachloride	112	70-130
2,2,4-Trimethylpentane	106	70-130
Benzene	102	70-130
1,2-Dichloroethane	106	70-130
Heptane	113	70-130
Trichloroethene	110	70-130
1,2-Dichloropropane	104	70-130
1,4-Dioxane	124	70-130
Bromodichloromethane	110	70-130
cis-1,3-Dichloropropene	120	70-130
4-Methyl-2-pentanone	125	70-130
Toluene	105	70-130
trans-1,3-Dichloropropene	109	70-130
1,1,2-Trichloroethane	102	70-130
Tetrachloroethene	111	70-130
2-Hexanone	125	70-130

eurofins | Air Toxics

Client Sample ID: LCSD

Lab ID#: 1402063-09AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**c020704**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/7/14 04:23 PM**	

Compound	%Recovery	Method Limits
Dibromochloromethane	120	70-130
1,2-Dibromoethane (EDB)	110	70-130
Chlorobenzene	103	70-130
Ethyl Benzene	112	70-130
m,p-Xylene	116	70-130
o-Xylene	112	70-130
Styrene	120	70-130
Bromoform	120	70-130
Cumene	117	70-130
1,1,2,2-Tetrachloroethane	105	70-130
Propylbenzene	117	70-130
4-Ethyltoluene	116	70-130
1,3,5-Trimethylbenzene	113	70-130
1,2,4-Trimethylbenzene	101	70-130
1,3-Dichlorobenzene	109	70-130
1,4-Dichlorobenzene	101	70-130
alpha-Chlorotoluene	122	70-130
1,2-Dichlorobenzene	105	70-130
1,2,4-Trichlorobenzene	73	70-130
Hexachlorobutadiene	65 Q	70-130

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	107	70-130

eurofins | Air Toxics

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: Monica Williams
Collected by: (Print and Sign) Monica Williams
Company: CDM Smith
Email: williamsmk@cdmsmith.com
Address: 315 Riverview St Ste 300
City: Wichita
State: KS
Zip: 67203
Phone: 316-660-6700
Fax: 316-264-3025

Project Info:
P.O. #
Project #
Project Name: KDHE-NK V1

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)
01A	IAS-NIC-Park-107	35246	1/31/14	1648	TO-15	-28.5	-6		
02A	IAS-NIC-Park-131	11026	1/31/14	1657	TO-15	-29	-6.5		
03A	IAS-NIC-Louv-7	30845	1/31/14	1720	TO-15	-29	-7		
04A	IAS-NIC-Louv-27	32113	1/31/14	1735	TO-15	-29	-7		
05A	IAS-NIC-Wash-138	34192	1/31/14	1810	TO-15	-29	-8		
06A	IAS-NIC-Wash-112	05362	1/31/14	1821	TO-15	-29	-6.5		

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
[signature]	2/3/14 0906	[signature]	2/5/14 1020

Notes:

Lab Use Only: Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
Fedex		NA	Good	Yes No None	1402063

Form 1293 rev.11

eurofins | Air Toxics

2/25/2014
Ms. Monica Williams
CDM Smith Inc.
345 Riverview
Suite 520
Wichita KS 67203

Project Name: KDHEVI-NIC Schools
Project #:
Workorder #: 1402126A

Dear Ms. Monica Williams

The following report includes the data for the above referenced project for sample(s) received on 2/10/2014 at Air Toxics Ltd.

The data and associated QC analyzed by Passive S.E. RAD130/SKC 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: Kelly Buettner at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Kelly Buettner

Project Manager

eurofins | Air Toxics

WORK ORDER #: 1402126A

Work Order Summary

CLIENT:	Ms. Monica Williams CDM Smith Inc. 345 Riverview Suite 520 Wichita, KS 67203	**BILL TO:**	Ms. Monica Williams CDM Smith Inc. 345 Riverview Suite 520 Wichita, KS 67203
PHONE:	316-660-6716	**P.O. #**	
FAX:	316-264-3025	**PROJECT #**	KDHEVI-NIC Schools
DATE RECEIVED:	02/10/2014	**CONTACT:**	Kelly Buettner
DATE COMPLETED:	02/25/2014		

FRACTION #	NAME	TEST
01A	OAP-NIC-LOUV-OA1	Passive S.E. RAD130/SKC
02A	OAP-NIC-LOUV-OA2	Passive S.E. RAD130/SKC
03A	IAP-NIC-LOUV-7	Passive S.E. RAD130/SKC
04A	IAP-NIC-LOUV-3	Passive S.E. RAD130/SKC
05A	IAP-NIC-LOUV-10	Passive S.E. RAD130/SKC
06A	IAP-NIC-LOUV-15	Passive S.E. RAD130/SKC
07A	IAP-NIC-LOUV-20	Passive S.E. RAD130/SKC
08A	IAP-NIC-LOUV-21	Passive S.E. RAD130/SKC
09A	IAP-NIC-LOUV-27	Passive S.E. RAD130/SKC
10A	IAP-NIC-LOUV-31	Passive S.E. RAD130/SKC
11A	OAP-NIC-LOUV-OA1Q	Passive S.E. RAD130/SKC
12A	OAP-NIC-Park-OA1	Passive S.E. RAD130/SKC
13A	OAP-NIC-Park-OA2	Passive S.E. RAD130/SKC
14A	IAP-NIC-Park-138	Passive S.E. RAD130/SKC
15A	IAP-NIC-Park-135	Passive S.E. RAD130/SKC
16A	IAP-NIC-Park-131	Passive S.E. RAD130/SKC
17A	IAP-NIC-Park-128	Passive S.E. RAD130/SKC
18A	IAP-NIC-Park-107	Passive S.E. RAD130/SKC
19A(cancelled)	IAP-NIC-Park-110	Passive S.E. RAD130/SKC
20A	IAP-NIC-Park-101E	Passive S.E. RAD130/SKC
21A	Lab Blank	Passive S.E. RAD130/SKC
22A	LCS	Passive S.E. RAD130/SKC
22AA	LCSD	Passive S.E. RAD130/SKC

CERTIFIED BY: Heidi Mayo

Technical Director

DATE: 02/25/14

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

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 9563
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Passive SE GC/MS
CDM Smith Inc.
Workorder# 1402126A

Twenty Radiello 130 (Solvent) samples were received on February 10, 2014. The laboratory extracted the charcoal sorbent bed of the passive sampler using carbon disulfide. An aliquot of the extract was injected into a GC/MS for identification and quantification of volatile organic compounds (VOCs).

The mass of each target compound adsorbed by the sampler was converted to units of concentration using the sample deployment time and the sampling rate for each VOC. If sampling rates were calculated by the lab or the manufacturer, the concentration result has been flagged as an estimated value.

Receiving Notes

The Chain of Custody was missing method information or contained incorrect method information. ATL proceeded with the analysis as per the original contract.

Analytical Notes

Sample IAP-NIC-Park-110 was not reported because the extract was lost in a laboratory accident.

Sample concentrations were calculated using sampling rates provided by the manufacturer.
These sampling rate values already take into account the desorption efficiency with carbon disulfide. As a result, the average concentration over the sampling duration is calculated from the mass of analyte measured and the exposure time without a correction factor. Results were calculated based on 25 deg C without temperature correction.

The rates for Vinyl Chloride, 1,1-Dichloroethene, 1,1-Dichloroethane, cis-1,2-Dichloroethene and trans-1,2-Dichloroethene were estimated based on diffusion coefficient and the geometric constant of the sampler. The resulting concentration for these compounds is flagged with a 'C' to indicate the calculated concentration is an estimated value.

The actual exposure time was used to calculate sample concentrations and reporting limits. An exposure time of 10096 minutes was used for the Laboratory Blank.

The Relative Percent Difference (RPD) of the LCS/LCSD exceeded acceptance limits for Chloroform.

Definition of Data Qualifying Flags

Nine 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
N - The identification is based on presumptive evidence.
C - Estimated concentration due to calculated sampling rate

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

eurofins | Air Toxics

Summary of Detected Compounds
VOCS BY PASSIVE SAMPLER - GC/MS

Client Sample ID: OAP-NIC-LOUV-OA1

Lab ID#: 1402126A-01A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	0.64	0.82
Hexane	0.10	0.15	0.25	0.38
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.22	0.28
Carbon Tetrachloride	0.10	0.15	0.26	0.38
Benzene	0.40	0.50	0.53	0.65
Toluene	0.10	0.13	0.27	0.36

Client Sample ID: OAP-NIC-LOUV-OA2

Lab ID#: 1402126A-02A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	0.63	0.81
Hexane	0.10	0.15	0.17	0.25
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.22	0.28
Carbon Tetrachloride	0.10	0.15	0.25	0.37
Benzene	0.40	0.50	0.51	0.64
Toluene	0.10	0.13	0.25	0.34

Client Sample ID: IAP-NIC-LOUV-7

Lab ID#: 1402126A-03A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	5.7	7.3
Hexane	0.10	0.15	0.38	0.57
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.30	0.38
Cyclohexane	0.10	0.18	0.10	0.19
Carbon Tetrachloride	0.10	0.15	0.27	0.40
Benzene	0.40	0.50	0.58	0.71
Heptane	0.10	0.17	0.12	0.21
Toluene	0.10	0.13	0.56	0.76
m,p-Xylene	0.10	0.14	0.18	0.25

eurofins | Air Toxics

Summary of Detected Compounds
VOCS BY PASSIVE SAMPLER - GC/MS

Client Sample ID: IAP-NIC-LOUV-3

Lab ID#: 1402126A-04A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	3.5	4.5
Hexane	0.10	0.15	0.30	0.44
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.24	0.30
Carbon Tetrachloride	0.10	0.15	0.21	0.31
Benzene	0.40	0.50	0.47	0.58
Heptane	0.10	0.17	0.15	0.26
Toluene	0.10	0.13	0.47	0.63
m,p-Xylene	0.10	0.14	0.14	0.20

Client Sample ID: IAP-NIC-LOUV-10

Lab ID#: 1402126A-05A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	5.0	6.4
Hexane	0.10	0.15	0.49	0.74
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.30	0.37
Cyclohexane	0.10	0.18	0.12	0.23
Carbon Tetrachloride	0.10	0.15	0.25	0.37
Benzene	0.40	0.50	0.53	0.66
Heptane	0.10	0.17	0.29	0.50
Toluene	0.10	0.13	0.75	1.0
Ethyl Benzene	0.10	0.14	0.10	0.14
m,p-Xylene	0.10	0.14	0.28	0.39

Client Sample ID: IAP-NIC-LOUV-15

Lab ID#: 1402126A-06A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	17	22
Hexane	0.10	0.15	0.22	0.33
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.32	0.40
Carbon Tetrachloride	0.10	0.15	0.23	0.34
Benzene	0.40	0.50	0.48	0.60

eurofins | Air Toxics

Summary of Detected Compounds
VOCS BY PASSIVE SAMPLER - GC/MS

Client Sample ID: IAP-NIC-LOUV-15

Lab ID#: 1402126A-06A

Heptane	0.10	0.17	0.14	0.24
Toluene	0.10	0.13	0.55	0.74
m,p-Xylene	0.10	0.14	0.13	0.19

Client Sample ID: IAP-NIC-LOUV-20

Lab ID#: 1402126A-07A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	8.7	11
Hexane	0.10	0.15	0.28	0.42
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.35	0.44
Cyclohexane	0.10	0.18	0.10	0.19
Carbon Tetrachloride	0.10	0.15	0.21	0.31
Benzene	0.40	0.50	0.42	0.52
Heptane	0.10	0.17	0.20	0.34
Toluene	0.10	0.13	0.43	0.58
m,p-Xylene	0.10	0.14	0.14	0.20

Client Sample ID: IAP-NIC-LOUV-21

Lab ID#: 1402126A-08A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	10	13
Hexane	0.10	0.15	0.20	0.31
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.32	0.40
Carbon Tetrachloride	0.10	0.15	0.24	0.35
Benzene	0.40	0.50	0.49	0.61
Heptane	0.10	0.17	0.11	0.19
Toluene	0.10	0.13	0.42	0.56
m,p-Xylene	0.10	0.14	0.14	0.19

Client Sample ID: IAP-NIC-LOUV-27

Lab ID#: 1402126A-09A

eurofins | Air Toxics

Summary of Detected Compounds
VOCS BY PASSIVE SAMPLER - GC/MS

Client Sample ID: IAP-NIC-LOUV-27

Lab ID#: 1402126A-09A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	46	59
Hexane	0.10	0.15	0.34	0.52
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.38	0.48
Chloroform	0.10	0.13	0.10	0.14
Carbon Tetrachloride	0.10	0.15	0.20	0.30
Benzene	0.40	0.50	0.42	0.52
1,2-Dichloroethane	0.10	0.13	0.14	0.18
Heptane	0.10	0.17	0.15	0.26
Toluene	0.10	0.13	1.2	1.6
m,p-Xylene	0.10	0.14	0.20	0.29

Client Sample ID: IAP-NIC-LOUV-31

Lab ID#: 1402126A-10A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	47	60
Hexane	0.10	0.15	0.26	0.38
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.40	0.51
Chloroform	0.10	0.13	0.11	0.14
Cyclohexane	0.10	0.18	0.72	1.3
Carbon Tetrachloride	0.10	0.15	0.22	0.33
Benzene	0.40	0.50	0.46	0.57
1,2-Dichloroethane	0.10	0.13	0.14	0.19
Heptane	0.10	0.17	0.20	0.35
Toluene	0.10	0.13	1.2	1.6
Ethyl Benzene	0.10	0.14	0.17	0.25
m,p-Xylene	0.10	0.14	0.56	0.79
o-Xylene	0.10	0.15	0.15	0.24

Client Sample ID: OAP-NIC-LOUV-OA1Q

Lab ID#: 1402126A-11A

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

eurofins | Air Toxics

Summary of Detected Compounds
VOCS BY PASSIVE SAMPLER - GC/MS

Client Sample ID: OAP-NIC-LOUV-OA1Q

Lab ID#: 1402126A-11A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.29	0.54	0.80
Hexane	0.10	0.17	0.19	0.33
2-Butanone (Methyl Ethyl Ketone)	0.10	0.14	0.20	0.28
Cyclohexane	0.10	0.21	0.63	1.3
Carbon Tetrachloride	0.10	0.17	0.23	0.39
Benzene	0.40	0.56	0.50	0.70
Toluene	0.10	0.15	0.23	0.35

Client Sample ID: OAP-NIC-Park-OA1

Lab ID#: 1402126A-12A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	0.61	0.79
Hexane	0.10	0.15	0.28	0.43
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.24	0.31
Cyclohexane	0.10	0.18	0.66	1.2
Carbon Tetrachloride	0.10	0.15	0.25	0.37
Benzene	0.40	0.50	0.54	0.66
Heptane	0.10	0.17	0.10	0.17
Toluene	0.10	0.13	0.28	0.38
m,p-Xylene	0.10	0.14	0.11	0.16

Client Sample ID: OAP-NIC-Park-OA2

Lab ID#: 1402126A-13A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	0.41	0.52
Hexane	0.10	0.15	0.16	0.23
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.19	0.24
Cyclohexane	0.10	0.18	0.74	1.4
Carbon Tetrachloride	0.10	0.15	0.18	0.26
Toluene	0.10	0.13	0.26	0.34
m,p-Xylene	0.10	0.14	0.11	0.16

eurofins | Air Toxics

Summary of Detected Compounds
VOCS BY PASSIVE SAMPLER - GC/MS

Client Sample ID: OAP-NIC-Park-OA2

Lab ID#: 1402126A-13A

Client Sample ID: IAP-NIC-Park-138

Lab ID#: 1402126A-14A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	6.3	8.1
Hexane	0.10	0.15	0.24	0.36
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.42	0.52
Cyclohexane	0.10	0.18	0.78	1.4
Carbon Tetrachloride	0.10	0.15	0.24	0.35
Benzene	0.40	0.50	0.52	0.64
Heptane	0.10	0.17	0.32	0.54
Toluene	0.10	0.13	0.43	0.57
Ethyl Benzene	0.10	0.14	0.12	0.17
m,p-Xylene	0.10	0.14	0.29	0.42
o-Xylene	0.10	0.15	0.10	0.16

Client Sample ID: IAP-NIC-Park-135

Lab ID#: 1402126A-15A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	5.2	6.7
Hexane	0.10	0.15	0.35	0.52
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.39	0.49
Cyclohexane	0.10	0.18	0.81	1.5
Carbon Tetrachloride	0.10	0.15	0.26	0.38
Benzene	0.40	0.50	0.55	0.68
Heptane	0.10	0.17	0.22	0.37
Toluene	0.10	0.13	0.47	0.63
m,p-Xylene	0.10	0.14	0.21	0.30

Client Sample ID: IAP-NIC-Park-131

Lab ID#: 1402126A-16A

eurofins | Air Toxics

Summary of Detected Compounds
VOCS BY PASSIVE SAMPLER - GC/MS

Client Sample ID: IAP-NIC-Park-131

Lab ID#: 1402126A-16A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	4.9	6.4
Hexane	0.10	0.15	0.22	0.33
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.39	0.49
Cyclohexane	0.10	0.18	0.76	1.4
Carbon Tetrachloride	0.10	0.15	0.22	0.32
Benzene	0.40	0.50	0.48	0.59
Heptane	0.10	0.17	0.24	0.40
Toluene	0.10	0.13	0.46	0.62
m,p-Xylene	0.10	0.14	0.18	0.26

Client Sample ID: IAP-NIC-Park-128

Lab ID#: 1402126A-17A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	6.5	8.3
Hexane	0.10	0.15	0.21	0.32
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.38	0.48
Cyclohexane	0.10	0.18	0.72	1.3
Carbon Tetrachloride	0.10	0.15	0.21	0.32
Benzene	0.40	0.50	0.48	0.59
Heptane	0.10	0.17	0.20	0.34
Toluene	0.10	0.13	0.49	0.66
m,p-Xylene	0.10	0.14	0.20	0.28

Client Sample ID: IAP-NIC-Park-107

Lab ID#: 1402126A-18A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	2.8	3.6
Hexane	0.10	0.15	0.28	0.43
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.32	0.40
Cyclohexane	0.10	0.18	0.94	1.7
Carbon Tetrachloride	0.10	0.15	0.23	0.34

eurofins | Air Toxics

Summary of Detected Compounds
VOCS BY PASSIVE SAMPLER - GC/MS

Client Sample ID: IAP-NIC-Park-107

Lab ID#: 1402126A-18A

Benzene	0.40	0.50	0.52	0.64
Heptane	0.10	0.17	0.15	0.26
Toluene	0.10	0.13	0.42	0.57
Ethyl Benzene	0.10	0.15	0.25	0.36
m,p-Xylene	0.10	0.14	0.39	0.56
o-Xylene	0.10	0.15	0.15	0.23

Client Sample ID: IAP-NIC-Park-101E

Lab ID#: 1402126A-20A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	6.7	8.6
Hexane	0.10	0.15	0.28	0.42
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.38	0.48
Cyclohexane	0.10	0.18	0.82	1.5
Carbon Tetrachloride	0.10	0.15	0.22	0.32
Benzene	0.40	0.50	0.50	0.62
Heptane	0.10	0.17	0.52	0.89
Toluene	0.10	0.13	1.2	1.6
Ethyl Benzene	0.10	0.14	0.13	0.19
m,p-Xylene	0.10	0.14	0.33	0.47
o-Xylene	0.10	0.15	0.13	0.20

eurofins | Air Toxics

Client Sample ID: OAP-NIC-LOUV-OA1

Lab ID#: 1402126A-01A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	**10021207sim**	**Date of Collection: 2/7/14 4:58:00 PM**
Dil. Factor:	**1.00**	**Date of Analysis: 2/12/14 12:29 PM**
		Date of Extraction: 2/12/14

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	0.64	0.82
Methyl tert-butyl ether	0.10	0.15	Not Detected	Not Detected
Hexane	0.10	0.15	0.25	0.38
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.22	0.28
Chloroform	0.10	0.13	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.16	Not Detected	Not Detected
Cyclohexane	0.10	0.18	Not Detected	Not Detected
Carbon Tetrachloride	0.10	0.15	0.26	0.38
Benzene	0.40	0.50	0.53	0.65
1,2-Dichloroethane	0.10	0.13	Not Detected	Not Detected
Heptane	0.10	0.17	Not Detected	Not Detected
Trichloroethene	0.10	0.14	Not Detected	Not Detected
Toluene	0.10	0.13	0.27	0.36
Tetrachloroethene	0.10	0.17	Not Detected	Not Detected
Ethyl Benzene	0.10	0.15	Not Detected	Not Detected
m,p-Xylene	0.10	0.14	Not Detected	Not Detected
o-Xylene	0.10	0.15	Not Detected	Not Detected
1,1-Dichloroethene	0.40	0.52	Not Detected C	Not Detected C
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.33	Not Detected C	Not Detected C
Vinyl Chloride	0.40	0.44	Not Detected C	Not Detected C
1,1-Dichloroethane	0.10	0.16	Not Detected C	Not Detected C

C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 10069 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	106	70-130

eurofins | Air Toxics

Client Sample ID: OAP-NIC-LOUV-OA2

Lab ID#: 1402126A-02A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	**10021208sim**	**Date of Collection: 2/7/14 5:06:00 PM**
Dil. Factor:	**1.00**	**Date of Analysis: 2/12/14 12:52 PM**
		Date of Extraction: 2/12/14

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	0.63	0.81
Methyl tert-butyl ether	0.10	0.15	Not Detected	Not Detected
Hexane	0.10	0.15	0.17	0.25
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.22	0.28
Chloroform	0.10	0.13	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.16	Not Detected	Not Detected
Cyclohexane	0.10	0.18	Not Detected	Not Detected
Carbon Tetrachloride	0.10	0.15	0.25	0.37
Benzene	0.40	0.50	0.51	0.64
1,2-Dichloroethane	0.10	0.13	Not Detected	Not Detected
Heptane	0.10	0.17	Not Detected	Not Detected
Trichloroethene	0.10	0.14	Not Detected	Not Detected
Toluene	0.10	0.13	0.25	0.34
Tetrachloroethene	0.10	0.17	Not Detected	Not Detected
Ethyl Benzene	0.10	0.14	Not Detected	Not Detected
m,p-Xylene	0.10	0.14	Not Detected	Not Detected
o-Xylene	0.10	0.15	Not Detected	Not Detected
1,1-Dichloroethene	0.40	0.52	Not Detected C	Not Detected C
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.33	Not Detected C	Not Detected C
Vinyl Chloride	0.40	0.44	Not Detected C	Not Detected C
1,1-Dichloroethane	0.10	0.16	Not Detected C	Not Detected C

C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 10074 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130

eurofins | Air Toxics

Client Sample ID: IAP-NIC-LOUV-7

Lab ID#: 1402126A-03A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	**10021209sim**	**Date of Collection: 2/7/14 5:14:00 PM**
Dil. Factor:	**1.00**	**Date of Analysis: 2/12/14 01:15 PM**
		Date of Extraction: 2/12/14

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	5.7	7.3
Methyl tert-butyl ether	0.10	0.15	Not Detected	Not Detected
Hexane	0.10	0.15	0.38	0.57
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.30	0.38
Chloroform	0.10	0.13	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.16	Not Detected	Not Detected
Cyclohexane	0.10	0.18	0.10	0.19
Carbon Tetrachloride	0.10	0.15	0.27	0.40
Benzene	0.40	0.50	0.58	0.71
1,2-Dichloroethane	0.10	0.13	Not Detected	Not Detected
Heptane	0.10	0.17	0.12	0.21
Trichloroethene	0.10	0.14	Not Detected	Not Detected
Toluene	0.10	0.13	0.56	0.76
Tetrachloroethene	0.10	0.17	Not Detected	Not Detected
Ethyl Benzene	0.10	0.14	Not Detected	Not Detected
m,p-Xylene	0.10	0.14	0.18	0.25
o-Xylene	0.10	0.15	Not Detected	Not Detected
1,1-Dichloroethene	0.40	0.52	Not Detected C	Not Detected C
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.33	Not Detected C	Not Detected C
Vinyl Chloride	0.40	0.44	Not Detected C	Not Detected C
1,1-Dichloroethane	0.10	0.16	Not Detected C	Not Detected C

C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 10076 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130

eurofins | Air Toxics

Client Sample ID: IAP-NIC-LOUV-3

Lab ID#: 1402126A-04A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	**10021210sim**	**Date of Collection: 2/7/14 5:11:00 PM**
Dil. Factor:	**1.00**	**Date of Analysis: 2/12/14 01:38 PM**
		Date of Extraction: 2/12/14

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	3.5	4.5
Methyl tert-butyl ether	0.10	0.15	Not Detected	Not Detected
Hexane	0.10	0.15	0.30	0.44
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.24	0.30
Chloroform	0.10	0.13	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.16	Not Detected	Not Detected
Cyclohexane	0.10	0.18	Not Detected	Not Detected
Carbon Tetrachloride	0.10	0.15	0.21	0.31
Benzene	0.40	0.50	0.47	0.58
1,2-Dichloroethane	0.10	0.13	Not Detected	Not Detected
Heptane	0.10	0.17	0.15	0.26
Trichloroethene	0.10	0.14	Not Detected	Not Detected
Toluene	0.10	0.13	0.47	0.63
Tetrachloroethene	0.10	0.17	Not Detected	Not Detected
Ethyl Benzene	0.10	0.15	Not Detected	Not Detected
m,p-Xylene	0.10	0.14	0.14	0.20
o-Xylene	0.10	0.15	Not Detected	Not Detected
1,1-Dichloroethene	0.40	0.52	Not Detected C	Not Detected C
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.33	Not Detected C	Not Detected C
Vinyl Chloride	0.40	0.44	Not Detected C	Not Detected C
1,1-Dichloroethane	0.10	0.16	Not Detected C	Not Detected C

C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 10070 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130

eurofins | Air Toxics

Client Sample ID: IAP-NIC-LOUV-10

Lab ID#: 1402126A-05A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	**10021211sim**	**Date of Collection: 2/7/14 5:18:00 PM**
Dil. Factor:	**1.00**	**Date of Analysis: 2/12/14 02:02 PM**
		Date of Extraction: 2/12/14

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	5.0	6.4
Methyl tert-butyl ether	0.10	0.15	Not Detected	Not Detected
Hexane	0.10	0.15	0.49	0.74
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.30	0.37
Chloroform	0.10	0.13	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.16	Not Detected	Not Detected
Cyclohexane	0.10	0.18	0.12	0.23
Carbon Tetrachloride	0.10	0.15	0.25	0.37
Benzene	0.40	0.50	0.53	0.66
1,2-Dichloroethane	0.10	0.13	Not Detected	Not Detected
Heptane	0.10	0.17	0.29	0.50
Trichloroethene	0.10	0.14	Not Detected	Not Detected
Toluene	0.10	0.13	0.75	1.0
Tetrachloroethene	0.10	0.17	Not Detected	Not Detected
Ethyl Benzene	0.10	0.14	0.10	0.14
m,p-Xylene	0.10	0.14	0.28	0.39
o-Xylene	0.10	0.15	Not Detected	Not Detected
1,1-Dichloroethene	0.40	0.52	Not Detected C	Not Detected C
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.33	Not Detected C	Not Detected C
Vinyl Chloride	0.40	0.44	Not Detected C	Not Detected C
1,1-Dichloroethane	0.10	0.16	Not Detected C	Not Detected C

C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 10073 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130

eurofins | Air Toxics

Client Sample ID: IAP-NIC-LOUV-15

Lab ID#: 1402126A-06A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	**10021212sim**	**Date of Collection: 2/7/14 5:23:00 PM**
Dil. Factor:	**1.00**	**Date of Analysis: 2/12/14 02:25 PM**
		Date of Extraction: 2/12/14

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	17	22
Methyl tert-butyl ether	0.10	0.15	Not Detected	Not Detected
Hexane	0.10	0.15	0.22	0.33
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.32	0.40
Chloroform	0.10	0.13	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.16	Not Detected	Not Detected
Cyclohexane	0.10	0.18	Not Detected	Not Detected
Carbon Tetrachloride	0.10	0.15	0.23	0.34
Benzene	0.40	0.50	0.48	0.60
1,2-Dichloroethane	0.10	0.13	Not Detected	Not Detected
Heptane	0.10	0.17	0.14	0.24
Trichloroethene	0.10	0.14	Not Detected	Not Detected
Toluene	0.10	0.13	0.55	0.74
Tetrachloroethene	0.10	0.17	Not Detected	Not Detected
Ethyl Benzene	0.10	0.14	Not Detected	Not Detected
m,p-Xylene	0.10	0.14	0.13	0.19
o-Xylene	0.10	0.15	Not Detected	Not Detected
1,1-Dichloroethene	0.40	0.52	Not Detected C	Not Detected C
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.33	Not Detected C	Not Detected C
Vinyl Chloride	0.40	0.44	Not Detected C	Not Detected C
1,1-Dichloroethane	0.10	0.16	Not Detected C	Not Detected C

C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 10076 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130

eurofins | Air Toxics

Client Sample ID: IAP-NIC-LOUV-20

Lab ID#: 1402126A-07A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	**10021213sim**	**Date of Collection: 2/7/14 5:27:00 PM**
Dil. Factor:	**1.00**	**Date of Analysis: 2/12/14 02:48 PM**
		Date of Extraction: 2/12/14

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	8.7	11
Methyl tert-butyl ether	0.10	0.15	Not Detected	Not Detected
Hexane	0.10	0.15	0.28	0.42
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.35	0.44
Chloroform	0.10	0.13	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.16	Not Detected	Not Detected
Cyclohexane	0.10	0.18	0.10	0.19
Carbon Tetrachloride	0.10	0.15	0.21	0.31
Benzene	0.40	0.50	0.42	0.52
1,2-Dichloroethane	0.10	0.13	Not Detected	Not Detected
Heptane	0.10	0.17	0.20	0.34
Trichloroethene	0.10	0.14	Not Detected	Not Detected
Toluene	0.10	0.13	0.43	0.58
Tetrachloroethene	0.10	0.17	Not Detected	Not Detected
Ethyl Benzene	0.10	0.14	Not Detected	Not Detected
m,p-Xylene	0.10	0.14	0.14	0.20
o-Xylene	0.10	0.15	Not Detected	Not Detected
1,1-Dichloroethene	0.40	0.52	Not Detected C	Not Detected C
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.33	Not Detected C	Not Detected C
Vinyl Chloride	0.40	0.44	Not Detected C	Not Detected C
1,1-Dichloroethane	0.10	0.16	Not Detected C	Not Detected C

C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 10077 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130

eurofins | Air Toxics

Client Sample ID: IAP-NIC-LOUV-21

Lab ID#: 1402126A-08A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	**10021214sim**	**Date of Collection: 2/7/14 5:30:00 PM**
Dil. Factor:	**1.00**	**Date of Analysis: 2/12/14 03:11 PM**
		Date of Extraction: 2/12/14

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	10	13
Methyl tert-butyl ether	0.10	0.15	Not Detected	Not Detected
Hexane	0.10	0.15	0.20	0.31
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.32	0.40
Chloroform	0.10	0.13	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.16	Not Detected	Not Detected
Cyclohexane	0.10	0.18	Not Detected	Not Detected
Carbon Tetrachloride	0.10	0.15	0.24	0.35
Benzene	0.40	0.50	0.49	0.61
1,2-Dichloroethane	0.10	0.13	Not Detected	Not Detected
Heptane	0.10	0.17	0.11	0.19
Trichloroethene	0.10	0.14	Not Detected	Not Detected
Toluene	0.10	0.13	0.42	0.56
Tetrachloroethene	0.10	0.17	Not Detected	Not Detected
Ethyl Benzene	0.10	0.14	Not Detected	Not Detected
m,p-Xylene	0.10	0.14	0.14	0.19
o-Xylene	0.10	0.15	Not Detected	Not Detected
1,1-Dichloroethene	0.40	0.52	Not Detected C	Not Detected C
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.33	Not Detected C	Not Detected C
Vinyl Chloride	0.40	0.44	Not Detected C	Not Detected C
1,1-Dichloroethane	0.10	0.16	Not Detected C	Not Detected C

C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 10078 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130

eurofins | Air Toxics

Client Sample ID: IAP-NIC-LOUV-27

Lab ID#: 1402126A-09A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	**10021215sim**	**Date of Collection: 2/7/14 5:35:00 PM**
Dil. Factor:	**1.00**	**Date of Analysis: 2/12/14 03:35 PM**
		Date of Extraction: 2/12/14

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	46	59
Methyl tert-butyl ether	0.10	0.15	Not Detected	Not Detected
Hexane	0.10	0.15	0.34	0.52
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.38	0.48
Chloroform	0.10	0.13	0.10	0.14
1,1,1-Trichloroethane	0.10	0.16	Not Detected	Not Detected
Cyclohexane	0.10	0.18	Not Detected	Not Detected
Carbon Tetrachloride	0.10	0.15	0.20	0.30
Benzene	0.40	0.50	0.42	0.52
1,2-Dichloroethane	0.10	0.13	0.14	0.18
Heptane	0.10	0.17	0.15	0.26
Trichloroethene	0.10	0.14	Not Detected	Not Detected
Toluene	0.10	0.13	1.2	1.6
Tetrachloroethene	0.10	0.17	Not Detected	Not Detected
Ethyl Benzene	0.10	0.14	Not Detected	Not Detected
m,p-Xylene	0.10	0.14	0.20	0.29
o-Xylene	0.10	0.15	Not Detected	Not Detected
1,1-Dichloroethene	0.40	0.52	Not Detected C	Not Detected C
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.33	Not Detected C	Not Detected C
Vinyl Chloride	0.40	0.44	Not Detected C	Not Detected C
1,1-Dichloroethane	0.10	0.16	Not Detected C	Not Detected C

C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 10079 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130

eurofins | Air Toxics

Client Sample ID: IAP-NIC-LOUV-31

Lab ID#: 1402126A-10A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	**10021216sim**	**Date of Collection: 2/7/14 5:39:00 PM**
Dil. Factor:	**1.00**	**Date of Analysis: 2/12/14 03:58 PM**
		Date of Extraction: 2/12/14

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	47	60
Methyl tert-butyl ether	0.10	0.15	Not Detected	Not Detected
Hexane	0.10	0.15	0.26	0.38
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.40	0.51
Chloroform	0.10	0.13	0.11	0.14
1,1,1-Trichloroethane	0.10	0.16	Not Detected	Not Detected
Cyclohexane	0.10	0.18	0.72	1.3
Carbon Tetrachloride	0.10	0.15	0.22	0.33
Benzene	0.40	0.50	0.46	0.57
1,2-Dichloroethane	0.10	0.13	0.14	0.19
Heptane	0.10	0.17	0.20	0.35
Trichloroethene	0.10	0.14	Not Detected	Not Detected
Toluene	0.10	0.13	1.2	1.6
Tetrachloroethene	0.10	0.17	Not Detected	Not Detected
Ethyl Benzene	0.10	0.14	0.17	0.25
m,p-Xylene	0.10	0.14	0.56	0.79
o-Xylene	0.10	0.15	0.15	0.24
1,1-Dichloroethene	0.40	0.52	Not Detected C	Not Detected C
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.33	Not Detected C	Not Detected C
Vinyl Chloride	0.40	0.44	Not Detected C	Not Detected C
1,1-Dichloroethane	0.10	0.16	Not Detected C	Not Detected C

C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 10081 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130

eurofins | Air Toxics

Client Sample ID: OAP-NIC-LOUV-OA1Q

Lab ID#: 1402126A-11A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	**10021217sim**	**Date of Collection: 2/7/14 5:02:00 PM**
Dil. Factor:	**1.00**	**Date of Analysis: 2/12/14 04:21 PM**
		Date of Extraction: 2/12/14

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.29	0.54	0.80
Methyl tert-butyl ether	0.10	0.17	Not Detected	Not Detected
Hexane	0.10	0.17	0.19	0.33
2-Butanone (Methyl Ethyl Ketone)	0.10	0.14	0.20	0.28
Chloroform	0.10	0.15	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.18	Not Detected	Not Detected
Cyclohexane	0.10	0.21	0.63	1.3
Carbon Tetrachloride	0.10	0.17	0.23	0.39
Benzene	0.40	0.56	0.50	0.70
1,2-Dichloroethane	0.10	0.15	Not Detected	Not Detected
Heptane	0.10	0.19	Not Detected	Not Detected
Trichloroethene	0.10	0.16	Not Detected	Not Detected
Toluene	0.10	0.15	0.23	0.35
Tetrachloroethene	0.10	0.19	Not Detected	Not Detected
Ethyl Benzene	0.10	0.16	Not Detected	Not Detected
m,p-Xylene	0.10	0.16	Not Detected	Not Detected
o-Xylene	0.10	0.17	Not Detected	Not Detected
1,1-Dichloroethene	0.40	0.59	Not Detected C	Not Detected C
cis-1,2-Dichloroethene	0.10	0.18	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.38	Not Detected C	Not Detected C
Vinyl Chloride	0.40	0.50	Not Detected C	Not Detected C
1,1-Dichloroethane	0.10	0.18	Not Detected C	Not Detected C

C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 8887 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130

eurofins | Air Toxics

Client Sample ID: OAP-NIC-Park-OA1

Lab ID#: 1402126A-12A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	**10021218sim**	**Date of Collection: 2/7/14 3:56:00 PM**
Dil. Factor:	**1.00**	**Date of Analysis: 2/12/14 04:45 PM**
		Date of Extraction: 2/12/14

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	0.61	0.79
Methyl tert-butyl ether	0.10	0.15	Not Detected	Not Detected
Hexane	0.10	0.15	0.28	0.43
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.24	0.31
Chloroform	0.10	0.13	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.16	Not Detected	Not Detected
Cyclohexane	0.10	0.18	0.66	1.2
Carbon Tetrachloride	0.10	0.15	0.25	0.37
Benzene	0.40	0.50	0.54	0.66
1,2-Dichloroethane	0.10	0.13	Not Detected	Not Detected
Heptane	0.10	0.17	0.10	0.17
Trichloroethene	0.10	0.14	Not Detected	Not Detected
Toluene	0.10	0.13	0.28	0.38
Tetrachloroethene	0.10	0.17	Not Detected	Not Detected
Ethyl Benzene	0.10	0.15	Not Detected	Not Detected
m,p-Xylene	0.10	0.14	0.11	0.16
o-Xylene	0.10	0.15	Not Detected	Not Detected
1,1-Dichloroethene	0.40	0.52	Not Detected C	Not Detected C
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.33	Not Detected C	Not Detected C
Vinyl Chloride	0.40	0.44	Not Detected C	Not Detected C
1,1-Dichloroethane	0.10	0.16	Not Detected C	Not Detected C

C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 10059 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130

eurofins | Air Toxics

Client Sample ID: OAP-NIC-Park-OA2

Lab ID#: 1402126A-13A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	**10021219sim**	**Date of Collection: 2/7/14 4:03:00 PM**
Dil. Factor:	**1.00**	**Date of Analysis: 2/12/14 05:08 PM**
		Date of Extraction: 2/12/14

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	0.41	0.52
Methyl tert-butyl ether	0.10	0.15	Not Detected	Not Detected
Hexane	0.10	0.15	0.16	0.23
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.19	0.24
Chloroform	0.10	0.13	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.16	Not Detected	Not Detected
Cyclohexane	0.10	0.18	0.74	1.4
Carbon Tetrachloride	0.10	0.15	0.18	0.26
Benzene	0.40	0.50	Not Detected	Not Detected
1,2-Dichloroethane	0.10	0.13	Not Detected	Not Detected
Heptane	0.10	0.17	Not Detected	Not Detected
Trichloroethene	0.10	0.14	Not Detected	Not Detected
Toluene	0.10	0.13	0.26	0.34
Tetrachloroethene	0.10	0.17	Not Detected	Not Detected
Ethyl Benzene	0.10	0.15	Not Detected	Not Detected
m,p-Xylene	0.10	0.14	0.11	0.16
o-Xylene	0.10	0.15	Not Detected	Not Detected
1,1-Dichloroethene	0.40	0.52	Not Detected C	Not Detected C
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.33	Not Detected C	Not Detected C
Vinyl Chloride	0.40	0.44	Not Detected C	Not Detected C
1,1-Dichloroethane	0.10	0.16	Not Detected C	Not Detected C

C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 10060 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130

eurofins | Air Toxics

Client Sample ID: IAP-NIC-Park-138

Lab ID#: 1402126A-14A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	**10021220sim**	**Date of Collection: 2/7/14 4:38:00 PM**
Dil. Factor:	**1.00**	**Date of Analysis: 2/12/14 05:31 PM**
		Date of Extraction: 2/12/14

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	6.3	8.1
Methyl tert-butyl ether	0.10	0.15	Not Detected	Not Detected
Hexane	0.10	0.15	0.24	0.36
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.42	0.52
Chloroform	0.10	0.13	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.16	Not Detected	Not Detected
Cyclohexane	0.10	0.18	0.78	1.4
Carbon Tetrachloride	0.10	0.15	0.24	0.35
Benzene	0.40	0.50	0.52	0.64
1,2-Dichloroethane	0.10	0.13	Not Detected	Not Detected
Heptane	0.10	0.17	0.32	0.54
Trichloroethene	0.10	0.14	Not Detected	Not Detected
Toluene	0.10	0.13	0.43	0.57
Tetrachloroethene	0.10	0.17	Not Detected	Not Detected
Ethyl Benzene	0.10	0.14	0.12	0.17
m,p-Xylene	0.10	0.14	0.29	0.42
o-Xylene	0.10	0.15	0.10	0.16
1,1-Dichloroethene	0.40	0.52	Not Detected C	Not Detected C
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.33	Not Detected C	Not Detected C
Vinyl Chloride	0.40	0.44	Not Detected C	Not Detected C
1,1-Dichloroethane	0.10	0.16	Not Detected C	Not Detected C

C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 10091 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130

eurofins | Air Toxics

Client Sample ID: IAP-NIC-Park-135

Lab ID#: 1402126A-15A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	**10021221sim**	**Date of Collection: 2/7/14 4:37:00 PM**
Dil. Factor:	**1.00**	**Date of Analysis: 2/12/14 05:54 PM**
		Date of Extraction: 2/12/14

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	5.2	6.7
Methyl tert-butyl ether	0.10	0.15	Not Detected	Not Detected
Hexane	0.10	0.15	0.35	0.52
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.39	0.49
Chloroform	0.10	0.13	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.16	Not Detected	Not Detected
Cyclohexane	0.10	0.18	0.81	1.5
Carbon Tetrachloride	0.10	0.15	0.26	0.38
Benzene	0.40	0.50	0.55	0.68
1,2-Dichloroethane	0.10	0.13	Not Detected	Not Detected
Heptane	0.10	0.17	0.22	0.37
Trichloroethene	0.10	0.14	Not Detected	Not Detected
Toluene	0.10	0.13	0.47	0.63
Tetrachloroethene	0.10	0.17	Not Detected	Not Detected
Ethyl Benzene	0.10	0.14	Not Detected	Not Detected
m,p-Xylene	0.10	0.14	0.21	0.30
o-Xylene	0.10	0.15	Not Detected	Not Detected
1,1-Dichloroethene	0.40	0.52	Not Detected C	Not Detected C
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.33	Not Detected C	Not Detected C
Vinyl Chloride	0.40	0.44	Not Detected C	Not Detected C
1,1-Dichloroethane	0.10	0.16	Not Detected C	Not Detected C

C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 10085 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130

eurofins | Air Toxics

Client Sample ID: IAP-NIC-Park-131

Lab ID#: 1402126A-16A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	**10021222sim**	**Date of Collection: 2/7/14 4:30:00 PM**
Dil. Factor:	**1.00**	**Date of Analysis: 2/12/14 06:17 PM**
		Date of Extraction: 2/12/14

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	4.9	6.4
Methyl tert-butyl ether	0.10	0.15	Not Detected	Not Detected
Hexane	0.10	0.15	0.22	0.33
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.39	0.49
Chloroform	0.10	0.13	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.16	Not Detected	Not Detected
Cyclohexane	0.10	0.18	0.76	1.4
Carbon Tetrachloride	0.10	0.15	0.22	0.32
Benzene	0.40	0.50	0.48	0.59
1,2-Dichloroethane	0.10	0.13	Not Detected	Not Detected
Heptane	0.10	0.17	0.24	0.40
Trichloroethene	0.10	0.14	Not Detected	Not Detected
Toluene	0.10	0.13	0.46	0.62
Tetrachloroethene	0.10	0.17	Not Detected	Not Detected
Ethyl Benzene	0.10	0.14	Not Detected	Not Detected
m,p-Xylene	0.10	0.14	0.18	0.26
o-Xylene	0.10	0.15	Not Detected	Not Detected
1,1-Dichloroethene	0.40	0.52	Not Detected C	Not Detected C
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.33	Not Detected C	Not Detected C
Vinyl Chloride	0.40	0.44	Not Detected C	Not Detected C
1,1-Dichloroethane	0.10	0.16	Not Detected C	Not Detected C

C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 10074 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130

eurofins | Air Toxics

Client Sample ID: IAP-NIC-Park-128

Lab ID#: 1402126A-17A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	**10021223sim**	**Date of Collection: 2/7/14 4:27:00 PM**
Dil. Factor:	**1.00**	**Date of Analysis: 2/12/14 06:40 PM**
		Date of Extraction: 2/12/14

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	6.5	8.3
Methyl tert-butyl ether	0.10	0.15	Not Detected	Not Detected
Hexane	0.10	0.15	0.21	0.32
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.38	0.48
Chloroform	0.10	0.13	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.16	Not Detected	Not Detected
Cyclohexane	0.10	0.18	0.72	1.3
Carbon Tetrachloride	0.10	0.15	0.21	0.32
Benzene	0.40	0.50	0.48	0.59
1,2-Dichloroethane	0.10	0.13	Not Detected	Not Detected
Heptane	0.10	0.17	0.20	0.34
Trichloroethene	0.10	0.14	Not Detected	Not Detected
Toluene	0.10	0.13	0.49	0.66
Tetrachloroethene	0.10	0.17	Not Detected	Not Detected
Ethyl Benzene	0.10	0.15	Not Detected	Not Detected
m,p-Xylene	0.10	0.14	0.20	0.28
o-Xylene	0.10	0.15	Not Detected	Not Detected
1,1-Dichloroethene	0.40	0.52	Not Detected C	Not Detected C
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.33	Not Detected C	Not Detected C
Vinyl Chloride	0.40	0.44	Not Detected C	Not Detected C
1,1-Dichloroethane	0.10	0.16	Not Detected C	Not Detected C

C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 10068 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130

eurofins | Air Toxics

Client Sample ID: IAP-NIC-Park-107

Lab ID#: 1402126A-18A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	**10021224sim**	**Date of Collection: 2/7/14 4:17:00 PM**
Dil. Factor:	**1.00**	**Date of Analysis: 2/12/14 07:04 PM**
		Date of Extraction: 2/12/14

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	2.8	3.6
Methyl tert-butyl ether	0.10	0.15	Not Detected	Not Detected
Hexane	0.10	0.15	0.28	0.43
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.32	0.40
Chloroform	0.10	0.13	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.16	Not Detected	Not Detected
Cyclohexane	0.10	0.18	0.94	1.7
Carbon Tetrachloride	0.10	0.15	0.23	0.34
Benzene	0.40	0.50	0.52	0.64
1,2-Dichloroethane	0.10	0.13	Not Detected	Not Detected
Heptane	0.10	0.17	0.15	0.26
Trichloroethene	0.10	0.14	Not Detected	Not Detected
Toluene	0.10	0.13	0.42	0.57
Tetrachloroethene	0.10	0.17	Not Detected	Not Detected
Ethyl Benzene	0.10	0.15	0.25	0.36
m,p-Xylene	0.10	0.14	0.39	0.56
o-Xylene	0.10	0.15	0.15	0.23
1,1-Dichloroethene	0.40	0.52	Not Detected C	Not Detected C
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.33	Not Detected C	Not Detected C
Vinyl Chloride	0.40	0.44	Not Detected C	Not Detected C
1,1-Dichloroethane	0.10	0.16	Not Detected C	Not Detected C

C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 10051 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130

eurofins | Air Toxics

Client Sample ID: IAP-NIC-Park-101E

Lab ID#: 1402126A-20A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	**10021225sim**	**Date of Collection: 2/7/14 6:21:00 PM**
Dil. Factor:	**1.00**	**Date of Analysis: 2/12/14 07:27 PM**
		Date of Extraction: 2/12/14

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	6.7	8.6
Methyl tert-butyl ether	0.10	0.15	Not Detected	Not Detected
Hexane	0.10	0.15	0.28	0.42
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.38	0.48
Chloroform	0.10	0.13	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.16	Not Detected	Not Detected
Cyclohexane	0.10	0.18	0.82	1.5
Carbon Tetrachloride	0.10	0.15	0.22	0.32
Benzene	0.40	0.50	0.50	0.62
1,2-Dichloroethane	0.10	0.13	Not Detected	Not Detected
Heptane	0.10	0.17	0.52	0.89
Trichloroethene	0.10	0.14	Not Detected	Not Detected
Toluene	0.10	0.13	1.2	1.6
Tetrachloroethene	0.10	0.17	Not Detected	Not Detected
Ethyl Benzene	0.10	0.14	0.13	0.19
m,p-Xylene	0.10	0.14	0.33	0.47
o-Xylene	0.10	0.15	0.13	0.20
1,1-Dichloroethene	0.40	0.52	Not Detected C	Not Detected C
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.33	Not Detected C	Not Detected C
Vinyl Chloride	0.40	0.44	Not Detected C	Not Detected C
1,1-Dichloroethane	0.10	0.16	Not Detected C	Not Detected C

C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 10096 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130

eurofins | Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1402126A-21A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	**10021206sim**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/12/14 11:50 AM**	
		Date of Extraction: 2/12/14	

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	Not Detected	Not Detected
Methyl tert-butyl ether	0.10	0.15	Not Detected	Not Detected
Hexane	0.10	0.15	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	Not Detected	Not Detected
Chloroform	0.10	0.13	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.16	Not Detected	Not Detected
Cyclohexane	0.10	0.18	Not Detected	Not Detected
Carbon Tetrachloride	0.10	0.15	Not Detected	Not Detected
Benzene	0.40	0.50	Not Detected	Not Detected
1,2-Dichloroethane	0.10	0.13	Not Detected	Not Detected
Heptane	0.10	0.17	Not Detected	Not Detected
Trichloroethene	0.10	0.14	Not Detected	Not Detected
Toluene	0.10	0.13	Not Detected	Not Detected
Tetrachloroethene	0.10	0.17	Not Detected	Not Detected
Ethyl Benzene	0.10	0.14	Not Detected	Not Detected
m,p-Xylene	0.10	0.14	Not Detected	Not Detected
o-Xylene	0.10	0.15	Not Detected	Not Detected
1,1-Dichloroethene	0.40	0.52	Not Detected C	Not Detected C
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.33	Not Detected C	Not Detected C
Vinyl Chloride	0.40	0.44	Not Detected C	Not Detected C
1,1-Dichloroethane	0.10	0.16	Not Detected C	Not Detected C

C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 10096 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130

eurofins | Air Toxics

Client Sample ID: LCS

Lab ID#: 1402126A-22A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	**10021204sim**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 2/12/14 11:00 AM**
		Date of Extraction: 2/12/14

Compound	%Recovery	Method Limits
Acetone	76	70-130
Methyl tert-butyl ether	90	70-130
Hexane	79	70-130
2-Butanone (Methyl Ethyl Ketone)	86	70-130
Chloroform	95	70-130
1,1,1-Trichloroethane	99	70-130
Cyclohexane	96	70-130
Carbon Tetrachloride	103	70-130
Benzene	92	70-130
1,2-Dichloroethane	92	70-130
Heptane	106	70-130
Trichloroethene	103	70-130
Toluene	95	70-130
Tetrachloroethene	102	70-130
Ethyl Benzene	102	70-130
m,p-Xylene	95	70-130
o-Xylene	92	70-130
1,1-Dichloroethene	92	70-130
cis-1,2-Dichloroethene	92	70-130
trans-1,2-Dichloroethene	88	70-130
Vinyl Chloride	69	50-140
1,1-Dichloroethane	96	70-130

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130

eurofins | Air Toxics

Client Sample ID: LCSD

Lab ID#: 1402126A-22AA

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	**10021205sim**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 2/12/14 11:26 AM**
		Date of Extraction: 2/12/14

Compound	%Recovery	Method Limits
Acetone	79	70-130
Methyl tert-butyl ether	94	70-130
Hexane	84	70-130
2-Butanone (Methyl Ethyl Ketone)	89	70-130
Chloroform	127	70-130
1,1,1-Trichloroethane	109	70-130
Cyclohexane	121	70-130
Carbon Tetrachloride	100	70-130
Benzene	77	70-130
1,2-Dichloroethane	115	70-130
Heptane	95	70-130
Trichloroethene	102	70-130
Toluene	95	70-130
Tetrachloroethene	103	70-130
Ethyl Benzene	101	70-130
m,p-Xylene	95	70-130
o-Xylene	91	70-130
1,1-Dichloroethene	96	70-130
cis-1,2-Dichloroethene	98	70-130
trans-1,2-Dichloroethene	92	70-130
Vinyl Chloride	68	50-140
1,1-Dichloroethane	95	70-130

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130

PASSIVE SAMPLE COLLECTION

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
(916) 985-1000 FAX (916) 985-1020

Project Manager: Monica Williams
Collected by: (Print and Sign) Monica Williams
Company: CDM Smith Email: williamsmk@cdmsmith.com
Address: 3245 Riverview Ste 520 City: Wichita State: KS Zip: 67203
Phone: 316-660-6700 Fax: 316-264-3025

Project Info:
P.O. #:
Project #:
Project Name: KDHE V1-NIC Schools

Turn Around Time: ☒ Normal ☐ Rush ____ specify

Reporting Units: ☐ ppmv ☐ ppbv ☐ µg/m3 ☐ mg/m3

Lab I.D.	Field Sample I.D. (Location)	Sampler #	Date of Deployment (mm/dd/yy)	Time of Deployment (hr : min)	Date of Retrieval (mm/dd/yy)	Time of Retrieval (hr : min)	Analysis Requested	Indoor Air	Outdoor Air	Workplace Monitoring	Other ( )
01A	OAP-NIC-LOUV-OA1	996FF	01/31/14	17:09	02/07/14	16:58	TO-17	☐	☒	☐	☐
02A	OAP-NIC-LOUV-OA2	999FF	01/31/14	17:12	02/07/14	17:06	TO-17	☐	☒	☐	☐
03A	IAP-NIC-LOUV-7	498CX	01/31/14	17:18	02/07/14	17:14	TO-17	☒	☐	☐	☐
04A	IAP-NIC-LOUV-3	501CX	01/31/14	17:21	02/07/14	17:11	TO-17	☒	☐	☐	☐
05A	IAP-NIC-LOUV-10	504CX	01/31/14	17:25	02/07/14	17:18	TO-17	☒	☐	☐	☐
06A	IAP-NIC-LOUV-15	507CX	01/31/14	17:27	02/07/14	17:23	TO-17	☒	☐	☐	☐
07A	IAP-NIC-LOUV-20	510CX	01/31/14	17:30	02/07/14	17:27	TO-17	☒	☐	☐	☐
08A	IAP-NIC-LOUV-21	985FF	01/31/14	17:32	02/07/14	17:30	TO-17	☒	☐	☐	☐
09A	IAP-NIC-LOUV-27	988FF	01/31/14	17:36	02/07/14	17:35	TO-17	☒	☐	☐	☐
10A	IAP-NIC-LOUV-31	991FF	01/31/14	17:38	02/07/14	17:34	TO-17	☒	☐	☐	☐

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
[signature]	2/8/14 14:24	[signature] ATL	02/10/14 0945
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Sample Site Air Temperature:

Notes:

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	Fedex	7978 6061 4675	N/A	Good	Yes No None	1402126A

PASSIVE SAMPLE COLLECTION

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
(916) 985-1000 FAX (916) 985-1020

Project Manager: Monica Williams
Collected by: (Print and Sign) Monica Williams
Company: CDM Smith Email: williamsmk@cdmsmith.com
Address: 345 Riverview Ste 520 City: Wichita State: KS Zip: 67203
Phone: 316-660-6700 Fax: 316-264-3025

Project Info:
P.O. #
Project #
Project Name: KDHE VI - NIC Schools

Turn Around Time: ☒ Normal ☐ Rush _____ specify

Reporting Units: ☐ ppmv ☐ ppbv ☐ µg/m3 ☐ mg/m3

Lab I.D.	Field Sample I.D. (Location)	Sampler #	Date of Deployment (mm/dd/yy)	Time of Deployment (hr : min)	Date of Retrieval (mm/dd/yy)	Time of Retrieval (hr : min)	Analysis Requested	Indoor Air	Outdoor Air	Workplace Monitoring	Other ( )
11A	OAP-NIC-Louv-OA1G	079FU	02/01/14	1255	02/07/14	17:02	TO-17	☐	☒	☐	☐
12A	OAP-NIC-Park-OA1	003FG	01/31/14	16:17	02/07/14	15:56	TO-17	☐	☒	☐	☐
13A	OAP-NIC-Park-OA2	002FG	01/31/14	16:23	02/07/14	16:03	TO-17	☐	☒	☐	☐
14A	IAP-NIC-Park-138	005FG	01/31/14	16:27	02/07/14	16:38	TO-17	☒	☐	☐	☐
15A	IAP-NIC-Park-135	001FG	01/31/14	16:32	02/07/14	16:37	TO-17	☒	☐	☐	☐
16A	IAP-NIC-Park-131	004FG	01/31/14	16:36	02/07/14	16:30	TO-17	☒	☐	☐	☐
17A	IAP-NIC-Park-128	987FF	01/31/14	16:39	02/07/14	16:27	TO-17	☒	☐	☐	☐
18A	IAP-NIC-Park-107	990FF	01/31/14	16:46	02/07/14	16:17	TO-17	☒	☐	☐	☐
19A	IAP-NIC-Park-110	993FF	01/31/14	16:51	02/07/14	16:21	TO-17	☒	☐	☐	☐
20A	IAP-NIC-Park-101E	077FU	01/31/14	16:05	02/07/14	16:21	TO-17	☒	☐	☐	☐

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
[signature]	2/8/14 14:24	[signature] ATL	02/10/14 0945
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Sample Site Air Temperature:

Notes:

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	Fedex	7978 6061 4675	NA	Good	Yes No ~~None~~	1402126A

PASSIVE SAMPLE COLLECTION

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
(916) 985-1000 FAX (916) 985-1020

Project Manager: Monica Williams
Collected by: (Print and Sign) Monica Williams
Company: CDM Smith Email: williamsml@cdmsmith.com
Address: 345 Riverview Ste 520 City: Wichita State: KS Zip: 67203
Phone: 316-660-6700 Fax: 316-264-3025

Project Info:
P.O. #
Project #
Project Name: KDHE VI-NIC Schools

Turn Around Time: ☒ Normal ☐ Rush _____ specify

Reporting Units: ☐ ppmv ☐ ppbv ☐ µg/m3 ☐ mg/m3

Lab I.D.	Field Sample I.D. (Location)	Sampler #	Date of Deployment (mm/dd/yy)	Time of Deployment (hr : min)	Date of Retrieval (mm/dd/yy)	Time of Retrieval (hr : min)	Analysis Requested	Indoor Air	Outdoor Air	Workplace Monitoring	Other ( )
21A	OAP-NIC-Wash-041	006FG	01/31/14	17:53	02/07/14	15:16	TO-17	☐	☒	☐	☐
22A	OAP-NIC-Wash-042	078FU	01/31/14	17:59	02/07/14	15:27	TO-17	☐	☒	☐	☐
23A MB	IAP-NIC-Wash-138	076FU	01/31/14	18:08	02/07/14	18:17	TO-17	☒	☐	☐	☐
24A 02/10/14	IAP-NIC-Wash-133	094FU	01/31/14	18:12	02/07/14	18:12	TO-17	☒	☐	☐	☐
25A	IAP-NIC-Wash-129	095FU	01/31/14	18:15	02/07/14	18:09	TO-17	☒	☐	☐	☐
26A	IAP-NIC-Wash-126	096FU	01/31/14	18:17	02/07/14	18:05	TO-17	☒	☐	☐	☐
27A	IAP-NIC-Wash-112	091FU	01/31/14	18:19	02/07/14	18:02	TO-17	☒	☐	☐	☐
28A	IAP-NIC-Wash-109	092FU	01/31/14	18:23	02/07/14	17:57	TO-17	☒	☐	☐	☐
29A	IAP-NIC-Wash-106	093FU	01/31/14	18:24	02/07/14	17:53	TO-17	☒	☐	☐	☐
30A	OAP-NIC-Wash-042Q	080FU	02/01/14	12:43	02/07/14	15:29	TO-17	☐	☒	☐	☐

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
[signature]	2/8/14 14:24	[signature] ATL	02/10/14 0945
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Sample Site Air Temperature:

Notes:

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	Fedex	7978 8061 4675	NA	Good	Yes No None	1402126A

eurofins | Air Toxics

2/25/2014
Ms. Monica Williams
CDM Smith Inc.
345 Riverview
Suite 520
Wichita KS 67203

Project Name: KDHEVI-NIC Schools
Project #:
Workorder #: 1402126B

Dear Ms. Monica Williams

The following report includes the data for the above referenced project for sample(s) received on 2/10/2014 at Air Toxics Ltd.

The data and associated QC analyzed by Passive S.E. RAD130/SKC 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: Kelly Buettner at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Kelly Buettner

Project Manager

eurofins | Air Toxics

WORK ORDER #: 1402126B

Work Order Summary

CLIENT:	Ms. Monica Williams CDM Smith Inc. 345 Riverview Suite 520 Wichita, KS 67203	**BILL TO:**	Ms. Monica Williams CDM Smith Inc. 345 Riverview Suite 520 Wichita, KS 67203
PHONE:	316-660-6716	**P.O. #**	
FAX:	316-264-3025	**PROJECT #**	KDHEVI-NIC Schools
DATE RECEIVED:	02/10/2014	**CONTACT:**	Kelly Buettner
DATE COMPLETED:	02/25/2014		

FRACTION #	NAME	TEST
21A	OAP-NIC-Wash-OA1	Passive S.E. RAD130/SKC
22A	OAP-NIC-Wash-OA2	Passive S.E. RAD130/SKC
23A	IAP-NIC-Wash-138	Passive S.E. RAD130/SKC
24A	IAP-NIC-Wash-133	Passive S.E. RAD130/SKC
25A	IAP-NIC-Wash-129	Passive S.E. RAD130/SKC
26A	IAP-NIC-Wash-126	Passive S.E. RAD130/SKC
27A	IAP-NIC-Wash-112	Passive S.E. RAD130/SKC
28A	IAP-NIC-Wash-109	Passive S.E. RAD130/SKC
29A	IAP-NIC-Wash-106	Passive S.E. RAD130/SKC
30A	OAP-NIC-Wash-OA2Q	Passive S.E. RAD130/SKC
31A	Lab Blank	Passive S.E. RAD130/SKC
32A	LCS	Passive S.E. RAD130/SKC
32AA	LCSD	Passive S.E. RAD130/SKC

CERTIFIED BY: Heidi Hayes

Technical Director

DATE: 02/25/14

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

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 9563
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Passive SE GC/MS
CDM Smith Inc.
Workorder# 1402126B

Ten Radiello 130 (Solvent) samples were received on February 10, 2014. The laboratory extracted the charcoal sorbent bed of the passive sampler using carbon disulfide. An aliquot of the extract was injected into a GC/MS for identification and quantification of volatile organic compounds (VOCs).

The mass of each target compound adsorbed by the sampler was converted to units of concentration using the sample deployment time and the sampling rate for each VOC. If sampling rates were calculated by the lab or the manufacturer, the concentration result has been flagged as an estimated value.

Receiving Notes

The Chain of Custody was missing method information or contained incorrect method information. ATL proceeded with the analysis as per the original contract.

Analytical Notes

Sample concentrations were calculated using sampling rates provided by the manufacturer.
These sampling rate values already take into account the desorption efficiency with carbon disulfide. As a result, the average concentration over the sampling duration is calculated from the mass of analyte measured and the exposure time without a correction factor. Results were calculated based on 25 deg C without temperature correction.

The rates for Vinyl Chloride, 1,1-Dichloroethene, 1,1-Dichloroethane, cis-1,2-Dichloroethene and trans-1,2-Dichloroethene were estimated based on diffusion coefficient and the geometric constant of the sampler. The resulting concentration for these compounds is flagged with a 'C' to indicate the calculated concentration is an estimated value.

The actual exposure time was used to calculate sample concentrations and reporting limits. An exposure time of 10089 minutes was used for the Laboratory Blank.

The Relative Percent Difference (RPD) of the LCS/LCSD exceeded acceptance limits for Hexane.

Cyclohexane was detected in the Laboratory Blank. Associated results are "B" flagged.

Definition of Data Qualifying Flags

Nine 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

N - The identification is based on presumptive evidence.
C - Estimated concentration due to calculated sampling rate

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

eurofins | Air Toxics

Summary of Detected Compounds
VOCS BY PASSIVE SAMPLER - GC/MS

Client Sample ID: OAP-NIC-Wash-OA1

Lab ID#: 1402126B-21A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	0.66	0.87
Hexane	0.10	0.15	0.23	0.36
2-Butanone (Methyl Ethyl Ketone)	0.10	0.13	0.21	0.27
Cyclohexane	0.10	0.19	0.67 B	1.2 B
Carbon Tetrachloride	0.10	0.15	0.26	0.38
Benzene	0.40	0.50	0.54	0.67
Heptane	0.10	0.17	0.12	0.20
Toluene	0.10	0.14	0.32	0.44
m,p-Xylene	0.10	0.14	0.12	0.18

Client Sample ID: OAP-NIC-Wash-OA2

Lab ID#: 1402126B-22A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	0.66	0.86
Hexane	0.10	0.15	0.26	0.39
2-Butanone (Methyl Ethyl Ketone)	0.10	0.13	0.23	0.29
Cyclohexane	0.10	0.19	0.65 B	1.2 B
Carbon Tetrachloride	0.10	0.15	0.29	0.44
Benzene	0.40	0.50	0.58	0.73
Heptane	0.10	0.17	0.12	0.22
Toluene	0.10	0.14	0.34	0.47
m,p-Xylene	0.10	0.14	0.12	0.18

Client Sample ID: IAP-NIC-Wash-138

Lab ID#: 1402126B-23A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	6.5	8.4
Hexane	0.10	0.15	0.24	0.36
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.38	0.48
Cyclohexane	0.10	0.18	0.69 B	1.3 B
Carbon Tetrachloride	0.10	0.15	0.23	0.34

eurofins | Air Toxics

Summary of Detected Compounds
VOCS BY PASSIVE SAMPLER - GC/MS

Client Sample ID: IAP-NIC-Wash-138

Lab ID#: 1402126B-23A

Benzene	0.40	0.50	0.51	0.63
Heptane	0.10	0.17	0.40	0.69
Toluene	0.10	0.13	1.6	2.1
Ethyl Benzene	0.10	0.14	0.15	0.22
m,p-Xylene	0.10	0.14	0.35	0.49
o-Xylene	0.10	0.15	0.14	0.22

Client Sample ID: IAP-NIC-Wash-133

Lab ID#: 1402126B-24A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	11	14
Hexane	0.10	0.15	0.31	0.46
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.51	0.64
Chloroform	0.10	0.13	0.16	0.22
Cyclohexane	0.10	0.18	0.73 B	1.3 B
Carbon Tetrachloride	0.10	0.15	0.21	0.31
Benzene	0.40	0.50	0.47	0.59
Heptane	0.10	0.17	0.82	1.4
Toluene	0.10	0.13	1.0	1.4
Ethyl Benzene	0.10	0.14	0.27	0.40
m,p-Xylene	0.10	0.14	0.73	1.0
o-Xylene	0.10	0.15	0.17	0.26

Client Sample ID: IAP-NIC-Wash-129

Lab ID#: 1402126B-25A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	9.9	13
Hexane	0.10	0.15	0.24	0.36
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.49	0.62
Chloroform	0.10	0.13	0.15	0.19
Cyclohexane	0.10	0.18	0.71 B	1.3 B
Carbon Tetrachloride	0.10	0.15	0.24	0.35

eurofins | Air Toxics

Summary of Detected Compounds
VOCS BY PASSIVE SAMPLER - GC/MS

Client Sample ID: IAP-NIC-Wash-129

Lab ID#: 1402126B-25A

Benzene	0.40	0.50	0.51	0.64
Heptane	0.10	0.17	0.66	1.1
Toluene	0.10	0.13	1.0	1.4
Ethyl Benzene	0.10	0.14	0.14	0.20
m,p-Xylene	0.10	0.14	0.33	0.47
o-Xylene	0.10	0.15	0.12	0.18

Client Sample ID: IAP-NIC-Wash-126

Lab ID#: 1402126B-26A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	8.2	10
Hexane	0.10	0.15	0.29	0.44
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.46	0.57
Chloroform	0.10	0.13	0.16	0.22
Cyclohexane	0.10	0.18	0.72 B	1.3 B
Carbon Tetrachloride	0.10	0.15	0.21	0.31
Benzene	0.40	0.50	0.45	0.56
Heptane	0.10	0.17	0.71	1.2
Toluene	0.10	0.13	0.91	1.2
Ethyl Benzene	0.10	0.15	0.12	0.17
m,p-Xylene	0.10	0.14	0.28	0.40
o-Xylene	0.10	0.15	0.10	0.16

Client Sample ID: IAP-NIC-Wash-112

Lab ID#: 1402126B-27A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	6.2	8.0
Hexane	0.10	0.15	0.20	0.30
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.38	0.48
Cyclohexane	0.10	0.18	0.65 B	1.2 B
Carbon Tetrachloride	0.10	0.15	0.21	0.31
Benzene	0.40	0.50	0.44	0.55

eurofins | Air Toxics

Summary of Detected Compounds
VOCS BY PASSIVE SAMPLER - GC/MS

Client Sample ID: IAP-NIC-Wash-112

Lab ID#: 1402126B-27A

Heptane	0.10	0.17	0.32	0.54
Toluene	0.10	0.13	0.92	1.2
Ethyl Benzene	0.10	0.15	0.12	0.18
m,p-Xylene	0.10	0.14	0.30	0.43
o-Xylene	0.10	0.15	0.12	0.18

Client Sample ID: IAP-NIC-Wash-109

Lab ID#: 1402126B-28A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	5.9	7.6
Hexane	0.10	0.15	0.16	0.25
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.38	0.47
Chloroform	0.10	0.13	0.12	0.16
Cyclohexane	0.10	0.18	0.80 B	1.5 B
Carbon Tetrachloride	0.10	0.15	0.21	0.31
Heptane	0.10	0.17	0.53	0.90
Toluene	0.10	0.13	0.98	1.3
Ethyl Benzene	0.10	0.15	0.12	0.18
m,p-Xylene	0.10	0.14	0.30	0.43
o-Xylene	0.10	0.15	0.12	0.19

Client Sample ID: IAP-NIC-Wash-106

Lab ID#: 1402126B-29A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	10	14
Hexane	0.10	0.15	0.20	0.30
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.48	0.60
Cyclohexane	0.10	0.18	0.68 B	1.3 B
Carbon Tetrachloride	0.10	0.15	0.22	0.33
Benzene	0.40	0.50	0.51	0.64
1,2-Dichloroethane	0.10	0.13	0.11	0.14
Heptane	0.10	0.17	0.42	0.72

eurofins | Air Toxics

Summary of Detected Compounds
VOCS BY PASSIVE SAMPLER - GC/MS

Client Sample ID: IAP-NIC-Wash-106

Lab ID#: 1402126B-29A

Toluene	0.10	0.13	1.6	2.1
Ethyl Benzene	0.10	0.15	0.19	0.27
m,p-Xylene	0.10	0.14	0.44	0.63
o-Xylene	0.10	0.15	0.15	0.24

Client Sample ID: OAP-NIC-Wash-OA2Q

Lab ID#: 1402126B-30A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.29	0.60	0.88
Hexane	0.10	0.17	0.12	0.21
2-Butanone (Methyl Ethyl Ketone)	0.10	0.14	0.20	0.28
Cyclohexane	0.10	0.21	0.62 B	1.3 B
Carbon Tetrachloride	0.10	0.17	0.20	0.34
Benzene	0.40	0.57	0.45	0.64
Toluene	0.10	0.15	0.25	0.38

eurofins | Air Toxics

Client Sample ID: OAP-NIC-Wash-OA1

Lab ID#: 1402126B-21A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	**10021308sim**	**Date of Collection: 2/7/14 3:16:00 PM**
Dil. Factor:	**1.00**	**Date of Analysis: 2/13/14 01:21 PM**
		Date of Extraction: 2/13/14

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	0.66	0.87
Methyl tert-butyl ether	0.10	0.16	Not Detected	Not Detected
Hexane	0.10	0.15	0.23	0.36
2-Butanone (Methyl Ethyl Ketone)	0.10	0.13	0.21	0.27
Chloroform	0.10	0.13	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.16	Not Detected	Not Detected
Cyclohexane	0.10	0.19	0.67 B	1.2 B
Carbon Tetrachloride	0.10	0.15	0.26	0.38
Benzene	0.40	0.50	0.54	0.67
1,2-Dichloroethane	0.10	0.13	Not Detected	Not Detected
Heptane	0.10	0.17	0.12	0.20
Trichloroethene	0.10	0.15	Not Detected	Not Detected
Toluene	0.10	0.14	0.32	0.44
Tetrachloroethene	0.10	0.17	Not Detected	Not Detected
Ethyl Benzene	0.10	0.15	Not Detected	Not Detected
m,p-Xylene	0.10	0.14	0.12	0.18
o-Xylene	0.10	0.16	Not Detected	Not Detected
1,1-Dichloroethene	0.40	0.53	Not Detected C	Not Detected C
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.34	Not Detected C	Not Detected C
Vinyl Chloride	0.40	0.45	Not Detected C	Not Detected C
1,1-Dichloroethane	0.10	0.16	Not Detected C	Not Detected C

B = Compound present in laboratory blank greater than reporting limit, background subtraction not performed.
C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 9923 minutes.
Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	106	70-130

eurofins | Air Toxics

Client Sample ID: OAP-NIC-Wash-OA2

Lab ID#: 1402126B-22A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	**10021309sim**	**Date of Collection: 2/7/14 3:27:00 PM**
Dil. Factor:	**1.00**	**Date of Analysis: 2/13/14 01:44 PM**
		Date of Extraction: 2/13/14

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	0.66	0.86
Methyl tert-butyl ether	0.10	0.15	Not Detected	Not Detected
Hexane	0.10	0.15	0.26	0.39
2-Butanone (Methyl Ethyl Ketone)	0.10	0.13	0.23	0.29
Chloroform	0.10	0.13	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.16	Not Detected	Not Detected
Cyclohexane	0.10	0.19	0.65 B	1.2 B
Carbon Tetrachloride	0.10	0.15	0.29	0.44
Benzene	0.40	0.50	0.58	0.73
1,2-Dichloroethane	0.10	0.13	Not Detected	Not Detected
Heptane	0.10	0.17	0.12	0.22
Trichloroethene	0.10	0.14	Not Detected	Not Detected
Toluene	0.10	0.14	0.34	0.47
Tetrachloroethene	0.10	0.17	Not Detected	Not Detected
Ethyl Benzene	0.10	0.15	Not Detected	Not Detected
m,p-Xylene	0.10	0.14	0.12	0.18
o-Xylene	0.10	0.15	Not Detected	Not Detected
1,1-Dichloroethene	0.40	0.53	Not Detected C	Not Detected C
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.34	Not Detected C	Not Detected C
Vinyl Chloride	0.40	0.45	Not Detected C	Not Detected C
1,1-Dichloroethane	0.10	0.16	Not Detected C	Not Detected C

B = Compound present in laboratory blank greater than reporting limit, background subtraction not performed.
C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 9928 minutes.
Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130

eurofins | Air Toxics

Client Sample ID: IAP-NIC-Wash-138

Lab ID#: 1402126B-23A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	**10021310sim**	**Date of Collection: 2/7/14 6:17:00 PM**
Dil. Factor:	**1.00**	**Date of Analysis: 2/13/14 02:08 PM**
		Date of Extraction: 2/13/14

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	6.5	8.4
Methyl tert-butyl ether	0.10	0.15	Not Detected	Not Detected
Hexane	0.10	0.15	0.24	0.36
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.38	0.48
Chloroform	0.10	0.13	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.16	Not Detected	Not Detected
Cyclohexane	0.10	0.18	0.69 B	1.3 B
Carbon Tetrachloride	0.10	0.15	0.23	0.34
Benzene	0.40	0.50	0.51	0.63
1,2-Dichloroethane	0.10	0.13	Not Detected	Not Detected
Heptane	0.10	0.17	0.40	0.69
Trichloroethene	0.10	0.14	Not Detected	Not Detected
Toluene	0.10	0.13	1.6	2.1
Tetrachloroethene	0.10	0.17	Not Detected	Not Detected
Ethyl Benzene	0.10	0.14	0.15	0.22
m,p-Xylene	0.10	0.14	0.35	0.49
o-Xylene	0.10	0.15	0.14	0.22
1,1-Dichloroethene	0.40	0.52	Not Detected C	Not Detected C
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.33	Not Detected C	Not Detected C
Vinyl Chloride	0.40	0.44	Not Detected C	Not Detected C
1,1-Dichloroethane	0.10	0.16	Not Detected C	Not Detected C

B = Compound present in laboratory blank greater than reporting limit, background subtraction not performed.
C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 10089 minutes.
Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130

eurofins | Air Toxics

Client Sample ID: IAP-NIC-Wash-133

Lab ID#: 1402126B-24A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	**10021311sim**	**Date of Collection: 2/7/14 6:12:00 PM**
Dil. Factor:	**1.00**	**Date of Analysis: 2/13/14 02:31 PM**
		Date of Extraction: 2/13/14

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	11	14
Methyl tert-butyl ether	0.10	0.15	Not Detected	Not Detected
Hexane	0.10	0.15	0.31	0.46
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.51	0.64
Chloroform	0.10	0.13	0.16	0.22
1,1,1-Trichloroethane	0.10	0.16	Not Detected	Not Detected
Cyclohexane	0.10	0.18	0.73 B	1.3 B
Carbon Tetrachloride	0.10	0.15	0.21	0.31
Benzene	0.40	0.50	0.47	0.59
1,2-Dichloroethane	0.10	0.13	Not Detected	Not Detected
Heptane	0.10	0.17	0.82	1.4
Trichloroethene	0.10	0.14	Not Detected	Not Detected
Toluene	0.10	0.13	1.0	1.4
Tetrachloroethene	0.10	0.17	Not Detected	Not Detected
Ethyl Benzene	0.10	0.14	0.27	0.40
m,p-Xylene	0.10	0.14	0.73	1.0
o-Xylene	0.10	0.15	0.17	0.26
1,1-Dichloroethene	0.40	0.52	Not Detected C	Not Detected C
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.33	Not Detected C	Not Detected C
Vinyl Chloride	0.40	0.44	Not Detected C	Not Detected C
1,1-Dichloroethane	0.10	0.16	Not Detected C	Not Detected C

B = Compound present in laboratory blank greater than reporting limit, background subtraction not performed.
C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 10080 minutes.
Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130

eurofins | Air Toxics

Client Sample ID: IAP-NIC-Wash-129

Lab ID#: 1402126B-25A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	**10021312sim**	**Date of Collection: 2/7/14 6:09:00 PM**
Dil. Factor:	**1.00**	**Date of Analysis: 2/13/14 02:54 PM**
		Date of Extraction: 2/13/14

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	9.9	13
Methyl tert-butyl ether	0.10	0.15	Not Detected	Not Detected
Hexane	0.10	0.15	0.24	0.36
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.49	0.62
Chloroform	0.10	0.13	0.15	0.19
1,1,1-Trichloroethane	0.10	0.16	Not Detected	Not Detected
Cyclohexane	0.10	0.18	0.71 B	1.3 B
Carbon Tetrachloride	0.10	0.15	0.24	0.35
Benzene	0.40	0.50	0.51	0.64
1,2-Dichloroethane	0.10	0.13	Not Detected	Not Detected
Heptane	0.10	0.17	0.66	1.1
Trichloroethene	0.10	0.14	Not Detected	Not Detected
Toluene	0.10	0.13	1.0	1.4
Tetrachloroethene	0.10	0.17	Not Detected	Not Detected
Ethyl Benzene	0.10	0.14	0.14	0.20
m,p-Xylene	0.10	0.14	0.33	0.47
o-Xylene	0.10	0.15	0.12	0.18
1,1-Dichloroethene	0.40	0.52	Not Detected C	Not Detected C
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.33	Not Detected C	Not Detected C
Vinyl Chloride	0.40	0.44	Not Detected C	Not Detected C
1,1-Dichloroethane	0.10	0.16	Not Detected C	Not Detected C

B = Compound present in laboratory blank greater than reporting limit, background subtraction not performed.
C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 10074 minutes.
Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130

eurofins | Air Toxics

Client Sample ID: IAP-NIC-Wash-126

Lab ID#: 1402126B-26A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	**10021313sim**	**Date of Collection: 2/7/14 6:05:00 PM**
Dil. Factor:	**1.00**	**Date of Analysis: 2/13/14 03:18 PM**
		Date of Extraction: 2/13/14

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	8.2	10
Methyl tert-butyl ether	0.10	0.15	Not Detected	Not Detected
Hexane	0.10	0.15	0.29	0.44
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.46	0.57
Chloroform	0.10	0.13	0.16	0.22
1,1,1-Trichloroethane	0.10	0.16	Not Detected	Not Detected
Cyclohexane	0.10	0.18	0.72 B	1.3 B
Carbon Tetrachloride	0.10	0.15	0.21	0.31
Benzene	0.40	0.50	0.45	0.56
1,2-Dichloroethane	0.10	0.13	Not Detected	Not Detected
Heptane	0.10	0.17	0.71	1.2
Trichloroethene	0.10	0.14	Not Detected	Not Detected
Toluene	0.10	0.13	0.91	1.2
Tetrachloroethene	0.10	0.17	Not Detected	Not Detected
Ethyl Benzene	0.10	0.15	0.12	0.17
m,p-Xylene	0.10	0.14	0.28	0.40
o-Xylene	0.10	0.15	0.10	0.16
1,1-Dichloroethene	0.40	0.52	Not Detected C	Not Detected C
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.33	Not Detected C	Not Detected C
Vinyl Chloride	0.40	0.44	Not Detected C	Not Detected C
1,1-Dichloroethane	0.10	0.16	Not Detected C	Not Detected C

B = Compound present in laboratory blank greater than reporting limit, background subtraction not performed.
C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 10068 minutes.
Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130

eurofins | Air Toxics

Client Sample ID: IAP-NIC-Wash-112

Lab ID#: 1402126B-27A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	**10021314sim**	**Date of Collection: 2/7/14 6:02:00 PM**
Dil. Factor:	**1.00**	**Date of Analysis: 2/13/14 03:41 PM**
		Date of Extraction: 2/13/14

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	6.2	8.0
Methyl tert-butyl ether	0.10	0.15	Not Detected	Not Detected
Hexane	0.10	0.15	0.20	0.30
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.38	0.48
Chloroform	0.10	0.13	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.16	Not Detected	Not Detected
Cyclohexane	0.10	0.18	0.65 B	1.2 B
Carbon Tetrachloride	0.10	0.15	0.21	0.31
Benzene	0.40	0.50	0.44	0.55
1,2-Dichloroethane	0.10	0.13	Not Detected	Not Detected
Heptane	0.10	0.17	0.32	0.54
Trichloroethene	0.10	0.14	Not Detected	Not Detected
Toluene	0.10	0.13	0.92	1.2
Tetrachloroethene	0.10	0.17	Not Detected	Not Detected
Ethyl Benzene	0.10	0.15	0.12	0.18
m,p-Xylene	0.10	0.14	0.30	0.43
o-Xylene	0.10	0.15	0.12	0.18
1,1-Dichloroethene	0.40	0.52	Not Detected C	Not Detected C
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.33	Not Detected C	Not Detected C
Vinyl Chloride	0.40	0.44	Not Detected C	Not Detected C
1,1-Dichloroethane	0.10	0.16	Not Detected C	Not Detected C

B = Compound present in laboratory blank greater than reporting limit, background subtraction not performed.
C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 10063 minutes.
Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130

eurofins | Air Toxics

Client Sample ID: IAP-NIC-Wash-109

Lab ID#: 1402126B-28A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	**10021315sim**	**Date of Collection: 2/7/14 5:57:00 PM**
Dil. Factor:	**1.00**	**Date of Analysis: 2/13/14 04:04 PM**
		Date of Extraction: 2/13/14

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	5.9	7.6
Methyl tert-butyl ether	0.10	0.15	Not Detected	Not Detected
Hexane	0.10	0.15	0.16	0.25
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.38	0.47
Chloroform	0.10	0.13	0.12	0.16
1,1,1-Trichloroethane	0.10	0.16	Not Detected	Not Detected
Cyclohexane	0.10	0.18	0.80 B	1.5 B
Carbon Tetrachloride	0.10	0.15	0.21	0.31
Benzene	0.40	0.50	Not Detected	Not Detected
1,2-Dichloroethane	0.10	0.13	Not Detected	Not Detected
Heptane	0.10	0.17	0.53	0.90
Trichloroethene	0.10	0.14	Not Detected	Not Detected
Toluene	0.10	0.13	0.98	1.3
Tetrachloroethene	0.10	0.17	Not Detected	Not Detected
Ethyl Benzene	0.10	0.15	0.12	0.18
m,p-Xylene	0.10	0.14	0.30	0.43
o-Xylene	0.10	0.15	0.12	0.19
1,1-Dichloroethene	0.40	0.52	Not Detected C	Not Detected C
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.33	Not Detected C	Not Detected C
Vinyl Chloride	0.40	0.44	Not Detected C	Not Detected C
1,1-Dichloroethane	0.10	0.16	Not Detected C	Not Detected C

B = Compound present in laboratory blank greater than reporting limit, background subtraction not performed.
C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 10054 minutes.
Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130

eurofins | Air Toxics

Client Sample ID: IAP-NIC-Wash-106

Lab ID#: 1402126B-29A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	**10021316sim**	**Date of Collection: 2/7/14 5:53:00 PM**
Dil. Factor:	**1.00**	**Date of Analysis: 2/13/14 04:28 PM**
		Date of Extraction: 2/13/14

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	10	14
Methyl tert-butyl ether	0.10	0.15	Not Detected	Not Detected
Hexane	0.10	0.15	0.20	0.30
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	0.48	0.60
Chloroform	0.10	0.13	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.16	Not Detected	Not Detected
Cyclohexane	0.10	0.18	0.68 B	1.3 B
Carbon Tetrachloride	0.10	0.15	0.22	0.33
Benzene	0.40	0.50	0.51	0.64
1,2-Dichloroethane	0.10	0.13	0.11	0.14
Heptane	0.10	0.17	0.42	0.72
Trichloroethene	0.10	0.14	Not Detected	Not Detected
Toluene	0.10	0.13	1.6	2.1
Tetrachloroethene	0.10	0.17	Not Detected	Not Detected
Ethyl Benzene	0.10	0.15	0.19	0.27
m,p-Xylene	0.10	0.14	0.44	0.63
o-Xylene	0.10	0.15	0.15	0.24
1,1-Dichloroethene	0.40	0.52	Not Detected C	Not Detected C
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.33	Not Detected C	Not Detected C
Vinyl Chloride	0.40	0.44	Not Detected C	Not Detected C
1,1-Dichloroethane	0.10	0.16	Not Detected C	Not Detected C

B = Compound present in laboratory blank greater than reporting limit, background subtraction not performed.
C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 10049 minutes.
Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130

eurofins | Air Toxics

Client Sample ID: OAP-NIC-Wash-OA2Q

Lab ID#: 1402126B-30A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	**10021317sim**	**Date of Collection: 2/7/14 3:29:00 PM**
Dil. Factor:	**1.00**	**Date of Analysis: 2/13/14 04:51 PM**
		Date of Extraction: 2/13/14

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.29	0.60	0.88
Methyl tert-butyl ether	0.10	0.17	Not Detected	Not Detected
Hexane	0.10	0.17	0.12	0.21
2-Butanone (Methyl Ethyl Ketone)	0.10	0.14	0.20	0.28
Chloroform	0.10	0.15	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.18	Not Detected	Not Detected
Cyclohexane	0.10	0.21	0.62 B	1.3 B
Carbon Tetrachloride	0.10	0.17	0.20	0.34
Benzene	0.40	0.57	0.45	0.64
1,2-Dichloroethane	0.10	0.15	Not Detected	Not Detected
Heptane	0.10	0.20	Not Detected	Not Detected
Trichloroethene	0.10	0.16	Not Detected	Not Detected
Toluene	0.10	0.15	0.25	0.38
Tetrachloroethene	0.10	0.19	Not Detected	Not Detected
Ethyl Benzene	0.10	0.17	Not Detected	Not Detected
m,p-Xylene	0.10	0.16	Not Detected	Not Detected
o-Xylene	0.10	0.17	Not Detected	Not Detected
1,1-Dichloroethene	0.40	0.60	Not Detected C	Not Detected C
cis-1,2-Dichloroethene	0.10	0.18	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.38	Not Detected C	Not Detected C
Vinyl Chloride	0.40	0.50	Not Detected C	Not Detected C
1,1-Dichloroethane	0.10	0.18	Not Detected C	Not Detected C

B = Compound present in laboratory blank greater than reporting limit, background subtraction not performed.
C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 8806 minutes.
Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130

eurofins | Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1402126B-31A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	**10021307sim**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/13/14 12:46 PM**	
		Date of Extraction: 2/13/14	

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Acetone	0.20	0.26	Not Detected	Not Detected
Methyl tert-butyl ether	0.10	0.15	Not Detected	Not Detected
Hexane	0.10	0.15	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.10	0.12	Not Detected	Not Detected
Chloroform	0.10	0.13	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.16	Not Detected	Not Detected
Cyclohexane	0.10	0.18	0.71	1.3
Carbon Tetrachloride	0.10	0.15	Not Detected	Not Detected
Benzene	0.40	0.50	Not Detected	Not Detected
1,2-Dichloroethane	0.10	0.13	Not Detected	Not Detected
Heptane	0.10	0.17	Not Detected	Not Detected
Trichloroethene	0.10	0.14	Not Detected	Not Detected
Toluene	0.10	0.13	Not Detected	Not Detected
Tetrachloroethene	0.10	0.17	Not Detected	Not Detected
Ethyl Benzene	0.10	0.14	Not Detected	Not Detected
m,p-Xylene	0.10	0.14	Not Detected	Not Detected
o-Xylene	0.10	0.15	Not Detected	Not Detected
1,1-Dichloroethene	0.40	0.52	Not Detected C	Not Detected C
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.33	Not Detected C	Not Detected C
Vinyl Chloride	0.40	0.44	Not Detected C	Not Detected C
1,1-Dichloroethane	0.10	0.16	Not Detected C	Not Detected C

C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 10089 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130

eurofins | Air Toxics

Client Sample ID: LCS

Lab ID#: 1402126B-32A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	**10021304sim**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 2/13/14 10:56 AM**
		Date of Extraction: 2/13/14

Compound	%Recovery	Method Limits
Acetone	73	70-130
Methyl tert-butyl ether	93	70-130
Hexane	116	70-130
2-Butanone (Methyl Ethyl Ketone)	79	70-130
Chloroform	89	70-130
1,1,1-Trichloroethane	80	70-130
Cyclohexane	105	70-130
Carbon Tetrachloride	109	70-130
Benzene	95	70-130
1,2-Dichloroethane	76	70-130
Heptane	98	70-130
Trichloroethene	95	70-130
Toluene	89	70-130
Tetrachloroethene	93	70-130
Ethyl Benzene	96	70-130
m,p-Xylene	90	70-130
o-Xylene	84	70-130
1,1-Dichloroethene	87	70-130
cis-1,2-Dichloroethene	87	70-130
trans-1,2-Dichloroethene	84	70-130
Vinyl Chloride	71	50-140
1,1-Dichloroethane	84	70-130

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	105	70-130

eurofins | Air Toxics

Client Sample ID: LCSD

Lab ID#: 1402126B-32AA

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	**10021305sim**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 2/13/14 11:19 AM**
		Date of Extraction: 2/13/14

Compound	%Recovery	Method Limits
Acetone	76	70-130
Methyl tert-butyl ether	92	70-130
Hexane	78	70-130
2-Butanone (Methyl Ethyl Ketone)	82	70-130
Chloroform	87	70-130
1,1,1-Trichloroethane	89	70-130
Cyclohexane	97	70-130
Carbon Tetrachloride	99	70-130
Benzene	86	70-130
1,2-Dichloroethane	86	70-130
Heptane	99	70-130
Trichloroethene	95	70-130
Toluene	90	70-130
Tetrachloroethene	94	70-130
Ethyl Benzene	95	70-130
m,p-Xylene	89	70-130
o-Xylene	82	70-130
1,1-Dichloroethene	89	70-130
cis-1,2-Dichloroethene	89	70-130
trans-1,2-Dichloroethene	97	70-130
Vinyl Chloride	72	50-140
1,1-Dichloroethane	90	70-130

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	105	70-130

PASSIVE SAMPLE COLLECTION

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
(916) 985-1000 FAX (916) 985-1020

Project Manager: Monica Williams
Collected by: (Print and Sign) Monica Williams
Company: CDM Smith Email: williamsmk@cdmsmith.com
Address: 345 Riverview Ste 520 City: Wichita State: KS Zip: 67203
Phone: 316-660-6700 Fax: 316-264-3025

Project Info:
P.O. #:
Project #:
Project Name: KDHE V1 - NIC Schools

Turn Around Time: ☒ Normal ☐ Rush (specify)

Reporting Units: ☐ ppmv ☐ ppbv ☐ µg/m3 ☐ mg/m3

Lab I.D.	Field Sample I.D. (Location)	Sampler #	Date of Deployment (mm/dd/yy)	Time of Deployment (hr:min)	Date of Retrieval (mm/dd/yy)	Time of Retrieval (hr:min)	Analysis Requested	Indoor Air	Outdoor Air	Workplace Monitoring	Other ( )
01A	OAP-NIC-Louv-041	996FF	01/31/14	17:09	02/07/14	16:58	TO-17	☐	☒	☐	☐
02A	OAP-NIC-Louv-042	999FF	01/31/14	17:12	02/07/14	17:06	TO-17	☐	☒	☐	☐
03A	IAP-NIC-Louv-7	498CX	01/31/14	17:18	02/07/14	17:14	TO-17	☒	☐	☐	☐
04A	IAP-NIC-Louv-3	501CX	01/31/14	17:21	02/07/14	17:11	TO-17	☒	☐	☐	☐
05A	IAP-NIC-Louv-10	504CX	01/31/14	17:25	02/07/14	17:18	TO-17	☒	☐	☐	☐
06A	IAP-NIC-Louv-15	507CX	01/31/14	17:27	02/07/14	17:23	TO-17	☒	☐	☐	☐
07A	IAP-NIC-Louv-20	510CX	01/31/14	17:30	02/07/14	17:27	TO-17	☒	☐	☐	☐
08A	IAP-NIC-Louv-21	985FF	01/31/14	17:32	02/07/14	17:30	TO-17	☒	☐	☐	☐
09A	IAP-NIC-Louv-27	988FF	01/31/14	17:36	02/07/14	17:35	TO-17	☒	☐	☐	☐
10A	IAP-NIC-Louv-31	991FF	01/31/14	17:38	02/07/14	17:39	TO-17	☒	☐	☐	☐

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
[signature]	2/8/14 14:24	[signature] ATL	02/10/14 0945
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Sample Site Air Temperature:

Notes:

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	Fedex	7978 6061 4675	N/A	Good	Yes No (None)	1402126B

PASSIVE SAMPLE COLLECTION

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
(916) 985-1000 FAX (916) 985-1020

Project Manager: Monica Williams
Collected by: (Print and Sign) Monica Williams
Company: CDM Smith Email: williamsmk@cdmsmith.com
Address: 345 Riverview-Ste 520 City: Wichita State: KS Zip: 67203
Phone: 316-660-6700 Fax: 316-264-3025

Project Info:
P.O. #
Project #
Project Name: KDHE VI - NIC Schools

Turn Around Time: ☒ Normal ☐ Rush _____ specify

Reporting Units: ☐ ppmv ☐ ppbv ☐ µg/m3 ☐ mg/m3

Lab I.D.	Field Sample I.D. (Location)	Sampler #	Date of Deployment (mm/dd/yy)	Time of Deployment (hr : min)	Date of Retrieval (mm/dd/yy)	Time of Retrieval (hr : min)	Analysis Requested	Indoor Air	Outdoor Air	Workplace Monitoring	Other ( )
11A	OAP-NIC-Lauv-041Q	079FG	02/01/14	1255	02/07/14	17:02	TO-17	☐	☒	☐	☐
12A	OAP-NIC-Park-041	003FG	01/31/14	16:17	02/07/14	15:56	TO-17	☐	☒	☐	☐
13A	OAP-NIC-Park-042	002FG	01/31/14	16:23	02/07/14	16:03	TO-17	☐	☒	☐	☐
14A	IAP-NIC-Park-138	005FG	01/31/14	16:27	02/07/14	16:38	TO-17	☒	☐	☐	☐
15A	IAP-NIC-Park-135	001FG	01/31/14	16:32	02/07/14	16:37	TO-17	☒	☐	☐	☐
16A	IAP-NIC-Park-131	004FG	01/31/14	16:36	02/07/14	16:30	TO-17	☒	☐	☐	☐
17A	IAP-NIC-Park-128	987FF	01/31/14	16:39	02/07/14	16:27	TO-17	☒	☐	☐	☐
18A	IAP-NIC-Park-107	990FF	01/31/14	16:46	02/07/14	16:17	TO-17	☒	☐	☐	☐
19A	IAP-NIC-Park-110	993FF	01/31/14	16:51	02/07/14	16:21	TO-17	☒	☐	☐	☐
20A	IAP-NIC-Park-101E	077FG	01/31/14	18:05	02/07/14	18:21	TO-17	☒	☐	☐	☐

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
[signature]	2/8/14 14:24	[signature] ATL	02/10/14 0945
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Sample Site Air Temperature:

Notes:

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	Fedex	7978 6061 4675	NA	Good	Yes No ~~None~~	1402126B

PASSIVE SAMPLE COLLECTION

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
(916) 985-1000 FAX (916) 985-1020

Project Manager: Monica Williams
Collected by: (Print and Sign) Monica Williams
Company: CDM Smith Email: williamsmk@cdmsmith.com
Address: 3/5 Riverview Ste 520 City: Wichita State: KS Zip: 67203
Phone: 316-660-6700 Fax: 316-264-3025

Project Info:
P.O. #:
Project #:
Project Name: KDHE VI-NIC Schools

Turn Around Time: ☒ Normal ☐ Rush (specify)

Reporting Units: ☐ ppmv ☐ ppbv ☐ µg/m3 ☐ mg/m3

Lab I.D.	Field Sample I.D. (Location)	Sampler #	Date of Deployment (mm/dd/yy)	Time of Deployment (hr : min)	Date of Retrieval (mm/dd/yy)	Time of Retrieval (hr : min)	Analysis Requested	Indoor Air	Outdoor Air	Workplace Monitoring	Other ( )
21A	OAP-NIC-Wash-OA1	066FG	01/31/14	17:53	02/07/14	15:16	TO-17	☐	☒	☐	☐
22A	OAP-NIC-Wash-OA2	078FU	01/31/14	17:59	02/07/14	15:27	TO-17	☐	☒	☐	☐
23A	IAP-NIC-Wash-138	076FU	01/31/14	18:08	02/07/14	18:17	TO-17	☒	☐	☐	☐
24A	IAP-NIC-Wash-133	094FU	01/31/14	18:12	02/07/14	18:12	TO-17	☒	☐	☐	☐
25A	IAP-NIC-Wash-129	095FU	01/31/14	18:15	02/07/14	18:09	TO-17	☒	☐	☐	☐
26A	IAP-NIC-Wash-126	096FU	01/31/14	18:17	02/07/14	18:05	TO-17	☒	☐	☐	☐
27A	IAP-NIC-Wash-112	091FU	01/31/14	18:19	02/07/14	18:02	TO-17	☒	☐	☐	☐
28A	IAP-NIC-Wash-109	092FU	01/31/14	18:23	02/07/14	17:57	TO-17	☒	☐	☐	☐
29A	IAP-NIC-Wash-106	093FU	01/31/14	18:24	02/07/14	17:53	TO-17	☒	☐	☐	☐
30A	OAP-NIC-Wash-OA2Q	080FU	02/01/14	12:43	02/07/14	15:29	TO-17	☐	☒	☐	☐

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
[signature]	2/8/14 14:24	[signature] ATL	02/10/14 0945

Sample Site Air Temperature:

Notes:

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	Fedex	7978 8061 4675	NA	Good	Yes No None	1402126B

Appendix B
Field Notes –
NIC Schools Vapor Intrusion Phase 2

Modified Sampling Form
Phase 2 – North Industrial Corridor Site
Vapor Intrusion Assessment

Location/Property: L'Ouverture Elementary **Sample Date:** 1/31/14

Environmental Conditions

Outdoor Temperature: 23°F Barometric Pressure: 29.9" Relative Humidity: 92% Wind Speed: 14mph Wind Direction: NE

Are any chemicals stored or used regularly in the building: *See MSDSs provided by USD via email on Feb. 21, 2012

Air Sample Detail

	Sample Location	Sample ID	Start Date & Time	Initial Vacuum / ~~Temperature~~	End Date & Time	Final Vacuum / ~~Temperature~~	Canister # / Sampler #	Flow Controller #
(1) ✓	Rm 7	IAS-NIC-Louv-7	1/31/14 1720	-29" Hg	2/1/14 1537	-7" Hg	30845	100098
(2) ✓	Rm 27	IAS-NIC-Louv-27	1735	-29" Hg	2/1/14 1540	-7" Hg	32113	40397
(3) ✓	w fence	OAP-NIC-Louv-OA1	1709	—	2/7/14 1658	—	996FF	—
(4) ✓	n side drainpipe	OAP-NIC-Louv-OA2	1712	—	1706	—	999FF	—
(5)	Rm 7	IAP-NIC-Louv-7	1718	—	1714	P9 —	498CX	—
(6)	Rm 3	IAP-NIC-Louv-3	1721	—	1711	P8 —	501CX	—
(7)	Rm 10	IAP-NIC-Louv-10	1725	—	1718	P10 —	504CX	—
(8)	Rm 15	IAP-NIC-Louv-15	1727	—	1723	P11 —	507CX	—
(9)	Rm 20	IAP-NIC-Louv-20	1730	—	1727	P12 —	510CX	—
(10)	Rm 21	IAP-NIC-Louv-21	1732	—	1730	P13 —	985FF	—
(11)	Rm 27	IAP-NIC-Louv-27	1736	—	1735	P14 —	988FF	—
(12)	Rm 31	IAP-NIC-Louv-31	1/31/14 1738	—	↓ 1735	P15 —	991FF	—
(13) ✓	w fence	OAP-NIC-Louv-OA1Q *dup	2/1/14 125	—	2/7/14 1702	—	079FU	—
(14)								
(15)								

Comments: Summas 100% cert - p/u # 94673 (Air Toxics)

OA1 near bldg on fence b/w parking lot & playground 19h 36m diff w/ Q

OA 2 tied to drain pipe on n side of bldg

Modified Sampling Form
Phase 2 – North Industrial Corridor Site
Vapor Intrusion Assessment

Location/Property: Park Elementary **Sample Date:** 1/31/14

Environmental Conditions

Outdoor Temperature: 23°F Barometric Pressure: 29.9" Relative Humidity: 92% Wind Speed: 14 mph Wind Direction: NE

Are any chemicals stored or used regularly in the building: *See MSDSs provided by USD via email on Feb. 21, 2012

Air Sample Detail

	Sample Location	Sample ID	Start Date & Time	Initial Vacuum / ~~Temperature~~	End Date & Time	Final Vacuum / ~~Temperature~~	Canister # / Sampler #	Flow Controller #
(1) ✓	Rm 107	IAS-NIC-Park-107	1/31/14 1648	-28.5" Hg	2/1/14 1521	-6" Hg	35246	40620
(2) ✓	Rm 131	IAS-NIC-Park-131	1657	-29" Hg	2/1/14 1524	-6.5" Hg	11026	40501
(3) ✓	N side fence	OAP-NIC-Park-OA1	1617	—	2/7/14 1552	—	003FG	—
(4) ✓	W side fence	OAP-NIC-Park-OA2	1623	—	1603	P6 —	002FG	—
(5)	Rm 138	IAP-NIC-Park-138	1627	—	1638	P7 —	005FG	—
(6)	Rm 135	IAP-NIC-Park-135	1632	—	1637	P5 —	001FG	—
(7)	Rm 131	IAP-NIC-Park-131	1636	—	1630	P4 —	004FG	—
(8)	Rm 128	IAP-NIC-Park-128	1639	—	1627	P3 —	987FF	—
(9)	Rm 107	IAP-NIC-Park-107	1646	—	1617	P1 —	990FF	—
(10)	Rm 110	IAP-NIC-Park-110	1/31/14 1651	—	2/7/14 1621	P2 —	993FF	—
(11)								
(12)								
(13)								
(14)								
(15)								

had fall into shed - buried

Comments: Summas 100% cert - lot # 94673 (Air Toxics)

OA1 - on fence N of N wing of bldg

OA2 - on fence on S side of playground on W side of bldg

Modified Sampling Form
Phase 2 – North Industrial Corridor Site
Vapor Intrusion Assessment

Location/Property: Washington Elementary **Sample Date:** 1/31/14

Environmental Conditions

Outdoor Temperature: 23°F Barometric Pressure: 29.9" Relative Humidity: 92% Wind Speed: 14mph Wind Direction: NE

Are any chemicals stored or used regularly in the building: *See MSDSs provided by USD via email on Feb. 21, 2012

Air Sample Detail

	Sample Location	Sample ID	Start Date & Time	Initial Vacuum / ~~Temperature~~	End Date & Time	Final Vacuum / ~~Temperature~~	Canister # / Sampler #	Flow Controller #
(1) ✓	Rm 138 Library	IHS-NIC-Wash-138	1/31/14 1810	-29"Hg	2/1/14 1532	-8	34192	30455
(2) ✓	Rm 112	IHS-NIC-Wash-112	1821	-29"Hg	2/1/14 1554	-6.5	05362	40549
(3) ✓	ne fence	OAP-NIC-Wash-OA1	1753	—	2/7/14 1516	—	006FG	—
(4) ✓	sw fence	OAP-NIC-Wash-OA2	1759	—	2/7/14 1527	—	098FU	—
(5)	Rm 101E office	IAP-NIC-Wash-101E	1805	—	1821	P13 —	077FU	—
(6)	Rm 138 Library	IAP-NIC-Wash-138	1808	—	1817	P12 —	076FU	—
(7)	Rm 133	IAP-NIC-Wash-133	1812	—	1812	P4 —	094FU	—
(8)	Rm 129	IAP-NIC-Wash-129	1815	—	1809	P20 —	095FU	—
(9)	Rm 126	IAP-NIC-Wash-126	1817	—	1805	P19 —	096FU	—
(10)	Rm 112	IAP-NIC-Wash-112	1819	—	1802	P8 —	091FU	—
(11)	Rm 109	IAP-NIC-Wash-109	1823	—	1757	P17 —	092FU	—
(12)	Rm 106	IAP-NIC-Wash-106	1824	—	1753	P16 —	093FU	—
(13) ✓	sw fence	OAP-NIC-Wash-OA2Q *dup	2/1/14 1243	—	2/7/14 1529	—	080FU	—
(14)			had fallen into snow - partially covered					
(15)								

Comments: Summa 100% cal - lot # 94673 (AirToxics)

OA1 - ne side of bldg blw staff parking lot & playground on fence

OA2 - sw side on fence blw parking lot & playground 18h 44m diff for Q

Appendix C
Field Photos –
NIC Schools Vapor Intrusion Phase 2

FIELD PHOTOGRAPHY LOG SHEET

North Industrial Corridor (NIC) Site, Wichita, KS – Selected Schools February 2014

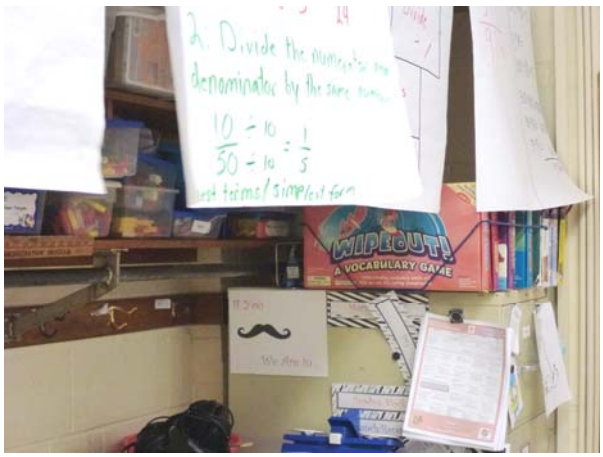
Photograph: #1: SC-L-3_Ph2. L'Ouverture Computer Tech Elementary, Room 3. Sampler is hanging below the TV.

Photograph: #2: SC-L-7_p/c_Ph2. L'Ouverture Computer Tech Elementary, Room 7. Sampler is hanging below TV; stainless steel canister is sitting on the bookcase below the TV.

Photograph: #3: SC-L-10_Ph2. L'Ouverture Computer Tech Elementary, Room 10. Sampler is hanging below the TV.

Photograph: #4: SC-L-15_Ph2. L'Ouverture Computer Tech Elementary, Room 15. Sampler is hanging below the TV.

Photograph: #5: SC-L-20_Ph2. L'Ouverture Computer Tech Elementary, Room 20. Sampler is sitting on the top of the file cabinet to the left of the game.



Photograph: #6: SC-L-21_Ph2. L'Ouverture Computer Tech Elementary, Room 21. Sampler is hanging just inside the closet approximately level with the top shelf.

Photograph: #7: SC-L-27_p/c_Ph2. L'Ouverture Computer Tech Elementary, Room 27. Sampler is sitting on the top shelf of the bookcase; stainless steel canister is sitting on the desk next to the bookcase.

Photograph: #8: SC-L-31_Ph2. L'Ouverture Computer Tech Elementary, Room 31. Sampler is sitting on top of the refrigerator.

Photograph: #9: OA6-L_Ph2. L'Ouverture Computer Tech Elementary. Outdoor air sample – shelter with sampler is tied to a drain pipe on the north side of the school.

Photograph: #10: OA5-L_Ph2. L'Ouverture Computer Tech Elementary. Outdoor air sample – shelter with sampler is tied to the fence between the playground and parking lot on the west side of the building.

Photograph: #11: SC-P-107_p/c_Ph2. Park Elementary, Room 107. Sampler is hanging from the board above the yellow bins; stainless steel canister is sitting on the table in front of the bins.

Photograph: #12: SC-P-110_Ph2. Park Elementary, Room 110. Sampler is hanging from the top of the chalkboard (left of the section with orange paper background).

Photograph: #13: SC-P-128_Ph2. Park Elementary, Room 128. Sampler is sitting on top of the shelf, left of the turtle stuffed animal.

Photograph: #14: SC-P-131_p/c_Ph2. Park Elementary, Room 131. Sampler is sitting on top of the desk right of the blue bin; stainless steel canister is sitting on the desk.

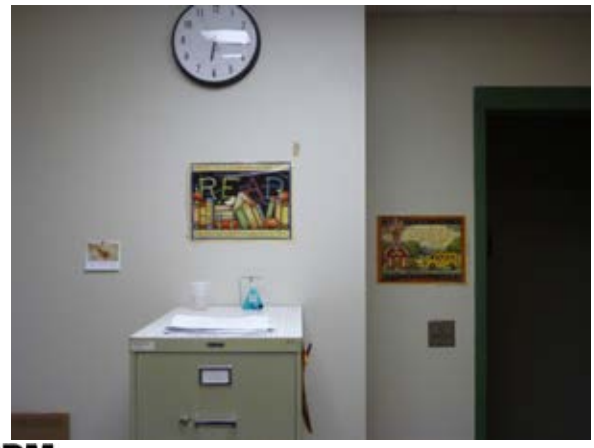
Photograph: #15: SC-P-135_Ph2. Park Elementary, Room 135. Sampler is hanging from the top, right corner of the bulletin board behind the computers.

Photograph: #16: SC-P-138_Ph2. Park Elementary, Room 138. Sampler sitting on top of the shelves, between the books and globe.

Photograph: #17: OA3-P_Ph2. Park Elementary. Outdoor air sample – shelter with sampler is tied to the fence on the north side of the school.

Photograph: #18: OA4-P_Ph2. Park Elementary, Outdoor air sample –shelter with sampler is tied to the fence on the west side of the school, south side of the playground.

Photograph: #19: SC-W-101E_Ph2. Washington Elementary, Room 101E. Sampler is sitting on a file cabinet in this office.



Photograph: #20: SC-W-106_Ph2. Washington Elementary, Room 106. Sampler is hanging below the TV.

Photograph: #21: SC-W-109_Ph2. Washington Elementary, Room 109. Sampler is hanging below the TV.

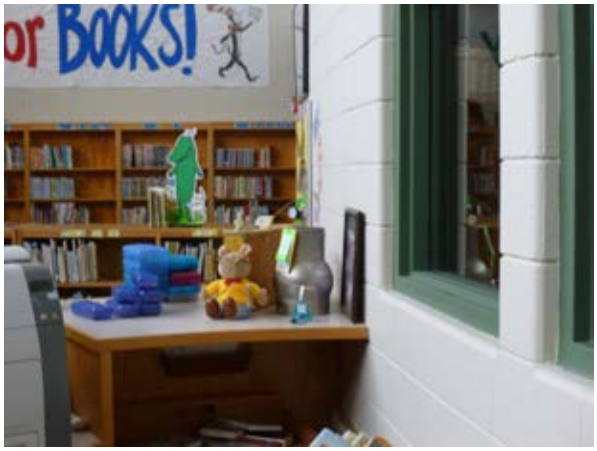
Photograph: #22: SC-W-112_p/c_Ph2. Washington Elementary, Room 112. Sampler is hanging below the TV; stainless steel canister is sitting on a shelf below the TV.

Photograph: #23: SC-W-126_Ph2. Washington Elementary, Room 126. Sampler is hanging below the TV.

Photograph: #24: SC-W-129_Ph2. Washington Elementary, Room 129. Sampler is hanging below the TV.

Photograph: #25: SC-W-133_Ph2. Washington Elementary, Room 133. Sampler is hanging below the TV.

Photograph: #26: SC-W-138_p/c_Ph2. Washington Elementary, Room 138 (library). Sampler and stainless steel canister are sitting on a shelf behind the librarian's desk.



Photograph: #27: OA1-W_Ph2. Washington Elementary. Outdoor air sample – shelter with sampler is tied to the fence on the northeast side of the school.

Photograph: #28: OA2-W_Ph2. Washington Elementary. Outdoor air sample – shelter with sampler is tied to the fence on the southwest side of the school.