STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Northwest Regional Office • 3190 160th Avenue SE • Bellevue, Washington 98008-5452 • (425) 649-7000

March 17, 2008

CERTIFIED MAIL
7007 0220 0004 7250 3270

Mr. Jim Sumner
Manager, Group Environmental Programs
General Electric Aircraft Engine
One Neumann Way MD T165
Cincinnati, OH 45215

Dear Mr. Sumner:

Re: Ecology Comment and Response Letter on the Report: Results of November 2007 Air Sampling at 220 South Dawson Street, WA, dated January 18, 2008

Thank you for submitting the report, *Results of November 2007 Air Sampling at 220 South Dawson Street, WA, dated January 18, 2008.* The Washington State Department of Ecology (Ecology) received this report on January 22, 2008.

Please note that the report was submitted late. In the future please submit the validated indoor air sample data to Ecology within 45-calendar days of the sampling event, per the Agreed Order DE 4258, Section VII.E.

The January report contains a good narrative description of the November 2 and 5, 2007 indoor air sampling events. Several statements or conclusions made in the report, however, are problematic and Ecology has noted these in the comments below.

1. Figure 2 refers to the air sample collected under the temporary trailer in the alley way. GE refers to this sample (AA-5) as an *ambient air* sample. Ecology disagrees that this sample collected "ambient air" and does not approve this figure in the report. This is consistent with Ecology's previous characterizations of this sample. In our letters dated August 15, 2007 (7007 0220 0004 7250 4789) and September 25, 2007 (7007 0220 0004 6659 3850) we told GE that *Ecology does not consider the single air sample collected in the former dangerous waste storage alley and under the temporary trailer an ambient air sample. The purpose of this air sample is to conservatively estimate the concentrations of TCE entering the temporary trailer and not to estimate the ambient outdoor TCE concentrations."*

These Ecology statements and revisions were part of the conditionally-approved air sampling work plan. Please ensure that future statements and references regarding samples collected from under the temporary trailer shall refer to them as "crawl space sample" or simply "samples from under the trailer," not ambient air samples.

2. The locations chosen to collect ambient air samples on November 2, 2007, do not appear to be appropriate. For this specific indoor air sampling event, the winds were primarily from the southeast (as

the report's Figure 2 depicts). Based on the prevailing and dominant wind direction that day, the optimum location for an upwind ambient air sample would have been near station AA-1. However, GE only collected ambient air samples at locations AA-2 and AA-4. Both locations were downwind of the indoor air sample stations and partially downwind of portions of the mitigated building. Neither ambient air sample location is suitable since it is possible that the TCE in both samples may have originated in part from indoor air emitted by the 220 S. Dawson building.

For future sampling events, Ecology recommends that GE verify the general wind direction the day of the sampling event and use this information to select the best locations for upwind ambient air sampling stations. Ecology realizes that even when such measures are taken, however, that the wind direction may change during the sampling period and shift in such a way that no samples collect upwind air. In these cases there is little the field team can do. Nevertheless, the authors of the report must always assess how well the sampling event filled the upwind air data gap, and if no samples were collected upwind, as appears to be the case on November 2, this should be acknowledged and the consequences discussed. It is not acceptable to simply substitute other ambient air results and use them to "correct" indoor air measurements, without providing a rationale for such a deviation from the approved work plan.

Due to this uncertainty in the ambient air TCE concentrations during the November 2, 2007 sampling event, Ecology believes that the it is more appropriate to cite the corrected IA-1 and IA-5 TCE concentration as 0.09 – 0.5 ug/m^3, and 0.04 – 0.45 ug/m^3, respectively. In future reports, GE must footnote these corrected TCE indoor air concentration ranges (IA-1 and IA-5) as *"estimates due to a lack of upwind ambient air TCE concentration data for the sampling period."*

3. Table 2: Some of the air sample collections were less than 8 hours. Refer to Table 2 and samples AA-3, AA-4, AA-4 dup, IA-4 dup. There was no explanation in the report for this deviation from the work plan, and no explanation as to how this could compromise data quality. Nor was there acknowledgement that sample collections significantly less than 8 hours add considerable uncertainty to "corrected" indoor air sample concentrations.

4. Table 2: The final field vacuum reading for Canister AA-1 was -6.5 psig. However, the canister read -0- vaccum at the laboratory. There was no discussion in the report of why this final pressure difference was observed. One explanation is that the AA-1 canister leaked air into the vessel after the sampling was supposed to have been completed. In the absence of an explanation for why the pressures were different, an added level of uncertainty must be associated with AA-1's reported VOC concentrations.

5. Table 2: The duplicate samples for IA-4 and AA-4 were collected over 4-hour and 3.3-hour time intervals. The primary IA-4 sample collected air for 8 hours and the primary AA-4 canister collected sample for 6.5 hours. Since the duplicate sample time periods do not coincide with those of the primary samples, they should not be used to determine precision (as stated in the ENSR Analytical Data verification checklist #21). This obvious difference in collection times should have been acknowledged and discussed in the report. GE should have (1) assessed what this QA failure meant to data quality, and (2) proposed actions that could be taken in the future to ensure better synchronicity between collocated pairs.

6. Table 3: The TCE in sample AA-4 decreased from 0.67 ug/m^3 (11/2/07 sample date) to 0.14 ug/m^3 (11/5/07 sample date) over three days time. As we have noted above, it is possible that the higher reading on 11/2/07 is due to some contribution from the 220 S. Dawson Street building.

Although these findings should have been discussed in the report, Ecology is not requesting that GE revise the January 2008 document. However, Ecology is requiring specific revisions in the manner that data from this sampling event is presented in future reports (paragraphs 1 and 2). Our comments here and above also serve to clarify that Ecology interprets the November 2 results differently than the report's authors.

The indoor air sampling conducted by GE is intended to verify the effectiveness of the vapor intrusion mitigation system. Due to the problems noted above (no upwind sample on 11/2; inconsistent sample collection periods), the results from the November sampling do not clearly demonstrate adequate mitigation performance. Ecology will be evaluating the necessity for further indoor air sampling at the former 220 S. Dawson Street building, in accordance with Section VII.E of the Agreed Order. Please feel free to call me at (425) 649-7264 if you have any questions regarding this letter.

Sincerely,

Dean Yasuda

Dean Yasuda, P.E.
Environmental Engineer
Hazardous Waste and Toxics Reduction Program

DY:SA
cc: Julie Sellick, HWTR/NWRO
Ed Jones, Ecology HWTR/NWRO
Melissa Rourke, Ecology AAG
Tong Li, Ground Water Solutions
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James King, Hudson Bay Insulation
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Jamie Stevens, ENSR
Linda Baker, ENSR
WAD009278706 HZW 6.2

General Electric
WAD 009248706
HZW 6.7.1

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January 18, 2008

Mr. Dean Yasuda
Washington Department of Ecology
Northwest Regional Office
3190- 160th Avenue S.E.
Bellevue, Washington 98008-5452

Dean Mr. Yasuda:

Attached please find a memo prepared by ENSR on behalf of GE outlining the results of November 2007 air sampling event. This memo and attachments serve as an addendum to the VIMS Engineering Report.

Please note that McKinstry has clarified that because the VIMS fan was installed into the existing electrical circuit, no electrical permit was pulled by McKinstry. This letter is intended to correct section 3.2.2 of the VIMS Engineering Report as noted.

Should you have any questions or concerns about the information presented in these reports, please do not hesitate to call me at (513) 672-3986 or Jamie Stevens at (206) 624-9349.

Sincerely,

James W. Sumner

Attachment – November 2007 Air Sampling Event Memo

cc: Tong Li – Groundwater Solutions
Bill Teplicky, McKinstry (via e-mail)
Bill Joyce – Salter Joyce Ziker (via e-mail)
Jamie Stevens, Linda Baker – RETEC

Original hand signed cover letter sent after report submitted

General Electric
WAD009276706
HSW G.7.1

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JAN 25 2008
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Dean Mr. Yasuda:

Attached please find a memo prepared by ENSR on behalf of GE outlining the results of November 2007 air sampling event. This memo and attachments serve as an addendum to the VIMS Engineering Report.

Please note that McKinstry has clarified that because the VIMS fan was installed into the existing electrical circuit, no electrical permit was pulled by McKinstry. This letter is intended to correct section 3.2.2 of the VIMS Engineering Report as noted.

Should you have any questions or concerns about the information presented in these reports, please do not hesitate to call me at (513) 672-3986 or Jamie Stevens at (206) 624-9349.

Sincerely,

James W. Sumner

Attachment – November 2007 Air Sampling Event Memo

cc: Tong Li – Groundwater Solutions
Bill Teplicky, McKinstry (via e-mail)
Bill Joyce – Salter Joyce Ziker (via e-mail)
Jamie Stevens, Linda Baker – RETEC

The RETEC Group, Inc.
1011 SW Klickitat Way, Suite 207, Seattle, WA 98134-1162
T 206.624.9349 F 206.624.2839 www.ensr.aecom.com

Memorandum

Date: January 18, 2007

To: James Sumner – General Electric Aviation

From: Jamie Stevens

Subject: Results of November 2007 Air Sampling at 220 South Dawson Street, WA

GE Aviation (GE) completed installation of a Vapor Intrusion and Mitigation System [VIMS] in August 2007.The purpose of this memo is to provide the results of the confirmation VIMS testing conducted in November 2007.

Sampling Methods

Two rounds of sampling were conducted on Friday November 2 and Monday November 5, 2007. All samples were collected in accordance with the Sampling Analysis Plan – Vapor Intrusion Mitigation Interim Action – Revision 1. Sampling was preformed on 2 separate dates to accommodate the moving schedule for Puget Sound Pipe and Supply. A total of 13 air samples were collected for this evaluation. These consisted of 5 ambient air samples, 5 indoor air samples, 1 exhaust sample, 1 temporary job trailer sample, and 1 field duplicate sample. Figure 1 shows the sample locations; Table 1 summarizes the sampling locations on both dates.

Table 1: Summary of Sample Locations and Sampling Dates

Location and Sample ID	Sample Date
Puget Sound Pipe & Supply warehouse (IA-1) and office (IA-5)	November 2, 2007
Ambient Locations on the NE (AA-2) and NW (AA-4)	November 2, 2007
Hudson Bay Insulation Office (IA-4) and Warehouse (IA-7)	November 5, 2007
Masons Supply Company Office (IA-3)	November 5, 2007
The space under the temporary trailer in the Alley (AA-5)	November 5, 2007
Ambient Locations on the SE (AA-1), SW (AA-3), and NW (AA-4)	November 5, 2007
Exhaust Stack (EX-1)	November 5, 2007

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Ambient and Indoor Air Results

The wind direction on November 2 was generally from a South-Southeast direction. Wind speed and direction data were obtained from the Puget Sound Clean Air Agency (PSCAA) station located at 4752 East Marginal Way South, less than one-half mile from the former GE facility. Wind roses showing the wind speed and direction recorded throughout the day are shown in Figure 2. Based on the wind data for the test period, sample AA-2, the North-East location, is the most representative of upwind conditions at the former GE facility on November 2.

The wind direction on November 5 was generally from a North-west direction. Wind speed and direction data were obtained from the PSCAA station located at 4752 East Marginal Way South. Wind roses showing the wind speed and direction recorded throughout the day are shown in Figure 3. Based on the wind data for the test period, sample AA-4, the North-west location, is representative of upwind conditions at the former GE facility on November 5.

Tables 2 and 3 include a summary of the results from the November 2007 sampling event. Copies of field forms and analytical reports are included in Attachment A. 1,1,1-Trichloroethane, Tetrachloroethylene, Chloroform, and Trichloroethylene (TCE) were detected above laboratory detection limits in both ambient and indoor samples. Because these compounds were detected in ambient air, the average upwind concentration for November 2 (AA-2) and November 5 (AA-4) were subtracted from the indoor air concentrations, to develop "corrected" indoor air concentrations, reflecting only the indoor air contribution to PCE in the samples. The raw and "corrected" indoor air results are summarized in Table 3.

1,1,1-Trichloroethane, Tetrachloroethylene, and Chloroform were detected below the MTCA Method C indoor air screening levels in all indoor air samples. TCE was detected in all indoor samples with the exception of IA-3. Corrected TCE detections ranged from 0.04 $\mu g/m^3$ (IA-5) to 0.46 $\mu g/m^3$ (IA-4). TCE detected at IA-4 is greater than the MTCA Method C cleanup level of 0.22 $\mu g/m^3$. All detections are below the TCE site remediation level of 0.96 $\mu g/m^3$. This number takes into account actual exposure frequencies and durations for the workers in the building, rather than assuming 24-hour a day exposures as the MTCA Method C value assumes.

Temporary Job Trailer Air Results

One additional sample was collected from beneath the temporary job trailer located in the alley between the former GE building and the McKinstry Company building. TCE was detected below the MTCA Method C cleanup level of 0.22 $\mu g/m^3$, results are summarized on Table 3.

VIMS Exhaust Air Results

In addition to the ambient and indoor air samples, one analytical sample was collected directly from the exhaust stack on the downstream side of the exhaust fan. Prior to sampling, the exit velocity was measured from the sampling port using a hot wire anemometer. Table 4 provides a summary of the average flow, detected concentrations, and the total mass released based on the air flow and detected concentrations. Copies of field forms and analytical reports are included in Attachment A.

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Summary

As stated in Section 4.2 of the Final Engineer Report, this memo provides the certified laboratory analytical results and summary tables from the confirmation testing. This memo serves as an addendum to the Final Engineering Report.

If you have any questions, please contact me at (206) 624-9349.

Sincerely yours,

Jamie C Stevens

Jamie C. Stevens, P.E.
Project Engineer

Attached: Tables, Figures, Attachment A

Table 2 Summary of Sample Collection Information - November 2 and 5, 2007

Location ID	Sample Date	Canister ID	Initial Vacuum Readings		Final Vacuum Readings		Final Vacuum Reading at Laboratory	Start Time	End Time	Duration (hours)	Analysis
			Vacuum Gauge	Flow Controller	Vacuum Gauge	Flow Controller					
AA-1	11/5/2007	12079	-30	-30	---	-6.5	0.0	7:54	15:54	8:00	TO-15 SIM
AA-2	11/2/2007	3422	-30	-30	-7.0	-8.0	4.5	7:11	16:01	8:50	TO-15 SIM
AA-3	11/5/2007	4375	-30	-29	---	-5.0	0.6	8:01	13:48	5:47	TO-15 SIM
AA-4	11/2/2007	12071	-30	-30	-2.0	-1.0	0.6	7:20	13:50	6:30	TO-15 SIM
AA-4	11/5/2007	4290	-30	-30	---	-7.0	0.6	8:08	11:28	3:20	TO-15 SIM
AA-5	11/5/2007	33789	-30	-30	---	-7.0	3.5	8:11	15:59	7:48	TO-15 SIM
IA-1	11/2/2007	13658	-30	-30	-8.0	-10.0	4.5	7:05	15:55	8:50	TO-15 SIM
IA-3	11/5/2007	20934	-30	-29	---	-9.0	5.0	7:30	15:38	8:08	TO-15 SIM
IA-4	11/5/2007	34022	-30	-30	---	-8.0	4.0	7:26	15:44	8:18	TO-15 SIM
IA-5	11/2/2007	34393	-30	-30	-7.0	-7.0	5.5	7:08	15:58	8:50	TO-15 SIM
IA-7	11/5/2007	31155	-30	-30	---	-7.5	3.0	7:24	15:41	8:17	TO-15 SIM
IA-4 (Dup)	11/5/2007	3745	-30	-30	---	-2.0	0.8	7:26	11:20	3:54	TO-15 SIM

Notes:

TO-15 Analysis included: 1,1,1-Trichloroethane (1,1,1-TCA), 1,1-Dichloroethane (1,1-DCA), 1,1-Dichloroethylene (1,1-DCE), Chloroform, cis 1,2-Dichloroethylene (1,2-DCE), Tetrachloroethylene (PCE), Trichloroethylene (TCE), and Vinyl Chloride

All vacuum readings in units of pounds per square inch Hg

Initial Vacuum Readings of -30psi were greater than -30psi, the gauge only recorded to -30psi.

Final vacuum readings were collected from the flow controller only on November 5, 2007.

Table 3: Summary of Vapor Intrusion Confirmation Results – Former GE Building

Location ID	1,1,1-TCA							Chloroform							cis-1,2-DCE						
Indoor Air Samples (µg/m³)	12/5/2005	8/21/2006	11/9/2006	2/19/2007	3/13/2007	11/2/2007	11/5/2007	12/5/2005	8/21/2006	11/9/2006	2/19/2007	3/13/2007	11/2/2007	11/5/2007	12/5/2005	8/21/2006	11/9/2006	2/19/2007	3/13/2007	11/2/2007	11/5/2007
IA-1	**0.18**	**0.21**	< 0.18	< 0.18	NS	**0.19**	NS	< 0.15	< 0.16	< 0.16	< 0.16	NS	< 0.15	NS	< 0.12	< 0.13	< 0.13	< 0.13		< 0.12	NS
IA-2	< 0.19	NS	NS	NS	NS	NS	NS	< 0.17	NS	NS	NS	NS	NS	NS	< 0.14	NS	NS	NS	NS	NS	NS
IA-2 (duplicate)	< 0.18	NS	NS	NS	NS	NS	NS	< 0.16	NS	NS	NS	NS	NS	NS	< 0.13	NS	NS	NS	NS	NS	NS
IA-3	< 0.18	**0.17**	< 0.18	< 0.18	NS	NS	< 0.18	< 0.16	0.16	< 0.16	< 0.16	NS	NS	< 0.16	< 0.13	< 0.12	< 0.13	< 0.13	NS	NS	< 0.13
IA-4	< 0.18	**0.21**	< 0.17	< 0.18	NS	NS	< 0.17	< 0.16	0.16	< 0.15	< 0.16	NS	NS	< 0.15	< 0.13	< 0.13	< 0.12	< 0.13	NS	NS	< 0.12
IA-4 (duplicate)	NS	NS	< 0.18	< 0.2	NS	NS	< 0.14	NS	NS	< 0.16	< 0.16	NS	NS	**0.14**	NS	NS	< 0.13	< 0.11	< 0.14	NS	< 0.1
IA-5	**0.38**	**0.21**	**0.32**	**0.37**	NS	**0.19**	NS	< 0.17	< 0.16	< 0.13	< 0.18	NS	< 0.16	NS	< 0.14	< 0.13	< 0.13	< 0.14	NS	< 0.13	NS
IA-5 (duplicate)	NS	**0.18**	NS	NS	NS	NS	NS	NS	< 0.16	NS	NS	NS	NS	NS	NS	< 0.13	NS	NS	NS	NS	NS
IA-6	< 0.18	NS	NS	NS	NS	NS	NS	< 0.16	NS	NS	NS	NS	NS	NS	< 0.13	NS	NS	NS	NS	NS	NS
IA-7		NS	NS	NS	< 0.19	NS	< 0.16	NS	NS	NS	NS	< 0.17	NS	**0.16**	NS	NS	NS	NS	NS	< 0.14	NS
Alley Trailer	NS	NS	NS	NS	NS	NS	< 0.16	NS	NS	NS	NS	NS	NS	< 0.15	NS	NS	NS	NS	NS	NS	< 0.12
Ambient Samples (µg/m³)																					
AA-1	< 0.18	< 0.18	< 0.17	< 0.18	NS	NS	< 0.15	< 0.16	< 0.16	< 0.15	0.16	NS	NS	< 0.13	< 0.13	< 0.13	< 0.12	< 0.13	NS	NS	< 0.11
AA-3	< 0.17	< 0.18	< 0.16	< 0.18	< 0.17	NS	< 0.15	< 0.15	< 0.16	< 0.15	0.16	< 0.15	NS	< 0.12	< 0.12	< 0.13	< 0.12	< 0.13	< 0.12	NS	< 0.1
AA-5	< 0.17	NS	NS	NS	NS	NS	NS	< 0.15	NS	NS	NS	NS	NS	NS	< 0.12	NS	NS	NS	NS	NS	NS
AA-2	< 0.17	< 0.18	< 0.16	< 0.18	NS	**0.19**	NS	< 0.15	< 0.16	< 0.14	*0.16*	NS	< 0.15	NS	< 0.12	< 0.13	< 0.12	< 0.13	NS	< 0.12	NS
AA-4	< 0.17	< 0.18	< 0.17	< 0.16	NS	**0.22**	< 0.14	< 0.15	< 0.16	< 0.15	**0.15**	NS	**0.14**	< 0.12	< 0.12	< 0.13	< 0.12	< 0.16	NS	< 0.1	< 0.1
Average Upwind for Ir	*0*	*0*	*0*	*0*	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Corrected Indoor Air Results (Indoor Air minus Ambient) (µg/m³)																					
IA-1	**0.18**	**0.21**	< 0.18	< 0.18	NS	**0.19**	NS	< 0.15	< 0.16	< 0.16	< 0.16	< 0.18	< 0.15	NS	< 0.12	< 0.13	< 0.13	< 0.13	NS	< 0.12	NS
IA-2	< 0.19	NS	NS	NS	NS	NS	NS	< 0.17	NS	NS	NS	NS	NS	NS	< 0.14	NS	NS	NS	NS	NS	NS
IA-3	< 0.18	**0.17**	< 0.18	< 0.18	NS	NS	< 0.18	< 0.16	0.16	< 0.16	< 0.16	0 0	NS	< 0.16	< 0.13	< 0.12	< 0.13	< 0.13	NS	NS	< 0.13
IA-4	< 0.18	**0.21**	< 0.17	< 0.18	NS	NS	< 0.17	< 0.16	0.16	< 0.15	< 0.16	0 0	NS	< 0.15	< 0.13	< 0.13	< 0.12	< 0.13	NS	NS	< 0.12
IA-5	**0.38**	**0.21**	< 0.32	**0.37**	NS	**0.19**	NS	< 0.17	< 0.16	< 0.13	< 0.18	0 0	< 0.16	NS	< 0.14	< 0.13	< 0.11	< 0.14	NS	< 0.13	NS
IA-6	< 0.18	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
IA-7	NS	NS	NS	NS	< 0.19	NS	< 0.16	NS	NS	NS	NS	< 0.17	NS	**0.16**	NS	NS	NS	NS	< 0.14	NS	< 0.12
MTCA Method C Indoor Air Screening Level	*2,205*							*1.1*							*35*						

Notes:

1. Average PCE concentration in ambient air calculated using 1/2 detection limit for non-detect result.
2. TCE has two screening levels, the MTCA Method C screening level (0.22 ug/m3)and the site specific remediation level (0.96 ug/m^3)

NS - Location was not sampled

Shading indicates values above the MTCA Method C Screening level

Shading indicates values above the Site Specific Remediation Level

During the November 2006 Sampling event no COCs were detected in the Ambient air.

1,1,1-TCA- 1,1,1-Trichloroethane

1,1-DCA- 1,1-Dichloroethane - all detections ND, not included in this table

1,1-DCE- 1,1-Dichloroethylene all detections ND, not included in this table

1,2-DCE- cis 1,2-Dichloroethylene

PCE- Tetrachloroethylene

TCE- Trichloroethylene

Table 3: Summary of Vapor Intrusion Confirmation Results – Former GE Building

Location ID	12/5/2005	8/21/2006	11/9/2006	2/19/2007	3/13/2007	11/2/2007	11/5/2007	12/5/2005	8/21/2006	11/9/2006	2/19/2007	3/13/2007	11/2/2007	11/5/2007	12/5/2005	8/21/2006	11/9/2006	2/19/2007	3/13/2007	11/2/2007	11/5/2007
		Vinyl Chloride						PCE							TCE						
Indoor Air Samples (µg/m³)																					
IA-1	< 0.04	< 0.041	< 0.043	< 0.043	< 0.13	< 0.04	NS	**0.38**	**0.22**	< 0.23	< 0.22	NS	**0.74**	NS	**0.28**	**1.3**	**0.2**	< 0.17	NS	**0.5**	NS
IA-2	< 0.044	NS	NS	NS	NS	NS	NS	**0.38**	NS	NS	NS	NS	NS	NS	**0.27**	NS	NS	NS	NS	NS	NS
IA-2 (duplicate)	< 0.041	NS	NS	NS	NS	NS	NS	**0.38**	NS	NS	NS	NS	NS	NS	**0.28**	NS	NS	NS	NS	NS	NS
IA-3	< 0.043	< 0.039	< 0.043	< 0.043	< 0.13	NS	< 0.041	**0.43**	**0.29**	**0.67**	< 0.23	NS	NS	< 0.22	**0.34**	**0.29**	< 0.18	**0.24**	NS	NS	< 0.17
IA-4	< 0.041	< 0.041	< 0.04	< 0.041	< 0.12	NS	< 0.04	**0.42**	**0.22**	< 0.21	< 0.22	NS	NS	**0.22**	**0.55**	**5.2**	**1.7**	**0.35**	NS	NS	**0.6**
IA-4 (duplicate)	NS	NS	< 0.041	< 0.041	< 0.13	NS	< 0.032	NS	NS	< 0.22	< 0.22	NS	NS	< 0.17	NS	NS	**1.7**	**0.37**	NS	NS	**0.54**
IA-5	< 0.044	< 0.041	< 0.034	< 0.047	NS	< 0.042	NS	**0.45**	**0.22**	**0.28**	**0.25**	NS	0.71	NS	**0.71**	**1.2**	**1**	**0.99**	NS	**0.45**	NS
IA-5 (duplicate)	NS	< 0.041	NS	NS	NS	NS	NS	NS	**0.22**	NS	NS	NS	NS	NS	NS	**0.96**	NS	NS	NS	NS	NS
IA-6	< 0.041	NS	NS	NS	NS	NS	NS	**0.46**	NS	NS	NS	NS	NS	NS	**0.44**	NS	NS	NS	NS	NS	NS
IA-7	NS	NS	NS	NS	< 0.045	NS	< 0.038	NS	NS	NS	NS	**0.57**	NS	< 0.2	NS	NS	NS	NS	**0.26**	NS	**0.33**
Alley Trailer	NS	NS	NS	NS	NS	NS	< 0.039	NS	NS	NS	NS	NS	NS	< 0.21	NS	NS	NS	NS	NS	NS	**0.16**
Ambient Samples (µg/m³)																					
AA-1	< 0.043	< 0.043	< 0.04	< 0.041	NS	NS	< 0.034	**0.46**	< 0.23	< 0.21	< 0.22	NS	NS	0.2	**0.2**	< 0.18	< 0.17	< 0.17	NS	NS	**0.14**
AA-3	< 0.04	< 0.042	0.039	< 0.041	NS	NS	< 0.033	**0.37**	**0.27**	< 0.21	< 0.22	1.8	NS	< 0.18	**0.18**	< 0.18	< 0.16	< 0.17	< 0.17	NS	< 0.14
AA-5	< 0.04	NS	NS	NS	< 0.04	NS	NS	**0.4**	NS	NS	NS	NS	NS	NS	**0.19**	NS	NS	NS	NS	NS	NS
AA-2	< 0.04	< 0.043	< 0.038	< 0.041	NS	< 0.04	NS	**0.38**	< 0.23	< 0.2	< 0.22	NS	0.7	NS	**0.18**	< 0.18	< 0.16	< 0.17	NS	**0.41**	NS
AA-4	< 0.04	< 0.043	< 0.04	< 0.039	NS	< 0.033	< 0.033	**0.34**	< 0.23	< 0.21	**0.26**	NS	0.9	< 0.18	< 0.17	< 0.18	< 0.17	< 0.16	NS	**0.67**	**0.14**
Average Upwind for Ir	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	***0.41***	***0.12*** [1]	*0.00*	*0.00*			*0.00*	***0.19***	*0.00*	*0.00*	*0.00*		*0.41*	*0.14*
Corrected Indoor Air Results (Indoor Air minus Ambient) (µg/m³)																					
IA-1	< 0.04	< 0.041	< 0.043	< 0.043	NS	< 0.04	NS	**-0.03**	**0.03**	< 0.23	< 0.22	NS	0.74	NS	**0.09**	**1.3**	**0.2**	**0.17**	NS	**0.09**	NS
IA-2	< 0.044	NS	NS	NS	NS	NS	NS	**-0.03**	NS	NS	NS	NS	NS	NS	**0.08**	NS	NS	NS	NS	NS	NS
IA-3	< 0.043	< 0.039	< 0.043	< 0.043	NS	NS	< 0.04	**0.02**	**0.10**	**0.67**	< 0.23	NS	NS	< 0.22	**0.15**	**0.29**	< 0.18	**0.24**	NS	NS	< 0.03
IA-4	< 0.041	< 0.041	< 0.04	< 0.041	NS	NS	< 0.04	**0.01**	**0.03**	< 0.21	< 0.22	NS	NS	**0.22**	**0.36**	**5.2**	**1.7**	**0.35**	NS	NS	**0.46**
IA-5	< 0.044	< 0.041	< 0.034	< 0.047	NS	< 0.04	NS	**0.04**	**0.03**	**0.28**	**0.25**	NS	0.71	NS	**0.52**	**1.2**	**1**	**0.99**	NS	**0.04**	NS
IA-6	< 0.041	NS	NS	NS	NS	NS	NS	**0.05**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
IA-7	NS	NS	NS	NS	< 0.045	NS	< 0.04	NS	NS	NS	NS		NS	< 0.20	NS	NS	NS	NS		NS	**0.19**
MTCA Method C Indoor Air Screening Level		*2.82*						*4.2*							*0.22/0.96*						

Notes:

1. Average PCE concentration in ambient air calculated using 1/2 detection limit for non-detect result.
2. TCE has two screening levels, the MTCA Method C screening level (0.22 ug/m3)and the site specific remediation level (0.96 ug/m³)

NS - Location was not sampled

Shading indicates values above the MTCA Method C Screening level

Shading indicates values above the Site Specific Remediation Level

During the November 2006 Sampling event no COCs were detected in the Ambient air.

1,1,1-TCA- 1,1,1-Trichloroethane

1,1-DCA- 1,1-Dichloroethane - all detections ND, not included in this table

1,1-DCE- 1,1-Dichloroethylene all detections ND, not included in this table

1,2-DCE- cis 1,2-Dichloroethylene

PCE- Tetrachloroethylene

TCE- Trichloroethylene

Table 4: Exhaust Sample Discharge

Summary of Velocity Recordings

stack velocity range ft/min:	1750-2305
average stack velocity ft/min:	1990
pipe area ft^2:	0.0899
flow at exhaust ft^3/min:	178.82

Summary of Analytical Results

* location :	EX-1					
* coc detected :	1,1-DCA	cis-1,2-DCE	PCE	TCE	TCA	
* ug/M^3 :	8.2	7	6.2	140	44	
Kg/M^3 :	8.20E-09	7.00E-09	6.20E-09	1.40E-07	4.40E-08	
lbs/ft^3 :	5.12E-10	4.37E-10	3.87E-10	8.74E-09	2.75E-09	**Totals**
					total lbs/ft^3 :	**1.28E-08**

Summary of Mass Emitted

Flow (at sample location)		1,1-DCA	cis-1,2-DCE	PCE	TCE	TCA	
cfm	**ft^3/yr**	**lbs/yr**	**lbs/yr**	**lbs/yr**	**lbs/yr**	**lbs/yr**	
175.82	9.24E+07	0.05	0.04	0.04	0.81	0.25	**Totals**
					total lbs/year :		**1.18**

* Results from November 5, 2007 Sampling Event

Exempt from Air Permit:
Soil and groundwater remediation projects involving <15 pounds per year of benzene or vinyl chloride, <500 pounds per year of perchloroethylene, and <1,000 pounds per year of toxic air contaminants.

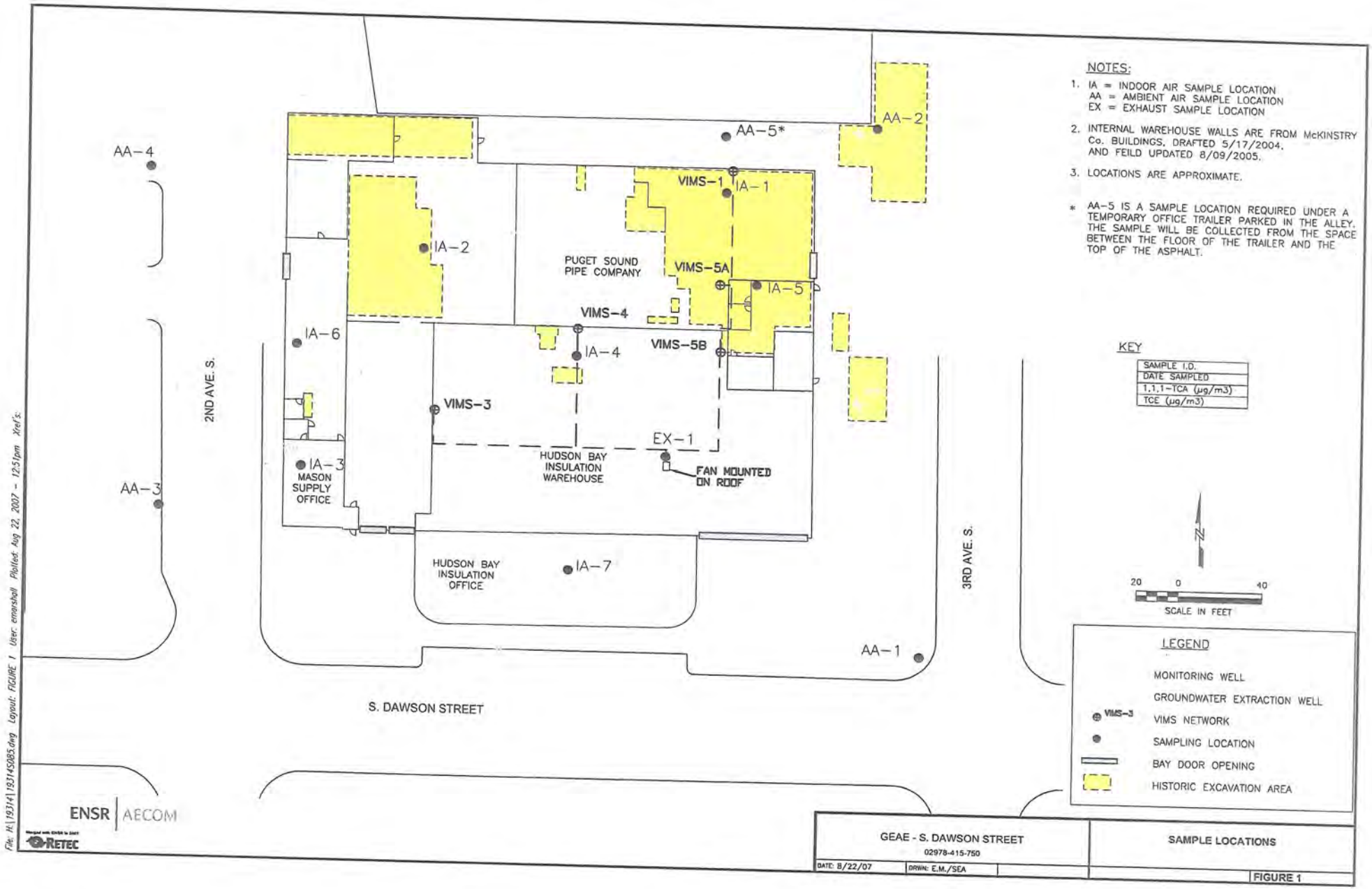
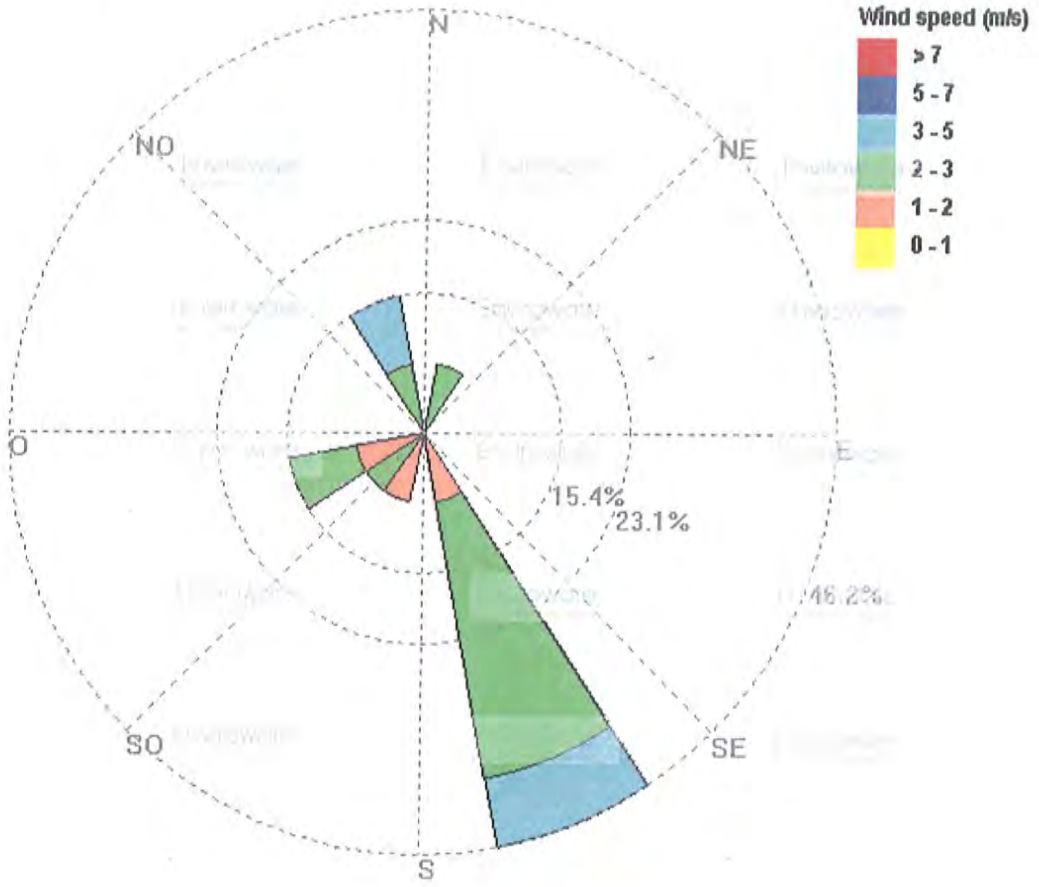
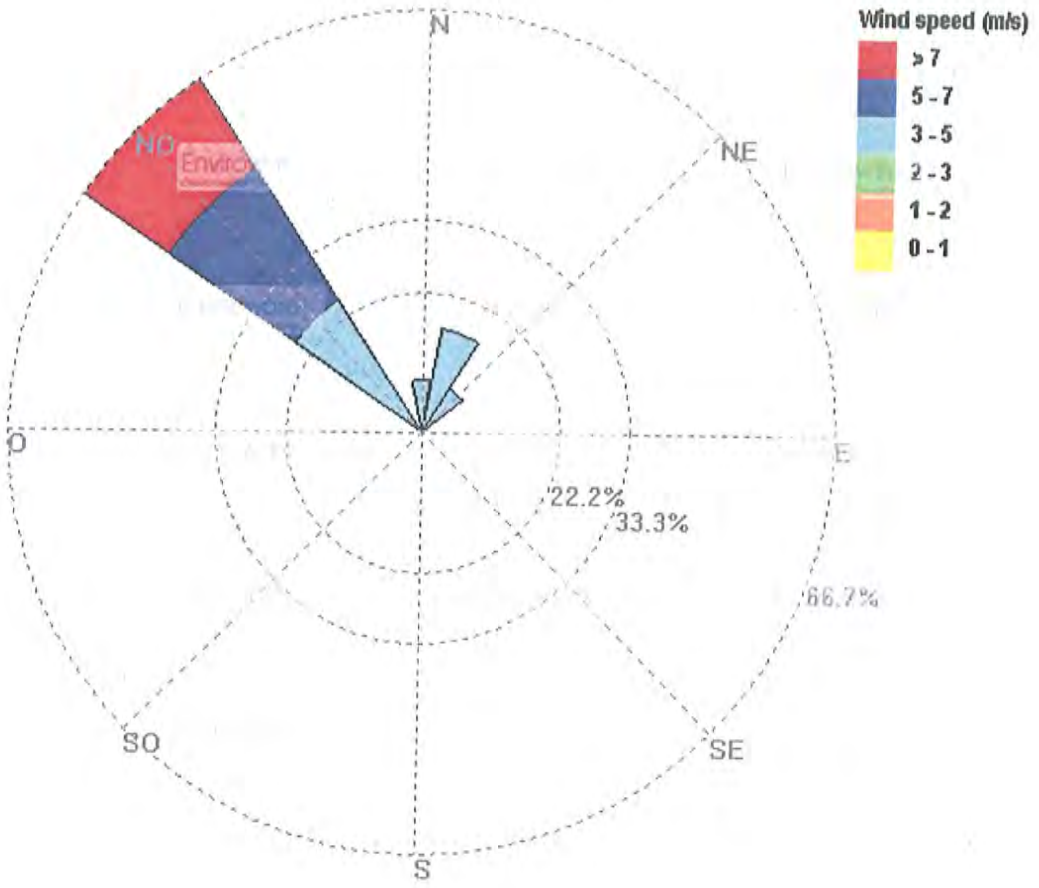

AA-4
AA-5*
AA-2
VIMS-1
IA-1
IA-2
PUGET SOUND
PIPE COMPANY
VIMS-5A
IA-5
VIMS-4
IA-6
IA-4
VIMS-5B
2ND AVE. S.
VIMS-3
EX-1
IA-3
MASON
SUPPLY
OFFICE
HUDSON BAY
INSULATION
WAREHOUSE
FAN MOUNTED
ON ROOF
AA-3
HUDSON BAY
INSULATION
OFFICE
IA-7
3RD AVE. S.
AA-1
S. DAWSON STREET
NOTES:
1. IA = INDOOR AIR SAMPLE LOCATION
AA = AMBIENT AIR SAMPLE LOCATION
EX = EXHAUST SAMPLE LOCATION
2. INTERNAL WAREHOUSE WALLS ARE FROM McKINSTRY Co. BUILDINGS, DRAFTED 5/17/2004, AND FEILD UPDATED 8/09/2005.
3. LOCATIONS ARE APPROXIMATE.
* AA-5 IS A SAMPLE LOCATION REQUIRED UNDER A TEMPORARY OFFICE TRAILER PARKED IN THE ALLEY. THE SAMPLE WILL BE COLLECTED FROM THE SPACE BETWEEN THE FLOOR OF THE TRAILER AND THE TOP OF THE ASPHALT.
KEY
SAMPLE I.D.
DATE SAMPLED
1,1,1-TCA (µg/m3)
TCE (µg/m3)
N
20 0 40
SCALE IN FEET
LEGEND
MONITORING WELL
GROUNDWATER EXTRACTION WELL
VIMS-3 VIMS NETWORK
SAMPLING LOCATION
BAY DOOR OPENING
HISTORIC EXCAVATION AREA
ENSR | AECOM
RETEC
GEAE - S. DAWSON STREET
02978-415-750
DATE: 8/22/07
DRWN: E.M./SEA
SAMPLE LOCATIONS
FIGURE 1
File: H:\1931+\19314085.dwg Layout: FIGURE 1 User: emarshall Plotted: Aug 22, 2007 - 12:51pm Xref's:

Figure 2 - November 2, 2007 Windrose Data



Plot (6:00-18:00 PDT) – data from: http://www.pscleanair.org/

Figure 3 - November 5, 2007 Windrose Data



Plot (6:00-18:00 PDT) – data from: http://www.pscleanair.org/

Attachment A

Analytical Data and Field Sheets

ENSR | AECOM

Prepared for:
GE South Dawson Street
GE Capital Corporation

December 3, 2007

Organic Data Verification Report

GE South Dawson Street Air Sampling Air Toxics Ltd. data November 2007

Prepared By Sue Milcan
Environmental Scientist/Quality Assurance Manager

The RETEC Group, Inc. – merged with ENSR in 2007
December 2007
Document No.: 02978415-753

Merged with ENSR in 2007
RETEC

Overview

The samples analyzed for the GE South Dawson Street air sampling event of November 2007 are listed in the Table of Samples Analyzed (page 2). Data verification was performed on thirteen air samples.

Samples were analyzed by Air Toxics Ltd of Folsom, CA. The verified analyses were Volatile Organic Compounds (VOCs) by modified GC/MS method TO15 full scan or TO15 SIM.

The RETEC Analytical Data Verification Checklist is presented as pages 3-6. Data were evaluated based on validation criteria set forth in the *USEPA Contract Laboratory Program (CLP) National Functional Guidelines for Organic Data Review*, document number EPA540/R-99/008 of October 1999, and the *USEPA CLP National Functional Guidelines for Superfund Organic Methods Data Review*, document number USEPA-540-R-07-003, July 2007, as they applied to the reported methodology. Field duplicate RPD control limits were taken from the USEPA Region I Laboratory Data Validation Functional Guidelines for Evaluating Organics Analyses, December 1996.

The following data components were reviewed during the data verification procedure:

Submitted Deliverables
Case Narratives
Chain-of-Custody form(s) and sample integrity
Sample results, reporting detection limits dilution factors
Holding times
Method blank results
LCS and LCSD (blank spike) results
Organic surrogate recoveries
Blind field duplicate results
Electronic data deliverables (EDDs)

Data Verification Qualifiers Assigned During this Review

There were no data verification qualifiers assigned during this review.

Overall Data Assessment

Precision, accuracy, method compliance, and completeness of the data set have been determined to be acceptable, based on the data submitted. The data are suitable for their intended use without qualification.

Table of Samples Analyzed
GE South Dawson Street
Air Samples
Air Toxics Ltd. Laboratory Projects 0711108(A/B) and 0711144
November 2007 Sampling

Matrix	Sample ID		Sample Date	Sample Time	Lab SDG	Lab Sample ID
Air	IA-1-1107		11/2/2007	07:05	0711108A	0711108A-02A
Air	IA-5-1107		11/2/2007	07:08	0711108A	0711108A-03A
Air	AA-2-1107		11/2/2007	07:11	0711108A	0711108A-04A
Air	AA-4-110207		11/2/2007	07:20	0711108A	0711108A-05A
Air	EX-1-1107		11/5/2007	10:20	0711108B	0711108B-01A
Air	IA-4-1107		11/5/2007	07:26	0711144	0711144-01A
Air	IA-7-1107		11/5/2007	07:24	0711144	0711144-02A
Air	IA-3-1107		11/5/2007	07:30	0711144	0711144-03A
Air	DUP-1107	IA-4-1107 Dup	11/5/2007	07:26	0711144	0711144-04A
Air	AA-1-1107		11/5/2007	07:54	0711144	0711144-05A
Air	AA-3-1107		11/5/2007	08:01	0711144	0711144-06A
Air	AA-4-110507		11/5/2007	08:08	0711144	0711144-07A
Air	AA-5-1107		11/5/2007	08:11	0711144	0711144-08A

ENSR [RETEC] ANALYTICAL DATA VERIFICATION CHECKLIST

Project Name: GE South Dawson Street	Laboratory: Air Toxics, Ltd., Folsom, CA.
Project Reference: Air Sampling	Sample Matrix: Air
ENSR [RETEC] Project: 02978415-753	Sample Start Date: 11/02/2007
Verified By/Date Verified: Sue Milcan 12/03/2007 (completed)	Sample End Date: 11/05/2007
Samples Analyzed: see Table of Samples Analyzed, GE South Dawson Street, Air Samples, November 2007 (page 2).	
Parameters Verified: Volatile Organic Compounds (VOCs) by modified GC/MS method TO15 SIM.	
Laboratory Project IDs (SDGs): 0711108A, 0711108B, 0711144	

PRECISION, ACCURACY, METHOD COMPLIANCE, AND COMPLETENESS ASSESSMENT

Precision:	X	Acceptable		Unacceptable	SM	Initials

Comments: Comments: Precision is the measure of variability of individual sample measurements. Field precision was determined by comparison of field duplicate sample results. Laboratory precision was determined by examination of laboratory duplicate results. Evaluation of field and laboratory duplicates for precision was done using the Relative Percent Difference (RPD). The RPD is defined as the difference between two duplicate samples divided by the mean and expressed as a percent. All RPD precision measurements were compared to EPA published QC limits. No data require qualification based on these measurements, and overall field and laboratory precision is acceptable. Precision measurements are reviewed in items 17 and 21.

Accuracy:	X	Acceptable		Unacceptable	SM	Initials

Comments: Field accuracy, a measure of the sampling bias, could not be determined as there were no trip blank, field blank, or equipment rinse blank samples included in this data set. Laboratory accuracy is a measure of the system bias, and was measured by evaluating laboratory control sample/laboratory control sample duplicate (LCS/LCSD), and organic system monitoring compounds (surrogate) percent recoveries (%Rs). LCS and LCSD %Rs, which demonstrated the overall performance of the analysis, were compared to EPA published QC limits. System monitoring compound or surrogate recoveries, which measured system performance and efficiency during organic analysis, were compared to EPA published QC limits or laboratory control charted limits. No data require qualification based on laboratory accuracy measurements, and overall laboratory accuracy is acceptable. Accuracy measurements are reviewed in items 12, 14, 15 and 16.

Method Compliance:	X	Acceptable		Unacceptable	SM	Initials

Comments: For this data set, method compliance was determined by evaluating sample integrity, holding time, and laboratory blanks against method specified requirements, while applying EPA data validation guidelines. No data require qualification based on method compliance measurements, and overall method compliance is acceptable based on the supplied data. Method compliance measurements are reviewed in items 4, 6, 8, 11, 13, 18, 19, 20, and 22.

Completeness:	X	Acceptable		Unacceptable	SM	Initials

Comments: Completeness is the overall ratio of the number of samples planned versus the number of samples with valid analyses. Project completeness goals were set at 90-100%. Determination of completeness included a review of chain of custody records, laboratory analytical methods, and detection limits. Completeness also included 100% review of the laboratory sample data results, QC summary reports, and electronic data deliverables (EDDs). EDD modifications were made as documented in item 23.

All of the data received from the lab were useable without qualification. Since no data were missing or rejected, completeness of the data set is calculated to be 100% and is acceptable.

ENSR [RETEC] ANALYTICAL DATA VERIFICATION CHECKLIST

VERIFICATION CRITERIA CHECK						
Data verification qualifiers assigned during this review: None required						
1. Did the laboratory identify any non-conformances related to the analytical results?	X	Yes		No	SM	Initials
Explanation by laboratory: No analytical problems were outlined and no laboratory flags were assigned to the data.						
2. Were sample Chain-of-Custody forms complete?	X	Yes		No	SM	Initials
Comments: COC records from field to laboratory were complete, and custody was maintained as evidenced by field and laboratory personnel signatures, dates, and times of receipt. The following observations were noted. The COC information for samples IA-4-1107, IA-7-1107, IA-3-1107, and DUP-1107 did not match the entries on the sample tags with regard to sample identification. Sample identification information was missing on provided tags for AA-1-1107, AA-3-1107, AA-4-1107, and AA-5-1107. Information on the COC records was used to process and report the samples. No action is required other than to document this occurrence.						
3. Were all the analyses requested for the samples on the COCs completed by the laboratory?	X	Yes		No	SM	Initials
Comments: All method TO15 full scan and TO15 SIM analyses were completed.						
4. Were samples received in good condition and at the appropriate temperature?	X	Yes		No	SM	Initials
Comments: No discrepancies or problems with sample condition and pressure, or with receipt temperature were identified on the COC record or in the laboratory case narrative.						
5. Were the reported analytical methods in compliance with WP/QAPP, permit, or COC?	X	Yes		No	SM	Initials
Comments: The reported methods and target analyte lists were in compliance with project requirements.						
6. Were detection limits in accordance with WP/QAPP, permit, or method?	X	Yes		No	SM	Initials
Comments: Reported detection limits are achievable by the quoted methods.						
7. Do the laboratory reports include only those constituents requested to be reported for a specific analytical method?	X	Yes		No	SM	Initials
Comments: Only analytes applicable to the project requirements and methods were reported.						
8. Were sample holding times met?	X	Yes		No	SM	Initials
Comments: Extraction and analytical holding times were met for all samples and analyses.						
9. Were correct concentration units reported?	X	Yes		No	SM	Initials
Comments: All results are reported in units of $\mu g/m^3$ or ppbv. Note that only the $\mu g/m^3$ data are reported in the EDD.						
10. Were the reporting requirements for flagged data met?	X	Yes		No	SM	Initials
Comments: There were no laboratory flags assigned to the reported data. Data verification qualifiers override laboratory flags.						

ENSR [RETEC] ANALYTICAL DATA VERIFICATION CHECKLIST

11. Were laboratory blank samples free of target analyte contamination?	**X**	Yes		No	SM	Initials
Comments: The summarized laboratory blanks were free of target analyte contamination.						
12. Were trip blank, field blank, and/or equipment rinse blank samples free of target analyte contamination?		Yes		No	SM	Initials
Comments: Not applicable - There were no trip blank, field blank or equipment rinse blank samples included in this data set. Field accuracy could not be evaluated for this data set.						
13. Were instrument calibrations within method or data validation control limits?	**X – limited review**	Yes		No	SM	Initials
Comments: The submitted summarized continuing calibration verification (CCV) %Rs were within the method required QC limits of 70-130% for daily calibrations.						
14. Were surrogate recoveries within control limits?	**X**	Yes		No	SM	Initials
Comments: Surrogate percent recoveries (%Rs) for organic analyses were within data verification QC criteria (laboratory limits of 70-130%) for all project and QC samples.						
15. Were laboratory control sample recoveries within control limits?	**X**	Yes		No	SM	Initials
Comments: LCS and LCSD recoveries were within data verification/laboratory control-charted QC limits of 70-130% for all target analytes.						
16. Were matrix spike recoveries within control limits?		Yes		No	SM	Initials
Comments: Not applicable for the reported method - The analysis of MS and MSD samples is not required for TO15 and TO15 SIM analyses.						
17. Were duplicate RPDs and/or serial dilution %Ds within control limits?	**X**	Yes		No	SM	Initials
Comments: Laboratory RPDs for target analytes in LCS/LCSD samples were within data verification/laboratory control-charted QC limits of 0-20%. The RPDs between the laboratory duplicate and the source sample AA-1-1107 are not applicable since the reported concentrations are within +/- the reporting limit indicating compliant precision. *Serial Dilution %D data for metals analysis is not applicable for the reported method or for this level of review.*						
18. Were organic system performance criteria met?		Yes		No	SM	Initials
Comments: Not applicable for this level of data verification – Organic system performance data was not supplied in analytical laboratory reports and was therefore not included in this data review.						
19. Were internal standards within method criteria for GC/MS sample analyses?		Yes		No	SM	Initials
Comments: Not applicable for this level of data verification – GC/MS internal standard data was not supplied in analytical laboratory reports and was therefore not included in this data review.						
20. Were inorganic system performance criteria met?		Yes		No	SM	Initials
Comments: Not applicable for the reported method – There were no inorganic parameters requested for the samples in this data set.						

ENSR [RETEC] ANALYTICAL DATA VERIFICATION CHECKLIST

21. Were blind field duplicates collected? If so, discuss the precision (RPD) of the results.	X	Yes		No	SM	Initials

Duplicate Sample No.	DUP-1-1107	Primary Sample No.	IA-4-1107

Comments: Field duplicate RPDs were within the default data validation QC limits of 0-30% for air matrices, or RPDs were not applicable due to results that were within +/- the reporting limit, or results that were undetected in both samples. Field duplicate and native sample concentrations that were both undetected are not reflected in the table below since RPDs are not applicable.

The following RPDs were calculated:

Method	Units	Analyte	IA-4-1107	DUP-1107	RPD
TO15 SIM	µg/m^3	Chloroform	< 0.15	0.14	+/- RL
TO15 SIM	µg/m^3	Tetrachloroethene	0.22	< 0.17	+/- RL
TO15 SIM	µg/m^3	Trichloroethene	0.60	0.54	10.5

22. Were qualitative criteria for organic target analyte identification met?		Yes		No	SM	Initials

Comments: Not applicable for this level of data verification –GC/MS quantitation reports and chromatograms were not supplied in analytical laboratory reports and were therefore not included in this data review.

23. Were 100% of the EDD concentrations and reporting limits compared to the hardcopy data reports?	X	Yes		No	SM	Initials

Comments: Note that only the µg/m^3 data are reported in the EDD. There were no discrepancies between the EDD concentrations and reporting limits and the hardcopy data reports. Significant figures in reported results or reporting limits were corrected as necessary. According to validation protocol, the hardcopy data report was accepted as the correct reference.

The RETEC database manager in Seattle, WA was informed of all EDD corrections made to the provided EDD file. The updated EDD result file, with significant figure corrections, was returned to the RETEC database manager in Seattle, WA 12/03/2007 for updating to the project database.

24. General Comments: Data were evaluated based on validation criteria set forth in the *USEPA Contract Laboratory Program (CLP) National Functional Guidelines for Organic Data Review*, document number EPA540/R-99/008 of October 1999, and the *USEPA CLP National Functional Guidelines for Superfund Organic Methods Data Review*, document number USEPA-540-R-07-003, July 2007, as they applied to the reported methodology. Field duplicate RPD control limits were taken from the USEPA Region I Laboratory Data Validation Functional Guidelines for Evaluating Organics Analyses, December 1996.

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Thank you for choosing Air Toxics Ltd. To better serve our customers, we are providing your report by e-mail. This document is provided in Portable Document Format which can be viewed with Acrobat Reader by Adobe.

This electronic report includes the following:

- Work order Summary;
- Laboratory Narrative;
- Results; and
- Chain of Custody (copy).

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(916) 985-1000 .FAX (916) 985-1020
Hours 8:00 A.M to 6:00 P.M. Pacific

Air Toxics LTD.
AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0711144

Work Order Summary

CLIENT:	Ms. Jamie Stevens ENSR 1011 SW Klickitat Way Suite 207 Seattle, WA 98134	**BILL TO:**	Ms. Jamie Stevens ENSR 1011 SW Klickitat Way Suite 207 Seattle, WA 98134
PHONE:	206-624-9349	**P.O. #**	
FAX:		**PROJECT #**	GE001.19314 Dawson St.
DATE RECEIVED:	11/07/2007	**CONTACT:**	Kelly Buettner
DATE COMPLETED:	11/20/2007		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.
01A	IA-4-1107	Modified TO-15 SIM	4.0 "Hg
02A	IA-7-1107	Modified TO-15 SIM	3.0 "Hg
03A	IA-3-1107	Modified TO-15 SIM	5.0 "Hg
04A	DUP-1107	Modified TO-15 SIM	0.8 psi
05A	AA-1-1107	Modified TO-15 SIM	0.0 "Hg
05AA	AA-1-1107 Lab Duplicate	Modified TO-15 SIM	0.0 "Hg
06A	AA-3-1107	Modified TO-15 SIM	0.6 psi
07A	AA-4-110507	Modified TO-15 SIM	0.6 psi
08A	AA-5-1107	Modified TO-15 SIM	3.5 "Hg
09A	Lab Blank	Modified TO-15 SIM	NA
09B	Lab Blank	Modified TO-15 SIM	NA
10A	CCV	Modified TO-15 SIM	NA
10B	CCV	Modified TO-15 SIM	NA
11A	LCS	Modified TO-15 SIM	NA
11AA	LCSD	Modified TO-15 SIM	NA
11B	LCS	Modified TO-15 SIM	NA
11BB	LCSD	Modified TO-15 SIM	NA

CERTIFIED BY: Linda A. Truman DATE: 11/20/07

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/07, Expiration date: 06/30/08
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

LABORATORY NARRATIVE
Modified TO-15 SIM
ENSR
Workorder# 0711144

LUMEN DATA VALIDATED

Eight 6 Liter Summa Canister (SIM Certified) samples were received on November 07, 2007. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the SIM acquisition mode. The method involves concentrating up to 0.5 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

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

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

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

Receiving Notes

The Chain of Custody (COC) information for samples IA-4-1107, IA-7-1107, IA-3-1107 and DUP-1107 did not match the entries on the sample tags with regard to sample identification. Therefore the information on the COC was used to process and report the samples.

Sample identification for samples AA-1-1107, AA-3-1107, AA-4-110507 and AA-5-1107 were not provided on the sample tags. Therefore the information on the Chain of Custody was used to process and report the samples.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

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

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

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

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

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

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

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

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

Client Sample ID: IA-4-1107

Lab ID#: 0711144-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Trichloroethene	0.031	0.11	0.17	0.60
Tetrachloroethene	0.031	0.032	0.21	0.22

Client Sample ID: IA-7-1107

Lab ID#: 0711144-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Trichloroethene	0.030	0.062	0.16	0.33
Chloroform	0.030	0.033	0.14	0.16

Client Sample ID: IA-3-1107

Lab ID#: 0711144-03A

No Detections Were Found.

Client Sample ID: DUP-1107

Lab ID#: 0711144-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Trichloroethene	0.025	0.10	0.14	0.54
Chloroform	0.025	0.028	0.12	0.14

Client Sample ID: AA-1-1107

Lab ID#: 0711144-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Trichloroethene	0.027	0.026 J	0.14	0.14
Tetrachloroethene	0.027	0.030	0.18	0.20

Client Sample ID: AA-1-1107 Lab Duplicate

Lab ID#: 0711144-05AA

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Tetrachloroethene	0.027	0.028	0.18	0.19

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

Client Sample ID: AA-3-1107

Lab ID#: 0711144-06A

No Detections Were Found.

Client Sample ID: AA-4-110507

Lab ID#: 0711144-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Trichloroethene	0.026	0.026	0.14	0.14

Client Sample ID: AA-5-1107

Lab ID#: 0711144-08A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Trichloroethene	0.030	0.030	0.16	0.16

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: IA-4-1107

Lab ID#: 0711144-01A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**a111410**	**Date of Collection:**	**11/5/07**
Dil. Factor:	**1.55**	**Date of Analysis:**	**11/14/07 06:10 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	0.016	Not Detected	0.040	Not Detected
cis-1,2-Dichloroethene	0.031	Not Detected	0.12	Not Detected
Trichloroethene	0.031	0.11	0.17	0.60
1,1-Dichloroethene	0.016	Not Detected	0.061	Not Detected
Chloroform	0.031	Not Detected	0.15	Not Detected
1,1,1-Trichloroethane	0.031	Not Detected	0.17	Not Detected
Tetrachloroethene	0.031	0.032	0.21	0.22
1,1-Dichloroethane	0.031	Not Detected	0.12	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	92	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	91	70-130

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: IA-7-1107

Lab ID#: 0711144-02A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**a111411**	**Date of Collection: 11/5/07**	
Dil. Factor:	**1.49**	**Date of Analysis: 11/14/07 06:49 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	0.015	Not Detected	0.038	Not Detected
cis-1,2-Dichloroethene	0.030	Not Detected	0.12	Not Detected
Trichloroethene	0.030	0.062	0.16	0.33
1,1-Dichloroethene	0.015	Not Detected	0.059	Not Detected
Chloroform	0.030	0.033	0.14	0.16
1,1,1-Trichloroethane	0.030	Not Detected	0.16	Not Detected
Tetrachloroethene	0.030	Not Detected	0.20	Not Detected
1,1-Dichloroethane	0.030	Not Detected	0.12	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	93	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	92	70-130

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: IA-3-1107

Lab ID#: 0711144-03A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**a111412**	**Date of Collection:**	**11/5/07**
Dil. Factor:	**1.61**	**Date of Analysis:**	**11/14/07 07:28 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	0.016	Not Detected	0.041	Not Detected
cis-1,2-Dichloroethene	0.032	Not Detected	0.13	Not Detected
Trichloroethene	0.032	Not Detected	0.17	Not Detected
1,1-Dichloroethene	0.016	Not Detected	0.064	Not Detected
Chloroform	0.032	Not Detected	0.16	Not Detected
1,1,1-Trichloroethane	0.032	Not Detected	0.18	Not Detected
Tetrachloroethene	0.032	Not Detected	0.22	Not Detected
1,1-Dichloroethane	0.032	Not Detected	0.13	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	94	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	93	70-130

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: DUP-1107

Lab ID#: 0711144-04A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	a111413	**Date of Collection:**	11/5/07
Dil. Factor:	1.27	**Date of Analysis:**	11/14/07 08:12 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	0.013	Not Detected	0.032	Not Detected
cis-1,2-Dichloroethene	0.025	Not Detected	0.10	Not Detected
Trichloroethene	0.025	0.10	0.14	0.54
1,1-Dichloroethene	0.013	Not Detected	0.050	Not Detected
Chloroform	0.025	0.028	0.12	0.14
1,1,1-Trichloroethane	0.025	Not Detected	0.14	Not Detected
Tetrachloroethene	0.025	Not Detected	0.17	Not Detected
1,1-Dichloroethane	0.025	Not Detected	0.10	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	92	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	93	70-130

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AA-1-1107

Lab ID#: 0711144-05A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**a111414**	**Date of Collection: 11/5/07**	
Dil. Factor:	**1.34**	**Date of Analysis: 11/14/07 08:51 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	0.013	Not Detected	0.034	Not Detected
cis-1,2-Dichloroethene	0.027	Not Detected	0.11	Not Detected
Trichloroethene	0.027	0.026 J	0.14	0.14
1,1-Dichloroethene	0.013	Not Detected	0.053	Not Detected
Chloroform	0.027	Not Detected	0.13	Not Detected
1,1,1-Trichloroethane	0.027	Not Detected	0.15	Not Detected
Tetrachloroethene	0.027	0.030	0.18	0.20
1,1-Dichloroethane	0.027	Not Detected	0.11	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	94	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	94	70-130

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AA-1-1107 Lab Duplicate

Lab ID#: 0711144-05AA

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**a111419**	**Date of Collection: 11/5/07**	
Dil. Factor:	**1.34**	**Date of Analysis: 11/15/07 09:04 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	0.013	Not Detected	0.034	Not Detected
cis-1,2-Dichloroethene	0.027	Not Detected	0.11	Not Detected
Trichloroethene	0.027	Not Detected	0.14	Not Detected
1,1-Dichloroethene	0.013	Not Detected	0.053	Not Detected
Chloroform	0.027	Not Detected	0.13	Not Detected
1,1,1-Trichloroethane	0.027	Not Detected	0.15	Not Detected
Tetrachloroethene	0.027	0.028	0.18	0.19
1,1-Dichloroethane	0.027	Not Detected	0.11	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	93	70-130

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AA-3-1107

Lab ID#: 0711144-06A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**a111415**	**Date of Collection:**	**11/5/07**
Dil. Factor:	**1.29**	**Date of Analysis:**	**11/14/07 09:30 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	0.013	Not Detected	0.033	Not Detected
cis-1,2-Dichloroethene	0.026	Not Detected	0.10	Not Detected
Trichloroethene	0.026	Not Detected	0.14	Not Detected
1,1-Dichloroethene	0.013	Not Detected	0.051	Not Detected
Chloroform	0.026	Not Detected	0.12	Not Detected
1,1,1-Trichloroethane	0.026	Not Detected	0.14	Not Detected
Tetrachloroethene	0.026	Not Detected	0.18	Not Detected
1,1-Dichloroethane	0.026	Not Detected	0.10	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	94	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	92	70-130

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AA-4-110507

Lab ID#: 0711144-07A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**a111417**	**Date of Collection: 11/5/07**	
Dil. Factor:	**1.29**	**Date of Analysis: 11/15/07 07:39 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	0.013	Not Detected	0.033	Not Detected
cis-1,2-Dichloroethene	0.026	Not Detected	0.10	Not Detected
Trichloroethene	0.026	0.026	0.14	0.14
1,1-Dichloroethene	0.013	Not Detected	0.051	Not Detected
Chloroform	0.026	Not Detected	0.12	Not Detected
1,1,1-Trichloroethane	0.026	Not Detected	0.14	Not Detected
Tetrachloroethene	0.026	Not Detected	0.18	Not Detected
1,1-Dichloroethane	0.026	Not Detected	0.10	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	93	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	91	70-130

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AA-5-1107

Lab ID#: 0711144-08A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**a111507**	**Date of Collection:**	**11/5/07**
Dil. Factor:	**1.52**	**Date of Analysis:**	**11/15/07 03:18 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	0.015	Not Detected	0.039	Not Detected
cis-1,2-Dichloroethene	0.030	Not Detected	0.12	Not Detected
Trichloroethene	0.030	0.030	0.16	0.16
1,1-Dichloroethene	0.015	Not Detected	0.060	Not Detected
Chloroform	0.030	Not Detected	0.15	Not Detected
1,1,1-Trichloroethane	0.030	Not Detected	0.16	Not Detected
Tetrachloroethene	0.030	Not Detected	0.21	Not Detected
1,1-Dichloroethane	0.030	Not Detected	0.12	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	94	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	90	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0711144-09A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**a111407**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/14/07 03:34 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	0.010	Not Detected	0.026	Not Detected
cis-1,2-Dichloroethene	0.020	Not Detected	0.079	Not Detected
Trichloroethene	0.020	Not Detected	0.11	Not Detected
1,1-Dichloroethene	0.010	Not Detected	0.040	Not Detected
Chloroform	0.020	Not Detected	0.098	Not Detected
1,1,1-Trichloroethane	0.020	Not Detected	0.11	Not Detected
Tetrachloroethene	0.020	Not Detected	0.14	Not Detected
1,1-Dichloroethane	0.020	Not Detected	0.081	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	91	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	89	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0711144-10B

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**a111502**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/15/07 10:35 AM**	

Compound	%Recovery
Vinyl Chloride	122
cis-1,2-Dichloroethene	101
Trichloroethene	76
1,1-Dichloroethene	93
Chloroform	95
1,1,1-Trichloroethane	89
Tetrachloroethene	78
1,1-Dichloroethane	102

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	91	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	96	70-130

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0711144-11A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**a111404**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/14/07 10:25 AM**	

Compound	%Recovery
Vinyl Chloride	106
cis-1,2-Dichloroethene	108
Trichloroethene	86
1,1-Dichloroethene	110
Chloroform	99
1,1,1-Trichloroethane	93
Tetrachloroethene	86
1,1-Dichloroethane	107

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	90	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	91	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCSD

Lab ID#: 0711144-11AA

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**a111405**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/14/07 11:15 AM**	

Compound	%Recovery
Vinyl Chloride	106
cis-1,2-Dichloroethene	105
Trichloroethene	85
1,1-Dichloroethene	109
Chloroform	97
1,1,1-Trichloroethane	92
Tetrachloroethene	86
1,1-Dichloroethane	105

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	90	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	92	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0711144-11B

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**a111503**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/15/07 11:36 AM**	

Compound	%Recovery
Vinyl Chloride	118
cis-1,2-Dichloroethene	108
Trichloroethene	86
1,1-Dichloroethene	109
Chloroform	102
1,1,1-Trichloroethane	95
Tetrachloroethene	83
1,1-Dichloroethane	114

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	93	70-130
Toluene-d8	106	70-130
4-Bromofluorobenzene	92	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCSD

Lab ID#: 0711144-11BB

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**a111504**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/15/07 12:23 PM**	

Compound	%Recovery
Vinyl Chloride	111
cis-1,2-Dichloroethene	109
Trichloroethene	85
1,1-Dichloroethene	111
Chloroform	102
1,1,1-Trichloroethane	95
Tetrachloroethene	83
1,1-Dichloroethane	112

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	92	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	91	70-130

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

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Project Manager: Janie Stevens

Collected by: (Print and Sign) A. Jambrosic / J. Stevens

Company: Retec / ENSR Email: jstevens@ensr.aecom.com

Address: 1011 SW Klickitat City: Seattle State: WA Zip: 98134

Phone: 206-832-4934 Fax: 206-624-2839

Project Info:
P.O. #:
Project #: G6001-19314
Project Name: Dawson St.

Turn Around Time:
(X) Normal
( ) Rush
specify

Lab Use Only
Pressurized by: VFR
Date: 11/9/07
Pressurization Gas: (N2) 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	1A-4-1107	34022	11/5/07	0726	TO-15 SIM	+30	-8.0	4.0 psig	5 psi
02A	1A-7-1107	31155	11/5/07	0724		+30	-7.5	3.0 psig	
03A	1A-3-1107	20934	11/5/07	0730		+30	-9.0	5.0 psig	
04A	DUP-1107	3745	11/5/07	0726		+30	-2.0	0.8 psi	
05A	AA-1-1107	12079	11/5/07	0754		+30	-2.0	0.8 psi	
06A	AA-3-1107	4375	11/5/07	0801		+30	-3.0	1.2 psig	
07A	AA-4-110507	42149	11/5/07	0808		+30	0.0	0.6 psi	
08A	AA-5-1107	33785	11/5/07	0811		-27	-7.0	3.5 psig	

Relinquished by: (signature) Janie Cyr 11/8/07 9:00am Date/Time
Received by: (signature) B Stephens ATL 11/7/07 0910 Date/Time

Relinquished by: (signature) Date/Time
Received by: (signature) Date/Time

Notes:

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	FedEx	799146852757	NA	Good	Yes No None	0711144

Form 1288 rev:1

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

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Thank you for choosing Air Toxics Ltd. To better serve our customers, we are providing your report by e-mail. This document is provided in Portable Document Format which can be viewed with Acrobat Reader by Adobe.

This electronic report includes the following:

- Work order Summary;
- Laboratory Narrative;
- Results; and
- Chain of Custody (copy).

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0711108B

Work Order Summary

CLIENT:	Ms. Jamie Stevens ENSR 1011 SW Klickitat Way Suite 207 Seattle, WA 98134	**BILL TO:**	Ms. Jamie Stevens ENSR 1011 SW Klickitat Way Suite 207 Seattle, WA 98134
PHONE:	206-624-9349	**P.O. #**	
FAX:		**PROJECT #**	GE001.19314 220.S. Dawson St
DATE RECEIVED:	11/06/2007	**CONTACT:**	Kelly Buettner
DATE COMPLETED:	11/19/2007		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.
01A	EX-1-1107	Modified TO-15	6.0 "Hg
02A	Lab Blank	Modified TO-15	NA
03A	CCV	Modified TO-15	NA
04A	LCS	Modified TO-15	NA
05A	LCSD	Modified TO-15	NA

CERTIFIED BY: Linda D. Freeman DATE: 11/19/07

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/07, Expiration date: 06/30/08
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

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LABORATORY NARRATIVE
Modified TO-15
ENSR
Workorder# 0711108B

LUMEN DATA VALIDATED

One 6 Liter Summa Canister sample was received on November 06, 2007. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 0.2 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

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

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

Requirement	*TO-15*	*ATL Modifications*
Daily CCV	+- 30% Difference	</= 30% Difference with two allowed out up to </=40%.; flag and narrate outliers
Sample collection media	Summa canister	ATL recommends use of summa canisters to insure data defensibility, but will report results from Tedlar bags at client request
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

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

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

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.
UJ- Non-detected compound associated with low bias in the CCV
N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

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

Client Sample ID: EX-1-1107

Lab ID#: 0711108B-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
1,1-Dichloroethane	0.84	2.0	3.4	8.2
cis-1,2-Dichloroethene	0.84	1.8	3.3	7.0
1,1,1-Trichloroethane	0.84	8.2	4.6	44
Trichloroethene	0.84	26	4.5	140
Tetrachloroethene	0.84	0.92	5.7	6.2

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: EX-1-1107

Lab ID#: 0711108B-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**8111609**	**Date of Collection:**	**11/5/07**
Dil. Factor:	**1.68**	**Date of Analysis:**	**11/16/07 03:14 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	0.84	Not Detected	2.1	Not Detected
1,1-Dichloroethene	0.84	Not Detected	3.3	Not Detected
1,1-Dichloroethane	0.84	2.0	3.4	8.2
cis-1,2-Dichloroethene	0.84	1.8	3.3	7.0
Chloroform	0.84	Not Detected	4.1	Not Detected
1,1,1-Trichloroethane	0.84	8.2	4.6	44
Trichloroethene	0.84	26	4.5	140
Tetrachloroethene	0.84	0.92	5.7	6.2

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	91	70-130
1,2-Dichloroethane-d4	91	70-130
4-Bromofluorobenzene	95	70-130

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Client Sample ID: Lab Blank

Lab ID#: 0711108B-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**8111608**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/16/07 01:26 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	92	70-130
1,2-Dichloroethane-d4	92	70-130
4-Bromofluorobenzene	93	70-130

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0711108B-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**8111602**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/16/07 09:01 AM**	

Compound	%Recovery
Vinyl Chloride	94
1,1-Dichloroethene	85
1,1-Dichloroethane	90
cis-1,2-Dichloroethene	82
Chloroform	79
1,1,1-Trichloroethane	85
Trichloroethene	81
Tetrachloroethene	87

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	93	70-130
1,2-Dichloroethane-d4	89	70-130
4-Bromofluorobenzene	100	70-130

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0711108B-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**8111603**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/16/07 09:29 AM**	

Compound	%Recovery
Vinyl Chloride	100
1,1-Dichloroethene	99
1,1-Dichloroethane	100
cis-1,2-Dichloroethene	90
Chloroform	87
1,1,1-Trichloroethane	95
Trichloroethene	86
Tetrachloroethene	90

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	95	70-130
4-Bromofluorobenzene	99	70-130

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCSD

Lab ID#: 0711108B-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**8111607**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/16/07 12:15 PM**	

Compound	%Recovery
Vinyl Chloride	94
1,1-Dichloroethene	92
1,1-Dichloroethane	92
cis-1,2-Dichloroethene	85
Chloroform	81
1,1,1-Trichloroethane	89
Trichloroethene	85
Tetrachloroethene	86

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	91	70-130
4-Bromofluorobenzene	99	70-130

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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

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

Project Manager Janice Stevens
Collected by: (Printed/Sign) Janice Stevens
Company ENGR/RETEC Email jstevens@enst...com.com
Address 101 Stewart St. City Seattle State WA Zip 98101
Phone 206-624-9349 Fax 206-624-2839

Project Info:
P.O. #
Project # 7600149314
Project Name 220 S. Dawson St

Turn Around Time:
(X) Normal
( ) Rush
( ) specify

Lab Use Only
Pressurized by: GS
Date: 11/7/07
Pressurization Gas: (N) 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 (psig)
01A	EX-1-1107	4283	11/5/07	1020	TO-15	-30	-9.0	6.0	5.0
	1A-1-1107	13658	11/2/07	0705	TO-15 SIM	-30	-8.0		
	1A-5-1107	34393	11/2/07	0708	TO-15 SIM	-30	-30		
	AA-2-1107	34322	11/2/07	0711	TO-15 SIM	-30	-7.0		
	AA-3-110207	12071	11/2/07	0720	TO-15 SIM	-30	-7.0		
	(AA-4)								

Relinquished by: (signature) Date/Time: Janice C. Stevens 11/05/07 12:45
Received by: (signature) Date/Time: ATS with FTL 11/6/07 0845
Relinquished by: (signature) Date/Time:
Received by: (signature) Date/Time:
Relinquished by: (signature) Date/Time:
Received by: (signature) Date/Time:

Notes:

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	Fed Ex		NA	ambient	Yes / No / (None)	0711108

Form 1298 rev.1

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Thank you for choosing Air Toxics Ltd. To better serve our customers, we are providing your report by e-mail. This document is provided in Portable Document Format which can be viewed with Acrobat Reader by Adobe.

This electronic report includes the following:

- Work order Summary;
- Laboratory Narrative;
- Results; and
- Chain of Custody (copy).

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0711108A

Work Order Summary

CLIENT:	Ms. Jamie Stevens ENSR 1011 SW Klickitat Way Suite 207 Seattle, WA 98134	**BILL TO:**	Ms. Jamie Stevens ENSR 1011 SW Klickitat Way Suite 207 Seattle, WA 98134
PHONE:	206-624-9349	**P.O. #**	
FAX:		**PROJECT #**	GE001.19314 220.S. Dawson St
DATE RECEIVED:	11/06/2007	**CONTACT:**	Kelly Buettner
DATE COMPLETED:	11/19/2007		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.
02A	IA-1-1107	Modified TO-15 SIM	4.5 "Hg
03A	IA-5-1107	Modified TO-15 SIM	5.5 "Hg
04A	AA-2-1107	Modified TO-15 SIM	4.5 "Hg
05A	AA-4-110207	Modified TO-15 SIM	0.6 psi
06A	Lab Blank	Modified TO-15 SIM	NA
07A	CCV	Modified TO-15 SIM	NA
08A	LCS	Modified TO-15 SIM	NA
08AA	LCSD	Modified TO-15 SIM	NA

CERTIFIED BY: Linda D. Truman DATE: 11/19/07

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/07, Expiration date: 06/30/08
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

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Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

LABORATORY NARRATIVE
Modified TO-15 SIM
ENSR
Workorder# 0711108A

LUMEN DATA VALIDATED

Four 6 Liter Summa Canister (SIM Certified) samples were received on November 06, 2007. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the SIM acquisition mode. The method involves concentrating up to 0.5 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

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

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

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

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

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

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

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the reporting limit.
UJ- Non-detected compound associated with low bias in the CCV
N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

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

Client Sample ID: IA-1-1107

Lab ID#: 0711108A-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Trichloroethene	0.032	0.094	0.17	0.50
1,1,1-Trichloroethane	0.032	0.035	0.17	0.19
Tetrachloroethene	0.032	0.11	0.21	0.74

Client Sample ID: IA-5-1107

Lab ID#: 0711108A-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Trichloroethene	0.033	0.083	0.18	0.45
1,1,1-Trichloroethane	0.033	0.035	0.18	0.19
Tetrachloroethene	0.033	0.10	0.22	0.71

Client Sample ID: AA-2-1107

Lab ID#: 0711108A-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Trichloroethene	0.032	0.076	0.17	0.41
1,1,1-Trichloroethane	0.032	0.036	0.17	0.19
Tetrachloroethene	0.032	0.10	0.21	0.70

Client Sample ID: AA-4-110207

Lab ID#: 0711108A-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Trichloroethene	0.026	0.12	0.14	0.67
Chloroform	0.026	0.028	0.12	0.14
1,1,1-Trichloroethane	0.026	0.040	0.14	0.22
Tetrachloroethene	0.026	0.13	0.18	0.90

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: IA-1-1107

Lab ID#: 0711108A-02A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**a110908**	**Date of Collection:**	**11/2/07**
Dil. Factor:	**1.58**	**Date of Analysis:**	**11/9/07 02:50 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	0.016	Not Detected	0.040	Not Detected
cis-1,2-Dichloroethene	0.032	Not Detected	0.12	Not Detected
Trichloroethene	0.032	0.094	0.17	0.50
1,1-Dichloroethene	0.016	Not Detected	0.063	Not Detected
Chloroform	0.032	Not Detected	0.15	Not Detected
1,1,1-Trichloroethane	0.032	0.035	0.17	0.19
Tetrachloroethene	0.032	0.11	0.21	0.74
1,1-Dichloroethane	0.032	Not Detected	0.13	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	92	70-130
Toluene-d8	106	70-130
4-Bromofluorobenzene	91	70-130

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: IA-5-1107

Lab ID#: 0711108A-03A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**a110909**	**Date of Collection: 11/2/07**	
Dil. Factor:	**1.64**	**Date of Analysis: 11/9/07 04:01 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	0.016	Not Detected	0.042	Not Detected
cis-1,2-Dichloroethene	0.033	Not Detected	0.13	Not Detected
Trichloroethene	0.033	0.083	0.18	0.45
1,1-Dichloroethene	0.016	Not Detected	0.065	Not Detected
Chloroform	0.033	Not Detected	0.16	Not Detected
1,1,1-Trichloroethane	0.033	0.035	0.18	0.19
Tetrachloroethene	0.033	0.10	0.22	0.71
1,1-Dichloroethane	0.033	Not Detected	0.13	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	93	70-130
Toluene-d8	105	70-130
4-Bromofluorobenzene	95	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AA-2-1107

Lab ID#: 0711108A-04A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**a110910**	**Date of Collection:**	**11/2/07**
Dil. Factor:	**1.58**	**Date of Analysis:**	**11/9/07 04:40 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	0.016	Not Detected	0.040	Not Detected
cis-1,2-Dichloroethene	0.032	Not Detected	0.12	Not Detected
Trichloroethene	0.032	0.076	0.17	0.41
1,1-Dichloroethene	0.016	Not Detected	0.063	Not Detected
Chloroform	0.032	Not Detected	0.15	Not Detected
1,1,1-Trichloroethane	0.032	0.036	0.17	0.19
Tetrachloroethene	0.032	0.10	0.21	0.70
1,1-Dichloroethane	0.032	Not Detected	0.13	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	93	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	90	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AA-4-110207

Lab ID#: 0711108A-05A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**a110911**	**Date of Collection: 11/2/07**	
Dil. Factor:	**1.29**	**Date of Analysis: 11/9/07 05:19 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	0.013	Not Detected	0.033	Not Detected
cis-1,2-Dichloroethene	0.026	Not Detected	0.10	Not Detected
Trichloroethene	0.026	0.12	0.14	0.67
1,1-Dichloroethene	0.013	Not Detected	0.051	Not Detected
Chloroform	0.026	0.028	0.12	0.14
1,1,1-Trichloroethane	0.026	0.040	0.14	0.22
Tetrachloroethene	0.026	0.13	0.18	0.90
1,1-Dichloroethane	0.026	Not Detected	0.10	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	93	70-130
Toluene-d8	105	70-130
4-Bromofluorobenzene	91	70-130

Air Toxics LTD.

CHAIN-OF-CUSTODY RECORD

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

Project Manager: Jamie Stevens
Collected by: (Print and Sign) Jamie Stevens
Company: ENSR/AECOM Email: jstevens@ensr.aecom.com
Address: 1011 SW Klickitat City: Seattle State: WA Zip: 98103
Phone: 206-624-9349 Fax: 206-624-2839

Project Info:
P.O. #:
Project #: G5001.19314
Project Name: 220 S. Dawson St

Turn Around Time:
(X) Normal
( ) Rush
specify

Lab Use Only
Pressurized by: [illegible]
Date: 11-11-07
Pressurization Gas: (N2) He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Received Final (psi)
	EX-1-1107	4233	11/5/07	1020	TO-15	-30	-9.0	5.0
02A	1A-1-1107	13658	11/2/07	0705	TO-15 SIM	-30	-8.0	4.5
03A	1A-5-1107	34393	11/2/07	0708	TO-15 SIM	-30	-7.0	5.5
04A	AA-2-1107	34322	11/2/07	0711	TO-15 SIM	-30	-7.0	4.5
05A	AA-3-110207	12071	11/2/07	0720	TO-15 SIM	-30	-2.0	0.1
06A	(AA-4)							

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Jamie C Stevens	11/05/07 12:45	AMSOIL FTE	11/6/07 0045

Notes:

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	Fed Ex	NA		good	Yes No (None)	0711108

Form T293 rev 11

VIMS Verification System Sampling Friday Nov 2 2007

Indoor and Ambient Air Sampling - 8 hours

				Start Pressure		Check1		Check2		Check3			End Pressure	
Location	ID	Can ID	Start Time	Gauge	Can	Time	Pressure	Time	Pressure	Time	Pressure	End Time	Gauge	Can
PSP WH	IA-1	13658	0705	+-30	+-30	1017	-20	1344	-20			1555	-8	-10
PSP Office	IA-5	34393	0708	+-30	+-30	1019	-27	1346	-9.75			1558	-7	-7
Hudson WH	IA-4													
Hudson Office	IA-7													
Mason Office	IA-3													
	Duplicate													
SE	AA-1													
NE	AA-2	34322	0711	+-30	+-30	1025	-22	1348	-12			1601	-7.0	-8.0
SW	AA-3													
NW	AA-4	12071	0720	+-30	+-30	1015	-10.0	1252	-2.5			1350	-2.0	-1.0
Alley	AA-5													

Exhaust Sampling - 30 Minute Sampling - Not sampled

				Start Pressure			End Pressure	
Location	ID	Can ID	Start Time	Gauge	Can	End Time	Gauge	Can
Exhaust Fan	EX-1							

Length of tubing

Velocity Measurements - Not Measured

Location	Velocity	Velocity Units	Temperature	Pressure	Flow Rate from Pressure
2/3 distance from the center					
1/3 distance from the center					
Center of Pipe					
2/3 distance from the center					
1/3 distance from the center					

VIMS Verification System Sampling Monday Nov 5 2007

Indoor and Ambient Air Sampling - 8 hours

				Start Pressure		Check1		Check2		Check3			End Pressure	
Location	ID	Can ID	Start Time	Gauge	Can	Time	Pressure	Time	Pressure	Time	Pressure	End Time	Gauge	Can
PSP WH	IA-1	Sampled	11/2/07											
PSP Office	IA-5	Sampled	11/2/07											
Hudson WH	IA-4	34022	0726	+-30	+-30	1120	-18.0	1416	-10			1544		-8.0
Hudson Office	IA-7	31155	0724	+-30	+-30	1123	-17.5	1413	-10			1541		-7.5
Mason Office	IA-3	20934	0730	+-30	+-30	1135	-18.0	1404	-11.5			1538		-9.0
IA-4	Duplicate	3745	0726	+-30	+-30	1121	-2.0					1120		-2.0
SE	AA-1	12079	0754	+-30	+-30	1117	-16.5	1412	-8.0			1554		-6.0
NE	AA-2	Not	sampled	—										—
SW	AA-3	4375	0801	+-30	+-30	1127	-4.0	1348	-3.0			1348		-3.0
NW	AA-4 *	4290	0808	+-30	+-30	1128	0.0					1128		0.0
Alley	AA-5	33789	0811	+-30	-27	1139	-14.5	1410	-30			1559		-7.0

Exhaust Sampling - 30 Minute Sampling

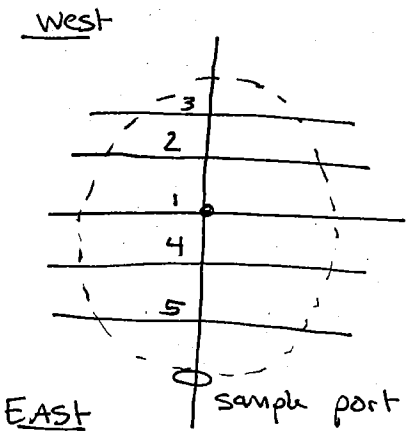
				Start Pressure			End Pressure	
Location	ID	Can ID	Start Time	Gauge	Can	End Time	Gauge	Can
Exhaust Fan	EX-1	4283	1020	+-30	+-30	1050		-7.0

Length of tubing

Not Measured

Velocity Measurements

Location	Velocity	Velocity Units	Temperature	~~Pressure~~	~~Flow Rate from Pressure~~
2/3 distance from the center	2305	ft/min	54	sample 5	
1/3 distance from the center	2040	ft/min	55	sample 4	
Center of Pipe	2075	ft/min	57	sample 1	
2/3 distance from the center	1780	ft/min	56.4	sample 2	
1/3 distance from the center	1750	ft/min	56.8	sample 3	



* Flow controler difficult to put on sample can

FIELD ACTIVITY LOG

RETEC

PROJECT GE Dawson St
COMPLETED BY J. Stevens
JOB NO. 02978415
APPROVED BY
DAY & DATE Friday 11/2/07
SHEET 1 OF 1

FIELD ACTIVITY SUBJECT:
DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

TIME	
0630	JS arrive at office. Check weather - winds out of the SSE
0650	arrive on site. Check with PSP on activities confirmed light moving only (no large equipment, similar to what they do every day). Inspected warehouse and office for potential sources of TCE - none identified. Review JHA.
0700	Deployed canisters - see sample log
0800	JS leave site
1000	On site - check sample canisters
1340	on site check sample canisters
1350	Stopped location AA-4, pressure -2.0
1530	On site - start taking canisters down
1620	JS leave site retvin to office to pack up boxes / field notes

VISITORS ON SITE:
none.

CHANGES FROM PLANS OR IMPORTANT DECISIONS
none.

WEATHER CONDITIONS:
clear. light wind, no rain.

IMPORTANT TELEPHONE CALLS:
none.

PERSONNEL ON SITE:
J. Stevens

FIELD ACTIVITY LOG

RETEC

PROJECT GE Dawson St — COMPLETED BY J. Stevens

JOB NO. 02978415 — APPROVED BY _____

DAY & DATE Monday 11/5/07 — SHEET 1 OF

FIELD ACTIVITY SUBJECT:
DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

TIME	
0630	arrive at office load equipment check wind - N-NE
0700	site saftey meeting
	start setting up sample canisters at all indoor/outdoor
	locations
0750	Pick up drill and ladders at Hertz Rental
0830	STAR form for roof work
0840	A.J. pick up drill bits from granger supply
0915	Start on exhaust sample. A.J. pick up additional
	drill bit at granger
1040	Ecology on site
1059	Ecology leave site
1120	check sample cans
1410	check sample cans
1510	A.J. placed additional haz. sign on stack
	start taking down sample cans (A.J)
1528	J. Sumner on site
1600	J. Sumner and J. Stevens meet w/ Mckinstry
1720	J. Sumner and J. Stevens off site
	end 11/5/07

VISITORS ON SITE:
Dean Yasuda
Ed Jones

CHANGES FROM PLANS OR IMPORTANT DECISIONS

WEATHER CONDITIONS:

IMPORTANT TELEPHONE CALLS:
J.S. call D. Yasuda to report status.
D.Y. retvin phone call (voice mail)

PERSONNEL ON SITE:
J. Stevens, A. Jambrosic, Jim Sumner

Air Toxics LTD.

CHAIN-OF-CUSTODY RECORD

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FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Page 1 of 1

Project Manager Jamie Stevens

Collected by: (Print and Sign) Jamie Stevens

Company ENGR/RETEC Email jstevens@engr.com

Address 1011 SW Klickitat City Seattle State WA Zip 98103

Phone 206.624.9349 Fax 206.624.9399

Project Info:
P.O. #
Project # EP001.17314
Project Name 220 S. Dawson St

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 (psig)
	EX-1-1107	4283	11/5/07	1020	TO-15	-30	-9.0		
	1A-1-1107	13658	11/5/07	0705	TO-15 SIM	-30	-8.0		
	1A-5-1107	34393	11/5/07	0702	TO-15 SIM	-30	-20		
	AA-2-1107	34322	11/2/07	0711	TO-15 SIM	-30	-7.0		
	AA-4-1102 07 (AA-4)	12071	11/2/07	0720	TO-15 SIM	-30	-3.0		

Relinquished by: (signature) Date/Time
James C. Reeves 11/05/07 12:45

Received by: (signature) Date/Time

Relinquished by: (signature) Date/Time

Received by: (signature) Date/Time

Relinquished by: (signature) Date/Time

Received by: (signature) Date/Time

Notes:

Lab Use Only

Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact? Yes No None	Work Order #

Form 1293 rev.11

Air Toxics LTD.

CHAIN-OF-CUSTODY RECORD

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

Project Manager: Jamie Stevens

Collected by: (Print and Sign) A. [illegible] / J. Stevens

Company: [illegible] Email: [illegible]

Address: [illegible] City: [illegible] State: [illegible] Zip: [illegible]

Phone: [illegible] Fax: [illegible]

Project Info:

P.O. #:

Project #: GF001-17314

Project Name: Dawson St.

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)
	IA-4-1107	34022	11/5/07	0726	TO-15 SIM	+30	-2.0		
	IA-7-1107	31155	11/5/07	0724	↓	+30	[illegible]		
	IA-3-1107	20734	11/5/07	0730	↓	+30	[illegible]		
	Dup-1107	37-45	11/5/07	0726	↓	+30	-2.0		
	AA-1-1107	12079	11/5/07	0754	↓	+30	[illegible]		
	AA-3-1107	4375	11/5/07	0801	↓	+30	-3.0		
	AA-4-110507	42.49	11/5/07	0808	↓	+30	0.0		
	AA-5-1107	33789	11/5/07	0811	↓	-27	[illegible]		

Relinquished by: (signature) Date/Time	Received by: (signature) Date/Time
[illegible signature]	
Relinquished by: (signature) Date/Time	Received by: (signature) Date/Time
Relinquished by: (signature) Date/Time	Received by: (signature) Date/Time

Notes:

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

Form 1293 rev.11