

**RCRA Corrective Action  
Environmental Indicator (EI) RCRIS code (CA725)**

**Appendix F**

***Summary of Indoor Air Analytical Data  
and  
Constituents Detected in Indoor Air  
Environmental Indicator Determination  
For  
Pratt & Whitney Willgoos Facility***

**INDOOR AIR MONITORING  
IN SUPPORT OF  
VCAP RISK ASSESSMENT**

**Pratt & Whitney  
Pent Road  
(Willgoos)  
East Hartford, CT**

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### ATTACHMENTS

ATTACHMENT F1	Standard Operating Procedure (SOP) “Specification of Air Sampling Procedure For Employee Exposure Monitoring”
ATTACHMENT F2	Memorandum from Gradient Corp.



## 1. SUMMARY

Indoor air monitoring was performed at the Pratt & Whitney, Pent Road (Willgoos) facility in East Hartford, Connecticut in support of the Voluntary Corrective Action Program (VCAP) Risk Assessment. Samples were collected throughout the facility from locations representative of process operations. The samples were collected on multimedia (thermal desorption) tubes and on charcoal tubes and were analyzed in accordance with modified EPA Method T01/T02 for an expanded list of volatile organic compounds (VOCs).

This report presents results from five sampling events: November 2, 1998, December 21, 2000, March 1, 2001, June 18, 2001 and September 21, 2001.

The sampling will continue to be performed on an annual basis at all six, current locations. The quarterly event exhibiting the highest concentrations of VOCs, based on the results obtained during the quarterly sampling from WG-RSK-AS-06, (or WG-RSK-AS-16 as it is currently represented) will be selected for annual sampling events. The highest VOC concentrations over the four previous monitoring events were observed during the June 2001 indoor air monitoring event. Sampling events will be conducted on an annual basis during the selected quarter (June of each year) at all six, current locations.

## 2. FACILITY INFORMATION

The Pent Road facility, also known as the Andrew Willgoos turbine laboratory, 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.

## 3. METHODOLOGY

Indoor air sampling activities were performed in accordance with Standard Operating Procedures (SOPs). The SOP for "Specification of Air Sampling Procedure For Employee Exposure Monitoring" has been included as Attachment F1. The samples were collected in multimedia



thermal desorption tubes and in charcoal tubes over approximately an eight hour period. The charcoal tubes were to be used in place of the multimedia tubes in case breakthrough was observed. No such condition was observed in any of the sampling locations, and therefore the charcoal tubes were not analyzed. The method used for the analysis was modified EPA Method T01/T02. Rather than use Tenax as specified by Method TO1, AceUsa (former CIGNA's Environmental Health Laboratory in Cromwell, Connecticut) is using multimedia tubes consisting of three different adsorbents to increase the adsorbent capability of the mixture. The analysis is performed by GC/MS as specified in the method.

The samples collected were placed in an ice-filled cooler and submitted to either Cigna's Environmental Health Laboratory of Cromwell, Connecticut (November 1998 event) or Environmental Health Laboratory (Division of Ace USA) of Cromwell, Connecticut (all other events) for analysis under chain-of-custody procedures. The samples collected were analyzed for an expanded list of volatile organic compounds (including acetone, 2-butanone, methyl-tert-butyl-ether, methyl isobutyl ketone, and vinyl chloride) 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 in Drawing 3 (see Volume I of CA 725).

In addition, one trip blank and one duplicate sample were collected for quality assurance/quality control (QA/QC) purposes. In addition, one field blank sample was collected during the March 2001, June 2001 and September 2001 monitoring events.

### 3.1 November 2, 1998 Sample Collection

Five indoor air samples, one trip blank and one duplicate were collected on November 2, 1998 from various locations throughout the main testing facility building, from the Fuel System Laboratory, the operator's room at the Tank Farm Pump House, and the Test Cells. The rationale for sample collection is summarized below:

Sampling Location	Rationale
WG-RSK-AS-01	Collected in Tank Farm Pump House.
WG-RSK-AS-02	Collected in Level 29 of main facility near manufacturing activities.
WG-RSK-AS-03	Collected in Level 36 of main facility near manufacturing activities.
WG-RSK-AS-04	Collected in engine test cell.
WG-RSK-AS-05	Collected in Fuel System Lab.



The duplicate sample was collected from location WG-RSK-AS-01 during the November 1998 monitoring event.

### 3.2 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 3. The location and rationale for sample collection are outlined 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 former fuel lab. Process operations are being conducted in this area. The area is occupied.
WG-RSK-AS-16	A sample was collected in 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 slightly different locations used for some of the samples in comparison to the November 1998 sampling event. 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 in November 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. The duplicate sample was collected from location WG-RSK-AS-14 during the December 2000 monitoring event.

### 3.3 March 1, 2001 Sample Collection

Six indoor air samples in five buildings, a duplicate and both a trip and field blank were collected during the March 1, 2001 monitoring event. The rationale for sample collection is the same as



described above for the December 21, 2000 event. 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 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.

### 3.4 June 18, 2001 Sample Collection

Six indoor air samples in five buildings, a duplicate and both a trip and field blank were collected during the June 18, 2001 monitoring event. The rationale for sample collection is the same as described above for the March 1, 2001 event. 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.

### 3.5 September 21, 2001 Sample Collection

Six indoor air samples in five buildings, a duplicate and both a trip and field 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.



## 4. RESULTS

The analytical results obtained from the monitoring events are summarized in tabular form in the following pages. Table F1 presents a summary of sampling and analytical information, while Table F2 summarizes the detected concentrations. Table F3 presents all analytical data obtained from all the sample events. Analytical results from trip and field blank samples were all reported in nanograms per cubic meter.

### 4.1 November 2, 1998 Analytical Results

The concentrations detected for most constituents were in the low microgram per cubic meter ( $\mu\text{g}/\text{m}^3$ ) range. The constituents detected and their highest concentrations included acetone (up to  $33 \mu\text{g}/\text{m}^3$ ); methylene chloride (up to  $1.9 \mu\text{g}/\text{m}^3$ ); styrene (up to  $3.1 \mu\text{g}/\text{m}^3$ ); toluene (up to  $5.6 \mu\text{g}/\text{m}^3$ ); trichloroethylene (up to  $150 \mu\text{g}/\text{m}^3$ ); m&p-xylenes (up to  $2.9 \mu\text{g}/\text{m}^3$ ); and o-xylene (up to  $1.2 \mu\text{g}/\text{m}^3$ ). Vinyl chloride was not detected.

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.

A comparison of the duplicate samples collected in the operator room of the Tank Farm Pump House in locations adjacent to each other gave reasonable agreement with relative percent differences up to 60% which is justified at these low concentrations. However, styrene was detected at low concentration in one out of the two samples only. The blank sample did not indicate any contamination.



## 4.2 December 21, 2000 Analytical Results

The concentrations detected for most constituents were in the low microgram per cubic meter ( $\mu\text{g}/\text{m}^3$ ) range. Typical constituents detected and their highest concentrations included acetone (20E  $\mu\text{g}/\text{m}^3$ ); benzene (4.5  $\mu\text{g}/\text{m}^3$ ); 1,2,4-trimethylbenzene (18  $\mu\text{g}/\text{m}^3$ ); 1,3,5-trimethylbenzene (5.8  $\mu\text{g}/\text{m}^3$ ); ethylbenzene (7.8  $\mu\text{g}/\text{m}^3$ ); n-propylbenzene (2.5  $\mu\text{g}/\text{m}^3$ ); sec-butylbenzene (0.85  $\mu\text{g}/\text{m}^3$ ); 2-butanone (1.1  $\mu\text{g}/\text{m}^3$ ); p-cymene (2.4  $\mu\text{g}/\text{m}^3$ ); 1,1,1-trichloroethane (2.9  $\mu\text{g}/\text{m}^3$ ); 1,1-dichloroethylene (0.85  $\mu\text{g}/\text{m}^3$ ); tetrachloroethylene (4.2  $\mu\text{g}/\text{m}^3$ ); trichloroethylene (18  $\mu\text{g}/\text{m}^3$ ); chloromethane (0.95  $\mu\text{g}/\text{m}^3$ ); dichlorodifluoromethane (58E  $\mu\text{g}/\text{m}^3$ ); dichloromethane (6.2  $\mu\text{g}/\text{m}^3$ ); trichlorofluoromethane (2.4  $\mu\text{g}/\text{m}^3$ ); 4-methyl-2-pentanone (0.34  $\mu\text{g}/\text{m}^3$ ); naphthalene (3.5  $\mu\text{g}/\text{m}^3$ ); styrene (0.76  $\mu\text{g}/\text{m}^3$ ); toluene (22  $\mu\text{g}/\text{m}^3$ ); total xylenes (28  $\mu\text{g}/\text{m}^3$ ). 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 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*.

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 F2 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  $\mu\text{g}/\text{m}^3$ . Samples WG-RSK-AS-11, WG-RSK-AS-14, and WG-RSK-AS-16 had benzene detected at 3.8  $\mu\text{g}/\text{m}^3$ , 3.3  $\mu\text{g}/\text{m}^3$ , and 4.5  $\mu\text{g}/\text{m}^3$ .



The results obtained from the two duplicate samples collected on thermal desorption tubes from location WG-RSK-AS-14 indicated relative percent differences up to 61% (for example, methylene chloride detected at 0.42  $\mu\text{g}/\text{m}^3$  and 0.79  $\mu\text{g}/\text{m}^3$ ). 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.

### 4.3 March 1, 2001 Analytical Results

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

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  $\mu\text{g}/\text{m}^3$  on the thermal desorption tube and 270  $\mu\text{g}/\text{m}^3$  on the charcoal tube) and toluene (42  $\mu\text{g}/\text{m}^3$  on the thermal desorption tube and 85  $\mu\text{g}/\text{m}^3$  on the charcoal tube).

Although some elevated levels of benzene were detected in the December 21, 2000 monitoring event, the sampling performed in March 2001 did not indicate any levels of VOCs above VCAP screening levels listed in Table 3-4 (as expanded by Gradient, see Attachment F2).

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  $\mu\text{g}/\text{m}^3$  in only one of the two duplicate samples collected). Therefore, the relative percent difference 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.

#### 4.4 June 18, 2001 Analytical Results

Relatively elevated volatile organic compounds were detected at the pump house (location WG-RSK-AS-11). Typical constituents detected at this location included aromatic hydrocarbons such as benzene ( $30 \mu\text{g}/\text{m}^3$ ); toluene ( $100 \mu\text{g}/\text{m}^3$ ); and xylenes ( $110 \mu\text{g}/\text{m}^3$ ). 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 ( $340 \mu\text{g}/\text{m}^3$ ); 1,1,1-trichloroethane ( $150 \mu\text{g}/\text{m}^3$ ); trans-1,2-dichloroethylene ( $8,600 \mu\text{g}/\text{m}^3$ ); cis-1,2-dichloroethylene ( $13 \mu\text{g}/\text{m}^3$ ); and, 1,2-dichloroethane ( $1.8 \mu\text{g}/\text{m}^3$ ).

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 thermal desorption tube concentration levels 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 ( $300 \mu\text{g}/\text{m}^3$  on the thermal desorption tube and  $8,600 \mu\text{g}/\text{m}^3$  on the charcoal tube) and 1,1,1-trichloroethane ( $46 \mu\text{g}/\text{m}^3$  on the thermal desorption tube and  $97 \mu\text{g}/\text{m}^3$  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 relative percent differences in the duplicate samples collected (for example, trichloroethylene was detected at  $0.43 \mu\text{g}/\text{m}^3$  and  $1.4 \mu\text{g}/\text{m}^3$  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, see Attachment F2) indicated exceedances for benzene at location WG-RSK-AS-11. ( $30 \mu\text{g}/\text{m}^3$ ), and trans-1,2-dichloroethylene ( $8,600 \mu\text{g}/\text{m}^3$ , based on the analysis of the charcoal tube) at location WG-RSK-AS-15.

#### 4.5 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 ( $1.4 \mu\text{g}/\text{m}^3$ ); 1,3,5-trimethylbenzene ( $0.94 \mu\text{g}/\text{m}^3$ ); ethylbenzene ( $2.3 \mu\text{g}/\text{m}^3$ ); n-butylbenzene ( $0.25 \mu\text{g}/\text{m}^3$ ); 2-butanone ( $5.3 \mu\text{g}/\text{m}^3$ ); carbon tetrachloride ( $0.42 \mu\text{g}/\text{m}^3$ ); p-isopropyltoluene ( $0.53 \mu\text{g}/\text{m}^3$ ); 1,1,1-trichloroethane ( $45 \text{ E } \mu\text{g}/\text{m}^3$  in the thermal desorption tube and  $59 \mu\text{g}/\text{m}^3$  in the charcoal tube); 1,1-dichloroethylene ( $0.87 \mu\text{g}/\text{m}^3$ ); tetrachloroethylene ( $0.86 \mu\text{g}/\text{m}^3$ ); trans-1,2-dichloroethylene ( $9.0 \mu\text{g}/\text{m}^3$ ); trichloroethylene ( $20 \mu\text{g}/\text{m}^3$ ); dichlorodifluoromethane ( $7.1 \mu\text{g}/\text{m}^3$ ); dichloromethane ( $5.6 \mu\text{g}/\text{m}^3$ ); trichlorofluoromethane ( $2.4 \mu\text{g}/\text{m}^3$ ); methyl isobutyl ketone ( $1.4 \mu\text{g}/\text{m}^3$ ); styrene ( $4.0 \mu\text{g}/\text{m}^3$ ); toluene ( $12.0 \mu\text{g}/\text{m}^3$ ); o-xylene ( $3.0 \mu\text{g}/\text{m}^3$ ); and total xylenes ( $8.8 \mu\text{g}/\text{m}^3$ ).

No exceedances of the VCAP screening levels listed in Table 3-4 (as expanded by Gradient, see Attachment F2) 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 relative percent differences in the duplicate samples collected (for example, trans-1,2-dichloroethylene was detected at  $0.95 \mu\text{g}/\text{m}^3$  and  $9.0 \mu\text{g}/\text{m}^3$  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.



## TABLES



**Table F1**  
**SUMMARY OF SAMPLING AND ANALYTICAL INFORMATION**  
**Pratt & Whitney, Pent Road, East Hartford, CT (Willgoos) - Indoor Air Sampling**

Sample Information						Analysis Information							
Location ID	Sample ID	Sample Date	From (ft)	To (ft)	Class	Portable GC	Volatile Organics	Semivolatile Organics	Herbicides	Pesticides	PCBs	Metals	Miscellaneous
WG-RSK-AS-01	1831453	11/ 2/98			VS		X						
WG-RSK-AS-01	1831454	11/ 2/98			VS		X						
WG-RSK-AS-02	1831455	11/ 2/98			VS		X						
WG-RSK-AS-03	1831456	11/ 2/98			VS		X						
WG-RSK-AS-04	1831457	11/ 2/98			VS		X						
WG-RSK-AS-05	1831458	11/ 2/98			VS		x						
WG-RSK-AS-11	1979474	12/21/00			VS		X	X		x			
WG-RSK-AS-11	1979475	12/21/00			VS		X						
WG-RSK-AS-11	1990393	3/ 1/01			VS		X	X		x			
WG-RSK-AS-11	1997129	6/18/01			VS		X	X		x			
WG-RSK-AS-11	1997130	6/18/01			VS		X						
WG-RSK-AS-12	1979488	12/21/00			VS		X	x		x			
WG-RSK-AS-12	1979489	12/21/00			VS		X						
WG-RSK-AS-12	1990405	3/ 1/01			VS		X	x		x			
WG-RSK-AS-12	1990406	3/ 1/01			VS		X						
WG-RSK-AS-12	1997386	6/18/01			VS		X	x		x			
WG-RSK-AS-12	1997387	6/18/01			VS		X						
WG-RSK-AS-13	1979478	12/21/00			VS		X	x		x			
WG-RSK-AS-13	1990401	3/ 1/01			VS		X	X		x			
WG-RSK-AS-13	1990402	3/ 1/01			VS		X						
WG-RSK-AS-13	1997137	6/18/01			VS		X	X		x			
WG-RSK-AS-13	1997138	6/18/01			VS		x						
WG-RSK-AS-14	1979480	12/21/00			VS		X	X		x			
WG-RSK-AS-14	1979482	12/21/00			VS		X	X		x			
WG-RSK-AS-14	1990399	3/ 1/01			VS		X	X		x			
WG-RSK-AS-14	1990400	3/ 1/01			VS		X						
WG-RSK-AS-14	1997135	6/18/01			VS		X	X		x			
WG-RSK-AS-14	1997136	6/18/01			VS		X						
WG-RSK-AS-15	1979484	12/21/00			VS		X	X		x			
WG-RSK-AS-15	1990403	3/ 1/01			VS		X	X		x			
WG-RSK-AS-15	1997139	6/18/01			VS		X	X		x			
WG-RSK-AS-15	1997140	6/18/01			VS		X						

Notes: 1. Legend: x - mass, t - TCLP, s - SPLP, e - EPTOX, z - ZHE; Capitalized - at least one analyte detected  
2. Printed on 08/31/01

**Table F1**  
**SUMMARY OF SAMPLING AND ANALYTICAL INFORMATION**  
**Pratt & Whitney, Pent Road, East Hartford, CT (Willgoos) - Indoor Air Sampling**

Sample Information						Analysis Information							
Location ID	Sample ID	Sample Date	From (ft)	To (ft)	Class	Portable GC	Volatile Organics	Semivolatile Organics	Herbicides	Pesticides	PCBs	Metals	Miscellaneous
WG-RSK-AS-16	1979476	12/21/00			VS		X	X		x			
WG-RSK-AS-16	1990395	3/ 1/01			VS		x	x		x			
WG-RSK-AS-16	1990397	3/ 1/01			VS		X	x		x			
WG-RSK-AS-16	1997131	6/18/01			VS		X	X		x			
WG-RSK-AS-16	1997132	6/18/01			VS		X						
WG-RSK-AS-16	1997133	6/18/01			VS		X	X		x			
WG-RSK-AS-16	1997134	6/18/01			VS		X						
WG-RSK-AS-17	1990407	3/ 1/01			VBKF		X	x		x			
WG-RSK-AS-17	1990409	3/ 1/01			VBKF		X	x		x			
WG-RSK-AS-17	1990410	3/ 1/01			VBKF		x						
WG-RSK-AS-17	1997384	6/18/01			VBKF		X	x		x			
WG-RSK-AS-17	1997385	6/18/01			VBKF		X						
WG-RSK-AS-17	1997388	6/18/01			VBKF		x	x		x			
WG-RSK-AS-17	1997389	6/18/01			VBKF		x						

Notes: 1. Legend: x - mass, t - TCLP, s - SPLP, e - EPTOX, z - ZHE; Capitalized - at least one analyte detected  
2. Printed on 08/31/01



**Table F2**  
**SUMMARY OF SAMPLING AND ANALYTICAL INFORMATION (DETECTS)**  
**Pratt & Whitney, Pent Road, East Hartford, CT (Willgoos) - Indoor Air Sampling**

	Location ID	WG-RSK-AS-01	WG-RSK-AS-01	WG-RSK-AS-02	WG-RSK-AS-03	WG-RSK-AS-04	WG-RSK-AS-11	WG-RSK-AS-11
	Sample ID	1831453	1831454	1831455	1831456	1831457	1979474	1979475
	Sample Date	11/02/1998	11/02/1998	11/02/1998	11/02/1998	11/02/1998	12/21/2000	12/21/2000
	Sample Time	16:54	17:00	17:11	17:32	17:45	07:24	07:24
	Laboratory	CIGN						
	Lab. Number	CIGNA1831453	CIGNA1831454	CIGNA1831455	CIGNA1831456	CIGNA1831457	C0005922-1	C0005922-11
Constituent	Units							
n-Propylbenzene	µg/m3						2.5	
Cymene	µg/m3						2.4	
Naphthalene	µg/m3						3.5	
Acetone	µg/m3	33	33	8.4	6.3	3.0	20 E	19
Benzene	µg/m3						3.8	
1,2,4-Trimethylbenzene	µg/m3						18	
1,3,5-Trimethylbenzene	µg/m3						5.8	
Ethyl Benzene	µg/m3						7.8	
Butylbenzene n-	µg/m3							
sec-Butylbenzene	µg/m3						0.85	
2-Butanone	µg/m3						1.1	
Carbon Tetrachloride	µg/m3							
Cumene	µg/m3						0.81	
1,1,1-Trichloroethane	µg/m3						2.8	
1,1,2-Trichloroethane	µg/m3							
1,2-Dichloroethane	µg/m3							
Chloroethane	µg/m3							
1,1-Dichloroethylene	µg/m3							
Vinyl Chloride	µg/m3							
cis-1,2-Dichloroethylene	µg/m3							
Tetrachloroethylene	µg/m3						0.39	
trans-1,2-Dichloroethylene	µg/m3							
Trichloroethylene	µg/m3			150	5.8			
Bromomethane	µg/m3							
Bromochloromethane	µg/m3							
Chloromethane	µg/m3						0.36	
Methylene Chloride	µg/m3	1.9	1.8				6.2	
Dichlorodifluoromethane	µg/m3						6.2	
Fluorotrichloromethane	µg/m3						0.99	

Notes: 1. Only Detects Shown  
2. Printed on 08/31/01





**Table F2**  
**SUMMARY OF SAMPLING AND ANALYTICAL INFORMATION (DETECTS)**  
**Pratt & Whitney, Pent Road, East Hartford, CT (Willgoos) - Indoor Air Sampling**

	Location ID	WG-RSK-AS-11	WG-RSK-AS-11	WG-RSK-AS-11	WG-RSK-AS-12	WG-RSK-AS-12	WG-RSK-AS-12	WG-RSK-AS-12
	Sample ID	1990393	1997129	1997130	1979488	1979489	1990405	1990406
	Sample Date	03/01/2001	06/18/2001	06/18/2001	12/21/2000	12/21/2000	03/01/2001	03/01/2001
	Sample Time	08:35	07:25	07:40	09:17	09:17	10:30	10:32
	Laboratory	CIGN						
	Lab. Number	C0106351-01	C010711101	C010711110	C0005922-7	C0005922-12	C0106351-09	C0106351-10
Constituent	Units							
n-Propylbenzene	µg/m3	0.93	7.0					
Cymene	µg/m3	3.1	2.9					
Naphthalene	µg/m3	1.9	15					
Acetone	µg/m3	4.8	42 E	13	0.930		1.2	
Benzene	µg/m3	1.8	30 E	21				
1,2,4-Trimethylbenzene	µg/m3	7.1	26 E	13	0.47			
1,3,5-Trimethylbenzene	µg/m3	2.1	13					
Ethyl Benzene	µg/m3	1.9	25 E	18			0.68	
Butylbenzene n-	µg/m3		4.1					
sec-Butylbenzene	µg/m3	0.64						
2-Butanone	µg/m3		4.3					
Carbon Tetrachloride	µg/m3							
Cumene	µg/m3		2.3					
1,1,1-Trichloroethane	µg/m3	0.88	0.76					
1,1,2-Trichloroethane	µg/m3		5.4					
1,2-Dichloroethane	µg/m3							
Chloroethane	µg/m3							
1,1-Dichloroethylene	µg/m3							
Vinyl Chloride	µg/m3							
cis-1,2-Dichloroethylene	µg/m3							
Tetrachloroethylene	µg/m3		0.41					
trans-1,2-Dichloroethylene	µg/m3		0.30					
Trichloroethylene	µg/m3		0.63		17		15	
Bromomethane	µg/m3		1.9					
Bromochloromethane	µg/m3		6.1					
Chloromethane	µg/m3	0.37	3.9		0.44			
Methylene Chloride	µg/m3	1.5	300 E	32	0.53		1.2	
Dichlorodifluoromethane	µg/m3	5.4	7.1		58 E	39	270 E	130
Fluorotrichloromethane	µg/m3	0.57	0.84		1.6		1.1	

Notes: 1. Only Detects Shown  
2. Printed on 08/31/01





**Table F2**  
**SUMMARY OF SAMPLING AND ANALYTICAL INFORMATION (DETECTS)**  
**Pratt & Whitney, Pent Road, East Hartford, CT (Willgoos) - Indoor Air Sampling**

	Location ID	WG-RSK-AS-12	WG-RSK-AS-12	WG-RSK-AS-13	WG-RSK-AS-13	WG-RSK-AS-13	WG-RSK-AS-13	WG-RSK-AS-14
Sample ID	1997386	1997387	1979478	1990401	1990402	1997137	1979480	
Sample Date	06/18/2001	06/18/2001	12/21/2000	03/01/2001	03/01/2001	06/18/2001	12/21/2000	
Sample Time	10:15	10:15	08:15	09:50	09:52	09:06	08:36	
Laboratory	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN	
Lab. Number	C010711108	C010711117	C0005922-3	C0106351-06	C0106351-07	C010711105	C0005922-4	
Constituent	Units							
n-Propylbenzene	µg/m3				1.0			0.95
Cymene	µg/m3				0.78			0.62
Naphthalene	µg/m3				0.33	0.30		3.4
Acetone	µg/m3	4.7		2.2	2.6	2.8		3.6
Benzene	µg/m3			1.9	1.2			3.3
1,2,4-Trimethylbenzene	µg/m3			1.3	4.1			4.8
1,3,5-Trimethylbenzene	µg/m3				3.3			1.5
Ethyl Benzene	µg/m3			1.0		0.25		1.5
Butylbenzene n-	µg/m3							
sec-Butylbenzene	µg/m3							0.45
2-Butanone	µg/m3	0.47				0.51		
Carbon Tetrachloride	µg/m3					0.36		
Cumene	µg/m3							
1,1,1-Trichloroethane	µg/m3					0.49		
1,1,2-Trichloroethane	µg/m3							
1,2-Dichloroethane	µg/m3	1.3				1.8		
Chloroethane	µg/m3							
1,1-Dichloroethylene	µg/m3							
Vinyl Chloride	µg/m3							
cis-1,2-Dichloroethylene	µg/m3							
Tetrachloroethylene	µg/m3							0.40
trans-1,2-Dichloroethylene	µg/m3	2.0						
Trichloroethylene	µg/m3	12		18	17	18		0.67
Bromomethane	µg/m3							
Bromochloromethane	µg/m3	1.6						
Chloromethane	µg/m3	0.79		0.95	0.61	0.24		0.64
Methylene Chloride	µg/m3	340 E	22			26 E		0.42
Dichlorodifluoromethane	µg/m3	13		31	240 E	270	21	5.6
Fluorotrichloromethane	µg/m3	0.48		2.4	0.99		0.77	0.98

Notes: 1. Only Detects Shown  
2. Printed on 08/31/01





**Table F2**  
**SUMMARY OF SAMPLING AND ANALYTICAL INFORMATION (DETECTS)**  
**Pratt & Whitney, Pent Road, East Hartford, CT (Willgoos) - Indoor Air Sampling**

	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-15	WG-RSK-AS-15
	Sample ID	1979482	1990399	1990400	1997135	1997136	1979484	1990403
	Sample Date	12/21/2000	03/01/2001	03/01/2001	06/18/2001	06/18/2001	12/21/2000	03/01/2001
	Sample Time	08:40	09:28	09:31	08:49	08:48	08:50	10:12
	Laboratory	CIGN						
	Lab. Number	C0005922-5	C0106351-04	C0106351-05	C010711104	C010711113	C0005922-6	C0106351-08
Constituent	Units							
n-Propylbenzene	µg/m3	0.84			0.65		0.98	0.46
Cymene	µg/m3	0.55			0.37			
Naphthalene	µg/m3	2.6	1.0		2.9		0.97	1.0
Acetone	µg/m3	2.700	8.7		4.1		1.4	
Benzene	µg/m3	1.8	0.82				1.1	
1,2,4-Trimethylbenzene	µg/m3	4.3	0.94		2.4		5.5	2.6
1,3,5-Trimethylbenzene	µg/m3	1.3			2.5		1.8	0.85
Ethyl Benzene	µg/m3	1.4	0.70		0.98		0.47	0.47
Butylbenzene n-	µg/m3							
sec-Butylbenzene	µg/m3	0.39						
2-Butanone	µg/m3				0.58			
Carbon Tetrachloride	µg/m3							
Cumene	µg/m3				0.32			
1,1,1-Trichloroethane	µg/m3				0.28			
1,1,2-Trichloroethane	µg/m3							
1,2-Dichloroethane	µg/m3							
Chloroethane	µg/m3							
1,1-Dichloroethylene	µg/m3							
Vinyl Chloride	µg/m3							
cis-1,2-Dichloroethylene	µg/m3							
Tetrachloroethylene	µg/m3							
trans-1,2-Dichloroethylene	µg/m3							
Trichloroethylene	µg/m3	0.61			0.29			
Bromomethane	µg/m3							
Bromochloromethane	µg/m3				0.30			
Chloromethane	µg/m3	0.40	0.41		0.40			
Methylene Chloride	µg/m3	0.79	0.53		44 E	4.5		1.1
Dichlorodifluoromethane	µg/m3	5.5	4.9		5.6		4.3	5.4
Fluorotrichloromethane	µg/m3	1.2	0.98		0.58		0.86	1.0

Notes: 1. Only Detects Shown  
2. Printed on 08/31/01





**Table F2**  
**SUMMARY OF SAMPLING AND ANALYTICAL INFORMATION (DETECTS)**  
**Pratt & Whitney, Pent Road, East Hartford, CT (Willgoos) - Indoor Air Sampling**

	Location ID	WG-RSK-AS-15	WG-RSK-AS-15	WG-RSK-AS-16	WG-RSK-AS-16	WG-RSK-AS-16	WG-RSK-AS-16	WG-RSK-AS-16
	Sample ID	1997139	1997140	1979476	1990397	1997131	1997132	1997133
	Sample Date	06/18/2001	06/18/2001	12/21/2000	03/01/2001	06/18/2001	06/18/2001	06/18/2001
	Sample Time	09:28	09:25	08:01	09:05	08:10	08:10	08:20
	Laboratory	CIGN						
	Lab. Number	C010711106	C010711115	C0005922-2	C0106351-03	C010711102	C010711111	C010711103
Constituent	Units							
n-Propylbenzene	µg/m3	0.32		0.90				
Cymene	µg/m3							
Naphthalene	µg/m3	1.4				2.1		2.5
Acetone	µg/m3	14		2.5	1.2	7.4		4.8
Benzene	µg/m3			4.5	0.76	0.59		1.4
1,2,4-Trimethylbenzene	µg/m3	1.4		4.8	0.47	0.32		0.55
1,3,5-Trimethylbenzene	µg/m3	0.88		1.6				0.39
Ethyl Benzene	µg/m3			3.1		0.30		0.66
Butylbenzene n-	µg/m3							
sec-Butylbenzene	µg/m3							
2-Butanone	µg/m3					4.3		3.5
Carbon Tetrachloride	µg/m3							
Cumene	µg/m3							
1,1,1-Trichloroethane	µg/m3			2.9	4.7	46 E	97	150 E
1,1,2-Trichloroethane	µg/m3							
1,2-Dichloroethane	µg/m3							
Chloroethane	µg/m3	4.5						
1,1-Dichloroethylene	µg/m3			0.85	0.76			0.39
Vinyl Chloride	µg/m3	0.33						
cis-1,2-Dichloroethylene	µg/m3	13						
Tetrachloroethylene	µg/m3			4.2		0.51		1.7
trans-1,2-Dichloroethylene	µg/m3	300 E	8600					
Trichloroethylene	µg/m3					0.43		1.4
Bromomethane	µg/m3							
Bromochloromethane	µg/m3							
Chloromethane	µg/m3	2.4						
Methylene Chloride	µg/m3	8.2			2.5	49 E	4.2	53 E
Dichlorodifluoromethane	µg/m3	7.3		5.1	4.9	6.6		7.9
Fluorotrichloromethane	µg/m3	0.89		0.69	0.90	1.1		0.70

Notes: 1. Only Detects Shown  
2. Printed on 08/31/01





**Table F2**  
**SUMMARY OF SAMPLING AND ANALYTICAL INFORMATION (DETECTS)**  
**Pratt & Whitney, Pent Road, East Hartford, CT (Willgoos) - Indoor Air Sampling**

	Location ID	WG-RSK-AS-16	WG-RSK-AS-17	WG-RSK-AS-17	WG-RSK-AS-17	WG-RSK-AS-17		
	Sample ID	1997134	1990407	1990409	1997384	1997385		
	Sample Date	06/18/2001	03/01/2001	03/01/2001	06/18/2001	06/18/2001		
	Sample Time	08:20	10:45	13:45	09:50	09:50		
	Laboratory	CIGN	CIGN	CIGN	CIGN	CIGN		
	Lab. Number	C010711112	C0106351-11	C0106351-14	C010711107	C010711116		
Constituent	Units							
n-Propylbenzene	µg/m3							
Cymene	µg/m3							
Naphthalene	µg/m3							
Acetone	µg/m3		0.61		3.3			
Benzene	µg/m3							
1,2,4-Trimethylbenzene	µg/m3							
1,3,5-Trimethylbenzene	µg/m3							
Ethyl Benzene	µg/m3							
Butylbenzene n-	µg/m3							
sec-Butylbenzene	µg/m3							
2-Butanone	µg/m3				0.32			
Carbon Tetrachloride	µg/m3							
Cumene	µg/m3							
1,1,1-Trichloroethane	µg/m3	100						
1,1,2-Trichloroethane	µg/m3							
1,2-Dichloroethane	µg/m3							
Chloroethane	µg/m3							
1,1-Dichloroethylene	µg/m3							
Vinyl Chloride	µg/m3							
cis-1,2-Dichloroethylene	µg/m3							
Tetrachloroethylene	µg/m3							
trans-1,2-Dichloroethylene	µg/m3				2.1			
Trichloroethylene	µg/m3							
Bromomethane	µg/m3				0.69			
Bromochloromethane	µg/m3							
Chloromethane	µg/m3		0.94		0.39			
Methylene Chloride	µg/m3		1.2	9.7	27 E	6.0		
Dichlorodifluoromethane	µg/m3		4.0		5.3			
Fluorotrichloromethane	µg/m3		1.7		0.32			

Notes: 1. Only Detects Shown  
2. Printed on 08/31/01





**Table F3**  
**SUMMARY OF ANALYTICAL RESULTS**  
**Pratt & Whitney, Pent Road, East Hartford, CT (Willgoos) - Indoor Air Sampling**

	Location ID	WG-RSK-AS-01	WG-RSK-AS-01	WG-RSK-AS-02	WG-RSK-AS-03	WG-RSK-AS-04	WG-RSK-AS-05	WG-RSK-AS-11
Sample ID	1831453	1831453	1831454	1831455	1831456	1831457	1831458	1979474
Sample Date	11/02/1998	11/02/1998	11/02/1998	11/02/1998	11/02/1998	11/02/1998	11/02/1998	12/21/2000
Sample Time	16:54	17:00	17:11	17:32	17:45	17:54	17:54	07:24
Laboratory	CIGN							
Lab. Number	CIGNA1831453	CIGNA1831454	CIGNA1831455	CIGNA1831456	CIGNA1831457	CIGNA1831458	CIGNA1831458	C0005922-1
Constituent	Units							
1,2-Dibromo-3-chloropropane	ng							<0.33
n-Propylbenzene	ng							2.5
Hexachlorobutadiene	ng							<0.33
Cymene	ng							2.4
Naphthalene	ng							3.5
Acetone	µg	33	33	8.4	6.3	3.0	<1.9	20 E
Benzene	µg	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	3.8
1,2,3-Trichlorobenzene	ng							<0.33
1,2,4-Trichlorobenzene	ng							<0.33
1,2,4-Trimethylbenzene	µg							18
o-Dichlorobenzene	ng	<0.95	<0.95	<1.0	<0.95	<0.95	<0.95	<0.33
1,3,5-Trimethylbenzene	ng							5.8
m-Dichlorobenzene	ng	<0.95	<0.95	<1.0	<0.95	<0.95	<0.95	<0.33
p-Dichlorobenzene	ng	<0.95	<0.95	<1.0	<0.95	<0.95	<0.95	<0.33
Bromobenzene	ng							<0.33
Chlorobenzene	ng	<0.95	<0.95	<1.0	<0.95	<0.95	<0.95	<0.33
Ethyl Benzene	µg	<0.98	<0.94	<0.98	<0.94	<0.94	<0.98	7.8
Butylbenzene n-	ng							<0.33
sec-Butylbenzene	ng							0.85
tert-Butylbenzene	ng							<0.33
2-Butanone	ng	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	1.1
Carbon Tetrachloride	ng	<0.99	<0.99	<0.99	<0.99	<0.99	<0.99	<0.33
Cumene	ng							0.81
1,1,1,2-Tetrachloroethane	ng	<0.94	<0.94	<1.0	<0.94	<0.94	<0.94	<0.33
1,1,1-Trichloroethane	µg	<0.97	<0.97	<0.97	<0.97	<0.97	<0.97	2.8
1,1,2,2-Tetrachloroethane	ng	<0.94	<0.94	<1.0	<0.94	<0.94	<0.94	<0.33
1,1,2-Trichloroethane	ng	<0.97	<0.97	<0.97	<0.97	<0.97	<0.97	<0.33
1,1-Dichloroethane	ng	<0.95	<0.95	<0.99	<0.95	<0.95	<0.99	<0.33
Ethylene Dibromide	ng	<0.98	<0.98	<0.98	<0.98	<0.98	<0.98	<0.33

**Table F3**  
**SUMMARY OF ANALYTICAL RESULTS**  
**Pratt & Whitney, Pent Road, East Hartford, CT (Willgoos) - Indoor Air Sampling**

	Location ID	WG-RSK-AS-01	WG-RSK-AS-01	WG-RSK-AS-02	WG-RSK-AS-03	WG-RSK-AS-04	WG-RSK-AS-05	WG-RSK-AS-11
Sample ID	1831453	1831454	1831455	1831456	1831457	1831458	1831458	1979474
Sample Date	11/02/1998	11/02/1998	11/02/1998	11/02/1998	11/02/1998	11/02/1998	11/02/1998	12/21/2000
Sample Time	16:54	17:00	17:11	17:32	17:45	17:54	17:54	07:24
Laboratory	CIGN							
Lab. Number	CIGNA1831453	CIGNA1831454	CIGNA1831455	CIGNA1831456	CIGNA1831457	CIGNA1831458	CIGNA1831458	C0005922-1
Constituent	Units							
1,2-Dichloroethane	ng	<0.95	<0.95	<0.99	<0.95	<0.95	<0.99	<0.33
Chloroethane	ng							<0.33
Methyl-tert-butyl Ether	µg/m3	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	
1,1-Dichloroethylene	ng	<0.97	<0.97	<0.97	<0.97	<0.97	<0.97	<0.33
Vinyl Chloride	ng	<3.8	<3.8	<4.0	<3.8	<3.8	<3.8	<0.33
cis-1,2-Dichloroethylene	ng							<0.33
Tetrachloroethylene	ng	<1.0	<0.93	<1.0	<1.0	<0.93	<1.0	0.39
trans-1,2-Dichloroethylene	µg							<0.33
Trichloroethylene	ng	<0.95	<0.95	150	5.8	<0.95	<0.95	<0.33
Bromomethane	ng							<0.33
Bromochloromethane	ng							<0.33
Bromodichloromethane	ng							<0.33
Chloromethane	ng							0.36
Dibromomethane	ng							<0.33
Dibromochloromethane	ng							<0.33
Methylene Chloride	µg	1.9	1.8	<0.99	<0.96	<0.96	<0.99	6.2
Dichlorodifluoromethane	ng							6.2
Bromoform	ng	<0.98	<0.97	<0.99	<0.97	<0.97	<0.98	<0.33
Chloroform	ng	<0.96	<0.96	<1.0	<0.96	<0.96	<0.96	<0.33
Fluorotrichloromethane	ng							0.99
Methyl Isobutyl Ketone	ng	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	0.34
1,2,3-Trichloropropane	ng							<0.33
Propylene Dichloride	ng	<0.95	<0.95	<1.0	<0.95	<0.95	<0.95	<0.33
1,3-Dichloropropane	ng							<0.33
2,2-Dichloropropane	ng							<0.33
1,1-Dichloropropylene	ng							<0.33
cis-1,3-Dichloropropylene	ng	<0.98	<0.98	<0.98	<0.98	<0.94	<0.98	<0.33
trans-1,3-Dichloropropylene	ng	<0.98	<0.98	<0.98	<0.98	<0.94	<0.98	<0.33
Styrene	ng	3.1	<0.96	<0.96	<0.96	<0.96	<0.96	0.76

Notes: 1. Printed on 08/31/01



**Table F3**  
**SUMMARY OF ANALYTICAL RESULTS**  
**Pratt & Whitney, Pent Road, East Hartford, CT (Willgoos) - Indoor Air Sampling**

	Location ID	WG-RSK-AS-11	WG-RSK-AS-11	WG-RSK-AS-11	WG-RSK-AS-11	WG-RSK-AS-12	WG-RSK-AS-12	WG-RSK-AS-12
	Sample ID	1979475	1990393	1997129	1997130	1979488	1979489	1990405
	Sample Date	12/21/2000	03/01/2001	06/18/2001	06/18/2001	12/21/2000	12/21/2000	03/01/2001
	Sample Time	07:24	08:35	07:25	07:40	09:17	09:17	10:30
	Laboratory	CIGN						
	Lab. Number	C0005922-11	C0106351-01	C010711101	C010711110	C0005922-7	C0005922-12	C0106351-09
Constituent	Units							
1,2-Dibromo-3-chloropropane	ng		<0.33	<0.22		<0.36		<0.39
n-Propylbenzene	ng		0.93	7.0		<0.36		<0.39
Hexachlorobutadiene	ng		<0.33	<0.22		<0.36		<0.39
Cymene	ng		3.1	2.9		<0.36		<0.39
Naphthalene	ng		1.9	15		<0.36		<0.39
Acetone	µg	19	4.8	42 E	13	0.930	<10	1.2
Benzene	µg		1.8	30 E	21	<0.71		<0.78
1,2,3-Trichlorobenzene	ng		<0.33	<0.22		<0.36		<0.39
1,2,4-Trichlorobenzene	ng		<0.33	<0.22		<0.36		<0.39
1,2,4-Trimethylbenzene	µg		7.1	26 E	13	0.47		<0.39
o-Dichlorobenzene	ng		<0.33	<0.22		<0.36		<0.39
1,3,5-Trimethylbenzene	ng		2.1	13		<0.36		<0.39
m-Dichlorobenzene	ng		<0.33	<0.22		<0.36		<0.39
p-Dichlorobenzene	ng		<0.33	<0.22		<0.36		<0.39
Bromobenzene	ng		<0.33	<0.22		<0.36		<0.39
Chlorobenzene	ng		<0.33	<0.22		<0.36		<0.39
Ethyl Benzene	µg		1.9	25 E	18	<0.36		0.68
Butylbenzene n-	ng		<0.33	4.1		<0.36		<0.39
sec-Butylbenzene	ng		0.64	<0.22		<0.36		<0.39
tert-Butylbenzene	ng		<0.33	<0.22		<0.36		<0.39
2-Butanone	ng		<0.33	4.3		<0.36		<0.39
Carbon Tetrachloride	ng		<0.33	<0.22		<0.36		<0.39
Cumene	ng		<0.33	2.3		<0.36		<0.39
1,1,1,2-Tetrachloroethane	ng		<0.33	<0.22		<0.36		<0.39
1,1,1-Trichloroethane	µg		0.88	0.76		<0.36		<0.39
1,1,2,2-Tetrachloroethane	ng		<0.33	<0.22		<0.36		<0.39
1,1,2-Trichloroethane	ng		<0.33	5.4		<0.36		<0.39
1,1-Dichloroethane	ng		<0.33	<0.22		<0.36		<0.39
Ethylene Dibromide	ng		<0.33	<0.22		<0.36		<0.39

**Table F3**  
**SUMMARY OF ANALYTICAL RESULTS**  
**Pratt & Whitney, Pent Road, East Hartford, CT (Willgoos) - Indoor Air Sampling**

	Location ID	WG-RSK-AS-11	WG-RSK-AS-11	WG-RSK-AS-11	WG-RSK-AS-11	WG-RSK-AS-12	WG-RSK-AS-12	WG-RSK-AS-12
	Sample ID	1979475	1990393	1997129	1997130	1979488	1979489	1990405
	Sample Date	12/21/2000	03/01/2001	06/18/2001	06/18/2001	12/21/2000	12/21/2000	03/01/2001
	Sample Time	07:24	08:35	07:25	07:40	09:17	09:17	10:30
	Laboratory	CIGN						
	Lab. Number	C0005922-11	C0106351-01	C010711101	C010711110	C0005922-7	C0005922-12	C0106351-09
Constituent	Units							
1,2-Dichloroethane	ng		<0.33	<0.22		<0.36		<0.39
Chloroethane	ng		<0.33	<0.22				<0.39
Methyl-tert-butyl Ether	µg/m3							
1,1-Dichloroethylene	ng		<0.33	<0.22		<0.36		<0.39
Vinyl Chloride	ng		<0.33	<0.22		<0.36		<0.39
cis-1,2-Dichloroethylene	ng		<0.33	<0.22		<0.36		<0.39
Tetrachloroethylene	ng		<0.33	0.41		<0.36		<0.39
trans-1,2-Dichloroethylene	µg		<0.33	0.30		<0.36		<0.39
Trichloroethylene	ng		<0.33	0.63		17		15
Bromomethane	ng		<0.33	1.9		<0.36		<0.39
Bromochloromethane	ng		<0.33	6.1		<0.36		<0.39
Bromodichloromethane	ng		<0.33	<0.22		<0.36		<0.39
Chloromethane	ng		0.37	3.9		0.44		<0.39
Dibromomethane	ng		<0.33	<0.22		<0.36		<0.39
Dibromochloromethane	ng		<0.33	<0.22		<0.36		<0.39
Methylene Chloride	µg		1.5	300 E	32	0.53		1.2
Dichlorodifluoromethane	ng	<10	5.4	7.1		58 E	39	270 E
Bromoform	ng		<0.33	<0.22		<0.36		<0.39
Chloroform	ng		<0.33	<0.22		<0.36		<0.39
Fluorotrichloromethane	ng		0.57	0.84		1.6		1.1
Methyl Isobutyl Ketone	ng		<0.33	<0.22		<0.36		<0.39
1,2,3-Trichloropropane	ng		<0.33	<0.22		<0.36		<0.39
Propylene Dichloride	ng		<0.33	<0.22		<0.36		<0.39
1,3-Dichloropropane	ng		<0.33	<0.22		<0.36		<0.39
2,2-Dichloropropane	ng		<0.33	<0.22		<0.36		<0.39
1,1-Dichloropropylene	ng		<0.33	<0.22		<0.36		<0.39
cis-1,3-Dichloropropylene	ng		<0.33	<0.22		<0.36		<0.39
trans-1,3-Dichloropropylene	ng		<0.33	<0.22		<0.36		<0.39
Styrene	ng		<0.33	1.9		<0.36		<0.39

Notes: 1. Printed on 08/31/01





**Table F3**  
**SUMMARY OF ANALYTICAL RESULTS**  
**Pratt & Whitney, Pent Road, East Hartford, CT (Willgoos) - Indoor Air Sampling**

	Location ID	WG-RSK-AS-12	WG-RSK-AS-12	WG-RSK-AS-12	WG-RSK-AS-13	WG-RSK-AS-13	WG-RSK-AS-13	WG-RSK-AS-13
	Sample ID	1990406	1997386	1997387	1979478	1990401	1990402	1997137
	Sample Date	03/01/2001	06/18/2001	06/18/2001	12/21/2000	03/01/2001	03/01/2001	06/18/2001
	Sample Time	10:32	10:15	10:15	08:15	09:50	09:52	09:06
	Laboratory	CIGN						
	Lab. Number	C0106351-10	C010711108	C010711117	C0005922-3	C0106351-06	C0106351-07	C010711105
Constituent	Units							
1,2-Dibromo-3-chloropropane	ng		<0.30		<0.51	<0.33		<0.24
n-Propylbenzene	ng		<0.30		<0.51	1.0		<0.24
Hexachlorobutadiene	ng		<0.30		<0.51	<0.33		<0.24
Cymene	ng		<0.30		<0.51	0.78		<0.24
Naphthalene	ng		<0.30		<0.51	0.33		0.30
Acetone	µg		4.7		2.2	2.6		2.8
Benzene	µg		<0.61		1.9	1.2		<0.47
1,2,3-Trichlorobenzene	ng		<0.30		<0.51	<0.33		<0.24
1,2,4-Trichlorobenzene	ng		<0.30		<0.51	<0.33		<0.24
1,2,4-Trimethylbenzene	µg		<0.30		1.3	4.1		<0.24
o-Dichlorobenzene	ng		<0.30		<0.51	<0.33		<0.24
1,3,5-Trimethylbenzene	ng		<0.30		<0.51	3.3		<0.24
m-Dichlorobenzene	ng		<0.30		<0.51	<0.33		<0.24
p-Dichlorobenzene	ng		<0.30		<0.51	<0.33		<0.24
Bromobenzene	ng		<0.30		<0.51	<0.33		<0.24
Chlorobenzene	ng		<0.30		<0.51	<0.33		<0.24
Ethyl Benzene	µg		<0.30		1.0	<0.33		0.25
Butylbenzene n-	ng		<0.30		<0.51	<0.33		<0.24
sec-Butylbenzene	ng		<0.30		<0.51	<0.33		<0.24
tert-Butylbenzene	ng		<0.30		<0.51	<0.33		<0.24
2-Butanone	ng		0.47		<0.51	<0.33		0.51
Carbon Tetrachloride	ng		<0.30		<0.51	<0.33		0.36
Cumene	ng		<0.30		<0.51	<0.33		<0.24
1,1,1,2-Tetrachloroethane	ng		<0.30		<0.51	<0.33		<0.24
1,1,1-Trichloroethane	µg		<0.30		<0.51	<0.33		0.49
1,1,2,2-Tetrachloroethane	ng		<0.30		<0.51	<0.33		<0.24
1,1,2-Trichloroethane	ng		<0.30		<0.51	<0.33		<0.24
1,1-Dichloroethane	ng		<0.30		<0.51	<0.33		<0.24
Ethylene Dibromide	ng		<0.30		<0.51	<0.33		<0.24

Notes: 1. Printed on 08/31/01



**Table F3**  
**SUMMARY OF ANALYTICAL RESULTS**  
**Pratt & Whitney, Pent Road, East Hartford, CT (Willgoos) - Indoor Air Sampling**

	Location ID	WG-RSK-AS-12	WG-RSK-AS-12	WG-RSK-AS-12	WG-RSK-AS-13	WG-RSK-AS-13	WG-RSK-AS-13	WG-RSK-AS-13
	Sample ID	1990406	1997386	1997387	1979478	1990401	1990402	1997137
	Sample Date	03/01/2001	06/18/2001	06/18/2001	12/21/2000	03/01/2001	03/01/2001	06/18/2001
	Sample Time	10:32	10:15	10:15	08:15	09:50	09:52	09:06
	Laboratory	CIGN						
	Lab. Number	C0106351-10	C010711108	C010711117	C0005922-3	C0106351-06	C0106351-07	C010711105
Constituent	Units							
1,2-Dichloroethane	ng		1.3		<0.51	<0.33		1.8
Chloroethane	ng		<0.30			<0.33		<0.24
Methyl-tert-butyl Ether	µg/m <sup>3</sup>							
1,1-Dichloroethylene	ng		<0.30		<0.51	<0.33		<0.24
Vinyl Chloride	ng		<0.30		<0.51	<0.33		<0.24
cis-1,2-Dichloroethylene	ng		<0.30		<0.51	<0.33		<0.24
Tetrachloroethylene	ng		<0.30		<0.51	<0.33		<0.24
trans-1,2-Dichloroethylene	µg		2.0		<0.51	<0.33		<0.24
Trichloroethylene	ng		12		18	17		18
Bromomethane	ng		<0.30		<0.51	<0.33		<0.24
Bromochloromethane	ng		1.6		<0.51	<0.33		<0.24
Bromodichloromethane	ng		<0.30		<0.51	<0.33		<0.24
Chloromethane	ng		0.79		0.95	0.61		0.24
Dibromomethane	ng		<0.30		<0.51	<0.33		<0.24
Dibromochloromethane	ng		<0.30		<0.51	<0.33		<0.24
Methylene Chloride	µg		340 E	22	<0.51	<0.33		26 E
Dichlorodifluoromethane	ng	130	13		31	240 E	270	21
Bromoform	ng		<0.30		<0.51	<0.33		<0.24
Chloroform	ng		<0.30		<0.51	<0.33		<0.24
Fluorotrichloromethane	ng		0.48		2.4	0.99		0.77
Methyl Isobutyl Ketone	ng		<0.30		<0.51	<0.33		<0.24
1,2,3-Trichloropropane	ng		<0.30		<0.51	<0.33		<0.24
Propylene Dichloride	ng		<0.30		<0.51	<0.33		<0.24
1,3-Dichloropropane	ng		<0.30		<0.51	<0.33		<0.24
2,2-Dichloropropane	ng		<0.30		<0.51	<0.33		<0.24
1,1-Dichloropropylene	ng		<0.30		<0.51	<0.33		<0.24
cis-1,3-Dichloropropylene	ng		<0.30		<0.51	<0.33		<0.24
trans-1,3-Dichloropropylene	ng		<0.30		<0.51	<0.33		<0.24
Styrene	ng		<0.30		<0.51	<0.33		<0.24

Notes: 1. Printed on 08/31/01





**Table F3**  
**SUMMARY OF ANALYTICAL RESULTS**  
**Pratt & Whitney, Pent Road, East Hartford, CT (Willgoos) - Indoor Air Sampling**

	Location ID	WG-RSK-AS-13	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	1997138	1979480	1979482	1990399	1990400	1997135	1997136
	Sample Date	06/18/2001	12/21/2000	12/21/2000	03/01/2001	03/01/2001	06/18/2001	06/18/2001
	Sample Time	09:06	08:36	08:40	09:28	09:31	08:49	08:48
	Laboratory	CIGN						
	Lab. Number	C010711114	C0005922-4	C0005922-5	C0106351-04	C0106351-05	C010711104	C010711113
Constituent	Units							
1,2-Dibromo-3-chloropropane	ng		<0.34	<0.34	<0.36		<0.26	
n-Propylbenzene	ng		0.95	0.84	<0.36		0.65	
Hexachlorobutadiene	ng		<0.34	<0.34	<0.36		<0.26	
Cymene	ng		0.62	0.55	<0.36		0.37	
Naphthalene	ng		3.4	2.6	1.0		2.9	
Acetone	µg		3.6	2.700	8.7		4.1	
Benzene	µg		3.3	1.8	0.82		<0.52	
1,2,3-Trichlorobenzene	ng		<0.34	<0.34	<0.36		<0.26	
1,2,4-Trichlorobenzene	ng		<0.34	<0.34	<0.36		<0.26	
1,2,4-Trimethylbenzene	µg		4.8	4.3	0.94		2.4	
o-Dichlorobenzene	ng		<0.34	<0.34	<0.36		<0.26	
1,3,5-Trimethylbenzene	ng		1.5	1.3	<0.36		2.5	
m-Dichlorobenzene	ng		<0.34	<0.34	<0.36		<0.26	
p-Dichlorobenzene	ng		<0.34	<0.34	<0.36		<0.26	
Bromobenzene	ng		<0.34	<0.34	<0.36		<0.26	
Chlorobenzene	ng		<0.34	<0.34	<0.36		<0.26	
Ethyl Benzene	µg		1.5	1.4	0.70		0.98	
Butylbenzene n-	ng		<0.34	<0.34	<0.36		<0.26	
sec-Butylbenzene	ng		0.45	0.39	<0.36		<0.26	
tert-Butylbenzene	ng		<0.34	<0.34	<0.36		<0.26	
2-Butanone	ng		<0.34	<0.34	<0.36		0.58	
Carbon Tetrachloride	ng		<0.34	<0.34	<0.36		<0.26	
Cumene	ng		<0.34	<0.34	<0.36		0.32	
1,1,1,2-Tetrachloroethane	ng		<0.34	<0.34	<0.36		<0.26	
1,1,1-Trichloroethane	µg		<0.34	<0.34	<0.36		0.28	
1,1,2,2-Tetrachloroethane	ng		<0.34	<0.34	<0.36		<0.26	
1,1,2-Trichloroethane	ng		<0.34	<0.34	<0.36		<0.26	
1,1-Dichloroethane	ng		<0.34	<0.34	<0.36		<0.26	
Ethylene Dibromide	ng		<0.34	<0.34	<0.36		<0.26	

Notes: 1. Printed on 08/31/01



**Table F3**  
**SUMMARY OF ANALYTICAL RESULTS**  
**Pratt & Whitney, Pent Road, East Hartford, CT (Willgoos) - Indoor Air Sampling**

	Location ID	WG-RSK-AS-13	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	1997138	1979480	1979482	1990399	1990400	1997135	1997136
	Sample Date	06/18/2001	12/21/2000	12/21/2000	03/01/2001	03/01/2001	06/18/2001	06/18/2001
	Sample Time	09:06	08:36	08:40	09:28	09:31	08:49	08:48
	Laboratory	CIGN						
	Lab. Number	C010711114	C0005922-4	C0005922-5	C0106351-04	C0106351-05	C010711104	C010711113
Constituent	Units							
1,2-Dichloroethane	ng		<0.34	<0.34	<0.36		<0.26	
Chloroethane	ng				<0.36		<0.26	
Methyl-tert-butyl Ether	µg/m3							
1,1-Dichloroethylene	ng		<0.34	<0.34	<0.36		<0.26	
Vinyl Chloride	ng		<0.34	<0.34	<0.36		<0.26	
cis-1,2-Dichloroethylene	ng		<0.34	<0.34	<0.36		<0.26	
Tetrachloroethylene	ng		0.40	<0.34	<0.36		<0.26	
trans-1,2-Dichloroethylene	µg		<0.34	<0.34	<0.36		<0.26	
Trichloroethylene	ng		0.67	0.61	<0.36		0.29	
Bromomethane	ng		<0.34	<0.34	<0.36		<0.26	
Bromochloromethane	ng		<0.34	<0.34	<0.36		0.30	
Bromodichloromethane	ng		<0.34	<0.34	<0.36		<0.26	
Chloromethane	ng		0.64	0.40	0.41		0.40	
Dibromomethane	ng		<0.34	<0.34	<0.36		<0.26	
Dibromochloromethane	ng		<0.34	<0.34	<0.36		<0.26	
Methylene Chloride	µg	<4.1	0.42	0.79	0.53		44 E	4.5
Dichlorodifluoromethane	ng		5.6	5.5	4.9	<10	5.6	
Bromoform	ng		<0.34	<0.34	<0.36		<0.26	
Chloroform	ng		<0.34	<0.34	<0.36		<0.26	
Fluorotrichloromethane	ng		0.98	1.2	0.98		0.58	
Methyl Isobutyl Ketone	ng		<0.34	<0.34	<0.36		<0.26	
1,2,3-Trichloropropane	ng		<0.34	<0.34	<0.36		<0.26	
Propylene Dichloride	ng		<0.34	<0.34	<0.36		<0.26	
1,3-Dichloropropane	ng		<0.34	<0.34	<0.36		<0.26	
2,2-Dichloropropane	ng		<0.34	<0.34	<0.36		<0.26	
1,1-Dichloropropylene	ng		<0.34	<0.34	<0.36		<0.26	
cis-1,3-Dichloropropylene	ng		<0.34	<0.34	<0.36		<0.26	
trans-1,3-Dichloropropylene	ng		<0.34	<0.34	<0.36		<0.26	
Styrene	ng		0.39	<0.34	<0.36		<0.26	

Notes: 1. Printed on 08/31/01





**Table F3**  
**SUMMARY OF ANALYTICAL RESULTS**  
**Pratt & Whitney, Pent Road, East Hartford, CT (Willgoos) - Indoor Air Sampling**

	Location ID	WG-RSK-AS-15	WG-RSK-AS-15	WG-RSK-AS-15	WG-RSK-AS-15	WG-RSK-AS-16	WG-RSK-AS-16	WG-RSK-AS-16
	Sample ID	1979484	1990403	1997139	1997140	1979476	1990395	1990397
	Sample Date	12/21/2000	03/01/2001	06/18/2001	06/18/2001	12/21/2000	03/01/2001	03/01/2001
	Sample Time	08:50	10:12	09:28	09:25	08:01	09:05	09:05
	Laboratory	CIGN						
	Lab. Number	C0005922-6	C0106351-08	C010711106	C010711115	C0005922-2	C0106351-02	C0106351-03
Constituent	Units							
1,2-Dibromo-3-chloropropane	ng	<0.39	<0.36	<0.31		<0.58	<0.35	<0.33
n-Propylbenzene	ng	0.98	0.46	0.32		0.90	<0.35	<0.33
Hexachlorobutadiene	ng	<0.39	<0.36	<0.31		<0.58	<0.35	<0.33
Cymene	ng	<0.39	<0.36	<0.31		<0.58	<0.35	<0.33
Naphthalene	ng	0.97	1.0	1.4		<0.58	<0.35	<0.33
Acetone	µg	1.4	<0.36	14		2.5	<0.35	1.2
Benzene	µg	1.1	<0.72	<0.62		4.5	<0.71	0.76
1,2,3-Trichlorobenzene	ng	<0.39	<0.36	<0.31		<0.58	<0.35	<0.33
1,2,4-Trichlorobenzene	ng	<0.39	<0.36	<0.31		<0.58	<0.35	<0.33
1,2,4-Trimethylbenzene	µg	5.5	2.6	1.4		4.8	<0.35	0.47
o-Dichlorobenzene	ng	<0.39	<0.36	<0.31		<0.58	<0.35	<0.33
1,3,5-Trimethylbenzene	ng	1.8	0.85	0.88		1.6	<0.35	<0.33
m-Dichlorobenzene	ng	<0.39	<0.36	<0.31		<0.58	<0.35	<0.33
p-Dichlorobenzene	ng	<0.39	<0.36	<0.31		<0.58	<0.35	<0.33
Bromobenzene	ng	<0.39	<0.36	<0.31		<0.58	<0.35	<0.33
Chlorobenzene	ng	<0.39	<0.36	<0.31		<0.58	<0.35	<0.33
Ethyl Benzene	µg	0.47	0.47	<0.31		3.1	<0.35	<0.33
Butylbenzene n-	ng	<0.39	<0.36	<0.31		<0.58	<0.35	<0.33
sec-Butylbenzene	ng	<0.39	<0.36	<0.31		<0.58	<0.35	<0.33
tert-Butylbenzene	ng	<0.39	<0.36	<0.31		<0.58	<0.35	<0.33
2-Butanone	ng	<0.39	<0.36	<0.31		<0.58	<0.35	<0.33
Carbon Tetrachloride	ng	<0.39	<0.36	<0.31		<0.58	<0.35	<0.33
Cumene	ng	<0.39	<0.36	<0.31		<0.58	<0.35	<0.33
1,1,1,2-Tetrachloroethane	ng	<0.39	<0.36	<0.31		<0.58	<0.35	<0.33
1,1,1-Trichloroethane	µg	<0.39	<0.36	<0.31		2.9	<0.35	4.7
1,1,2,2-Tetrachloroethane	ng	<0.39	<0.36	<0.31		<0.58	<0.35	<0.33
1,1,2-Trichloroethane	ng	<0.39	<0.36	<0.31		<0.58	<0.35	<0.33
1,1-Dichloroethane	ng	<0.39	<0.36	<0.31		<0.58	<0.35	<0.33
Ethylene Dibromide	ng	<0.39	<0.36	<0.31		<0.58	<0.35	<0.33

Notes: 1. Printed on 08/31/01



**Table F3**  
**SUMMARY OF ANALYTICAL RESULTS**  
**Pratt & Whitney, Pent Road, East Hartford, CT (Willgoos) - Indoor Air Sampling**

	Location ID	WG-RSK-AS-15	WG-RSK-AS-15	WG-RSK-AS-15	WG-RSK-AS-15	WG-RSK-AS-16	WG-RSK-AS-16	WG-RSK-AS-16
Sample ID	1979484	1990403	1997139	1997140	1979476	1990395	1990397	
Sample Date	12/21/2000	03/01/2001	06/18/2001	06/18/2001	12/21/2000	03/01/2001	03/01/2001	
Sample Time	08:50	10:12	09:28	09:25	08:01	09:05	09:05	
Laboratory	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN	CIGN	
Lab. Number	C0005922-6	C0106351-08	C010711106	C010711115	C0005922-2	C0106351-02	C0106351-03	
Constituent	Units							
1,2-Dichloroethane	ng	<0.39	<0.36	<0.31		<0.58	<0.35	<0.33
Chloroethane	ng		<0.36	4.5			<0.35	<0.33
Methyl-tert-butyl Ether	µg/m3							
1,1-Dichloroethylene	ng	<0.39	<0.36	<0.31		0.85	<0.35	0.76
Vinyl Chloride	ng	<0.39	<0.36	0.33		<0.58	<0.35	<0.33
cis-1,2-Dichloroethylene	ng	<0.39	<0.36	13		<0.58	<0.35	<0.33
Tetrachloroethylene	ng	<0.39	<0.36	<0.31		4.2	<0.35	<0.33
trans-1,2-Dichloroethylene	µg	<0.39	<0.36	300 E	8600	<0.58	<0.35	<0.33
Trichloroethylene	ng	<0.39	<0.36	<0.31		<0.58	<0.35	<0.33
Bromomethane	ng	<0.39	<0.36	<0.31		<0.58	<0.35	<0.33
Bromochloromethane	ng	<0.39	<0.36	<0.31		<0.58	<0.35	<0.33
Bromodichloromethane	ng	<0.39	<0.36	<0.31		<0.58	<0.35	<0.33
Chloromethane	ng	<0.39	<0.36	2.4		<0.58	<0.35	<0.33
Dibromomethane	ng	<0.39	<0.36	<0.31		<0.58	<0.35	<0.33
Dibromochloromethane	ng	<0.39	<0.36	<0.31		<0.58	<0.35	<0.33
Methylene Chloride	µg	<0.39	1.1	8.2		<0.58	<0.35	2.5
Dichlorodifluoromethane	ng	4.3	5.4	7.3		5.1	<0.35	4.9
Bromoform	ng	<0.39	<0.36	<0.31		<0.58	<0.35	<0.33
Chloroform	ng	<0.39	<0.36	<0.31		<0.58	<0.35	<0.33
Fluorotrichloromethane	ng	0.86	1.0	0.89		0.69	<0.35	0.90
Methyl Isobutyl Ketone	ng	<0.39	<0.36	<0.31		<0.58	<0.35	<0.33
1,2,3-Trichloropropane	ng	<0.39	<0.36	<0.31		<0.58	<0.35	<0.33
Propylene Dichloride	ng	<0.39	<0.36	<0.31		<0.58	<0.35	<0.33
1,3-Dichloropropane	ng	<0.39	<0.36	<0.31		<0.58	<0.35	<0.33
2,2-Dichloropropane	ng	<0.39	<0.36	<0.31		<0.58	<0.35	<0.33
1,1-Dichloropropylene	ng	<0.39	<0.36	<0.31		<0.58	<0.35	<0.33
cis-1,3-Dichloropropylene	ng	<0.39	<0.36	<0.31		<0.58	<0.35	<0.33
trans-1,3-Dichloropropylene	ng	<0.39	<0.36	<0.31		<0.58	<0.35	<0.33
Styrene	ng	<0.39	0.82	<0.31		<0.58	<0.35	<0.33

Notes: 1. Printed on 08/31/01





**Table F3**  
**SUMMARY OF ANALYTICAL RESULTS**  
**Pratt & Whitney, Pent Road, East Hartford, CT (Willgoos) - Indoor Air Sampling**

	Location ID	WG-RSK-AS-16	WG-RSK-AS-16	WG-RSK-AS-16	WG-RSK-AS-16	WG-RSK-AS-17	WG-RSK-AS-17	WG-RSK-AS-17
	Sample ID	1997131	1997132	1997133	1997134	1990407	1990409	1990410
	Sample Date	06/18/2001	06/18/2001	06/18/2001	06/18/2001	03/01/2001	03/01/2001	03/01/2001
	Sample Time	08:10	08:10	08:20	08:20	10:45	13:45	13:45
	Laboratory	CIGN						
	Lab. Number	C010711102	C010711111	C010711103	C010711112	C0106351-11	C0106351-14	C0106351-15
Constituent	Units							
1,2-Dibromo-3-chloropropane	ng	<0.28		<0.23		<0.36	<5.0	
n-Propylbenzene	ng	<0.28		<0.23		<0.36	<5.0	
Hexachlorobutadiene	ng	<0.28		<0.23		<0.36	<5.0	
Cymene	ng	<0.28		<0.23		<0.36	<5.0	
Naphthalene	ng	2.1		2.5		<0.36	<5.0	
Acetone	µg	7.4		4.8		0.61	<5.0	
Benzene	µg	0.59		1.4		<0.73	<10	
1,2,3-Trichlorobenzene	ng	<0.28		<0.23		<0.36	<5.0	
1,2,4-Trichlorobenzene	ng	<0.28		<0.23		<0.36	<5.0	
1,2,4-Trimethylbenzene	µg	0.32		0.55		<0.36	<5.0	
o-Dichlorobenzene	ng	<0.28		<0.23		<0.36	<5.0	
1,3,5-Trimethylbenzene	ng	<0.28		0.39		<0.36	<5.0	
m-Dichlorobenzene	ng	<0.28		<0.23		<0.36	<5.0	
p-Dichlorobenzene	ng	<0.28		<0.23		<0.36	<5.0	
Bromobenzene	ng	<0.28		<0.23		<0.36	<5.0	
Chlorobenzene	ng	<0.28		<0.23		<0.36	<5.0	
Ethyl Benzene	µg	0.30		0.66		<0.36	<5.0	
Butylbenzene n-	ng	<0.28		<0.23		<0.36	<5.0	
sec-Butylbenzene	ng	<0.28		<0.23		<0.36	<5.0	
tert-Butylbenzene	ng	<0.28		<0.23		<0.36	<5.0	
2-Butanone	ng	4.3		3.5		<0.36	<5.0	
Carbon Tetrachloride	ng	<0.28		<0.23		<0.36	<5.0	
Cumene	ng	<0.28		<0.23		<0.36	<5.0	
1,1,1,2-Tetrachloroethane	ng	<0.28		<0.23		<0.36	<5.0	
1,1,1-Trichloroethane	µg	46 E	97	150 E	100	<0.36	<5.0	
1,1,2,2-Tetrachloroethane	ng	<0.28		<0.23		<0.36	<5.0	
1,1,2-Trichloroethane	ng	<0.28		<0.23		<0.36	<5.0	
1,1-Dichloroethane	ng	<0.28		<0.23		<0.36	<5.0	
Ethylene Dibromide	ng	<0.28		<0.23		<0.36	<5.0	

**Table F3**  
**SUMMARY OF ANALYTICAL RESULTS**  
**Pratt & Whitney, Pent Road, East Hartford, CT (Willgoos) - Indoor Air Sampling**

	Location ID	WG-RSK-AS-16	WG-RSK-AS-16	WG-RSK-AS-16	WG-RSK-AS-16	WG-RSK-AS-17	WG-RSK-AS-17	WG-RSK-AS-17
	Sample ID	1997131	1997132	1997133	1997134	1990407	1990409	1990410
	Sample Date	06/18/2001	06/18/2001	06/18/2001	06/18/2001	03/01/2001	03/01/2001	03/01/2001
	Sample Time	08:10	08:10	08:20	08:20	10:45	13:45	13:45
	Laboratory	CIGN						
	Lab. Number	C010711102	C010711111	C010711103	C010711112	C0106351-11	C0106351-14	C0106351-15
Constituent	Units							
1,2-Dichloroethane	ng	<0.28		<0.23		<0.36	<5.0	
Chloroethane	ng	<0.28		<0.23		<0.36	<5.0	
Methyl-tert-butyl Ether	µg/m3							
1,1-Dichloroethylene	ng	<0.28		0.39		<0.36	<5.0	
Vinyl Chloride	ng	<0.28		<0.23		<0.36	<5.0	
cis-1,2-Dichloroethylene	ng	<0.28		<0.23		<0.36	<5.0	
Tetrachloroethylene	ng	0.51		1.7		<0.36	<5.0	
trans-1,2-Dichloroethylene	µg	<0.28		<0.23		<0.36	<5.0	
Trichloroethylene	ng	0.43		1.4		<0.36	<5.0	
Bromomethane	ng	<0.28		<0.23		<0.36	<5.0	
Bromochloromethane	ng	<0.28		<0.23		<0.36	<5.0	
Bromodichloromethane	ng	<0.28		<0.23		<0.36	<5.0	
Chloromethane	ng	<0.28		<0.23		0.94	<5.0	
Dibromomethane	ng	<0.28		<0.23		<0.36	<5.0	
Dibromochloromethane	ng	<0.28		<0.23		<0.36	<5.0	
Methylene Chloride	µg	49 E	4.2	53 E	<3.7	1.2	9.7	
Dichlorodifluoromethane	ng	6.6		7.9		4.0	<5.0	<1.0
Bromoform	ng	<0.28		<0.23		<0.36	<5.0	
Chloroform	ng	<0.28		<0.23		<0.36	<5.0	
Fluorotrichloromethane	ng	1.1		0.70		1.7	<5.0	
Methyl Isobutyl Ketone	ng	0.53		0.97		<0.36	<5.0	
1,2,3-Trichloropropane	ng	<0.28		<0.23		<0.36	<5.0	
Propylene Dichloride	ng	<0.28		<0.23		<0.36	<5.0	
1,3-Dichloropropane	ng	<0.28		<0.23		<0.36	<5.0	
2,2-Dichloropropane	ng	<0.28		<0.23		<0.36	<5.0	
1,1-Dichloropropylene	ng	<0.28		<0.23		<0.36	<5.0	
cis-1,3-Dichloropropylene	ng	<0.28		<0.23		<0.36	<5.0	
trans-1,3-Dichloropropylene	ng	<0.28		<0.23		<0.36	<5.0	
Styrene	ng	<0.28		0.53		<0.36	<5.0	



**Table F3**  
**SUMMARY OF ANALYTICAL RESULTS**  
**Pratt & Whitney, Pent Road, East Hartford, CT (Willgoos) - Indoor Air Sampling**

	Location ID	WG-RSK-AS-17	WG-RSK-AS-17	WG-RSK-AS-17	WG-RSK-AS-17			
	Sample ID	1997384	1997385	1997388	1997389			
	Sample Date	06/18/2001	06/18/2001	06/18/2001	06/18/2001			
	Sample Time	09:50	09:50	10:30	10:30			
	Laboratory	CIGN	CIGN	CIGN	CIGN			
	Lab. Number	C010711107	C010711116	C010711109	C010711118			
Constituent	Units							
1,2-Dibromo-3-chloropropane	ng	<0.26		<5.0				
n-Propylbenzene	ng	<0.26		<5.0				
Hexachlorobutadiene	ng	<0.26		<5.0				
Cymene	ng	<0.26		<5.0				
Naphthalene	ng	<0.26		<5.0				
Acetone	µg	3.3		<5.0	<0.40			
Benzene	µg	<0.52		<10	<0.40			
1,2,3-Trichlorobenzene	ng	<0.26		<5.0				
1,2,4-Trichlorobenzene	ng	<0.26		<5.0				
1,2,4-Trimethylbenzene	µg	<0.26		<5.0	<0.40			
o-Dichlorobenzene	ng	<0.26		<5.0				
1,3,5-Trimethylbenzene	ng	<0.26		<5.0				
m-Dichlorobenzene	ng	<0.26		<5.0				
p-Dichlorobenzene	ng	<0.26		<5.0				
Bromobenzene	ng	<0.26		<5.0				
Chlorobenzene	ng	<0.26		<5.0				
Ethyl Benzene	µg	<0.26		<5.0	<0.40			
Butylbenzene n-	ng	<0.26		<5.0				
sec-Butylbenzene	ng	<0.26		<5.0				
tert-Butylbenzene	ng	<0.26		<5.0				
2-Butanone	ng	0.32		<5.0				
Carbon Tetrachloride	ng	<0.26		<5.0				
Cumene	ng	<0.26		<5.0				
1,1,1,2-Tetrachloroethane	ng	<0.26		<5.0				
1,1,1-Trichloroethane	µg	<0.26		<5.0	<0.40			
1,1,2,2-Tetrachloroethane	ng	<0.26		<5.0				
1,1,2-Trichloroethane	ng	<0.26		<5.0				
1,1-Dichloroethane	ng	<0.26		<5.0				
Ethylene Dibromide	ng	<0.26		<5.0				

Notes: 1. Printed on 08/31/01



**Table F3**  
**SUMMARY OF ANALYTICAL RESULTS**  
**Pratt & Whitney, Pent Road, East Hartford, CT (Willgoos) - Indoor Air Sampling**

	Location ID	WG-RSK-AS-17	WG-RSK-AS-17	WG-RSK-AS-17	WG-RSK-AS-17			
	Sample ID	1997384	1997385	1997388	1997389			
	Sample Date	06/18/2001	06/18/2001	06/18/2001	06/18/2001			
	Sample Time	09:50	09:50	10:30	10:30			
	Laboratory	CIGN	CIGN	CIGN	CIGN			
	Lab. Number	C010711107	C010711116	C010711109	C010711118			
Constituent	Units							
1,2-Dichloroethane	ng	<0.26		<5.0				
Chloroethane	ng	<0.26		<5.0				
Methyl-tert-butyl Ether	µg/m3							
1,1-Dichloroethylene	ng	<0.26		<5.0				
Vinyl Chloride	ng	<0.26		<5.0				
cis-1,2-Dichloroethylene	ng	<0.26		<5.0				
Tetrachloroethylene	ng	<0.26		<5.0				
trans-1,2-Dichloroethylene	µg	2.1		<5.0	<0.40			
Trichloroethylene	ng	<0.26		<5.0				
Bromomethane	ng	0.69		<5.0				
Bromochloromethane	ng	<0.26		<5.0				
Bromodichloromethane	ng	<0.26		<5.0				
Chloromethane	ng	0.39		<5.0				
Dibromomethane	ng	<0.26		<5.0				
Dibromochloromethane	ng	<0.26		<5.0				
Methylene Chloride	µg	27 E	6.0	<5.0	<0.40			
Dichlorodifluoromethane	ng	5.3		<5.0				
Bromoform	ng	<0.26		<5.0				
Chloroform	ng	<0.26		<5.0				
Fluorotrichloromethane	ng	0.32		<5.0				
Methyl Isobutyl Ketone	ng	<0.26		<5.0				
1,2,3-Trichloropropane	ng	<0.26		<5.0				
Propylene Dichloride	ng	<0.26		<5.0				
1,3-Dichloropropane	ng	<0.26		<5.0				
2,2-Dichloropropane	ng	<0.26		<5.0				
1,1-Dichloropropylene	ng	<0.26		<5.0				
cis-1,3-Dichloropropylene	ng	<0.26		<5.0				
trans-1,3-Dichloropropylene	ng	<0.26		<5.0				
Styrene	ng	<0.26		<5.0				



