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To: MARINA ROSER

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Facsimile: (860) 424-4059

From: PHILIP WARNER

Date: AUGUST 27, 2002

Page 1 of : 18

Subject: RESPONSE TO QUESTIONS FOR STABILIZATION DEMONSTRATION

Message: MARINA,

ATTACHED IS THE INDOOR AIR QUALITY MONITORING REPORT. THE FIGURE ATTACHED IS ONLY A PORTION SHOWING THE SAMPLING LOCATIONS. ALSO ATTACHED IS A REFERENCE LIST OF THE REPORTS COMPLETED FOR THE SITE.

IF YOU HAVE ANY ADDITIONAL COMMENTS OR QUESTIONS, PLEASE CALL ME AT (860) 529-8882

Phil Warner

cc:

URS Corporation
500 Enterprise Drive, Suite 3B
Rocky Hill, CT 06067
Tel: 860.529.8882
Fax: 860.529.3991
www.urscorp.com

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June 20, 2001

Ms. Carolyn Quinn
Manager, Remediation and Evaluation Services
Honeywell
101 Columbia Road
Morristown, NJ 07962

RE: Letter Report of Indoor Air Quality Monitoring
Former Honeywell Skinner Valve
New Britain, Connecticut
URS Project Number: 10737-186-211

Dear Ms. Quinn:

At the request of Honeywell, Inc., URS Corporation (URS) conducted an indoor air monitoring program at the former Honeywell facility in New Britain, Connecticut. This monitoring program was conducted to evaluate airborne levels of a variety of organic vapors within the building being generated by off-gassing from two contaminant plumes located beneath the building. This monitoring was conducted as a result of concentrations of two volatile organic compounds [trichloroethene (TCE) and 1,1-dichloroethene (1,1-DCE)] dissolved in the groundwater. The two plumes that have been identified beneath the building consist primarily of TCE and chlorofluorocarbons (CFCs). Figure 1 shows the building floor plan and the general locations of the two plumes.

URS developed a sampling plan that consisted of ten separate sampling locations. These locations included two over each plume, five at different locations within the building away from the plumes and one on the building exterior to represent background/ambient levels of the identified contaminants. The ten sampling locations are also identified on Figure 1.

For this sampling program URS used SUMMA vacuum canisters with regulators calibrated to collect an eight-hour sample. Although the samples were not personal samples, they were collected over an eight-hour time period so that sample results could be compared to US Occupational Safety and Health Administration (OSHA) permissible exposure limits (PELs), American Conference of Governmental Industrial Hygienists (ACGIH) threshold limit values (TLVs), and Indoor Target Air Concentrations for Industrial/Commercial sites as set forth in the State of Connecticut Remediation Standard Regulations (RSRs) for each organic vapor. Since the airborne organic vapor levels were anticipated to be very low, the decision was made to use the SUMMA canisters instead of charcoal tubes to achieve a greater analytical sensitivity.

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Mr. Jason Edic, an industrial hygienist with URS, conducted the sampling program on April 20, 2000. Samples were placed at the designated locations between 9:30 and 10:30 a.m. and were observed by Mr. Edic throughout the sampling period. The building was occupied at the time of the sampling program. Following the sampling period, the canisters were transported, under full chain-of-custody, to ENSR Consulting and Engineering in Acton, Massachusetts. ENSR had supplied the canisters to URS and had conducted the pre- and post-sampling calibration.

The samples were analyzed by gas chromatography/mass spectrometry (GC/MS) in accordance with the US Environmental Protection Agency (EPA) TO-14 analytical protocol for the "determination of volatile organic compounds in ambient air using SUMMA passivated canister sampling and gas chromatography analysis". The TO-14 protocol was used to allow an evaluation of approximately forty-two different airborne organic vapors.

A summary of the air sampling results by sampling location is contained in Table 1. Analytical results are contained in Attachment A. The OSHA PELs, ACGIH TLVs and State of Connecticut Target Indoor Air Concentrations for those organics where reference values have been established are also contained in this table for comparison purposes. Samples H-01 through H-04 were collected at locations above the two identified contaminant plumes, samples H-05 through H-08 were collected in various building areas away from the two plume locations, and sample H-10 was collected outside the building to serve as a background/ambient sample. The laboratory reported that Sample H-09 could not be analyzed due to a defective valve on the SUMMA canister.

Of the forty-two organic compounds evaluated, thirty compounds were found to be present either at or below the analytical detection limit. Seven of the twelve compounds which were detected at levels above the detection limit were found to be present in higher quantities outside the building than at any of the interior sampling locations. These results are attributed to normal background levels within the environment.

The remaining five organic vapors that were detected above the analytical sensitivity of the instrumentation were compared to a number of regulatory and reference standards for human exposure. Both OSHA PELs and ACGIH TLVs were used for these comparisons, in addition to Connecticut Target Indoor Air Concentrations. URS contacted Ms. Ruth Lepley of the State of Connecticut Department of Environmental Protection (CTDEP) to discuss the application of the Target Indoor Air Concentrations to measured airborne concentrations and actual worker exposures based on time spent in a specific work area. She stated that the exposures which were to be compared to the Target Indoor Air Concentrations were the actual worker exposures, based on time of exposure, and not simply the area airborne contaminant concentrations. Based on these understandings, URS evaluated the sampling data for the five compounds determined to be present at concentrations above background as follows:

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1,1,1-trichloroethane	Results for only one sample, H-04, were detected above the analytical sensitivity at 0.68 parts/billion (ppb). The OSHA PEL for this compound is 3,500 ppb. The Connecticut Target Indoor Air Concentration for this compound is 1,460 ug/m^3 which is significantly higher than the 3.8 ug/m^3 found to be present at this location.
Toluene	All nine sample results showed concentrations above the analytical sensitivity of the method, only one of which was above the outdoor background level. The highest individual sample result, identified at location H-01, was 28 ppb compared to an OSHA PEL of 3,000 ppb. The measured level of this organic vapor, 110 ug/m^3, was well below the Target Indoor Air Concentration of 584 ug/m^3.
Cis-1,2-dichloroethene	Three sample results were recorded above the analytical sensitivity of the method. However, all results were less than one percent of the ACGIH TLV of 2,000 ppb. Connecticut has not established a Target Indoor Air Concentration for this compound.
Trichloroethene	TCE was detected in six of the samples, including the outdoor sample. The highest concentration detected was 3.3 ppb, compared to the ACGIH TLV of 500 ppb. The sample locations were determined to have an average eight-hour exposure in excess of the Connecticut Target Concentrations. However, based on occupancy data provided by Parker Skinner, one of the locations, (H-04 in the maintenance area) is generally unoccupied (2 hours per day) and when the actual worker exposure is calculated based on occupancy time, the site-specific worker exposure of 1.6 ug/m^3 is well below the Connecticut Target Concentration of 5 ug/m^3. When the actual worker exposure (based on occupancy of 4 hours per day) is calculated for the two locations H-01 and H-02 in the laboratory area, the worker exposures are 9 ug/m^3 and 7 ug/m^3, respectively. The Connecticut Target Indoor Air Concentration is 5 ug/m^3, therefore the worker exposure slightly exceeds the Connecticut Indoor Air Concentration. However, based on a subsequent telephone conversation with Ms. Lepley on June 14, 2001, she stated that the Target Indoor Air Concentrations are not enforceable and were developed based on long term risk based analysis. When URS described to her the nature of the Target excedences, she stated that they should not generate a concern, nor

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	was any remediation required to reduce the airborne concentrations.
Tetrachloroethene	Three samples showed barely detectable levels, the highest being 0.67 ppb which is below the ACGIH TLV of 250 ppb. All three concentrations exceeding background were well below the Connecticut Target Air Concentrations.

Based on the results of this sampling program, and a review of the amount of time spent in each building area where samples were collected, no organic vapors included in the EPA TO-14 analysis were detected at or above OSHA PELs or ACGIH TLVs. Two results slightly exceeded the State of Connecticut Target Indoor Air Concentrations for TCE but at concentrations that would not be of concern to the CTDEP.

If you have any questions please call either Doug Lawson at 603-893-0616 or Sydney Neer at 860-721-1424.

Sincerely,

URS CORPORATION

Suzanne Russell for

Douglas R. Lawson, Ph.D., CIH
Manager, Industrial Hygiene Services

Sydney V. Neer

Sydney V. Neer, PG, LEP
Senior Project Manager

cc: B. Jackson, Honeywell
R. Taylor, Parker
K. Niezelski, Parker

Enclosure

ATTACHMENT A

ENSR Consulting and Engineering
Air Toxics Specialty Laboratory
42 Nagog Park
Acton, MA 01720
(978) 635-9500
Fax: (978) 268-1525

ENSR Air Toxics Specialty Laboratory
Analytical Report

Client: D. Lawson/D. Ellis
Dames & Moore
5 Industrial Way
Salem, NH 03079

Client ID: 10737-186-211

Laboratory ID: 00-079

Date(s) Received: 4/21/00

All work contained in this report has been done in accordance with laboratory standard operating procedures. ENSR's Air Toxics Specialty Laboratory follows methodologies based upon standard EPA/NIOSH/OSHA Methods. Data contained herein should be considered accurate and complete to the best of our knowledge. This report cannot be duplicated in part without the written permission of ENSR.

Andy Rezendes
Laboratory Manager
ENSR Air Toxics Specialty Laboratory

5/8/00
Date

ENSR Consulting and Engineering
Air Toxics Specialty Laboratory

Case Narrative

Re.: Volatile Organic Analysis of SUMMA® Canisters by Gas Chromatography/Mass Spectrometry (GC/MS) – **Dames & Moore/Honeywell**

Project #: **10737-186-211**

LAB ID #: **00-079**

ANALYTICAL PROCEDURE.

Nine (9) SUMMA® canisters were analyzed for volatile organic compounds under the guidelines of EPA TO-14, Determination of Volatile Organic Compounds (VOCs) in Ambient Air Using SUMMA® Passivated Canister Sampling and Gas Chromatography (GC) Analysis.

A Hewlett Packard 6890 gas chromatograph equipped with a Hewlett Packard 5973 mass selective detector (MSD) was employed for the analysis. A Nutech 3550A/3600 automatic concentrator was utilized for pre-concentration.

A 250-mL aliquot was drawn from each SUMMA® canister, concentrated at -150°C and then transferred to the GC/MSD for the analysis. The operating conditions of the GC/MSD are listed in Table 1.

GC/MSD calibration was performed with canister standards prepared for each target compound. Three to six-point calibrations were generated for each compound using these standards.

No problems were encountered during sample log-in.

QUALITY CONTROL:

1. A laboratory blank was analyzed prior to sample analysis in the same manner as the samples. Target analytes were not detected in the laboratory blank.

2. Sample H-10 was analyzed in duplicate.

3. The SUMMA® canister for sample H-06 was cleaned on February 21, 2000 and was certified clean by the analysis of one canister from the cleaning batch (B232). The SUMMA® canister for sample H-03 was cleaned on February 23, 2000 and was certified clean by the analysis of one canister from the cleaning batch (4S). The SUMMA® canisters for the remaining samples were cleaned on March 22, 2000 and were certified clean by the analysis of one canister from the cleaning batch (A221).

ENSR Consulting and Engineering
Air Toxics Specialty Laboratory

TABLE 1

GC/MSD Operating Conditions

Instrument	Hewlett Packard 6890 GC/ 5973 MSD
Injector Temperature	220°C
Column	Rtx-1 60 m Capillary
Parameters	0.25mm ID, 1.0µm df
Carrier gas	UHP Helium: Flow rate = 2.0 cc/min
Detector	Mass Selective detector: Temperature: 240°C
Temperature program	Initial Temp.: 10°C Hold: 6.0 min
	Ramping Rate: 8.0°C/min
	Final Temp: 170°C Time 5. 0 min
Data System	HP ChemStation

Date Analysis Started: 4/21/00

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ENSR AIR TOXICS SPECIALTY LABORATORY
SUMMARY OF ANALYTICAL RESULTS

nes & Moore
ioratory ID #: 00-079

ite ID	H-01		H-02		H-03		H-04	
ratory ID	00-079-1		00-079-2		00-079-3		00-079-4	
Sampled	4/20/99		4/20/99		4/20/99		4/20/99	
Analyzed	4/21/00		4/21/00		4/21/00		4/21/00	
pound	ug/m³	ppbV	ug/m³	ppbV	ug/m³	ppbV	ug/m³	ppbV
n-114	2.2 U	0.31 U	2.2 U	0.31 U	2.2 U	0.31 U	2.2 U	0.31 U
orodifluoromethane	2.2 U	0.44 U	2.2 U	0.44 U	2.2 U	0.44 U	2.2 U	0.44 U
romethane	2.2 U	1.1 U	2.2 U	1.1 U	2.2 U	1.1 U	2.2 U	1.1 U
chloride	2.2 U	0.85 U	2.2 U	0.85 U	2.2 U	0.85 U	2.2 U	0.85 U
utadiene	2.2 U	0.98 U	2.2 U	0.98 U	2.2 U	0.98 U	2.2 U	0.98 U
iomethane	2.2 U	0.56 U	2.2 U	0.56 U	2.2 U	0.56 U	2.2 U	0.56 U
roethane	2.2 U	0.82 U	2.2 U	0.82 U	2.2 U	0.82 U	2.2 U	0.82 U
lorofluoromethane	2.2 U	0.39 U	2.2 U	0.39 U	2.2 U	0.39 U	2.2 U	0.39 U
lenioroethene	2.2 U	0.55 U	2.2 U	0.55 U	2.2 U	0.55 U	2.2 U	0.55 U
ylene chloride	2.2 U	0.62 U	2.2 U	0.62 U	2.2 U	0.62 U	2.2 U	0.62 U
n-113	2.2 U	0.28 U	2.2 U	0.28 U	2.2 U	0.28 U	2.2 U	0.28 U
lichloroethane	2.2 U	0.53 U	2.2 U	0.53 U	2.2 U	0.53 U	2.2 U	0.53 U
s-1,2-dichloroethane	2.2 U	0.55 U	2.2 U	0.55 U	2.2 U	0.55 U	2.2 U	0.55 U
,2-dichloroethane	13	3.3	21	5.3	2.2 U	0.55 U	2.2 U	0.55 U
roform	2.2 U	0.44 U	2.2 U	0.44 U	2.2 U	0.44 U	2.2 U	0.44 U
lichloroethane	2.2 U	0.53 U	2.2 U	0.53 U	2.2 U	0.53 U	2.2 U	0.53 U
loroethene	18	3.3	14	2.7	3.1	0.57	5.2	1.1
-trichloroethane	2.2 U	0.40 U	2.2 U	0.40 U	2.2 U	0.40 U	3.8	0.68
zene	4.5	1.4	2.4	0.75	2.2 U	0.68 U	3.4	1.0
on tetrachloride	2.2 U	0.34 U	2.2 U	0.34 U	2.2 U	0.34 U	2.2 U	0.34 U
lichloropropane	2.2 U	0.47 U	2.2 U	0.47 U	2.2 U	0.47 U	2.2 U	0.47 U
,3-dichloropropene	2.2 U	0.48 U	2.2 U	0.48 U	2.2 U	0.48 U	2.2 U	0.48 U
s-1,3-dichloropropene	2.2 U	0.48 U	2.2 U	0.48 U	2.2 U	0.48 U	2.2 U	0.48 U
-trichloroethane	2.2 U	0.40 U	2.2 U	0.40 U	2.2 U	0.40 U	2.2 U	0.40 U
ene	110	28	64	17	75	20	85	22
ibromoethane	2.2 U	0.28 U	2.2 U	0.28 U	2.2 U	0.28 U	2.2 U	0.28 U
chloroethene	2.2 U	0.32 U	2.2 U	0.32 U	3.3	0.48	4.6	0.67
robenzene	2.2 U	0.47 U	2.2 U	0.47 U	2.2 U	0.47 U	2.2 U	0.47 U
lobenzene	2.2 U	0.50 U	2.2 U	0.50 U	2.2 U	0.50 U	3.0	0.67
m-xylene	3.4	0.78	4.4	1.0	6.7	1.5	11	2.5
ene	2.2 U	0.51 U	2.2 U	0.51 U	2.2 U	0.51 U	2.2 U	0.51 U
2,2-tetrachloroethane	2.2 U	0.32 U	2.2 U	0.32 U	2.2 U	0.32 U	2.2 U	0.32 U
lene	2.2 U	0.50 U	2.2 U	0.50 U	2.2 U	0.50 U	3.0	0.69
5-trimethylbenzene	2.2 U	0.44 U	2.2 U	0.44 U	2.2 U	0.44 U	2.2 U	0.44 U
nyl toluene	2.2 U	0.44 U	2.2 U	0.44 U	2.2 U	0.44 U	2.2 U	0.44 U
zyl chloride	2.2 U	0.42 U	2.2 U	0.42 U	2.2 U	0.42 U	2.2 U	0.42 U
4-trimethylbenzene	2.2 U	0.44 U	2.2 U	0.44 U	2.2 U	0.44 U	2.4	0.47
dichlorobenzene	2.2 U	0.36 U	2.2 U	0.36 U	2.2 U	0.36 U	2.2 U	0.36 U
dichlorobenzene	2.2 U	0.36 U	2.2 U	0.36 U	2.2 U	0.36 U	2.2 U	0.36 U
dichlorobenzene	2.2 U	0.36 U	2.2 U	0.36 U	2.2 U	0.36 U	2.2 U	0.36 U
4-trichlorobenzene	2.2 U	0.29 U	2.2 U	0.29 U	2.2 U	0.29 U	2.2 U	0.29 U
achlorobutadiene	2.2 U	0.20 U	2.2 U	0.20 U	2.2 U	0.20 U	2.2 U	0.20 U

undetected at the specified reporting limit
analyte found in blank(s)
estimated value: reported value exceeds the upper limit of calibration

ENSR AIR TOXICS SPECIALTY LABORATORY
SUMMARY OF ANALYTICAL RESULTS

mes & Moore
boratory ID #: 00-079

ple ID	H-05				H-06				H-07				H-08				H-10			
oratory ID	00-079-5				00-079-6				00-079-7				00-079-8				00-079-10			
Sampled	4/20/99				4/20/99				4/20/99				4/20/99				4/20/99			
Analyzed	4/21/00				4/21/00				4/21/00				4/21/00				4/22/00			
npound	ug/m³		ppbV		ug/m³		ppbV		ug/m³		ppbV		ug/m³		ppbV		ug/m³		ppbV	
on-114	2.2	U	0.31	U	2.2	U	0.31	U	2.2	U	0.31	U	2.2	U	0.31	U	2.2	U	0.31	U
lorodifluoromethane	2.2	U	0.44	U	2.2	U	0.44	U	2.2	U	0.44	U	2.2	U	0.44	U	2.2	U	0.44	U
romethane	2.2	U	1.1	U	2.2	U	1.1	U	2.2	U	1.1	U	2.2	U	1.1	U	2.2	U	1.1	U
yl chloride	2.2	U	0.85	U	2.2	U	0.85	U	2.2	U	0.85	U	2.2	U	0.85	U	2.2	U	0.85	U
butadiene	2.2	U	0.98	U	2.2	U	0.98	U	2.2	U	0.98	U	2.2	U	0.98	U	2.2	U	0.98	U
romomethane	2.2	U	0.56	U	2.2	U	0.56	U	2.2	U	0.56	U	2.2	U	0.56	U	2.2	U	0.56	U
oroethane	2.2	U	0.82	U	2.2	U	0.82	U	2.2	U	0.82	U	2.2	U	0.82	U	2.2	U	0.82	U
hlorofluoromethane	2.2	U	0.39	U	2.2	U	0.39	U	2.2	U	0.39	U	2.2	U	0.39	U	2.2	U	0.39	U
-dichloroethene	2.2	U	0.55	U	2.2	U	0.55	U	2.2	U	0.55	U	2.2	U	0.55	U	2.2	U	0.55	U
thylene chloride	2.2	U	0.62	U	2.2	U	0.62	U	2.2	U	0.62	U	2.2	U	0.62	U	2.3		0.65	
on-113	2.2	U	0.28	U	14		1.8		2.2	U	0.28	U	2.2	U	0.28	U	2.2	U	0.28	U
dichloroethane	2.2	U	0.53	U	2.2	U	0.53	U	2.2	U	0.53	U	2.2	U	0.53	U	2.2	U	0.53	U
s-1,2-dichloroethene	2.2	U	0.55	U	2.2	U	0.55	U	2.2	U	0.55	U	2.2	U	0.55	U	2.2	U	0.55	U
-1,2-dichloroethene	2.2	U	0.55	U	3.0		0.73		2.2	U	0.55	U	2.2	U	0.55	U	2.2	U	0.55	U
oroform	2.2	U	0.44	U	2.2	U	0.44	U	2.2	U	0.44	U	2.2	U	0.44	U	2.2	U	0.44	U
-dichloroethane	2.2	U	0.53	U	2.2	U	0.53	U	2.2	U	0.53	U	2.2	U	0.53	U	2.2	U	0.53	U
hloroethene	2.2	U	0.40	U	4.6		0.83		2.2	U	0.40	U	2.2	U	0.40	U	3.1		0.56	
,1-trichloroethane	2.2	U	0.40	U	2.2	U	0.40	U	2.2	U	0.40	U	2.2	U	0.40	U	2.2	U	0.40	U
nzene	2.2	U	0.68	U	2.2	U	0.68	U	2.2	U	0.68	U	2.2	U	0.68	U	7.0		2.1	
bon tetrachloride	2.2	U	0.34	U	2.2	U	0.34	U	2.2	U	0.34	U	2.2	U	0.34	U	2.2	U	0.34	U
-dichloropropane	2.2	U	0.47	U	2.2	U	0.47	U	2.2	U	0.47	U	2.2	U	0.47	U	2.2	U	0.47	U
-1,3-dichloropropene	2.2	U	0.48	U	2.2	U	0.48	U	2.2	U	0.48	U	2.2	U	0.48	U	2.2	U	0.48	U
ns-1,3-dichloropropene	2.2	U	0.48	U	2.2	U	0.48	U	2.2	U	0.48	U	2.2	U	0.48	U	2.2	U	0.48	U
2-trichloroethane	2.2	U	0.40	U	2.2	U	0.40	U	2.2	U	0.40	U	2.2	U	0.40	U	2.2	U	0.40	U
uene	30		7.9		82		21		26		6.8		17		4.5		85		22	
-dibromoethane	2.2	U	0.28	U	2.2	U	0.28	U	2.2	U	0.28	U	2.2	U	0.28	U	2.2	U	0.28	U
rachloroethene	4.2		0.60		2.2	U	0.32	U	2.2	U	0.32	U	2.2	U	0.32	U	2.2	U	0.32	U
lorobenzene	2.2	U	0.47	U	2.2	U	0.47	U	2.2	U	0.47	U	2.2	U	0.47	U	2.2	U	0.47	U
hylbenzene	2.2	U	0.50	U	2.2	U	0.50	U	2.2	U	0.50	U	2.2	U	0.50	U	5.5		1.3	
& m-xylene	9.2		2.1		8.3		1.9		6.6		1.5		4.8		1.1		23		5.2	
yrene	2.2	U	0.51	U	2.2	U	0.51	U	2.2	U	0.51	U	2.2	U	0.51	U	2.2	U	0.51	U
1,2,2-tetrachloroethane	2.2	U	0.32	U	2.2	U	0.32	U	2.2	U	0.32	U	2.2	U	0.32	U	2.2	U	0.32	U
xylene	2.2	U	0.50	U	2.2	U	0.50	U	2.2	U	0.50	U	2.2	U	0.50	U	6.6		1.5	
3,5-trimethylbenzene	2.2	U	0.44	U	2.2	U	0.44	U	2.2	U	0.44	U	2.2	U	0.44	U	2.4		0.49	
ethyl toluene	2.2	U	0.44	U	2.2	U	0.44	U	2.2	U	0.44	U	2.2	U	0.44	U	2.2	U	0.44	U
nzyl chloride	2.2	U	0.42	U	2.2	U	0.42	U	2.2	U	0.42	U	2.2	U	0.42	U	2.2	U	0.42	U
2,4-trimethylbenzene	2.2	U	0.44	U	2.2	U	0.44	U	2.2	U	0.44	U	2.2	U	0.44	U	7.5		1.5	
3-dichlorobenzene	2.2	U	0.36	U	2.2	U	0.36	U	2.2	U	0.36	U	2.2	U	0.36	U	2.2	U	0.36	U
4-dichlorobenzene	2.2	U	0.36	U	2.2	U	0.36	U	2.2	U	0.36	U	2.2	U	0.36	U	2.2	U	0.36	U
2-dichlorobenzene	2.2	U	0.36	U	2.2	U	0.36	U	2.2	U	0.36	U	2.2	U	0.36	U	2.2	U	0.36	U
2,4-trichlorobenzene	2.2	U	0.29	U	2.2	U	0.29	U	2.2	U	0.29	U	2.2	U	0.29	U	2.2	U	0.29	U
xachlorobutadiene	2.2	U	0.20	U	2.2	U	0.20	U	2.2	U	0.20	U	2.2	U	0.20	U	2.2	U	0.20	U

= undetected at the specified reporting limit
= analyte found in blank(s)
= estimated value: reported value exceeds the upper limit of calibration

ENSR AIR TOXICS SPECIALTY LABORATORY
QUALITY CONTROL RESULTS-DUPLICATE ANALYSES

Dames & Moore
Laboratory ID #: 00-079

Sample ID	H-10				H-10 DUP				
Laboratory ID	00-079-10				00-079-10 DUP				
Date Sampled	4/20/99				4/20/99				
Date Analyzed	4/22/00				4/22/00				
Compound	ug/m³		ppbV		ug/m³		ppbV		RPD
Freon-114	2.2	U	0.31	U	2.2	U	0.31	U	NC
dichlorodifluoromethane	2.2	U	0.44	U	2.2	U	0.44	U	NC
chloromethane	2.2	U	1.1	U	2.2	U	1.1	U	NC
vinyl chloride	2.2	U	0.85	U	2.2	U	0.85	U	NC
1,3-butadiene	2.2	U	0.98	U	2.2	U	0.98	U	NC
bromomethane	2.2	U	0.56	U	2.2	U	0.56	U	NC
chloroethane	2.2	U	0.82	U	2.2	U	0.82	U	NC
trichlorofluoromethane	2.2	U	0.39	U	2.2	U	0.39	U	NC
1,1-dichloroethene	2.2	U	0.55	U	2.2	U	0.55	U	NC
methylene chloride	2.3		0.65		3.5		1.0		43
Freon-113	2.2	U	0.28	U	2.2	U	0.28	U	NC
1,1-dichloroethane	2.2	U	0.53	U	2.2	U	0.53	U	NC
trans-1,2-dichloroethene	2.2	U	0.55	U	2.2	U	0.55	U	NC
cis-1,2-dichloroethene	2.2	U	0.55	U	2.2	U	0.55	U	NC
chloroform	2.2	U	0.44	U	2.2	U	0.44	U	NC
1,2-dichloroethane	2.2	U	0.53	U	2.2	U	0.53	U	NC
trichloroethene	3.1		0.56		3.4		0.63		12
1,1,1-trichloroethane	2.2	U	0.40	U	2.2	U	0.40	U	NC
benzene	7.0		2.1		7.0		2.1		0.0
carbon tetrachloride	2.2	U	0.34	U	2.2	U	0.34	U	NC
1,2-dichloropropane	2.2	U	0.47	U	2.2	U	0.47	U	NC
cis-1,3-dichloropropene	2.2	U	0.48	U	2.2	U	0.48	U	NC
trans-1,3-dichloropropene	2.2	U	0.48	U	2.2	U	0.48	U	NC
1,1,2-trichloroethane	2.2	U	0.40	U	2.2	U	0.40	U	NC
toluene	85		22		89		23		4.2
1,2-dibromoethane	2.2	U	0.28	U	2.2	U	0.28	U	NC
tetrachloroethene	2.2	U	0.32	U	2.2	U	0.32	U	NC
chlorobenzene	2.2	U	0.47	U	2.2	U	0.47	U	NC
ethylbenzene	5.5		1.3		5.8		1.3		5.4
p & m-xylene	23		5.2		24		5.5		4.8
styrene	2.2	U	0.51	U	2.2	U	0.51	U	NC
1,1,2,2-tetrachloroethane	2.2	U	0.32	U	2.2	U	0.32	U	NC
o-xylene	6.6		1.5		7.3		1.7		11
1,3,5-trimethylbenzene	2.4		0.49		2.4		0.48		2.1
4-ethyl toluene	2.2	U	0.44	U	2.4		0.49		NC
benzyl chloride	2.2	U	0.42	U	2.2	U	0.42	U	NC
1,2,4-trimethylbenzene	7.5		1.5		7.8		1.6		3.9
1,3-dichlorobenzene	2.2	U	0.36	U	2.2	U	0.36	U	NC
1,4-dichlorobenzene	2.2	U	0.36	U	2.2	U	0.36	U	NC
1,2-dichlorobenzene	2.2	U	0.36	U	2.2	U	0.36	U	NC
1,2,4-trichlorobenzene	2.2	U	0.29	U	2.2	U	0.29	U	NC
hexachlorobutadiene	2.2	U	0.20	U	2.2	U	0.20	U	NC

U = undetected at the specified reporting limit
E = estimated value: reported value exceeds the upper limit of calibration
B = analyte found in blank(s)

NC = not calculable
RPD = relative percent difference

Fax (603) 893-1240

MSC1378

ENSR

CHAIN OF CUSTODY RECORD

Page 1 of 1

Client/Project Name: HONEYWELL/CANISTER SAMPLING

Project Location: PHENIX SKINNER VALVE DIV. NEW BRITAIN CT

Project Number: 10737-186-211

Field Logbook No.:

Sample(s): (Print Name) Affiliation: JASON EDIC URS/DAMES & MOORE

Chain of Custody Tape No.:

Signature: Jason Edic

Send Results/Report to: D. LAWSON / D. ELLIS
5 INDUSTRIAL WAY SALEM, NH 03079

Analysis Requested: TO-14

Field Sample No./Identification	Date	Time (Military)	Grab	Comp	Sample Container (Size/Mat'l)	Sample Type (Liquid, Sludge, Etc.)	Preservative	Field Filtered	TO-14						Lab I.D.	Remarks
H-01	4/20/00	460			CANISTER	AIR/CANISTER			X						00-0579-1	B231
H-02		460							X						-2	A216
H-03		463							X						-3	2.[illegible] Hg initially 50
H-04		461							X						-4	A202
H-05		460							X						-5	94
H-06		461							X						-6	B232
H-07		457							X						-7	A230
H-08		456							X						-8	A210
~~H-09~~		~~458~~							X							STILL HAS VOID IN PRESSURE
H-10		460							X						-10	91

Relinquished by: (Print Name)	Date	Received by: (Print Name)	Date
JASON EDIC Signature: Jason Edic	4.21.00 Time:	Alison MacDuff Signature: [illegible]	4/21/00 Time: 1500
Relinquished by: (Print Name) Signature:	Date: Time:	Received by: (Print Name) Signature:	Date: Time:
Relinquished by: (Print Name) Signature:	Date Time:	Received by: (Print Name) Signature:	Date: Time

Analytical Laboratory (Destination):
ENSR Air Toxics Laboratory
42 Nagog Park
Acton, MA 01720
Attn: Andy Rezendes

Serial No.

page 8 of 9

SAMPLE LOG-IN & RECEIPT CHECKLIST

Client/Proj #: DAMES + MOORE

Proj Mgr: A. REE

Lab Pool #: 00-079

Inspected & Logged in by: A REE

Date Time: 4/21/00 @ 1530

Sample Matrix	Number of Samples	Analysis Requested	Analyze by (date)	Storage Location
CANS	9	TO14	ASAP 5/5/00	GC/MS

Circle the appropriate response:

1) Shipped / Hand delivered 4/21/00

2) COC present / not present on receipt

3) COC-Tape present / not present on shipping container

4) Samples broken / intact on receipt

5) Samples ambient / chilled on receipt

6) Samples preserved correctly / incorrectly / none recommended

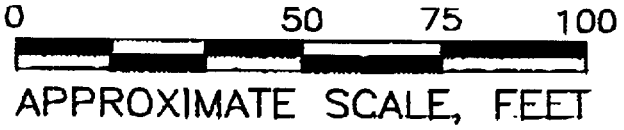
7) Received within / outside holding time

8) COC tapes present / not present on samples

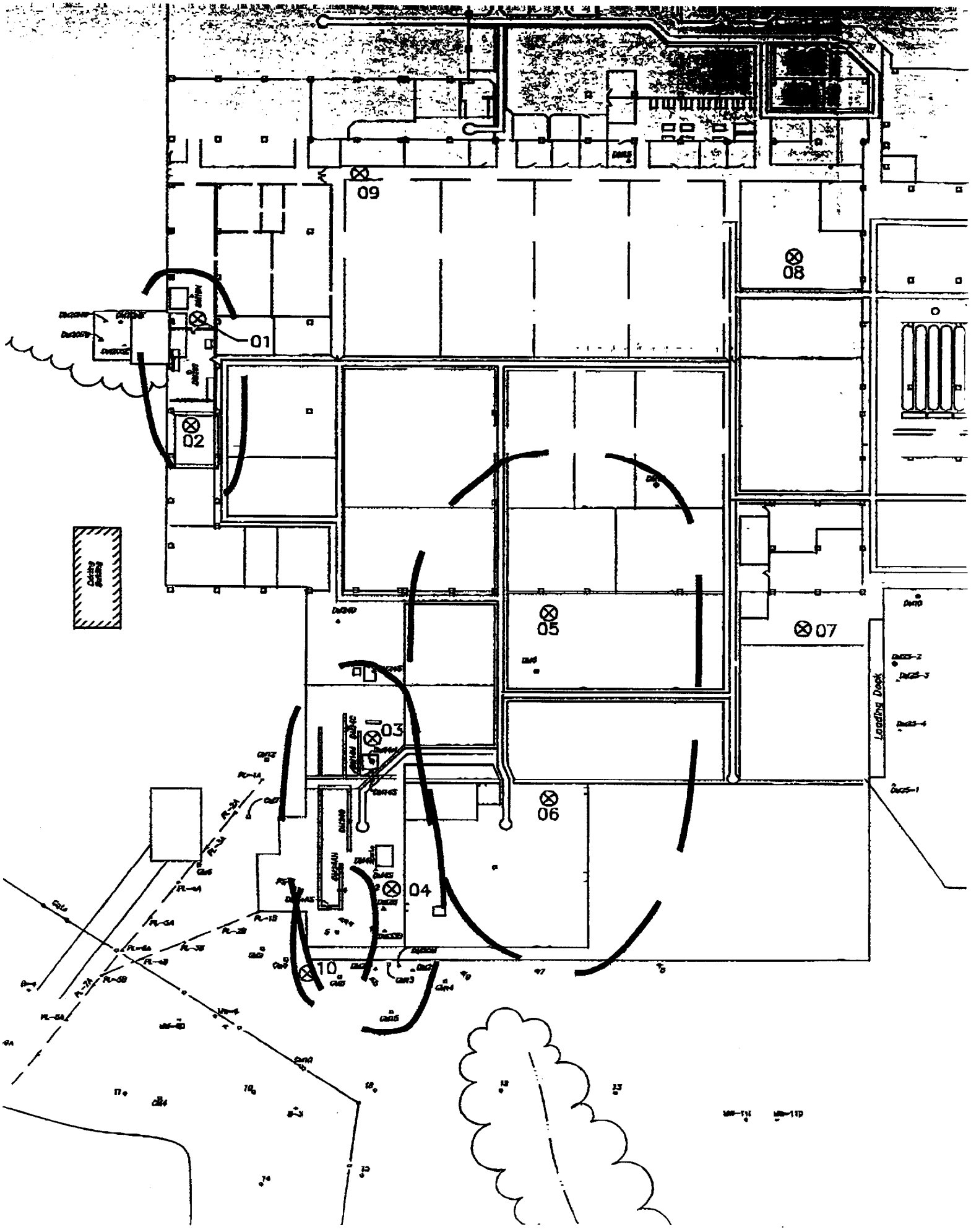
9) Discrepancies / NO discrepancies noted between COCs and samples

Additional Comments:

FIGURE



CLIENT: HONEYWELL, INC.			
PROJECT: SKINNER VALVE DIVISION NEW BRITAIN, CONNECTICUT			
DCM GROUP	DAMES & MOORE A DAMES & MOORE GROUP COMPANY		
TITLE: INDOOR AIR MONITORING SAMPLING LOCATIONS			PROJECT NO: 10737-186
DESIGN: DM		SCALE: AS SHOWN	FIGURE NO: 1
APPROVED: DL		DATE: 6/20/00	
DRAWN: ALP		FILE NO:	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