RCRA RECORDS CENTER
FACILITY
I.D. NO.
FILE LOC.
OTHER

Appendix C

Indoor Air Monitoring In Support of VCAP

Willgoos

of magnitude lower during the September 21, 2001 monitoring event. Furthermore, benzene remained below the detection limit in all samples collected.

3. FACILITY INFORMATION

The Willgoos facility is located on Pent Road in East Hartford, Connecticut. The site occupies approximately 58 acres and lies to the east of the Connecticut River. The Pent Road facility is a jet engine test facility used for the experimental testing of jet engines and jet engine components.

The facility consists of buildings for engineering offices and laboratories, facility maintenance, jet engine and experimental testing, steam and compressed air generation, a pump house and tank farm for fuel storage and distribution, industrial wastewater and sewage treatment facilities. There are also facilities for fire protection, domestic and process water supply.

4. METHODOLOGY

Indoor air monitoring was conducted at the Willgoos facility on December 21, 2000, March 1, 2001, June 18, 2001, and September 21, 2001 in order to verify that indoor air VOC concentration levels are below the generic Pratt & Whitney screening levels established in the CSM. Specifically, the intent of the indoor air sampling was to verify that concentrations of constituents in indoor air are below the Pratt & Whitney generic screening levels listed in Table 3-4 of the CSM.

The air samples were collected on both multimedia (thermal desorption) tubes and charcoal tubes over an approximately eight-hour time period. The air pumps were calibrated in the morning and the calibration was checked at the end of the sample collection. Both charcoal and multimedia (thermal desorption) tubes were collected at the same locations in the event breakthrough of the multimedia tubes occurred.

The samples collected were placed in an ice-filled cooler and submitted to Environmental Health Laboratory (Division of Ace USA) of Cromwell, Connecticut for analysis under chain-of-custody procedures. The samples were analyzed for an expanded list of volatile organic compounds (including acetone, 2-butanone, methyl-tert-butyl-ether, methyl isobutyl ketone, and vinyl chloride) in accordance with the modified EPA Method T01/T02 using gas chromatography/mass spectroscopy (GC/MS). All thermal desorption tubes were analyzed. The charcoal tubes were analyzed only for the samples and constituents for which breakthrough was suspected.

All sample locations are shown on Drawing No 1. Copies of the field forms are provided in Attachment 1.

4.1 December 21, 2000 Sample Collection

Six indoor air samples, a duplicate and a trip blank were collected in five buildings at locations shown on Drawing No. 1. The trip blank consisted of one multimedia tube and one charcoal tube transferred with the remaining samples to assess whether cross contamination has occurred during sample collection or in the laboratory. The location and rationale for sample collection are provided below:

Sampling Location	Sample Location and Rationale
WG-RSK-AS-11	A sample was collected on the first floor of the oil pump house near controls and meters. There was no oil evident on this floor. However, oil pumps and equipment were located in a basement below this concrete floor. Process operations are being conducted in this area. The area is occupied.
WG-RSK-AS-12	A sample was collected near machinery and equipment in the main building (opposite the pump house). Process operations are being conducted in this area. The area is occupied.
WG-RSK-AS-13	A sample was collected near a closed chemical storage cabinet in main building exhauster area. Process operations are being conducted in this area. The area appears to be infrequently occupied. In addition, the sample can be used to evaluate whether volatilization from impacted groundwater is of concern.
WG-RSK-AS-14	A sample was collected in the engine dressing area of the test cell building. Process operations are being conducted in this area. The area is occupied.
WG-RSK-AS-15	A sample was collected in the former fuel lab. Process operations are being conducted in this area. The area is occupied.
WG-RSK-AS-16	A sample was collected in the weld shop near compressed gas cylinders and machine shop equipment. Process operations are being conducted in this area. The area is occupied. In addition, the sample can be used to evaluate whether volatilization from impacted groundwater is of concern.

It should be noted that all sampling locations were renumbered by adding a factor of 10 on the sample designation in order to account for the different locations used for some of the samples. For example sample WG-RSK-AS-01 was renamed as WG-RSK-AS-11, etc. Most samples were collected in the general vicinity of the initial samples collected on December 1998. However, samples WG-RSK-AS-13, WG-RSK-AS-14, and WG-RSK-AS-15 were located at different locations within the same building in response to EPA comments addressed in the December 21, 2000 submittal referenced above.

The duplicate sample was collected from location WG-RSK-AS-14 during the December 2000 monitoring event.

4.2 March 1, 2001 Sample Collection

Six indoor air samples in five buildings, a duplicate and a trip blank were collected during the March 1, 2001 monitoring event. The rationale for sample collection is the same as described above. In addition to the collection of interior samples in the same locations as the December 21, 2000 samples, a field blank sample was collected from an upwind exterior area on the facility

grounds for QA/QC purposes. The sample was collected outside, on a catwalk leading to the Connecticut River, approximately 45 feet west of the main building, as described below:

Sampling Location	Sample Location and Rationale
WG-RSK-AS-17	A sample was collected outside, 45 feet behind the main building and 4 feet above ground. The pump was placed on the I beam of a catwalk leading towards the Connecticut River. A northwest wind was blowing from across the river towards the pump. The sample was collected to determine whether background conditions influence the concentrations detected inside the buildings.

The duplicate sample was collected from location WG-RSK-AS-16 during the March 1, 2001 monitoring event.

4.3 June 18, 2001 Sample Collection

Six indoor air samples in five buildings, a duplicate and a trip blank were collected during the June 18, 2001 monitoring event. The rationale for sample collection is the same as described above. In addition to the collection of interior samples in the same locations as the December 21, 2000 samples, a field blank sample was collected from an upwind exterior area on the facility grounds for QA/QC purposes. The sample was collected outside, at location WG-RSK-AS-17, as during the March 1, 2001 monitoring event.

The duplicate sample was collected from location WG-RSK-AS-16 during the June 18, 2001 monitoring event.

4.4 September 21, 2001 Sample Collection

Six indoor air samples in five buildings, a duplicate and a trip blank were collected during the September 21, 2001 monitoring event. The rationale for sample collection is the same as described above. In addition to the collection of interior samples in the same locations as the December 21, 2000 samples, a field blank sample was collected from an upwind exterior area on the facility grounds for QA/QC purposes. The sample was collected outside, at location WG-RSK-AS-17, as during the June 18, 2001 monitoring event.

The duplicate sample was collected from location WG-RSK-AS-15 during the September 21, 2001 monitoring event.

5. RESULTS

The analytical results obtained from the three monitoring events are summarized in tabular form in the following pages. Table 1 presents a summary of sampling and analytical information, while Table 2 summarizes the detected concentrations. Table 3 presents all analytical data obtained for the four events. Attachment 2 provides the results of the trip blank samples reported in nanograms for the four monitoring events. The trip blanks can only be reported in mass units, since there is no air flow rate associated with the collection of these samples.

5.1 December 21, 2000 Analytical Results

The concentrations detected for most constituents were in the low microgram per cubic meter ($\mu g/m^3$) range. Typical constituents detected and their highest concentrations included acetone (20E $\mu g/m^3$); benzene (4.5 $\mu g/m^3$); 1,2,4-trimethylbenzene (18 $\mu g/m^3$); 1,3,5-trimethylbenzene (5.8 $\mu g/m^3$); ethylbenzene (7.8 $\mu g/m^3$); n-propylbenzene (2.5 $\mu g/m^3$); sec-butylbenzene (0.85 $\mu g/m^3$); 2-butanone (1.1 $\mu g/m^3$); p-cymene (2.4 $\mu g/m^3$); 1,1,1-trichloroethane (2.9 $\mu g/m^3$); 1,1-dichloroethylene (0.85 $\mu g/m^3$); tetrachloroethylene (4.2 $\mu g/m^3$); trichloroethylene (18 $\mu g/m^3$); chloromethane (0.95 $\mu g/m^3$); dichlorodifluoromethane (58E $\mu g/m^3$); dichloromethane (6.2 $\mu g/m^3$); trichlorofluoromethane (2.4 $\mu g/m^3$); 4-methyl-2-pentanone (0.34 $\mu g/m^3$); naphthalene (3.5 $\mu g/m^3$); styrene (0.76 $\mu g/m^3$); toluene (22 $\mu g/m^3$); total xylenes (28 $\mu g/m^3$). The qualifier E indicates that the concentration reported exceeded the upper limit of the calibration range but did not surpass the breakthrough level or saturate the detector.

All thermal desorption tubes were analyzed. In addition, dichlorodifluoromethane and acetone were also analyzed using the charcoal tubes because the concentration levels obtained by the analysis of the thermal desorption tubes were in the upper end of the calibration curve. The results of the compounds analyzed from the charcoal tubes were at lower levels than the corresponding concentrations reported for the analysis of the thermal desorption tubes.

The results obtained from the two duplicate samples collected on thermal desorption tubes from location WG-RSK-AS-14 indicated relative percent differences (RPDs) up to 61% (for example, methylene chloride detected at 0.42 $\mu g/m^3$ and 0.79 $\mu g/m^3$). Such differences, however, are to be expected at the low concentration ranges reported. It should be noted that methylene chloride and trichlorofluoromethane were detected in the trip blank sample collected.

The indoor air sample data provided in the tables were compared to the numeric screening levels published in the *Conceptual Site Models and Screening Levels for Pratt & Whitney's VCAP*

Connecticut Facilities, prepared by Gradient Corporation, issued on December 19, 1997 and revised on September 18, 1998 and September 15, 1999. Specifically, the indoor air data were compared to the numeric criteria published in Table 3-4 of the above-referenced report. The table is titled *Generic P&W Indoor Air Screening Levels (SLs) P&W VCAP, Connecticut Facilities*. The comparison indicated that the detected concentrations are several orders of magnitude below the corresponding screening levels. Applicable VCAP screening levels are shown in Attachment 3.

It should be pointed out that no screening levels exist in Gradient's Table 3-4 for some of the constituents reported by the laboratory. In response, Gradient Corporation developed indoor air screening levels for these compounds using existing chemical, toxicological and regulatory data from various sources. Gradient's memorandum is included in Attachment 3 of this report.

An evaluation against the criteria listed above indicated that of the detected compounds, benzene was reported at concentrations slightly above the generic Pratt & Whitney screening level of 3.2 $\mu g/m^3$. Samples WG-RSL-AS-11, WG-RSK-AS-14 and WG-RSK-AS-16 had benzene detected at 3.8 $\mu g/m^3$, 3.3 $\mu g/m^3$, and 4.5 $\mu g/m^3$.

5.2 March 1, 2001 Analytical Results

The concentrations detected for most constituents were in the low microgram per cubic meter ($\mu g/m^3$) range. Typical constituents detected and their highest concentrations included acetone (8.7 $\mu g/m^3$); benzene (1.8 $\mu g/m^3$); 1,2,4-trimethylbenzene (7.1 $\mu g/m^3$); 1,3,5-trimethylbenzene (3.3 $\mu g/m^3$); ethylbenzene (1.9 $\mu g/m^3$); n-propylbenzene (1.0 $\mu g/m^3$); p-cymene (3.1 $\mu g/m^3$); 1,1-dichloroethylene (0.76 $\mu g/m^3$); chloromethane (0.94 $\mu g/m^3$ detected in the field blank sample); dichlorodifluoromethane (270 $\mu g/m^3$); dichloromethane (2.5 $\mu g/m^3$); trichlorofluoromethane (1.7 $\mu g/m^3$ detected in the field blank sample); naphthalene (1.9 $\mu g/m^3$); styrene (0.82 $\mu g/m^3$); toluene (85 $\mu g/m^3$); total xylenes (7.0 $\mu g/m^3$); trichloroethylene (17 $\mu g/m^3$); 1,1,1-trichloroethane (4.7 $\mu g/m^3$); sec-butylbenzene (0.64 $\mu g/m^3$).

All thermal desorption tubes were analyzed. Dichlorodifluoromethane and toluene were also analyzed using the charcoal tubes because thermal desorption tube levels were in the upper end of the calibration curve. The detection limits for the charcoal analyses are relatively elevated as compared to the detection limits reported for the thermal desorption analyses. It should be noted, however, that the intent of these analyses is to confirm whether breakthrough has occurred for

compounds with relatively elevated concentrations. The results reported by the analysis of the charcoal tubes were generally of the same order as the results reported by the analysis of the thermal desorption tubes, with the exception of dichlorodifluoromethane (240 $\mu g/m^3$ on the thermal desorption tube and 270 $\mu g/m^3$ on the charcoal tube) and toluene (42 $\mu g/m^3$ on the thermal desorption tube and 85 $\mu g/m^3$ on the charcoal tube).

The results obtained from the two duplicate samples collected on thermal desorption tubes from location WG-RSK-AS-16 indicated that some compounds were detected in only one of the duplicate samples collected (for example, 1,2,4-trimethylbenzene was detected at 0.47 $\mu g/m^3$ in only one of the two duplicate samples collected). Therefore the RPD could not be calculated. Such differences are to be expected at the low concentration ranges reported. Methylene chloride was detected in the trip blank collected. In addition, it should be noted that several hydrocarbons were detected in the field blank sample collected (Table 2).

Although some elevated levels of benzene were detected in the December 21, 2000 monitoring event, the sampling performed in March 2001 did not indicate that levels of VOCs above the VCAP screening levels currently exist on the site.

5.3 June 18, 2001 Analytical Results

Relatively elevated volatile organic compounds were detected at the Pump House (location WT-RSK-AS-11). Typical constituents detected at this location included aromatic hydrocarbons such as benzene (30 $\mu g/m^3$); toluene (100 $\mu g/m^3$); and xylenes (110 $\mu g/m^3$). The presence of these constituents can most likely be attributed to the presence of fuel collected in drainage buckets in the basement of the pump house. As noted on the field forms the smell of fuel was evident during sample collection.

Hydrocarbons were also detected at the same general levels at the other locations sampled. Typical constituents detected and their highest concentrations included dichloromethane (340 $\mu g/m^3$); 1,1,1-trichloroethane (150 $\mu g/m^3$); trans-1,2-dichloroethylene (8,600 $\mu g/m^3$); cis-1,2-dichloroethylene (13 $\mu g/m^3$); and 1,2-dichloroethane (1.8 $\mu g/m^3$).

As in previous rounds, all thermal desorption tubes were analyzed. However, during the June 18, 2001 monitoring event it was necessary to analyze the charcoal tubes for several compounds since the concentration levels detected in the thermal desorption tubes were in the upper end of the calibration curve. The compounds analyzed for in the charcoal tubes included methylene

chloride, trans-1,2-dichloroethylene, 1,1,1-trichloroethane, benzene, toluene, ethylbenzene, m- and p-xylenes, o-xylene, 1,2,4-trimethylbenzene, and acetone. Most of these compounds were detected in the air samples collected in the Pump House. In general, the results obtained using the charcoal tubes indicated lower concentration levels than the thermal desorption analyses with the exception of trans-1,2-dichloroethylene (300 E $\mu g/m^3$ on the thermal desorption tube and 8,600 $\mu g/m^3$ on the charcoal tube) and 1,1,1-trichloroethane (46 $\mu g/m^3$ on the thermal desorption tube and 97 $\mu g/m^3$ on the charcoal tube). The elevated concentration of trans-1,2-dichloroethylene was detected at location WG-RSK-AS-15.

The results obtained from the two duplicate samples collected on thermal desorption tubes from location WG-RSK-AS-16 indicated relatively elevated RPDs in the duplicate samples collected (for example, trichloroethylene was detected at 0.43 $\mu g/m^3$ and 1.4 $\mu g/m^3$ in the duplicate samples collected). However, such differences are to be expected at the low concentration ranges reported. No VOCs were detected in the trip blank collected. In addition, it should be noted that several hydrocarbons were detected in the field blank sample collected.

An evaluation against the criteria listed above (VCAP screening levels listed in Table 3-4, as expanded by Gradient) indicated exceedances for benzene at the Pump House (30 $\mu g/m^3$), and trans-1,2-dichloroethylene (8,600 $\mu g/m^3$, based on the analysis of the charcoal tube) at the Lab (location WG-RSK-AS-15).

5.4 September 21, 2001 Analytical Results

Generally, lower levels of hydrocarbons were detected at the locations sampled. Typical constituents detected and their highest concentrations included 1,2,4-trimethylbenzene (1.4 $\mu g/m^3$); 1,3,5-trimethylbenzene (0.94 $\mu g/m^3$); ethylbenzene (2.3 $\mu g/m^3$); n-butlbenzene (0.25 $\mu g/m^3$); 2-butatone (5.3 $\mu g/m^3$); carbon tetrachloride (0.42 $\mu g/m^3$); p-isopropyltoluene (0.53 $\mu g/m^3$); 1,1,1-trichloroethane (45 E $\mu g/m^3$ in the thermal desorption tube and 59 $\mu g/m^3$ in the charcoal tube); 1,1-dichloroethylene (0.87 $\mu g/m^3$); tetrachlororethylene (0.86 $\mu g/m^3$); trans-1,2-dichloroethylene (9.0 $\mu g/m^3$); trichloroethylene (20 $\mu g/m^3$); dichlorodifluoromethane (7.1 $\mu g/m^3$); dichloromethane (5.6 $\mu g/m^3$); trichlororfluoromethane (2.4 $\mu g/m^3$); methyl isobutyl ketone (1.4 $\mu g/m^3$); styrene (4.0 $\mu g/m^3$); toluene (12.0 $\mu g/m^3$); o-xylene (3.0 $\mu g/m^3$); and total xylenes (8.8 $\mu g/m^3$).

No exceedances of the VCAP screening levels listed in Table 3-4 were observed at any of the locations sampled during the September 21, 2001 monitoring event.

The results obtained from the two duplicate samples collected on thermal desorption tubes from location WG-RSK-AS-15 indicated relatively elevated RPDs in the duplicate samples collected (for example, trans-1,2-dichloroethylene was detected at 0.95 $\mu g/m^3$ and 9.0 $\mu g/m^3$ in the duplicate samples collected). However, such differences are to be expected at the low concentration ranges reported. No VOCs were detected in the trip blank collected. In addition, it should be noted that several hydrocarbons (such as acetone, 2-butanone, trichloroethylene, trichloromethane, trichlorofluoromethane, and toluene) were detected in the field blank sample collected.

6. CONCLUSIONS

Four indoor air monitoring events were performed at the Willgoos facility on December 21, 2000, March 1, 2001, June 18, 2001, and September 21, 2001 in order to verify that indoor air VOC concentration levels are below the generic Pratt & Whitney screening levels established in the CSM. Samples were collected from six locations throughout the facility during each sampling event from locations representative of current and historic process operations.

The analytical results of the samples collected on December 21, 2000 indicated levels of benzene over the generic screening levels of 3.2 $\mu g/m^3$ in three of the samples. Samples WG-RSL-AS-11, WG-RSK-AS-14 and WG-RSK-AS-16 had benzene detected at 3.8 $\mu g/m^3$, 3.3 $\mu g/m^3$ and 4.5 $\mu g/m^3$. In order to determine whether the elevated levels of benzene were indicative of actual site conditions, LEA performed a confirmatory round of air sampling in March 2001. No VOCs over the generic Pratt & Whitney screening levels were detected during the sampling that was conducted on March 1, 2001.

A third quarterly monitoring event was performed in June 2001. An evaluation of the data obtained during this event indicated exceedances for benzene at the Pump House (30 $\mu g/m^3$), and trans-1,2-dichloroethylene (8,600 $\mu g/m^3$) at location WG-RSK-AS-15. The detection of benzene in the Pump House can most likely be attributed to the presence of fuel being collected in drainage buckets in the basement of the pump house as witnessed during sample collection. Trans-1,2-dichloroethylene was not detected during the December 2000, March 2001, and September 2001 monitoring events at location WG-RSK-AS-15. Its presence during the June 2001 monitoring appears to be anomalous. Subsequent monitoring events will confirm the presence or absence of these compounds.

The data obtained during the September 2001 monitoring event indicated no exceedances of the generic Pratt & Whitney screening levels at any of the locations sampled. Based on the results obtained during the quarterly sampling from location WG-RSK-AS-16, the quarterly event exhibiting the highest concentrations of total VOCs was the June 18, 2001 monitoring event. The next sampling round will be performed in June 2002 and the results will be evaluated against the generic Pratt & Whitney screening levels. Monitoring will continue on an annual basis thereafter. Sampling events will be conducted on an annual basis during the selected quarter at six locations.

TABLES

Table 1
SUMMARY OF SAMPLING AND ANALYTICAL INFORMATION
P&W East Hartford Willgoos: Indoor Air Monitoring

Loureiro Engineering Associates, Inc.

Sample Information					Analysis Information							
Location ID	Sample ID	Sample Date	Sampled Interval (ft)	Sample Class	LEA Volatiles	Volatile Organics	Semivolatile Organics	Herbicides	Pesticides	PCBs	Metals	Miscellaneous Analyses
BLANK	1979486	12/21/2000		VBKF		X	x		x			
BLANK	1979487	12/21/2000		VBKF		x						
Blank CT	1990410	03/01/2001		VBKT		x						
Blank CT	1997389	06/18/2001		VBKT		x						
Blank TD	1990409	03/01/2001		VBKT		X	x		x			
Blank TD	1997388	06/18/2001		VBKT		x	x		x			
TRIP BLANK	2007383	09/21/2001		VBKT		x	x		x			
WG-RSK-AS-11	1979474	12/21/2000		VS		X	X		x			
WG-RSK-AS-11	1979475	12/21/2000		VS		X						
WG-RSK-AS-11	1990393	03/01/2001		VS		X	X		x			
WG-RSK-AS-11	1990394	03/01/2001		VS								
WG-RSK-AS-11	1997129	06/18/2001		VS		X	X		x			
WG-RSK-AS-11	1997130	06/18/2001		VS		X						
WG-RSK-AS-11	2007375	09/21/2001		VS		X	X		x			
WG-RSK-AS-12	1979488	12/21/2000		VS		X	x		x			
WG-RSK-AS-12	1979489	12/21/2000		VS		X						
WG-RSK-AS-12	1990405	03/01/2001		VS		X	x		x			
WG-RSK-AS-12	1990406	03/01/2001		VS		X						
WG-RSK-AS-12	1997386	06/18/2001		VS		X	x		x			
WG-RSK-AS-12	1997387	06/18/2001		VS		X						
WG-RSK-AS-12	2007382	09/21/2001		VS		X	x		x			
WG-RSK-AS-13	1979478	12/21/2000		VS		X	x		x			
WG-RSK-AS-13	1979479	12/21/2000		VS								
WG-RSK-AS-13	1990401	03/01/2001		VS		X	X		x			
WG-RSK-AS-13	1990402	03/01/2001		VS		X						
WG-RSK-AS-13	1997137	06/18/2001		VS		X	X		x			
WG-RSK-AS-13	1997138	06/18/2001		VS		x						
WG-RSK-AS-13	2007378	09/21/2001		VS		X	X		x			
WG-RSK-AS-14	1979480	12/21/2000		VS		X	X		x			
WG-RSK-AS-14	1979481	12/21/2000		VS								
WG-RSK-AS-14	1979482	12/21/2000		VS		X	X		x			
WG-RSK-AS-14	1979483	12/21/2000		VS								
WG-RSK-AS-14	1990399	03/01/2001		VS		X	X		x			

Legend: x - mass, t - TCLP, s - SPLP, e - EPTOX, z - ZHE, d - Thermal Desorption, r - Charcoal Tube, a - SEM/AVS, f - filtered, nr - not received; Capitalized - at least one analyte in class detected

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Table 1
SUMMARY OF SAMPLING AND ANALYTICAL INFORMATION
P&W East Hartford Willgoos: Indoor Air Monitoring

Loureiro Engineering Associates, Inc.

Sample Information					Analysis Information							
Location ID	Sample ID	Sample Date	Sampled Interval (ft)	Sample Class	LEAVolatiles	Volatile Organics	Semivolatile Organics	Herbicides	Pesticides	PCBs	Metals	Miscellaneous Analyses
WG-RSK-AS-14	1990400	03/01/2001		VS		X						
WG-RSK-AS-14	1997135	06/18/2001		VS		X	X		x			
WG-RSK-AS-14	1997136	06/18/2001		VS		X						
WG-RSK-AS-14	2007377	09/21/2001		VS		X	X		x			
WG-RSK-AS-15	1979484	12/21/2000		VS		X	X		x			
WG-RSK-AS-15	1979485	12/21/2000		VS								
WG-RSK-AS-15	1990403	03/01/2001		VS		X	X		x			
WG-RSK-AS-15	1990404	03/01/2001		VS								
WG-RSK-AS-15	1997139	06/18/2001		VS		X	X		x			
WG-RSK-AS-15	1997140	06/18/2001		VS		X						
WG-RSK-AS-15	2007379	09/21/2001		VS		X	X		x			
WG-RSK-AS-15	2007380	09/21/2001		VS		X	X		x			
WG-RSK-AS-16	1979476	12/21/2000		VS		X	X		x			
WG-RSK-AS-16	1979477	12/21/2000		VS								
WG-RSK-AS-16	1990395	03/01/2001		VS		x	x		x			
WG-RSK-AS-16	1990396	03/01/2001		VS								
WG-RSK-AS-16	1990397	03/01/2001		VS		X	x		x			
WG-RSK-AS-16	1990398	03/01/2001		VS								
WG-RSK-AS-16	1997131	06/18/2001		VS		X	X		x			
WG-RSK-AS-16	1997132	06/18/2001		VS		X						
WG-RSK-AS-16	1997133	06/18/2001		VS		X	X		x			
WG-RSK-AS-16	1997134	06/18/2001		VS		X						
WG-RSK-AS-16	2007376	09/21/2001		VS		X	X		x			
WG-RSK-AS-17	1990407	03/01/2001		VBKF		X	x		x			
WG-RSK-AS-17	1990408	03/01/2001		VBKF								
WG-RSK-AS-17	1997384	06/18/2001		VBKF		X	x		x			
WG-RSK-AS-17	1997385	06/18/2001		VBKF		X						
WG-RSK-AS-17	2007381	09/21/2001		VBKF		X	x		x			

Legend: x - mass, t - TCLP, s - SPLP, e - EPTOX, z - ZHE, d - Thermal Desorption, r - Charcoal Tube, a - SEM/AVS, f - filtered, nr - not received; Capitalized - at least one analyte in class detected

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Table 2
SUMMARY OF ANALYTICAL RESULTS (DETECTS)
P&W East Hartford Willgoos: Indoor Air Monitoring

Loureiro Engineering Associates, Inc.

	Location ID	BLANK	Blank TD	WG-RSK-AS-11	WG-RSK-AS-11	WG-RSK-AS-11	WG-RSK-AS-11	WG-RSK-AS-11
	Sample ID	1979486	1990409	1979474	1979475	1990393	1997129	1997130
	Sample Date	12/21/2000	03/01/2001	12/21/2000	12/21/2000	03/01/2001	06/18/2001	06/18/2001
	Sample Time	08:55	13:45	07:24	07:24	08:35	07:25	07:40
	Laboratory	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN
	Lab. Number	C0005922-8	C0106351-14	C0005922-1	C0005922-11	C0106351-01	C010711101	C010711110
Constituent	Units							
n-Propylbenzene	-			2.5 ug/m3		0.93 ug/m3	7.0 ug/m3	
4-Isopropyltoluene (p-cymene)	-			2.4 ug/m3		3.1 ug/m3	2.9 ug/m3	
Naphthalene	-			3.5 ug/m3		1.9 ug/m3	15 ug/m3	
Acetone	-			20 E ug/m3	19 ug/m3	4.8 ug/m3	42 E ug/m3	13 ug/m3
Benzene	-			3.8 ug/m3		1.8 ug/m3	30 E ug/m3	21 ug/m3
1,2,4-Trimethylbenzene	-			18 ug/m3		7.1 ug/m3	26 E ug/m3	13 ug/m3
1,3,5-Trimethylbenzene	-			5.8 ug/m3		2.1 ug/m3	13 ug/m3	
Ethylbenzene	-			7.8 ug/m3		1.9 ug/m3	25 E ug/m3	18 ug/m3
n-Butylbenzene	-						4.1 ug/m3	
sec-Butylbenzene	-			0.85 ug/m3		0.64 ug/m3		
2-Butanone(MEK)	-			1.1 ug/m3			4.3 ug/m3	
Carbon Tetrachloride	-							
Isopropylbenzene (cumene)	-			0.81 ug/m3			2.3 ug/m3	
1,1,1-Trichloroethane	-			2.8 ug/m3		0.88 ug/m3	0.76 ug/m3	
1,1,2-Trichloroethane	-						5.4 ug/m3	
1,2-Dichloroethane	-							
Chloroethane	-							
1,1-Dichloroethylene	-							
Vinyl Chloride	-							
cis-1,2-Dichloroethylene	-							
Tetrachloroethylene	-			0.39 ug/m3			0.41 ug/m3	
trans-1,2-Dichloroethylene	-						0.30 ug/m3	
Trichloroethylene	-						0.63 ug/m3	
Bromomethane	-						1.9 ug/m3	
Bromochloromethane	-						6.1 ug/m3	
Chloromethane	-			0.36 ug/m3		0.37 ug/m3	3.9 ug/m3	
Methylene Chloride	-	16 ng	9.7 ng	6.2 ug/m3		1.5 ug/m3	300 E ug/m3	32 ug/m3
Dichlorodifluoromethane	-			6.2 ug/m3		5.4 ug/m3	7.1 ug/m3	
Chloroform	-							

Table 2
SUMMARY OF ANALYTICAL RESULTS (DETECTS)
P&W East Hartford Willgoos: Indoor Air Monitoring

Loureiro Engineering Associates, Inc.

	Location ID	BLANK	Blank TD	WG-RSK-AS-11	WG-RSK-AS-11	WG-RSK-AS-11	WG-RSK-AS-11	WG-RSK-AS-11
	Sample ID	1979486	1990409	1979474	1979475	1990393	1997129	1997130
	Sample Date	12/21/2000	03/01/2001	12/21/2000	12/21/2000	03/01/2001	06/18/2001	06/18/2001
	Sample Time	08:55	13:45	07:24	07:24	08:35	07:25	07:40
	Laboratory	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN
	Lab. Number	C0005922-8	C0106351-14	C0005922-1	C0005922-11	C0106351-01	C010711101	C010711110
Constituent	Units							
Trichlorofluoromethane	-	16 ng		0.99 ug/m3		0.57 ug/m3	0.84 ug/m3	
Methyl Isobutyl Ketone	-			0.34 ug/m3				
Styrene	-			0.76 ug/m3			1.9 ug/m3	
Toluene	-			22 ug/m3		7.9 ug/m3	100 E ug/m3	67 ug/m3
o-Xylene	-			11 ug/m3		2.6 ug/m3	42 E ug/m3	23 ug/m3
Xylenes	-			28 ug/m3		7.0 ug/m3	110 E ug/m3	70 ug/m3

Table 2
SUMMARY OF ANALYTICAL RESULTS (DETECTS)
P&W East Hartford Willgoos: Indoor Air Monitoring

Loureiro Engineering Associates, Inc.

	Location ID	WG-RSK-AS-11	WG-RSK-AS-12	WG-RSK-AS-12	WG-RSK-AS-12	WG-RSK-AS-12	WG-RSK-AS-12	WG-RSK-AS-12
	Sample ID	2007375	1979488	1979489	1990405	1990406	1997386	1997387
	Sample Date	09/21/2001	12/21/2000	12/21/2000	03/01/2001	03/01/2001	06/18/2001	06/18/2001
	Sample Time	06:53	09:17	09:17	10:30	10:32	10:15	10:15
	Laboratory	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN
	Lab. Number	C0107730-01	C0005922-7	C0005922-12	C0106351-09	C0106351-10	C010711108	C010711117
Constituent	Units							
n-Propylbenzene	-							
4-Isopropyltoluene (p-cymene)	-							
Naphthalene	-	1.4 ug/m3						
Acetone	-	20 ug/m3	0.930 ug/m3		1.2 ug/m3		4.7 ug/m3	
Benzene	-							
1,2,4-Trimethylbenzene	-		0.47 ug/m3					
1,3,5-Trimethylbenzene	-							
Ethylbenzene	-	2.3 ug/m3			0.68 ug/m3			
n-Butylbenzene	-							
sec-Butylbenzene	-							
2-Butanone(MEK)	-	2.5 ug/m3					0.47 ug/m3	
Carbon Tetrachloride	-							
Isopropylbenzene (cumene)	-							
1,1,1-Trichloroethane	-							
1,1,2-Trichloroethane	-							
1,2-Dichloroethane	-						1.3 ug/m3	
Chloroethane	-							
1,1-Dichloroethylene	-							
Vinyl Chloride	-							
cis-1,2-Dichloroethylene	-							
Tetrachloroethylene	-							
trans-1,2-Dichloroethylene	-						2.0 ug/m3	
Trichloroethylene	-		17 ug/m3		15 ug/m3		12 ug/m3	
Bromomethane	-							
Bromochloromethane	-						1.6 ug/m3	
Chloromethane	-		0.44 ug/m3				0.79 ug/m3	
Methylene Chloride	-	5.6 ug/m3	0.53 ug/m3		1.2 ug/m3		340 E ug/m3	22 ug/m3
Dichlorodifluoromethane	-	4.2 ug/m3	58 E ug/m3	39 ug/m3	270 E ug/m3	130 ug/m3	13 ug/m3	
Chloroform	-							

Table 2
SUMMARY OF ANALYTICAL RESULTS (DETECTS)
P&W East Hartford Willgoos: Indoor Air Monitoring

Loureiro Engineering Associates, Inc.

	Location ID	WG-RSK-AS-11	WG-RSK-AS-12	WG-RSK-AS-12	WG-RSK-AS-12	WG-RSK-AS-12	WG-RSK-AS-12	WG-RSK-AS-12
	Sample ID	2007375	1979488	1979489	1990405	1990406	1997386	1997387
	Sample Date	09/21/2001	12/21/2000	12/21/2000	03/01/2001	03/01/2001	06/18/2001	06/18/2001
	Sample Time	06:53	09:17	09:17	10:30	10:32	10:15	10:15
	Laboratory	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN
	Lab. Number	C0107730-01	C0005922-7	C0005922-12	C0106351-09	C0106351-10	C010711108	C010711117
Constituent	Units							
Trichlorofluoromethane	-	2.4 ug/m3	1.6 ug/m3		1.1 ug/m3		0.48 ug/m3	
Methyl Isobutyl Ketone	-	1.4 ug/m3						
Styrene	-	4.0 ug/m3						
Toluene	-	12 ug/m3	1.4 ug/m3		1.0 ug/m3		1.1 ug/m3	
o-Xylene	-	3.0 ug/m3			0.56 ug/m3			
Xylenes	-	8.8 ug/m3	0.84 ug/m3		2.1 ug/m3		0.71 ug/m3	

Table 2
SUMMARY OF ANALYTICAL RESULTS (DETECTS)
P&W East Hartford Willgoos: Indoor Air Monitoring

Loureiro Engineering Associates, Inc.

	Location ID	WG-RSK-AS-12	WG-RSK-AS-13	WG-RSK-AS-13	WG-RSK-AS-13	WG-RSK-AS-13	WG-RSK-AS-13	WG-RSK-AS-14
	Sample ID	2007382	1979478	1990401	1990402	1997137	2007378	1979480
	Sample Date	09/21/2001	12/21/2000	03/01/2001	03/01/2001	06/18/2001	09/21/2001	12/21/2000
	Sample Time	08:33	08:15	09:50	09:52	09:06	07:40	08:36
	Laboratory	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN
	Lab. Number	C0107730-08	C0005922-3	C0106351-06	C0106351-07	C010711105	C0107730-04	C0005922-4
Constituent	Units							
n-Propylbenzene	-			1.0 ug/m3				0.95 ug/m3
4-Isopropyltoluene (p-cymene)	-			0.78 ug/m3				0.62 ug/m3
Naphthalene	-			0.33 ug/m3		0.30 ug/m3	0.52 ug/m3	3.4 ug/m3
Acetone	-	3.6 ug/m3	2.2 ug/m3	2.6 ug/m3		2.8 ug/m3	6.4 ug/m3	3.6 ug/m3
Benzene	-		1.9 ug/m3	1.2 ug/m3				3.3 ug/m3
1,2,4-Trimethylbenzene	-		1.3 ug/m3	4.1 ug/m3				4.8 ug/m3
1,3,5-Trimethylbenzene	-			3.3 ug/m3				1.5 ug/m3
Ethylbenzene	-		1.0 ug/m3			0.25 ug/m3		1.5 ug/m3
n-Butylbenzene	-							
sec-Butylbenzene	-							0.45 ug/m3
2-Butanone(MEK)	-	0.40 ug/m3				0.51 ug/m3	1.0 ug/m3	
Carbon Tetrachloride	-	0.42 ug/m3				0.36 ug/m3		
Isopropylbenzene (cumene)	-							
1,1,1-Trichloroethane	-					0.49 ug/m3		
1,1,2-Trichloroethane	-							
1,2-Dichloroethane	-					1.8 ug/m3		
Chloroethane	-							
1,1-Dichloroethylene	-							
Vinyl Chloride	-							
cis-1,2-Dichloroethylene	-							
Tetrachloroethylene	-							0.40 ug/m3
trans-1,2-Dichloroethylene	-							
Trichloroethylene	-	20 ug/m3	18 ug/m3	17 ug/m3		18 ug/m3	4.0 ug/m3	0.67 ug/m3
Bromomethane	-							
Bromochloromethane	-							
Chloromethane	-		0.95 ug/m3	0.61 ug/m3		0.24 ug/m3		0.64 ug/m3
Methylene Chloride	-					26 E ug/m3		0.42 ug/m3
Dichlorodifluoromethane	-		31 ug/m3	240 E ug/m3	270 ug/m3	21 ug/m3		5.6 ug/m3
Chloroform	-							

Table 2
SUMMARY OF ANALYTICAL RESULTS (DETECTS)
P&W East Hartford Willgoos: Indoor Air Monitoring

Loureiro Engineering Associates, Inc.

	Location ID	WG-RSK-AS-12	WG-RSK-AS-13	WG-RSK-AS-13	WG-RSK-AS-13	WG-RSK-AS-13	WG-RSK-AS-13	WG-RSK-AS-14
	Sample ID	2007382	1979478	1990401	1990402	1997137	2007378	1979480
	Sample Date	09/21/2001	12/21/2000	03/01/2001	03/01/2001	06/18/2001	09/21/2001	12/21/2000
	Sample Time	08:33	08:15	09:50	09:52	09:06	07:40	08:36
	Laboratory	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN
	Lab. Number	C0107730-08	C0005922-3	C0106351-06	C0106351-07	C010711105	C0107730-04	C0005922-4
Constituent	Units							
Trichlorofluoromethane	-	0.95 ug/m3	2.4 ug/m3	0.99 ug/m3		0.77 ug/m3		0.98 ug/m3
Methyl Isobutyl Ketone	-							
Styrene	-							0.39 ug/m3
Toluene	-	0.38 ug/m3	4.4 ug/m3	0.91 ug/m3		1.2 ug/m3	0.50 ug/m3	5.0 ug/m3
o-Xylene	-		1.1 ug/m3	0.57 ug/m3		0.29 ug/m3		2.2 ug/m3
Xylenes	-		3.3 ug/m3	0.91 ug/m3		0.86 ug/m3		5.1 ug/m3

Table 2
SUMMARY OF ANALYTICAL RESULTS (DETECTS)
P&W East Hartford Willgoos: Indoor Air Monitoring

Loureiro Engineering Associates, Inc.

	Location ID	WG-RSK-AS-14	WG-RSK-AS-14	WG-RSK-AS-14	WG-RSK-AS-14	WG-RSK-AS-14	WG-RSK-AS-14	WG-RSK-AS-15
	Sample ID	1979482	1990399	1990400	1997135	1997136	2007377	1979484
	Sample Date	12/21/2000	03/01/2001	03/01/2001	06/18/2001	06/18/2001	09/21/2001	12/21/2000
	Sample Time	08:40	09:28	09:31	08:49	08:48	07:30	08:50
	Laboratory	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN
	Lab. Number	C0005922-5	C0106351-04	C0106351-05	C010711104	C010711113	C0107730-03	C0005922-6
Constituent	Units							
n-Propylbenzene	-	0.84 ug/m3			0.65 ug/m3			0.98 ug/m3
4-Isopropyltoluene (p-cymene)	-	0.55 ug/m3			0.37 ug/m3			
Naphthalene	-	2.6 ug/m3	1.0 ug/m3		2.9 ug/m3		1.2 ug/m3	0.97 ug/m3
Acetone	-	2.700 ug/m3	8.7 ug/m3		4.1 ug/m3		20 E ug/m3	1.4 ug/m3
Benzene	-	1.8 ug/m3	0.82 ug/m3					1.1 ug/m3
1,2,4-Trimethylbenzene	-	4.3 ug/m3	0.94 ug/m3		2.4 ug/m3		0.42 ug/m3	5.5 ug/m3
1,3,5-Trimethylbenzene	-	1.3 ug/m3			2.5 ug/m3		0.27 ug/m3	1.8 ug/m3
Ethylbenzene	-	1.4 ug/m3	0.70 ug/m3		0.98 ug/m3			0.47 ug/m3
n-Butylbenzene	-							
sec-Butylbenzene	-	0.39 ug/m3						
2-Butanone(MEK)	-				0.58 ug/m3			
Carbon Tetrachloride	-							
Isopropylbenzene (cumene)	-				0.32 ug/m3			
1,1,1-Trichloroethane	-				0.28 ug/m3			
1,1,2-Trichloroethane	-							
1,2-Dichloroethane	-							
Chloroethane	-							
1,1-Dichloroethylene	-							
Vinyl Chloride	-							
cis-1,2-Dichloroethylene	-							
Tetrachloroethylene	-							
trans-1,2-Dichloroethylene	-							
Trichloroethylene	-	0.61 ug/m3			0.29 ug/m3		0.63 ug/m3	
Bromomethane	-							
Bromochloromethane	-				0.30 ug/m3			
Chloromethane	-	0.40 ug/m3	0.41 ug/m3		0.40 ug/m3			
Methylene Chloride	-	0.79 ug/m3	0.53 ug/m3		44 E ug/m3	4.5 ug/m3	0.32 ug/m3	
Dichlorodifluoromethane	-	5.5 ug/m3	4.9 ug/m3		5.6 ug/m3		4.4 ug/m3	4.3 ug/m3
Chloroform	-							

Table 2
SUMMARY OF ANALYTICAL RESULTS (DETECTS)
P&W East Hartford Willgoos: Indoor Air Monitoring

Loureiro Engineering Associates, Inc.

	Location ID	WG-RSK-AS-14	WG-RSK-AS-14	WG-RSK-AS-14	WG-RSK-AS-14	WG-RSK-AS-14	WG-RSK-AS-14	WG-RSK-AS-15
	Sample ID	1979482	1990399	1990400	1997135	1997136	2007377	1979484
	Sample Date	12/21/2000	03/01/2001	03/01/2001	06/18/2001	06/18/2001	09/21/2001	12/21/2000
	Sample Time	08:40	09:28	09:31	08:49	08:48	07:30	08:50
	Laboratory	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN
	Lab. Number	C0005922-5	C0106351-04	C0106351-05	C010711104	C010711113	C0107730-03	C0005922-6
Constituent	Units							
Trichlorofluoromethane	-	1.2 ug/m3	0.98 ug/m3		0.58 ug/m3		0.90 ug/m3	0.86 ug/m3
Methyl Isobutyl Ketone	-							
Styrene	-							
Toluene	-	4.2 ug/m3	42 E ug/m3	85 ug/m3	2.8 ug/m3		0.57 ug/m3	3.8 ug/m3
o-Xylene	-	2.0 ug/m3	0.52 ug/m3		2.6 ug/m3		0.26 ug/m3	1.6 ug/m3
Xylenes	-	4.5 ug/m3	2.0 ug/m3		6.5 ug/m3		0.59 ug/m3	1.6 ug/m3

Table 2
SUMMARY OF ANALYTICAL RESULTS (DETECTS)
P&W East Hartford Willgoos: Indoor Air Monitoring

Loureiro Engineering Associates, Inc.

	Location ID	WG-RSK-AS-15	WG-RSK-AS-15	WG-RSK-AS-15	WG-RSK-AS-15	WG-RSK-AS-15	WG-RSK-AS-16	WG-RSK-AS-16
	Sample ID	1990403	1997139	1997140	2007379	2007380	1979476	1990397
	Sample Date	03/01/2001	06/18/2001	06/18/2001	09/21/2001	09/21/2001	12/21/2000	03/01/2001
	Sample Time	10:12	09:28	09:25	08:04	08:04	08:01	09:05
	Laboratory	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN
	Lab. Number	C0106351-08	C010711106	C010711115	C0107730-05	C0107730-06	C0005922-2	C0106351-03
Constituent	Units							
n-Propylbenzene	-	0.46 ug/m3	0.32 ug/m3		0.35 ug/m3		0.90 ug/m3	
4-Isopropyltoluene (p-cymene)	-				0.30 ug/m3			
Naphthalene	-	1.0 ug/m3	1.4 ug/m3		1.2 ug/m3	1.1 ug/m3		
Acetone	-		14 ug/m3		14 ug/m3	5.2 ug/m3	2.5 ug/m3	1.2 ug/m3
Benzene	-						4.5 ug/m3	0.76 ug/m3
1,2,4-Trimethylbenzene	-	2.6 ug/m3	1.4 ug/m3		1.4 ug/m3	0.95 ug/m3	4.8 ug/m3	0.47 ug/m3
1,3,5-Trimethylbenzene	-	0.85 ug/m3	0.88 ug/m3		0.94 ug/m3	0.66 ug/m3	1.6 ug/m3	
Ethylbenzene	-	0.47 ug/m3			0.62 ug/m3	0.45 ug/m3	3.1 ug/m3	
n-Butylbenzene	-							
sec-Butylbenzene	-							
2-Butanone(MEK)	-							
Carbon Tetrachloride	-				0.39 ug/m3			
Isopropylbenzene (cumene)	-							
1,1,1-Trichloroethane	-						2.9 ug/m3	4.7 ug/m3
1,1,2-Trichloroethane	-							
1,2-Dichloroethane	-							
Chloroethane	-		4.5 ug/m3					
1,1-Dichloroethylene	-						0.85 ug/m3	0.76 ug/m3
Vinyl Chloride	-		0.33 ug/m3					
cis-1,2-Dichloroethylene	-		13 ug/m3					
Tetrachloroethylene	-						4.2 ug/m3	
trans-1,2-Dichloroethylene	-		300 E ug/m3	8600 ug/m3	9.0 ug/m3	0.95 ug/m3		
Trichloroethylene	-							
Bromomethane	-							
Bromochloromethane	-							
Chloromethane	-		2.4 ug/m3					
Methylene Chloride	-	1.1 ug/m3	8.2 ug/m3					2.5 ug/m3
Dichlorodifluoromethane	-	5.4 ug/m3	7.3 ug/m3		7.1 ug/m3	2.5 ug/m3	5.1 ug/m3	4.9 ug/m3
Chloroform	-							

Table 2
SUMMARY OF ANALYTICAL RESULTS (DETECTS)
P&W East Hartford Willgoos: Indoor Air Monitoring

Loureiro Engineering Associates, Inc.

	Location ID	WG-RSK-AS-15	WG-RSK-AS-15	WG-RSK-AS-15	WG-RSK-AS-15	WG-RSK-AS-15	WG-RSK-AS-16	WG-RSK-AS-16
	Sample ID	1990403	1997139	1997140	2007379	2007380	1979476	1990397
	Sample Date	03/01/2001	06/18/2001	06/18/2001	09/21/2001	09/21/2001	12/21/2000	03/01/2001
	Sample Time	10:12	09:28	09:25	08:04	08:04	08:01	09:05
	Laboratory	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN
	Lab. Number	C0106351-08	C010711106	C010711115	C0107730-05	C0107730-06	C0005922-2	C0106351-03
Constituent	Units							
Trichlorofluoromethane	-	1.0 ug/m3	0.89 ug/m3		1.7 ug/m3		0.69 ug/m3	0.90 ug/m3
Methyl Isobutyl Ketone	-							
Styrene	-	0.82 ug/m3			0.74 ug/m3	0.55 ug/m3		
Toluene	-	2.7 ug/m3			2.2 ug/m3	1.2 ug/m3	14 ug/m3	1.1 ug/m3
o-Xylene	-	0.97 ug/m3	0.48 ug/m3		1.2 ug/m3	0.92 ug/m3	4.1 ug/m3	
Xylenes	-	1.5 ug/m3	0.74 ug/m3		2.7 ug/m3	2.1 ug/m3	11 ug/m3	0.72 ug/m3

Table 2
SUMMARY OF ANALYTICAL RESULTS (DETECTS)
P&W East Hartford Willgoos: Indoor Air Monitoring

Loureiro Engineering Associates, Inc.

	Location ID	WG-RSK-AS-16	WG-RSK-AS-16	WG-RSK-AS-16	WG-RSK-AS-16	WG-RSK-AS-16	WG-RSK-AS-16	WG-RSK-AS-17
	Sample ID	1997131	1997132	1997133	1997134	2007376	2007376	1990407
	Sample Date	06/18/2001	06/18/2001	06/18/2001	06/18/2001	09/21/2001	09/21/2001	03/01/2001
	Sample Time	08:10	08:10	08:20	08:20	07:16	07:16	10:45
	Laboratory	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN
	Lab. Number	C010711102	C010711111	C010711103	C010711112	C0107730-02	C0107730-12	C0106351-11
Constituent	Units							
n-Propylbenzene	-							
4-Isopropyltoluene (p-cymene)	-					0.53 ug/m3		
Naphthalene	-	2.1 ug/m3		2.5 ug/m3		3.8 ug/m3		
Acetone	-	7.4 ug/m3		4.8 ug/m3		22 E ug/m3		0.61 ug/m3
Benzene	-	0.59 ug/m3		1.4 ug/m3				
1,2,4-Trimethylbenzene	-	0.32 ug/m3		0.55 ug/m3		0.87 ug/m3		
1,3,5-Trimethylbenzene	-			0.39 ug/m3		0.71 ug/m3		
Ethylbenzene	-	0.30 ug/m3		0.66 ug/m3		0.77 ug/m3		
n-Butylbenzene	-					0.25 ug/m3		
sec-Butylbenzene	-							
2-Butanone(MEK)	-	4.3 ug/m3		3.5 ug/m3		5.3 ug/m3		
Carbon Tetrachloride	-							
Isopropylbenzene (cumene)	-							
1,1,1-Trichloroethane	-	46 E ug/m3	97 ug/m3	150 E ug/m3	100 ug/m3	45 E ug/m3	59 ug/m3	
1,1,2-Trichloroethane	-							
1,2-Dichloroethane	-							
Chloroethane	-							
1,1-Dichloroethylene	-			0.39 ug/m3		0.87 ug/m3		
Vinyl Chloride	-							
cis-1,2-Dichloroethylene	-							
Tetrachloroethylene	-	0.51 ug/m3		1.7 ug/m3		0.86 ug/m3		
trans-1,2-Dichloroethylene	-							
Trichloroethylene	-	0.43 ug/m3		1.4 ug/m3		0.66 ug/m3		
Bromomethane	-							
Bromochloromethane	-							
Chloromethane	-							0.94 ug/m3
Methylene Chloride	-	49 E ug/m3	4.2 ug/m3	53 E ug/m3		0.31 ug/m3		1.2 ug/m3
Dichlorodifluoromethane	-	6.6 ug/m3		7.9 ug/m3				4.0 ug/m3
Chloroform	-							

Table 2
SUMMARY OF ANALYTICAL RESULTS (DETECTS)
P&W East Hartford Willgoos: Indoor Air Monitoring

Loureiro Engineering Associates, Inc.

	Location ID	WG-RSK-AS-16	WG-RSK-AS-16	WG-RSK-AS-16	WG-RSK-AS-16	WG-RSK-AS-16	WG-RSK-AS-16	WG-RSK-AS-17
	Sample ID	1997131	1997132	1997133	1997134	2007376	2007376	1990407
	Sample Date	06/18/2001	06/18/2001	06/18/2001	06/18/2001	09/21/2001	09/21/2001	03/01/2001
	Sample Time	08:10	08:10	08:20	08:20	07:16	07:16	10:45
	Laboratory	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN
	Lab. Number	C010711102	C010711111	C010711103	C010711112	C0107730-02	C0107730-12	C0106351-11
Constituent	Units							
Trichlorofluoromethane	-	1.1 ug/m3		0.70 ug/m3		1.1 ug/m3		1.7 ug/m3
Methyl Isobutyl Ketone	-	0.53 ug/m3		0.97 ug/m3		0.83 ug/m3		
Styrene	-			0.53 ug/m3		1.0 ug/m3		
Toluene	-	2.9 ug/m3		7.9 ug/m3		5.6 ug/m3		0.56 ug/m3
o-Xylene	-	0.45 ug/m3		0.83 ug/m3		1.4 ug/m3		
Xylenes	-	1.1 ug/m3		2.8 ug/m3		4.0 ug/m3		

Table 2
SUMMARY OF ANALYTICAL RESULTS (DETECTS)
P&W East Hartford Willgoos: Indoor Air Monitoring

Loureiro Engineering Associates, Inc.

	Location ID	WG-RSK-AS-17	WG-RSK-AS-17	WG-RSK-AS-17				
	Sample ID	1997384	1997385	2007381				
	Sample Date	06/18/2001	06/18/2001	09/21/2001				
	Sample Time	09:50	09:50	08:43				
	Laboratory	CIGN	CIGN	CIGN				
	Lab. Number	C010711107	C010711116	C0107730-07				
Constituent	Units							
n-Propylbenzene	-							
4-Isopropyltoluene (p-cymene)	-							
Naphthalene	-							
Acetone	-	3.3 ug/m3		7.2 ug/m3				
Benzene	-							
1,2,4-Trimethylbenzene	-							
1,3,5-Trimethylbenzene	-							
Ethylbenzene	-							
n-Butylbenzene	-							
sec-Butylbenzene	-							
2-Butanone(MEK)	-	0.32 ug/m3		1.1 ug/m3				
Carbon Tetrachloride	-							
Isopropylbenzene (cumene)	-							
1,1,1-Trichloroethane	-							
1,1,2-Trichloroethane	-							
1,2-Dichloroethane	-							
Chloroethane	-							
1,1-Dichloroethylene	-							
Vinyl Chloride	-							
cis-1,2-Dichloroethylene	-							
Tetrachloroethylene	-							
trans-1,2-Dichloroethylene	-	2.1 ug/m3						
Trichloroethylene	-			0.28 ug/m3				
Bromomethane	-	0.69 ug/m3						
Bromochloromethane	-							
Chloromethane	-	0.39 ug/m3						
Methylene Chloride	-	27 E ug/m3	6.0 ug/m3					
Dichlorodifluoromethane	-	5.3 ug/m3						
Chloroform	-			1.0 ug/m3				

Table 2
SUMMARY OF ANALYTICAL RESULTS (DETECTS)
P&W East Hartford Willgoos: Indoor Air Monitoring

Loureiro Engineering Associates, Inc.

	Location ID	WG-RSK-AS-17	WG-RSK-AS-17	WG-RSK-AS-17				
	Sample ID	1997384	1997385	2007381				
	Sample Date	06/18/2001	06/18/2001	09/21/2001				
	Sample Time	09:50	09:50	08:43				
	Laboratory	CIGN	CIGN	CIGN				
	Lab. Number	C010711107	C010711116	C0107730-07				
Constituent	Units							
Trichlorofluoromethane	-	0.32 ug/m3		0.45 ug/m3				
Methyl Isobutyl Ketone	-							
Styrene	-							
Toluene	-	0.68 ug/m3		0.55 ug/m3				
o-Xylene	-							
Xylenes	-							

Table 3
SUMMARY OF ANALYTICAL RESULTS
P&W East Hartford Willgoos: Indoor Air Monitoring

Loureiro Engineering Associates, Inc.

	Location ID	BLANK	BLANK	Blank CT	Blank CT	Blank TD	Blank TD	TRIP BLANK
	Sample ID	1979486	1979487	1990410	1997389	1990409	1997388	2007383
	Sample Date	12/21/2000	12/21/2000	03/01/2001	06/18/2001	03/01/2001	06/18/2001	09/21/2001
	Sample Time	08:55	08:56	13:45	10:30	13:45	10:30	
	Laboratory	CIGN		CIGN	CIGN	CIGN	CIGN	CIGN
	Lab. Number	C0005922-8	C0005922-13	C0106351-15	C010711118	C0106351-14	C010711109	C0107730-09
Constituent	Units							
Dibromochloropropane (DBCP)	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
n-Propylbenzene	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
Hexachlorobutadiene	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
4-Isopropyltoluene (p-cymene)	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
Naphthalene	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
Acetone	-	<5.0 ng	<1.0 ng		<0.40 ug	<5.0 ng	<5.0 ng	<5.0 ng
Benzene	-	<10 ng			<0.40 ug	<10 ng	<10 ng	<10 ng
1,2,3-Trichlorobenzene	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
1,2,4-Trichlorobenzene	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
1,2,4-Trimethylbenzene	-	<5.0 ng			<0.40 ug	<5.0 ng	<5.0 ng	<5.0 ng
1,2-Dichlorobenzene	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
1,3,5-Trimethylbenzene	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
1,3-Dichlorobenzene	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
1,4-Dichlorobenzene	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
Bromobenzene	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
Chlorobenzene	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
Ethylbenzene	-	<5.0 ng			<0.40 ug	<5.0 ng	<5.0 ng	<5.0 ng
n-Butylbenzene	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
sec-Butylbenzene	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
tert-Butylbenzene	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
2-Butanone(MEK)	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
Carbon Tetrachloride	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
Isopropylbenzene (cumene)	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
1,1,1,2-Tetrachloroethane	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
1,1,1-Trichloroethane	-	<5.0 ng			<0.40 ug	<5.0 ng	<5.0 ng	<5.0 ng
1,1,2,2-Tetrachloroethane	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
1,1,2-Trichloroethane	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
1,1-Dichloroethane	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
Ethylene Dibromide (EDB)	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng

Table 3
SUMMARY OF ANALYTICAL RESULTS
P&W East Hartford Willgoos: Indoor Air Monitoring

Loureiro Engineering Associates, Inc.

	Location ID	BLANK	BLANK	Blank CT	Blank CT	Blank TD	Blank TD	TRIP BLANK
	Sample ID	1979486	1979487	1990410	1997389	1990409	1997388	2007383
	Sample Date	12/21/2000	12/21/2000	03/01/2001	06/18/2001	03/01/2001	06/18/2001	09/21/2001
	Sample Time	08:55	08:56	13:45	10:30	13:45	10:30	
	Laboratory	CIGN		CIGN	CIGN	CIGN	CIGN	CIGN
	Lab. Number	C0005922-8	C0005922-13	C0106351-15	C010711118	C0106351-14	C010711109	C0107730-09
Constituent	Units							
1,2-Dichloroethane	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
Chloroethane	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
1,1-Dichloroethylene	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
Vinyl Chloride	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
cis-1,2-Dichloroethylene	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
Tetrachloroethylene	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
trans-1,2-Dichloroethylene	-	<5.0 ng			<0.40 ug	<5.0 ng	<5.0 ng	<5.0 ng
Trichloroethylene	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
Bromomethane	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
Bromochloromethane	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
Bromodichloromethane	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
Chloromethane	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
Methane,dibromo-	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
Dibromochloromethane	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
Methylene Chloride	-	16 ng			<0.40 ug	9.7 ng	<5.0 ng	<5.0 ng
Dichlorodifluoromethane	-	<5.0 ng	<1.0 ng	<1.0 ug		<5.0 ng	<5.0 ng	<5.0 ng
Bromoform	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
Chloroform	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
Trichlorofluoromethane	-	16 ng				<5.0 ng	<5.0 ng	<5.0 ng
Methyl Isobutyl Ketone	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
1,2,3-Trichloropropane	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
1,2-Dichloropropane	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
Propane,1,3-dichloro-	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
Propane,2,2-dichloro-	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
1,1-Dichloropropylene	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
cis-1,3-Dichloropropylene	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
trans-1,3-Dichloropropylene	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
Styrene	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
Toluene	-	<5.0 ng		<1.0 ug	<0.40 ug	<5.0 ng	<5.0 ng	<5.0 ng

Table 3
SUMMARY OF ANALYTICAL RESULTS
P&W East Hartford Willgoos: Indoor Air Monitoring

Loureiro Engineering Associates, Inc.

	Location ID	BLANK	BLANK	Blank CT	Blank CT	Blank TD	Blank TD	TRIP BLANK
	Sample ID	1979486	1979487	1990410	1997389	1990409	1997388	2007383
	Sample Date	12/21/2000	12/21/2000	03/01/2001	06/18/2001	03/01/2001	06/18/2001	09/21/2001
	Sample Time	08:55	08:56	13:45	10:30	13:45	10:30	
	Laboratory	CIGN		CIGN	CIGN	CIGN	CIGN	CIGN
	Lab. Number	C0005922-8	C0005922-13	C0106351-15	C010711118	C0106351-14	C010711109	C0107730-09
Constituent	Units							
o-Chlorotoluene	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
p-Chlorotoluene	-	<5.0 ng				<5.0 ng	<5.0 ng	<5.0 ng
o-Xylene	-	<5.0 ng			<0.40 ug	<5.0 ng	<5.0 ng	<5.0 ng
Xylenes	-	<10 ng			<0.40 ug	<10 ng	<10 ng	<10 ng

Table 3
SUMMARY OF ANALYTICAL RESULTS
P&W East Hartford Willgoos: Indoor Air Monitoring

Loureiro Engineering Associates, Inc.

	Location ID	TRIP BLANK	TRIP BLANK	WG-RSK-AS-11	WG-RSK-AS-11	WG-RSK-AS-11	WG-RSK-AS-11	WG-RSK-AS-11
	Sample ID	2007383	2007383	1979474	1979475	1990393	1997129	1997130
	Sample Date	09/21/2001	09/21/2001	12/21/2000	12/21/2000	03/01/2001	06/18/2001	06/18/2001
	Sample Time			07:24	07:24	08:35	07:25	07:40
	Laboratory	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN
	Lab. Number	C0107730-13	C0107730-14	C0005922-1	C0005922-11	C0106351-01	C010711101	C010711110
Constituent	Units							
Dibromochloropropane (DBCP)	-			<0.33 ug/m3		<0.33 ug/m3	<0.22 ug/m3	
n-Propylbenzene	-			2.5 ug/m3		0.93 ug/m3	7.0 ug/m3	
Hexachlorobutadiene	-			<0.33 ug/m3		<0.33 ug/m3	<0.22 ug/m3	
4-Isopropyltoluene (p-cymene)	-			2.4 ug/m3		3.1 ug/m3	2.9 ug/m3	
Naphthalene	-			3.5 ug/m3		1.9 ug/m3	15 ug/m3	
Acetone	-	<5.0 ng		20 E ug/m3	19 ug/m3	4.8 ug/m3	42 E ug/m3	13 ug/m3
Benzene	-			3.8 ug/m3		1.8 ug/m3	30 E ug/m3	21 ug/m3
1,2,3-Trichlorobenzene	-			<0.33 ug/m3		<0.33 ug/m3	<0.22 ug/m3	
1,2,4-Trichlorobenzene	-			<0.33 ug/m3		<0.33 ug/m3	<0.22 ug/m3	
1,2,4-Trimethylbenzene	-			18 ug/m3		7.1 ug/m3	26 E ug/m3	13 ug/m3
1,2-Dichlorobenzene	-			<0.33 ug/m3		<0.33 ug/m3	<0.22 ug/m3	
1,3,5-Trimethylbenzene	-			5.8 ug/m3		2.1 ug/m3	13 ug/m3	
1,3-Dichlorobenzene	-			<0.33 ug/m3		<0.33 ug/m3	<0.22 ug/m3	
1,4-Dichlorobenzene	-			<0.33 ug/m3		<0.33 ug/m3	<0.22 ug/m3	
Bromobenzene	-			<0.33 ug/m3		<0.33 ug/m3	<0.22 ug/m3	
Chlorobenzene	-			<0.33 ug/m3		<0.33 ug/m3	<0.22 ug/m3	
Ethylbenzene	-			7.8 ug/m3		1.9 ug/m3	25 E ug/m3	18 ug/m3
n-Butylbenzene	-			<0.33 ug/m3		<0.33 ug/m3	4.1 ug/m3	
sec-Butylbenzene	-			0.85 ug/m3		0.64 ug/m3	<0.22 ug/m3	
tert-Butylbenzene	-			<0.33 ug/m3		<0.33 ug/m3	<0.22 ug/m3	
2-Butanone(MEK)	-			1.1 ug/m3		<0.33 ug/m3	4.3 ug/m3	
Carbon Tetrachloride	-			<0.33 ug/m3		<0.33 ug/m3	<0.22 ug/m3	
Isopropylbenzene (cumene)	-			0.81 ug/m3		<0.33 ug/m3	2.3 ug/m3	
1,1,1,2-Tetrachloroethane	-			<0.33 ug/m3		<0.33 ug/m3	<0.22 ug/m3	
1,1,1-Trichloroethane	-		<5.0 ng	2.8 ug/m3		0.88 ug/m3	0.76 ug/m3	
1,1,2,2-Tetrachloroethane	-			<0.33 ug/m3		<0.33 ug/m3	<0.22 ug/m3	
1,1,2-Trichloroethane	-			<0.33 ug/m3		<0.33 ug/m3	5.4 ug/m3	
1,1-Dichloroethane	-			<0.33 ug/m3		<0.33 ug/m3	<0.22 ug/m3	
Ethylene Dibromide (EDB)	-			<0.33 ug/m3		<0.33 ug/m3	<0.22 ug/m3	

Table 3
SUMMARY OF ANALYTICAL RESULTS
P&W East Hartford Willgoos: Indoor Air Monitoring

Loureiro Engineering Associates, Inc.

	Location ID	TRIP BLANK	TRIP BLANK	WG-RSK-AS-11	WG-RSK-AS-11	WG-RSK-AS-11	WG-RSK-AS-11	WG-RSK-AS-11
	Sample ID	2007383	2007383	1979474	1979475	1990393	1997129	1997130
	Sample Date	09/21/2001	09/21/2001	12/21/2000	12/21/2000	03/01/2001	06/18/2001	06/18/2001
	Sample Time			07:24	07:24	08:35	07:25	07:40
	Laboratory	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN
	Lab. Number	C0107730-13	C0107730-14	C0005922-1	C0005922-11	C0106351-01	C010711101	C010711110
Constituent	Units							
1,2-Dichloroethane	-			<0.33 ug/m3		<0.33 ug/m3	<0.22 ug/m3	
Chloroethane	-			<0.33 ug/m3		<0.33 ug/m3	<0.22 ug/m3	
1,1-Dichloroethylene	-			<0.33 ug/m3		<0.33 ug/m3	<0.22 ug/m3	
Vinyl Chloride	-			<0.33 ug/m3		<0.33 ug/m3	<0.22 ug/m3	
cis-1,2-Dichloroethylene	-			<0.33 ug/m3		<0.33 ug/m3	<0.22 ug/m3	
Tetrachloroethylene	-			0.39 ug/m3		<0.33 ug/m3	0.41 ug/m3	
trans-1,2-Dichloroethylene	-			<0.33 ug/m3		<0.33 ug/m3	0.30 ug/m3	
Trichloroethylene	-			<0.33 ug/m3		<0.33 ug/m3	0.63 ug/m3	
Bromomethane	-			<0.33 ug/m3		<0.33 ug/m3	1.9 ug/m3	
Bromochloromethane	-			<0.33 ug/m3		<0.33 ug/m3	6.1 ug/m3	
Bromodichloromethane	-			<0.33 ug/m3		<0.33 ug/m3	<0.22 ug/m3	
Chloromethane	-			0.36 ug/m3		0.37 ug/m3	3.9 ug/m3	
Methane,dibromo-	-			<0.33 ug/m3		<0.33 ug/m3	<0.22 ug/m3	
Dibromochloromethane	-			<0.33 ug/m3		<0.33 ug/m3	<0.22 ug/m3	
Methylene Chloride	-			6.2 ug/m3		1.5 ug/m3	300 E ug/m3	32 ug/m3
Dichlorodifluoromethane	-			6.2 ug/m3	<10 ug/m3	5.4 ug/m3	7.1 ug/m3	
Bromoform	-			<0.33 ug/m3		<0.33 ug/m3	<0.22 ug/m3	
Chloroform	-			<0.33 ug/m3		<0.33 ug/m3	<0.22 ug/m3	
Trichlorofluoromethane	-			0.99 ug/m3		0.57 ug/m3	0.84 ug/m3	
Methyl Isobutyl Ketone	-			0.34 ug/m3		<0.33 ug/m3	<0.22 ug/m3	
1,2,3-Trichloropropane	-			<0.33 ug/m3		<0.33 ug/m3	<0.22 ug/m3	
1,2-Dichloropropane	-			<0.33 ug/m3		<0.33 ug/m3	<0.22 ug/m3	
Propane,1,3-dichloro-	-			<0.33 ug/m3		<0.33 ug/m3	<0.22 ug/m3	
Propane,2,2-dichloro-	-			<0.33 ug/m3		<0.33 ug/m3	<0.22 ug/m3	
1,1-Dichloropropylene	-			<0.33 ug/m3		<0.33 ug/m3	<0.22 ug/m3	
cis-1,3-Dichloropropylene	-			<0.33 ug/m3		<0.33 ug/m3	<0.22 ug/m3	
trans-1,3-Dichloropropylene	-			<0.33 ug/m3		<0.33 ug/m3	<0.22 ug/m3	
Styrene	-			0.76 ug/m3		<0.33 ug/m3	1.9 ug/m3	
Toluene	-			22 ug/m3		7.9 ug/m3	100 E ug/m3	67 ug/m3

Table 3
SUMMARY OF ANALYTICAL RESULTS
P&W East Hartford Willgoos: Indoor Air Monitoring

Loureiro Engineering Associates, Inc.

	Location ID	TRIP BLANK	TRIP BLANK	WG-RSK-AS-11	WG-RSK-AS-11	WG-RSK-AS-11	WG-RSK-AS-11	WG-RSK-AS-11
	Sample ID	2007383	2007383	1979474	1979475	1990393	1997129	1997130
	Sample Date	09/21/2001	09/21/2001	12/21/2000	12/21/2000	03/01/2001	06/18/2001	06/18/2001
	Sample Time			07:24	07:24	08:35	07:25	07:40
	Laboratory	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN
	Lab. Number	C0107730-13	C0107730-14	C0005922-1	C0005922-11	C0106351-01	C010711101	C010711110
Constituent	Units							
o-Chlorotoluene	-			<0.33 ug/m3		<0.33 ug/m3	<0.22 ug/m3	
p-Chlorotoluene	-			<0.33 ug/m3		<0.33 ug/m3	<0.22 ug/m3	
o-Xylene	-			11 ug/m3		2.6 ug/m3	42 E ug/m3	23 ug/m3
Xylenes	-			28 ug/m3		7.0 ug/m3	110 E ug/m3	70 ug/m3

Table 3
SUMMARY OF ANALYTICAL RESULTS
P&W East Hartford Willgoos: Indoor Air Monitoring

Loureiro Engineering Associates, Inc.

	Location ID	WG-RSK-AS-11	WG-RSK-AS-12	WG-RSK-AS-12	WG-RSK-AS-12	WG-RSK-AS-12	WG-RSK-AS-12	WG-RSK-AS-12
	Sample ID	2007375	1979488	1979489	1990405	1990406	1997386	1997387
	Sample Date	09/21/2001	12/21/2000	12/21/2000	03/01/2001	03/01/2001	06/18/2001	06/18/2001
	Sample Time	06:53	09:17	09:17	10:30	10:32	10:15	10:15
	Laboratory	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN
	Lab. Number	C0107730-01	C0005922-7	C0005922-12	C0106351-09	C0106351-10	C010711108	C010711117
Constituent	Units							
Dibromochloropropane (DBCP)	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
n-Propylbenzene	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
Hexachlorobutadiene	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
4-Isopropyltoluene (p-cymene)	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
Naphthalene	-	1.4 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
Acetone	-	20 ug/m3	0.930 ug/m3	<10 ug/m3	1.2 ug/m3		4.7 ug/m3	
Benzene	-	<1.2 ug/m3	<0.71 ug/m3		<0.78 ug/m3		<0.61 ug/m3	
1,2,3-Trichlorobenzene	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
1,2,4-Trichlorobenzene	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
1,2,4-Trimethylbenzene	-	<0.60 ug/m3	0.47 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
1,2-Dichlorobenzene	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
1,3,5-Trimethylbenzene	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
1,3-Dichlorobenzene	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
1,4-Dichlorobenzene	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
Bromobenzene	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
Chlorobenzene	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
Ethylbenzene	-	2.3 ug/m3	<0.36 ug/m3		0.68 ug/m3		<0.30 ug/m3	
n-Butylbenzene	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
sec-Butylbenzene	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
tert-Butylbenzene	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
2-Butanone(MEK)	-	2.5 ug/m3	<0.36 ug/m3		<0.39 ug/m3		0.47 ug/m3	
Carbon Tetrachloride	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
Isopropylbenzene (cumene)	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
1,1,1,2-Tetrachloroethane	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
1,1,1-Trichloroethane	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
1,1,2,2-Tetrachloroethane	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
1,1,2-Trichloroethane	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
1,1-Dichloroethane	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
Ethylene Dibromide (EDB)	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	

Table 3
SUMMARY OF ANALYTICAL RESULTS
P&W East Hartford Willgoos: Indoor Air Monitoring

Loureiro Engineering Associates, Inc.

	Location ID	WG-RSK-AS-11	WG-RSK-AS-12	WG-RSK-AS-12	WG-RSK-AS-12	WG-RSK-AS-12	WG-RSK-AS-12	WG-RSK-AS-12
	Sample ID	2007375	1979488	1979489	1990405	1990406	1997386	1997387
	Sample Date	09/21/2001	12/21/2000	12/21/2000	03/01/2001	03/01/2001	06/18/2001	06/18/2001
	Sample Time	06:53	09:17	09:17	10:30	10:32	10:15	10:15
	Laboratory	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN
	Lab. Number	C0107730-01	C0005922-7	C0005922-12	C0106351-09	C0106351-10	C010711108	C010711117
Constituent	Units							
1,2-Dichloroethane	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		1.3 ug/m3	
Chloroethane	-	<0.60 ug/m3			<0.39 ug/m3		<0.30 ug/m3	
1,1-Dichloroethylene	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
Vinyl Chloride	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
cis-1,2-Dichloroethylene	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
Tetrachloroethylene	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
trans-1,2-Dichloroethylene	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		2.0 ug/m3	
Trichloroethylene	-	<0.60 ug/m3	17 ug/m3		15 ug/m3		12 ug/m3	
Bromomethane	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
Bromochloromethane	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		1.6 ug/m3	
Bromodichloromethane	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
Chloromethane	-	<0.60 ug/m3	0.44 ug/m3		<0.39 ug/m3		0.79 ug/m3	
Methane,dibromo-	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
Dibromochloromethane	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
Methylene Chloride	-	5.6 ug/m3	0.53 ug/m3		1.2 ug/m3		340 E ug/m3	22 ug/m3
Dichlorodifluoromethane	-	4.2 ug/m3	58 E ug/m3	39 ug/m3	270 E ug/m3	130 ug/m3	13 ug/m3	
Bromoform	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
Chloroform	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
Trichlorofluoromethane	-	2.4 ug/m3	1.6 ug/m3		1.1 ug/m3		0.48 ug/m3	
Methyl Isobutyl Ketone	-	1.4 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
1,2,3-Trichloropropane	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
1,2-Dichloropropane	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
Propane,1,3-dichloro-	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
Propane,2,2-dichloro-	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
1,1-Dichloropropylene	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
cis-1,3-Dichloropropylene	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
trans-1,3-Dichloropropylene	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
Styrene	-	4.0 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
Toluene	-	12 ug/m3	1.4 ug/m3		1.0 ug/m3	<10 ug/m3	1.1 ug/m3	

Table 3
SUMMARY OF ANALYTICAL RESULTS
P&W East Hartford Willgoos: Indoor Air Monitoring

Loureiro Engineering Associates, Inc.

	Location ID	WG-RSK-AS-11	WG-RSK-AS-12	WG-RSK-AS-12	WG-RSK-AS-12	WG-RSK-AS-12	WG-RSK-AS-12	WG-RSK-AS-12
	Sample ID	2007375	1979488	1979489	1990405	1990406	1997386	1997387
	Sample Date	09/21/2001	12/21/2000	12/21/2000	03/01/2001	03/01/2001	06/18/2001	06/18/2001
	Sample Time	06:53	09:17	09:17	10:30	10:32	10:15	10:15
	Laboratory	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN
	Lab. Number	C0107730-01	C0005922-7	C0005922-12	C0106351-09	C0106351-10	C010711108	C010711117
Constituent	Units							
o-Chlorotoluene	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
p-Chlorotoluene	-	<0.60 ug/m3	<0.36 ug/m3		<0.39 ug/m3		<0.30 ug/m3	
o-Xylene	-	3.0 ug/m3	<0.36 ug/m3		0.56 ug/m3		<0.30 ug/m3	
Xylenes	-	8.8 ug/m3	0.84 ug/m3		2.1 ug/m3		0.71 ug/m3	

Table 3
SUMMARY OF ANALYTICAL RESULTS
P&W East Hartford Willgoos: Indoor Air Monitoring

Loureiro Engineering Associates, Inc.

	Location ID	WG-RSK-AS-12	WG-RSK-AS-13	WG-RSK-AS-13	WG-RSK-AS-13	WG-RSK-AS-13	WG-RSK-AS-13	WG-RSK-AS-13
	Sample ID	2007382	1979478	1990401	1990402	1997137	1997138	2007378
	Sample Date	09/21/2001	12/21/2000	03/01/2001	03/01/2001	06/18/2001	06/18/2001	09/21/2001
	Sample Time	08:33	08:15	09:50	09:52	09:06	09:06	07:40
	Laboratory	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN
	Lab. Number	C0107730-08	C0005922-3	C0106351-06	C0106351-07	C010711105	C010711114	C0107730-04
Constituent	Units							
Dibromochloropropane (DBCP)	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		<0.24 ug/m3		<0.30 ug/m3
n-Propylbenzene	-	<0.31 ug/m3	<0.51 ug/m3	1.0 ug/m3		<0.24 ug/m3		<0.30 ug/m3
Hexachlorobutadiene	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		<0.24 ug/m3		<0.30 ug/m3
4-Isopropyltoluene (p-cymene)	-	<0.31 ug/m3	<0.51 ug/m3	0.78 ug/m3		<0.24 ug/m3		<0.30 ug/m3
Naphthalene	-	<0.31 ug/m3	<0.51 ug/m3	0.33 ug/m3		0.30 ug/m3		0.52 ug/m3
Acetone	-	3.6 ug/m3	2.2 ug/m3	2.6 ug/m3		2.8 ug/m3		6.4 ug/m3
Benzene	-	<0.62 ug/m3	1.9 ug/m3	1.2 ug/m3		<0.47 ug/m3		<0.61 ug/m3
1,2,3-Trichlorobenzene	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		<0.24 ug/m3		<0.30 ug/m3
1,2,4-Trichlorobenzene	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		<0.24 ug/m3		<0.30 ug/m3
1,2,4-Trimethylbenzene	-	<0.31 ug/m3	1.3 ug/m3	4.1 ug/m3		<0.24 ug/m3		<0.30 ug/m3
1,2-Dichlorobenzene	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		<0.24 ug/m3		<0.30 ug/m3
1,3,5-Trimethylbenzene	-	<0.31 ug/m3	<0.51 ug/m3	3.3 ug/m3		<0.24 ug/m3		<0.30 ug/m3
1,3-Dichlorobenzene	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		<0.24 ug/m3		<0.30 ug/m3
1,4-Dichlorobenzene	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		<0.24 ug/m3		<0.30 ug/m3
Bromobenzene	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		<0.24 ug/m3		<0.30 ug/m3
Chlorobenzene	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		<0.24 ug/m3		<0.30 ug/m3
Ethylbenzene	-	<0.31 ug/m3	1.0 ug/m3	<0.33 ug/m3		0.25 ug/m3		<0.30 ug/m3
n-Butylbenzene	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		<0.24 ug/m3		<0.30 ug/m3
sec-Butylbenzene	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		<0.24 ug/m3		<0.30 ug/m3
tert-Butylbenzene	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		<0.24 ug/m3		<0.30 ug/m3
2-Butanone(MEK)	-	0.40 ug/m3	<0.51 ug/m3	<0.33 ug/m3		0.51 ug/m3		1.0 ug/m3
Carbon Tetrachloride	-	0.42 ug/m3	<0.51 ug/m3	<0.33 ug/m3		0.36 ug/m3		<0.30 ug/m3
Isopropylbenzene (cumene)	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		<0.24 ug/m3		<0.30 ug/m3
1,1,1,2-Tetrachloroethane	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		<0.24 ug/m3		<0.30 ug/m3
1,1,1-Trichloroethane	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		0.49 ug/m3		<0.30 ug/m3
1,1,2,2-Tetrachloroethane	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		<0.24 ug/m3		<0.30 ug/m3
1,1,2-Trichloroethane	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		<0.24 ug/m3		<0.30 ug/m3
1,1-Dichloroethane	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		<0.24 ug/m3		<0.30 ug/m3
Ethylene Dibromide (EDB)	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		<0.24 ug/m3		<0.30 ug/m3

Table 3
SUMMARY OF ANALYTICAL RESULTS
P&W East Hartford Willgoos: Indoor Air Monitoring

Loureiro Engineering Associates, Inc.

	Location ID	WG-RSK-AS-12	WG-RSK-AS-13	WG-RSK-AS-13	WG-RSK-AS-13	WG-RSK-AS-13	WG-RSK-AS-13	WG-RSK-AS-13
	Sample ID	2007382	1979478	1990401	1990402	1997137	1997138	2007378
	Sample Date	09/21/2001	12/21/2000	03/01/2001	03/01/2001	06/18/2001	06/18/2001	09/21/2001
	Sample Time	08:33	08:15	09:50	09:52	09:06	09:06	07:40
	Laboratory	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN
	Lab. Number	C0107730-08	C0005922-3	C0106351-06	C0106351-07	C010711105	C010711114	C0107730-04
Constituent	Units							
1,2-Dichloroethane	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		1.8 ug/m3		<0.30 ug/m3
Chloroethane	-	<0.31 ug/m3		<0.33 ug/m3		<0.24 ug/m3		<0.30 ug/m3
1,1-Dichloroethylene	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		<0.24 ug/m3		<0.30 ug/m3
Vinyl Chloride	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		<0.24 ug/m3		<0.30 ug/m3
cis-1,2-Dichloroethylene	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		<0.24 ug/m3		<0.30 ug/m3
Tetrachloroethylene	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		<0.24 ug/m3		<0.30 ug/m3
trans-1,2-Dichloroethylene	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		<0.24 ug/m3		<0.30 ug/m3
Trichloroethylene	-	20 ug/m3	18 ug/m3	17 ug/m3		18 ug/m3		4.0 ug/m3
Bromomethane	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		<0.24 ug/m3		<0.30 ug/m3
Bromochloromethane	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		<0.24 ug/m3		<0.30 ug/m3
Bromodichloromethane	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		<0.24 ug/m3		<0.30 ug/m3
Chloromethane	-	<0.31 ug/m3	0.95 ug/m3	0.61 ug/m3		0.24 ug/m3		<0.30 ug/m3
Methane,dibromo-	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		<0.24 ug/m3		<0.30 ug/m3
Dibromochloromethane	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		<0.24 ug/m3		<0.30 ug/m3
Methylene Chloride	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		26 E ug/m3	<4.1 ug/m3	<0.30 ug/m3
Dichlorodifluoromethane	-	<0.31 ug/m3	31 ug/m3	240 E ug/m3	270 ug/m3	21 ug/m3		<0.30 ug/m3
Bromoform	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		<0.24 ug/m3		<0.30 ug/m3
Chloroform	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		<0.24 ug/m3		<0.30 ug/m3
Trichlorofluoromethane	-	0.95 ug/m3	2.4 ug/m3	0.99 ug/m3		0.77 ug/m3		<0.30 ug/m3
Methyl Isobutyl Ketone	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		<0.24 ug/m3		<0.30 ug/m3
1,2,3-Trichloropropane	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		<0.24 ug/m3		<0.30 ug/m3
1,2-Dichloropropane	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		<0.24 ug/m3		<0.30 ug/m3
Propane,1,3-dichloro-	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		<0.24 ug/m3		<0.30 ug/m3
Propane,2,2-dichloro-	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		<0.24 ug/m3		<0.30 ug/m3
1,1-Dichloropropylene	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		<0.24 ug/m3		<0.30 ug/m3
cis-1,3-Dichloropropylene	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		<0.24 ug/m3		<0.30 ug/m3
trans-1,3-Dichloropropylene	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		<0.24 ug/m3		<0.30 ug/m3
Styrene	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		<0.24 ug/m3		<0.30 ug/m3
Toluene	-	0.38 ug/m3	4.4 ug/m3	0.91 ug/m3	<11 ug/m3	1.2 ug/m3		0.50 ug/m3

Table 3
SUMMARY OF ANALYTICAL RESULTS
P&W East Hartford Willgoos: Indoor Air Monitoring

Loureiro Engineering Associates, Inc.

	Location ID	WG-RSK-AS-12	WG-RSK-AS-13	WG-RSK-AS-13	WG-RSK-AS-13	WG-RSK-AS-13	WG-RSK-AS-13	WG-RSK-AS-13
	Sample ID	2007382	1979478	1990401	1990402	1997137	1997138	2007378
	Sample Date	09/21/2001	12/21/2000	03/01/2001	03/01/2001	06/18/2001	06/18/2001	09/21/2001
	Sample Time	08:33	08:15	09:50	09:52	09:06	09:06	07:40
	Laboratory	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN
	Lab. Number	C0107730-08	C0005922-3	C0106351-06	C0106351-07	C010711105	C010711114	C0107730-04
Constituent	Units							
o-Chlorotoluene	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		<0.24 ug/m3		<0.30 ug/m3
p-Chlorotoluene	-	<0.31 ug/m3	<0.51 ug/m3	<0.33 ug/m3		<0.24 ug/m3		<0.30 ug/m3
o-Xylene	-	<0.31 ug/m3	1.1 ug/m3	0.57 ug/m3		0.29 ug/m3		<0.30 ug/m3
Xylenes	-	<0.62 ug/m3	3.3 ug/m3	0.91 ug/m3		0.86 ug/m3		<0.61 ug/m3

Table 3
SUMMARY OF ANALYTICAL RESULTS
P&W East Hartford Willgoos: Indoor Air Monitoring

Loureiro Engineering Associates, Inc.

	Location ID	WG-RSK-AS-14	WG-RSK-AS-14	WG-RSK-AS-14	WG-RSK-AS-14	WG-RSK-AS-14	WG-RSK-AS-14	WG-RSK-AS-14
	Sample ID	1979480	1979482	1990399	1990400	1997135	1997136	2007377
	Sample Date	12/21/2000	12/21/2000	03/01/2001	03/01/2001	06/18/2001	06/18/2001	09/21/2001
	Sample Time	08:36	08:40	09:28	09:31	08:49	08:48	07:30
	Laboratory	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN
	Lab. Number	C0005922-4	C0005922-5	C0106351-04	C0106351-05	C010711104	C010711113	C0107730-03
Constituent	Units							
Dibromochloropropane (DBCP)	-	<0.34 ug/m3	<0.34 ug/m3	<0.36 ug/m3		<0.26 ug/m3		<0.25 ug/m3
n-Propylbenzene	-	0.95 ug/m3	0.84 ug/m3	<0.36 ug/m3		0.65 ug/m3		<0.25 ug/m3
Hexachlorobutadiene	-	<0.34 ug/m3	<0.34 ug/m3	<0.36 ug/m3		<0.26 ug/m3		<0.25 ug/m3
4-Isopropyltoluene (p-cymene)	-	0.62 ug/m3	0.55 ug/m3	<0.36 ug/m3		0.37 ug/m3		<0.25 ug/m3
Naphthalene	-	3.4 ug/m3	2.6 ug/m3	1.0 ug/m3		2.9 ug/m3		1.2 ug/m3
Acetone	-	3.6 ug/m3	2.700 ug/m3	8.7 ug/m3		4.1 ug/m3		20 E ug/m3
Benzene	-	3.3 ug/m3	1.8 ug/m3	0.82 ug/m3		<0.52 ug/m3		<0.51 ug/m3
1,2,3-Trichlorobenzene	-	<0.34 ug/m3	<0.34 ug/m3	<0.36 ug/m3		<0.26 ug/m3		<0.25 ug/m3
1,2,4-Trichlorobenzene	-	<0.34 ug/m3	<0.34 ug/m3	<0.36 ug/m3		<0.26 ug/m3		<0.25 ug/m3
1,2,4-Trimethylbenzene	-	4.8 ug/m3	4.3 ug/m3	0.94 ug/m3		2.4 ug/m3		0.42 ug/m3
1,2-Dichlorobenzene	-	<0.34 ug/m3	<0.34 ug/m3	<0.36 ug/m3		<0.26 ug/m3		<0.25 ug/m3
1,3,5-Trimethylbenzene	-	1.5 ug/m3	1.3 ug/m3	<0.36 ug/m3		2.5 ug/m3		0.27 ug/m3
1,3-Dichlorobenzene	-	<0.34 ug/m3	<0.34 ug/m3	<0.36 ug/m3		<0.26 ug/m3		<0.25 ug/m3
1,4-Dichlorobenzene	-	<0.34 ug/m3	<0.34 ug/m3	<0.36 ug/m3		<0.26 ug/m3		<0.25 ug/m3
Bromobenzene	-	<0.34 ug/m3	<0.34 ug/m3	<0.36 ug/m3		<0.26 ug/m3		<0.25 ug/m3
Chlorobenzene	-	<0.34 ug/m3	<0.34 ug/m3	<0.36 ug/m3		<0.26 ug/m3		<0.25 ug/m3
Ethylbenzene	-	1.5 ug/m3	1.4 ug/m3	0.70 ug/m3		0.98 ug/m3		<0.25 ug/m3
n-Butylbenzene	-	<0.34 ug/m3	<0.34 ug/m3	<0.36 ug/m3		<0.26 ug/m3		<0.25 ug/m3
sec-Butylbenzene	-	0.45 ug/m3	0.39 ug/m3	<0.36 ug/m3		<0.26 ug/m3		<0.25 ug/m3
tert-Butylbenzene	-	<0.34 ug/m3	<0.34 ug/m3	<0.36 ug/m3		<0.26 ug/m3		<0.25 ug/m3
2-Butanone(MEK)	-	<0.34 ug/m3	<0.34 ug/m3	<0.36 ug/m3		0.58 ug/m3		<0.25 ug/m3
Carbon Tetrachloride	-	<0.34 ug/m3	<0.34 ug/m3	<0.36 ug/m3		<0.26 ug/m3		<0.25 ug/m3
Isopropylbenzene (cumene)	-	<0.34 ug/m3	<0.34 ug/m3	<0.36 ug/m3		0.32 ug/m3		<0.25 ug/m3
1,1,1,2-Tetrachloroethane	-	<0.34 ug/m3	<0.34 ug/m3	<0.36 ug/m3		<0.26 ug/m3		<0.25 ug/m3
1,1,1-Trichloroethane	-	<0.34 ug/m3	<0.34 ug/m3	<0.36 ug/m3		0.28 ug/m3		<0.25 ug/m3
1,1,2,2-Tetrachloroethane	-	<0.34 ug/m3	<0.34 ug/m3	<0.36 ug/m3		<0.26 ug/m3		<0.25 ug/m3
1,1,2-Trichloroethane	-	<0.34 ug/m3	<0.34 ug/m3	<0.36 ug/m3		<0.26 ug/m3		<0.25 ug/m3
1,1-Dichloroethane	-	<0.34 ug/m3	<0.34 ug/m3	<0.36 ug/m3		<0.26 ug/m3		<0.25 ug/m3
Ethylene Dibromide (EDB)	-	<0.34 ug/m3	<0.34 ug/m3	<0.36 ug/m3		<0.26 ug/m3		<0.25 ug/m3

Table 3
SUMMARY OF ANALYTICAL RESULTS
P&W East Hartford Willgoos: Indoor Air Monitoring

Loureiro Engineering Associates, Inc.

	Location ID	WG-RSK-AS-14	WG-RSK-AS-14	WG-RSK-AS-14	WG-RSK-AS-14	WG-RSK-AS-14	WG-RSK-AS-14	WG-RSK-AS-14
	Sample ID	1979480	1979482	1990399	1990400	1997135	1997136	2007377
	Sample Date	12/21/2000	12/21/2000	03/01/2001	03/01/2001	06/18/2001	06/18/2001	09/21/2001
	Sample Time	08:36	08:40	09:28	09:31	08:49	08:48	07:30
	Laboratory	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN
	Lab. Number	C0005922-4	C0005922-5	C0106351-04	C0106351-05	C010711104	C010711113	C0107730-03
Constituent	Units							
1,2-Dichloroethane	-	<0.34 ug/m3	<0.34 ug/m3	<0.36 ug/m3		<0.26 ug/m3		<0.25 ug/m3
Chloroethane	-			<0.36 ug/m3		<0.26 ug/m3		<0.25 ug/m3
1,1-Dichloroethylene	-	<0.34 ug/m3	<0.34 ug/m3	<0.36 ug/m3		<0.26 ug/m3		<0.25 ug/m3
Vinyl Chloride	-	<0.34 ug/m3	<0.34 ug/m3	<0.36 ug/m3		<0.26 ug/m3		<0.25 ug/m3
cis-1,2-Dichloroethylene	-	<0.34 ug/m3	<0.34 ug/m3	<0.36 ug/m3		<0.26 ug/m3		<0.25 ug/m3
Tetrachloroethylene	-	0.40 ug/m3	<0.34 ug/m3	<0.36 ug/m3		<0.26 ug/m3		<0.25 ug/m3
trans-1,2-Dichloroethylene	-	<0.34 ug/m3	<0.34 ug/m3	<0.36 ug/m3		<0.26 ug/m3		<0.25 ug/m3
Trichloroethylene	-	0.67 ug/m3	0.61 ug/m3	<0.36 ug/m3		0.29 ug/m3		0.63 ug/m3
Bromomethane	-	<0.34 ug/m3	<0.34 ug/m3	<0.36 ug/m3		<0.26 ug/m3		<0.25 ug/m3
Bromochloromethane	-	<0.34 ug/m3	<0.34 ug/m3	<0.36 ug/m3		0.30 ug/m3		<0.25 ug/m3
Bromodichloromethane	-	<0.34 ug/m3	<0.34 ug/m3	<0.36 ug/m3		<0.26 ug/m3		<0.25 ug/m3
Chloromethane	-	0.64 ug/m3	0.40 ug/m3	0.41 ug/m3		0.40 ug/m3		<0.25 ug/m3
Methane,dibromo-	-	<0.34 ug/m3	<0.34 ug/m3	<0.36 ug/m3		<0.26 ug/m3		<0.25 ug/m3
Dibromochloromethane	-	<0.34 ug/m3	<0.34 ug/m3	<0.36 ug/m3		<0.26 ug/m3		<0.25 ug/m3
Methylene Chloride	-	0.42 ug/m3	0.79 ug/m3	0.53 ug/m3		44 E ug/m3	4.5 ug/m3	0.32 ug/m3
Dichlorodifluoromethane	-	5.6 ug/m3	5.5 ug/m3	4.9 ug/m3	<10 ug/m3	5.6 ug/m3		4.4 ug/m3
Bromoform	-	<0.34 ug/m3	<0.34 ug/m3	<0.36 ug/m3		<0.26 ug/m3		<0.25 ug/m3
Chloroform	-	<0.34 ug/m3	<0.34 ug/m3	<0.36 ug/m3		<0.26 ug/m3		<0.25 ug/m3
Trichlorofluoromethane	-	0.98 ug/m3	1.2 ug/m3	0.98 ug/m3		0.58 ug/m3		0.90 ug/m3
Methyl Isobutyl Ketone	-	<0.34 ug/m3	<0.34 ug/m3	<0.36 ug/m3		<0.26 ug/m3		<0.25 ug/m3
1,2,3-Trichloropropane	-	<0.34 ug/m3	<0.34 ug/m3	<0.36 ug/m3		<0.26 ug/m3		<0.25 ug/m3
1,2-Dichloropropane	-	<0.34 ug/m3	<0.34 ug/m3	<0.36 ug/m3		<0.26 ug/m3		<0.25 ug/m3
Propane,1,3-dichloro-	-	<0.34 ug/m3	<0.34 ug/m3	<0.36 ug/m3		<0.26 ug/m3		<0.25 ug/m3
Propane,2,2-dichloro-	-	<0.34 ug/m3	<0.34 ug/m3	<0.36 ug/m3		<0.26 ug/m3		<0.25 ug/m3
1,1-Dichloropropylene	-	<0.34 ug/m3	<0.34 ug/m3	<0.36 ug/m3		<0.26 ug/m3		<0.25 ug/m3
cis-1,3-Dichloropropylene	-	<0.34 ug/m3	<0.34 ug/m3	<0.36 ug/m3		<0.26 ug/m3		<0.25 ug/m3
trans-1,3-Dichloropropylene	-	<0.34 ug/m3	<0.34 ug/m3	<0.36 ug/m3		<0.26 ug/m3		<0.25 ug/m3
Styrene	-	0.39 ug/m3	<0.34 ug/m3	<0.36 ug/m3		<0.26 ug/m3		<0.25 ug/m3
Toluene	-	5.0 ug/m3	4.2 ug/m3	42 E ug/m3	85 ug/m3	2.8 ug/m3		0.57 ug/m3

Table 3
SUMMARY OF ANALYTICAL RESULTS
P&W East Hartford Willgoos: Indoor Air Monitoring

Loureiro Engineering Associates, Inc.

	Location ID	WG-RSK-AS-14	WG-RSK-AS-14	WG-RSK-AS-14	WG-RSK-AS-14	WG-RSK-AS-14	WG-RSK-AS-14	WG-RSK-AS-14
	Sample ID	1979480	1979482	1990399	1990400	1997135	1997136	2007377
	Sample Date	12/21/2000	12/21/2000	03/01/2001	03/01/2001	06/18/2001	06/18/2001	09/21/2001
	Sample Time	08:36	08:40	09:28	09:31	08:49	08:48	07:30
	Laboratory	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN
	Lab. Number	C0005922-4	C0005922-5	C0106351-04	C0106351-05	C010711104	C010711113	C0107730-03
Constituent	Units							
o-Chlorotoluene	-	<0.34 ug/m3	<0.34 ug/m3	<0.36 ug/m3		<0.26 ug/m3		<0.25 ug/m3
p-Chlorotoluene	-	<0.34 ug/m3	<0.34 ug/m3	<0.36 ug/m3		<0.26 ug/m3		<0.25 ug/m3
o-Xylene	-	2.2 ug/m3	2.0 ug/m3	0.52 ug/m3		2.6 ug/m3		0.26 ug/m3
Xylenes	-	5.1 ug/m3	4.5 ug/m3	2.0 ug/m3		6.5 ug/m3		0.59 ug/m3

Table 3
SUMMARY OF ANALYTICAL RESULTS
P&W East Hartford Willgoos: Indoor Air Monitoring

Loureiro Engineering Associates, Inc.

	Location ID	WG-RSK-AS-14	WG-RSK-AS-15	WG-RSK-AS-15	WG-RSK-AS-15	WG-RSK-AS-15	WG-RSK-AS-15	WG-RSK-AS-15
	Sample ID	2007377	1979484	1990403	1997139	1997140	2007379	2007380
	Sample Date	09/21/2001	12/21/2000	03/01/2001	06/18/2001	06/18/2001	09/21/2001	09/21/2001
	Sample Time	07:30	08:50	10:12	09:28	09:25	08:04	08:04
	Laboratory	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN
	Lab. Number	C0107730-13	C0005922-6	C0106351-08	C010711106	C010711115	C0107730-05	C0107730-06
Constituent	Units							
Dibromochloropropane (DBCP)	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		<0.26 ug/m3	<0.39 ug/m3
n-Propylbenzene	-		0.98 ug/m3	0.46 ug/m3	0.32 ug/m3		0.35 ug/m3	<0.39 ug/m3
Hexachlorobutadiene	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		<0.26 ug/m3	<0.39 ug/m3
4-Isopropyltoluene (p-cymene)	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		0.30 ug/m3	<0.39 ug/m3
Naphthalene	-		0.97 ug/m3	1.0 ug/m3	1.4 ug/m3		1.2 ug/m3	1.1 ug/m3
Acetone	-	<51 ug/m3	1.4 ug/m3	<0.36 ug/m3	14 ug/m3		14 ug/m3	5.2 ug/m3
Benzene	-		1.1 ug/m3	<0.72 ug/m3	<0.62 ug/m3		<0.52 ug/m3	<0.78 ug/m3
1,2,3-Trichlorobenzene	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		<0.26 ug/m3	<0.39 ug/m3
1,2,4-Trichlorobenzene	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		<0.26 ug/m3	<0.39 ug/m3
1,2,4-Trimethylbenzene	-		5.5 ug/m3	2.6 ug/m3	1.4 ug/m3		1.4 ug/m3	0.95 ug/m3
1,2-Dichlorobenzene	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		<0.26 ug/m3	<0.39 ug/m3
1,3,5-Trimethylbenzene	-		1.8 ug/m3	0.85 ug/m3	0.88 ug/m3		0.94 ug/m3	0.66 ug/m3
1,3-Dichlorobenzene	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		<0.26 ug/m3	<0.39 ug/m3
1,4-Dichlorobenzene	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		<0.26 ug/m3	<0.39 ug/m3
Bromobenzene	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		<0.26 ug/m3	<0.39 ug/m3
Chlorobenzene	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		<0.26 ug/m3	<0.39 ug/m3
Ethylbenzene	-		0.47 ug/m3	0.47 ug/m3	<0.31 ug/m3		0.62 ug/m3	0.45 ug/m3
n-Butylbenzene	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		<0.26 ug/m3	<0.39 ug/m3
sec-Butylbenzene	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		<0.26 ug/m3	<0.39 ug/m3
tert-Butylbenzene	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		<0.26 ug/m3	<0.39 ug/m3
2-Butanone(MEK)	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		<0.26 ug/m3	<0.39 ug/m3
Carbon Tetrachloride	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		0.39 ug/m3	<0.39 ug/m3
Isopropylbenzene (cumene)	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		<0.26 ug/m3	<0.39 ug/m3
1,1,1,2-Tetrachloroethane	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		<0.26 ug/m3	<0.39 ug/m3
1,1,1-Trichloroethane	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		<0.26 ug/m3	<0.39 ug/m3
1,1,2,2-Tetrachloroethane	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		<0.26 ug/m3	<0.39 ug/m3
1,1,2-Trichloroethane	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		<0.26 ug/m3	<0.39 ug/m3
1,1-Dichloroethane	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		<0.26 ug/m3	<0.39 ug/m3
Ethylene Dibromide (EDB)	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		<0.26 ug/m3	<0.39 ug/m3

Table 3
SUMMARY OF ANALYTICAL RESULTS
P&W East Hartford Willgoos: Indoor Air Monitoring

Loureiro Engineering Associates, Inc.

	Location ID	WG-RSK-AS-14	WG-RSK-AS-15	WG-RSK-AS-15	WG-RSK-AS-15	WG-RSK-AS-15	WG-RSK-AS-15	WG-RSK-AS-15
	Sample ID	2007377	1979484	1990403	1997139	1997140	2007379	2007380
	Sample Date	09/21/2001	12/21/2000	03/01/2001	06/18/2001	06/18/2001	09/21/2001	09/21/2001
	Sample Time	07:30	08:50	10:12	09:28	09:25	08:04	08:04
	Laboratory	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN
	Lab. Number	C0107730-13	C0005922-6	C0106351-08	C010711106	C010711115	C0107730-05	C0107730-06
Constituent	Units							
1,2-Dichloroethane	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		<0.26 ug/m3	<0.39 ug/m3
Chloroethane	-			<0.36 ug/m3	4.5 ug/m3		<0.26 ug/m3	<0.39 ug/m3
1,1-Dichloroethylene	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		<0.26 ug/m3	<0.39 ug/m3
Vinyl Chloride	-		<0.39 ug/m3	<0.36 ug/m3	0.33 ug/m3		<0.26 ug/m3	<0.39 ug/m3
cis-1,2-Dichloroethylene	-		<0.39 ug/m3	<0.36 ug/m3	13 ug/m3		<0.26 ug/m3	<0.39 ug/m3
Tetrachloroethylene	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		<0.26 ug/m3	<0.39 ug/m3
trans-1,2-Dichloroethylene	-		<0.39 ug/m3	<0.36 ug/m3	300 E ug/m3	8600 ug/m3	9.0 ug/m3	0.95 ug/m3
Trichloroethylene	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		<0.26 ug/m3	<0.39 ug/m3
Bromomethane	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		<0.26 ug/m3	<0.39 ug/m3
Bromochloromethane	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		<0.26 ug/m3	<0.39 ug/m3
Bromodichloromethane	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		<0.26 ug/m3	<0.39 ug/m3
Chloromethane	-		<0.39 ug/m3	<0.36 ug/m3	2.4 ug/m3		<0.26 ug/m3	<0.39 ug/m3
Methane,dibromo-	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		<0.26 ug/m3	<0.39 ug/m3
Dibromochloromethane	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		<0.26 ug/m3	<0.39 ug/m3
Methylene Chloride	-		<0.39 ug/m3	1.1 ug/m3	8.2 ug/m3		<0.26 ug/m3	<0.39 ug/m3
Dichlorodifluoromethane	-		4.3 ug/m3	5.4 ug/m3	7.3 ug/m3		7.1 ug/m3	2.5 ug/m3
Bromoform	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		<0.26 ug/m3	<0.39 ug/m3
Chloroform	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		<0.26 ug/m3	<0.39 ug/m3
Trichlorofluoromethane	-		0.86 ug/m3	1.0 ug/m3	0.89 ug/m3		1.7 ug/m3	<0.39 ug/m3
Methyl Isobutyl Ketone	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		<0.26 ug/m3	<0.39 ug/m3
1,2,3-Trichloropropane	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		<0.26 ug/m3	<0.39 ug/m3
1,2-Dichloropropane	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		<0.26 ug/m3	<0.39 ug/m3
Propane,1,3-dichloro-	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		<0.26 ug/m3	<0.39 ug/m3
Propane,2,2-dichloro-	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		<0.26 ug/m3	<0.39 ug/m3
1,1-Dichloropropylene	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		<0.26 ug/m3	<0.39 ug/m3
cis-1,3-Dichloropropylene	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		<0.26 ug/m3	<0.39 ug/m3
trans-1,3-Dichloropropylene	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		<0.26 ug/m3	<0.39 ug/m3
Styrene	-		<0.39 ug/m3	0.82 ug/m3	<0.31 ug/m3		0.74 ug/m3	0.55 ug/m3
Toluene	-		3.8 ug/m3	2.7 ug/m3	<0.31 ug/m3		2.2 ug/m3	1.2 ug/m3

Table 3
SUMMARY OF ANALYTICAL RESULTS
P&W East Hartford Willgoos: Indoor Air Monitoring

Loureiro Engineering Associates, Inc.

	Location ID	WG-RSK-AS-14	WG-RSK-AS-15	WG-RSK-AS-15	WG-RSK-AS-15	WG-RSK-AS-15	WG-RSK-AS-15	WG-RSK-AS-15
	Sample ID	2007377	1979484	1990403	1997139	1997140	2007379	2007380
	Sample Date	09/21/2001	12/21/2000	03/01/2001	06/18/2001	06/18/2001	09/21/2001	09/21/2001
	Sample Time	07:30	08:50	10:12	09:28	09:25	08:04	08:04
	Laboratory	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN
	Lab. Number	C0107730-13	C0005922-6	C0106351-08	C010711106	C010711115	C0107730-05	C0107730-06
Constituent	Units							
o-Chlorotoluene	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		<0.26 ug/m3	<0.39 ug/m3
p-Chlorotoluene	-		<0.39 ug/m3	<0.36 ug/m3	<0.31 ug/m3		<0.26 ug/m3	<0.39 ug/m3
o-Xylene	-		1.6 ug/m3	0.97 ug/m3	0.48 ug/m3		1.2 ug/m3	0.92 ug/m3
Xylenes	-		1.6 ug/m3	1.5 ug/m3	0.74 ug/m3		2.7 ug/m3	2.1 ug/m3

Table 3
SUMMARY OF ANALYTICAL RESULTS
P&W East Hartford Willgoos: Indoor Air Monitoring

Loureiro Engineering Associates, Inc.

	Location ID	WG-RSK-AS-16	WG-RSK-AS-16	WG-RSK-AS-16	WG-RSK-AS-16	WG-RSK-AS-16	WG-RSK-AS-16	WG-RSK-AS-16
	Sample ID	1979476	1990395	1990397	1997131	1997132	1997133	1997134
	Sample Date	12/21/2000	03/01/2001	03/01/2001	06/18/2001	06/18/2001	06/18/2001	06/18/2001
	Sample Time	08:01	09:05	09:05	08:10	08:10	08:20	08:20
	Laboratory	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN
	Lab. Number	C0005922-2	C0106351-02	C0106351-03	C010711102	C010711111	C010711103	C010711112
Constituent	Units							
Dibromochloropropane (DBCP)	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	
n-Propylbenzene	-	0.90 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	
Hexachlorobutadiene	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	
4-Isopropyltoluene (p-cymene)	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	
Naphthalene	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	2.1 ug/m3		2.5 ug/m3	
Acetone	-	2.5 ug/m3	<0.35 ug/m3	1.2 ug/m3	7.4 ug/m3		4.8 ug/m3	
Benzene	-	4.5 ug/m3	<0.71 ug/m3	0.76 ug/m3	0.59 ug/m3		1.4 ug/m3	
1,2,3-Trichlorobenzene	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	
1,2,4-Trichlorobenzene	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	
1,2,4-Trimethylbenzene	-	4.8 ug/m3	<0.35 ug/m3	0.47 ug/m3	0.32 ug/m3		0.55 ug/m3	
1,2-Dichlorobenzene	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	
1,3,5-Trimethylbenzene	-	1.6 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		0.39 ug/m3	
1,3-Dichlorobenzene	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	
1,4-Dichlorobenzene	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	
Bromobenzene	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	
Chlorobenzene	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	
Ethylbenzene	-	3.1 ug/m3	<0.35 ug/m3	<0.33 ug/m3	0.30 ug/m3		0.66 ug/m3	
n-Butylbenzene	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	
sec-Butylbenzene	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	
tert-Butylbenzene	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	
2-Butanone(MEK)	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	4.3 ug/m3		3.5 ug/m3	
Carbon Tetrachloride	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	
Isopropylbenzene (cumene)	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	
1,1,1,2-Tetrachloroethane	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	
1,1,1-Trichloroethane	-	2.9 ug/m3	<0.35 ug/m3	4.7 ug/m3	46 E ug/m3	97 ug/m3	150 E ug/m3	100 ug/m3
1,1,2,2-Tetrachloroethane	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	
1,1,2-Trichloroethane	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	
1,1-Dichloroethane	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	
Ethylene Dibromide (EDB)	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	

Table 3
SUMMARY OF ANALYTICAL RESULTS
P&W East Hartford Willgoos: Indoor Air Monitoring

Loureiro Engineering Associates, Inc.

	Location ID	WG-RSK-AS-16	WG-RSK-AS-16	WG-RSK-AS-16	WG-RSK-AS-16	WG-RSK-AS-16	WG-RSK-AS-16	WG-RSK-AS-16
	Sample ID	1979476	1990395	1990397	1997131	1997132	1997133	1997134
	Sample Date	12/21/2000	03/01/2001	03/01/2001	06/18/2001	06/18/2001	06/18/2001	06/18/2001
	Sample Time	08:01	09:05	09:05	08:10	08:10	08:20	08:20
	Laboratory	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN
	Lab. Number	C0005922-2	C0106351-02	C0106351-03	C010711102	C010711111	C010711103	C010711112
Constituent	Units							
1,2-Dichloroethane	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	
Chloroethane	-		<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	
1,1-Dichloroethylene	-	0.85 ug/m3	<0.35 ug/m3	0.76 ug/m3	<0.28 ug/m3		0.39 ug/m3	
Vinyl Chloride	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	
cis-1,2-Dichloroethylene	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	
Tetrachloroethylene	-	4.2 ug/m3	<0.35 ug/m3	<0.33 ug/m3	0.51 ug/m3		1.7 ug/m3	
trans-1,2-Dichloroethylene	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	
Trichloroethylene	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	0.43 ug/m3		1.4 ug/m3	
Bromomethane	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	
Bromochloromethane	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	
Bromodichloromethane	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	
Chloromethane	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	
Methane,dibromo-	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	
Dibromochloromethane	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	
Methylene Chloride	-	<0.58 ug/m3	<0.35 ug/m3	2.5 ug/m3	49 E ug/m3	4.2 ug/m3	53 E ug/m3	<3.7 ug/m3
Dichlorodifluoromethane	-	5.1 ug/m3	<0.35 ug/m3	4.9 ug/m3	6.6 ug/m3		7.9 ug/m3	
Bromoform	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	
Chloroform	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	
Trichlorofluoromethane	-	0.69 ug/m3	<0.35 ug/m3	0.90 ug/m3	1.1 ug/m3		0.70 ug/m3	
Methyl Isobutyl Ketone	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	0.53 ug/m3		0.97 ug/m3	
1,2,3-Trichloropropane	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	
1,2-Dichloropropane	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	
Propane,1,3-dichloro-	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	
Propane,2,2-dichloro-	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	
1,1-Dichloropropylene	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	
cis-1,3-Dichloropropylene	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	
trans-1,3-Dichloropropylene	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	
Styrene	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		0.53 ug/m3	
Toluene	-	14 ug/m3	<0.35 ug/m3	1.1 ug/m3	2.9 ug/m3		7.9 ug/m3	

Table 3
SUMMARY OF ANALYTICAL RESULTS
P&W East Hartford Willgoos: Indoor Air Monitoring

Loureiro Engineering Associates, Inc.

	Location ID	WG-RSK-AS-16	WG-RSK-AS-16	WG-RSK-AS-16	WG-RSK-AS-16	WG-RSK-AS-16	WG-RSK-AS-16	WG-RSK-AS-16
	Sample ID	1979476	1990395	1990397	1997131	1997132	1997133	1997134
	Sample Date	12/21/2000	03/01/2001	03/01/2001	06/18/2001	06/18/2001	06/18/2001	06/18/2001
	Sample Time	08:01	09:05	09:05	08:10	08:10	08:20	08:20
	Laboratory	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN
	Lab. Number	C0005922-2	C0106351-02	C0106351-03	C010711102	C010711111	C010711103	C010711112
Constituent	Units							
o-Chlorotoluene	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	
p-Chlorotoluene	-	<0.58 ug/m3	<0.35 ug/m3	<0.33 ug/m3	<0.28 ug/m3		<0.23 ug/m3	
o-Xylene	-	4.1 ug/m3	<0.35 ug/m3	<0.33 ug/m3	0.45 ug/m3		0.83 ug/m3	
Xylenes	-	11 ug/m3	<0.71 ug/m3	0.72 ug/m3	1.1 ug/m3		2.8 ug/m3	

Table 3
SUMMARY OF ANALYTICAL RESULTS
P&W East Hartford Willgoos: Indoor Air Monitoring

Loureiro Engineering Associates, Inc.

	Location ID	WG-RSK-AS-16	WG-RSK-AS-16	WG-RSK-AS-17	WG-RSK-AS-17	WG-RSK-AS-17	WG-RSK-AS-17
	Sample ID	2007376	2007376	1990407	1997384	1997385	2007381
	Sample Date	09/21/2001	09/21/2001	03/01/2001	06/18/2001	06/18/2001	09/21/2001
	Sample Time	07:16	07:16	10:45	09:50	09:50	08:43
	Laboratory	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN
	Lab. Number	C0107730-02	C0107730-12	C0106351-11	C010711107	C010711116	C0107730-07
Constituent	Units						
Dibromochloropropane (DBCP)	-	<0.25 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
n-Propylbenzene	-	<0.25 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
Hexachlorobutadiene	-	<0.25 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
4-Isopropyltoluene (p-cymene)	-	0.53 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
Naphthalene	-	3.8 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
Acetone	-	22 E ug/m3	<51 ug/m3	0.61 ug/m3	3.3 ug/m3		7.2 ug/m3
Benzene	-	<0.50 ug/m3		<0.73 ug/m3	<0.52 ug/m3		<0.50 ug/m3
1,2,3-Trichlorobenzene	-	<0.25 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
1,2,4-Trichlorobenzene	-	<0.25 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
1,2,4-Trimethylbenzene	-	0.87 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
1,2-Dichlorobenzene	-	<0.25 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
1,3,5-Trimethylbenzene	-	0.71 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
1,3-Dichlorobenzene	-	<0.25 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
1,4-Dichlorobenzene	-	<0.25 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
Bromobenzene	-	<0.25 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
Chlorobenzene	-	<0.25 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
Ethylbenzene	-	0.77 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
n-Butylbenzene	-	0.25 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
sec-Butylbenzene	-	<0.25 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
tert-Butylbenzene	-	<0.25 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
2-Butanone(MEK)	-	5.3 ug/m3		<0.36 ug/m3	0.32 ug/m3		1.1 ug/m3
Carbon Tetrachloride	-	<0.25 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
Isopropylbenzene (cumene)	-	<0.25 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
1,1,1,2-Tetrachloroethane	-	<0.25 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
1,1,1-Trichloroethane	-	45 E ug/m3	59 ug/m3	<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
1,1,2,2-Tetrachloroethane	-	<0.25 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
1,1,2-Trichloroethane	-	<0.25 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
1,1-Dichloroethane	-	<0.25 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
Ethylene Dibromide (EDB)	-	<0.25 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3

Table 3
SUMMARY OF ANALYTICAL RESULTS
P&W East Hartford Willgoos: Indoor Air Monitoring

Loureiro Engineering Associates, Inc.

	Location ID	WG-RSK-AS-16	WG-RSK-AS-16	WG-RSK-AS-17	WG-RSK-AS-17	WG-RSK-AS-17	WG-RSK-AS-17
	Sample ID	2007376	2007376	1990407	1997384	1997385	2007381
	Sample Date	09/21/2001	09/21/2001	03/01/2001	06/18/2001	06/18/2001	09/21/2001
	Sample Time	07:16	07:16	10:45	09:50	09:50	08:43
	Laboratory	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN
	Lab. Number	C0107730-02	C0107730-12	C0106351-11	C010711107	C010711116	C0107730-07
Constituent	Units						
1,2-Dichloroethane	-	<0.25 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
Chloroethane	-	<0.25 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
1,1-Dichloroethylene	-	0.87 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
Vinyl Chloride	-	<0.25 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
cis-1,2-Dichloroethylene	-	<0.25 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
Tetrachloroethylene	-	0.86 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
trans-1,2-Dichloroethylene	-	<0.25 ug/m3		<0.36 ug/m3	2.1 ug/m3		<0.25 ug/m3
Trichloroethylene	-	0.66 ug/m3		<0.36 ug/m3	<0.26 ug/m3		0.28 ug/m3
Bromomethane	-	<0.25 ug/m3		<0.36 ug/m3	0.69 ug/m3		<0.25 ug/m3
Bromochloromethane	-	<0.25 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
Bromodichloromethane	-	<0.25 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
Chloromethane	-	<0.25 ug/m3		0.94 ug/m3	0.39 ug/m3		<0.25 ug/m3
Methane,dibromo-	-	<0.25 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
Dibromochloromethane	-	<0.25 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
Methylene Chloride	-	0.31 ug/m3		1.2 ug/m3	27 E ug/m3	6.0 ug/m3	<0.25 ug/m3
Dichlorodifluoromethane	-	<0.25 ug/m3		4.0 ug/m3	5.3 ug/m3		<0.25 ug/m3
Bromoform	-	<0.25 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
Chloroform	-	<0.25 ug/m3		<0.36 ug/m3	<0.26 ug/m3		1.0 ug/m3
Trichlorofluoromethane	-	1.1 ug/m3		1.7 ug/m3	0.32 ug/m3		0.45 ug/m3
Methyl Isobutyl Ketone	-	0.83 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
1,2,3-Trichloropropane	-	<0.25 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
1,2-Dichloropropane	-	<0.25 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
Propane,1,3-dichloro-	-	<0.25 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
Propane,2,2-dichloro-	-	<0.25 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
1,1-Dichloropropylene	-	<0.25 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
cis-1,3-Dichloropropylene	-	<0.25 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
trans-1,3-Dichloropropylene	-	<0.25 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
Styrene	-	1.0 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
Toluene	-	5.6 ug/m3		0.56 ug/m3	0.68 ug/m3		0.55 ug/m3

Table 3
SUMMARY OF ANALYTICAL RESULTS
P&W East Hartford Willgoos: Indoor Air Monitoring

Loureiro Engineering Associates, Inc.

	Location ID	WG-RSK-AS-16	WG-RSK-AS-16	WG-RSK-AS-17	WG-RSK-AS-17	WG-RSK-AS-17	WG-RSK-AS-17
	Sample ID	2007376	2007376	1990407	1997384	1997385	2007381
	Sample Date	09/21/2001	09/21/2001	03/01/2001	06/18/2001	06/18/2001	09/21/2001
	Sample Time	07:16	07:16	10:45	09:50	09:50	08:43
	Laboratory	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN
	Lab. Number	C0107730-02	C0107730-12	C0106351-11	C010711107	C010711116	C0107730-07
Constituent	Units						
o-Chlorotoluene	-	<0.25 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
p-Chlorotoluene	-	<0.25 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
o-Xylene	-	1.4 ug/m3		<0.36 ug/m3	<0.26 ug/m3		<0.25 ug/m3
Xylenes	-	4.0 ug/m3		<0.73 ug/m3	<0.52 ug/m3		<0.50 ug/m3

Table 4
EXCEEDANCES
P&W East Hartford Willgoos: Indoor Air Monitoring

Loureiro Engineering Associates, Inc.

	Location ID	WG-RSK-AS-11	WG-RSK-AS-11	WG-RSK-AS-11	WG-RSK-AS-14	WG-RSK-AS-15	WG-RSK-AS-16
	Sample ID	1979474	1997129	1997130	1979480	1997140	1979476
	Sample Date	12/21/2000	06/18/2001	06/18/2001	12/21/2000	06/18/2001	12/21/2000
	Sample Time	07:24	07:25	07:40	08:36	09:25	08:01
	Laboratory	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN
	Lab. Number	C0005922-1	C010711101	C010711110	C0005922-4	C010711115	C0005922-2
Constituent	Units						
Benzene	-	3.8 ug/m3	30 E ug/m3	21 ug/m3	3.3 ug/m3		4.5 ug/m3
trans-1,2-Dichloroethylene	-					8600 ug/m3	

DRAWINGS

US EPA New England
RCRA Document Management System (RDMS)
Image Target Sheet

RDMS Document ID# 1081

Facility Name: PRATT & WHITNEY (MAIN STREET)

Phase Classification: R-5

Document Title: VOLUNTARY CORRECTIVE ACTION PROGRAM PROGRESS REPORT FOR THIRD QUARTER 2001 (10/12/01 TRANSMITTAL LETTER ATTACHED) [PART 1 OF 2]

Date of Document: 10/01/2001

Document Type: PROGRESS REPORT

Purpose of Target Sheet:

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Comments:
FIGURE 1: VCAP TIMELINE

* Please Contact the EPA New England RCRA Records Center to View This Document *

ATTACHMENT 1

Field Forms

December 21, 2000

Monitoring Event

DAILY FIELD REPORT

Loureiro Engineering Associates, Inc.

LEA Comm. No.	68VC132.001	Page 1 of 4
Project	Indoor Air Monitoring	Date 12/21/00
Location	P&W East Hartford Willgoos, East Hartford, CT	
Client	Pratt & Whitney East Hartford-JT	

Arrived at Site 0700 Departed from Site 1730 Vehicle Personal

Odometer (Start) 0 Return 84

Site Activities

- [ ] Soil Sampling
- [ ] Groundwater Sampling
- [ ] Surface Water Sampling
- [ ] Surface Water Sampling
- [X] Vapor/Air Sampling
- [ ] Concrete Sampling
- [ ] Other Sampling
- [ ] Well Installation
- [ ] Well Development
- [ ] Geoprobe Work
- [ ] Concrete Coring
- [ ] Construction
- [ ] Inspection
- [ ] Waste Management
- [ ] Waste Management
- [ ] Site Walk Over
- [ ] Surveying
- [ ] Other (Describe)

Current Project Information

Last Sample Number Used	
Last Location ID Used	
Current Location (if not complete)	
Sampling for	
Laboratories used	
Paperwork & Equipment left at/in	
Site Contact	J. TOTA
Contractors on Site	LEA
Time and place to meet contractors	

Non-productive Time

- [ ] None
- [ ] Equipment Breakdown
- [ ] Late
- [ ] Weather
- [ ] Missing Equipment
- [X] Other (Describe) (LUNCH 30 MIN.)

Quality Assurance Checks

Yes	N/A	No	
X			Sample labels complete
X			Sample/cooler seals OK
X			All samples obtained
X			Chains of custody
X			All forms/logs complete
X			Site walkover
X			Site H&S Plan on site
X			Instruments calibrated

Residuals Disposition

Item	Approx. Amount	Container ID
Soil/Solid		
Groundwater		
Decon Fluid		
PPE		
Other		

Instrument Calibrations

pH/Conductivity

Std.	Standard	Meter
	pH 4	
	pH 7	
	pH 10	
	Cond.	

PID/FID Meter

Std.	Standard	Meter
	Zero w/Background	
	Zero w/Clean Air	

Balance

Std.	Standard	Reading
	Std. Mass	

Expendable Items Used

Qty	Item	LEA Number
—	Decontamination Supplies	081
—	Gas Probes- 5' Stainless Steel	110
—	Miscellaneous Health & Safety Items	060
—	Tedlar Bags	079
—	Tygon Tubing	999
—	Water, Distilled	025

Equipment Used

Qty	Item	LEA Number
	Air Sampler-MSA Escort Elf	047
	Miscellaneous Small Tools & Equipment	152
	Soil Gas Survey Equipment	087
	VOC Analyzer- Photovac (PID)	012
7	AIR SAMPLING PUMPS FROM EHL	—
7	" " TUBING " " WITH DUAL HOLDERS	—
1	CALIBRATION PRIMARY ROTAMETER	

Field Personnel Richard Twomey

Signature Richard Twomey

Loureiro Engineering Associates, Inc.

DAILY FIELD REPORT

Supplemental Sheet

LEA Comm. No.	**68VC132.001**	Page 2 of 4
Project	Indoor Air Monitoring	Date 12/21/00
Location	P&W East Hartford Willgoos, East Hartford, CT	
Client	Pratt & Whitney East Hartford-JT	

Description of Site Activities

0700 Arrive onsite
0715 Begin setup + calibration of pumps.
0917-1550 Monitor pumps
1550-1730 Post calibrate and pickup pumps.

Field Personnel Richard Twomey

Signature Richard Twomey

Loureiro Engineering Associates, Inc.

DAILY FIELD REPORT

Supplemental Sheet

LEA Comm. No.	68VC132.001	Page 3 of 4
Project	Indoor Air Monitoring	Date 12/21/00
Location	P&W East Hartford Willgoos, East Hartford, CT	
Client	Pratt & Whitney East Hartford-JT	

Description of Site Activities

WG-RSK-AS-~~01~~ 11 RT PUMP HOUSE, CONTROLS & METERS ON 1ST FLOOR, NO OIL EVIDENT; BASEMENT BELOW TIGHT CONCRETE FLOOR HAS PUMPS (OIL), STRAINERS WITH SOME FUEL DRAINAGE IN BUCKETS, SMELL OF FUEL EVIDENT., AIR SAMPLING PUMP ON 1ST FLOOR 6' ABOVE FLOOR, ABOVE DISCONNECT 42PI-1-6-19-1

WG-RSK-AS-~~06~~ 18 WELD SHOP, COMPRESSED GAS CYLINDERS, NO LIQUID CHEMICALS, MACHINE TOOL EQUIPMENT, AIR SAMPLING PUMP 6 FT. ABOVE CONCRETE FLOOR, ADJACENT TO SHEAR 505694.

WG-RSK-AS-~~03~~ 13 EXHAUSTOR - MAIN BLDG, COLUMN FA 24, NO CHEMICAL OPERATIONS, CLOSED FLAMMABLE CABINET 30 FT FROM AIR SAMPLING, SAMPLING 6 FT ABOVE CONCRETE FLOOR.

WG-RSK-AS-~~04~~ 14 TEST CELL (X 235, 234) BUILDING, COLUMN NOT LABELED, CENTER OF ROOM IN FRONT OF MID-CYLID DOOR, SAMPLE 6 FT ABOVE CONCRETE FLOOR, ENGINE DRESSING AREA IN FRONT OF 2 CELLS, POG WITH OIL, 40 FT. FROM SAMPLE LOCATION.

WG-RSK-AS-~~05~~ 15 FUEL LAB - ESD LAB, OFFICE TYPE ROOM BEING MOVED, NO CHEMICALS, NO OPERATIONS, SAMPLE 4' ABOVE CARPETED FLOOR (SLAB) ON INTERIOR WALL (NO COLUMN).

WG-RSK-AS-~~02~~ 12 MAIN BLDG, DOOR OPPOSITE PUMP HOUSE, COLUMN C6, MACHINERY AND PIPING, OIL DRUM ≈ 40' FROM SAMPLE, SAMPLE 6 FT ABOVE CONCRETE SLAB ON COLUMN, NO CHEMICALS OR CHEMICAL OPS. NEAR SAMPLE.

NOTE: LOCATION NUMBERS CHANGED BECAUSE THEY WERE NOT THE SAME AS ORIGINAL NUMBERS OF LOCATIONS. RT

Field Personnel: Richard Twomey

Signature: Richard S Twomey

Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD
MISCELLANEOUS SAMPLES

LEA Comm. No.	68VC132.001		Page 4 of 4
Project	Indoor Air Monitoring		Date 12/21/00
Location	P&W East Hartford Willgoos, East Hartford, CT		
Client	Pratt & Whitney East Hartford-JT		

Sample ID	Location ID	~~Start~~ Time RT	Sample Type	Depth (ft)	PID/FID Reading	Comments Pump #	~~Waste Container~~ Tube # ID
1979474	Wb-RSK-AS-~~01~~ 11	0724	Vapor	—	—	562691	2558 TDT
1979475	"	"	"	"	"	"	LT
1979476	Wb-RSK-AS-~~06~~ 16	0801	Vapor	—	—	562020	2557 TDT
1979477	"		"	—	—	"	CT
1979478	Wb-RSK-AS-~~08~~ 13	0915	Vapor	—	—	562687	2556 TDT
1979479	"		Vapor				CT
1979480	Wb-RSK-~~AS-01~~ 14	0936	Vapor	—	—	504950	2555 TDT
1979481	"		Vapor	—	—	"	CT
1979482	Wb-RSK-AS-~~01~~ 14	0840	Dup	—	—	562668	2554 TDT
1979483	"		"	—	—	"	CT
1979484	Wb-RSK-AS-~~05~~ 15	0850	Vapor	—	—	RSK-AS-05	2553 TDT
1979485	"		"				LT
1979486	BLANK	0855	BKG	—	—	—	2551 TDT
1979487	BLANK	12 0856	BKG	—	—		CT
1979488	Wb-RSK-AS-~~01~~	0917	Vapor	—	—	RSK-AS-02	2552 TDT
1979489	Wb-RSK-AS-02	0917	Vapor	—	—		~~2552 TDT~~ CT

NOTE: LOCATION NUMBERS CHANGED BECAUSE THEY ARE NOT THE SAME AS THE ORIGINAL LOCATION NUMBERS. RT

Field Personnel: Richard Twomey

Signature: Richard P. Twomey

Pg 1 of 2

Environmental Health Laboratory
ESIS Risk Control Services
One of the ACE Group of Companies

Location and Mailing Address:
100 Sebethe Drive Suite A-5
Cromwell, CT 06416

(860) 635-6475; (800) 243-4903 FAX (860) 635-6750

REQUEST FOR ANALYTICAL SERVICES
(Please fill all blanks to help us better serve you)

FOR LAB USE ONLY	
RECEIVED Cromwell EHL Date: 12/02/00	Lab Report No. C00059922
Rec. & Checked in by: KT	☐ Und ☐ SRF ☐ AR ☐ ESIS ☐ Z ☐ Claims
	Pol. Or Con. No.

Send INVOICE To [REQUIRED] X		Send RESULTS To [REQUIRED]	
Name:	Nick Skuvlarikis	Name:	Same
Company:	LEA	Company:	
Mailing Address:	100 Northwest Dr	Mailing Address:	
City, State, Zip:	Plainville CT 06062	City, State, Zip:	
PO#, Ref # Etc (REQUIRED)		Job Name:	Electronic Delivery
Accts. Payable Phone No:	860-747-6181	Phone No:	☐ Phone Results
Accts. Payable Fax No:	860-747-8822	Fax:	☑ Fax Results

Sampling Location:	Person Collecting Samples:
Product Manufactured/Service Rendered:	Sampling Method:

EHL SAMPLE NO (Lab Use Only)	SAMPLE CONTAINER NO	Media Type	ANALYSIS DESIRED A 3 sample minimum charge applies when less than 3 of each specific analyte is requested.	NOTES (Recording sampling date, Location and Operation. Other compounds present, etc.) Flow Rate Pre	Post	SAMPLING RATE (liters/min)	SAMPLING TIME Start	End	Total Time (minutes)	AIR SAMPLE VOLUME (liters)
	1979474	TD	VOC	30	30 cc/min.		0725	1550		
	1979475	CT	VOC	206	~~137~~		0725	1550		
	1979476	TD	VOC	177			801	1612		
	1979477	CT	VOC	206			801	1612		
	1979478	TD	VOC	29.4			819		324	
	1979479	CT	VOC	206			819		324	
	1979480	TD	VOC	29.4	29.4		0836	1641		
	1979481	CT	VOC	206	~~206~~		0836	1641		
	1979482	TD	VOC	30			0840	1645		
	1979483	CT	VOC	206	206		0840	1645		
	1979484	TD	VOC	30			0850	1600		
	1979485	CT	VOC	206			0850	1600		
	1979486	TD	VOC	~~30~~	BLANK		0855	–		
	1979487	CT	VOC	–	BLANK		0856	–		

FOR LAB NOTES ONLY: per Dick Tilney in phone call, use 30 cc/min & 206 cc/min for calc. air volumes 12/30/00 samples in freezer

Faxed 12/

Pg. 2 of 2

Environmental Health Laboratory
ESIS Risk Control Services
One of the ACE Group of Companies

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100 Sebethe Drive Suite A-5
Cromwell, CT 06416

(860) 635-6475; (800) 243-4903 FAX (860) 635-6750

REQUEST FOR ANALYTICAL SERVICES

(Please fill all blanks to help us better serve you)

FOR LAB USE ONLY

RECEIVED Cromwell EHL	*Lab Report No.* C0005922
Date: 12/22/00	☐ *Und* ☐ *SRF* ☐ *AR* ☐ *ESIS* ☐ *Z* ☐ *Claims*
Rec. & Checked in by: KT	*Pol. Or Con. No.*

Send INVOICE To [REQUIRED]	*Send RESULTS To [REQUIRED]*	
Name:	**Name:**	
Company:	**Company:**	
Mailing Address:	**Mailing Address:**	
City, State, Zip:	**City, State, Zip:**	
PO#, Ref # Etc (REQUIRED)	**Job Name:**	
Accts. Payable Phone No:	**Phone No:**	☐ **Phone Results**
Accts. Payable Fax No:	**Fax:**	☐ **Fax Results**

Sampling Location:	Person Collecting Samples:
Product Manufactured/Service Rendered:	Sampling Method:

EHL SAMPLE NO (Lab Use Only)	SAMPLE CONTAINER NO	Media Type	ANALYSIS DESIRED A 3 sample minimum charge applies when less than 3 of each specific analyte is requested.	NOTES (Recording sampling date, Location and Operation. Other compounds present, etc.)	SAMPLING RATE (liters/min)	SAMPLING TIME Start	End	Total Time (minutes)	AIR SAMPLE VOLUME (liters)
	1979488	TD	VOC	Pre 30 / Post		0930	1716		
	1979489	CT	VOC	200		0930	1716		

FOR LAB NOTES ONLY:

Pg 1 of 2

Environmental Health Laboratory
ESIS Risk Control Services
One of the ACE Group of Companies

Location and Mailing Address:
100 Sebethe Drive Suite A-5
Cromwell, CT 06416

(860) 635-6475; (800) 243-4903 FAX (860) 635-6750

REQUEST FOR ANALYTICAL SERVICES

(Please fill all blanks to help us better serve you)

FOR LAB USE ONLY	
RECEIVED Cromwell EHL	*Lab Report No.*
Date:	☐ *Und* ☐ *SRF* ☐ *AR* ☐ *ESIS* ☐ *Z* ☐ *Claims*
Rec. & Checked in by:	*Pol. Or Con. No.*

Send INVOICE To [REQUIRED]	*Send RESULTS To [REQUIRED]*	
Name: [illegible]	**Name:** [illegible]	
Company: [illegible]	**Company:**	
Mailing Address: [illegible]	**Mailing Address:**	
City, State, Zip: [illegible]	**City, State, Zip:**	
PO#, Ref # Etc (REQUIRED)	**Job Name:** [illegible]	
Accts. Payable Phone No: 860-747-6181	**Phone No:**	☐ **Phone Results**
Accts. Payable Fax No: 860-747-8822	**Fax:**	☐ **Fax Results**

Sampling Location: P&W WILGOOS FACILITY

Person Collecting Samples: RICHARD E. TWOMEY

Product Manufactured/Service Rendered: TEST FACILITY

Sampling Method:

EHL SAMPLE NO (Lab Use Only)	SAMPLE CONTAINER NO	Media Type	ANALYSIS DESIRED A 3 sample minimum charge applies when less than 3 of each specific analyte is requested.	NOTES (Recording sampling date, Location and Operation. Other compounds present, etc.) Flow Rate * PUMP STOPPED	CC/MIN SAMPLING RATE (liters/min)	SAMPLING TIME Start	End	Total Time (minutes)	AIR SAMPLE VOLUME (liters)
	197474	TD	VOC	30 / 30	30	0725	1550	505	15.1
	197475	CT	VOC	200 / 197.5	206	0725	1550	505	~~15.1~~ 104
	[illegible]	TD	VOC	17.7 / 21	17.7	[illegible]	[illegible]	491	8.7
	[illegible]	CT	VOC	200 / 197.5	206	[illegible]	[illegible]	491	101.1
	[illegible]	TD	VOC	[illegible] / *NONE	30	[illegible]	1343	[illegible]	9.7
	[illegible]	CT	VOC	[illegible] / *NONE	206	[illegible]	1343	[illegible]	66.7
	[illegible]	TD	VOC	[illegible] / 29.4	30	[illegible]	[illegible]	485	14.6
	[illegible]	CT	VOC	200 / 221	206	[illegible]	[illegible]	485	99.9
	[illegible]	TD	VOC	[illegible] / 33	30	[illegible]	1645	485	14.6
	[illegible]	CT	VOC	200 / [illegible]	206	[illegible]	1645	485	99.9
	[illegible]	TD	VOC	[illegible] / *NONE	30	[illegible]	[illegible]	430	12.9
	[illegible]	CT	VOC	[illegible] / *NONE	206	[illegible]	[illegible]	430	88.6
	[illegible]	TD	VOC	[illegible] / [illegible]	—	[illegible]	—	—	—
	[illegible]	CT	VOC	[illegible] / [illegible]	—	[illegible]	—	—	—

FOR LAB NOTES ONLY:

Pg 2 of 2

Environmental Health Laboratory
ESIS Risk Control Services
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Location and Mailing Address:
100 Sebethe Drive Suite A-5
Cromwell, CT 06416

(860) 635-6475; (800) 243-4903 FAX (860) 635-6750

REQUEST FOR ANALYTICAL SERVICES

(Please fill all blanks to help us better serve you)

FOR LAB USE ONLY

RECEIVED Cromwell EHL	Lab Report No.
Date:_____	☐ Und ☐ SRF ☐ AR ☐ ESIS ☐ Z ☐ Claims
Rec. & Checked in by:_____	Pol. Or Con. No.

Send INVOICE To [REQUIRED]	Send RESULTS To [REQUIRED]	
Name: NICK SKOULARIKIS	Name: SAME	
Company: LEA	Company:	
Mailing Address:	Mailing Address:	
City, State, Zip:	City, State, Zip:	
PO#, Ref # Etc (REQUIRED)	Job Name:	
Accts. Payable Phone No:	Phone No:	☐ Phone Results
Accts. Payable Fax No:	Fax:	☐ Fax Results

Sampling Location:	Person Collecting Samples: RICHARD E. TWOMEY
Product Manufactured/Service Rendered:	Sampling Method:

EHL SAMPLE NO (Lab Use Only)	SAMPLE CONTAINER NO	Media Type	ANALYSIS DESIRED A 3 sample minimum charge applies when less than 3 of each specific analyte is requested.	NOTES (Recording sampling date, Location and Operation. Other compounds present, etc.)	CC/MIN SAMPLING RATE (liters/min)	SAMPLING TIME Start	End	Total Time (minutes)	AIR SAMPLE VOLUME (liters)
	[illegible]	TO	VOC	15 CC/MIN.	30	[illegible]	1716	466	14.0
	[illegible]	C	VOC	192.5	206	[illegible]	1716	466	96.0

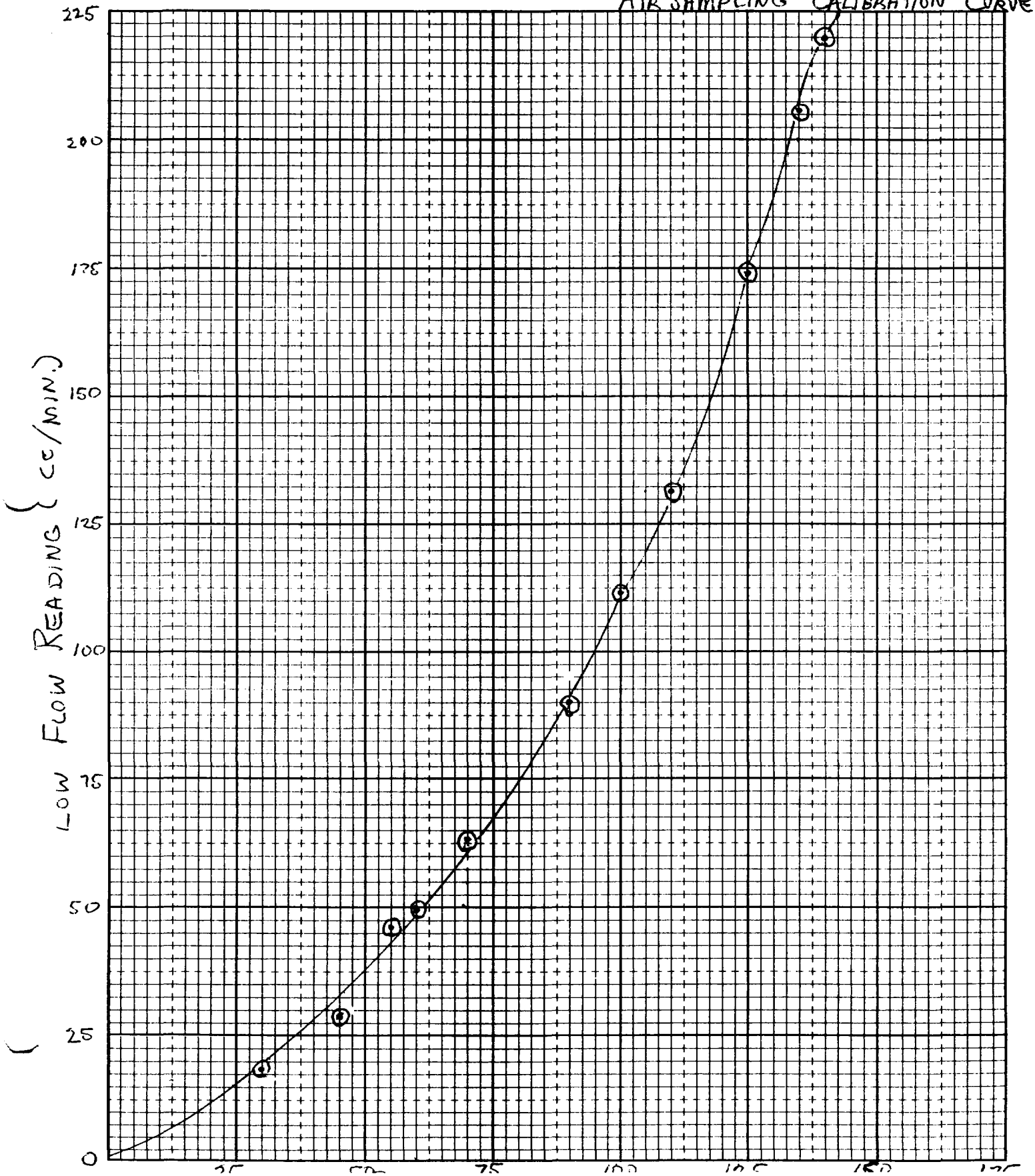
FOR LAB NOTES ONLY:

Notes & Computations

Loureiro Engineering Associates, Inc.
100 Northwest Drive • Plainville, Connecticut 06062
An Employee Owned Company

Comm No. 68VC132 Page 1 of 2
By DICK TWOMEY Date 12/21/00
Approved By _____ Date _____
Project P&W WILCOX VCAP 68VC132

AIR SAMPLING CALIBRATION CURVE



Rotometer Reading	Low Flow Reading (cc/min)
30	17.7
45	29.4
55	42.1
65	49.8
70	63
90	90
100	112
110	132
125	174
135	206
140	220
145	241

Calibrated by: JPM
Date: 11/22/2000

March 1, 2001

Monitoring Event

DAILY FIELD REPORT

Loureiro Engineering Associates, Inc.

LEA Comm. No.	**68VC133.001**	Page 1 of 4
Project	Indoor Air Monitoring - Feb 2001	Date 3/1/01
Location	P&W East Hartford Willgoos, East Hartford, CT	
Client	, Jane LaMorte	

Arrived at Site 0700 Departed from Site 1900 Vehicle PERSONAL

Odometer (Start) 0 Return 76

Site Activities

- [ ] Soil Sampling
- [ ] Groundwater Sampling
- [ ] Surface Water Sampling
- [ ] Surface Water Sampling
- [X] Vapor/Air Sampling
- [ ] Concrete Sampling
- [ ] Other Sampling
- [ ] Well Installation
- [ ] Well Development
- [ ] Geoprobe Work
- [ ] Concrete Coring
- [ ] Construction
- [ ] Inspection
- [ ] Waste Management
- [ ] Waste Management
- [ ] Site Walk Over
- [ ] Surveying
- [ ] Other (Describe)

Current Project Information

Last Sample Number Used	
Last Location ID Used	
Current Location (if not complete)	
Sampling for	
Laboratories used	
Paperwork & Equipment left at/in	
Site Contact	JOE TOTA
Contractors on Site	LEA
Time and place to meet contractors	NA

Non-productive Time

- [X] None
- [ ] Equipment Breakdown
- [ ] Late
- [ ] Weather
- [ ] Missing Equipment
- [X] Other (Describe) (LUNCH 30 MIN.)

Quality Assurance Checks

Yes	N/A	No	
X			Sample labels complete
X			Sample/cooler seals OK
X			All samples obtained
X			Chains of custody
X			All forms/logs complete
X			Site walkover
X			Site H&S Plan on site
X			Instruments calibrated

Residuals Disposition NA

Item	Approx. Amount	Container ID
Soil/Solid		
Groundwater		
Decon Fluid		
PPE		
Other		

Instrument Calibrations

pH/Conductivity NA

Std.	Standard	Meter
[ ]	pH 4	NA
[ ]	pH 7	
[ ]	pH 10	
	Cond.	

PID/FID Meter NA

Std.	Standard	Meter
[ ]	Zero w/Background	
[ ]	Zero w/Clean Air	

Balance NA

Std.	Standard	Reading
	Std. Mass	

Expendable Items Used

Qty	Item	LEA Number
—	Decontamination Supplies	081
—	Gas Probes- 5' Stainless Steel	110
—	Miscellaneous Health & Safety Items	060
—	Tedlar Bags	079
—	Tygon Tubing	999
—	Water, Distilled	025

Equipment Used

Qty	Item	LEA Number
	Air Sampler-MSA Escort Elf	047
	Miscellaneous Small Tools & Equipment	152
	Soil Gas Survey Equipment	087
	VOC Analyzer- Photovac (PID)	012
8	AIR SAMPLING PUMPS FROM EHL	
8	DUAL FLOW HOLDERS WITH TYGON TUBING-EHL	
1	CALIBRATOR-PRIMARY ROTAMETER	
1	AIR SAMPLING PUMP FROM LEA, BACKUP	
1	DUAL FLOW HOLDER WITH TUBING - LEA, BACKUP	

Field Personnel Richard Twomey

TIMOTHY DOWNEY

Signature Richard E. Twomey

Loureiro Engineering Associates, Inc.

DAILY FIELD REPORT

Supplemental Sheet

LEA Comm. No.	**68VC133.001**	Page 2 of 4
Project	Indoor Air Monitoring - Feb 2001	Date 3/1/01
Location	P&W East Hartford Willgoos, East Hartford, CT	
Client	, Jane LaMorte	

Description of Site Activities

0700 ARRIVED ON SITE
0715 BADGE CONTROL

0835-1048 SETUP AND CALIBRATE PUMPS
1048-1645 MONITOR PUMPS
1645-1825 POST CALIBRATE AND PICKUP PUMPS
1900 LEFT SITE

Field Personnel Richard Twomey
TIMOTHY DOWNEY

Signature Richard Twomey

Loureiro Engineering Associates, Inc.

DAILY FIELD REPORT

Supplemental Sheet

LEA Comm. No.	68VC133.001	Page 3 of 4
Project	Indoor Air Monitoring - Feb 2001	Date 3/1/01
Location	P&W East Hartford Willgoos, East Hartford, CT	
Client	, Jane LaMorte	

Description of Site Activities

WG-RSK-AS-~~01~~ 11 RT 15 FEET TO PIPE CHASES WITH VERY SMALL CLEARANCE TO BASEMENT BELOW CONCRETE FLOOR WHERE TWO BUCKETS WITH ≈ 1 INCH OF JET FUEL. PUMP HOUSE, CONTROLS AND METERS, FUEL PUMPS IN BASEMENT. SAMPLING DONE ON 1ST FLOOR, N SIDE.

WG-RSK-AS-~~02~~ 12: COLUMN CC 9' TO POG OF COVERED OIL-WATER WASTE AND OIL DEBRIS (NON RCRA). NO CHEMICALS IN USE. MACHINERY AND PIPING IN AREA.

WG-RSK-AS-~~03~~ 13 COLUMN GB 23, 20 FEET TO POG WITH USED OIL RAGS-SOLVENT IN COVERED CONTAINERS, 30 FEET TO COLUMN FA'24 (PREVIOUS SAMPLE, STEAM LEAK).

WG-RSK-AS-~~04~~ 14 NO CHEMICALS OBSERVED IN USE, 15 FEET TO JET ENGINE WITH POTENTIAL FOR FUEL RESIDUE AND HYDRAULIC OIL. POG WITH OIL 40 FEET FROM SAMPLE. TEST CELLS, PUMP ON COLUMN (UNLABELED) OPPOSITE CELL X235.

WG-RSK-AS-~~05~~ 15 ESD ROOM IN ECS LAB (ELECTROSTATIC DISCHARGE), NO CHEMICALS IN USE. EQUIPMENT (ELECTRONIC) BEING INSTALLED BY NEW OCCUPANT (HAMILTON SUNDSTRAND). PUMP ON WALL 4 FEET ABOVE FLOOR.

WG-RSK-AS-~~06~~ 16 15 FEET TO POG WITH COVERED CONTAINER OF OIL SOAKED RAGS. 15 FEET TO WELD GAS IN CYLINDER. NO CHEMICALS IN USE. WELD SHOP, NEAR SHEAR #505694.

WG-RSK-AS-~~07~~ 17 45 FEET BEHIND MAIN BUILDING 4 FEET ABOVE GROUND ON I BEAM OF CATWALK TO RIVER. STEAM PIPING 15 FEET AWAY, NO CHEMICALS, NO OPEN PITS, GRASSY SURFACE BELOW AND AROUND PUMP. WIND IS BLOWING ACROSS RIVER FROM THE NW.

NOTE: LOCATION NUMBERS CHANGED BECAUSE THEY ARE NOT THE SAME AS THE ORIGINAL LOCATION NUMBERS. RT

Field Personnel: Richard Twomey, TIMOTHY DOWNEY

Signature: Richard Twomey

Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD
MISCELLANEOUS SAMPLES

LEA Comm. No.	68VC133.001	Page 4 of 4
Project	Indoor Air Monitoring - Feb 2001	Date 3/1/01
Location	P&W East Hartford Willgoos, East Hartford, CT	
Client	, Jane LaMorte	

Sample ID	Location ID	~~Time~~ START	Sample Type	~~Depth~~ (ft)	~~PID/FID~~ Reading	FINISH PUMP# Comments	TUBE #/TYPE ~~Waste Container ID~~
1990393	WG-RSK-AS-07	RT	VAPOR	8:35	1650	pump 549647	2627/TDT
1990394	WG-RSK-AS-01	"	"	8:45	1653	" "	CT
1990395	WG-RSK-AS-06	16	"	9:05	1705	pump 562287	2623/TDT
1990396	WG-RSK-AS-06		"	9:12	1706	" "	CT
1990397	WG-RSK-AS-06	DUPL	"	9:05	1710	pump 549646	2625/TDT
1990398	WG-RSK-AS-06	DUPL.	"	9:12	1710	" "	CT
1990399	WG-RSK-AS-04	14	"	9:26	1725	pump 549705	2624/TDT
1990400	WG-RSK-AS-04		"	9:31	1725	" "	CT
1990401	WG-RSK-AS-03	13	"	9:50	1717	pump 562688	2628/TDT
1990402	WG-RSK-AS-03		"	9:52	1719	" "	CT
1990403	WG-RSK-AS-05	11	"	10:12	1800	pump 549291	2621/TDT
1990404	WG-RSK-AS-05		"	10:15	1800	" "	CT
1990405	WG-RSK-AS-02	12	"	10:30	1817	pump 572517	2626/TDT
1990406	WG-RSK-AS-02		"	10:32	1817	" "	CT
1990407	WG-RSK-AS-07	17	"	10:45	1830	pump 549535	~~2629~~ 2622/TDT
1990408	WG-RSK-AS-07		"	10:45	1830	" "	
1990409	Blank TD		"	13:45	–	no pump	2630/TDT
1990410	Blank CT		"	13:45	–	no pump	CT

DUPL = DUPLICATE
TDT = THERMAL DESORPTION TUBE
CT = CHARCOAL TUBE

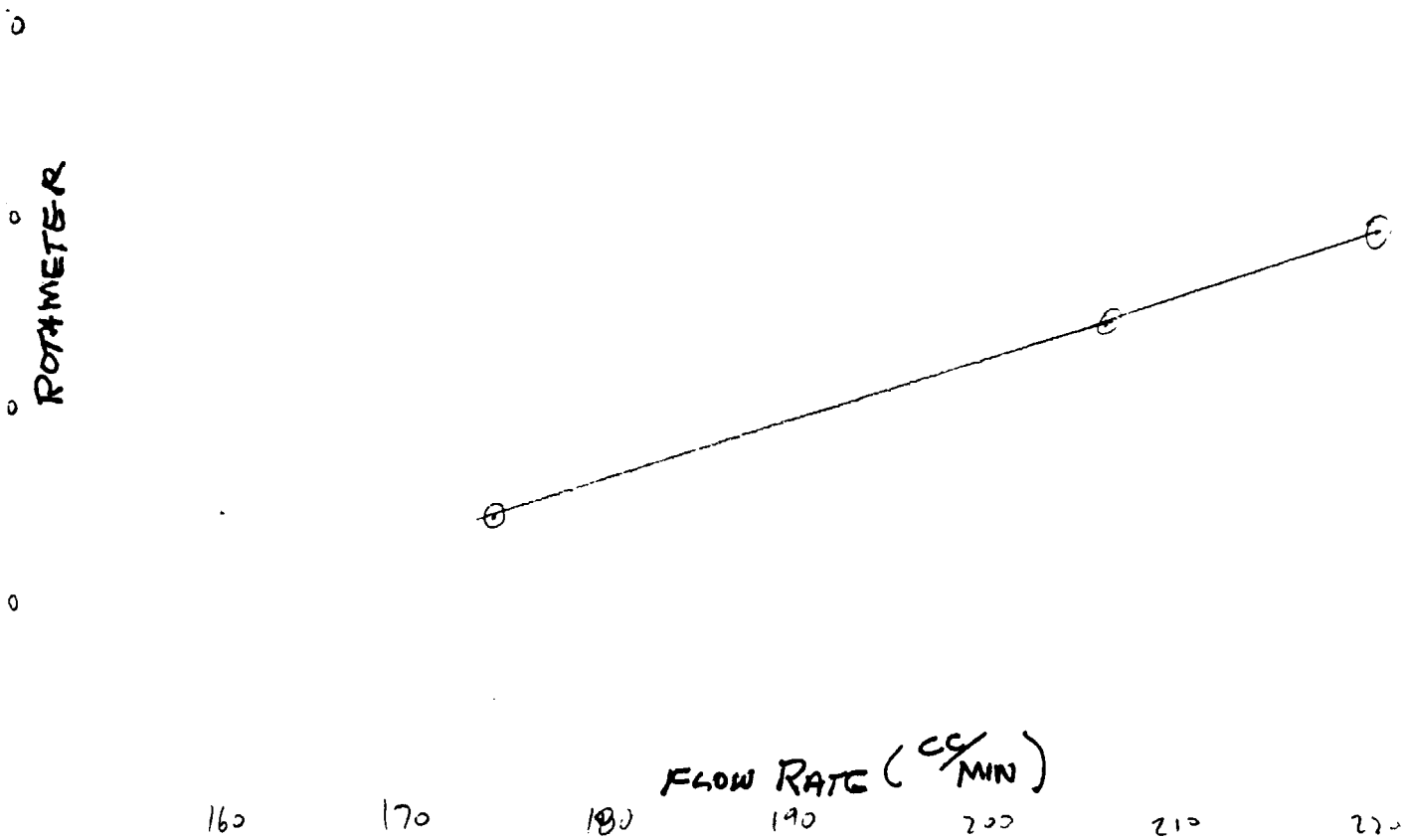
NOTE: LOCATION NUMBERS CHANGED BECAUSE THEY ARE NOT THE SAME AS THE ORIGINAL LOCATION NUMBERS. RT

Field Personnel: Richard Twomey, Tim Downey

Signature: Richard Twomey

(P&W EAST HARTFORD WILLGOOS, AIR SAMPLING
CALIBRATION CURVE

3/1 /1
R. TWOMEY



(OVER)

P & W WI2600S

3/1/01

POST CALIBRATION

				READING	FLOW RATE	CORRECTED FLOW RATE
1990393	WG-RSK-AS-01	TD	1650	47 →	32	30.7
1990394	"	CT	1653	132	196	201
1990395	WG-RSK-AS-06	TD	1705	45		
1990396	"	CT	1706	131	193	199.5
1990397	"	TD	1710	48	33 DUPL.	31.2
1990398	"	CT	1710	135	DUPL.	
1990399	WG-RSK-AS-04	TD	1725	45		
1990400	"	CT	1725	135		
1990401	WG-RSK-AS-03	TD	→	52	38.5	37.0 447 MIN
1990402	"	CT	→	135		447 MIN
1990403	WG-RSK-AS-05	TD	1800	45		
1990404	" 05	CT	1800	135		
1990405	WG-RSK-AS-02	TD	1817	40	25.5	27.5
1990406	WG " " 02	CT	1817	135		
1990407	WG-RSK-AS-07	TD	1830	44	28.5	29.0
1990408	" " "	CT	1830	135		

Environmental Health Laboratory
ESIS Risk Control Services
One of the ACE Group of Companies

Black

100 Sebethe Drive Suite A-5
Cromwell, CT 06416
(860) 635-6475; (800) 243-4903 FAX (860) 635-6750

REQUEST FOR ANALYTICAL SERVICES
(Please fill all blanks to help us better serve you)

Standard TAT

RUSH
Please call ahead for Rush analysis. Additional charges apply.

FOR LAB USE ONLY
Lab Report No.
Und ESIS | SRF Z | AR Claims
Pol. Or Con. No.

Send INVOICE To (REQUIRED)

Name: NICK SKOULARIKIS
Company: LEA
Mailing Address: 100 NORTHWEST DRIVE
City, State, Zip: PLAINVILLE, CT
PO#, Ref # (If Required)
Accts. Payable Phone No: 860-747-6181
Accts. Payable Fax No: 860-747-8822
Sampling Location: P&W WILLOWOOD FACILITY
Product Manufactured/Service Rendered: TEST FACILITY

Send RESULTS To (REQUIRED)

Name: SAME
Company:
Mailing Address: REQUEST:
City, State, Zip: ELECTRONIC DELIVERABLE
Phone No: ☐ Phone Results
Fax No: ☐ Fax Results
Email: ☐ Email Results
Sampling Media: THERMAL DESORPTION CHARCOAL TUBES
Sampling Method: AIR SAMPLING, TO1 MODIFIED

CHAIN OF CUSTODY

Collected by (print): RICHARD TWOMEY
Collector's Signature: Richard Twomey
Relinquished by: RICHARD TWOMEY Date/Time 3/2/01 8:30
Received by: Date/Time
Relinquished by: Date/Time
Received by: Date/Time
Method of Shipment: HAND DELIVERY/DROP OFF
Received at Lab by: Jim Kenny 26 Feb 2001
Authorized by: Richard Twomey (Signature Required) Date: 3/1/01
Sample Condition Upon Receipt: Acceptable Unacceptable

CALIBRATION SHEET FOR FLOW RATE

LIL SAMPLE NO (Lab Use Only)	SAMPLE CONTAINER NO	Media Type	ANALYSIS DESIRED (A separate sample container must be used for each group, unless it is requested)	FLOW RATE NOTES (Record flow sample date, location and time, other comments, etc.) PRE	POST	AVG CONTIN SAMPLING RATE (liters/min)	SAMPLING TIME Start	End	Total Time (minutes)	AIR SAMPLE VOLUME (liters)
✓	1990393	TD	VOC	29.4	32	30.7	8.35	1650		
✓	1990394	CT	VOC	206	196	201	8.45	1653		
✓	1990395	TD	VOC	29.4	29.4	29.4	9.05	1705		
✓	1990396	CT	VOC	206	193	199.5	9.12	1708		
✓	1990397	TD	VOC	29.4	33 ~~31.5~~	31.2	9.05	1710		
✓	1990398	CT	VOC	206	206	206	9.12	1710		
✓	1990399	TD	VOC	29.4	29.4	29.4	9.28	1725		
✓	1990400	CT	VOC	206	206	206	9.31	1725		
✓	1990401	TD	VOC	29.4	38.5	34.0	9.50	1717	447	
✓	1990402	CT	VOC	206	206	206	9:52	1719	447	
✓	1990403	TD	VOC	29.4	29.4	29.4	10.12	1800		
✓	1990404	CT	VOC	206	206	206	10.15	1800		
✓	1990405	TD	VOC	29.4	25.5	27.5	10.30	1817		
✓	1990406	CT	VOC	206	206	206	10.32	1817		
✓	1990407	TD	VOC	29.4	29.4	29.4	10.45	1830		
✓	1990408	CT	VOC	206	206	206	10.48	1830		

FOR LAB NOTES ONLY:

DISTRIBUTION: WHITE - LAB COPY CANARY - LAB FILE COPY PINK - CUSTOMER COPY

Environmental Health Laboratory
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100 Sebethe Drive Suite A-5
Cromwell, CT 06416
(860) 635-6475; (800) 243-4903 FAX (860) 635-6750

REQUEST FOR ANALYTICAL SERVICES
(Please fill all blanks to help us better serve you)

Standard TAT

RUSH
Please call ahead for Rush analysis. Additional charges apply.

FOR LAB USE ONLY
Lab Report No.

Und ESIS | SRF Z | AR Claims

Pol. Or Con. No.

Send INVOICE To [REQUIRED]	Send RESULTS To [REQUIRED]
Name: NICK SKOULARIKIS	Name: SAME
Company: LEA	Company:
Mailing Address: 100 NORTHWEST DRIVE	Mailing Address: REQUEST:
City, State, Zip: PLAINVILLE, CT 06062	City, State, Zip: ELECTRONIC DELIVERABLE
PO#, Ref # (If Required)	Phone No: ☐ Phone Results
Accts. Payable Phone No: 860-747-6181	Fax No: ☐ Fax Results
Accts. Payable Fax No: 860-747-8822	Email: ☐ Email Results
Sampling Location: 1 FW WILLGOOS FACILITY	Sampling Media: THERMAL DESORPTION & CHARCOAL TUBES
Product Manufactured/Service Rendered: TEST FACILITY	Sampling Method: AIR SAMPLING TO 2 MODIFIED

CHAIN OF CUSTODY

Collected by (print): RICHARD TWOMEY
Relinquished by: RICHARD TWOMEY Date/Time 3/2/01 0830
Relinquished by: Date/Time
Method of Shipment: HAND DELIVERY/DROP OFF
Authorized by: Richard Twomey (Signature required) Date: 3/1/01

Collector's Signature: Richard Twomey
Received by: Date/Time
Received by: Date/Time
Received at Lab by: Jim Kurzl 3/02/01
Sample Condition Upon Receipt: Acceptable Unacceptable

EHL SAMPLE NO (Lab Use Only)	SAMPLE CONTAINER NO	Media Type	ANALYSIS DESIRED (A 3 sample minimum charge applies when less than 3 of each specific analyte is required.)	NOTES (Recording sampling date, Location and Operation. Other compounds present, etc.)	SAMPLING RATE (liters/min)	SAMPLING TIME Start	End	Total Time (minutes)	AIR SAMPLE VOLUME (liters)
✓	1990409	TD	VOC	FLANK	–	–	–	–	–
✓	1990410	CT	VOC	BLANK	–	–	–	–	–

FOR LAB NOTES ONLY:

DISTRIBUTION: WHITE - LAB COPY CANARY - LAB FILE COPY PINK - CUSTOMER COPY

June 18, 2001

Monitoring Event

DAILY FIELD REPORT

Loureiro Engineering Associates, Inc.

LEA Comm. No.	**68VC134.001**	Page 1 of 3
Project	Indoor Air Monitoring - June 2001	Date 6/18/01
Location	P&W East Hartford Willgoos, East Hartford, CT	
Client	Pratt & Whitney East Hartford-PS	

Arrived at Site 0645 Departed from Site 1800 Vehicle PERSONAL

Odometer (Start) 0 Return 84

Site Activities

[ ]	Soil Sampling	[ ]	Geoprobe Work
[ ]	Groundwater Sampling	[ ]	Concrete Coring
[ ]	Surface Water Sampling	[ ]	Construction
[ ]	Surface Water Sampling	[ ]	Inspection
[X]	Vapor/Air Sampling	[ ]	Waste Management
[ ]	Concrete Sampling	[ ]	Waste Management
[ ]	Other Sampling	[ ]	Site Walk Over
[ ]	Well Installation	[ ]	Surveying
[ ]	Well Development	[ ]	Other (Describe)

Current Project Information

Last Sample Number Used	
Last Location ID Used	
Current Location (if not complete)	
Sampling for	
Laboratories used	
Paperwork & Equipment left at/in	
Site Contact	JOE TOTA
Contractors on Site	LEA
Time and place to meet contractors	

Non-productive Time

[ ]	None	[ ]	Weather
[ ]	Equipment Breakdown	[ ]	Missing Equipment
[ ]	Late	[X]	Other (Describe) (LUNCH 30 MINUTES)

Quality Assurance Checks

Yes	N/A	No	
X			Sample labels complete
X			Sample/cooler seals OK
X			All samples obtained
X			Chains of custody
X			All forms/logs complete
X			Site walkover
X			Site H&S Plan on site
X			Instruments calibrated

Residuals Disposition

Item	Approx. Amount	Container ID
Soil/Solid		
Groundwater		
Decon Fluid		
PPE		
Other		

Instrument Calibrations

pH/Conductivity

Std.	Standard	Meter
[ ]	pH 4	
[ ]	pH 7	
[ ]	pH 10	
[ ]	Cond.	

PID/FID Meter

Std.	Standard	Meter
[ ]	Zero w/Background	
[ ]	Zero w/Clean Air	

Balance

Std.	Standard	Reading
[ ]	Std. Mass	

Expendable Items Used

Qty	Item	LEA Number
	Decontamination Supplies	081
	Gas Probes, 5' Stainless Steel	110
	Miscellaneous Health & Safety Items	060
	Tedlar Bags	079
	Tygon Tubing	999
	Water, Distilled	025

Equipment Used

Qty	Item	LEA Number
	Air Sampler-MSA Escort Elf	047
	Miscellaneous Small Tools & Equipment	152
	Soil Gas Survey Equipment	087
	VOC Analyzer- Photovac (PID)	012
7	AIR SAMPLING PUMPS FROM LEA	
7	" " TUBING " "	
	WITH DUAL HOLDERS	
1	ULTRAFLOW CALIBRATOR	
2	AIR SAMPLING PUMPS FROM LEA	
1	" " TUBING " "	
1	DUAL TUBE HOLDER " "	

Field Personnel Richard Twomey *Signature*

MARC BUDNICK

Loureiro Engineering Associates, Inc.

DAILY FIELD REPORT

Supplemental Sheet

LEA Comm. No.	**68VC134.001**	Page 2 of 3
Project	Indoor Air Monitoring - June 2001	Date 06/18/01
Location	P&W East Hartford Willgoos, East Hartford, CT	
Client	Pratt & Whitney East Hartford-PS	

Description of Site Activities

0645 - BADGE CONTROL
0700 ARRIVE AT SITE
0715 BEGIN SET-UP & CALIBRATION OF PUMPS
1015 - 1530 MONITOR PUMPS, 1530-1800 POST CALIBRATE & PICKUP PUMPS.

WG-RSK-AS-11: CONTROL METERS ON 1ST FLOOR, NO OIL EVIDENT: BASEMENT BELOW TIGHT CONCRETE FLOOR HAS PUMPS (OIL) STRAINERS, WITH SOME FUEL DRAINAGE IN BUCKETS. SMELL OF FUEL EVIDENT. AIR SAMPLING ON 1ST FLOOR. 6' ABOVE FLOOR ABOVE DISCONNECTS A2P1-1-6-19-1

WG-RSK-AS-16: WELD SHOP, COMPRESSED AIR CYLINDERS, NO LIQUID CHEMICALS, MACHINE TOOLING EQUIPMENT AIR SAMPLING PUMP 7' ABOVE FLOOR ADJACENT TO SHEAR 505674. DUPLICATE PUMP ALSO PLACED HERE.

WG-RSK-AS-14: TEST CELL (X235, 234) BUILDING, COLUMN NOT LABELED CENTER OF ROOM IN FRONT OF MIDDLE OVERHEAD DOOR, SAMPLE 6' ABOVE CONCRETE FLOOR, ENGINE DRESSING AREA IN FRONT OF 2 CELLS POG WITH OIL 40 FT FROM SAMPLE LOCATION. MIDDLE OVERHEAD DOOR OPEN.

WG-RSK-AS-13: EXHAUSTOR, MAIN BLDG., SAMPLE LOCATION ON COLUMN E24 ≈15' FROM FORMER LOCATION (12/21/00) CLOSED FLAMMABLE CABINET ≈15' FROM SAMPLE LOCATION. 2 CLOSED TOP DRUMS LABELED HAZARDOUS WASTE APPROX. 15' AWAY IN FRONT OF COLUMN FA 24. RIGGING OPERATIONS IN AREA. FORK LIFT. SAMPLER LOCATED 6 FT ABOVE CONCRETE FLOOR OVERHEAD DOOR & PASSAGE DOOR OPEN.

WG-RSK-AS-15: ESD AREA (FORMER FUEL LAB), OFFICE TYPE ROOM, NO CHEMICALS, NO OPERATIONS, ROOM AIRCONDITIONED SAMPLE 4' ABOVE CARPETED FLOOR (SLAB) ON INTERIOR WALL (NO COLUMN #)

WG-RSK-AS-17: OUTDOOR SAMPLE. SAMPLER LOCATED ON CATWALK BETWEEN WEST SIDE OF MAIN BUILDING AND RIVER. 40' FROM MAIN BLDG.

WG-RSK-AS-12: MAIN BUILDING, DOOR OPPOSITE PUMPHOUSE, COLUMN C6 MACHINERY, AND PIPING. OIL DRUM 15' FROM SAMPLE LOCATION SAMPLE 6' ABOVE SLAB ON COLUMN

1510 FOUND PUMP OUT @ WG-RSK-AS-12. ELAPSED TIME 271 MIN. REPLACED WITH ~~ANOTHER~~ ANOTHER PUMP.

Field Personnel	Richard Twomey MARK BLDNICK	Signature

Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD
MISCELLANEOUS SAMPLES

LEA Comm. No.	68VC134.001	Page 3 of 3
Project	Indoor Air Monitoring - June 2001	Date 06/18/01
Location	P&W East Hartford Willgoos, East Hartford, CT	
Client	Pratt & Whitney East Hartford-PS	

Sample ID	Location ID	Time	Sample Type	Depth (ft)	PID/FID Reading	Comments Pump #	~~Waste Container~~ TUBE ID
1997129	WG-RSK-AS-11	0725	VAPOR			572517	2834 TDT
1997130	"	0740	VAPOR			"	CT
1997131	WG-RSK-AS-16	0810	VAPOR			562668	2827 TDT
1997132	"	0810	VAPOR			"	CT
1997133	WG-RSK-AS-16	0820	DUPE			549647	2832 TDT
1997134	WG-RSK-AS-16	0820	DUPE			"	CT
1997135	WG-RSK-AS-14	0848	VAPOR			549705	2836 TDT
1997136	"	0848	VAPOR			"	CT
1997137	WG-RSK-AS-13	0906	VAPOR			562087	2831 TDT
1997138	"	0906	VAPOR			"	CT
1997139	WG-RSK-AS-15	0928	VAPOR			562688	2830 TDT
1997140	"	0928	VAPOR			"	CT
1997384	WG-RSK-AS-17	0950	VAPOR	FIELD		562020	2825 TDT
1997385	"	0950	VAPOR	FIELD		"	CT
1997386	WG-RSK-AS-12	1015	VAPOR			MSA	2833 TDT
1997387	"	1015	VAPOR			"	CT
1997388	BLANK	1030	VAPOR				2826 TDT
1997389	BLANK	1030	VAPOR				

GCMS tube (THERMAL DESORPTION)

Extra not used

Field Personnel Richard Twomey Richard Twomey Signature

7111

RECEIVED
HARTFORD EHL
JUN 19 2001
LOGGED AND CHECKED IN BY
SN

Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD
MISCELLANEOUS SAMPLES

LEA Comm. No.	68VC134.001		Page ____ of ____
Project	Indoor Air Monitoring - June 2001		Date 06/18/01
Location	P&W East Hartford Willgoos, East Hartford, CT		
Client	Pratt & Whitney East Hartford-PS		

	Sample ID	Location ID	Time	Sample Type	Depth (ft)	PID/FID Reading	Comments Pump #	~~Waste Container~~ TUBE ID
22.34	1997129	WG-RSK-AS-9	0725	VAPOR			572517	2834 TDT
	1997130	"	0740	VAPOR			"	CT
17.99	1997131	WG-RSK-AS-16	0810	VAPOR			562668	2827 TDT
	1997132	"	0810	VAPOR			"	CT
21.34	1997133	WG-RSK-AS-16	0820	DUPE			549647	2832 TDT
	1997134	WG-RSK-AS-16	0820	DUPE			"	CT
19.40	1997135	WG-RSK-AS-19	0845	VAPOR			549705	2836 TDT
	1997136	"	0848	VAPOR			"	CT
21.10	1997137	WG-RSK-AS-13	0906	VAPOR			562087	2831 TDT
	1997138	"	0906	VAPOR			"	CT
16.10	1997139	WG-RSK-AS-15	0928	VAPOR			562688	2830 TDT
	1997140	"	0925	VAPOR			"	CT
19.11	1997384	WG-RSK-AS-17	0950	VAPOR		FIELD	562020	2825 TDT
	1997385	"	0950	VAPOR		FIELD	"	CT
16.48	1997386	WG-RSK-AS-12	1015	VAPOR			MSA	2833 TDT
	1997387	"	1015	VAPOR			"	CT
	1997388	BLANK	1030	VAPOR				2826 TDT
	1997389	BLANK	1030	VAPOR				

GCMS tube
Extra not used

Field Personnel: Richard Twomey — Signature: Richard L. Twomey

Sent By: LOUREIRO ENG ASSOC ;

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Standard TAT

RUSH

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Lab Report No. C0107111
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Pol. Or Con. No.

Send INVOICE To: (REQUIRED)		Send RESULTS To: (REQUIRED)	
Name:	NICK SKOULARIKIS	Name:	
Company:	LOUREIRO ENGINEERING ASSOC	Company:	
Mailing Address:	100 NORTHWEST DRIVE	Mailing Address:	
City, State, Zip:	PLAINVILLE, CT 06062	City, State, Zip:	ELECTRONIC DELIVERY
PO#, Ref # (If Required)	–	Phone No:	☐ Phone Results
Accts. Payable Phone No:	860-747-6181	Fax No:	☐ Fax Results
Accts. Payable Fax No:	860-747-8822	Email:	☐ Email Results
Sampling Location:	P&W WILLGOOS FACILITY	Sampling Media:	THERMAL DESORPTION & CHARCOAL TUBE
Product Manufactured/Service Rendered:	TEST FACILITY	Sampling Method:	AIR SAMPLING PUMP (AREA)

ndskoularikis@loureiro.com

CHAIN OF CUSTODY

Collected by (print):	RICHARD E. TWOMEY	Collector's Signature:	Richard E. Twomey
Relinquished by:	Richard Twomey Date/Time 6/19/01, 0800	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time
Method of Shipment:		Received at Lab by:	ML 6/19/01 9:10 a.m.

Authorized by: Richard E. Twomey (Signature required) Date: 6/19/01

Sample Condition Upon Receipt: Acceptable / Unacceptable *

Sample No. (Lab Use Only)	Sample Container No.	Media Type	Analysis Method	Flow Rate/CC/MIN Notes: Pre	Post	Sampling Rate (Calculated)	Sampling Time: Start	End	Total Time (Minutes)	Air Sample Volume (Liters)
	1997129	TD	VOC	43	39	41	0725	1630	545	~~2.23~~ 22.34
	1997130	CT	VOC	206	219	213	0740	1630	530	112.89
	1997131	TD	VOC	36	33	35	0810	1644	514	17.99
	1997132	CT	VOC	206	206	206	0810	1644	514	105.88
	1997133	TD	VOC	42	43	42	0820	1648	508	21.34
	1997134	CT	VOC	213	211	212	0820	1648	508	107.70
	1997135	TD	VOC	40	37	39	0845	1704	499	19.46
	1997136	CT	VOC	211	217	214	0845	1704	499	106.79
	1997137	TD	VOC	47	43	45	0906	1655	469	21.10
	1997138	CT	VOC	209	208	209	0906	~~1531~~ 1655	469	98.02
	1997139	TD	VOC	45	43	44	0925	1531	366	16.10
	1997140	CT	VOC	213	228	221	0925	1531	366	80.88
	1997384	TD	VOC	47	37	42	0950	1725	455	19.11
	1997385	CT	VOC	225	229	227	0950	1725	455	103.28
	1997386	TD	VOC	43	37	40	1015	1707	412	16.48
	1997387	CT	VOC	209	205	207	1015	1707	412	85.28
	1997388	TD	VOC	–	–	–	–	1740	–	BLANK
	1997389	CT	VOC	–	–	–	–	1740	–	BLANK

103
16
85

FOR LAB NOTES ONLY:

Emailed 6/27/01 @ 8:30 a.m. ML

* couldn't read numbers correctly had to call client ~~had to change~~

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1707 1707

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Send INVOICE To [REQUIRED]		**Send RESULTS To [REQUIRED]**	
Name:	NICK SKOULARIKIS	**Name:**	SAME
Company:	LOUREIRO ENG. ASSOC.	**Company:**	
Mailing Address:	100 NORTHWEST DRIVE	**Mailing Address:**	
City, State, Zip:	PLAINVILLE, CT 06062	**City, State, Zip:**	ELECTRONIC DELIVERABLE
PO#, Ref # (If Required):	–	**Phone No:**	☐ **Phone Results**
Accts. Payable Phone No:	860-747-6181	**Fax No:**	☐ **FaxResults**
Accts. Payable Fax No:	860-747-8822	**Email:**	ndskoularikis@loureiro.com ☐ **Email Results**
Sampling Location:	P&W WILLGOOS FACILITY	Sampling Media:	THERMAL DESORPTION & CHARCOAL TUBES
Product Manufactured/Service Rendered:	TEST FACILITY	Sampling Method:	AIR SAMPLING PUMP (AREA)

CHAIN OF CUSTODY

Collected by (print): RICHARD E. TWOMEY		Collector's Signature: Richard E. Twomey	
Relinquished: Richard Twomey	Date/Time 6/19/01, 0830	Received by:	Date/Time
Relinquished by	Date/Time	Received by:	Date/Time
Method of Shipment		Received at Lab by:	Date/Time

Authorized by: Richard E. Twomey **Date:** 6/19/01
(signature required)

Sample Condition Upon Receipt: ☐ Acceptable ☐ Unacceptable

EHL SAMPLE NO (Lab Use Only)	SAMPLE CONTAINER NO	Media Type	ANALYSIS DESIRED A 3 sample minimum charge applies when less than 3 of each specific analyte is requested.	NOTES (Recording sampling date, Location and Operation. Other compounds present, etc.) FLOW RATE (CC/MIN) (CALIBRATION) PRE	POST	SAMPLING RATE ~~(liters/min)~~	SAMPLING TIME Start	End	Total Time (minutes)	AIR SAMPLE VOLUME (liters)
	1997129	TD	VOC	43	39	41	0725	1630	545	22.34
	1997130	CT	VOC	206	219	213	0740	1630	530	112.89
	1997131	TD	VOC	36	33	35	0810	1644	514	17.99
	1997132	CT	VOC	206	206	206	0810	1644	514	105.88
	1997133	TD	VOC	42	43	42	0820	1648	508	21.34
	1997134	CT	VOC	213	211	212	0820	1648	508	107.70
	1997135	TD	VOC	40	37	39	0845	1704	499	19.46
	1997136	CT	VOC	211	217	214	0845	1704	499	106.79
	1997137	TD	VOC	47	43	45	0906	1655	469	21.10
	1997138	CT	VOC	209	208	209	0906	1655	469	98.02
	1997139	TD	VOC	45	43	44	0925	1531	366	16.10
	1997140	CT	VOC	213	228	221	0925	1531	366	80.88
	1997384	TD	VOC	47	37	42	0950	1725	455	19.11
	1997385	CT	VOC	225	229	227	0950	1725	455	103.28
	1997386	TD	VOC	43	37	40	1015	1707	412	16.48
	1997387	CT	VOC	209	205	207	1015	1707	412	85.28

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Lab Report No.

Und	SRF	AR
ESIS	Z	Claims

Pol. Or Con. No.

Send INVOICE To [REQUIRED]		**Send RESULTS To [REQUIRED]**	
Name:	NICK SKOULARIKIS	**Name:**	
Company:	LOUREIRO ENG. ASSOC.	**Company:**	
Mailing Address:	100 NORTHWEST DRIVE	**Mailing Address:**	
City, State, Zip:	PLAINVILLE, CT 06062	**City, State, Zip:**	ELECTRONIC DELIVERABLE
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Relinquished by:	Date/Time	Received by:	Date/Time	
Method of Shipment:		Received at Lab by:	Date/Time	

Authorized by: Richard E. Twomey (signature required) **Date:** 6/19/01

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EHL SAMPLE NO (Lab Use Only)	SAMPLE CONTAINER NO	Media Type	ANALYSIS DESIRED A 3 sample minimum charge applies when less than 3 of each specific analyte is requested.	NOTES (Recording sampling date, Location and Operation. Other compounds present, etc.)	SAMPLING RATE (liters/min)	SAMPLING TIME Start	End	Total Time (minutes)	AIR SAMPLE VOLUME (liters)
	1997388	TD	VOC	BLANK	–	–	–	–	–
	1997389	CT	VOC	BLANK	–	–	–	–	–

FOR LAB NOTES ONLY:

September 21, 2001

Monitoring Event

DAILY FIELD REPORT

Loureiro Engineering Associates, Inc.

LEA Comm. No.	**68VC135.001**	Page 1 of 3
Project	Indoor Air Monitoring - September 2001	Date 09 / 21 / 01
Location	P&W East Hartford Willgoos, East Hartford, CT	
Client	Pratt & Whitney East Hartford-JT	

Arrived at Site ~0610 Departed from Site ~1640 Vehicle

Odometer (Start) Return

Site Activities

- [ ] Soil Sampling
- [ ] Groundwater Sampling
- [ ] Surface Water Sampling
- [ ] Surface Water Sampling
- [x] Vapor/Air Sampling
- [ ] Concrete Sampling
- [ ] Other Sampling
- [ ] Well Installation
- [ ] Well Development
- [ ] Geoprobe Work
- [ ] Concrete Coring
- [ ] Construction
- [ ] Inspection
- [ ] Waste Management
- [ ] Waste Management
- [ ] Site Walk Over
- [ ] Surveying
- [ ] Other (Describe)

Current Project Information

Last Sample Number Used

Last Location ID Used

Current Location (if not complete)

Sampling for

Laboratories used

Paperwork & Equipment left at/in

Site Contact JOE TOTA / GREG HOLLINGSWORTH

Contractors on Site LEA

Time and place to meet contractors

Non-productive Time

- [ ] None
- [ ] Equipment Breakdown
- [ ] Late
- [ ] Weather
- [ ] Missing Equipment
- [ ] Other (Describe)

Quality Assurance Checks

Yes	N/A	No	
X			Sample labels complete
X			Sample/cooler seals OK
X			All samples obtained
X			Chains of custody
X			All forms/logs complete
X			Site walkover
X			Site H&S Plan on site
X			Instruments calibrated

Residuals Disposition

Item	Approx. Amount	Container ID
Soil/Solid		
Groundwater		
Decon Fluid		
PPE		
Other		

Instrument Calibrations

pH/Conductivity

Std.	Standard	Meter
[ ]	pH 4	
[ ]	pH 7	
[ ]	pH 10	
	Cond.	

PID/FID Meter

Std.	Standard	Meter
[ ]	Zero w/Background	
[ ]	Zero w/Clean Air	

Balance

Std.	Standard	Reading
	Std. Mass	

Expendable Items Used

Qty	Item	LEA Number
	Decontamination Supplies	081
	Gas Probes- 5' Stainless Steel	110
	Miscellaneous Health & Safety Items	060
	Tedlar Bags	079
	Tygon Tubing	999
	Water, Distilled	025

Equipment Used

Qty	Item	LEA Number
	Air Sampler-MSA Escort Elf	047
	Miscellaneous Small Tools & Equipment	152
	Soil Gas Survey Equipment	087
	VOC Analyzer- Photovac (PID)	012
7	AIR SAMPING PUMPS FROM EHL	
7	" " TUBING " " WITH DUAL HOLDERS	
1	ULTRA FLOW CALIBRATOR	
1	ROTO FLOW CALIBRATOR FROM EHL	
2	AIR SAMPLING PUMPS FROM LEA	
2	" " TUBING " "	
2	DUAL HOSE HOLDER " "	

Field Personnel RICHARD E. TWOMEY
JOHN H. DIMARIA

Signature John H. DiMaria

Loureiro Engineering Associates, Inc.

DAILY FIELD REPORT

Supplemental Sheet

LEA Comm. No.	**68VC135.001**	Page 2 of 3
Project	Indoor Air Monitoring - September 2001	Date 09/21/01
Location	P&W East Hartford Willgoos, East Hartford, CT	
Client	Pratt & Whitney East Hartford-JT	

Description of Site Activities

0610 ARRIVE AT SITE (RAINING)

0640 BADGE CONTROL

0645 BEGIN SETUP AND CALIBRATION OF PUMPS — 0845 FINISHED PUMP PLACEMENTS - JHD LEFT FOR N.HTFD.

0653 - 1506 MONITOR PUMPS — 1230 JHD RETURNED FROM N.HTFD.

1506 - 1607 POST CALIBRATE PUMPS AND PICK UP PUMPS

1. WG-RSK-AS-11: CONTROL METERS ON 1ST FLR, NO OIL EVIDENT; BSMT BELOW TIGHT CONCRETE FLOOR HAS PUMPS (OIL) STRAINERS WITH SOME FUEL DRAINAGE IN BUCKETS; SMELL OF FUEL EVIDENT. AIR SAMPLING ON 1ST FLOOR, 6 FT ABOVE FLOOR, ABOVE DISCONNECTS A281-1-6-19-1. LARGE FLAMMABLE LIQUIDS STORAGE CABINET, SM. SPRAY BOTTLES OF EYEGLASS CLEANER, DEGREASER, & CLEANER 18' FROM PUMP.
2. WG-RSK-AS-16: WELD SHOP; COMPRESSED AIR CYLINDERS; NO LIQUID CHEMICALS; MACHINE TOOLING EQUIPMENT. AIR SAMPLING PUMP 7 FT ABOVE FLOOR ADJACENT TO SHEAR 505674.
3. WG-RSK-AS-14: TEST CELL (X 235.234) BLDG. COLUMN NOT LABELED, CENTER OF ROOM IN FRONT OF MIDDLE OVERHEAD DOOR. SAMPLE 6' ABOVE CONCRETE FLOOR; ENGINE DRESSING AREA IN FRONT OF 2 CELLS POG WITH OIL 40 FT FROM SAMPLE LOCATION. MIDDLE OVERHEAD DOOR CLOSED. 757 ENGINE HANGING AND OPEN IN BAY 15 FT FROM PUMP.
4. WG-RSK-AS-13: EXHAUSTER MAIN BUILDING. SAMPLE LOCATION ON COLUMN E24 ~15 FT FROM FORMER LOCATION ON 12/21/00. CLOSED FLAMMABLE CABINET ~15 FT FROM SAMPLE LOCATION. 2 CLOSED TOP DRUMS LABELED HAZARDOUS WASTE ~15 FT AWAY IN FRONT OF COLUMN FA24. RIGGING OPERATIONS IN AREA. FORK LIFT. SAMPLE LOCATED 6 FT ABOVE CONCRETE FLOOR; OH. DOOR AND PASSAGE DOOR OPEN.
5. WG-RSK-AS-15: ESD AREA (FORMER FUEL LAB); OFFICE TYPE ROOM; ROOM AIR CONDITIONED; SAMPLE ~4 FT ABOVE CARPETTED FLOOR (SLAB) ON INTERIOR WALL (NO COLUMN #). ALCOHOL BOTTLES (SM. OZ. CONTAINERS) REMOVED FROM INSIDE ROOM. FLAMMABLE LIQUIDS CABINET ~15 FT FROM PUMPS. DUPLICATE PUMP ALSO PLACED (STOPPED @ 309 MIN. ELAPSED TIME)
6. WG-RSK-AS-17: OUTDOOR SAMPLE, SAMPLE LOCATED UNDER CATWALK BETWEEN WEST SIDE OF MAIN BUILDING AND RIVER, ~40 FT FROM MAIN BUILDING, SUBJECTED TO INTERMITTENT RAIN.
7. WG-RSK-AS-12: MAIN BUILDING, DOOR OPPOSITE PUMPHOUSE; COLUMN C6, MACHINERY AND PIPING. OIL DRUM ~15 FT. FROM SAMPLE LOCATION. SAMPLE ~6 FT ABOVE SLAB ON COLUMN.

Field Personnel	RICHARD E. TWOMEY JOHN H. DIMARIA	***Signature***

Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD
SOIL VAPOR SCREENING

LEA Comm. No.	**68VC135.001**	Page 3 of 3
Project	Indoor Air Monitoring - September 2001	Date 09/21/01
Location	P&W East Hartford Willgoos, East Hartford, CT	
Client	Pratt & Whitney East Hartford-JT	

	Sample ID	Location ID	Time (MIN)	Depth (ft)	High Reading	Low Reading	Flow Rate	PID/FID Reading	Comments TIME	EHL TUBE#		PUMP#
	2007375	WG-RSK-AS-11	493				17.0		0653-1456	2964	TD	56206
	"	"	"				206		" "		CT	"
	2007376	" -16	477				42.1		0716-1513	2970	TD	562688
	"	"	"				206		" "		CT	"
	2007377	" -14	474				41.6		0730-1524	2961	TD	562687
	"	"	"				206		" "		CT	"
	2007378	" -13	467				35.3		0740-1527	2962	TD	549647
	"	"	"				186		" "		CT	"
	2007379	" -15	460				41.6		0804-1544	2963	TD	549535
	"	"	"				206		" "		CT	"
DUPL	2007380	" -15	309	[redacted]			41.6		0804-1313	2966	TD	562043
DUPL	"	"	"				206		" "		CT	"
FIELD BLANK	2007381	" -17	438				45.6		0843-1601	2956	TD	MSA#2
	"	"	"				200.5		" "		CT	"
	2007382	" -12	454				35.3		0833-1607	2968	TD	562668
	"	"	"				197.4		" "		CT	"
TRIP BLANK	2007383	BLANK	—				—		—	2969	TD	—
	"	"	"				"		"		CT	"

Field Personnel: RICHARD E. TWOMEY, JOHN H. DiMARIA

Signature

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romwell, CT 06416
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☐ Und ☐ SRF ☐ AR
☐ ESIS ☐ Z ☐ Claims

Pol. Or Con. No.

Send INVOICE To [REQUIRED]		***Send RESULTS To [REQUIRED]***	
Name: NICK SKOULARIKIS		**Name:** NICK SKOULARIKIS	
Company: LOUREIRO ENGINEERING ASSOC., INC		**Company:**	
Mailing Address: 100 NORTHWEST DRIVE		**Mailing Address:** SAME	
City, State, Zip: PLAINVILLE, CT 06062		**City, State, Zip:**	
PO#, Ref # (If Required):		**Phone No:**	☐ **Phone Results**
Accts. Payable Phone No: 860 7476181		**Fax No:** (ELECTRONIC COPY) X HARD COPY	☐ **FaxResults**
Accts. Payable Fax No: 860 747 8822		**Email:** ndskoularikis@loureiro.com	☒ **Email Results**
Sampling Location: P&W WILLGOOS FACILITY		Sampling Media: THERMAL DESORPTION AND CHARCOAL TUBE	
Product Manufactured/Service Rendered: TEST FACILITY		Sampling Method: AIR SAMPLING PUMP	

CHAIN OF CUSTODY				
Collected by (*print*): RICHARD E. TWOMEY		Collector's Signature:		
Relinquished by:	Date/Time	Received by:	Date/Time	
Relinquished by:	Date/Time	Received by:	Date/Time	
Method of Shipment:		Received at Lab by:	Date/Time	

Authorized by:_____ **Date:**_____
(signature required)

Sample Condition Upon Receipt: ☐ Acceptable ☐ Unacceptable

EHL SAMPLE NO (Lab Use Only)	SAMPLE CONTAINER NO	Media Type	ANALYSIS DESIRED (A 3 sample minimum charge applies when less than 3 of each specific analyte is requested.)	NOTES (Recording sampling date, Location and Operation. Other compounds present, etc.) FLOW RATE PRE	POST	SAMPLING RATE cc/MIN (liters/min)	SAMPLING TIME Start	End	Total Time (minutes)	AIR SAMPLE VOLUME (liters)
	200 7375 2964	TD	VOC	17.7	16.3	17.0	0653	1456	493	8.38
	200 7375 WG-RSK-AS-11	CT	VOC	206	206	206	0653	1456	493	101.56
	200 7376 2970	TD	VOC	42.1	42.1	42.1	0716	1513	477	20.08
	200 7376 WG-RSK-AS 16	CT	VOC	206	206	206	0716	1513	477	98.26
	200 7377 2967	TD	VOC	42.1	41	41.6	0730	1524	474	19.72
	200 7377 WG-RSK-AS-14	CT	VOC	206	206	206	0730	1524	474	97.64
	200 7378 2962	TD	VOC	42.1	28.5	35.3	0740	1527	467	16.49
	200 7378 WG-RSK-AS-13	CT	VOC	206	166	186	0740	1527	467	86.86
	200 7379 2963	TD	VOC	42.1	41	41.6	0804	1544	460	19.14
	200 7379 WG-RSK-AS-15	CT	VOC	206	206	206	0804	1544	460	94.76
	200 7380 2966	TD	– DUPL VOC	42.1	41	41.6	0804	1313	309	12.85
	200 7380 WG-RSK-AS-15	CT	– DUPL VOC	206	206	206	0804	1313	309	63.65
	200 7381 2956	TD	VOC	42.1	49	45.6	0843	1601	438	19.97
	200 7381 WG-RSK-AS-17	CT	VOC	206	195	200.5	0843	1601	438	87.82
	200 7382 2968	TD	VOC	42.1	28.5	35.3	0833	1607	454	16.03
	200 7382 WG-RSK-AS-12	CT	VOC	206	188.8	197.4	0833	1607	454	89.62

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Send INVOICE To [REQUIRED]	***Send RESULTS To [REQUIRED]***
Name: NICK SKOULARIKIS	**Name:** ndskoularikis@loureiro.com
Company: LOUREIRO ENGINEERING ASSOCIATES INC	**Company:** (SAME)
Mailing Address: 100 NORTHWEST DRIVE	**Mailing Address:** {ELECTRONIC DELIVERY
City, State, Zip: PLAINVILLE, CT 06062	**City, State, Zip:** + HARD COPY}
PO#, Ref # (If Required):	**Phone No:** (SAME) ☐ **Phone Results**
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Product Manufactured/Service Rendered: TEST FACILITY	Sampling Method: AIR SAMPLING PUMP

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Collected by (*print*): RICHARD E. TWOMEY		Collector's Signature:		
Relinquished by:	Date/Time	Received by:	Date/Time	
Relinquished by:	Date/Time	Received by:	Date/Time	
Method of Shipment:		Received at Lab by:	Date/Time	

Authorized by:_____ **Date:**_____
(signature required)

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	~~200 7383~~ 2969	TD	VOC	BLANK						
	200 7383	CT	VOC	"						
		~~TD~~								
		~~CT~~								

FOR LAB NOTES ONLY:

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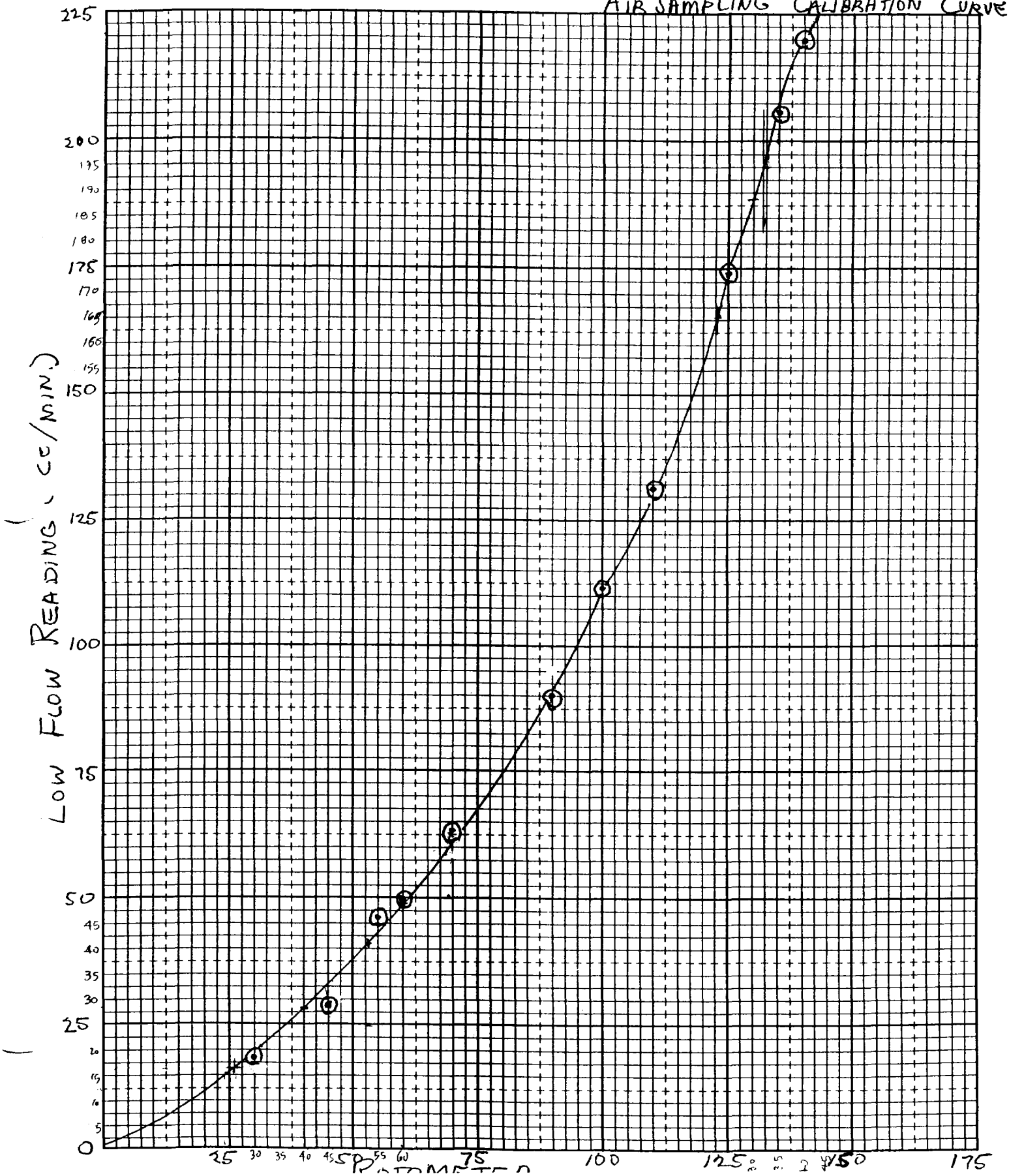
Rotometer Reading	Low Flow Reading (cc/min)
30	17.7
45	29.4
55	42.1
65	49.8
70	63
90	90
100	112
110	132
125	174
135	206
140	220
145	241

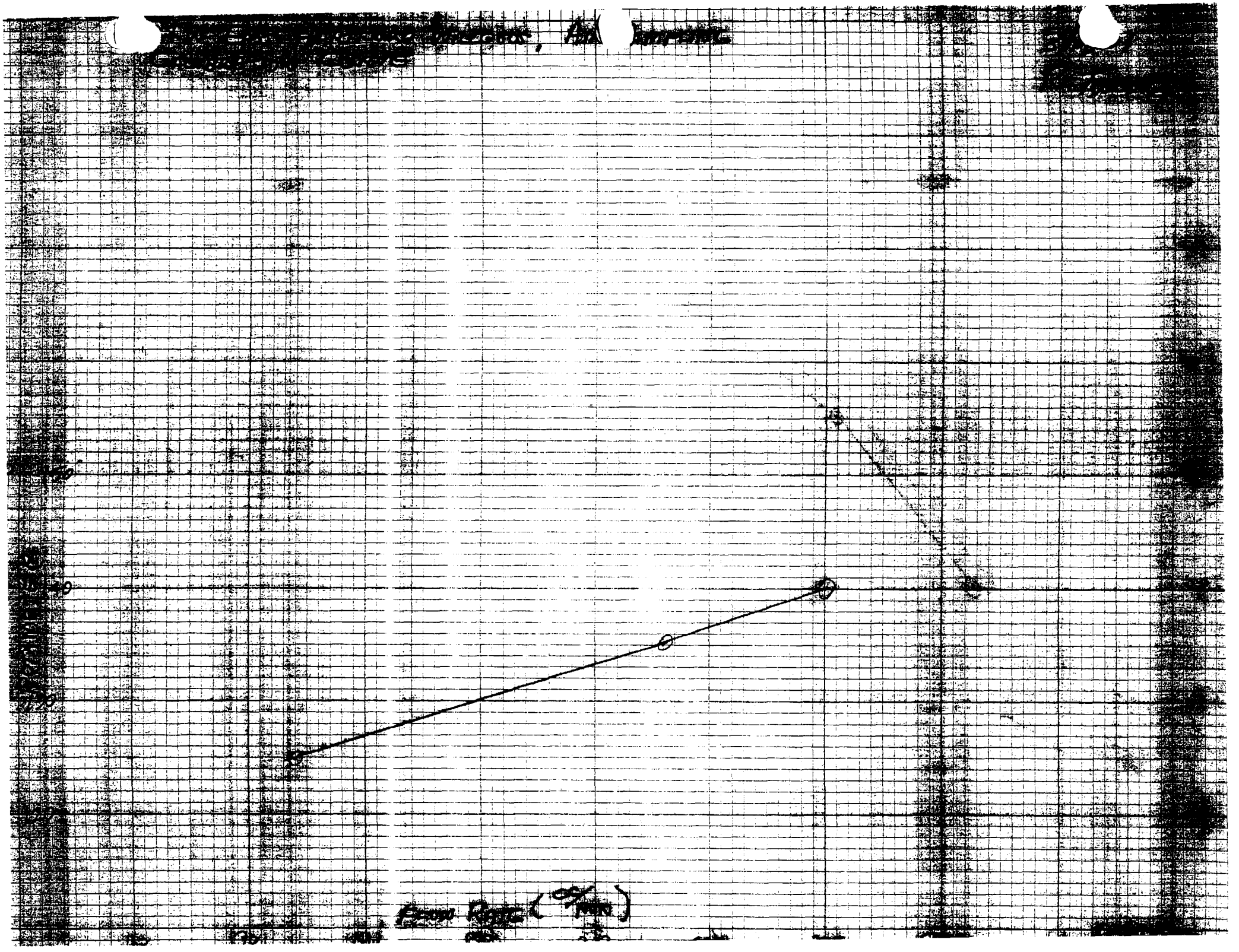
Calibrated by: JPM
Date: 11/22/2000

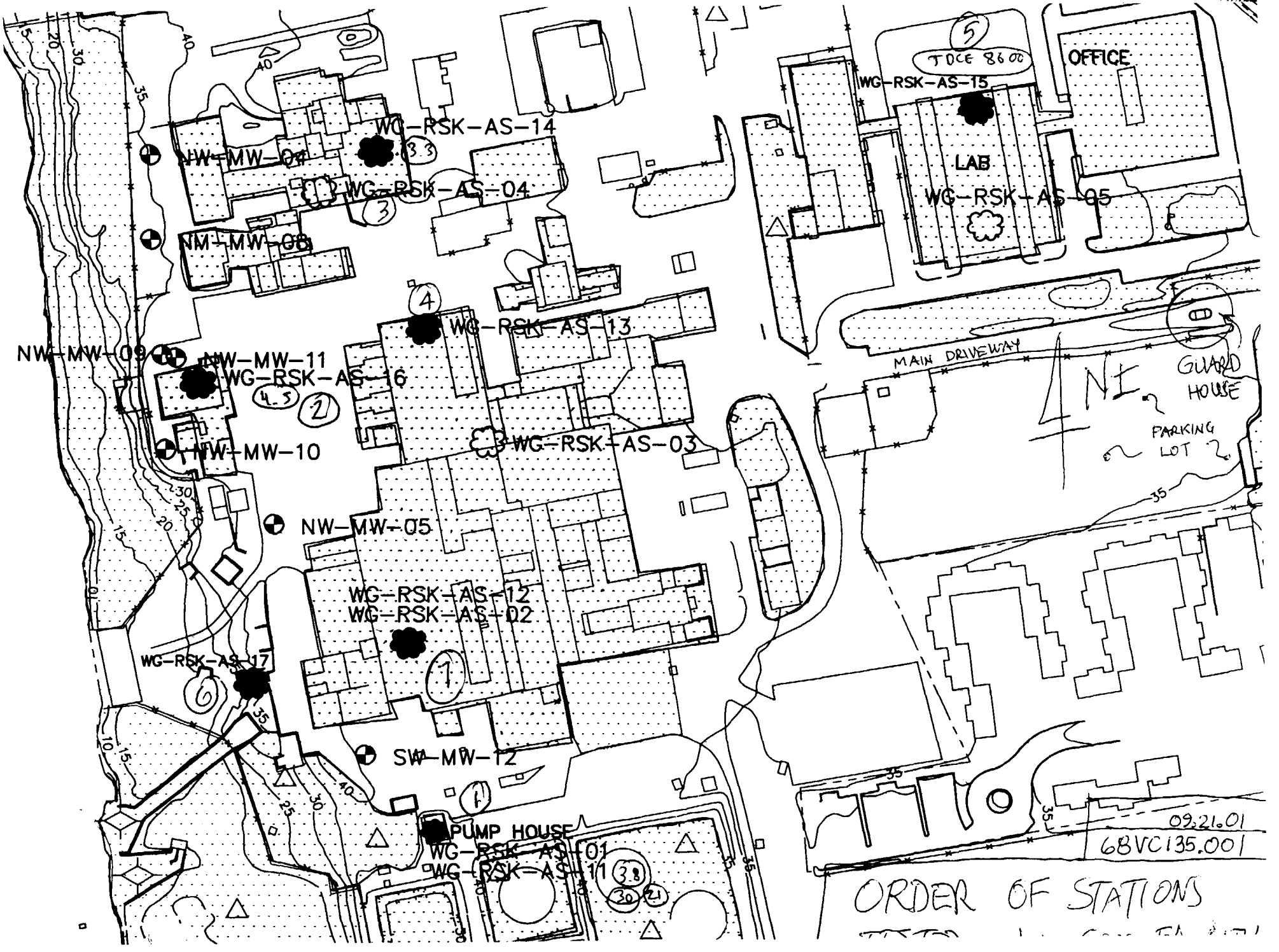
Notes & Computations

Loureiro Engineering Associates, Inc.
100 Northwest Drive • Plainville, Connecticut 06062
An Employee Owned Company

Comm No. 68VC132 Page 1 of 2
By DICK TWOMEY Date 12/21/00
Approved By _____ Date _____
Project P&W WILGOOD VCAP 68VC132
AIR SAMPLING CALIBRATION CURVE




Growth Rate (%/year)


WG-RSK-AS-14
NW-MW-04
WG-RSK-AS-04
NW-MW-08
WG-RSK-AS-15
OFFICE
LAB
WG-RSK-AS-05
TOCE 8600
WG-RSK-AS-13
NW-MW-09
MW-MW-11
WG-RSK-AS-16
NW-MW-10
WG-RSK-AS-03
MAIN DRIVEWAY
GUARD HOUSE
PARKING LOT
NW-MW-05
WG-RSK-AS-12
WG-RSK-AS-02
WG-RSK-AS-17
SW-MW-12
PUMP HOUSE
WG-RSK-AS-01
WG-RSK-AS-11
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68VC135.001
ORDER OF STATIONS

ATTACHMENT 2

Copies of Analytical Reports

December 21, 2000

Monitoring Event

ace usa

January 9, 2001

Nick Skoularikis
Loureio Eng. Assoc.
100 Northwest, Dr.
Plainville, CT 06062

REPORT #: C0005922

Nick,

Enclosed are the GC/MS results for the samples you sent in. If you have any further questions please don't hesitate to call me.

Sincerely,

John Lee
Chemist
Environmental Health Laboratory
100 Sebethe Drive; Suite A-5
Cromwell, CT 06416
(860) 635-6475
Fax (860) 635-6750

JL: ml

enc.

ENVIRONMENTAL HEALTH LABORATORY ANALYSIS REPORT

100 Sebethe Drive, Suite A-5
Cromwell, Connecticut 06416
(800)243-4903/(860)635-6475

Analysis: Expanded Scan
Analytical Method: GC/MS Thermal Desorption; Modified EPA TO1/TO2 **Report Number *C0005922***

Sample Number	1979474	1979474	1979476	1979476	1979478	
Air Volume Liters	15.2	15.2	8.69	8.69	9.72	
Compounds	ug/m3	ppb	ug/m3	ppb	ug/m3	CAS #
Dichlorodifluoromethane	**6.2**	**1.3**	**5.1**	**1.0**	**31**	75-71-8
Chloromethane	**0.36**	**0.18**	<0.58	<0.28	**0.95**	74-87-3
Chloroethene	<0.33	<0.13	<0.58	<0.23	<0.51	75-01-4
Bromomethane	<0.33	<0.086	<0.58	<0.15	<0.51	74-83-9
Chloroethane	<0.33	<0.13	<0.58	<0.22	<0.51	75-003
Trichlorofluoromethane	**0.99**	**0.18**	**0.69**	**0.12**	**2.4**	75-69-4
1,1-Dichloroethene	<0.33	<0.084	**0.85**	**0.22**	<0.51	75-35-4
Methylene Chloride	**6.2**	**1.8**	<0.58	<0.17	<0.51	75-09-2
trans-1,2-Dichloroethene	<0.33	<0.084	<0.58	<0.15	<0.51	156-60-5
1,1-Dichloroethane	<0.33	<0.082	<0.58	<0.14	<0.51	75-34-3
2,2-Dichloropropane	<0.33	<0.072	<0.58	<0.13	<0.51	594-20-7
cis-1,2-Dichloroethene	<0.33	<0.084	<0.58	<0.15	<0.51	156-59-2
Bromochloromethane	<0.33	<0.063	<0.58	<0.11	<0.51	74-97-5
Chloroform	<0.33	<0.068	<0.58	<0.12	<0.51	67-66-3
1,1,1-Trichloroethane	**2.8**	**0.52**	**2.9**	**0.53**	<0.51	71-55-6
1,1-Dichloropropene	<0.33	<0.073	<0.58	<0.13	<0.51	563-58-6
Carbon Tetrachloride	<0.33	<0.053	<0.58	<0.093	<0.51	56-23-5
Benzene	**3.8**	**1.2**	**4.5**	**1.4**	**1.9**	71-43-2
1,2-Dichloroethane	<0.33	<0.082	<0.58	<0.14	<0.51	107-06-2
Trichloroethene	<0.33	<0.062	<0.58	<0.11	**18**	79-01-6
1,2-Dichloropropane	<0.33	<0.072	<0.58	<0.13	<0.51	78-87-5
Dibromomethane	<0.33	<0.047	<0.58	<0.082	<0.51	74-95-3
Bromodichloromethane	<0.33	<0.050	<0.58	<0.087	<0.51	75-27-4
cis-1,3-Dichloropropene	<0.33	<0.073	<0.58	<0.13	<0.51	10061-01-5
Toluene	**22**	**5.9**	**14**	**3.7**	**4.4**	108-88-3
trans-1,3-Dichloropropene	<0.33	<0.073	<0.58	<0.13	<0.51	10061-02-6
1,1,2-Trichloroethane	<0.33	<0.061	<0.58	<0.11	<0.51	79-00-5
Tetrachloroethene	**0.39**	**0.059**	**4.2**	**0.62**	<0.51	127-18-4
1,3-Dichloropropane	<0.33	<0.072	<0.58	<0.13	<0.51	142-28-9
Dibromochloromethane	<0.33	<0.039	<0.58	<0.068	<0.51	124-48-1
1,2-Dibromoethane	<0.33	<0.043	<0.58	<0.076	<0.51	106-93-4
Chlorobenzene	<0.33	<0.072	<0.58	<0.13	<0.51	108-90-7
1,1,1,2-Tetrachloroethane	<0.33	<0.048	<0.58	<0.085	<0.51	630-20-6

Analyst: John A. Lee _____ Date: 1/8/01

100 Sebethe Drive, Suite A-5
Cromwell, Connecticut 06416
(800)243-4903/(860)635-6475

Report Number C0005922

Sample Number	1979474	1979474	1979476	1979476	1979478	
Air Volume Liters	15.2	15.2	8.69	8.69	9.72	
Compounds (cont.)	ug/m3	ppb	ug/m3	ppb	ug/m3	CAS #
Ethylbenzene	**7.8**	**1.8**	**3.1**	**0.71**	**1.0**	100-41-4
m,p-Xylene	**28**	**6.5**	**11**	**2.6**	**3.3**	1330-20-7
o-Xylene	**11**	**2.5**	**4.1**	**0.94**	**1.1**	95-47-6
Styrene	**0.76**	**0.18**	<0.58	<0.14	<0.51	100-42-5
Bromoform	<0.33	<0.032	<0.58	<0.056	<0.51	75-25-2
Isopropylbenzene	**0.81**	**0.16**	<0.58	<0.12	<0.51	98-82-8
1,1,2,2-Tetrachloroethane	<0.33	<0.048	<0.58	<0.085	<0.51	79-34-5
1,2,3-Trichloropropane	<0.33	<0.055	<0.58	<0.096	<0.51	96-18-4
Bromobenzene	<0.33	<0.052	<0.58	<0.090	<0.51	108-86-1
n-Propylbenzene	**2.5**	**0.51**	**0.90**	**0.18**	<0.51	103-65-1
2-Chlorotoluene	<0.33	<0.064	<0.58	<0.11	<0.51	95-49-8
1,3,5-Trimethylbenzene	**5.8**	**1.2**	**1.6**	**0.33**	<0.51	108-67-8
4-Chlorotoluene	<0.33	<0.064	<0.58	<0.11	<0.51	106-43-4
tert-Butylbenzene	<0.33	<0.060	<0.58	<0.10	<0.51	98-06-6
1,2,4-Trimethylbenzene	**18**	**3.7**	**4.8**	**0.98**	**1.3**	95-63-6
sec-Butylbenzene	**0.85**	**0.15**	<0.58	<0.10	<0.51	135-98-8
p-Isopropyltoluene	**2.4**	**0.44**	<0.58	<0.10	<0.51	535-77-3
1,3-Dichlorobenzene	<0.33	<0.055	<0.58	<0.096	<0.51	541-73-1
1,4-Dichlorobenzene	<0.33	<0.055	<0.58	<0.096	<0.51	106-46-7
n-Butylbenzene	<0.33	<0.060	<0.58	<0.10	<0.51	104-51-8
1,2-Dichlorobenzene	<0.33	<0.055	<0.58	<0.096	<0.51	95-50-1
1,2-Dibromo-3-chloropropane	<0.33	<0.034	<0.58	<0.060	<0.51	96-12-8
1,2,4-Trichlorobenzene	<0.33	<0.045	<0.58	<0.078	<0.51	120-82-1
Hexachlorobutadiene	<0.33	<0.031	<0.58	<0.055	<0.51	87-68-3
Naphthalene	**3.5**	**0.67**	<0.58	<0.11	<0.51	91-20-3
1,2,3-Trichlorobenzene	<0.33	<0.045	<0.58	<0.078	<0.51	87-61-6
Acetone	*** # 20**	*** # 8.6**	*** 2.5**	*** 1.0**	*** 2.2**	67-64-1
Methyl Ethyl Ketone	**1.1**	**0.39**	<0.58	<0.20	<0.51	78-93-3
Methyl Isobutyl Ketone	**0.34**	**0.084**	<0.58	<0.14	<0.51	108-10-1
	ug/m3		ug/m3		ug/m3	
**Total Hydrocarbons	**940**		**240**		**110**	---

Compound(s) concentration exceeded the upper limit of the calibration range but did not surpass the breakthrough level or saturate the detector. This value is reported as an estimate.

Thermal desorption requires the entire sample to be analyzed at one time. Sample breakthrough cannot be detected.

* Compound reported as an estimate due to coelution with another compound sharing the same quantitation ions.
**This value is a summation of all peak areas present in the sample (quantitated as toluene).

Analyst: John A. Lee _____ Date: 1/8/01

ENVIRONMENTAL HEALTH LABORATORY ANALYSIS REPORT

100 Sebethe Drive, Suite A-5
Cromwell, Connecticut 06416
(800)243-4903/(860)635-6475

Analysis: Expanded Scan

Analytical Method: GC/MS Thermal Desorption; Modified EPA TO1/TO2 **Report Number *C0005922***

Sample Number	1979478	1979480	1979480	1979482	1979482	
Air Volume Liters	9.72	14.6	14.6	14.6	14.6	
Compounds	ppb	ug/m3	ppb	ug/m3	ppb	CAS #
Dichlorodifluoromethane	**6.3**	**5.6**	**1.1**	**5.5**	**1.1**	75-71-8
Chloromethane	**0.46**	**0.64**	**0.31**	**0.40**	**0.20**	74-87-3
Chloroethene	<0.20	<0.34	<0.14	<0.34	<0.14	75-01-4
Bromomethane	<0.13	<0.34	<0.089	<0.34	<0.089	74-83-9
Chloroethane	<0.20	<0.34	<0.13	<0.34	<0.13	75-003
Trichlorofluoromethane	**0.43**	**0.98**	**0.18**	**1.2**	**0.22**	75-69-4
1,1-Dichloroethene	<0.13	<0.34	<0.087	<0.34	<0.087	75-35-4
Methylene Chloride	<0.15	**0.42**	**0.12**	**0.79**	**0.23**	75-09-2
trans-1,2-Dichloroethene	<0.13	<0.34	<0.087	<0.34	<0.087	156-60-5
1,1-Dichloroethane	<0.13	<0.34	<0.085	<0.34	<0.085	75-34-3
2,2-Dichloropropane	<0.11	<0.34	<0.075	<0.34	<0.075	594-20-7
cis-1,2-Dichloroethene	<0.13	<0.34	<0.087	<0.34	<0.087	156-59-2
Bromochloromethane	<0.098	<0.34	<0.065	<0.34	<0.065	74-97-5
Chloroform	<0.11	<0.34	<0.071	<0.34	<0.071	67-66-3
1,1,1-Trichloroethane	<0.095	<0.34	<0.063	<0.34	<0.063	71-55-6
1,1-Dichloropropene	<0.11	<0.34	<0.076	<0.34	<0.076	563-58-6
Carbon Tetrachloride	<0.083	<0.34	<0.055	<0.34	<0.055	56-23-5
Benzene	**0.61**	**3.3**	**1.0**	**1.8**	**0.56**	71-43-2
1,2-Dichloroethane	<0.13	<0.34	<0.085	<0.34	<0.085	107-06-2
Trichloroethene	**3.3**	**0.67**	**0.13**	**0.61**	**0.12**	79-01-6
1,2-Dichloropropane	<0.11	<0.34	<0.075	<0.34	<0.075	78-87-5
Dibromomethane	<0.073	<0.34	<0.049	<0.34	<0.049	74-95-3
Bromodichloromethane	<0.078	<0.34	<0.052	<0.34	<0.052	75-27-4
cis-1,3-Dichloropropene	<0.11	<0.34	<0.076	<0.34	<0.076	10061-01-5
Toluene	**1.2**	**5.0**	**1.3**	**4.2**	**1.1**	108-88-3
trans-1,3-Dichloropropene	<0.11	<0.34	<0.076	<0.34	<0.076	10061-02-6
1,1,2-Trichloroethane	<0.095	<0.34	<0.063	<0.34	<0.063	79-00-5
Tetrachloroethene	<0.077	**0.40**	**0.060**	<0.34	<0.051	127-18-4
1,3-Dichloropropane	<0.11	<0.34	<0.075	<0.34	<0.075	142-28-9
Dibromochloromethane	<0.061	<0.34	<0.041	<0.34	<0.041	124-48-1
1,2-Dibromoethane	<0.068	<0.34	<0.045	<0.34	<0.045	106-93-4
Chlorobenzene	<0.11	<0.34	<0.075	<0.34	<0.075	108-90-7
1,1,1,2-Tetrachloroethane	<0.076	<0.34	<0.050	<0.34	<0.050	630-20-6

Analyst: John A. Lee _____ Date: 1/8/01

100 Sebethe Drive, Suite A-5
Cromwell, Connecticut 06416
(800)243-4903/(860)635-6475

Report Number *C0005922*

Sample Number	1979478	1979480	1979480	1979482	1979482	
Air Volume Liters	9.72	14.6	14.6	14.6	14.6	
Compounds (cont.)	ppb	ug/m3	ppb	ug/m3	ppb	CAS #
Ethylbenzene	**0.23**	**1.5**	**0.34**	**1.4**	**0.32**	100-41-4
m,p-Xylene	**0.76**	**5.1**	**1.2**	**4.5**	**1.0**	1330-20-7
o-Xylene	**0.26**	**2.2**	**0.51**	**2.0**	**0.46**	95-47-6
Styrene	<0.12	**0.39**	**0.092**	<0.34	<0.080	100-42-5
Bromoform	<0.050	<0.34	<0.034	<0.34	<0.034	75-25-2
Isopropylbenzene	<0.10	<0.34	<0.070	<0.34	<0.070	98-82-8
1,1,2,2-Tetrachloroethane	<0.076	<0.34	<0.050	<0.34	<0.050	79-34-5
1,2,3-Trichloropropane	<0.086	<0.34	<0.057	<0.34	<0.057	96-18-4
Bromobenzene	<0.081	<0.34	<0.054	<0.34	<0.054	108-86-1
n-Propylbenzene	<0.10	**0.95**	**0.19**	**0.84**	**0.17**	103-65-1
2-Chlorotoluene	<0.10	<0.34	<0.066	<0.34	<0.066	95-49-8
1,3,5-Trimethylbenzene	<0.10	**1.5**	**0.31**	**1.3**	**0.27**	108-67-8
4-Chlorotoluene	<0.10	<0.34	<0.066	<0.34	<0.066	106-43-4
tert-Butylbenzene	<0.094	<0.34	<0.062	<0.34	<0.062	98-06-6
1,2,4-Trimethylbenzene	**0.27**	**4.8**	**0.99**	**4.3**	**0.88**	95-63-6
sec-Butylbenzene	<0.094	**0.45**	**0.081**	**0.39**	**0.071**	135-98-8
p-Isopropyltoluene	<0.094	**0.62**	**0.11**	**0.55**	**0.10**	535-77-3
1,3-Dichlorobenzene	<0.086	<0.34	<0.057	<0.34	<0.057	541-73-1
1,4-Dichlorobenzene	<0.086	<0.34	<0.057	<0.34	<0.057	106-46-7
n-Butylbenzene	<0.094	<0.34	<0.062	<0.34	<0.062	104-51-8
1,2-Dichlorobenzene	<0.086	<0.34	<0.057	<0.34	<0.057	95-50-1
1,2-Dibromo-3-chloropropane	<0.054	<0.34	<0.036	<0.34	<0.036	96-12-8
1,2,4-Trichlorobenzene	<0.070	<0.34	<0.047	<0.34	<0.047	120-82-1
Hexachlorobutadiene	<0.049	<0.34	<0.032	<0.34	<0.032	87-68-3
Naphthalene	<0.098	**3.4**	**0.65**	**2.6**	**0.51**	91-20-3
1,2,3-Trichlorobenzene	<0.070	<0.34	<0.047	<0.34	<0.047	87-61-6
Acetone	*** 0.91**	*** 3.6**	*** 1.5**	*** 2.7**	*** 1.2**	67-64-1
Methyl Ethyl Ketone	<0.17	<0.34	<0.12	<0.34	<0.12	78-93-3
Methyl Isobutyl Ketone	<0.13	<0.34	<0.084	<0.34	<0.084	108-10-1
		ug/m3		ug/m3		
**Total Hydrocarbons		**290**		**250**		---

Thermal desorption requires the entire sample to be analyzed at one time. Sample breakthrough cannot be detected.

* Compound reported as an estimate due to coelution with another compound sharing the same quantitation ions.
**This value is a summation of all peak areas present in the sample (quantitated as toluene).

Analyst: John A. Lee _____ Date: 1/8/01

ENVIRONMENTAL HEALTH LABORATORY ANALYSIS REPORT

100 Sebethe Drive, Suite A-5
Cromwell, Connecticut 06416
(800)243-4903/(860)635-6475

Analysis: Expanded Scan

Analytical Method: GC/MS Thermal Desorption; Modified EPA TO1/TO2 **Report Number *C0005922***

Sample Number	1979484	1979484	1979486	1979488	1979488	
Air Volume Liters	12.9	12.9	---	14.0	14.0	
Compounds	ug/m3	ppb	ng	ug/m3	ppb	CAS #
Dichlorodifluoromethane	**4.3**	**0.88**	<5.0	**# 58**	**# 12**	75-71-8
Chloromethane	<0.39	<0.19	<5.0	**0.44**	**0.22**	74-87-3
Chloroethene	<0.39	<0.15	<5.0	<0.36	<0.14	75-01-4
Bromomethane	<0.39	<0.10	<5.0	<0.36	<0.093	74-83-9
Chloroethane	<0.39	<0.15	<5.0	<0.36	<0.14	75-003
Trichlorofluoromethane	**0.86**	**0.15**	**16**	**1.6**	**0.30**	75-69-4
1,1-Dichloroethene	<0.39	<0.099	<5.0	<0.36	<0.091	75-35-4
Methylene Chloride	<0.39	<0.11	**16**	**0.53**	**0.15**	75-09-2
trans-1,2-Dichloroethene	<0.39	<0.099	<5.0	<0.36	<0.091	156-60-5
1,1-Dichloroethane	<0.39	<0.097	<5.0	<0.36	<0.089	75-34-3
2,2-Dichloropropane	<0.39	<0.085	<5.0	<0.36	<0.078	594-20-7
cis-1,2-Dichloroethene	<0.39	<0.099	<5.0	<0.36	<0.091	156-59-2
Bromochloromethane	<0.39	<0.074	<5.0	<0.36	<0.068	74-97-5
Chloroform	<0.39	<0.080	<5.0	<0.36	<0.074	67-66-3
1,1,1-Trichloroethane	<0.39	<0.072	<5.0	<0.36	<0.066	71-55-6
1,1-Dichloropropene	<0.39	<0.086	<5.0	<0.36	<0.079	563-58-6
Carbon Tetrachloride	<0.39	<0.062	<5.0	<0.36	<0.058	56-23-5
Benzene	**1.1**	**0.36**	<10	<0.71	<0.22	71-43-2
1,2-Dichloroethane	<0.39	<0.097	<5.0	<0.36	<0.089	107-06-2
Trichloroethene	<0.39	<0.073	<5.0	**17**	**3.2**	79-01-6
1,2-Dichloropropane	<0.39	<0.085	<5.0	<0.36	<0.078	78-87-5
Dibromomethane	<0.39	<0.055	<5.0	<0.36	<0.051	74-95-3
Bromodichloromethane	<0.39	<0.059	<5.0	<0.36	<0.054	75-27-4
cis-1,3-Dichloropropene	<0.39	<0.086	<5.0	<0.36	<0.079	10061-01-5
Toluene	**3.8**	**1.0**	<5.0	**1.4**	**0.37**	108-88-3
trans-1,3-Dichloropropene	<0.39	<0.086	<5.0	<0.36	<0.079	10061-02-6
1,1,2-Trichloroethane	<0.39	<0.072	<5.0	<0.36	<0.066	79-00-5
Tetrachloroethene	<0.39	<0.058	<5.0	<0.36	<0.053	127-18-4
1,3-Dichloropropane	<0.39	<0.085	<5.0	<0.36	<0.078	142-28-9
Dibromochloromethane	<0.39	<0.046	<5.0	<0.36	<0.042	124-48-1
1,2-Dibromoethane	<0.39	<0.051	<5.0	<0.36	<0.047	106-93-4
Chlorobenzene	<0.39	<0.085	<5.0	<0.36	<0.078	108-90-7
1,1,1,2-Tetrachloroethane	<0.39	<0.057	<5.0	<0.36	<0.053	630-20-6

Analyst: John A. Lee JAlee Date: 1/8/01

100 Sebethe Drive, Suite A-5
Cromwell, Connecticut 06416
(800)243-4903/(860)635-6475

Report Number *C0005922*

Sample Number	1979484	1979484	1979486	1979488	1979488	
Air Volume Liters	12.9	12.9	---	14.0	14.0	
Compounds (cont.)	ug/m3	ppb	ng	ug/m3	ppb	CAS #
Ethylbenzene	**0.47**	**0.11**	<5.0	<0.36	<0.082	100-41-4
m,p-Xylene	**1.6**	**0.37**	<10	**0.84**	**0.19**	1330-20-7
o-Xylene	**1.6**	**0.36**	<5.0	<0.36	<0.082	95-47-6
Styrene	<0.39	<0.091	<5.0	<0.36	<0.084	100-42-5
Bromoform	<0.39	<0.038	<5.0	<0.36	<0.035	75-25-2
Isopropylbenzene	<0.39	<0.079	<5.0	<0.36	<0.073	98-82-8
1,1,2,2-Tetrachloroethane	<0.39	<0.057	<5.0	<0.36	<0.053	79-34-5
1,2,3-Trichloropropane	<0.39	<0.065	<5.0	<0.36	<0.060	96-18-4
Bromobenzene	<0.39	<0.061	<5.0	<0.36	<0.056	108-86-1
n-Propylbenzene	**0.98**	**0.20**	<5.0	<0.36	<0.073	103-65-1
2-Chlorotoluene	<0.39	<0.075	<5.0	<0.36	<0.069	95-49-8
1,3,5-Trimethylbenzene	**1.8**	**0.36**	<5.0	<0.36	<0.073	108-67-8
4-Chlorotoluene	<0.39	<0.075	<5.0	<0.36	<0.069	106-43-4
tert-Butylbenzene	<0.39	<0.071	<5.0	<0.36	<0.065	98-06-6
1,2,4-Trimethylbenzene	**5.5**	**1.1**	<5.0	**0.47**	**0.096**	95-63-6
sec-Butylbenzene	<0.39	<0.071	<5.0	<0.36	<0.065	135-98-8
p-Isopropyltoluene	<0.39	<0.071	<5.0	<0.36	<0.065	535-77-3
1,3-Dichlorobenzene	<0.39	<0.065	<5.0	<0.36	<0.060	541-73-1
1,4-Dichlorobenzene	<0.39	<0.065	<5.0	<0.36	<0.060	106-46-7
n-Butylbenzene	<0.39	<0.071	<5.0	<0.36	<0.065	104-51-8
1,2-Dichlorobenzene	<0.39	<0.065	<5.0	<0.36	<0.060	95-50-1
1,2-Dibromo-3-chloropropane	<0.39	<0.041	<5.0	<0.36	<0.037	96-12-8
1,2,4-Trichlorobenzene	<0.39	<0.053	<5.0	<0.36	<0.049	120-82-1
Hexachlorobutadiene	<0.39	<0.037	<5.0	<0.36	<0.034	87-68-3
Naphthalene	**0.97**	**0.19**	<5.0	<0.36	<0.068	91-20-3
1,2,3-Trichlorobenzene	<0.39	<0.053	<5.0	<0.36	<0.049	87-61-6
Acetone	*** 1.4**	*** 0.57**	<5.0	*** 0.93**	*** 0.39**	67-64-1
Methyl Ethyl Ketone	<0.39	<0.13	<5.0	<0.36	<0.12	78-93-3
Methyl Isobutyl Ketone	<0.39	<0.095	<5.0	<0.36	<0.087	108-10-1
	ug/m3		ng	ug/m3		
**Total Hydrocarbons	**100**		**15**	**780**		---

Compound(s) concentration exceeded the upper limit of the calibration range but did not surpass the breakthrough level or saturate the detector. This value is reported as an estimate.

Thermal desorption requires the entire sample to be analyzed at one time. Sample breakthrough cannot be detected.

* Compound reported as an estimate due to coelution with another compound sharing the same quantitation ions.
**This value is a summation of all peak areas present in the sample (quantitated as toluene).

Analyst: John A. Lee _____ Date: 1/8/01

ENVIRONMENTAL HEALTH LABORATORY ANALYSIS REPORT

100 Sebethe Drive, Suite A-5
Cromwell, Connecticut 06416
(800)243-4903/(860)635-6475

Analysis: Expanded Scan

Analytical Method: GC/MS CS2 Desorption of Charcoal Tubes

Report Number *C0005922*

Sample Number	1979475	1979475	1979489	1979489	1979487	
Air Volume Liters	104	104	96.0	96.0	---	
Compounds	ug/m3	ppb	ug/m3	ppb	ng	CAS #
Dichlorodifluoromethane	<10	<2.1	**39**	**7.9**	<1.0	75-71-8
Acetone	**19**	**8.1**	<10	<4.4	<1.0	67-64-1

Front and back sections of charcoal tubes are combined for analysis. Sample breakthrough cannot be detected.

Analyst: John A. Lee JALee

Date: 1/8/01

Interpretation of Library Match Report

GC/MS Spectral Library Match Summation Report
Sorted by Top 5 Peak Area Amounts

Your sample name/number

Sample Name : Worker #1, EHL 030, tube 2065
Misc Info : DB-VRX, 75m X 0.45mm - C0002148
Vial Number : 1
Data File : D:\HPCHEM\1\TD\BSB\2148_W1.D
Operator : JAL
Date Acquired : 17 March 2000 9:12
Method File : TD_VRX

Quality factor of unknown peak to known spectrum. A factor greater than 90 means good match. Low factors can be due to low concentration levels or the presence of coeluting peaks, however chemical family classification can be estimated (i.e. silane, ketone, aromatic, etc.).

Peak #	R.T.	Area %	Library/ID	Ref #	CAS #	Qual
15	12.53	4.61	d:\hpchem\msexe\nbs49k.l			
			Ethane, 1,2-dichloro-	1073	000107-06-2	83
			Ethene, chloro-	132	000075-01-4	36
			Thiophene, 3,4-dichlorotetrahydro-	16155	003001-57-8	9
17	12.98	1.08	d:\hpchem\msexe\nbs49k.l			
			1-Propene, 1,1-dichloro-	2010	000563-58-6	91
			1-Propene, 1,2-dichloro-	2008	000563-54-2	90
			1-Propene, 1,3-dichloro-, (Z)-	2011	010061-01-5	64
26	16.72	8.63	d:\hpchem\msexe\nbs49k.l			
			Ethane, 1,1,2-trichloro-	4883	000079-00-5	94
			Ethane, 1,1,1-trichloro-	4882	000071-55-6	32
			Propane, 1,2,2-trichloro-	7382	003175-23-3	23
34	20.04	1.98	d:\hpchem\msexe\nbs49k.l			
			Benzene, ethyl-	1810	000100-41-4	91
			Benzene, 1,3-dimethyl-	1811	000108-38-3	53
			Benzene, 1,4-dimethyl-	1815	000106-42-3	50
40	21.88	2.73	d:\hpchem\msexe\nbs49k.l			
			Benzene, (1-methylethyl)-	3291	000098-82-8	91
			Benzene, 1-ethyl-2-methyl-	3293	000611-14-3	80
			Benzene, 1,2,3-trimethyl-	3300	000526-73-8	64

Peak number supplied from the chromatogram

Retention time of gas chromatograph peak

Peak magnitude. Multiply this percentage by the total hydrocarbon value reported to get the approximate concentration (based on toluene response)

Tentatively identified compounds with best matching spectrums compared to known chemicals

Chemical Abstract number of tentatively identified compound

GC/MS Spectral Library Match Summation Report
Sorted by Top 5 Peak Area Amounts

Sample Name : 1979474; C0005922, EHL 2558, tub
Misc Info : DB-VRX, 75m X 0.45mm
Vial Number : 6
Data File : D:\HPCHEM\1\TD\BSB\1979474.D
Operator : JAL
Date Acquired : 4 Jan 2001 18:59
Method File : TD_VRX

Peak #	R.T.	Area %	Library/ID	Ref #	CAS #	Qual
64	18.74	3.54	d:\hpchem\msexe\nbs49k.l			
			Benzene, 1,4-dimethyl-	1815	000106-42-3	95
			Benzene, 1,3-dimethyl-	1811	000108-38-3	95
			Cyclopentene, 1-ethenyl-3-methylen	1809	061142-07-2	72
79	21.7	4.57	d:\hpchem\msexe\nbs49k.l			
			Decane	6851	000124-18-5	97
			1-IODO-2-METHYLUNDECANE	33264	073105-67-6	72
			Tridecane	15584	000629-50-5	64
83	22.37	3.83	d:\hpchem\msexe\nbs49k.l			
			Benzene, 1,3,5-trimethyl-	3299	000108-67-8	76
			Benzene, 1,2,4-trimethyl-	3302	000095-63-6	64
			Benzene, 1,2,3-trimethyl-	3300	000526-73-8	64
87	22.98	8.85	d:\hpchem\msexe\nbs49k.l			
			D-Limonene	5690	005989-27-5	96
			Limonene	5674	000138-86-3	94
			Cyclohexene, 1-methyl-4-(1-methyle	5660	007705-14-8	91
95	24.22	5.88	d:\hpchem\msexe\nbs49k.l			
			Undecane	9747	001120-21-4	91
			Tridecane	15584	000629-50-5	90
			Tetradecane	18383	000629-59-4	90

GC/MS Spectral Library Match Summation Report
Sorted by Top 5 Peak Area Amounts

Sample Name : 1979476; C0005922, EHL 2557, tub
Misc Info : DB-VRX, 75m X 0.45mm
Vial Number : 7
Data File : D:\HPCHEM\1\TD\BSB\1979476.D
Operator : JAL
Date Acquired : 4 Jan 2001 19:55
Method File : TD_VRX

Peak #	R.T.	Area %	Library/ID	Ref #	CAS #	Qual
1	3.96	17.99	d:\hpchem\msexe\nbs49k.l			
			Propane	39	000074-98-6	2
			Butanenitrile	198	000109-74-0	1
			1-Octanamine	4554	000111-86-4	1
29	15.49	6.30	d:\hpchem\msexe\nbs49k.l			
			Benzene, methyl-	884	000108-88-3	90
			1,3,5-Cycloheptatriene	889	000544-25-2	74
			Tetracyclo[3.2.0.02,7.04,6]heptane	882	000278-06-8	64
39	18.74	5.44	d:\hpchem\msexe\nbs49k.l			
			Benzene, 1,4-dimethyl-	1815	000106-42-3	95
			Benzene, 1,3-dimethyl-	1811	000108-38-3	95
			Cyclopentene, 1-ethenyl-3-methylen	1809	061142-07-2	72
53	22.36	3.12	d:\hpchem\msexe\nbs49k.l			
			Benzene, 1,2,4-trimethyl-	3302	000095-63-6	90
			Benzene, 1,2,3-trimethyl-	3300	000526-73-8	74
			Benzene, 1-ethyl-2-methyl-	3293	000611-14-3	74
56	22.97	4.78	d:\hpchem\msexe\nbs49k.l			
			D-Limonene	5690	005989-27-5	96
			Cyclohexene, 1-methyl-4-(1-methyle	5660	007705-14-8	94
			Cyclohexene, 1-methyl-4-(1-methyle	5698	005989-54-8	91

GC/MS Spectral Library Match Summation Report
Sorted by Top 5 Peak Area Amounts

Sample Name : 1979478; C0005922, EHL 2556, tub
Misc Info : DB-VRX, 75m X 0.45mm
Vial Number : 8
Data File : D:\HPCHEM\1\TD\BSB\1979478.D
Operator : JAL
Date Acquired : 4 Jan 2001 20:52
Method File : TD_VRX

Peak #	R.T.	Area %	Library/ID	Ref #	CAS #	Qual
1	3.92	8.35	d:\hpchem\msexe\nbs49k.l			
			Methane, chlorodifluoro-	590	000075-45-6	90
			Ethane, 1,1-difluoro-	150	000075-37-6	5
			Methane, difluoro-	58	000075-10-5	1
2	4.07	5.98	d:\hpchem\msexe\nbs49k.l			
			Methane, dichlorodifluoro-	3209	000075-71-8	83
			Thiazole	568	000288-47-1	2
			2-Pyrrolidinone	569	000616-45-5	2
19	12.62	4.13	d:\hpchem\msexe\nbs49k.l			
			Pentane, 2,2,4,4-tetramethyl-	4432	001070-87-7	78
			Butane, 2,2,3,3-tetramethyl-	2718	000594-82-1	74
			Hexane, 2,2-dimethyl-	2719	000590-73-8	74
21	12.97	17.14	d:\hpchem\msexe\nbs49k.l			
			Ethene, trichloro-	4561	000079-01-6	68
			1H-1,2,4-Triazol-3-amine, 5-(methy	4572	045534-08-5	14
			Pyridine, 1-oxide	955	000694-59-7	10
28	15.49	4.61	d:\hpchem\msexe\nbs49k.l			
			Benzene, methyl-	884	000108-88-3	90
			1,3,5-Cycloheptatriene	889	000544-25-2	72
			Tetracyclo[3.2.0.02,7.04,6]heptane	882	000278-06-8	64

GC/MS Spectral Library Match Summation Report
Sorted by Top 5 Peak Area Amounts

Sample Name : 1979480; C0005922, EHL 2555, tub
Misc Info : DB-VRX, 75m X 0.45mm
Vial Number : 9
Data File : D:\HPCHEM\1\TD\BSB\1979480.D
Operator : JAL
Date Acquired : 4 Jan 2001 21:48
Method File : TD_VRX

Peak #	R.T.	Area %	Library/ID	Ref #	CAS #	Qual
45	18.99	5.21	d:\hpchem\msexe\nbs49k.l			
			Octacosane	42167	000630-02-4	64
			Heptane, 2,4-dimethyl-	4444	002213-23-2	59
			Hexane, 2,3,4-trimethyl-	4446	000921-47-1	53
57	21.7	8.51	d:\hpchem\msexe\nbs49k.l			
			Decane	6851	000124-18-5	97
			1-IODO-2-METHYLUNDECANE	33264	073105-67-6	72
			Undecane, 3,7-dimethyl-	15597	017301-29-0	64
60	22.37	3.68	d:\hpchem\msexe\nbs49k.l			
			Benzene, 1,2,4-trimethyl-	3302	000095-63-6	90
			Benzene, 1-ethyl-3-methyl-	3297	000620-14-4	55
			Benzene, 1,2,3-trimethyl-	3300	000526-73-8	49
64	22.98	5.02	d:\hpchem\msexe\nbs49k.l			
			D-Limonene	5690	005989-27-5	96
			Cyclohexene, 1-methyl-4-(1-methyle	5660	007705-14-8	94
			Bicyclo[2.2.1]hept-2-ene, 1,7,7-tr	5655	000464-17-5	93
72	24.21	6.86	d:\hpchem\msexe\nbs49k.l			
			Undecane	9747	001120-21-4	91
			Tetradecane	18383	000629-59-4	90
			Tridecane	15584	000629-50-5	90

GC/MS Spectral Library Match Summation Report
Sorted by Top 5 Peak Area Amounts

Sample Name : 1979482; C0005922, EHL 2554, tub
Misc Info : DB-VRX, 75m X 0.45mm
Vial Number : 10
Data File : D:\HPCHEM\1\TD\BSB\1979482.D
Operator : JAL
Date Acquired : 4 Jan 2001 22:43
Method File : TD_VRX

Peak #	R.T.	Area %	Library/ID	Ref #	CAS #	Qual
41	18.99	5.42	d:\hpchem\msexe\nbs49k.l			
			Octacosane	42167	000630-02-4	64
			Octane	2712	000111-65-9	59
			Heptane, 2,4-dimethyl-	4444	002213-23-2	59
52	21.71	8.59	d:\hpchem\msexe\nbs49k.l			
			Decane	6851	000124-18-5	97
			1-IODO-2-METHYLUNDECANE	33264	073105-67-6	72
			Decane, 2,9-dimethyl-	12792	001002-17-1	64
55	22.37	3.77	d:\hpchem\msexe\nbs49k.l			
			Benzene, 1,2,4-trimethyl-	3302	000095-63-6	90
			Benzene, 1-ethyl-3-methyl-	3297	000620-14-4	60
			Benzene, 1-ethyl-2-methyl-	3293	000611-14-3	55
59	22.98	4.98	d:\hpchem\msexe\nbs49k.l			
			D-Limonene	5690	005989-27-5	96
			Cyclohexene, 1-methyl-4-(1-methyle	5660	007705-14-8	94
			Bicyclo[2.2.1]hept-2-ene, 1,7,7-tr	5655	000464-17-5	91
67	24.21	7.18	d:\hpchem\msexe\nbs49k.l			
			Undecane	9747	001120-21-4	90
			Tridecane	15584	000629-50-5	90
			Tetradecane	18383	000629-59-4	90

GC/MS Spectral Library Match Summation Report
Sorted by Top 5 Peak Area Amounts

Sample Name : 1979484; C0005922, EHL 2553, tub
Misc Info : DB-VRX, 75m X 0.45mm
Vial Number : 11
Data File : D:\HPCHEM\1\TD\BSB\1979484.D
Operator : JAL
Date Acquired : 4 Jan 2001 23:39
Method File : TD_VRX

Peak #	R.T.	Area %	Library/ID	Ref #	CAS #	Qual
24	16.02	5.27	d:\hpchem\msexe\nbs49k.l			
			Octane	2712	000111-65-9	81
			Hexane, 2,4-dimethyl-	2717	000589-43-5	56
			Heptane, 2,4-dimethyl-	4444	002213-23-2	53
37	18.98	5.08	d:\hpchem\msexe\nbs49k.l			
			Nonane	4462	000111-84-2	90
			Heptane, 2,4-dimethyl-	4444	002213-23-2	59
			Octane, 2,4,6-trimethyl-	9743	062016-37-9	53
45	21.26	6.23	d:\hpchem\msexe\nbs49k.l			
			Benzene, 1-ethyl-2-methyl-	3293	000611-14-3	94
			Benzene, 1-ethyl-3-methyl-	3297	000620-14-4	91
			Benzene, 1-ethyl-4-methyl-	3298	000622-96-8	91
49	22.36	7.71	d:\hpchem\msexe\nbs49k.l			
			Benzene, 1,2,4-trimethyl-	3302	000095-63-6	94
			Benzene, 1-ethyl-2-methyl-	3293	000611-14-3	90
			Benzene, 1,2,3-trimethyl-	3300	000526-73-8	83
56	24.22	4.60	d:\hpchem\msexe\nbs49k.l			
			Undecane	9747	001120-21-4	91
			Tetradecane	18383	000629-59-4	86
			Decane, 2,3,5-trimethyl-	15638	062238-11-3	72

GC/MS Spectral Library Match Summation Report
Sorted by Top 5 Peak Area Amounts

Sample Name : 1979486; C0005922, EHL 2551, tub
Misc Info : DB-VRX, 75m X 0.45mm
Vial Number : 4
Data File : D:\HPCHEM\1\TD\BSB\1979486.D
Operator : JAL
Date Acquired : 4 Jan 2001 17:06
Method File : TD_VRX

Peak #	R.T.	Area %	Library/ID	Ref #	CAS #	Qual
1	6.37	26.38	d:\hpchem\msexe\nbs49k.l			
			Methane, trichlorofluoro-	5424	000075-69-4	83
			1,3,4-Thiadiazol-2-amine	1437	004005-51-0	4
			Ethanethioamide, N,N-dimethyl-	1631	000631-67-4	4
2	7.43	29.73	d:\hpchem\msexe\nbs49k.l			
			Methane, dichloro-	487	000075-09-2	91
			Methane, chlorofluoro-	169	000593-70-4	4
			Krypton	563	007439-90-9	2

** LESS THAN 5 TOTAL PEAKS OVER DETECTION LIMIT **

GC/MS Spectral Library Match Summation Report
Sorted by Top 5 Peak Area Amounts

Sample Name : 1979488; C0005922, EHL 2552, tub
Misc Info : DB-VRX, 75m X 0.45mm
Vial Number : 5
Data File : D:\HPCHEM\1\TD\BSB\1979488.D
Operator : JAL
Date Acquired : 4 Jan 2001 18:03
Method File : TD_VRX

Peak #	R.T.	Area %	Library/ID	Ref #	CAS #	Qual
2	3.94	2.98	d:\hpchem\msexe\nbs49k.l			
			Hexane, tetradecafluoro-	37801	000355-42-0	78
			Heptane, hexadecafluoro-	41696	000335-57-9	74
			Perfluoro(2-methylpentane)	37802	000355-04-4	39
3	4.03	24.02	d:\hpchem\msexe\nbs49k.l			
			Methane, dichlorodifluoro-	3209	000075-71-8	91
			Thiazole	568	000288-47-1	2
			2-Pyrrolidinone	569	000616-45-5	2
13	12.98	32.48	d:\hpchem\msexe\nbs49k.l			
			Ethene, trichloro-	4561	000079-01-6	64
			1H-1,2,4-Triazol-3-amine, 5-(methy	4572	045534-08-5	14
			Pyridine, 1-oxide	955	000694-59-7	10
18	21.7	3.58	d:\hpchem\msexe\nbs49k.l			
			Decane	6851	000124-18-5	78
			1-IODO-2-METHYLUNDECANE	33264	073105-67-6	72
			Decane, 2,9-dimethyl-	12792	001002-17-1	59
23	24.22	4.61	d:\hpchem\msexe\nbs49k.l			
			Undecane	9747	001120-21-4	91
			Tridecane	15584	000629-50-5	90
			Tetradecane	18383	000629-59-4	72

Interpretation of Library Match Report

GC/MS Spectral Library Match Summation Report
Sorted by Top 5 Peak Area Amounts

Your sample name/number

Sample Name : Worker #1, EHL 030, tube 2065
Misc Info : DB-VRX, 75m X 0.45mm - C0002148
Vial Number : 1
Data File : D:\HPCHEM\1\TD\BSB\2148_W1.D
Operator : JAL
Date Acquired : 17 March 2000 9:12
Method File : TD_VRX

Quality factor of unknown peak to known spectrum. A factor greater than 90 means good match. Low factors can be due to low concentration levels or the presence of coeluting peaks, however chemical family classification can be estimated (i.e. silane, ketone, aromatic, etc.).

Peak #	R.T.	Area %	Library/ID	Ref #	CAS #	Qual
15	12.53	4.61	d:\hpchem\msexe\nbs49k.l			
			Ethane, 1,2-dichloro-	1073	000107-06-2	83
			Ethene, chloro-	132	000075-01-4	36
			Thiophene, 3,4-dichlorotetrahydro-	16155	003001-57-8	9
17	12.98	1.08	d:\hpchem\msexe\nbs49k.l			
			1-Propene, 1,1-dichloro-	2010	000563-58-6	91
			1-Propene, 1,2-dichloro-	2008	000563-54-2	90
			1-Propene, 1,3-dichloro-, (Z)-	2011	010061-01-5	64
26	16.72	8.63	d:\hpchem\msexe\nbs49k.l			
			Ethane, 1,1,2-trichloro-	4883	000079-00-5	94
			Ethane, 1,1,1-trichloro-	4882	000071-55-6	32
			Propane, 1,2,2-trichloro-	7382	003175-23-3	23
34	20.04	1.98	d:\hpchem\msexe\nbs49k.l			
			Benzene, ethyl-	1810	000100-41-4	91
			Benzene, 1,3-dimethyl-	1811	000108-38-3	53
			Benzene, 1,4-dimethyl-	1815	000106-42-3	50
40	21.88	2.73	d:\hpchem\msexe\nbs49k.l			
			Benzene, (1-methylethyl)-	3291	000098-82-8	91
			Benzene, 1-ethyl-2-methyl-	3293	000611-14-3	80
			Benzene, 1,2,3-trimethyl-	3300	000526-73-8	64

Peak number supplied from the chromatogram

Retention time of gas chromatograph peak

Peak magnitude. Multiply this percentage by the total hydrocarbon value reported to get the approximate concentration (based on toluene response)

Tentatively identified compounds with best matching spectrums compared to known chemicals

Chemical Abstract number of tentatively identified compound

Pg 1 of 2

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Cromwell, CT 06416

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REQUEST FOR ANALYTICAL SERVICES
(Please fill all blanks to help us better serve you)

FOR LAB USE ONLY	
RECEIVED Cromwell EIH Date: 12/22/00	Lab Report No. C0005922
Rec. & Checked in by: KT	☐ Und ☐ SRF ☐ AR ☐ ESIS ☐ Z ☐ Claims
	Pol. Or Con. No.

Send INVOICE To [REQUIRED] X		Send RESULTS To [REQUIRED]	
Name:	Nick Skouloukis	Name:	Same
Company:	LEA	Company:	
Mailing Address:	100 Northwest Dr	Mailing Address:	
City, State, Zip:	Plainville CT 06062	City, State, Zip:	
PO#, Ref # Etc (REQUIRED)		Job Name:	Electronic Deliverable
Accts. Payable Phone No:	860-747-6181	Phone No:	☐ Phone Results
Accts. Payable Fax No:	860-747-8822	Fax:	☒ Fax Results

Sampling Location:	Person Collecting Samples:
Product Manufactured/Service Rendered:	Sampling Method:

EHE SAMPLE NO (Lab Use Only)	SAMPLE CONTAINER NO	Media Type	ANALYSIS DESIRED (A 3 sample minimum charge applies when less than 3 of each specific analyte is requested)	NOTES (Recording sampling date, Location and Operation. Other compounds present, etc.) Flow Rate Pre	Post	SAMPLING RATE (liters/min)	SAMPLING TIME Start	End	Total Time (minutes)	AIR SAMPLE VOLUME (liters)
	1979474	TD	VOC	30	30 cc/MIN.		0725	1550		
	1979475	CT	VOC	206	~~137~~		0725	1550		
	1979476	TD	VOC	117			801	1612		
	1979477	CT	VOC	206			801	1612		
	1979478	TD	VOC	29.4			819		324	
	1979479	CT	VOC	206			819		324	
	1979480	TD	VOC	29.4	29.4		0836	1641		
	1979481	CT	VOC	206	~~206~~		0836	1641		
	1979482	TD	VOC	30			0840	1645		
	1979483	CT	VOC	206	206		0840	1645		
	1979484	TD	VOC	30			0850	1600		
	1979485	CT	VOC	206			0850	1600		
	1979486	TD	VOC	~~30~~	BLANK		0855	—		
	1979487	CT	VOC	—	BLANK		0856	—		

FOR LAB NOTES ONLY:

Pg. 2 of 2

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REQUEST FOR ANALYTICAL SERVICES

(Please fill all blanks to help us better serve you)

FOR LAB USE ONLY	
RECEIVED Cromwell EHL Date: 12/22/00	*Lab Report No.* C0003
Rec. & Checked in by: KT	☐ *Und* ☐ *SRF* ☐ *A* ☐ *ESIS* ☐ *Z* ☐ *Clab.*
	Pol. Or Con. No.

Send INVOICE To [REQUIRED]	*Send RESULTS To [REQUIRED]*	
Name:	**Name:**	
Company:	**Company:**	
Mailing Address:	**Mailing Address:**	
City, State, Zip:	**City, State, Zip:**	
PO#, Ref # Etc (REQUIRED)	**Job Name:**	
Accts. Payable Phone No:	**Phone No:**	☐ **Phone Results**
Accts. Payable Fax No:	**Fax:**	☐ **Fax Results**

Sampling Location:	Person Collecting Samples:
Product Manufactured/Service Rendered:	Sampling Method:

EHL SAMPLE NO (Lab Use Only)	SAMPLE CONTAINER NO	Media Type	ANALYSIS DESIRED A 3 sample minimum charge applies when less than 3 of each specific analysis is requested	NOTES (Recording sampling date, Location and Operation. Other compounds present, etc.)	SAMPLING RATE (liters/min)	SAMPLING TIME Start	End	Total Time (minutes)	AIR SAMPLE VOLUME (liters)
	579488	TD	VOC	Pre 30 / Post		0930	1716		
	579489	CT	VOC	216		0930	1716		

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REQUEST FOR ANALYTICAL SERVICES

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FOR LAB USE ONLY	
RECEIVED Cromwell EHL Date: Rec. & Checked in by:	Lab Report No. ☐ Und ☐ SRF ☐ AR ☐ ESIS ☐ Z ☐ Claims Pol. Or Con. No.

Send INVOICE To [REQUIRED]	Send RESULTS To [REQUIRED]
Name: Nick Skouderikis	Name: same
Company: LEA	Company:
Mailing Address: 100 Northwest Dr	Mailing Address:
City, State, Zip: Plainville CT	City, State, Zip:
PO#, Ref # Etc (REQUIRED)	Job Name: Electronic Dilution
Accts. Payable Phone No: 860-747-6181	Phone No: ☐ Phone Results
Accts. Payable Fax No: 860-747-8822	Fax: ☐ Fax Results

Sampling Location: P&W WILGOOS FACILITY
Person Collecting Samples: RICHARD E. TWOMEY
Product Manufactured/Service Rendered: TEST FACILITY
Sampling Method:

Lab Use Only	Sample No.	Media Type	Analysis Requested	Blow Rate Pre Pump	Blow Rate Post Stop	CC/MIN Sampling Rate	Sampling Time Start	Sampling Time End	Total Time (minutes)	Air Sample Volume (liters)
	1979474	TD	VOC	30	30 cc/MIN	30	0725	1550	505	15.1
	1979475	CT	VOC	206	~~133~~ 197.5	206	0725	1550	505	~~15.1~~ 104.
	1979476	TD	VOC	17.7	21	17.7	801	1612	491	8.7
	1979477	CT	VOC	206	197.5	206	801	1612	491	101.1
	1979478	TD	VOC	29.4	*NONE	30	819	1343	324	9.7
	1979479	CT	VOC	206	*NONE	206	819	1343	324	66.7
	1979480	TD	VOC	29.4	29.4	30	0836	1641	485	14.6
	1979481	CT	VOC	206	~~286~~ 221	206	0836	1641	485	99.9
	1979482	TD	VOC	30	33	30	0840	1645	485	14.6
	1979483	CT	VOC	206	206	206	0840	1645	485	99.9
	1979484	TD	VOC	30	*NONE	30	0850	1600	430	12.9
	1979485	CT	VOC	206	*NONE	206	0850	1600	430	88.6
	1979486	TD	VOC	~~30~~	BLANK	—	[illegible]	—	—	—
	1979487	CT	VOC	—	BLANK	—	[illegible]	—	—	—

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REQUEST FOR ANALYTICAL SERVICES

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RECEIVED Cromwell EHL *Date:* ____ *Rec. & Checked in by:* ____	*Lab Report No.* ☐ *Und* ☐ *SRF* ☐ *AR* ☐ *ESIS* ☐ *Z* ☐ *Claims* *Pol. Or Con. No.*

Send INVOICE To (REQUIRED)	*Send RESULTS To (REQUIRED)*	
Name: NICK SKOULARIKIS	**Name:** SAME	
Company: LEA	**Company:**	
Mailing Address:	**Mailing Address:**	
City, State, Zip:	**City, State, Zip:**	
PO#, Ref # Etc (REQUIRED)	**Job Name:**	
Accts. Payable Phone No:	**Phone No:**	☐ **Phone Results**
Accts. Payable Fax No:	**Fax:**	☐ **Fax Results**

Sampling Location:	Person Collecting Samples: RICHARD E. TWOMEY
Product Manufactured/Service Rendered:	Sampling Method:

LAB SAMPLE NO. (Lab Use Only)	SAMPLE CONTAINER NO.	Media Type	ANALYSIS DESIRED (Analytical Method Check Sheet Must Be Attached For Non-Standard Analysis Requests)	NOTES (Including sampling date, Site Location and Operations, Other compounds of interest, etc.)	cc/MIN SAMPLING RATE (liters/min)	SAMPLING TIME Start	End	TOTAL TIME (minutes)	AIR SAMPLE VOLUME (liters)
	1579488	TD	VOC	Pa 30 / Pa 31 15 cc/MIN. 30		0930	1716	466	14.0
	1579489	CT	VOC	206 / 192.5	206	0930	1716	466	96.0

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March 1, 2001

Monitoring Event

ESIS

An Insurance Services Company

March 15, 2001

Nick Skoularikas
Loureiro Engineering Assoc.
100 Northwest Drive
Plainville, CT 06062

REPORT #: C0106351

Nick,

Enclosed are the GC/MS results for the samples you sent in. If you have any questions please don't hesitate to call me.

Sincerely,

John Lee
Chemist
Environmental Health Laboratory
100 Sebethe Drive; Suite A-5
Cromwell, CT 06416
(860) 635-6475
Fax (860) 635-6750

JL: ml

enc.

ENVIRONMENTAL HEALTH LABORATORY ANALYSIS REPORT

100 Sebethe Drive, Suite A-5
Cromwell, Connecticut 06416
(800)243-4903/(860)635-6475

Analysis: Expanded Scan

Analytical Method: GC/MS Thermal Desorption; Modified EPA TO1/TO2 **Report Number *C0106351***

Sample Number	1990393	1990393	1990395	1990395	1990397	
Air Volume Liters	15.2	15.2	14.1	14.1	15.1	
Compounds	ug/m3	ppb	ug/m3	ppb	ug/m3	CAS #
Dichlorodifluoromethane	**5.4**	**1.3**	<0.35	<0.088	**4.9**	75-71-8
Chloromethane	**0.37**	**0.18**	<0.35	<0.17	<0.33	74-87-3
Chloroethene	<0.33	<0.13	<0.35	<0.14	<0.33	75-01-4
Bromomethane	<0.33	<0.085	<0.35	<0.091	<0.33	74-83-9
Chloroethane	<0.33	<0.12	<0.35	<0.13	<0.33	75-00-3
Trichlorofluoromethane	**0.57**	**0.10**	<0.35	<0.063	**0.90**	75-69-4
1,1-Dichloroethene	<0.33	<0.083	<0.35	<0.089	**0.76**	75-35-4
Methylene Chloride	**1.5**	**0.45**	<0.35	<0.10	**2.5**	75-09-2
trans-1,2-Dichloroethene	<0.33	<0.083	<0.35	<0.089	<0.33	156-60-5
1,1-Dichloroethane	<0.33	<0.081	<0.35	<0.088	<0.33	75-34-3
cis-1,2-Dichloroethene	<0.33	<0.083	<0.35	<0.089	<0.33	156-59-2
Bromochloromethane	<0.33	<0.062	<0.35	<0.067	<0.33	74-97-5
Chloroform	<0.33	<0.079	<0.35	<0.085	<0.33	67-66-3
2,2-Dichloropropane	<0.33	<0.071	<0.35	<0.077	<0.33	594-20-7
1,2-Dichloroethane	<0.33	<0.081	<0.35	<0.087	<0.33	107-06-2
1,1,1-Trichloroethane	**0.88**	**0.16**	<0.35	<0.065	**4.7**	71-55-6
1,1-Dichloropropene	<0.33	<0.072	<0.35	<0.078	<0.33	563-58-6
Carbon Tetrachloride	<0.33	<0.052	<0.35	<0.056	<0.33	56-23-5
Benzene	**1.8**	**0.56**	<0.71	<0.22	**0.76**	71-43-2
Dibromomethane	<0.33	<0.046	<0.35	<0.050	<0.33	74-95-3
1,2-Dichloropropane	<0.33	<0.071	<0.35	<0.077	<0.33	78-87-5
Trichloroethene	<0.33	<0.061	<0.35	<0.066	<0.33	79-01-6
Bromodichloromethane	<0.33	<0.049	<0.35	<0.053	<0.33	75-27-4
cis-1,3-Dichloropropene	<0.33	<0.072	<0.35	<0.078	<0.33	10061-01-5
trans-1,3-Dichloropropene	<0.33	<0.072	<0.35	<0.078	<0.33	10061-02-6
1,1,2-Trichloroethane	<0.33	<0.060	<0.35	<0.065	<0.33	79-00-5
Toluene	**7.9**	**2.1**	<0.35	<0.094	**1.1**	108-88-3
1,3-Dichloropropane	<0.33	<0.071	<0.35	<0.077	<0.33	142-28-9
1,2-Dibromoethane	<0.33	<0.043	<0.35	<0.046	<0.33	106-93-4
Tetrachloroethene	<0.33	<0.049	<0.35	<0.052	<0.33	127-18-4
1,1,1,2-Tetrachloroethane	<0.33	<0.048	<0.35	<0.052	<0.33	630-20-6
Chlorobenzene	<0.33	<0.071	<0.35	<0.077	<0.33	108-90-7

Analyst: John A. Lee _____ Date: 3/12/01

100 Sebethe Drive, Suite A-5
Cromwell, Connecticut 06416
(800)243-4903/(860)635-6475

Report Number *C0106351*

Sample Number	1990393	1990393	1990395	1990395	1990397	
Air Volume Liters	15.2	15.2	14.1	14.1	15.1	
Compounds (cont.)	ug/m3	ppb	ug/m3	ppb	ug/m3	CAS #
Ethylbenzene	**1.9**	**0.44**	<0.35	<0.082	<0.33	100-41-4
m,p-Xylene	**7.0**	**1.6**	<0.71	<0.16	**0.72**	1330-20-7
Bromoform	<0.33	<0.032	<0.35	<0.034	<0.33	75-25-2
Styrene	<0.33	<0.077	<0.35	<0.083	<0.33	100-42-5
1,1,2,2-Tetrachloroethane	<0.33	<0.048	<0.35	<0.052	<0.33	79-34-5
o-Xylene	**2.6**	**0.60**	<0.35	<0.082	<0.33	95-47-6
1,2,3-Trichloropropane	<0.33	<0.055	<0.35	<0.059	<0.33	96-18-4
Isopropylbenzene	<0.33	<0.067	<0.35	<0.072	<0.33	98-82-8
Bromobenzene	<0.33	<0.051	<0.35	<0.055	<0.33	108-86-1
Propylbenzene	**0.93**	**0.19**	<0.35	<0.072	<0.33	103-65-1
2-Chlorotoluene	<0.33	<0.064	<0.35	<0.068	<0.33	95-49-8
4-Chlorotoluene	<0.33	<0.064	<0.35	<0.068	<0.33	106-43-4
1,3,5-Trimethylbenzene	**2.1**	**0.42**	<0.35	<0.072	<0.33	108-67-8
tert-Butylbenzene	<0.33	<0.060	<0.35	<0.065	<0.33	98-06-6
1,2,4-Trimethylbenzene	**7.1**	**1.4**	<0.35	<0.072	**0.47**	95-63-6
sec-Butylbenzene	**0.64**	**0.12**	<0.35	<0.065	<0.33	135-98-8
1,3-Dichlorobenzene	<0.33	<0.055	<0.35	<0.059	<0.33	541-73-1
1,4-Dichlorobenzene	<0.33	<0.055	<0.35	<0.059	<0.33	106-46-7
p-Isopropyltoluene	**3.1**	**0.57**	<0.35	<0.065	<0.33	99-87-6
1,2-Dichlorobenzene	<0.33	<0.055	<0.35	<0.059	<0.33	95-50-1
Butylbenzene	<0.33	<0.060	<0.35	<0.065	<0.33	104-51-8
1,2-Dibromo-3-chloropropane	<0.33	<0.034	<0.35	<0.037	<0.33	96-12-8
1,2,4-Trichlorobenzene	<0.33	<0.044	<0.35	<0.048	<0.33	120-82-1
Naphthalene	**1.9**	**0.37**	<0.35	<0.068	<0.33	91-20-3
Hexachlorobutadiene	<0.33	<0.031	<0.35	<0.033	<0.33	87-68-3
1,2,3-Trichlorobenzene	<0.33	<0.044	<0.35	<0.048	<0.33	87-61-6
Acetone	*** 4.8**	*** 2.0**	<0.35	<0.15	**1.2**	67-64-1
Methyl Ethyl Ketone	<0.33	<0.11	<0.35	<0.12	<0.33	78-93-3
Methyl Isobutyl Ketone	<0.33	<0.080	<0.35	<0.087	<0.33	108-10-1
	ug/m3		ug/m3		ug/m3	
**Total Hydrocarbons	**1,000**		<3.5		**77**	---

Thermal desorption requires the entire sample to be analyzed at one time. Sample breakthrough cannot be detected.

* Compound reported as an estimate due to coelution with another compound sharing the same quantitation ions.
**This value is a summation of all peak areas present in the sample (quantitated as toluene).

Analyst: John A. Lee _____ Date: 3/12/01

100 Sebethe Drive, Suite A-5
Cromwell, Connecticut 06416
(800)243-4903/(860)635-6475

Analysis: Expanded Scan

Analytical Method: GC/MS Thermal Desorption; Modified EPA TO1/TO2 **Report Number *C0106351***

Sample Number	1990397	1990399	1990399	1990401	1990401	
Air Volume Liters	15.1	14	14	15.2	15.2	
Compounds	ppb	ug/m3	ppb	ug/m3	ppb	CAS #
Dichlorodifluoromethane	**1.2**	**4.9**	**1.2**	**# 240**	**# 59**	75-71-8
Chloromethane	<0.16	**0.41**	**0.20**	**0.61**	**0.29**	74-87-3
Chloroethene	<0.13	<0.36	<0.14	<0.33	<0.13	75-01-4
Bromomethane	<0.085	<0.36	<0.092	<0.33	<0.085	74-83-9
Chloroethane	<0.13	<0.36	<0.14	<0.33	<0.12	75-00-3
Trichlorofluoromethane	**0.16**	**0.98**	**0.17**	**0.99**	**0.18**	75-69-4
1,1-Dichloroethene	**0.19**	<0.36	<0.090	<0.33	<0.083	75-35-4
Methylene Chloride	**0.73**	**0.53**	**0.15**	<0.33	<0.095	75-09-2
trans-1,2-Dichloroethene	<0.084	<0.36	<0.090	<0.33	<0.083	156-60-5
1,1-Dichloroethane	<0.082	<0.36	<0.088	<0.33	<0.081	75-34-3
cis-1,2-Dichloroethene	<0.084	<0.36	<0.090	<0.33	<0.083	156-59-2
Bromochloromethane	<0.063	<0.36	<0.067	<0.33	<0.062	74-97-5
Chloroform	<0.080	<0.36	<0.086	<0.33	<0.079	67-66-3
2,2-Dichloropropane	<0.072	<0.36	<0.077	<0.33	<0.071	594-20-7
1,2-Dichloroethane	<0.082	<0.36	<0.088	<0.33	<0.081	107-06-2
1,1,1-Trichloroethane	**0.86**	<0.36	<0.065	<0.33	<0.060	71-55-6
1,1-Dichloropropene	<0.073	<0.36	<0.079	<0.33	<0.072	563-58-6
Carbon Tetrachloride	<0.053	<0.36	<0.057	<0.33	<0.052	56-23-5
Benzene	**0.24**	**0.82**	**0.26**	**1.2**	**0.38**	71-43-2
Dibromomethane	<0.047	<0.36	<0.050	<0.33	<0.046	74-95-3
1,2-Dichloropropane	<0.072	<0.36	<0.077	<0.33	<0.071	78-87-5
Trichloroethene	<0.062	<0.36	<0.066	**17**	**3.3**	79-01-6
Bromodichloromethane	<0.049	<0.36	<0.053	<0.33	<0.049	75-27-4
cis-1,3-Dichloropropene	<0.073	<0.36	<0.079	<0.33	<0.072	10061-01-5
trans-1,3-Dichloropropene	<0.073	<0.36	<0.079	<0.33	<0.072	10061-02-6
1,1,2-Trichloroethane	<0.061	<0.36	<0.065	<0.33	<0.060	79-00-5
Toluene	**0.28**	**# 42**	**# 11**	**0.91**	**0.24**	108-88-3
1,3-Dichloropropane	<0.072	<0.36	<0.077	<0.33	<0.071	142-28-9
1,2-Dibromoethane	<0.043	<0.36	<0.046	<0.33	<0.043	106-93-4
Tetrachloroethene	<0.049	<0.36	<0.053	<0.33	<0.049	127-18-4
1,1,1,2-Tetrachloroethane	<0.048	<0.36	<0.052	<0.33	<0.048	630-20-6
Chlorobenzene	<0.072	<0.36	<0.078	<0.33	<0.071	108-90-7

Analyst: John A. Lee _____ Date: 3/12/01

100 Sebethe Drive, Suite A-5
Cromwell, Connecticut 06416
(800)243-4903/(860)635-6475

Report Number C010635

Sample Number	1990397	1990399	1990399	1990401	1990401	
Air Volume Liters	15.1	14	14	15.2	15.2	
Compounds (cont.)	ppb	ug/m3	ppb	ug/m3	ppb	CAS #
Ethylbenzene	<0.076	**0.70**	**0.16**	<0.33	<0.076	100-41-4
m,p-Xylene	**0.16**	**2.0**	**0.47**	**0.91**	**0.21**	1330-20-7
Bromoform	<0.032	<0.36	<0.035	<0.33	<0.032	75-25-2
Styrene	<0.078	<0.36	<0.084	<0.33	<0.077	100-42-5
1,1,2,2-Tetrachloroethane	<0.048	<0.36	<0.052	<0.33	<0.048	79-34-5
o-Xylene	<0.076	**0.52**	**0.12**	**0.57**	**0.13**	95-47-6
1,2,3-Trichloropropane	<0.055	<0.36	<0.059	<0.33	<0.055	96-18-4
Isopropylbenzene	<0.067	<0.36	<0.073	<0.33	<0.067	98-82-8
Bromobenzene	<0.052	<0.36	<0.056	<0.33	<0.051	108-86-1
Propylbenzene	<0.067	<0.36	<0.073	**1.0**	**0.20**	103-65-1
2-Chlorotoluene	<0.064	<0.36	<0.069	<0.33	<0.064	95-49-8
4-Chlorotoluene	<0.064	<0.36	<0.069	<0.33	<0.064	106-43-4
1,3,5-Trimethylbenzene	<0.067	<0.36	<0.073	**3.3**	**0.67**	108-67-8
tert-Butylbenzene	<0.060	<0.36	<0.065	<0.33	<0.060	98-06-6
1,2,4-Trimethylbenzene	**0.095**	**0.94**	**0.19**	**4.1**	**0.83**	95-63-6
sec-Butylbenzene	<0.060	<0.36	<0.065	<0.33	<0.060	135-98-8
1,3-Dichlorobenzene	<0.055	<0.36	<0.059	<0.33	<0.055	541-73-1
1,4-Dichlorobenzene	<0.055	<0.36	<0.059	<0.33	<0.055	106-46-7
p-Isopropyltoluene	<0.060	<0.36	<0.065	**0.78**	**0.14**	99-87-6
1,2-Dichlorobenzene	<0.055	<0.36	<0.059	<0.33	<0.055	95-50-1
Butylbenzene	<0.060	<0.36	<0.065	<0.33	<0.060	104-51-8
1,2-Dibromo-3-chloropropane	<0.034	<0.36	<0.037	<0.33	<0.034	96-12-8
1,2,4-Trichlorobenzene	<0.045	<0.36	<0.048	<0.33	<0.044	120-82-1
Naphthalene	<0.063	**1.0**	**0.19**	**0.33**	**0.063**	91-20-3
Hexachlorobutadiene	<0.031	<0.36	<0.033	<0.33	<0.031	87-68-3
1,2,3-Trichlorobenzene	<0.045	<0.36	<0.048	<0.33	<0.044	87-61-6
Acetone	**0.52**	**8.7**	**3.7**	**2.6**	**1.1**	67-64-1
Methyl Ethyl Ketone	<0.11	<0.36	<0.12	<0.33	<0.11	78-93-3
Methyl Isobutyl Ketone	<0.081	<0.36	<0.087	<0.33	<0.080	108-10-1
		ug/m3		ug/m3		
**Total Hydrocarbons		**240**		**400**		---

Compound(s) concentration exceeded the upper limit of the calibration range but did not surpass the breakthrough level or saturate the detector. This value is reported as an estimate.

Thermal desorption requires the entire sample to be analyzed at one time. Sample breakthrough cannot be detected.

**This value is a summation of all peak areas present in the sample (quantitated as toluene).

Analyst: John A. Lee _____ Date: 3/12/01

100 Sebethe Drive, Suite A-5
Cromwell, Connecticut 06416
(800)243-4903/(860)635-6475

Analysis: Expanded Scan

Analytical Method: GC/MS Thermal Desorption; Modified EPA TO1/TO2 **Report Number *C0106351***

Sample Number	1990403	1990403	1990405	1990405	1990407	
Air Volume Liters	13.8	13.8	12.8	12.8	13.7	
Compounds	ug/m3	ppb	ug/m3	ppb	ug/m3	CAS #
Dichlorodifluoromethane	**5.4**	**1.3**	**# 270**	**# 67**	**4.0**	75-71-8
Chloromethane	<0.36	<0.18	<0.39	<0.19	**0.94**	74-87-3
Chloroethene	<0.36	<0.14	<0.39	<0.15	<0.36	75-01-4
Bromomethane	<0.36	<0.093	<0.39	<0.10	<0.36	74-83-9
Chloroethane	<0.36	<0.14	<0.39	<0.15	<0.36	75-00-3
Trichlorofluoromethane	**1.0**	**0.18**	**1.1**	**0.20**	**1.7**	75-69-4
1,1-Dichloroethene	<0.36	<0.091	<0.39	<0.099	<0.36	75-35-4
Methylene Chloride	**1.1**	**0.31**	**1.2**	**0.35**	**1.2**	75-09-2
trans-1,2-Dichloroethene	<0.36	<0.091	<0.39	<0.099	<0.36	156-60-5
1,1-Dichloroethane	<0.36	<0.090	<0.39	<0.097	<0.36	75-34-3
cis-1,2-Dichloroethene	<0.36	<0.091	<0.39	<0.099	<0.36	156-59-2
Bromochloromethane	<0.36	<0.068	<0.39	<0.074	<0.36	74-97-5
Chloroform	<0.36	<0.087	<0.39	<0.094	<0.36	67-66-3
2,2-Dichloropropane	<0.36	<0.078	<0.39	<0.085	<0.36	594-20-7
1,2-Dichloroethane	<0.36	<0.089	<0.39	<0.096	<0.36	107-06-2
1,1,1-Trichloroethane	<0.36	<0.066	<0.39	<0.072	<0.36	71-55-6
1,1-Dichloropropene	<0.36	<0.080	<0.39	<0.086	<0.36	563-58-6
Carbon Tetrachloride	<0.36	<0.058	<0.39	<0.062	<0.36	56-23-5
Benzene	<0.72	<0.23	<0.78	<0.24	<0.73	71-43-2
Dibromomethane	<0.36	<0.051	<0.39	<0.055	<0.36	74-95-3
1,2-Dichloropropane	<0.36	<0.078	<0.39	<0.085	<0.36	78-87-5
Trichloroethene	<0.36	<0.067	**15**	**2.8**	<0.36	79-01-6
Bromodichloromethane	<0.36	<0.054	<0.39	<0.058	<0.36	75-27-4
cis-1,3-Dichloropropene	<0.36	<0.080	<0.39	<0.086	<0.36	10061-01-5
trans-1,3-Dichloropropene	<0.36	<0.080	<0.39	<0.086	<0.36	10061-02-6
1,1,2-Trichloroethane	<0.36	<0.066	<0.39	<0.072	<0.36	79-00-5
Toluene	**2.7**	**0.72**	**1.0**	**0.27**	**0.56**	108-88-3
1,3-Dichloropropane	<0.36	<0.078	<0.39	<0.085	<0.36	142-28-9
1,2-Dibromoethane	<0.36	<0.047	<0.39	<0.051	<0.36	106-93-4
Tetrachloroethene	<0.36	<0.053	<0.39	<0.058	<0.36	127-18-4
1,1,1,2-Tetrachloroethane	<0.36	<0.053	<0.39	<0.057	<0.36	630-20-6
Chlorobenzene	<0.36	<0.079	<0.39	<0.085	<0.36	108-90-7

Analyst: John A. Lee _____ Date: 3/12/01

100 Sebethe Drive, Suite A-5
Cromwell, Connecticut 06416
(800)243-4903/(860)635-8475

Report Number ***C0106351***

Sample Number	1990403	1990403	1990405	1990405	1990407	
Air Volume Liters	13.8	13.8	12.8	12.8	13.7	
Compounds (cont.)	ug/m3	ppb	ug/m3	ppb	ug/m3	CAS #
Ethylbenzene	**0.47**	**0.11**	**0.68**	**0.16**	<0.36	100-41-4
m,p-Xylene	**1.5**	**0.34**	**2.1**	**0.48**	<0.73	1330-20-7
Bromoform	<0.36	<0.035	<0.39	<0.038	<0.36	75-25-2
Styrene	**0.82**	**0.19**	<0.39	<0.092	<0.36	100-42-5
1,1,2,2-Tetrachloroethane	<0.36	<0.053	<0.39	<0.057	<0.36	79-34-5
o-Xylene	**0.97**	**0.22**	**0.56**	**0.13**	<0.36	95-47-6
1,2,3-Trichloropropane	<0.36	<0.060	<0.39	<0.065	<0.36	96-18-4
Isopropylbenzene	<0.36	<0.074	<0.39	<0.079	<0.36	98-82-8
Bromobenzene	<0.36	<0.056	<0.39	<0.061	<0.36	108-86-1
Propylbenzene	**0.46**	**0.094**	<0.39	<0.079	<0.36	103-65-1
2-Chlorotoluene	<0.36	<0.070	<0.39	<0.075	<0.36	95-49-8
4-Chlorotoluene	<0.36	<0.070	<0.39	<0.075	<0.36	106-43-4
1,3,5-Trimethylbenzene	**0.85**	**0.17**	<0.39	<0.079	<0.36	108-67-8
tert-Butylbenzene	<0.36	<0.066	<0.39	<0.071	<0.36	98-06-6
1,2,4-Trimethylbenzene	**2.6**	**0.54**	<0.39	<0.079	<0.36	95-63-6
sec-Butylbenzene	<0.36	<0.066	<0.39	<0.071	<0.36	135-98-8
1,3-Dichlorobenzene	<0.36	<0.060	<0.39	<0.065	<0.36	541-73-1
1,4-Dichlorobenzene	<0.36	<0.060	<0.39	<0.065	<0.36	106-46-7
p-Isopropyltoluene	<0.36	<0.066	<0.39	<0.071	<0.36	99-87-6
1,2-Dichlorobenzene	<0.36	<0.060	<0.39	<0.065	<0.36	95-50-1
Butylbenzene	<0.36	<0.066	<0.39	<0.071	<0.36	104-51-8
1,2-Dibromo-3-chloropropane	<0.36	<0.037	<0.39	<0.040	<0.36	96-12-8
1,2,4-Trichlorobenzene	<0.36	<0.049	<0.39	<0.053	<0.36	120-82-1
Naphthalene	**1.0**	**0.20**	<0.39	<0.075	<0.36	91-20-3
Hexachlorobutadiene	<0.36	<0.034	<0.39	<0.037	<0.36	87-68-3
1,2,3-Trichlorobenzene	<0.36	<0.049	<0.39	<0.053	<0.36	87-61-6
Acetone	<0.36	<0.15	**1.2**	**0.50**	*** 0.61**	67-64-1
Methyl Ethyl Ketone	<0.36	<0.12	<0.39	<0.13	<0.36	78-93-3
Methyl Isobutyl Ketone	<0.36	<0.088	<0.39	<0.095	<0.36	108-10-1
	ug/m3		ug/m3		ug/m3	
**Total Hydrocarbons	**110**		**140**		**6.4**	---

Compound(s) concentration exceeded the upper limit of the calibration range but did not surpass the breakthrough level or saturate the detector. This value is reported as an estimate.

Thermal desorption requires the entire sample to be analyzed at one time. Sample breakthrough cannot be detected.

* Compound reported as an estimate due to coelution with another compound sharing the same quantitation ions.
**This value is a summation of all peak areas present in the sample (quantitated as toluene).

Analyst: John A. Lee _____ Date: 3/12/01

ENVIRONMENTAL HEALTH LABORATORY ANALYSIS REPORT

100 Sebethe Drive, Suite A-5
Cromwell, Connecticut 06416
(800)243-4903/(860)635-6475

Analysis: Expanded Scan

Analytical Method: GC/MS Thermal Desorption; Modified EPA TO1/TO2 **Report Number C0106351**

Sample Number	1990407	1990409				
Air Volume Liters	13.7	---				
Compounds	ppb	ng				CAS #
Dichlorodifluoromethane	**1.0**	<5.0				75-71-8
Chloromethane	**0.45**	<5.0				74-87-3
Chloroethene	<0.14	<5.0				75-01-4
Bromomethane	<0.094	<5.0				74-83-9
Chloroethane	<0.14	<5.0				75-00-3
Trichlorofluoromethane	**0.30**	<5.0				75-69-4
1,1-Dichloroethene	<0.092	<5.0				75-35-4
Methylene Chloride	**0.35**	**9.7**				75-09-2
trans-1,2-Dichloroethene	<0.092	<5.0				156-60-5
1,1-Dichloroethane	<0.090	<5.0				75-34-3
cis-1,2-Dichloroethene	<0.092	<5.0				156-59-2
Bromochloromethane	<0.069	<5.0				74-97-5
Chloroform	<0.088	<5.0				67-66-3
2,2-Dichloropropane	<0.079	<5.0				594-20-7
1,2-Dichloroethane	<0.090	<5.0				107-06-2
1,1,1-Trichloroethane	<0.067	<5.0				71-55-6
1,1-Dichloropropene	<0.080	<5.0				563-58-6
Carbon Tetrachloride	<0.058	<5.0				56-23-5
Benzene	<0.23	<10				71-43-2
Dibromomethane	<0.051	<5.0				74-95-3
1,2-Dichloropropane	<0.079	<5.0				78-87-5
Trichloroethene	<0.068	<5.0				79-01-6
Bromodichloromethane	<0.054	<5.0				75-27-4
cis-1,3-Dichloropropene	<0.080	<5.0				10061-01-5
trans-1,3-Dichloropropene	<0.080	<5.0				10061-02-6
1,1,2-Trichloroethane	<0.067	<5.0				79-00-5
Toluene	**0.15**	<5.0				108-88-3
1,3-Dichloropropane	<0.079	<5.0				142-28-9
1,2-Dibromoethane	<0.047	<5.0				106-93-4
Tetrachloroethene	<0.054	<5.0				127-18-4
1,1,1,2-Tetrachloroethane	<0.053	<5.0				630-20-6
Chlorobenzene	<0.079	<5.0				108-90-7

Analyst: John A. Lee _____ Date: 3/12/01

100 Sebethe Drive, Suite A-5
Cromwell, Connecticut 06416
(800)243-4903/(860)635-6475

Report Number *C0106351*

Sample Number	1990407	1990409				
Air Volume Liters	13.7	---				
Compounds (cont.)	ppb	ng				CAS #
Ethylbenzene	<0.084	<5.0				100-41-4
m,p-Xylene	<0.17	<10				1330-20-7
Bromoform	<0.035	<5.0				75-25-2
Styrene	<0.086	<5.0				100-42-5
1,1,2,2-Tetrachloroethane	<0.053	<5.0				79-34-5
o-Xylene	<0.084	<5.0				95-47-6
1,2,3-Trichloropropane	<0.061	<5.0				96-18-4
Isopropylbenzene	<0.074	<5.0				98-82-8
Bromobenzene	<0.057	<5.0				108-86-1
Propylbenzene	<0.074	<5.0				103-65-1
2-Chlorotoluene	<0.070	<5.0				95-49-8
4-Chlorotoluene	<0.070	<5.0				106-43-4
1,3,5-Trimethylbenzene	<0.074	<5.0				108-67-8
tert-Butylbenzene	<0.066	<5.0				98-06-6
1,2,4-Trimethylbenzene	<0.074	<5.0				95-63-6
sec-Butylbenzene	<0.066	<5.0				135-98-8
1,3-Dichlorobenzene	<0.061	<5.0				541-73-1
1,4-Dichlorobenzene	<0.061	<5.0				106-46-7
p-Isopropyltoluene	<0.066	<5.0				99-87-6
1,2-Dichlorobenzene	<0.061	<5.0				95-50-1
Butylbenzene	<0.066	<5.0				104-51-8
1,2-Dibromo-3-chloropropane	<0.038	<5.0				96-12-8
1,2,4-Trichlorobenzene	<0.049	<5.0				120-82-1
Naphthalene	<0.070	<5.0				91-20-3
Hexachlorobutadiene	<0.034	<5.0				87-68-3
1,2,3-Trichlorobenzene	<0.049	<5.0				87-61-6
Acetone	*** 0.26**	<5.0				67-64-1
Methyl Ethyl Ketone	<0.12	<5.0				78-93-3
Methyl Isobutyl Ketone	<0.089	<5.0				108-10-1
		ng				
**Total Hydrocarbons		**12**				---

Thermal desorption requires the entire sample to be analyzed at one time. Sample breakthrough cannot be detected.

* Compound reported as an estimate due to coelution with another compound sharing the same quantitation ions.
**This value is a summation of all peak areas present in the sample (quantitated as toluene).

Analyst: John A. Lee _____ Date: 3/12/01

ENVIRONMENTAL HEALTH LABORATORY ANALYSIS REPORT

100 Sebethe Drive, Suite A-5
Cromwell, Connecticut 06416
(800)243-4903/(860)635-8475

Analysis: Expanded Scan

Analytical Method: GC/MS CS2 Desorption of Charcoal Tubes

Report Number *C0106351*

Sample Number	1990400	1990400	1990402	1990402	1990406	
Air Volume Liters	97.6	97.6	92.1	92.1	95.8	
Compounds	mg/m3	ppm	mg/m3	ppm	mg/m3	CAS #
Dichlorodifluoromethane	<0.010	<0.0025	**0.27**	**0.068**	**0.13**	75-71-8
Toluene	**0.085**	**0.023**	<0.011	<0.0014	<0.010	108-88-3

Front and back sections of charcoal tubes are combined for analysis. Sample breakthrough cannot be detected.

Analyst: John A. Lee _____ Date: 3/15/01

ENVIRONMENTAL HEALTH LABORATORY ANALYSIS REPORT

100 Sebelius Drive, Suite A-5
Cromwell, Connecticut 06416
(800)243-4903/(860)635-6475

Analysis: Expanded Scan

Analytical Method: GC/MS CS2 Desorption of Charcoal Tubes

Report Number *C0106351*

Sample Number	1990406	1990410				
Air Volume Liters	95.8	---				
Compounds	ppm	ug				CAS #
Dichlorodifluoromethane	**0.032**	<1.0				75-71-8
Toluene	<0.0014	<1.0				108-88-3

Front and back sections of charcoal tubes are combined for analysis. Sample breakthrough cannot be detected.

Analyst: John A. Lee _____ Date: 3/15/01

GC/MS Spectral Library Match Summation Report
Sorted by Top 5 Peak Area Amounts

Sample Name : 1990393; C0106351, EHL 2627, tub
Misc Info : DB-VRX; 75m X 0.45mm
Vial Number : 10
Data File : D:\HPCHEM\1\!TD\BSB\6351_393.D
Operator : JAL
Date Acquired : 8 Mar 01 3:33 am
Method File : TD_VRX

Peak #	R.T.	Area %	Library/ID	Ref #	CAS #	Qual
66	21.7	6.75	c:\database\nist98.L			
			Decane	5445	000124-18-5	95
			Undecane	109663	001120-21-4	78
			Triacontane	109665	000638-68-6	64
73	22.99	21.16	c:\database\nist98.L			
			D-Limonene	114020	005989-27-5	96
			Limonene	21973	000138-86-3	95
			Cyclohexene, 1-methyl-4-(1-methyle	21971	007705-14-8	90
77	23.56	4.05	c:\database\nist98.L			
			Hexane, 2,2,5,5-tetramethyl-	112510	001071-81-4	50
			Dodecane, 2,5-dimethyl-	16436	056292-65-0	47
			Pentadecane, 7-methyl-	16513	006165-40-8	38
81	24.21	7.41	c:\database\nist98.L			
			Undecane	112280	001120-21-4	96
			Tridecane	16403	000629-50-5	90
			Decane	5445	000124-18-5	90
95	26.57	5.04	c:\database\nist98.L			
			Dodecane	112317	000112-40-3	96
			Tetradecane	112357	000629-59-4	74
			Undecane	16533	001120-21-4	72

GC/MS Spectral Library Match Summation Report
Sorted by Top 5 Peak Area Amounts

Sample Name : 1990395; C0106351, EHL 2623, tub
Misc Info : DB-VRX; 75m X 0.45mm
Vial Number : 9
Data File : D:\HPCHEM\1\!TD\BSB\6351_395.D
Operator : JAL
Date Acquired : 8 Mar 01 2:33 am
Method File : TD_VRX

Peak #	R.T.	Area %	Library/ID	Ref #	CAS #	Qual
1	24.86	100.00	0 c:\database\nist98.L			
			Benzeneethanamine, N-[(pentafluoro	115266	055429-85-1	39
			Benzoic acid, 2-[(trimethylsilyl)o	115268	003789-85-3	9
			1-Propene-1-thiol	25348	000925-89-3	4

** LESS THAN 5 TOTAL PEAKS OVER DETECTION LIMIT **

GC/MS Spectral Library Match Summation Report
Sorted by Top 5 Peak Area Amounts

Sample Name : 1990397; C0106351, EHL 2625, tub
Misc Info : DB-VRX; 75m X 0.45mm
Vial Number : 8
Data File : D:\HPCHEM\1\!TD\BSB\6351_397.D
Operator : JAL
Date Acquired : 8 Mar 01 1:34 am
Method File : TD_VRX

Peak #	R.T.	Area %	Library/ID	Ref #	CAS #	Qual
1	3.98	32.86	c:\database\nist98.L			
			Propene	108457	000115-07-1	9
			Cyclopropene	1232	1000194-05-8	2
			Borane, ethyldimethyl-	1462	001113-22-0	1
9	11.26	4.72	c:\database\nist98.L			
			Ethane, 1,1,1-trichloro-	118378	000071-55-6	90
			Ethane, 1,1-dichloro-1-nitro-	118376	000594-72-9	56
			Propanoyl chloride, 2,2-dichloro-	42288	026073-26-7	50
22	21.68	4.37	c:\database\nist98.L			
			Decane	112241	000124-18-5	97
			Tridecane	16403	000629-50-5	64
			Tetradecane	112357	000629-59-4	64
27	22.96	5.79	c:\database\nist98.L			
			Limonene	21973	000138-86-3	97
			D-Limonene	114020	005989-27-5	97
			Cyclohexene, 1-methyl-4-(1-methyle	21975	005989-54-8	91
36	24.86	9.82	c:\database\nist98.L			
			Benzeneethanamine, N-[(pentafluoro	115266	055429-85-1	42
			Benzoic acid, 2-[(trimethylsilyl)o	27665	003789-85-3	42
			Benzeneacetic acid, .alpha.,4-bis[	27663	055334-40-2	33

GC/MS Spectral Library Match Summation Report
Sorted by Top 5 Peak Area Amounts

Sample Name : 1990399; C0106351, EHL 2624, tub
Misc Info : DB-VRX; 75m X 0.45mm
Vial Number : 7
Data File : D:\HPCHEM\1\!TD\BSB\6351_399.D
Operator : JAL
Date Acquired : 8 Mar 01 12:32 am
Method File : TD_VRX

Peak #	R.T.	Area %	Library/ID	Ref #	CAS #	Qual
1	3.98	22.11	c:\database\nist98.L			
			Propene	108457	000115-07-1	9
			Propane	108018	000074-98-6	9
			Cyclopropene	1232	1000194-05-8	2
14	15.48	19.88	c:\database\nist98.L			
			Toluene	117292	000108-88-3	94
			1,3,5-Cycloheptatriene	37276	000544-25-2	90
			Molybdenum, di-.mu.-chlorobis[(1,2	37274	035625-66-2	72
51	24.2	4.39	c:\database\nist98.L			
			Undecane	112280	001120-21-4	96
			Hexadecane	112406	000544-76-3	90
			Tridecane	16403	000629-50-5	90
61	26.56	4.59	c:\database\nist98.L			
			Dodecane	112317	000112-40-3	96
			Tetradecane	112357	000629-59-4	87
			Tridecane	112309	000629-50-5	86
73	29.07	3.85	c:\database\nist98.L			
			Tridecane	112308	000629-50-5	98
			Tetradecane	112357	000629-59-4	87
			Heptadecane	112319	000629-78-7	86

GC/MS Spectral Library Match Summation Report
Sorted by Top 5 Peak Area Amounts

Sample Name : 1990401; C0106351, EHL 2628, tub
Misc Info : DB-VRX; 75m X 0.45mm
Vial Number : 6
Data File : D:\HPCHEM\1\!TD\BSB\6351_401.D
Operator : JAL
Date Acquired : 7 Mar 01 11:31 pm
Method File : TD_VRX

Peak #	R.T.	Area %	Library/ID	Ref #	CAS #	Qual
2	4.07	11.55	c:\database\nist98.L			
			Dichlorodifluoromethane	34441	000075-71-8	91
			2-Pyrrolidinone	116666	000616-45-5	4
			Phosphoramidous difluoride	34371	025757-74-8	2
18	12.96	8.42	c:\database\nist98.L			
			Trichloroethylene	41538	000079-01-6	99
			Bis(chloromethyl)sulfide	41062	1000226-61-9	50
			Benzene, 1-chloro-4-fluoro-	121895	000352-33-0	10
56	24.2	12.35	c:\database\nist98.L			
			Undecane	112281	001120-21-4	96
			Hexadecane	112406	000544-76-3	90
			Tridecane	16403	000629-50-5	90
64	25.54	4.78	c:\database\nist98.L			
			Cyclohexane, pentyl-	116435	004292-92-6	53
			Cyclohexane, 1,1'-(1,4-butanediyl)	32982	006165-44-2	50
			Cyclohexane, (1-methylethyl)-	14162	000696-29-7	50
68	26.56	4.46	c:\database\nist98.L			
			Dodecane	112318	000112-40-3	95
			Tetradecane	112357	000629-59-4	87
			Tridecane	112309	000629-50-5	86

GC/MS Spectral Library Match Summation Report
Sorted by Top 5 Peak Area Amounts

Sample Name : 1990403; C0106351, EHL 2621, tub
Misc Info : DB-VRX; 75m X 0.45mm
Vial Number : 5
Data File : D:\HPCHEM\1\!TD\BSB\6351_403.D
Operator : JAL
Date Acquired : 7 Mar 01 10:30 pm
Method File : TD_VRX

Peak #	R.T.	Area %	Library/ID	Ref #	CAS #	Qual
3	4.42	4.79	c:\database\nist98.L			
			Isobutane	109241	000075-28-5	64
			1-Propanol, 2-methyl-	4017	000078-83-1	4
			4-Penten-2-one	4029	013891-87-7	4
8	6.62	4.97	c:\database\nist98.L			
			Pentane	4653	000109-66-0	86
			Oxirane, ethyl-	3255	000106-88-7	50
			1-Propanol, 2-methyl-	109380	000078-83-1	45
46	22.35	5.30	c:\database\nist98.L			
			Benzene, 1,2,3-trimethyl-	119303	000526-73-8	95
			Benzene, 1,3,5-trimethyl-	119300	000108-67-8	95
			Benzene, 1,2,4-trimethyl-	119306	000095-63-6	94
53	24.2	5.49	c:\database\nist98.L			
			Undecane	112281	001120-21-4	96
			Hexadecane	112406	000544-76-3	86
			Tridecane	16403	000629-50-5	86
62	26.56	4.96	c:\database\nist98.L			
			Dodecane	16262	000112-40-3	96
			Undecane	112281	001120-21-4	80
			Tridecane	112309	000629-50-5	80

GC/MS Spectral Library Match Summation Report
Sorted by Top 5 Peak Area Amounts

Sample Name : 1990405; C0106351, EHL 2626, tub
Misc Info : DB-VRX; 75m X 0.45mm
Vial Number : 4
Data File : D:\HPCHEM\1\!TD\BSB\6351_405.D
Operator : JAL
Date Acquired : 7 Mar 01 9:30 pm
Method File : TD_VRX

Peak #	R.T.	Area %	Library/ID	Ref #	CAS #	Qual
2	3.96	11.16	c:\database\nist98.L			
			Hexane, tetradecafluoro-	23361	000355-42-0	90
			Heptane, hexadecafluoro-	23363	000335-57-9	83
			Pentane, dodecafluoro-	23362	000678-26-2	50
3	4.05	41.28	c:\database\nist98.L			
			Dichlorodifluoromethane	34441	000075-71-8	91
			2-Pyrrolidinone	116666	000616-45-5	4
			Thiazole	116712	000288-47-1	2
9	7.53	3.08	c:\database\nist98.L			
			Ethane, 1,1,2-trichloro-1,2,2-trif	118737	000076-13-1	91
			Trichloromonofluoromethane	118725	000075-69-4	38
			Ethane, 1,1,1-trichloro-2,2,2-trif	123640	000354-58-5	32
14	12.96	20.87	c:\database\nist98.L			
			Trichloroethylene	41538	000079-01-6	99
			2-Fluoro-5-chloropyrimidine	59541	062802-37-3	16
			Pyridine, 1-oxide	40920	000694-59-7	10
25	24.2	2.99	c:\database\nist98.L			
			Undecane	112280	001120-21-4	96
			Hexadecane	112408	000544-76-3	86
			Heptadecane	112319	000629-78-7	86

GC/MS Spectral Library Match Summation Report
Sorted by Top 5 Peak Area Amounts

Sample Name : 1990407; C0106351, EHL 2622, tub
Misc Info : DB-VRX; 75m X 0.45mm
Vial Number : 3
Data File : D:\HPCHEM\1\!TD\BSB\6351_407.D
Operator : JAL
Date Acquired : 7 Mar 01 8:26 pm
Method File : TD_VRX

Peak #	R.T.	Area %	Library/ID	Ref #	CAS #	Qual
1	4.06	10.97	c:\database\nist98.L			
			Dichlorodifluoromethane	116732	000075-71-8	83
			2H-Pyran, 2-butoxytetrahydro-	34283	001927-68-0	4
			1-Pentanol, 5-[(tetrahydro-2H-pyra	34370	076102-74-4	4
3	6.42	12.63	c:\database\nist98.L			
			Trichloromonofluoromethane	118724	000075-69-4	83
			1,3,4-Thiadiazol-2-amine	118714	004005-51-0	7
			3H-1,2,4-Triazole-3-thione, 1,2-di	43910	003179-31-5	4
4	6.65	9.54	c:\database\nist98.L			
			Pentane	4653	000109-66-0	9
			Butane, 2-methyl-	109392	000078-78-4	4
			Butane	3946	000106-97-8	3
5	7.49	15.71	c:\database\nist98.L			
			Methylene Chloride	12327	000075-09-2	91
			Propenoic acid, 2-TFA-amino-	4793	1000126-82-9	64
			Methane, bromochloro-	12332	000074-97-5	36
8	18.72	10.67	c:\database\nist98.L			
			p-Xylene	117403	000106-42-3	64
			Benzene, 1,2-dimethyl-	117386	000095-47-6	64
			Ethylbenzene	117388	000100-41-4	9

GC/MS Spectral Library Match Summation Report
Sorted by Top 5 Peak Area Amounts

Sample Name : 1990409; C0106351, EHL 2630, tub
Misc Info : DB-VRX; 75m X 0.45mm
Vial Number : 2
Data File : D:\HPCHEM\1\!TD\BSB\6351_409.D
Operator : JAL
Date Acquired : 7 Mar 01 7:26 pm
Method File : TD_VRX

Peak #	R.T.	Area %	Library/ID	Ref #	CAS #	Qual
1	18.56	100.00	0 c:\database\nist98.L			
			Acetamide, N-ethyl-	108194	000625-50-3	7
			2-Propanone, O-methyloxime	8	003376-35-0	7
			Morpholine	473	000110-91-8	7

** LESS THAN 5 TOTAL PEAKS OVER DETECTION LIMIT **

Interpretation of Library Match Report

GC/MS Spectral Library Match Summation Report
Sorted by Top 5 Peak Area Amounts

Your sample name/number

Sample Name : Worker #1, EHL 030, tube 2065
Misc Info : DB-VRX, 75m X 0.45mm - C0002148
Vial Number : 1
Data File : D:\HPCHEM\1\TD\BSB\2148_W1.D
Operator : JAL
Date Acquired : 17 March 2000 9:12
Method File : TD_VRX

Quality factor of unknown peak to known spectrum. A factor greater than 90 means good match. Low factors can be due to low concentration levels or the presence of coeluting peaks, however chemical family classification can be estimated (i.e. silane, ketone, aromatic, etc.).

Peak #	R.T.	Area %	Library/ID	Ref #	CAS #	Qual
15	12.53	4.61	d:\hpchem\msexe\nbs49k.l			
			Ethane, 1,2-dichloro-	1073	000107-06-2	83
			Ethene, chloro-	132	000075-01-4	36
			Thiophene, 3,4-dichlorotetrahydro-	16155	003001-57-8	9
17	12.98	1.08	d:\hpchem\msexe\nbs49k.l			
			1-Propene, 1,1-dichloro-	2010	000563-58-6	91
			1-Propene, 1,2-dichloro-	2008	000563-54-2	90
			1-Propene, 1,3-dichloro-, (Z)-	2011	010061-01-5	64
26	16.72	8.63	d:\hpchem\msexe\nbs49k.l			
			Ethane, 1,1,2-trichloro-	4883	000079-00-5	94
			Ethane, 1,1,1-trichloro-	4882	000071-55-6	32
			Propane, 1,2,2-trichloro-	7382	003175-23-3	23
34	20.04	1.98	d:\hpchem\msexe\nbs49k.l			
			Benzene, ethyl-	1810	000100-41-4	91
			Benzene, 1,3-dimethyl-	1811	000108-38-3	53
			Benzene, 1,4-dimethyl-	1815	000106-42-3	50
40	21.88	2.73	d:\hpchem\msexe\nbs49k.l			
			Benzene, (1-methylethyl)-	3291	000098-82-8	91
			Benzene, 1-ethyl-2-methyl-	3293	000611-14-3	80
			Benzene, 1,2,3-trimethyl-	3300	000526-73-8	64

Peak number supplied from the chromatogram

Retention time of gas chromatograph peak

Peak magnitude. Multiply this percentage by the total hydrocarbon value reported to get the approximate concentration (based on toluene response)

Tentatively identified compounds with best matching spectrums compared to known chemicals

Chemical Abstract number of tentatively identified compound

1 of 2

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REQUEST FOR ANALYTICAL SERVICES
(Please fill all blanks to help us better serve you)

Standard TAT

RUSH

Please call ahead for Rush analysis. Additional charges apply

3/2/01

FOR LAB USE ONLY
Lab Report No. C0106351
Und ESIS | SRF Z | AR Claims
Pol. Or Con. No.

Send INVOICE To [REQUIRED]		Send RESULTS To [REQUIRED]	
Name:	NICK SKOULARIKIS	Name:	SAME
Company:	LEA	Company:	
Mailing Address:	100 NORTHWEST DRIVE	Mailing Address:	REQUEST:
City, State, Zip:	PLAINVILLE, CT	City, State, Zip:	ELECTRONIC DELIVERABL
PO#, Ref # (If Required)		Phone No:	☐ Phone Results
Accts. Payable Phone No:	860-747-6181	Fax No:	☐ Fax Results
Accts. Payable Fax No:	860-747-8822	Email:	☐ Email Results
Sampling Location:	P&W WILLGOOS FACILITY	Sampling Media:	THERMAL DESORPTION & CHARCOAL TUBES
Product Manufactured/Service Rendered:	TEST FACILITY	Sampling Method:	AIR SAMPLING, TO1 MODIFIED

26

CHAIN OF CUSTODY

Collected by (print): RICHARD TWOMEY		Collector's Signature: Richard Twomey	
Relinquished by: RICHARD TWOMEY	Date/Time: 3/2/01 0830	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time
Method of Shipment: HAND DELIVERY/DROP OFF		Received at Lab by: Jim Kenny	26 30 02/01

Authorized by: Richard Twomey (signature required) Date: 3/1/01

Sample Condition Upon Receipt: Acceptable Unacceptable

CALIBRATED PUMP 54953 5

EHL SAMPLE NO (Lab Use Only)	SAMPLE CONTAINER NO	Media Type	ANALYSIS DESIRED A 3 sample minimum charge applies when less than 3 of each specific analyte is requested.	NOTES (Recording sampling date, Location and Operation, Other compounds present, etc.) FLOW RATE PRE	POST	AVE. CC/MIN. SAMPLING RATE (liters/min)	SAMPLING TIME Start	End	Total Time (minutes)	AIR SAMPLE VOLUME (liters) 2622
✓	1990393	TD	VOC	29.4	32	30.7	8.35	1650	495	15.2 ✓
✓	1990394	CT	VOC	206.	196	201	8.45	1653	488	
✓	1990395	TD	VOC	29.4	29.4	29.4	9.05	1705	480	14.1 ✓
✓	1990396	CT	VOC	206.	193	199.5	9.12	1706	474	
✓	1990397	TD	VOC	29.4	33 ~~48~~	31.2 ~~33~~	9.05	1710	485	15.1 ✓
✓	1990398	CT	VOC	206	206	206	9.12	1710	478	
✓	1990399	TD	VOC	29.4	29.4	29.4	9.28	1725	477	14.0 ✓
✓	1990400	CT	VOC	206	206	206	9.31	1725	474	97.64 ✓
✓	1990401	TD	VOC	29.4	38.5	34.0	9.50	1717	447	15.2 ✓
✓	1990402	CT	VOC	206	206	206	9.52	1719	447	92.08 ✓
✓	1990403	TD	VOC	29.4	29.4	29.4	10.12	1800	468	13.8 ✓
✓	1990404	CT	VOC	206.	206	206	10.15	1800	465	
✓	1990405	TD	VOC	29.4	25.5	27.5	10.30	1817	467	12.8 ✓
✓	1990406	CT	VOC	206	206	206	10.32	1817	465	95.79 ✓
✓	1990407	TD	VOC	29.4	29.4	29.4	10.45	1830	465	13.7 ✓
✓	1990408	CT	VOC	206	206	206	10.48	1830	462	

FOR LAB NOTES ONLY:

Emailed 3/15/01 @ 4:00 p.m.

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REQUEST FOR ANALYTICAL SERVICES

(Please fill all blanks to help us better serve you)

Standard TAT

RUSH
Please call ahead for Rush analysis. Additional charges apply

3/2/01

FOR LAB USE ONLY
Lab Report No. C0106351

Und ESIS | SRF Z | AR Claims

Pol. Or Con. No.

Send INVOICE To [REQUIRED]		Send RESULTS To [REQUIRED]	
Name:	NICK SKOULARIKIS	Name:	SAME
Company:	LEA	Company:	
Mailing Address:	100 NORTHWEST DRIVE	Mailing Address:	REQUEST:
City, State, Zip:	PLAINVILLE, CT 06062	City, State, Zip:	ELECTRONIC DELIVERABL
PO#, Ref # (If Required)		Phone No:	☐ Phone Results
Accts. Payable Phone No:	860-747-6181	Fax No:	☐ Fax Results
Accts. Payable Fax No:	860-747-8822	Email:	☐ Email Results
Sampling Location:	FEW WILLGOOS FACILITY	Sampling Media:	THERMAL DESORPTION & CHARCOAL TUBES
Product Manufactured/Service Rendered:	TEST FACILITY	Sampling Method:	AIR SAMPLING TO1 MODIFIED

CHAIN OF CUSTODY

Collected by (print):	RICHARD TWOMEY	Collector's Signature:	Richard Twomey
Relinquished by:	RICHARD TWOMEY Date/Time 3/2/01 0830	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time
Method of Shipment:	HAND DELIVERY/DROP OFF	Received at Lab by:	Jim Kurzt 3/02/01
Authorized by: (signature required)	Richard Twomey Date: 3/1/01	Sample Condition Upon Receipt:	Acceptable Unacceptable

EHL SAMPLE NO (Lab Use Only)	SAMPLE CONTAINER NO	Media, Type	ANALYSIS DESIRED A 3 sample minimum charge applies when less than 3 of each specific analyte is requested.	NOTES (Recording sampling date, Location and Operation. Other compounds present, etc.)	SAMPLING RATE (liters/min)	SAMPLING TIME Start	End	Total Time (minutes)	AIR SAMPLE VOLUME (liters)
✓	1990409	TD	VOC	BLANK	–	–	–	–	–
✓	1990410	CT	VOC	BLANK	–	–	–	–	–

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June 18, 2001

Monitoring Event

ENVIRONMENTAL HEALTH LABORATORY ANALYSIS REPORT

100 Sebethe Drive, Suite A-5
Cromwell, Connecticut 06416
(800)243-4903/(860)635-6475

Analysis: Expanded Scan

Analytical Method: GC/MS Thermal Desorption; Modified EPA TO1/TO2 **Report Number *C0107111***

Sample Number	1997129	1997129	1997131	1997131	1997133	
Date Of Analysis	06/22/01	06/22/01	06/22/01	06/22/01	06/22/01	
Time Of Analysis	20:07	20:07	18:50	18:50	19:29	
Air Volume Liters	22.34	22.34	17.99	17.99	21.34	
Compounds	ug/m3	ppb	ug/m3	ppb	ug/m3	CAS #
Dichlorodifluoromethane	**7.1**	**1.7**	**6.6**	**1.6**	**7.9**	75-71-8
Chloromethane	**3.9**	**1.9**	<0.28	<0.13	<0.23	74-87-3
Chloroethene	<0.22	<0.088	<0.28	<0.11	<0.23	75-01-4
Bromomethane	**1.9**	**0.49**	<0.28	<0.072	<0.23	74-83-9
Chloroethane	<0.22	<0.085	<0.28	<0.11	<0.23	75-00-3
Trichlorofluoromethane	**0.84**	**0.15**	**1.1**	**0.20**	**0.70**	75-69-4
1,1-Dichloroethene	<0.22	<0.056	<0.28	<0.070	**0.39**	75-35-4
Methylene Chloride	**# 300**	**# 87**	**# 49**	**# 14**	**# 53**	75-09-2
trans-1,2-Dichloroethene	**0.30**	**0.077**	<0.28	<0.070	<0.23	156-60-5
1,1-Dichloroethane	<0.22	<0.055	<0.28	<0.069	<0.23	75-34-3
cis-1,2-Dichloroethene	<0.22	<0.056	<0.28	<0.070	<0.23	156-59-2
Bromochloromethane	**6.1**	**1.1**	<0.28	<0.053	<0.23	74-97-5
Chloroform	<0.22	<0.054	<0.28	<0.067	<0.23	67-66-3
2,2-Dichloropropane	<0.22	<0.048	<0.28	<0.060	<0.23	594-20-7
1,2-Dichloroethane	<0.22	<0.055	<0.28	<0.069	<0.23	107-06-2
1,1,1-Trichloroethane	**0.76**	**0.14**	**# 46**	**# 8.4**	**# 150**	71-55-6
1,1-Dichloropropene	<0.22	<0.049	<0.28	<0.061	<0.23	563-58-6
Carbon Tetrachloride	<0.22	<0.036	<0.28	<0.044	<0.23	56-23-5
Benzene	**# 30**	**# 9.5**	**0.59**	**0.18**	**1.4**	71-43-2
Dibromomethane	<0.22	<0.031	<0.28	<0.039	<0.23	74-95-3
1,2-Dichloropropane	<0.22	<0.048	<0.28	<0.060	<0.23	78-87-5
Trichloroethene	**0.63**	**0.12**	**0.43**	**0.080**	**1.4**	79-01-6
Bromodichloromethane	<0.22	<0.033	<0.28	<0.041	<0.23	75-27-4
cis-1,3-Dichloropropene	<0.22	<0.049	<0.28	<0.061	<0.23	10061-01-5
trans-1,3-Dichloropropene	<0.22	<0.049	<0.28	<0.061	<0.23	10061-02-6
1,1,2-Trichloroethane	**5.4**	**0.99**	<0.28	<0.051	<0.23	79-00-5
Toluene	**# 100**	**# 27**	**2.9**	**0.76**	**7.9**	108-88-3
1,3-Dichloropropane	<0.22	<0.048	<0.28	<0.060	<0.23	142-28-9
1,2-Dibromoethane	<0.22	<0.029	<0.28	<0.036	<0.23	106-93-4
Tetrachloroethene	**0.41**	**0.061**	**0.51**	**0.075**	**1.7**	127-18-4
1,1,1,2-Tetrachloroethane	<0.22	<0.033	<0.28	<0.040	<0.23	630-20-6
Chlorobenzene	<0.22	<0.049	<0.28	<0.060	<0.23	108-90-7

Analyst: John A. Lee _____ Date: 6/26/01

100 Sebethe Drive, Suite A-5
Cromwell, Connecticut 06416
(800)243-4903/(860)635-8475

Report Number *C0107111*

Sample Number	1997129	1997129	1997131	1997131	1997133	
Air Volume Liters	22.34	22.34	17.99	17.99	21.34	
Compounds (cont.)	ug/m3	ppb	ug/m3	ppb	ug/m3	CAS #
Ethylbenzene	**# 25**	**# 5.7**	**0.30**	**0.068**	**0.66**	100-41-4
m,p-Xylene	**# 110**	**# 25**	**1.1**	**0.25**	**2.8**	1330-20-7
Bromoform	<0.22	<0.022	<0.28	<0.027	<0.23	75-25-2
Styrene	**1.9**	**0.44**	<0.28	<0.065	**0.53**	100-42-5
1,1,2,2-Tetrachloroethane	<0.22	<0.033	<0.28	<0.040	<0.23	79-34-5
o-Xylene	**# 42**	**# 9.8**	**0.45**	**0.10**	**0.83**	95-47-6
1,2,3-Trichloropropane	<0.22	<0.037	<0.28	<0.046	<0.23	96-18-4
Isopropylbenzene	**2.3**	**0.47**	<0.28	<0.057	<0.23	98-82-8
Bromobenzene	<0.22	<0.035	<0.28	<0.043	<0.23	108-86-1
Propylbenzene	**7.0**	**1.4**	<0.28	<0.057	<0.23	103-65-1
2-Chlorotoluene	<0.22	<0.043	<0.28	<0.054	<0.23	95-49-8
4-Chlorotoluene	<0.22	<0.043	<0.28	<0.054	<0.23	106-43-4
1,3,5-Trimethylbenzene	**13**	**2.7**	<0.28	<0.057	**0.39**	108-67-8
tert-Butylbenzene	<0.22	<0.041	<0.28	<0.051	<0.23	98-06-6
1,2,4-Trimethylbenzene	**# 26**	**# 5.2**	**0.32**	**0.064**	**0.55**	95-63-6
sec-Butylbenzene	<0.22	<0.041	<0.28	<0.051	<0.23	135-98-8
1,3-Dichlorobenzene	<0.22	<0.037	<0.28	<0.046	<0.23	541-73-1
1,4-Dichlorobenzene	<0.22	<0.037	<0.28	<0.046	<0.23	106-46-7
p-Isopropyltoluene	**2.9**	**0.52**	<0.28	<0.051	<0.23	99-87-6
1,2-Dichlorobenzene	<0.22	<0.037	<0.28	<0.046	<0.23	95-50-1
Butylbenzene	**4.1**	**0.75**	<0.28	<0.051	<0.23	104-51-8
1,2-Dibromo-3-chloropropane	<0.22	<0.023	<0.28	<0.029	<0.23	96-12-8
1,2,4-Trichlorobenzene	<0.22	<0.030	<0.28	<0.037	<0.23	120-82-1
Naphthalene	**15**	**2.8**	**2.1**	**0.39**	**2.5**	91-20-3
Hexachlorobutadiene	<0.22	<0.021	<0.28	<0.026	<0.23	87-68-3
1,2,3-Trichlorobenzene	<0.22	<0.030	<0.28	<0.037	<0.23	87-61-6
Acetone	**# 42**	**# 18**	**7.4**	**3.1**	**4.8**	67-64-1
Methyl Ethyl Ketone	**4.3**	**1.5**	**4.3**	**1.5**	**3.5**	78-93-3
Methyl Isobutyl Ketone	<0.22	<0.055	**0.53**	**0.13**	**0.97**	108-10-1
	ug/m3		ug/m3		ug/m3	
**Total Hydrocarbons	**# 4,300**		**# 200**		**# 380**	---

Compound(s) concentration exceeded the upper limit of the calibration range but did not surpass the breakthrough level or saturate the detector. This value is reported as an estimate.

Thermal desorption requires the entire sample to be analyzed at one time. Sample breakthrough cannot be detected.

**This value is a summation of all peak areas present in the sample (quantitated as toluene).

Analyst: John A. Lee _____ Date: 6/26/01

ENVIRONMENTAL HEALTH LABORATORY ANALYSIS REPORT

100 Sebethe Drive, Suite A-5
Cromwell, Connecticut 06416
(800)243-4903/(860)635-6475

Analysis: Expanded Scan

Analytical Method: GC/MS Thermal Desorption; Modified EPA TO1/TO2 **Report Number *C0107111***

Sample Number	1997133	1997135	1997135	1997137	1997137	
Date Of Analysis	06/22/01	06/22/01	06/22/01	06/22/01	06/22/01	
Time Of Analysis	19:29	20:46	20:46	21:24	21:24	
Air Volume Liters	21.34	19.4	19.4	21.1	21.1	
Compounds	ppb	ug/m3	ppb	ug/m3	ppb	CAS #
Dichlorodifluoromethane	**2.0**	**5.6**	**1.4**	**21**	**5.1**	75-71-8
Chloromethane	<0.11	**0.40**	**0.19**	**0.24**	**0.12**	74-87-3
Chloroethene	<0.092	<0.26	<0.10	<0.24	<0.093	75-01-4
Bromomethane	<0.060	<0.26	<0.066	<0.24	<0.061	74-83-9
Chloroethane	<0.089	<0.26	<0.098	<0.24	<0.090	75-00-3
Trichlorofluoromethane	**0.12**	**0.58**	**0.10**	**0.77**	**0.14**	75-69-4
1,1-Dichloroethene	**0.098**	<0.26	<0.065	<0.24	<0.060	75-35-4
Methylene Chloride	**# 15**	**# 44**	**# 13**	**# 26**	**# 7.6**	75-09-2
trans-1,2-Dichloroethene	<0.059	<0.26	<0.065	<0.24	<0.060	156-60-5
1,1-Dichloroethane	<0.058	<0.26	<0.064	<0.24	<0.059	75-34-3
cis-1,2-Dichloroethene	<0.059	<0.26	<0.065	<0.24	<0.060	156-59-2
Bromochloromethane	<0.044	**0.30**	**0.058**	<0.24	<0.045	74-97-5
Chloroform	<0.056	<0.26	<0.062	<0.24	<0.057	67-66-3
2,2-Dichloropropane	<0.051	<0.26	<0.056	<0.24	<0.051	594-20-7
1,2-Dichloroethane	<0.058	<0.26	<0.064	**1.8**	**0.44**	107-06-2
1,1,1-Trichloroethane	**# 28**	**0.28**	**0.051**	**0.49**	**0.090**	71-55-6
1,1-Dichloropropene	<0.052	<0.26	<0.057	<0.24	<0.052	563-58-6
Carbon Tetrachloride	<0.037	<0.26	<0.041	**0.36**	**0.057**	56-23-5
Benzene	**0.44**	<0.52	<0.16	<0.47	<0.15	71-43-2
Dibromomethane	<0.033	<0.26	<0.036	<0.24	<0.033	74-95-3
1,2-Dichloropropane	<0.051	<0.26	<0.056	<0.24	<0.051	78-87-5
Trichloroethene	**0.26**	**0.29**	**0.054**	**18**	**3.4**	79-01-6
Bromodichloromethane	<0.035	<0.26	<0.038	<0.24	<0.035	75-27-4
cis-1,3-Dichloropropene	<0.052	<0.26	<0.057	<0.24	<0.052	10061-01-5
trans-1,3-Dichloropropene	<0.052	<0.26	<0.057	<0.24	<0.052	10061-02-6
1,1,2-Trichloroethane	<0.043	<0.26	<0.047	<0.24	<0.043	79-00-5
Toluene	**2.1**	**2.8**	**0.74**	**1.2**	**0.32**	108-88-3
1,3-Dichloropropane	<0.051	<0.26	<0.056	<0.24	<0.051	142-28-9
1,2-Dibromoethane	<0.030	<0.26	<0.034	<0.24	<0.031	106-93-4
Tetrachloroethene	**0.26**	<0.26	<0.038	<0.24	<0.035	127-18-4
1,1,1,2-Tetrachloroethane	<0.034	<0.26	<0.038	<0.24	<0.035	630-20-6
Chlorobenzene	<0.051	<0.26	<0.056	<0.24	<0.051	108-90-7

Analyst: John A. Lee _____ Date: 6/26/01

100 Sebethe Drive, Suite A-5
Cromwell, Connecticut 06416
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Report Number *C0107111*

Sample Number	1997133	1997135	1997135	1997137	1997137	
Air Volume Liters	21.34	19.4	19.4	21.1	21.1	
Compounds (cont.)	ppb	ug/m3	ppb	ug/m3	ppb	CAS #
Ethylbenzene	**0.15**	**0.98**	**0.23**	**0.25**	**0.059**	100-41-4
m,p-Xylene	**0.65**	**6.5**	**1.5**	**0.86**	**0.20**	1330-20-7
Bromoform	<0.023	<0.26	<0.025	<0.24	<0.023	75-25-2
Styrene	**0.12**	<0.26	<0.060	<0.24	<0.056	100-42-5
1,1,2,2-Tetrachloroethane	<0.034	<0.26	<0.038	<0.24	<0.035	79-34-5
o-Xylene	**0.19**	**2.6**	**0.61**	**0.29**	**0.067**	95-47-6
1,2,3-Trichloropropane	<0.039	<0.26	<0.043	<0.24	<0.039	96-18-4
Isopropylbenzene	<0.048	**0.32**	**0.065**	<0.24	<0.048	98-82-8
Bromobenzene	<0.036	<0.26	<0.040	<0.24	<0.037	108-86-1
Propylbenzene	<0.048	**0.65**	**0.13**	<0.24	<0.048	103-65-1
2-Chlorotoluene	<0.045	<0.26	<0.050	<0.24	<0.046	95-49-8
4-Chlorotoluene	<0.045	<0.26	<0.050	<0.24	<0.046	106-43-4
1,3,5-Trimethylbenzene	**0.079**	**2.5**	**0.52**	<0.24	<0.048	108-67-8
tert-Butylbenzene	<0.043	<0.26	<0.047	<0.24	<0.043	98-06-6
1,2,4-Trimethylbenzene	**0.11**	**2.4**	**0.49**	<0.24	<0.048	95-63-6
sec-Butylbenzene	<0.043	<0.26	<0.047	<0.24	<0.043	135-98-8
1,3-Dichlorobenzene	<0.039	<0.26	<0.043	<0.24	<0.039	541-73-1
1,4-Dichlorobenzene	<0.039	<0.26	<0.043	<0.24	<0.039	106-46-7
p-Isopropyltoluene	<0.043	**0.37**	**0.068**	<0.24	<0.043	99-87-6
1,2-Dichlorobenzene	<0.039	<0.26	<0.043	<0.24	<0.039	95-50-1
Butylbenzene	<0.043	<0.26	<0.047	<0.24	<0.043	104-51-8
1,2-Dibromo-3-chloropropane	<0.024	<0.26	<0.027	<0.24	<0.025	96-12-8
1,2,4-Trichlorobenzene	<0.032	<0.26	<0.035	<0.24	<0.032	120-82-1
Naphthalene	**0.47**	**2.9**	**0.56**	**0.30**	**0.058**	91-20-3
Hexachlorobutadiene	<0.022	<0.26	<0.024	<0.24	<0.022	87-68-3
1,2,3-Trichlorobenzene	<0.032	<0.26	<0.035	<0.24	<0.032	87-61-6
Acetone	**2.0**	**4.1**	**1.7**	**2.8**	**1.2**	67-64-1
Methyl Ethyl Ketone	**1.2**	**0.58**	**0.20**	**0.51**	**0.17**	78-93-3
Methyl Isobutyl Ketone	**0.24**	<0.26	<0.063	<0.24	<0.058	108-10-1
		ug/m3		ug/m3		
**Total Hydrocarbons		**# 260**		**# 82**		---

Compound(s) concentration exceeded the upper limit of the calibration range but did not surpass the breakthrough level or saturate the detector. This value is reported as an estimate.

Thermal desorption requires the entire sample to be analyzed at one time. Sample breakthrough cannot be detected.

**This value is a summation of all peak areas present in the sample (quantitated as toluene).

Analyst: John A. Lee _____ Date: 6/26/01

ENVIRONMENTAL HEALTH LABORATORY ANALYSIS REPORT

100 Sebethe Drive, Suite A-5
Cromwell, Connecticut 06416
(800)243-4903/(860)635-6475

Analysis: Expanded Scan

Analytical Method: GC/MS Thermal Desorption; Modified EPA TO1/TO2 **Report Number *C0107111***

Sample Number	1997139	1997139	1997384	1997384	1997386	
Date Of Analysis	06/22/01	06/22/01	06/22/01	06/22/01	06/22/01	
Time Of Analysis	22:03	22:03	22:42	22:42	23:20	
Air Volume Liters	16.1	16.1	19.11	19.11	16.48	
Compounds	ug/m3	ppb	ug/m3	ppb	ug/m3	CAS #
Dichlorodifluoromethane	**7.3**	**1.8**	**5.3**	**1.3**	**13**	75-71-8
Chloromethane	**2.4**	**1.2**	**0.39**	**0.19**	**0.79**	74-87-3
Chloroethene	**0.33**	**0.13**	<0.26	<0.10	<0.30	75-01-4
Bromomethane	<0.31	<0.080	**0.69**	**0.18**	<0.30	74-83-9
Chloroethane	**4.5**	**1.7**	<0.26	<0.099	<0.30	75-00-3
Trichlorofluoromethane	**0.89**	**0.16**	**0.32**	**0.056**	**0.48**	75-69-4
1,1-Dichloroethene	<0.31	<0.078	<0.26	<0.066	<0.30	75-35-4
Methylene Chloride	**8.2**	**2.4**	**# 27**	**# 7.9**	**# 340**	75-09-2
trans-1,2-Dichloroethene	**# 300**	**# 76**	**2.1**	**0.54**	**2.0**	156-60-5
1,1-Dichloroethane	<0.31	<0.077	<0.26	<0.065	<0.30	75-34-3
cis-1,2-Dichloroethene	**13**	**3.3**	<0.26	<0.066	<0.30	156-59-2
Bromochloromethane	<0.31	<0.059	<0.26	<0.049	**1.6**	74-97-5
Chloroform	<0.31	<0.075	<0.26	<0.063	<0.30	67-66-3
2,2-Dichloropropane	<0.31	<0.067	<0.26	<0.057	<0.30	594-20-7
1,2-Dichloroethane	<0.31	<0.077	<0.26	<0.065	**1.3**	107-06-2
1,1,1-Trichloroethane	<0.31	<0.057	<0.26	<0.048	<0.30	71-55-6
1,1-Dichloropropene	<0.31	<0.068	<0.26	<0.058	<0.30	563-58-6
Carbon Tetrachloride	<0.31	<0.049	<0.26	<0.042	<0.30	56-23-5
Benzene	<0.62	<0.19	<0.52	<0.16	<0.61	71-43-2
Dibromomethane	<0.31	<0.044	<0.26	<0.037	<0.30	74-95-3
1,2-Dichloropropane	<0.31	<0.067	<0.26	<0.057	<0.30	78-87-5
Trichloroethene	<0.31	<0.058	<0.26	<0.049	**12**	79-01-6
Bromodichloromethane	<0.31	<0.046	<0.26	<0.039	<0.30	75-27-4
cis-1,3-Dichloropropene	<0.31	<0.068	<0.26	<0.058	<0.30	10061-01-5
trans-1,3-Dichloropropene	<0.31	<0.068	<0.26	<0.058	<0.30	10061-02-6
1,1,2-Trichloroethane	<0.31	<0.057	<0.26	<0.048	<0.30	79-00-5
Toluene	<0.31	<0.082	**0.68**	**0.18**	**1.1**	108-88-3
1,3-Dichloropropane	<0.31	<0.067	<0.26	<0.057	<0.30	142-28-9
1,2-Dibromoethane	<0.31	<0.040	<0.26	<0.034	<0.30	106-93-4
Tetrachloroethene	<0.31	<0.046	<0.26	<0.039	<0.30	127-18-4
1,1,1,2-Tetrachloroethane	<0.31	<0.045	<0.26	<0.038	<0.30	630-20-6
Chlorobenzene	<0.31	<0.067	<0.26	<0.057	<0.30	108-90-7

Analyst: John A. Lee _____ Date: 6/26/01

100 Sebethe Drive, Suite A-5
Cromwell, Connecticut 06416
(800)243-4903/(860)635-8475

Report Number *C0107111*

Sample Number	1997139	1997139	1997384	1997384	1997386	
Air Volume Liters	16.1	16.1	19.11	19.11	16.48	
Compounds (cont.)	ug/m3	ppb	ug/m3	ppb	ug/m3	CAS #
Ethylbenzene	<0.31	<0.072	<0.26	<0.060	<0.30	100-41-4
m,p-Xylene	**0.74**	**0.17**	<0.52	<0.12	**0.71**	1330-20-7
Bromoform	<0.31	<0.030	<0.26	<0.025	<0.30	75-25-2
Styrene	<0.31	<0.073	<0.26	<0.061	<0.30	100-42-5
1,1,2,2-Tetrachloroethane	<0.31	<0.045	<0.26	<0.038	<0.30	79-34-5
o-Xylene	**0.48**	**0.11**	<0.26	<0.060	<0.30	95-47-6
1,2,3-Trichloropropane	<0.31	<0.052	<0.26	<0.043	<0.30	96-18-4
Isopropylbenzene	<0.31	<0.063	<0.26	<0.053	<0.30	98-82-8
Bromobenzene	<0.31	<0.048	<0.26	<0.041	<0.30	108-86-1
Propylbenzene	**0.32**	**0.065**	<0.26	<0.053	<0.30	103-65-1
2-Chlorotoluene	<0.31	<0.060	<0.26	<0.051	<0.30	95-49-8
4-Chlorotoluene	<0.31	<0.060	<0.26	<0.051	<0.30	106-43-4
1,3,5-Trimethylbenzene	**0.88**	**0.18**	<0.26	<0.053	<0.30	108-67-8
tert-Butylbenzene	<0.31	<0.057	<0.26	<0.048	<0.30	98-06-6
1,2,4-Trimethylbenzene	**1.4**	**0.28**	<0.26	<0.053	<0.30	95-63-6
sec-Butylbenzene	<0.31	<0.057	<0.26	<0.048	<0.30	135-98-8
1,3-Dichlorobenzene	<0.31	<0.052	<0.26	<0.044	<0.30	541-73-1
1,4-Dichlorobenzene	<0.31	<0.052	<0.26	<0.044	<0.30	106-46-7
p-Isopropyltoluene	<0.31	<0.057	<0.26	<0.048	<0.30	99-87-6
1,2-Dichlorobenzene	<0.31	<0.052	<0.26	<0.044	<0.30	95-50-1
Butylbenzene	<0.31	<0.057	<0.26	<0.048	<0.30	104-51-8
1,2-Dibromo-3-chloropropane	<0.31	<0.032	<0.26	<0.027	<0.30	96-12-8
1,2,4-Trichlorobenzene	<0.31	<0.042	<0.26	<0.035	<0.30	120-82-1
Naphthalene	**1.4**	**0.27**	<0.26	<0.050	<0.30	91-20-3
Hexachlorobutadiene	<0.31	<0.029	<0.26	<0.025	<0.30	87-68-3
1,2,3-Trichlorobenzene	<0.31	<0.042	<0.26	<0.035	<0.30	87-61-6
Acetone	**14**	**6.1**	**3.3**	**1.4**	**4.7**	67-64-1
Methyl Ethyl Ketone	<0.31	<0.11	**0.32**	**0.11**	**0.47**	78-93-3
Methyl Isobutyl Ketone	<0.31	<0.076	<0.26	<0.064	<0.30	108-10-1
	ug/m3		ug/m3		ug/m3	
**Total Hydrocarbons	**# 550**		**# 78**		**# 260**	---

Compound(s) concentration exceeded the upper limit of the calibration range but did not surpass the breakthrough level or saturate the detector. This value is reported as an estimate.

Thermal desorption requires the entire sample to be analyzed at one time. Sample breakthrough cannot be detected.

**This value is a summation of all peak areas present in the sample (quantitated as toluene).

Analyst: John A. Lee _____ Date: 6/26/01

ENVIRONMENTAL HEALTH LABORATORY ANALYSIS REPORT

100 Sebethe Drive, Suite A-5
Cromwell, Connecticut 06416
(800)243-4903/(860)635-8475

Analysis: Expanded Scan

Analytical Method: GC/MS Thermal Desorption; Modified EPA TO1/TO2 **Report Number *C0107111***

Sample Number	1997386	1997388				
Date Of Analysis	06/22/01	06/22/01				
Time Of Analysis	23:20	18:12				
Air Volume Liters	16.48	---				
Compounds	ppb	ng				CAS #
Dichlorodifluoromethane	**3.2**	<5.0				75-71-8
Chloromethane	**0.38**	<5.0				74-87-3
Chloroethene	<0.12	<5.0				75-01-4
Bromomethane	<0.078	<5.0				74-83-9
Chloroethane	<0.11	<5.0				75-00-3
Trichlorofluoromethane	**0.086**	<5.0				75-69-4
1,1-Dichloroethene	<0.077	<5.0				75-35-4
Methylene Chloride	**# 97**	<5.0				75-09-2
trans-1,2-Dichloroethene	**0.49**	<5.0				156-60-5
1,1-Dichloroethane	<0.075	<5.0				75-34-3
cis-1,2-Dichloroethene	<0.077	<5.0				156-59-2
Bromochloromethane	**0.30**	<5.0				74-97-5
Chloroform	<0.073	<5.0				67-66-3
2,2-Dichloropropane	<0.066	<5.0				594-20-7
1,2-Dichloroethane	**0.33**	<5.0				107-06-2
1,1,1-Trichloroethane	<0.056	<5.0				71-55-6
1,1-Dichloropropene	<0.067	<5.0				563-58-6
Carbon Tetrachloride	<0.048	<5.0				56-23-5
Benzene	<0.19	<10				71-43-2
Dibromomethane	<0.043	<5.0				74-95-3
1,2-Dichloropropane	<0.066	<5.0				78-87-5
Trichloroethene	**2.2**	<5.0				79-01-6
Bromodichloromethane	<0.045	<5.0				75-27-4
cis-1,3-Dichloropropene	<0.067	<5.0				10061-01-5
trans-1,3-Dichloropropene	<0.067	<5.0				10061-02-6
1,1,2-Trichloroethane	<0.056	<5.0				79-00-5
Toluene	**0.29**	<5.0				108-88-3
1,3-Dichloropropane	<0.066	<5.0				142-28-9
1,2-Dibromoethane	<0.039	<5.0				106-93-4
Tetrachloroethene	<0.045	<5.0				127-18-4
1,1,1,2-Tetrachloroethane	<0.044	<5.0				630-20-6
Chlorobenzene	<0.066	<5.0				108-90-7

Analyst: John A. Lee _____ Date: 6/26/01

100 Sebethe Drive, Suite A-5
Cromwell, Connecticut 06416
(800)243-4903/(860)635-6475

Report Number *C0107111*

Sample Number	1997386	1997388				
Air Volume Liters	16.48	---				
Compounds (cont.)	ppb	ng				CAS #
Ethylbenzene	<0.070	<5.0				100-41-4
m,p-Xylene	**0.16**	<10				1330-20-7
Bromoform	<0.029	<5.0				75-25-2
Styrene	<0.071	<5.0				100-42-5
1,1,2,2-Tetrachloroethane	<0.044	<5.0				79-34-5
o-Xylene	<0.070	<5.0				95-47-6
1,2,3-Trichloropropane	<0.050	<5.0				96-18-4
Isopropylbenzene	<0.062	<5.0				98-82-8
Bromobenzene	<0.047	<5.0				108-86-1
Propylbenzene	<0.062	<5.0				103-65-1
2-Chlorotoluene	<0.059	<5.0				95-49-8
4-Chlorotoluene	<0.059	<5.0				106-43-4
1,3,5-Trimethylbenzene	<0.062	<5.0				108-67-8
tert-Butylbenzene	<0.055	<5.0				98-06-6
1,2,4-Trimethylbenzene	<0.062	<5.0				95-63-6
sec-Butylbenzene	<0.055	<5.0				135-98-8
1,3-Dichlorobenzene	<0.050	<5.0				541-73-1
1,4-Dichlorobenzene	<0.050	<5.0				106-46-7
p-Isopropyltoluene	<0.055	<5.0				99-87-6
1,2-Dichlorobenzene	<0.050	<5.0				95-50-1
Butylbenzene	<0.055	<5.0				104-51-8
1,2-Dibromo-3-chloropropane	<0.031	<5.0				96-12-8
1,2,4-Trichlorobenzene	<0.041	<5.0				120-82-1
Naphthalene	<0.058	<5.0				91-20-3
Hexachlorobutadiene	<0.028	<5.0				87-68-3
1,2,3-Trichlorobenzene	<0.041	<5.0				87-61-6
Acetone	**2.0**	<5.0				67-64-1
Methyl Ethyl Ketone	**0.16**	<5.0				78-93-3
Methyl Isobutyl Ketone	<0.074	<5.0				108-10-1
		ng				
**Total Hydrocarbons		**7.0**				---

Compound(s) concentration exceeded the upper limit of the calibration range but did not surpass the breakthrough level or saturate the detector. This value is reported as an estimate.

Thermal desorption requires the entire sample to be analyzed at one time. Sample breakthrough cannot be detected.

**This value is a summation of all peak areas present in the sample (quantitated as toluene).

Analyst: John A. Lee _____ Date: 6/26/01

GC/MS Spectral Library Match Summation Report
Sorted by Top 5 Peak Area Amounts

Sample Name : 1997129, C0107111; EHL 2834, tub
Misc Info : Rtx-200; 60m x 0.32mm
Vial Number : 5
Data File : D:\HPCHEM\1\!TD\BSB\7111_129.D
Operator : JAL
Date Acquired : 22 Jun 2001 20:07
Method File : TD_200

Peak #	R.T.	Area %	Library/ID	Ref #	CAS #	Qual
15	5.75	5.03	c:\database\nist98.L			
			Pentane, 2-methyl-	4652	000107-83-5	55
			Aziridine, 2,2-dimethyl-	688	002658-24-4	38
			Furan	108395	000110-00-9	38
18	6.14	6.40	c:\database\nist98.L			
			Methylene Chloride	12327	000075-09-2	94
			Ethyl Chloride	107943	000075-00-3	4
			Piperidine, 2-propyl-, (S)-	33701	000458-88-8	4
36	8.65	3.48	c:\database\nist98.L			
			Furan, tetrahydro-	109003	000109-99-9	86
			1-Propene, 2-methoxy-	109004	000116-11-0	42
			Oxirane, 2,2-dimethyl-	108504	000558-30-5	35
69	12.59	3.61	c:\database\nist98.L			
			Benzene, 1,3-dimethyl-	117397	000108-38-3	97
			p-Xylene	117400	000106-42-3	95
			Benzene, 1,2-dimethyl-	37719	000095-47-6	94
97	15.69	6.92	c:\database\nist98.L			
			Cyclopentasiloxane, decamethyl-	103462	000541-02-6	87
			2,4(1H,3H)-Quinolinedione, 3-benzo	103476	070611-42-6	35
			Silane, [[4-[1,2-bis[(trimethylsil	128842	056114-62-6	32

GC/MS Spectral Library Match Summation Report
Sorted by Top 5 Peak Area Amounts

Sample Name : 1997131, C0107111; EHL 2827, tub
Misc Info : Rtx-200; 60m x 0.32mm
Vial Number : 3
Data File : D:\HPCHEM\1\!TD\BSB\7111_131.D
Operator : JAL
Date Acquired : 22 Jun 2001 18:50
Method File : TD_200

Peak #	R.T.	Area %	Library/ID	Ref #	CAS #	Qual
2	4.3	4.46	c:\database\nist98.L			
			Methane, chlorodifluoro-	111064	000075-45-6	74
			Ethane, 1,1-difluoro-	111062	000075-37-6	7
			Propiolonitrile	12371	001070-71-9	4
18	6.38	18.17	c:\database\nist98.L			
			Methylene Chloride	111039	000075-09-2	96
			3-Amino-s-triazole	209	000061-82-5	4
			Dicyandiamide	116556	000461-58-5	4
30	8.32	15.55	c:\database\nist98.L			
			Ethane, 1,1,1-trichloro-	118378	000071-55-6	90
			Ethane, 1,1-dichloro-1-nitro-	118376	000594-72-9	64
			Propanoyl chloride, 2,2-dichloro-	42288	026073-26-7	50
32	8.79	6.36	c:\database\nist98.L			
			Furan, tetrahydro-	109006	000109-99-9	90
			Oxirane, ethyl-	3255	000106-88-7	72
			1-Propene, 2-methoxy-	3294	000116-11-0	53
65	14.48	6.22	c:\database\nist98.L			
			D-Limonene	21974	005989-27-5	93
			Limonene	114007	000138-86-3	90
			Cyclohexene, 1-methyl-4-(1-methyle	21971	007705-14-8	74

GC/MS Spectral Library Match Summation Report
Sorted by Top 5 Peak Area Amounts

Sample Name : 1997133, C0107111; EHL 2832, tub
Misc Info : Rtx-200; 60m x 0.32mm
Vial Number : 4
Data File : D:\HPCHEM\1\!TD\BSB\7111_133.D
Operator : JAL
Date Acquired : 22 Jun 2001 19:29
Method File : TD_200

Peak #	R.T.	Area %	Library/ID	Ref #	CAS #	Qual
2	4.31	3.67	c:\database\nist98.L			
			Methane, chlorodifluoro-	111064	000075-45-6	83
			Ethane, 1,1-difluoro-	111062	000075-37-6	7
			Propiolonitrile	12371	001070-71-9	4
19	6.4	10.58	c:\database\nist98.L			
			Methylene Chloride	111039	000075-09-2	95
			4H-1,2,4-Triazol-4-amine	107976	000584-13-4	4
			3-Amino-s-triazole	209	000061-82-5	4
33	8.31	27.21	c:\database\nist98.L			
			Ethane, 1,1,1-trichloro-	118377	000071-55-6	90
			Propanoic acid, 2,2-dichloro-, met	42141	017640-02-7	56
			Ethane, 1,1-dichloro-1-nitro-	118376	000594-72-9	50
37	8.8	5.99	c:\database\nist98.L			
			Furan, tetrahydro-	109003	000109-99-9	86
			Cyclobutane, methyl-	3261	000598-61-8	37
			1-Propene, 2-methoxy-	109004	000116-11-0	36
80	14.48	5.55	c:\database\nist98.L			
			Cyclohexene, 1-methyl-4-(1-methyle	114008	005989-54-8	94
			D-Limonene	21974	005989-27-5	93
			Limonene	114006	000138-86-3	91

GC/MS Spectral Library Match Summation Report
Sorted by Top 5 Peak Area Amounts

Sample Name : 1997135, C0107111; EHL 2836, tub
Misc Info : Rtx-200; 60m x 0.32mm
Vial Number : 6
Data File : D:\HPCHEM\1\!TD\BSB\7111_135.D
Operator : JAL
Date Acquired : 22 Jun 2001 20:46
Method File : TD_200

Peak #	R.T.	Area %	Library/ID	Ref #	CAS #	Qual
14	6.16	8.45	c:\database\nist98.L			
			Methylene Chloride	12327	000075-09-2	94
			Ethyl Chloride	107943	000075-00-3	4
			Krypton	33829	007439-90-9	3
27	8.64	6.37	c:\database\nist98.L			
			Furan, tetrahydro-	109005	000109-99-9	90
			Oxirane, ethyl-	3255	000106-88-7	78
			1-Propene, 2-methoxy-	3294	000116-11-0	53
48	11.59	5.42	c:\database\nist98.L			
			Nonane	109596	000111-84-2	93
			1-Octanol, 2-butyl-	112292	003913-02-8	72
			Decane	109556	000124-18-5	64
56	12.59	4.71	c:\database\nist98.L			
			Benzene, 1,3-dimethyl-	117396	000108-38-3	95
			Benzene, 1,2-dimethyl-	37719	000095-47-6	95
			p-Xylene	117404	000106-42-3	95
62	13.36	4.95	c:\database\nist98.L			
			Decane	109556	000124-18-5	94
			Nonane	5495	000111-84-2	90
			Undecane	109663	001120-21-4	90

GC/MS Spectral Library Match Summation Report
Sorted by Top 5 Peak Area Amounts

Sample Name : 1997137, C0107111; EHL 2831, tub
Misc Info : Rtx-200; 60m x 0.32mm
Vial Number : 7
Data File : D:\HPCHEM\1\!TD\BSB\7111_137.D
Operator : JAL
Date Acquired : 22 Jun 2001 21:24
Method File : TD_200

Peak #	R.T.	Area %	Library/ID	Ref #	CAS #	Qual
2	4.16	3.72	c:\database\nist98.L			
			Dichlorodifluoromethane	116732	000075-71-8	72
			Phosphoramidous difluoride	34371	025757-74-8	5
			2-Pyrrolidinone	116666	000616-45-5	4
9	5.87	3.15	c:\database\nist98.L			
			Furan	21740	000110-00-9	78
			1,5-Cyclooctadien-4-one	113950	001460-21-5	40
			1H-Pyrazole	113959	000288-13-1	36
12	6.27	23.33	c:\database\nist98.L			
			Methylene Chloride	111039	000075-09-2	95
			3-Amino-s-triazole	209	000061-82-5	4
			4H-1,2,4-Triazol-4-amine	107976	000584-13-4	4
24	8.74	7.51	c:\database\nist98.L			
			Furan, tetrahydro-	109006	000109-99-9	90
			Oxirane, ethyl-	3255	000106-88-7	72
			1-Propene, 2-methoxy-	3294	000116-11-0	58
25	8.9	16.42	c:\database\nist98.L			
			Trichloroethylene	41538	000079-01-6	98
			2-Fluoro-5-chloropyrimidine	59541	062802-37-3	35
			Benzene, 1-chloro-3-fluoro-	121892	000625-98-9	25

GC/MS Spectral Library Match Summation Report
Sorted by Top 5 Peak Area Amounts

Sample Name : 1997139, C0107111; EHL 2830, tub
Misc Info : Rtx-200; 60m x 0.32mm
Vial Number : 8
Data File : D:\HPCHEM\1\ITD\BSB\7111_139.D
Operator : JAL
Date Acquired : 22 Jun 2001 22:03
Method File : TD_200

Peak #	R.T.	Area %	Library/ID	Ref #	CAS #	Qual
2	4	11.25	c:\database\nist98.L			
			Norflurane	1170	000811-97-2	5
			1H-Imidazol-2-amine	33094	007720-39-0	3
			Methane, oxybis[dichloro-	33237	020524-86-1	2
4	4.36	4.30	c:\database\nist98.L			
			Ribitol, 1,3:4,5-di-O-(ethylborane	51169	1000149-52-8	7
			1H-Imidazole, 4-nitro-	120227	003034-38-6	5
			Caprolactam	50977	000105-60-2	4
10	5.98	4.34	c:\database\nist98.L			
			Isopropyl Alcohol	110736	000067-63-0	9
			Ethylamine	108212	000075-04-7	4
			Methane, nitroso-	782	000865-40-7	3
12	6.34	58.33	c:\database\nist98.L			
			Ethene, 1,2-dichloro-, (E)-	113502	000156-60-5	68
			Ethene, 1,2-dichloro-, (Z)-	113498	000156-59-2	68
			Ethene, 1,1-dichloro-	20406	000075-35-4	64
14	7.75	1.66	c:\database\nist98.L			
			Acetone	109708	000067-64-1	80
			Propanal	108019	000123-38-6	5
			Ethene, methoxy-	9	000107-25-5	4

GC/MS Spectral Library Match Summation Report
Sorted by Top 5 Peak Area Amounts

Sample Name : 1997384, C0107111; EHL 2825, tub
Misc Info : Rtx-200; 60m x 0.32mm
Vial Number : 9
Data File : D:\HPCHEM\1\!TD\BSB\7111_384.D
Operator : JAL
Date Acquired : 22 Jun 2001 22:42
Method File : TD_200

Peak #	R.T.	Area %	Library/ID	Ref #	CAS #	Qual
14	6.15	16.83	c:\database\nist98.L			
			Methylene Chloride	111041	000075-09-2	91
			Ethyl Chloride	107943	000075-00-3	4
			Acetic acid, chloro-, ethyl ester	108005	000105-39-5	2
17	7.75	3.01	c:\database\nist98.L			
			Acetone	109708	000067-64-1	80
			Ethene, methoxy-	9	000107-25-5	4
			Butane	109164	000106-97-8	3
21	8.65	7.62	c:\database\nist98.L			
			Furan, tetrahydro-	109006	000109-99-9	90
			Oxirane, ethyl-	3255	000106-88-7	78
			1-Propene, 2-methoxy-	109004	000116-11-0	59
43	19.26	7.67	c:\database\nist98.L			
			Tetradecane	112357	000629-59-4	97
			Hexadecane	112408	000544-76-3	90
			Decane, 2,3,5-trimethyl-	16514	062238-11-3	90
45	20.59	25.49	c:\database\nist98.L			
			Heptadecane	112319	000629-78-7	91
			Hexadecane	16554	000544-76-3	90
			Pentadecane	16493	000629-62-9	87

GC/MS Spectral Library Match Summation Report
Sorted by Top 5 Peak Area Amounts

Sample Name : 1997386, C0107111; EHL 2833, tub
Misc Info : Rtx-200; 60m x 0.32mm
Vial Number : 10
Data File : D:\HPCHEM\1\!TD\BSB\7111_386.D
Operator : JAL
Date Acquired : 22 Jun 2001 23:20
Method File : TD_200

Peak #	R.T.	Area %	Library/ID	Ref #	CAS #	Qual
10	5.74	3.41	c:\database\nist98.L			
			Furan	108395	000110-00-9	90
			2,5-Furandione, 3-methyl-	1316	000616-02-4	74
			2H-Pyran-2-one	108399	000504-31-4	74
13	6.15	73.24	c:\database\nist98.L			
			Methylene Chloride	111040	000075-09-2	95
			Ethyl Chloride	107943	000075-00-3	4
			Imidazol, 4-fluoro-	34862	030086-17-0	2
18	7.74	1.20	c:\database\nist98.L			
			Acetone	109708	000067-64-1	72
			Ethene, methoxy-	9	000107-25-5	4
			Propanal	108019	000123-38-6	4
21	8.64	6.18	c:\database\nist98.L			
			Furan, tetrahydro-	109006	000109-99-9	90
			Oxirane, ethyl-	3255	000106-88-7	78
			1-Propene, 2-methoxy-	109004	000116-11-0	59
22	8.83	3.42	c:\database\nist98.L			
			Trichloroethylene	121902	000079-01-6	98
			2-Fluoro-5-chloropyrimidine	59541	062802-37-3	25
			Benzene, 1-chloro-4-fluoro-	58738	000352-33-0	22

GC/MS Spectral Library Match Summation Report
Sorted by Top 5 Peak Area Amounts

Sample Name : 1997388, C0107111; EHL 2826, tub
Misc Info : Rtx-200; 60m x 0.32mm
Vial Number : 2
Data File : D:\HPCHEM\1\!TD\BSB\7111_388.D
Operator : JAL
Date Acquired : 22 Jun 2001 18:12
Method File : TD_200

Peak #	R.T.	Area %	Library/ID	Ref #	CAS #	Qual
1	4.26	100.00	0 c:\database\nist98.L			
			1-Propene, 2-methyl-	108463	000115-11-7	78
			1-Butene	108672	000106-98-9	59
			2-Butene, (Z)-	2189	000590-18-1	9

** LESS THAN 5 TOTAL PEAKS OVER DETECTION LIMIT **

Interpretation of Library Match Report

GC/MS Spectral Library Match Summation Report
Sorted by Top 5 Peak Area Amounts

Your sample name/number

Sample Name : Worker #1, EHL 030, tube 2065
Misc Info : DB-VRX, 75m X 0.45mm - C0002148
Vial Number : 1
Data File : D:\HPCHEM\1\TD\BSB\2148_W1.D
Operator : JAL
Date Acquired : 17 March 2000 9:12
Method File : TD_VRX

Quality factor of unknown peak to known spectrum. A factor greater than 90 means good match. Low factors can be due to low concentration levels or the presence of coeluting peaks, however chemical family classification can be estimated (i.e. silane, ketone, aromatic, etc.).

Peak #	R.T.	Area %	Library/ID	Ref #	CAS #	Qual
15	12.53	4.61	d:\hpchem\msexe\nbs49k.l			
			Ethane, 1,2-dichloro-	1073	000107-06-2	83
			Ethene, chloro-	132	000075-01-4	36
			Thiophene, 3,4-dichlorotetrahydro-	16155	003001-57-8	9
17	12.98	1.08	d:\hpchem\msexe\nbs49k.l			
			1-Propene, 1,1-dichloro-	2010	000563-58-6	91
			1-Propene, 1,2-dichloro-	2008	000563-54-2	90
			1-Propene, 1,3-dichloro-, (Z)-	2011	010061-01-5	64
26	16.72	8.63	d:\hpchem\msexe\nbs49k.l			
			Ethane, 1,1,2-trichloro-	4883	000079-00-5	94
			Ethane, 1,1,1-trichloro-	4882	000071-55-6	32
			Propane, 1,2,2-trichloro-	7382	003175-23-3	23
34	20.04	1.98	d:\hpchem\msexe\nbs49k.l			
			Benzene, ethyl-	1810	000100-41-4	91
			Benzene, 1,3-dimethyl-	1811	000108-38-3	53
			Benzene, 1,4-dimethyl-	1815	000106-42-3	50
40	21.88	2.73	d:\hpchem\msexe\nbs49k.l			
			Benzene, (1-methylethyl)-	3291	000098-82-8	91
			Benzene, 1-ethyl-2-methyl-	3293	000611-14-3	80
			Benzene, 1,2,3-trimethyl-	3300	000526-73-8	64

Peak number supplied from the chromatogram

Retention time of gas chromatograph peak

Peak magnitude. Multiply this percentage by the total hydrocarbon value reported to get the approximate concentration (based on toluene response)

Tentatively identified compounds with best matching spectrums compared to known chemicals

Chemical Abstract number of tentatively identified compound

ENVIRONMENTAL HEALTH LABORATORY ANALYSIS REPORT

100 Sebethe Drive, Suite A-5
Cromwell, Connecticut 06416
(800)243-4903/(860)635-6475

Analysis: Expanded Scan

Analytical Method: GC/MS CS2 Desorption of Charcoal Tubes **Report Number *C0107111***

Sample Number	1997130	1997130	1997132	1997132	1997134	
Date Of Analysis	06/25/01	06/25/01	06/25/01	06/25/01	06/25/01	
Time Of Analysis	13:22	13:22	14:00	14:00	14:39	
Air Volume Liters	113	113	106	106	108	
Compounds	mg/m3	ppm	mg/m3	ppm	mg/m3	CAS #
Methylene Chloride	**0.032**	**0.0094**	**0.0042**	**0.0012**	<0.0037	75-09-2
trans-1,2-Dichloroethene	---	---	---	---	---	156-60-5
1,1,1-Trichloroethane	---	---	**0.097**	**0.018**	**0.10**	71-55-6
Benzene	**0.021**	**0.0066**	---	---	---	71-43-2
Toluene	**0.067**	**0.018**	---	---	---	108-88-3
Ethylbenzene	**0.018**	**0.0042**	---	---	---	100-41-4
m,p-Xylene	**0.070**	**0.016**	---	---	---	1330-20-7
o-Xylene	**0.023**	**0.0053**	---	---	---	95-47-6
1,2,4-Trimethylbenzene	**0.013**	**0.0026**	---	---	---	95-63-6
Acetone	**0.013**	**0.0054**	---	---	---	67-64-1

Front and back sections of charcoal tubes are combined for analysis. Sample breakthrough cannot be detected.

**This value is a summation of all peak areas present in the sample (quantitated as toluene).

Analyst: John A. Lee _____ Date: 6/26/01

ENVIRONMENTAL HEALTH LABORATORY ANALYSIS REPORT

100 Sebethe Drive, Suite A-5
Cromwell, Connecticut 06416
(800)243-4903/(860)635-6475

Analysis: Expanded Scan

Analytical Method: GC/MS CS2 Desorption of Charcoal Tubes

Report Number *C0107111*

Sample Number	1997134	1997136	1997136	1997138	1997138	
Date Of Analysis	06/25/01	06/25/01	06/25/01	06/25/01	06/25/01	
Time Of Analysis	14:39	15:17	15:17	15:57	15:57	
Air Volume Liters	108	107	107	98.0	98.0	
Compounds	ppm	mg/m3	ppm	mg/m3	ppm	CAS #
Methylene Chloride	<0.0011	**0.0045**	**0.0013**	<0.0041	<0.0012	75-09-2
trans-1,2-Dichloroethene	---	---	---	---	---	156-60-5
1,1,1-Trichloroethane	**0.018**	---	---	---	---	71-55-6
Benzene	---	---	---	---	---	71-43-2
Toluene	---	---	---	---	---	108-88-3
Ethylbenzene	---	---	---	---	---	100-41-4
m,p-Xylene	---	---	---	---	---	1330-20-7
o-Xylene	---	---	---	---	---	95-47-6
1,2,4-Trimethylbenzene	---	---	---	---	---	95-63-6
Acetone	---	---	---	---	---	67-64-1

Front and back sections of charcoal tubes are combined for analysis. Sample breakthrough cannot be detected.

**This value is a summation of all peak areas present in the sample (quantitated as toluene).

Analyst: John A. Lee _____ Date: 6/26/01

ENVIRONMENTAL HEALTH LABORATORY ANALYSIS REPORT

100 Sebethe Drive, Suite A-5
Cromwell, Connecticut 06416
(800)243-4903/(860)635-6475

Analysis: Expanded Scan

Analytical Method: GC/MS CS2 Desorption of Charcoal Tubes

Report Number *C0107111*

Sample Number	1997140	1997140	1997385	1997385	1997387	
Date Of Analysis	06/25/01	06/25/01	06/25/01	06/25/01	06/25/01	
Time Of Analysis	18:29	18:29	17:13	17:13	17:51	
Air Volume Liters	80.9	80.9	103	103	85.3	
Compounds	mg/m3	ppm	mg/m3	ppm	mg/m3	CAS #
Methylene Chloride	---	---	**0.0060**	**0.0017**	**0.022**	75-09-2
trans-1,2-Dichloroethene	**8.6**	**2.2**	---	---	---	156-60-5
1,1,1-Trichloroethane	---	---	---	---	---	71-55-6
Benzene	---	---	---	---	---	71-43-2
Toluene	---	---	---	---	---	108-88-3
Ethylbenzene	---	---	---	---	---	100-41-4
m,p-Xylene	---	---	---	---	---	1330-20-7
o-Xylene	---	---	---	---	---	95-47-6
1,2,4-Trimethylbenzene	---	---	---	---	---	95-63-6
Acetone	---	---	---	---	---	67-64-1

Front and back sections of charcoal tubes are combined for analysis. Sample breakthrough cannot be detected.

**This value is a summation of all peak areas present in the sample (quantitated as toluene).

Analyst: John A. Lee _____ Date: 6/26/01

ENVIRONMENTAL HEALTH LABORATORY ANALYSIS REPORT

100 Sebethe Drive, Suite A-5
Cromwell, Connecticut 06416
(800)243-4903/(860)635-8475

Analysis: Expanded Scan

Analytical Method: GC/MS CS2 Desorption of Charcoal Tubes

Report Number *C0107111*

Sample Number	1997387	1997389				
Date Of Analysis	06/25/01	06/25/01				
Time Of Analysis	17:51	12:44				
Air Volume Liters	85.3	---				
Compounds	ppm	ug				CAS #
Methylene Chloride	**0.0064**	<0.40				75-09-2
trans-1,2-Dichloroethene	---	<0.40				156-60-5
1,1,1-Trichloroethane	---	<0.40				71-55-6
Benzene	---	<0.40				71-43-2
Toluene	---	<0.40				108-88-3
Ethylbenzene	---	<0.40				100-41-4
m,p-Xylene	---	<0.40				1330-20-7
o-Xylene	---	<0.40				95-47-6
1,2,4-Trimethylbenzene	---	<0.40				95-63-6
Acetone	---	<0.40				67-64-1

Front and back sections of charcoal tubes are combined for analysis. Sample breakthrough cannot be detected.

**This value is a summation of all peak areas present in the sample (quantitated as toluene).

Analyst: John A. Lee _____ Date: 6/26/01

September 21, 2001

Monitoring Event

esis

September 27, 2001

Richard Twomey
Loureiro Engineering Associates, P.C.
100 Northwest Drive
Plainville, CT 06062

REPORT #: C0107730

Richard,

Enclosed are the revised results for the GCMS samples you sent in. If you have any questions please don't hesitate to call me.

Sincerely,

John Lee
Chemist
Environmental Health Laboratory
100 Sebethe Drive; Suite A-5
Cromwell, CT 06416
(860) 635-6475
Fax (860) 635-6750

JL: ml

enc.

ENVIRONMENTAL HEALTH LABORATORY ANALYSIS REPORT

100 Sebethe Drive, Suite A-5
Cromwell, Connecticut 06416
(800)243-4903/(860)635-6475

Analysis: Expanded Scan

Analytical Method: GC/MS Thermal Desorption; Modified EPA TO1/TO2 **Report Number** ***C0107730***

Sample Number	200 7375 2964	200 7375 2964	200 7376 2970	200 7376 2970	200 7377 2967	
Date Of Analysis	9/24/01	9/24/01	9/24/01	9/24/01	9/24/01	
Time Of Analysis	22:37	22:37	18:46	18:46	20:42	
Air Volume Liters	8.38	8.38	20.08	20.08	19.72	
Compounds	ug/m3	ppb	ug/m3	ppb	ug/m3	CAS #
Dichlorodifluoromethane	**4.2**	**1.0**	<0.25	<0.062	**4.4**	75-71-8
Chloromethane	<0.60	<0.29	<0.25	<0.12	<0.25	74-87-3
Chloroethene	<0.60	<0.23	<0.25	<0.097	<0.25	75-01-4
Bromomethane	<0.60	<0.15	<0.25	<0.064	<0.25	74-83-9
Chloroethane	<0.60	<0.23	<0.25	<0.094	<0.25	75-00-3
Trichlorofluoromethane	**2.4**	**0.43**	**1.1**	**0.20**	**0.90**	75-69-4
1,1-Dichloroethene	<0.60	<0.15	**0.87**	**0.22**	<0.25	75-35-4
Methylene Chloride	**5.6**	**1.6**	**0.31**	**0.089**	**0.32**	75-09-2
trans-1,2-Dichloroethene	<0.60	<0.15	<0.25	<0.063	<0.25	156-60-5
1,1-Dichloroethane	<0.60	<0.15	<0.25	<0.062	<0.25	75-34-3
cis-1,2-Dichloroethene	<0.60	<0.15	<0.25	<0.063	<0.25	156-59-2
Bromochloromethane	<0.60	<0.11	<0.25	<0.047	<0.25	74-97-5
Chloroform	<0.60	<0.14	<0.25	<0.060	<0.25	67-66-3
2,2-Dichloropropane	<0.60	<0.13	<0.25	<0.054	<0.25	594-20-7
1,2-Dichloroethane	<0.60	<0.15	<0.25	<0.061	<0.25	107-06-2
1,1,1-Trichloroethane	<0.60	<0.11	**# 45**	**# 8.2**	<0.25	71-55-6
1,1-Dichloropropene	<0.60	<0.13	<0.25	<0.055	<0.25	563-58-6
Carbon Tetrachloride	<0.60	<0.095	<0.25	<0.040	<0.25	56-23-5
Benzene	<1.2	<0.37	<0.50	<0.16	<0.51	71-43-2
Dibromomethane	<0.60	<0.084	<0.25	<0.035	<0.25	74-95-3
1,2-Dichloropropane	<0.60	<0.13	<0.25	<0.054	<0.25	78-87-5
Trichloroethene	<0.60	<0.11	**0.66**	**0.12**	**0.63**	79-01-6
Bromodichloromethane	<0.60	<0.089	<0.25	<0.037	<0.25	75-27-4
cis-1,3-Dichloropropene	<0.60	<0.13	<0.25	<0.055	<0.25	10061-01-5
trans-1,3-Dichloropropene	<0.60	<0.13	<0.25	<0.055	<0.25	10061-02-6
1,1,2-Trichloroethane	<0.60	<0.11	<0.25	<0.046	<0.25	79-00-5
Toluene	**12**	**3.2**	**5.6**	**1.5**	**0.57**	108-88-3
1,3-Dichloropropane	<0.60	<0.13	<0.25	<0.054	<0.25	142-28-9
1,2-Dibromoethane	<0.60	<0.078	<0.25	<0.032	<0.25	106-93-4
Tetrachloroethene	<0.60	<0.088	**0.86**	**0.13**	<0.25	127-18-4
1,1,1,2-Tetrachloroethane	<0.60	<0.087	<0.25	<0.036	<0.25	630-20-6
Chlorobenzene	<0.60	<0.13	<0.25	<0.054	<0.25	108-90-7

Analyst: John A. Lee _____ Date: 9/27/01

100 Sebethe Drive, Suite A-5
Cromwell, Connecticut 06416
(203)250-4903/(860)635-6475

Sample Number	200 7375 2964	200 7375 2964	200 7376 2970	200 7376 2970	200 7377 2967	
Air Volume Liters	8.38	8.38	20.08	20.08	19.72	
Compounds (cont.)	ug/m3	ppb	ug/m3	ppb	ug/m3	CAS #
Ethylbenzene	**2.3**	**0.54**	**0.77**	**0.18**	<0.25	100-41-4
m,p-Xylene	**8.8**	**2.0**	**4.0**	**0.91**	**0.59**	1330-20-7
Bromoform	<0.60	<0.058	<0.25	<0.024	<0.25	75-25-2
Styrene	**4.0**	**0.94**	**1.0**	**0.24**	<0.25	100-42-5
1,1,2,2-Tetrachloroethane	<0.60	<0.087	<0.25	<0.036	<0.25	79-34-5
o-Xylene	**3.0**	**0.68**	**1.4**	**0.32**	**0.26**	95-47-6
1,2,3-Trichloropropane	<0.60	<0.099	<0.25	<0.041	<0.25	96-18-4
Isopropylbenzene	<0.60	<0.12	<0.25	<0.051	<0.25	98-82-8
Bromobenzene	<0.60	<0.093	<0.25	<0.039	<0.25	108-86-1
Propylbenzene	<0.60	<0.12	<0.25	<0.051	<0.25	103-65-1
2-Chlorotoluene	<0.60	<0.12	<0.25	<0.048	<0.25	95-49-8
4-Chlorotoluene	<0.60	<0.12	<0.25	<0.048	<0.25	106-43-4
1,3,5-Trimethylbenzene	<0.60	<0.12	**0.71**	**0.14**	**0.27**	108-67-8
tert-Butylbenzene	<0.60	<0.11	<0.25	<0.045	<0.25	98-06-6
1,2,4-Trimethylbenzene	<0.60	<0.12	**0.87**	**0.18**	**0.42**	95-63-6
sec-Butylbenzene	<0.60	<0.11	<0.25	<0.045	<0.25	135-98-8
1,3-Dichlorobenzene	<0.60	<0.099	<0.25	<0.041	<0.25	541-73-1
1,4-Dichlorobenzene	<0.60	<0.099	<0.25	<0.041	<0.25	106-46-7
p-Isopropyltoluene	<0.60	<0.11	**0.53**	**0.096**	<0.25	99-87-6
1,2-Dichlorobenzene	<0.60	<0.099	<0.25	<0.041	<0.25	95-50-1
Butylbenzene	<0.60	<0.11	**0.25**	**0.046**	<0.25	104-51-8
1,2-Dibromo-3-chloropropane	<0.60	<0.062	<0.25	<0.026	<0.25	96-12-8
1,2,4-Trichlorobenzene	<0.60	<0.080	<0.25	<0.034	<0.25	120-82-1
Naphthalene	**1.4**	**0.27**	**3.8**	**0.73**	**1.2**	91-20-3
Hexachlorobutadiene	<0.60	<0.056	<0.25	<0.023	<0.25	87-68-3
1,2,3-Trichlorobenzene	<0.60	<0.080	<0.25	<0.034	<0.25	87-61-6
Acetone	**20**	**8.6**	**# 22**	**# 9.3**	**# 20**	67-64-1
Methyl Ethyl Ketone	**2.5**	**0.86**	**5.3**	**1.8**	<0.25	78-93-3
Methyl Isobutyl Ketone	**1.4**	**0.34**	**0.83**	**0.20**	<0.25	108-10-1
	ug/m3		ug/m3		ug/m3	
**Total Hydrocarbons	**180**		**280**		**120**	---

Compound(s) concentration exceeded the upper limit of the calibration range but did not surpass the breakthrough level or saturate the detector. This value is reported as an estimate.

Thermal desorption requires the entire sample to be analyzed at one time. Sample breakthrough cannot be detected.

**This value is a summation of all peak areas present in the sample (quantitated as toluene).

Analyst: John A. Lee _____ Date: 9/27/01

ENVIRONMENTAL HEALTH LABORATORY ANALYSIS REPORT

100 Sebethe Drive, Suite A-5
Cromwell, Connecticut 06416
(800)243-4903/(860)635-6475

Analysis: Expanded Scan

Analytical Method: GC/MS Thermal Desorption; Modified EPA TO1/TO2 **Report Number** ***C0107730***

Sample Number	200 7377 2967	200 7378 2962	200 7378 2962	200 7379 2963	200 7379 2963	
Date Of Analysis	9/24/01	9/24/01	9/24/01	9/24/01	9/24/01	
Time Of Analysis	20:42	21:20	21:20	19:25	19:25	
Air Volume Liters	19.72	16.49	16.49	19.14	19.14	
Compounds	ppb	ug/m3	ppb	ug/m3	ppb	CAS #
Dichlorodifluoromethane	**1.1**	<0.30	<0.075	**7.1**	**1.8**	75-71-8
Chloromethane	<0.12	<0.30	<0.15	<0.26	<0.13	74-87-3
Chloroethene	<0.099	<0.30	<0.12	<0.26	<0.10	75-01-4
Bromomethane	<0.065	<0.30	<0.078	<0.26	<0.067	74-83-9
Chloroethane	<0.096	<0.30	<0.11	<0.26	<0.099	75-00-3
Trichlorofluoromethane	**0.16**	<0.30	<0.054	**1.7**	**0.31**	75-69-4
1,1-Dichloroethene	<0.064	<0.30	<0.076	<0.26	<0.066	75-35-4
Methylene Chloride	**0.092**	<0.30	<0.087	<0.26	<0.075	75-09-2
trans-1,2-Dichloroethene	<0.064	<0.30	<0.076	**9.0**	**2.3**	156-60-5
1,1-Dichloroethane	<0.063	<0.30	<0.075	<0.26	<0.065	75-34-3
cis-1,2-Dichloroethene	<0.064	<0.30	<0.076	<0.26	<0.066	156-59-2
Bromochloromethane	<0.048	<0.30	<0.057	<0.26	<0.049	74-97-5
Chloroform	<0.061	<0.30	<0.073	<0.26	<0.063	67-66-3
2,2-Dichloropropane	<0.055	<0.30	<0.066	<0.26	<0.057	594-20-7
1,2-Dichloroethane	<0.063	<0.30	<0.075	<0.26	<0.064	107-06-2
1,1,1-Trichloroethane	<0.046	<0.30	<0.056	<0.26	<0.048	71-55-6
1,1-Dichloropropene	<0.056	<0.30	<0.067	<0.26	<0.058	563-58-6
Carbon Tetrachloride	<0.040	<0.30	<0.048	**0.39**	**0.062**	56-23-5
Benzene	<0.16	<0.61	<0.19	<0.52	<0.16	71-43-2
Dibromomethane	<0.036	<0.30	<0.043	<0.26	<0.037	74-95-3
1,2-Dichloropropane	<0.055	<0.30	<0.066	<0.26	<0.057	78-87-5
Trichloroethene	**0.12**	**4.0**	**0.74**	<0.26	<0.049	79-01-6
Bromodichloromethane	<0.038	<0.30	<0.045	<0.26	<0.039	75-27-4
cis-1,3-Dichloropropene	<0.056	<0.30	<0.067	<0.26	<0.058	10061-01-5
trans-1,3-Dichloropropene	<0.056	<0.30	<0.067	<0.26	<0.058	10061-02-6
1,1,2-Trichloroethane	<0.046	<0.30	<0.056	<0.26	<0.048	79-00-5
Toluene	**0.15**	**0.50**	**0.13**	**2.2**	**0.58**	108-88-3
1,3-Dichloropropane	<0.055	<0.30	<0.066	<0.26	<0.057	142-28-9
Dibromochloromethane	<0.030	<0.30	<0.036	<0.26	<0.031	124-48-1
1,2-Dibromoethane	<0.033	<0.30	<0.039	<0.26	<0.034	106-93-4
Tetrachloroethene	<0.037	<0.30	<0.045	<0.26	<0.039	127-18-4
1,1,1,2-Tetrachloroethane	<0.037	<0.30	<0.044	<0.26	<0.038	630-20-6
Chlorobenzene	<0.055	<0.30	<0.066	<0.26	<0.057	108-90-7

Analyst: John A. Lee _____ Date: 9/27/01

100 Sebethe Drive, Suite A-5
Cromwell, Connecticut 06416
(203)344-4903/(860)635-6475

Sample Number	200 7377 2967	200 7378 2962	200 7378 2962	200 7379 2963	200 7379 2963	
Air Volume Liters	19.72	16.49	16.49	19.14	19.14	
Compounds (cont.)	ppb	ug/m3	ppb	ug/m3	ppb	CAS #
Ethylbenzene	<0.058	<0.30	<0.070	**0.62**	**0.14**	100-41-4
m,p-Xylene	**0.14**	<0.61	<0.14	**2.7**	**0.62**	1330-20-7
Bromoform	<0.025	<0.30	<0.029	<0.26	<0.025	75-25-2
Styrene	<0.060	<0.30	<0.071	**0.74**	**0.17**	100-42-5
1,1,2,2-Tetrachloroethane	<0.037	<0.30	<0.044	<0.26	<0.038	79-34-5
o-Xylene	**0.059**	<0.30	<0.070	**1.2**	**0.29**	95-47-6
1,2,3-Trichloropropane	<0.042	<0.30	<0.050	<0.26	<0.043	96-18-4
Isopropylbenzene	<0.052	<0.30	<0.062	<0.26	<0.053	98-82-8
Bromobenzene	<0.039	<0.30	<0.047	<0.26	<0.041	108-86-1
Propylbenzene	<0.052	<0.30	<0.062	**0.35**	**0.072**	103-65-1
2-Chlorotoluene	<0.049	<0.30	<0.059	<0.26	<0.050	95-49-8
4-Chlorotoluene	<0.049	<0.30	<0.059	<0.26	<0.050	106-43-4
1,3,5-Trimethylbenzene	**0.054**	<0.30	<0.062	**0.94**	**0.19**	108-67-8
tert-Butylbenzene	<0.046	<0.30	<0.055	<0.26	<0.048	98-06-6
1,2,4-Trimethylbenzene	**0.086**	<0.30	<0.062	**1.4**	**0.29**	95-63-6
sec-Butylbenzene	<0.046	<0.30	<0.055	<0.26	<0.048	135-98-8
1,3-Dichlorobenzene	<0.042	<0.30	<0.050	<0.26	<0.043	541-73-1
1,4-Dichlorobenzene	<0.042	<0.30	<0.050	<0.26	<0.043	106-46-7
p-Isopropyltoluene	<0.046	<0.30	<0.055	**0.30**	**0.054**	99-87-6
1,2-Dichlorobenzene	<0.042	<0.30	<0.050	<0.26	<0.043	95-50-1
Butylbenzene	<0.046	<0.30	<0.055	<0.26	<0.048	104-51-8
1,2-Dibromo-3-chloropropane	<0.026	<0.30	<0.031	<0.26	<0.027	96-12-8
1,2,4-Trichlorobenzene	<0.034	<0.30	<0.041	<0.26	<0.035	120-82-1
Naphthalene	**0.23**	**0.52**	**0.098**	**1.2**	**0.23**	91-20-3
Hexachlorobutadiene	<0.024	<0.30	<0.028	<0.26	<0.024	87-68-3
1,2,3-Trichlorobenzene	<0.034	<0.30	<0.041	<0.26	<0.035	87-61-6
Acetone	**# 8.4**	**6.4**	**2.7**	**14**	**5.9**	67-64-1
Methyl Ethyl Ketone	<0.086	**1.0**	**0.34**	<0.26	<0.089	78-93-3
Methyl Isobutyl Ketone	<0.062	<0.30	<0.074	<0.26	<0.064	108-10-1
		ug/m3		ug/m3		
**Total Hydrocarbons		**110**		**# 390**		—

Compound(s) concentration exceeded the upper limit of the calibration range but did not surpass the breakthrough level or saturate the detector. This value is reported as an estimate.

Thermal desorption requires the entire sample to be analyzed at one time. Sample breakthrough cannot be detected.

**This value is a summation of all peak areas present in the sample (quantitated as toluene).

Analyst: John A. Lee _____ Date: 9/27/01

100 Sebethe Drive, Suite A-5
Cromwell, Connecticut 06416
(800)243-4903/(860)635-6475

Analysis: Expanded Scan

Analytical Method: GC/MS Thermal Desorption; Modified EPA TO1/TO2 **Report Number** ***C0107730***

Sample Number	200 7380 2966	200 7380 2966	200 7381 2956	200 7381 2956	200 7382 2968	
Date Of Analysis	9/24/01	9/24/01	9/24/01	9/24/01	9/24/01	
Time Of Analysis	20:03	20:03	18:07	18:07	21:59	
Air Volume Liters	12.85	12.85	19.97	19.97	16.03	
Compounds	ug/m3	ppb	ug/m3	ppb	ug/m3	CAS #
Dichlorodifluoromethane	**2.5**	**0.61**	<0.25	<0.062	<0.31	75-71-8
Chloromethane	<0.39	<0.19	<0.25	<0.12	<0.31	74-87-3
Chloroethene	<0.39	<0.15	<0.25	<0.098	<0.31	75-01-4
Bromomethane	<0.39	<0.10	<0.25	<0.064	<0.31	74-83-9
Chloroethane	<0.39	<0.15	<0.25	<0.095	<0.31	75-00-3
Trichlorofluoromethane	<0.39	<0.069	**0.45**	**0.080**	**0.95**	75-69-4
1,1-Dichloroethene	<0.39	<0.098	<0.25	<0.063	<0.31	75-35-4
Methylene Chloride	<0.39	<0.11	<0.25	<0.072	<0.31	75-09-2
trans-1,2-Dichloroethene	**0.95**	**0.24**	<0.25	<0.063	<0.31	156-60-5
1,1-Dichloroethane	<0.39	<0.096	<0.25	<0.062	<0.31	75-34-3
cis-1,2-Dichloroethene	<0.39	<0.098	<0.25	<0.063	<0.31	156-59-2
Bromochloromethane	<0.39	<0.074	<0.25	<0.047	<0.31	74-97-5
Chloroform	<0.39	<0.094	**1.0**	**0.25**	<0.31	67-66-3
2,2-Dichloropropane	<0.39	<0.084	<0.25	<0.054	<0.31	594-20-7
1,2-Dichloroethane	<0.39	<0.096	<0.25	<0.062	<0.31	107-06-2
1,1,1-Trichloroethane	<0.39	<0.071	<0.25	<0.046	<0.31	71-55-6
1,1-Dichloropropene	<0.39	<0.086	<0.25	<0.055	<0.31	563-58-6
Carbon Tetrachloride	<0.39	<0.062	<0.25	<0.040	**0.42**	56-23-5
Benzene	<0.78	<0.24	<0.50	<0.16	<0.62	71-43-2
Dibromomethane	<0.39	<0.055	<0.25	<0.035	<0.31	74-95-3
1,2-Dichloropropane	<0.39	<0.084	<0.25	<0.054	<0.31	78-87-5
Trichloroethene	<0.39	<0.072	**0.28**	**0.053**	**20**	79-01-6
Bromodichloromethane	<0.39	<0.058	<0.25	<0.037	<0.31	75-27-4
cis-1,3-Dichloropropene	<0.39	<0.086	<0.25	<0.055	<0.31	10061-01-5
trans-1,3-Dichloropropene	<0.39	<0.086	<0.25	<0.055	<0.31	10061-02-6
1,1,2-Trichloroethane	<0.39	<0.071	<0.25	<0.046	<0.31	79-00-5
Toluene	**1.2**	**0.32**	**0.55**	**0.15**	**0.38**	108-88-3
1,3-Dichloropropane	<0.39	<0.084	<0.25	<0.054	<0.31	142-28-9
1,2-Dibromoethane	<0.39	<0.051	<0.25	<0.033	<0.31	106-93-4
Tetrachloroethene	<0.39	<0.057	<0.25	<0.037	<0.31	127-18-4
1,1,1,2-Tetrachloroethane	<0.39	<0.057	<0.25	<0.036	<0.31	630-20-6
Chlorobenzene	<0.39	<0.085	<0.25	<0.054	<0.31	108-90-7

Analyst: John A. Lee _____ Date: 9/27/01

100 Sebethe Drive, Suite A-5
Cromwell, Connecticut 06416
(800)334-4903/(860)635-6475

Report Number C010730

Sample Number	200 7380 2966	200 7380 2966	200 7381 2956	200 7381 2956	200 7382 2968	
Air Volume Liters	12.85	12.85	19.97	19.97	16.03	
Compounds (cont.)	ug/m3	ppb	ug/m3	ppb	ug/m3	CAS #
Ethylbenzene	**0.45**	**0.10**	<0.25	<0.058	<0.31	100-41-4
m,p-Xylene	**2.1**	**0.48**	<0.50	<0.12	<0.62	1330-20-7
Bromoform	<0.39	<0.038	<0.25	<0.024	<0.31	75-25-2
Styrene	**0.55**	**0.13**	<0.25	<0.059	<0.31	100-42-5
1,1,2,2-Tetrachloroethane	<0.39	<0.057	<0.25	<0.036	<0.31	79-34-5
o-Xylene	**0.92**	**0.21**	<0.25	<0.058	<0.31	95-47-6
1,2,3-Trichloropropane	<0.39	<0.065	<0.25	<0.042	<0.31	96-18-4
Isopropylbenzene	<0.39	<0.079	<0.25	<0.051	<0.31	98-82-8
Bromobenzene	<0.39	<0.061	<0.25	<0.039	<0.31	108-86-1
Propylbenzene	<0.39	<0.079	<0.25	<0.051	<0.31	103-65-1
2-Chlorotoluene	<0.39	<0.075	<0.25	<0.048	<0.31	95-49-8
4-Chlorotoluene	<0.39	<0.075	<0.25	<0.048	<0.31	106-43-4
1,3,5-Trimethylbenzene	**0.66**	**0.13**	<0.25	<0.051	<0.31	108-67-8
tert-Butylbenzene	<0.39	<0.071	<0.25	<0.046	<0.31	98-06-6
1,2,4-Trimethylbenzene	**0.95**	**0.19**	<0.25	<0.051	<0.31	95-63-6
sec-Butylbenzene	<0.39	<0.071	<0.25	<0.046	<0.31	135-98-8
1,3-Dichlorobenzene	<0.39	<0.065	<0.25	<0.042	<0.31	541-73-1
1,4-Dichlorobenzene	<0.39	<0.065	<0.25	<0.042	<0.31	106-46-7
p-Isopropyltoluene	<0.39	<0.071	<0.25	<0.046	<0.31	99-87-6
1,2-Dichlorobenzene	<0.39	<0.065	<0.25	<0.042	<0.31	95-50-1
Butylbenzene	<0.39	<0.071	<0.25	<0.046	<0.31	104-51-8
1,2-Dibromo-3-chloropropane	<0.39	<0.040	<0.25	<0.026	<0.31	96-12-8
1,2,4-Trichlorobenzene	<0.39	<0.052	<0.25	<0.034	<0.31	120-82-1
Naphthalene	**1.1**	**0.20**	<0.25	<0.048	<0.31	91-20-3
Hexachlorobutadiene	<0.39	<0.036	<0.25	<0.023	<0.31	87-68-3
1,2,3-Trichlorobenzene	<0.39	<0.052	<0.25	<0.034	<0.31	87-61-6
Acetone	**5.2**	**2.2**	**7.2**	**3.0**	**3.6**	67-64-1
Methyl Ethyl Ketone	<0.39	<0.13	**1.1**	**0.37**	**0.40**	78-93-3
Methyl Isobutyl Ketone	<0.39	<0.095	<0.25	<0.061	<0.31	108-10-1
	ug/m3		ug/m3		ug/m3	
**Total Hydrocarbons	**98**		**75**		**110**	---

Compound(s) concentration exceeded the upper limit of the calibration range but did not surpass the breakthrough level or saturate the detector. This value is reported as an estimate.

Thermal desorption requires the entire sample to be analyzed at one time. Sample breakthrough cannot be detected.

**This value is a summation of all peak areas present in the sample (quantitated as toluene).

Analyst: John A. Lee _____ Date: 9/27/01

100 Sebethe Drive, Suite A-5
Cromwell, Connecticut 06416
(800)243-4903/(860)635-6475

Analysis: Expanded Scan

Analytical Method: GC/MS Thermal Desorption; Modified EPA TO1/TO2

Report Number ***C0107730***

Sample Number	200 7382 2968	200 7383 2969				
Date Of Analysis	9/24/01	9/24/01				
Time Of Analysis	21:59	16:12				
Air Volume Liters	16.03	---				
Compounds	ppb	ng				CAS #
Dichlorodifluoromethane	<0.077	<5.0				75-71-8
Chloromethane	<0.15	<5.0				74-87-3
Chloroethene	<0.12	<5.0				75-01-4
Bromomethane	<0.080	<5.0				74-83-9
Chloroethane	<0.12	<5.0				75-00-3
Trichlorofluoromethane	**0.17**	<5.0				75-69-4
1,1-Dichloroethene	<0.079	<5.0				75-35-4
Methylene Chloride	<0.090	<5.0				75-09-2
trans-1,2-Dichloroethene	<0.079	<5.0				156-60-5
1,1-Dichloroethane	<0.077	<5.0				75-34-3
cis-1,2-Dichloroethene	<0.079	<5.0				156-59-2
Bromochloromethane	<0.059	<5.0				74-97-5
Chloroform	<0.075	<5.0				67-66-3
2,2-Dichloropropane	<0.067	<5.0				594-20-7
1,2-Dichloroethane	<0.077	<5.0				107-06-2
1,1,1-Trichloroethane	<0.057	<5.0				71-55-6
1,1-Dichloropropene	<0.069	<5.0				563-58-6
Carbon Tetrachloride	**0.067**	<5.0				56-23-5
Benzene	<0.20	<10				71-43-2
Dibromomethane	<0.044	<5.0				74-95-3
1,2-Dichloropropane	<0.067	<5.0				78-87-5
Trichloroethene	**3.7**	<5.0				79-01-6
Bromodichloromethane	<0.047	<5.0				75-27-4
cis-1,3-Dichloropropene	<0.069	<5.0				10061-01-5
trans-1,3-Dichloropropene	<0.069	<5.0				10061-02-6
1,1,2-Trichloroethane	<0.057	<5.0				79-00-5
Toluene	**0.10**	<5.0				108-88-3
1,3-Dichloropropane	<0.067	<5.0				142-28-9
1,2-Dibromoethane	<0.041	<5.0				106-93-4
Tetrachloroethene	<0.046	<5.0				127-18-4
1,1,1,2-Tetrachloroethane	<0.045	<5.0				630-20-6
Chlorobenzene	<0.068	<5.0				108-90-7

Analyst: John A. Lee _____ Date: 9/27/01

100 Sebethe Drive, Suite A-5
Cromwell, Connecticut 06416
(800)334-4903/(860)635-6475

Sample Number	200 7382 2968	200 7383 2969				
Air Volume Liters	16.03	---				
Compounds (cont.)	ppb	ng				CAS #
Ethylbenzene	<0.072	<5.0				100-41-4
m,p-Xylene	<0.14	<10				1330-20-7
Bromoform	<0.030	<5.0				75-25-2
Styrene	<0.073	<5.0				100-42-5
1,1,2,2-Tetrachloroethane	<0.045	<5.0				79-34-5
o-Xylene	<0.072	<5.0				95-47-6
1,2,3-Trichloropropane	<0.052	<5.0				96-18-4
Isopropylbenzene	<0.063	<5.0				98-82-8
Bromobenzene	<0.049	<5.0				108-86-1
Propylbenzene	<0.063	<5.0				103-65-1
2-Chlorotoluene	<0.060	<5.0				95-49-8
4-Chlorotoluene	<0.060	<5.0				106-43-4
1,3,5-Trimethylbenzene	<0.063	<5.0				108-67-8
tert-Butylbenzene	<0.057	<5.0				98-06-6
1,2,4-Trimethylbenzene	<0.063	<5.0				95-63-6
sec-Butylbenzene	<0.057	<5.0				135-98-8
1,3-Dichlorobenzene	<0.052	<5.0				541-73-1
1,4-Dichlorobenzene	<0.052	<5.0				106-46-7
p-Isopropyltoluene	<0.057	<5.0				99-87-6
1,2-Dichlorobenzene	<0.052	<5.0				95-50-1
Butylbenzene	<0.057	<5.0				104-51-8
1,2-Dibromo-3-chloropropane	<0.032	<5.0				96-12-8
1,2,4-Trichlorobenzene	<0.042	<5.0				120-82-1
Naphthalene	<0.059	<5.0				91-20-3
Hexachlorobutadiene	<0.029	<5.0				87-68-3
1,2,3-Trichlorobenzene	<0.042	<5.0				87-61-6
Acetone	**1.5**	<5.0				67-64-1
Methyl Ethyl Ketone	**0.14**	<5.0				78-93-3
Methyl Isobutyl Ketone	<0.076	<5.0				108-10-1
		ng				
**Total Hydrocarbons		<50				---

Compound(s) concentration exceeded the upper limit of the calibration range but did not surpass the breakthrough level or saturate the detector. This value is reported as an estimate.

Thermal desorption requires the entire sample to be analyzed at one time. Sample breakthrough cannot be detected.

**This value is a summation of all peak areas present in the sample (quantitated as toluene).

Analyst: John A. Lee _____ Date: 9/27/01

ENVIRONMENTAL HEALTH LABORATORY ANALYSIS REPORT

100 Sebethe Drive, Suite A-5
Cromwell, Connecticut 06416
(800)243-4903/(860)635-6475

Analysis: Normal Scan

Analytical Method: GC/MS CS2 Desorption of Charcoal Tubes

Report Number ***C0107730***

	200 7376	200 7376	200 7377	200 7377	200 7383	
Sample Number	WG-RSK-AS-16	WG-RSK-AS-16	WG-RSK-AS-14	WG-RSK-AS-14	Blank	
Date of Analysis	9/24/01	9/24/01	9/24/01	9/24/01	9/24/01	
Time of Analysis	15:16	15:16	13:10	13:10	10:30	
Air Volume Liters	98.3	98.3	97.6	97.6	---	
Compounds	mg/m3	ppm	mg/m3	ppm	ug	CAS #
Acetone	<0.051	<0.022	<0.051	<0.021	<5.0	67-64-1
1,1,1-Trichloroethane	**0.059**	**0.011**	---	---	<5.0	71-55-6

Front and back sections of charcoal tubes are combined for analysis. Sample breakthrough cannot be detected.

Analyst: Christine Reigins *Christine Reigins*

Date: 9/27/01

Environmental Health Laboratory
ESIS Risk Control Services
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100 Sebethe Drive Suite A-5
Cromwell, CT 06416
(860) 635-6475; (800) 243-4903 FAX (860) 635-6750

REQUEST FOR ANALYTICAL SERVICES
(Please fill all blanks to help us better serve you)

[ ] ***Standard TAT***
[ ] ***RUSH***
Please call ahead for Rush analysis. Additional charges apply.

FOR LAB USE ONLY
Lab Report No.
Und SRF AIR
ESIS / Claims
Pol. Or Con. No.

Send INVOICE To [REQUIRED]	***Send RESULTS To [REQUIRED]***	
Name: NICK SKOULARIKIS	**Name:** NICK SKOULARIKIS	
Company: LOUREIRO ENGINEERING ASSOC., INC	**Company:**	
Mailing Address: 100 NORTHWEST DRIVE	**Mailing Address:** SAME	
City, State, Zip: PLAINVILLE, CT 06062	**City, State, Zip:**	
PO#, Ref # (If Required):	**Phone No:**	☐ **Phone Results**
Accts. Payable Phone No: 860 747 6181	**Fax No:**	☐ **FaxResults**
Accts. Payable Fax No: 860 747 8822	**Email:** ndskoularikis@loureiro.com	☒ **Email Results**
Sampling Location: P&W WILLGOOS FACILITY	Sampling Media: THERMAL DESORPTION AND CHARCOAL TUBE	
Product Manufactured/Service Rendered: TEST FACILITY	Sampling Method: AIR SAMPLING PUMP	

(ELECTRONIC COPY X HARD COPY)

CHAIN OF CUSTODY				
Collected by (print): RICHARD E. THOMEY		Collector's Signature:		
Relinquished by:	Date/Time	Received by:	Date/Time	
Relinquished by:	Date/Time	Received by:	Date/Time	
Method of Shipment:		Received at Lab by:	Date/Time	

Authorized by: _____ **Date:** _____
(signature required)

Sample Condition Upon Receipt: [ ] Acceptable [ ] Unacceptable

EHL SAMPLE NO (Lab Use Only)	SAMPLE CONTAINER NO	Media Type	ANALYSIS DESIRED A 3 sample minimum charge applies when less than 3 of each specific analyte is requested.	FLOW RATE NOTES (Recording sampling date, Location and Operation. Other compounds present, etc. PRE	POST	cc/MIN SAMPLING RATE (liters/min)	SAMPLING TIME Start	End	Total Time (minutes)	AIR SAMPLE VOLUME (liters)
	200 7375 2964	TD	VOC	17.7	16.3	17.0	0653	1456	493	8.38
	200 7375 WG-RSK-AS-11	CT	VOC	206	206	206	0653	1456	493	101.56
	200 7376 2970	TD	VOC	42.1	42.1	42.1	0716	1513	477	20.08
	200 7376 WG-RSK-AS 16	CT	VOC	206	206	206	0716	1513	477	98.26
	200 7377 2967	TD	VOC	42.1	41	41.6	0730	1524	474	19.72
	200 7377 WG-RSK-AS-14	CT	VOC	206	206	206	0730	1524	474	97.64
	200 7378 2962	TD	VOC	42.1	28.5	35.3	0740	1527	467	16.49
	200 7378 WG-RSK-AS-13	CT	VOC	206	166	186	0740	1527	467	86.86
	200 7379 2963	TD	VOC	42.1	41	41.6	0804	1544	460	19.14
	200 7379 WG-RSK-AS-15	CT	VOC	206	206	206	0804	1544	460	94.76
	200 7380 2966	TD	– DUPL VOC	42.1	41	41.6	0804	1313	309	12.85
	200 7380 WG-RSK-AS-15	CT	– DUPL VOC	206	206	206	0804	1313	309	63.65
	200 7381 2956	TD	VOC	42.1	49	45.6	0843	1601	438	19.97
	200 7381 WG-RSK-AS-17	CT	VOC	206	195	200.5	0843	1601	438	87.82
	200 7382 2968	TD	VOC	42.1	28.5	35.3	0833	1607	454	16.03
	200 7382 WG-RSK-AS-12	CT	VOC	206	188.8	197.4	0833	1607	454	89.62

FOR LAB NOTES ONLY:

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[redacted]

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REQUEST FOR ANALYTICAL SERVICES

(Please fill all blanks to help us better serve you)

☐ *Standard TAT*
☐ *RUSH*
Please call ahead for Rush analysis. Additional charges apply.

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Lab Report No.
☐ *Unit* ☐ *SRP* ☐ *AR*
☐ *ESIS* ☐ *[illegible]* ☐ *Claims*
Pol. Dr. Con. No.

Send INVOICE To (REQUIRED)		**Send RESULTS To (REQUIRED)**	
Name:	NICK SKOULARIKIS	Name:	ndskoularikis@loureiro.com
Company:	LOUREIRO ENGINEERING ASSOCIATES, INC	Company:	(SAME)
Mailing Address:	100 NORTHWEST DRIVE	Mailing Address:	(ELECTRONIC DELIVERY)
City, State, Zip:	PLAINVILLE, CT 06062	City, State, Zip:	(+ HARD COPY)
PO#, Ref # (If Required):		Phone No: (SAME)	☐ Phone Results
Accts. Payable Phone No:	860 747 6181	Fax No: (SAME)	☐ Fax Results
Accts. Payable Fax No:	860 747 8822	Email: ndskoularikis@loureiro.com	☒ Email Results
Sampling Location:	P&W WILLGOOS FACILITY	Sampling Media:	THERMAL DESORPTION AND CHARCOAL TUBE
Product Manufactured/Service Rendered:	TEST FACILITY	Sampling Method:	AIR SAMPLING PUMP

CHAIN OF CUSTODY				
Collected by (*print*): RICHARD E. TWOMEY		Collector's Signature:		
Relinquished by:	Date/Time	Received by	Date/Time	
Relinquished by:	Date/Time	Received by	Date/Time	
Method of Shipment:		Received at Lab by:	Date/Time	

Authorized by: _____ **Date:** _____
(signature required)

Sample Condition Upon Receipt: ☐ Acceptable ☐ Unacceptable

EVL SAMPLE NO (Lab Use Only)	SAMPLE CONTAINER NO	Media Type	ANALYSIS DESIRED A 5 sample minimum charge applies when less than 3 of each specific analyte is requested.	FLOW RATE NOTES (Recording sampling date, Location and Operation. Other compounds present, etc.) PRE	POST	CC/MIN SAMPLING RATE (liters/min)	SAMPLING TIME Start	End	Total Time (minutes)	AIR SAMPLE VOLUME (liters)
	200 7383 2969	TD	VOC	BLANK						
	200 7382	CT	VOC							
		TD								
		CT								

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ATTACHMENT 3

Applicable VCAP Screening Levels

Conceptual Site Models and Screening Levels For Pratt & Whitney's VCAP Connecticut Facilities

Prepared for
Pratt & Whitney
400 Main Street
East Hartford, CT

Prepared by
Gradient Corporation
44 Brattle Street
Cambridge, MA 02138

Issued: December 19, 1997
Revision 1: September 18, 1998
Revision 2: September 15, 1999

Table 3-4
Generic P&W Indoor Air Screening Levels (SLs)
P&W VCAP, Connecticut Facilities

Parameter[1]	Most Stringent Occupational Indoor Air Level[2] (mg/m³)	Generic P&W Indoor Air SLs[4] (mg/m³)
VOCs		
1,1,1,2-Tetrachloroethane	NA [3]	NA [3]
1,1,1-Trichloroethane	1900	19
1,1,2,2-Tetrachloroethane	6.9	0.069
1,1,2-Trichloroethane	45	0.45
1,1-Dichloroethane	400	4
1,1-Dichloroethene	20	0.2
1,2,3-Trichloropropane	60	0.6
1,2-Dichloroethane	4	0.04
1,2-Dichloroethene (cis)	790	7.9
1,2-Dichloroethene (trans)	790	7.9
1,2-Dichloropropane	347	3.47
1,3-Dichloropropene	4.5	0.045
1,4-Dioxane	90	0.9
2-Butanone (MEK)	590	5.9
Acetone	590	5.9
Acetonitrile	34	0.34
Acrylonitrile	4.3	0.043
Benzene	0.32	0.0032
Bromodichloromethane (Dichlorobromomethane)	NA [3]	NA [3]
Bromoform	5	0.05
Carbon Disulfide	3	0.03
Carbon Tetrachloride	31	0.31
Chlorobenzene	46	0.46
Chloroethane	264	2.64
Chloroform	49	0.49
Chloroprene (beta-Chloroprene)	36	0.36
Dichlorodifluoromethane	4950	49.5
Ethylbenzene	434	4.34
Ethylene Dibromide (EDB)	156	1.56
Isobutyl Alcohol (Isobutanol)	150	1.5
Methacrylonitrile	2.7	0.027
Methyl Bromide (Bromomethane)	3.9	0.039
Methyl isobutyl ketone (4-Methyl-2-pentanone)	205	2.05
Methyl-tert-butyl-ether (MTBE)	144	1.44
Methylene Chloride	174	1.74
Propionitrile	14	0.14
Styrene	85	0.85
Tetrachloroethene	170	1.7
Toluene	188	1.88
Trichloroethene	269	2.69
Trichlorofluoromethane	5600	56

Table 3-4
Generic P&W Indoor Air Screening Levels (SLs)
P&W VCAP, Connecticut Facilities

Parameter[1]	Most Stringent Occupational Indoor Air Level[2] (mg/m³)	Generic P&W Indoor Air SLs[4] (mg/m³)
Vinyl Acetate	35	0.35
Vinyl chloride	2.6	0.026
Xylenes	434	4.34

Notes:

1. *List includes VOCs for which USEPA has developed Soil Screening Levels; and VOCs detected in any medium in prior sampling conducted at the VCAP facilities that are also on the VCAP analytical list (included as Appendix B of Oct./Nov. Progress Report).*
2. *Lowest of OSHA PELs, NIOSH RELs, and ACGIH TLVs were used (ACGIH Guide to Occupational Exposure Values, 1998).*
3. *NA - Indicates value not available. If this compound is detected at the VCAP facilities, an occupational air exposure level may be later developed.*
4. *Proposed screening level is 1% of a chemical's most stringent occupational indoor air level.*

Memorandum

Gradient CORPORATION

To: Phil Sheridan, UTC, and Nick Skoularikis, LEA **Date:** July 6, 2001

From: Christopher Wells and Manu Sharma

Subject: P&W Indoor Air Screening Levels

This memorandum presents the development of indoor air screening levels for several compounds that have been detected in indoor air samples obtained at P&W VCAP, Connecticut facilities. These twelve compounds currently do not have established indoor air screening levels in the Conceptual Site Models report (Gradient, 1999)[1]. We have identified stringent occupational indoor air levels for these compounds using existing chemical, toxicologic, and regulatory data from many sources. These levels refer to airborne concentrations of compounds and represent conditions under which it is believed that nearly all workers may be repeatedly exposed without adverse health effects. In addition, occupational indoor air levels were derived for several compounds based on a comparison of their structural and toxicologic homology to other chemicals that have been more adequately studied. Indoor air screening levels were set at 1% of the occupational air exposure levels using the USEPA accepted approach presented in the Conceptual Site Models Report (Gradient, 1999). The proposed screening levels are tabulated below; a detailed discussion on the development approach is also presented below.

Proposed Generic P&W Indoor Air Screening Levels (SLs)
P&W VCAP, Connecticut Facilities

Chemical	Occupational Indoor Air Level (mg/m^3)	Source	Generic P&W Indoor Air SLs (mg/m^3)
1,1,1,2-Tetrachloroethane	54	ACGIH TLV for 1,1,2,2-tetrachloethane	0.54
1,2,4 Trimethylbenzene	120	ACGIH TLV for trimethylbenzenes	1.20
1,3,5 Trimethylbenzene	120	ACGIH TLV for trimethylbenzenes	1.20
1,4 Dichlorobenzene	60	OSHA PEL	0.60
Bromodichloromethane	3	OSHA PEL for bromoform	0.03
Chloromethane	103	OSHA PEL	1.03
Cumene	246	OSHA PEL	2.46
Cymene (mixed isomers)	274	OSHA PEL for cumene	2.74
m Cymene	274	OSHA PEL for cumene	2.74
Naphthalene	52	OSHA PEL	0.52
n Propylbenzyne	492	OSHA PEL for ethylbenzene	4.92
sec Butylbenzene	220	OSHA PEL for ethylbenzene, adjusted using LD_{50}s	2.20

[1] Gradient Corp. (Cambridge, MA) "Conceptual site models and screening levels for Pratt & Whitney's VCAP Connecticut facilities (Revision 2)." Prepared for Pratt & Whitney (East Hartford, CT) September 15, 1999.

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Discussion

1,1,1,2 Tetrachloroethane

Existing toxicological data on the carcinogenic and noncarcinogenic effects of 1,1,1,2-Tetrachloroethane are limited. This compound causes hepatocellular adenomas and carcinomas in female rats, and is considered a possible human carcinogen (Class C) by the USEPA. USEPA has little confidence in the Oral Reference Dose (RfD) for noncarcinogenic effects derived from Lowest Observed Adverse Effect Levels (LOAELs). US EPA is reasonably confident in existing carcinogenicity studies; an oral slope factor of 2.60×10^{-2} mg/kg/day and an inhalation unit risk factor of 7.4×10^{-6} per $\mu g/m^3$ have been derived for cancer. However, no sources explicitly recommend an occupational TWA for 1,1,1,2 tetrachloroethane; only NIOSH notes this compound should be handled with caution.

More thorough research has been conducted on an isomer, 1,1,2,2-Tetrachloroethane, for which US EPA reports an oral slope factor of 2.01×10^{-1} mg/kg/day and a unit risk factor of 5.80×10^{-5} per $\mu g/m^3$ for carcinogenesis. Likewise, OSHA reports a Permissible Exposure Limit (PEL) TWA of 5 parts per million (ppm). ACGIH and NIOSH recommend a more stringent TWA of 1 ppm for 1,1,2,2 Tetrachloroethane.

We derived a TWA for 1,1,1,2-Tetrachloroethane by adjusting the more stringent TWA of its isomer upwards by the multiplicative factor differentiating the two known URFs. The TWA we used for 1,1,1,2 Tetrachloroethane was 7.8 ppm, which is equivalent to 54 mg/m^3.

1,2,4- and 1,3,5-Trimethylbenzene

1,2,4-Trimethylbenzene (Pseudocumene) and 1,3,5-Trimethylbenzene (Mesitylene) are isomers, and are often described as components of a single mixture: Trimethyl benzene (mixed isomers)[2]. ACGIH and NIOSH both recommend a TWA of 25 ppm for the trimethyl benzene mixture. We applied this TWA for the mixture to each component of the mixture. The TWA for 1,2,4 and 1,3,5 trimethylbenzene is therefore 25 ppm, which is equivalent to 120 mg/m^3.

[2] Trimethyl benzene (mixed isomers) CAS No. 2551-13-7.

1,4-Dichlorobenzene

1,4-Dichlorobenzene (*p*-dichlorobenzene) has been studied repeatedly for its toxicologic properties. This compound is a white crystal arylhalide often used in insecticides. It is moderately toxic to humans by all routes of exposure, and has been shown to cause liver and kidney damage. It is also an eye irritant, teratogenic, and a depressant. OSHA reports a PEL TWA of 75 ppm, while ACGIH recommends a TWA of 10 ppm for 1,4 dichlorobenzene. We applied the lowest reported TWA of 10 ppm to 1,4 Dichlorobenzene for an occupational indoor air level which is equivalent to 60 mg/m^3.

Bromodichloromethane

Existing toxicological data on the carcinogenic and noncarcinogenic effects of Bromodichloromethane (BDCM) are limited. BDCM causes kidney cytomegalo and tubular cell adenomas in rats, and is considered a probable human carcinogen (Class B2) by the USEPA. USEPA has medium confidence in the Oral RfD for noncarcinogenic effects derived from a test of LOAELs by NTP. US EPA is reasonably confident in existing carcinogenicity studies. However, no sources explicitly recommend an occupational TWA for BDCM.

More thorough research has been conducted on several structurally related trihalomethanes, for which US EPA reports oral RfDs, oral slope factors, and oral and inhalation unit risk factors for carcinogenesis. Many chemicals within this class are considered probable human carcinogens by USEPA. Likewise, ACGIH reports PEL TWAs for many of these compounds.

Structurally related compound	Cas No.	TWA	Oral RfD	Oral SF	URF_O	URF_I
Dichlorofluoromethane (DCFM)	75-43-4	10	2.00E-01	-	-	-
chloroform	67-66-3	10	1.00E-02	6.10E-03	1.70E-07	2.30E-05
bromoform	75-25-2	0.5	2.00E-02	7.90E-03	2.30E-07	1.10E-06
bromodichloromethane (BDCM)	75-27-4	-	2.00E-02	6.20E-02	1.80E-05	-
dibromochloromethane (DBCM)	124-48-1	-	2.00E-02	8.40E-02	2.40E-06	-

We determined that an experimentally derived TWA for BDCM is unlikely to be lower than the range of TWAs for chloroform and bromoform. We conservatively apply the TWA of 0.5 ppm (the value for bromoform) which is equivalent to 3 mg/m^3.

Chloromethane

Chloromethane (Methyl chloride) is a central nervous system (CNS) depressant and affects mouse renal and reproductive systems, but is not classifiable as a human carcinogen by USEPA. AGGIH

recommends a TWA of 50 ppm for chloromethane; OSHA reports a PEL TWA of 100 ppm. We applied the lowest reported TWA for Chloromethane (50 ppm) which is equivalent to 103 mg/m^3.

Cumene

Cumene (isopropyl benzene) is a skin and eye irritant, affects the CNS, kidneys and adrenal glands in chronically exposed rats, and is not classifiable as a human carcinogen by USEPA. AGGIH, OSHA, and NIOSH all recommend a TWA of 50 ppm for Cumene. We applied this TWA for Cumene which is equivalent to 246 mg/m^3.

m Cymene and Cymene (mixed isomers)

m Cymene (isopropyl toluene) is an isomer of a set of compounds collectively referred to as cymene (mixed isomers). Existing toxicological data on carcinogenic and noncarcinogenic effects of cymene and its three isomers is limited. The LD_{50} from ingestion of *p* cymene isomer in rats is 4750 mg/kg/day. No sources explicitly recommend an occupational TWA for cymene.

More thorough research has been conducted on compounds that are structurally related to cymene. For example, cumene has a LD_{50} from ingestion in rats is 1400 mg/kg/day, and OSHA reports a PEL TWA of 50 ppm for cumene. Toluene has a LD_{50} from ingestion in rats is 636 mg/kg/day, and OSHA reports a PEL TWA of 50 ppm for toluene. We determined that an experimentally derived TWA for cymene (mixed isomers) or any of its isomers is unlikely to be lower than the TWAs of either toluene or cumene. We applied the OSHA PEL TWA of 50 ppm for cymene, which is equivalent to 274 mg/m^3.

Naphthalene

Naphthalene decreases body weight in rats and induces nasal hyperplasia and metaplasia in mice, but is not classifiable as a human carcinogen. Naphthalene is moderately to very toxic, and is derived principally from coal tar. AGGIH and OSHA recommend a TWA of 10 ppm for Naphthalene. We applied this TWA for Naphthalene, which is equivalent to 52 mg/m^3.

n Propylbenzyne

Existing toxicological data on the carcinogenic and noncarcinogenic effects of *n* propylbenzene is limited; it is not classifiable as a human carcinogen by USEPA. The LD_{50} from ingestion of *n*

propylbenzene in rats is 6040 mg/kg/day. No sources explicitly recommend an occupational TWA for *n* propylbenzene.

More thorough research has been conducted on compounds structurally related to *n* propylbenzene for which TWAs have already been derived. For example, ethylbenzene has an LD_{50} of 5460 mg/kg/day in rats; OSHA, ACGIH, and NIOSH all recommend a TWA of 100 ppm for ethylbenzene. We determined that an experimentally derived TWA for n Propylbenzene is unlikely to be lower than the TWA of ethylbenzene, and applied 100 ppm for *n* Propylbenzene, which is equivalent to 492 mg/m^3.

sec Butylbenzene

Existing toxicological data on the carcinogenic and noncarcinogenic effects of *sec* Butylbenzene is limited; it is described as a skin and eye irritant. The LD_{50} from ingestion of *sec* Butylbenzene in rats is 2240 mg/kg/day. No sources explicitly recommend an occupational TWA for *sec* butylbenzene.

More thorough research has been conducted on compounds structurally related to *sec* butylbenzene for which TWAs have already been derived. For example, ethylbenzene has an LD_{50} of 5460 mg/kg/day in rats; OSHA, ACGIH, and NIOSH all recommend a TWA of 100 ppm for ethylbenzene. We determined that an experimentally derived TWA for *sec* butylbenzene is likely to be smaller than the TWA of ethylbenzene by the same fraction that *sec* butylbenzene's LD_{50} is smaller than ethylbenzene's LD_{50} (40%). We applied 40 ppm for sec butylbenzene which is equivalent to 220 mg/m^3.

Generic P&W Indoor Air Screening Levels (SLs)
P&W VCAP, Connecticut Facilities

Chemical	CAS No.	Occupational Indoor Air Level (mg/m^3)	Source	Generic P&W Indoor Air SLs (mg/m^3)
1,1,1,2 Tetrachloroethane	630-20-6	54	isomer, ACGIH	0.54
1,2,4 Trimethylbenzene	95-63-6	120	mixture, ACGIH	1.20
1,3,5 Trimethylbenzene	108-67-8	120	mixture, ACGIH	1.20
1,4 Dichlorobenzene	106-46-7	60	OSHA	0.60
Bromodichloromethane	75-27-4	3	trihalomethanes	0.03
Chloromethane	74-87-3	103	OSHA	1.03
Cumene	98-82-8	246	OSHA	2.46
Cymene (mixed isomers)	25155-15-1	274	Cumene LD_{50}	2.74
m Cymene	535-77-3	274	Cumene LD_{50}	2.74
Naphthalene	91-20-3	52	OSHA	0.52
n Propylbenzyne	103-65-1	492	Ethylbenzene	4.92
sec Butylbenzene	135-98-8	220	Ethylbenzene	2.20

Memorandum

Gradient CORPORATION

To: Nick Skoularikis, LEA, and Joe Tota, UTC **Date:** September 10, 2001

From: Christopher Wells and Manu Sharma

Subject: P&W Indoor Air Screening Levels

This memorandum presents the development of indoor air screening levels for three compounds that have been detected in indoor air samples obtained at P&W VCAP, Connecticut facilities. These three compounds currently do not have established indoor air screening levels in the Conceptual Site Models report (Gradient, 1999)[1]. We have identified stringent occupational indoor air levels for these compounds using existing chemical, toxicologic, and regulatory data from many sources. These levels refer to airborne concentrations of compounds and represent conditions under which it is believed that nearly all workers may be repeatedly exposed without adverse health effects. In addition, occupational indoor air levels were derived for certain compounds based on a comparison of their structural and toxicologic homology to other chemicals that have been more adequately studied. Indoor air screening levels were set at 1% of the occupational air exposure levels using the USEPA accepted approach presented in the Conceptual Site Models Report (Gradient, 1999). The proposed screening levels are tabulated below, followed by a detailed discussion on the development approach.

Proposed Generic P&W Indoor Air Screening Levels (SLs)
P&W VCAP, Connecticut Facilities

Chemical	Occupational Indoor Air Level (mg/m^3)	Source	Generic P&W Indoor Air SLs (mg/m^3)
Bromochloromethane	1058	OSHA PEL	10.58
p Cymene	274	OSHA PEL for cumene	2.74
n Butylbenzene	137	Fraction of RD_{50} for ethylbenzene	1.37

[1] Gradient Corp. (Cambridge, MA) "Conceptual site models and screening levels for Pratt & Whitney's VCAP Connecticut facilities (Revision 2)." Prepared for Pratt & Whitney (East Hartford, CT) September 15, 1999.

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Discussion

Bromochlormethane

Bromochloromethane is a central nervous system (CNS) depressant and affects the liver, but is not classifiable as a human carcinogen by USEPA. OSHA, ACGIH, and NIOSH all recommend a TWA of 200 ppm for bromochloromethane which is equivalent to 1058 mg/m^3.

p Cymene

p Cymene (isopropyl toluene) is an isomer of a set of compounds collectively referred to as cymene (mixed isomers). Existing toxicological data on carcinogenic and noncarcinogenic effects of *p* cymene is limited. The LD_{50} from ingestion of *p* cymene isomer in rats is 4750 mg/kg/day (Cite)[2]. No sources explicitly recommend an occupational TWA for *p* cymene.

More thorough research has been conducted on compounds that are structurally related to *p* cymene. For example, cumene has a LD_{50} from ingestion in rats is 1400 mg/kg/day, and OSHA reports a PEL TWA of 50 ppm for cumene. Toluene has a LD_{50} from ingestion in rats is 636 mg/kg/day, and OSHA reports a PEL TWA of 50 ppm for toluene. We determined that an experimentally derived TWA for *p* cymene is unlikely to be lower than the TWAs of either toluene or cumene. We applied the OSHA PEL TWA of 50 ppm for *p* cymene, which is equivalent to 274 mg/m^3.

n Butylbenzene

Existing toxicological data on the carcinogenic and noncarcinogenic effects of *n* butylbenzene is limited; it is described as a sensory irritant. Minimal or no pulmonary irritation was observed in humans exposed to n-buytlbenzene (Nielsen and Alarie, 1982)[3]. The concentration of *n* butylbenzene necessary to depress the respiratory rate by 50% (RD_{50}) due to sensory irritation in mice is 710 ppm (Alarie *et al.*, 1998)[4]. No sources explicitly recommend an occupational TWA for *n* butylbenzene.

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[2] Jenner PM *et al.* (1964). *Food Cosmet. Toxicol.* 2, 327.

[3] Nielsen GD, and Alarie Y. (1982). Sensory irritation, pulmonary irritation, and respiratory stimulation by airborne benzene and alkylbenzenes: prediction of safe industrial exposure levels and correlation with their thermodynamic properties. *Toxicol Appl Pharmacol.* 65(3):459-77.

[4] Alarie Y, Schaper M, Nielsen GD, Abraham MH. (1998). Structure-activity relationships of volatile organic chemicals as sensory irritants. *Arch Toxicol.* 72(3):125-40.

More thorough research on sensory irritation of the respiratory tract has been conducted on compounds structurally related to *n* butylbenzene for which TWAs have already been derived. RD_{50}s derived from mice for nonreactive chemicals are highly correlated with their threshold limit values (Alarie et. al., 1995)[5]. For example, *n* butylbenzene and ethylbenzene are saturated alkybenzenes and sensory irritants that act by physical mechanisms. Ethylbenzene has an RD_{50} of 2,753 ppm (Alarie *et al.*, 1998); OSHA, ACGIH, and NIOSH all recommend a TWA of 100 ppm for ethylbenzene. We determined that an experimentally derived TWA for *n* butylbenzene is likely to be smaller than the TWA of ethylbenzene by the same fraction that *n* butylbenzene's RD_{50} is smaller than ethylbenzene's RD_{50} (25%). Extrapolation using RD_{50}s results in a more conservative (lower) occupational indoor air level for *n* butylbenzene than using the limited data available on acute oral exposure in mice (Tanii *et al.*, 1995)[6]. We applied 25 ppm for n butylbenzene which is equivalent to 137 mg/m^3.

[5] Alarie Y, Nielsen GD, Andonian-Haftvan J, Abraham MH. (1995). Physicochemical properties of nonreactive volatile organic chemicals to estimate RD50: alternatives to animal studies. *Toxicol Appl Pharmacol.* 134(1):92-9.

[6] : Tanii H, Huang J, Hashimoto K. (1995) Structure-acute toxicity relationship of aromatic hydrocarbons in mice. *Toxicol Lett.* 76(1):27-31.