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March 16, 2007

Michelle Tipple
Project Manager
Division of Hazardous Waste Remediation, Region III
New York State Department of Environmental Conservation
21 South Putt Corners Road
New Paltz, NY 12561

Subject: Soil Vapor Investigation
Hangar D, Westchester County Airport
White Plains, New York
Site #3-60-037

Dear Ms. Tipple:

Woodard & Curran, on behalf of ExxonMobil Refining & Supply, coordinated a soil vapor intrusion investigation for Hangar D, Bay 2 located at the Westchester Country Airport in White Plains, New York. The vapor intrusion investigation was completed at the request of the New York State Department of Health (NYSDOH) and the New York State Department of Environmental Conservation (NYSDEC) to investigate the potential for intrusion of site-related chemicals of concern (COCs) from subsurface sources to office portions of the hangar through the building slab. This work was conducted pursuant to the Vapor Intrusion Investigation Work Plan (Work Plan) dated September 30, 2005, approved by the NYSDEC on October 5, 2005 incorporating NYSDOH comments, and subsequent correspondence conveyed by electronic mail from the NYSDEC on April 24, 2006 and the subsequent response on May 4, 2006.

The subject sampling event was implemented in general accordance with the October 2006 NYSDOH *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (NYSDOH Guidance). Field tasks were conducted on April 26, 2005; February 21 and 22, 2006; and November 27 and 28, 2006. The primary COCs for the project (refer to Section 3.1 of the Work Plan) were chlorinated solvents and their breakdown products, including: 1,1,1-Trichloroethane (1,1,1-TCA), Tetrachloroethene (PCE), Trichloroethene (TCE), 1,1-Dichloroethane (1,1-DCA), 1,1-Dichloroethene (1,1-DCA), cis-1,2-Dichloroethene (cis-1,2-DCE), trans-1,2-Dichloroethene (trans-1,2-DCE), Chloroethane and Vinyl Chloride.

The NYSDEC is administering the Westchester County Airport Hangar D, Bay 2 Site under Article 27, Title 13 of the Environmental Conservation Law of the Sate of New York ("ECL") entitled "Inactive Hazardous Waste Disposal Sites". This program addresses hazardous waste sites, including sites where the responsible parties have been completing the work with NYSDEC approval. A Record of Decision (ROD) for the site was issued by the NYSDEC in March 2002 and subsequently a Remedial Design/Remedial Action Final Work Plan (RD/RA Work Plan) was issued by ExxonMobil in January 2003. As outlined in the ROD and RD/RA Work Plan, remedial efforts were implemented at the hangar including subsurface applications of potassium permanganate in April 2001 and September 2004 and start-up of a Soil Vapor Extraction (SVE) system in February 2004. A site location map is included as Figure 1 and a Site Plan is included as Figure 2.

Field Work and Documentation

Soil Vapor Sampling and Remedial System Operation

A chronological summary of soil vapor investigations and remedial efforts conducted at Hangar D is presented in Appendix A. Soil vapor samples from select vapor points used for a 1997 soil vapor survey (refer to Figure 2) were sampled in April 2005 with the SVE system operating. Then during routine operation and maintenance visits for the SVE system, the system was off upon arrival for the November 2006 visit. The blower had failed and could not be restarted. Upon consultation with the NYSDOH, soil vapor samples were collected in November 2006 in the vicinity of the SVE system with the system off to support system remedial data, evaluate the effectiveness of remediation to date, and to augment the soil vapor investigation.

Results from the April 2005 and November 2006 sampling events are summarized in Table 2. Tasks to implement the vapor sampling events are described in more detail in separate correspondence to the NYSDEC dated June 15, 2005 and in Appendix B herein.

Sub-slab Soil Vapor Investigation

Field tasks for the soil vapor investigation were conducted on February 21 and 22, 2006 with the SVE system operating and November 27 and 28, 2006 with the SVE system off. Samples were collected from the permanent sub-slab soil vapor probes SSV-1 and SSV-2 as depicted on Figure 2. Installation of the sub-slab soil vapor probes and results from the February 2006 field event are reported under cover dated April 20, 2006. A report summarizing the November 2006 field event is included in Appendix B herein. The laboratory analytical report for the November 2006 sampling event is included in Appendix C. A comparison of results from the February and November 2006 sampling events is presented in Table 1.

Results

Soil Vapor Sampling and Remedial System Operation

The goal of the SVE system is remediation of impacted soils above the water table by forced ventilation and volatilization. Soil vapor concentrations are a measure of the remedial effectiveness and progress of the system. In comparing soil vapor results from the 1997 survey to the April 2005 and November 2006 sampling events, current soil vapor concentrations are generally two to three orders of magnitude lower than those measured in 1997.

Sub-slab Soil Vapor Investigation

1,1,1-TCA, PCE and TCE were the only COCs detected in sub-slab soil vapor (refer to Table 1 and Appendix B). Detection limits for non-detect COCs were evaluated to confirm that they were appropriate for the investigation. Method detection limits for all non-detected compounds were below the most stringent 'No Further Action' criteria of 5 micrograms per cubic meter ($\mu g/m^3$) per Matrix 1 in the NYSDOH Guidance. Detections of 1,1,1-TCA and PCE were also below the 'No Further Action' criteria. Only TCE for the November 2006 sampling event was detected above the 'No Further Action' criteria.

Conclusions

In the active portion of the hangar, recent soil vapor sampling results were compared to pre-remediation concentrations. Chemical concentrations have decreased two to three orders of magnitude since implementing remedial measures.

In the hangar office area, only three of the nine identified COCs were detected in sub-slab soil vapor samples and only one COC for one sampling event (TCE for November 2006) was detected above the 'No Further Action' criteria identified in the NYSDOH Guidance.

Operation of the SVE system will resume and continue to promote soil remediation in accordance with the RD/RA Work Plan. In parallel, sub-slab soil vapor quality in the hangar office area will be monitored for an additional sampling event around November 2007 (the same season as the previous event) to confirm the concentration of TCE in sub-slab soil vapor.

On behalf of ExxonMobil Refining & Supply, we again want to express our appreciation for the time and assistance offered by all parties during the implementation of this work. Please contact the undersigned if we can respond to any questions or comments, or you require any additional information.

Sincerely,

Woodard & Curran

Anne E. Proctor, PE
Sr. Project Manager

Enclosures:
Table 1: Sub-slab Soil Vapor Sample Results
Table 2: Soil Vapor Sample Results
Figure 1: Site Location Map
Figure 2: Site Map
Appendix A: Chronology of Soil Vapor Investigations
Appendix B: "Soil Vapor Investigation" letter report from Roux Associates dated February 26, 2007
Appendix C: Analytical Laboratory Report

copy:
N. Walz – NYSDOH
M. Lamarre – ExxonMobil
M. Parletta – WCA
N. Hastings – W&C

TABLE 1
Sub-slab Soil Vapor Sample Results
Hangar D, Westchester County Airport

Parameters of Potential Concern	Sample Point SSV-1		Sample Point SSV-2	
	Feb-06	Nov-06	Feb-06	Nov-06
Chloroethane	<0.53	<0.53	<4.2	<2.6
1,1-Dichloroethane	<0.81	<0.81	<6.5	<4
1,1-Dichloroethylene	<0.79	<0.79	<6.3	<4
cis-1,2-Dichloroethylene	<0.79	<0.79	<6.3	<4
trans-1,2-Dichloroethylene	<0.79	<0.79	<6.3	<4
1,1,1-Trichloroethane	<1.1	**2.7**	**3.2 J**	**2.9 J**
Tetrachloroethylene	**1.3 J**	**11**	**33**	**59**
Trichloroethylene	<1.1	**9.1**	<8.6	**7**
Vinyl chloride	<0.51	<0.51	<4.1	<2.6

Notes:
All results are in micrograms per cubic meter.
J = Estimated below the detection limit
Detections are in bold type.

TABLE 2
Soil Vapor Sample Results
Hangar D, Westchester County Airport

PARAMETERS	VAPOR POINTS											
	VP-5			VP-9S			VP-9D			VP-10		
	Jul-97	Dec-97	Apr-05	Jul-97	Dec-97	Apr-05	Jul-97	Dec-97	Apr-05	Jul-97	Dec-97	Apr-05
Chloroethane	NA	NA	<4	NA	NA	<31	NA	NA	<3	NA	NA	<26
1,1-Dichloroethene	<1,000	**1,000**	<6	<1,000	**1,000**	<47	<1,000	**4,000**	<4	<1,000	**1,000**	<39
1,1-Dichlororethane	<1,000	**26,000**	<6	<1,000	**41,000**	<48	<1,000	**54,000**	<4	<1,000	**100,000**	<40
cis-1,2-Dichloroethene	<1,000	**1,000**	<6	<1,000	<1,000	<47	<1,000	**2,000**	<4	<1,000	<1,000	<39
trans-1,2-Dichloroethene	<1,000	<1,000	<6	<1,000	<1,000	<47	<1,000	<1,000	<4	<1,000	<1,000	<39
1,1,1-Trichloroethane	<1,000	**16,000**	<8	<1,000	**23,000**	<65	<1,000	**26,000**	<5	<1,000	**34,000**	<54
Trichloroethene	<1,000	<1,000	<8	<1,000	**17,000**	<64	<1,000	<1,000	<5	<1,000	**1,000**	<53
Tetrachloroethene	<1,000	**11,000**	**170**	<1,000	**17,000**	**510**	<1,000	**24,000**	**82**	<1,000	**41,000**	**920**
Vinyl Chloride	NA	NA	<4	NA	NA	<30	NA	NA	<3	NA	NA	<25

Notes:
All results are in micrograms per cubic meter.
NA = Not Analyzed
1997 samples analyzed using a field gas chromatograph. 2005 samples analyzed by a contract laboratory using EPA Method T015.
Detections are in bold.

TABLE 2 (continued)
Soil Vapor Sample Results
Hangar D, Westchester County Airport

PARAMETERS	VAPOR POINTS					
	VP-1S			VP-6		
	Jul-97	Dec-97	Nov-07	Jul-97	Dec-97	Nov-07
Chloroethane	NA	NA	<0.53	NA	NA	**7.1**
1,1-Dichloroethene	**26,000**	**24,000**	**40**	<1,000	**1,000**	**259**
1,1-Dichlororethane	<1,000	**70,000**	**514**	<1,000	**100,000**	**2,270**
cis-1,2-Dichloroethene	**2,000**	**9,000**	**7.1**	<1,000	<1,000	**599**
trans-1,2-Dichloroethene	**2,000**	**1,000**	**0.59**	<1,000	<1,000	**14**
1,1,1-Trichloroethane	**42,000**	**22,000**	**339**	<1,000	**34,000**	**4,300**
Trichloroethene	<1,000	**8,000**	**75.2**	<1,000	**1,000**	**747**
Tetrachloroethene	**2,000**	**112,000**	**1,840**	<1,000	**41,000**	**1,200**
Vinyl Chloride	NA	NA	**0.31**	NA	NA	**0.56**

Notes:
All results are in micrograms per cubic meter.
NA = Not Analyzed
1997 samples analyzed using a field gas chromatograph. 2007 samples analyzed by a contract laboratory using EPA Method T015.
Detections are in bold.

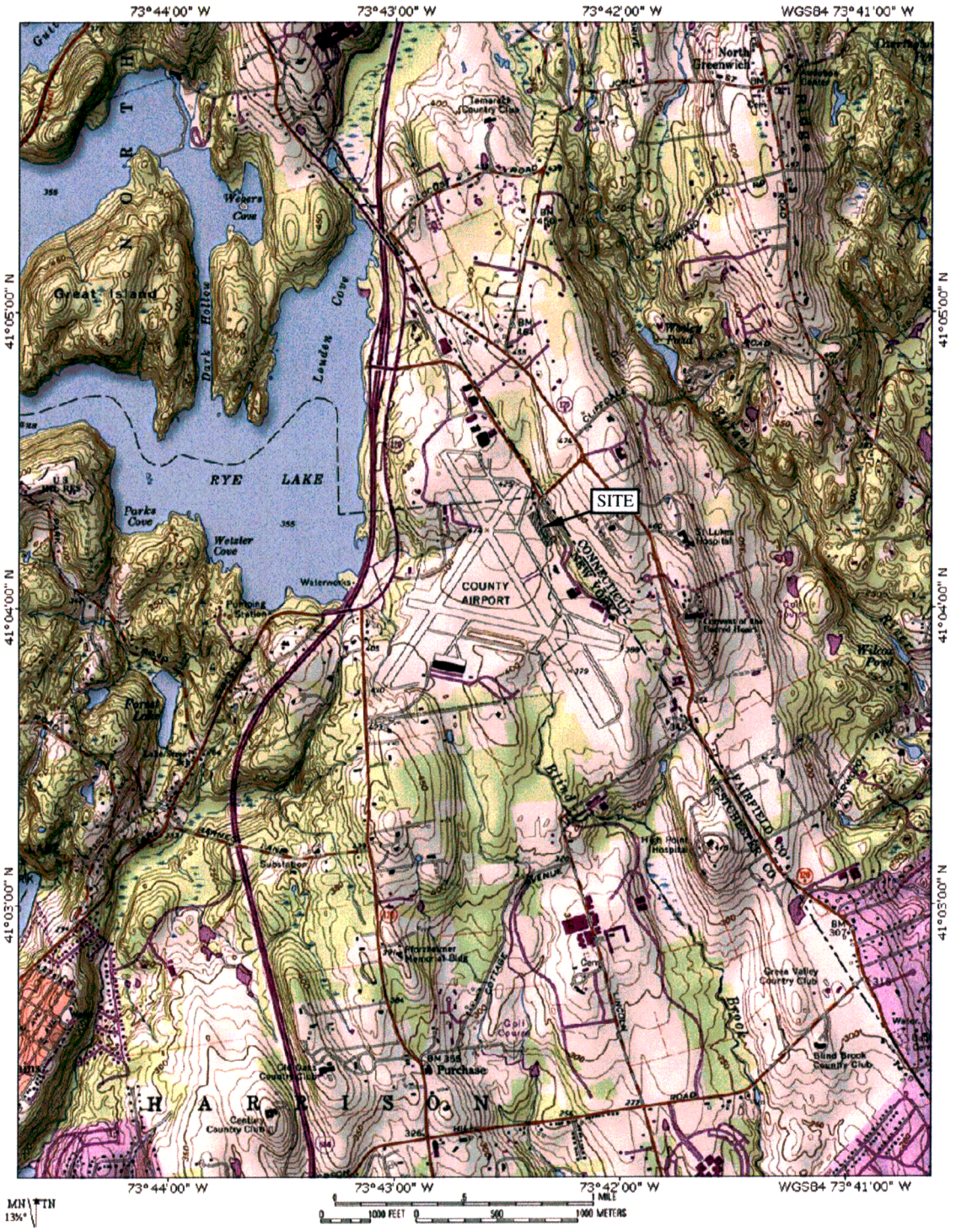
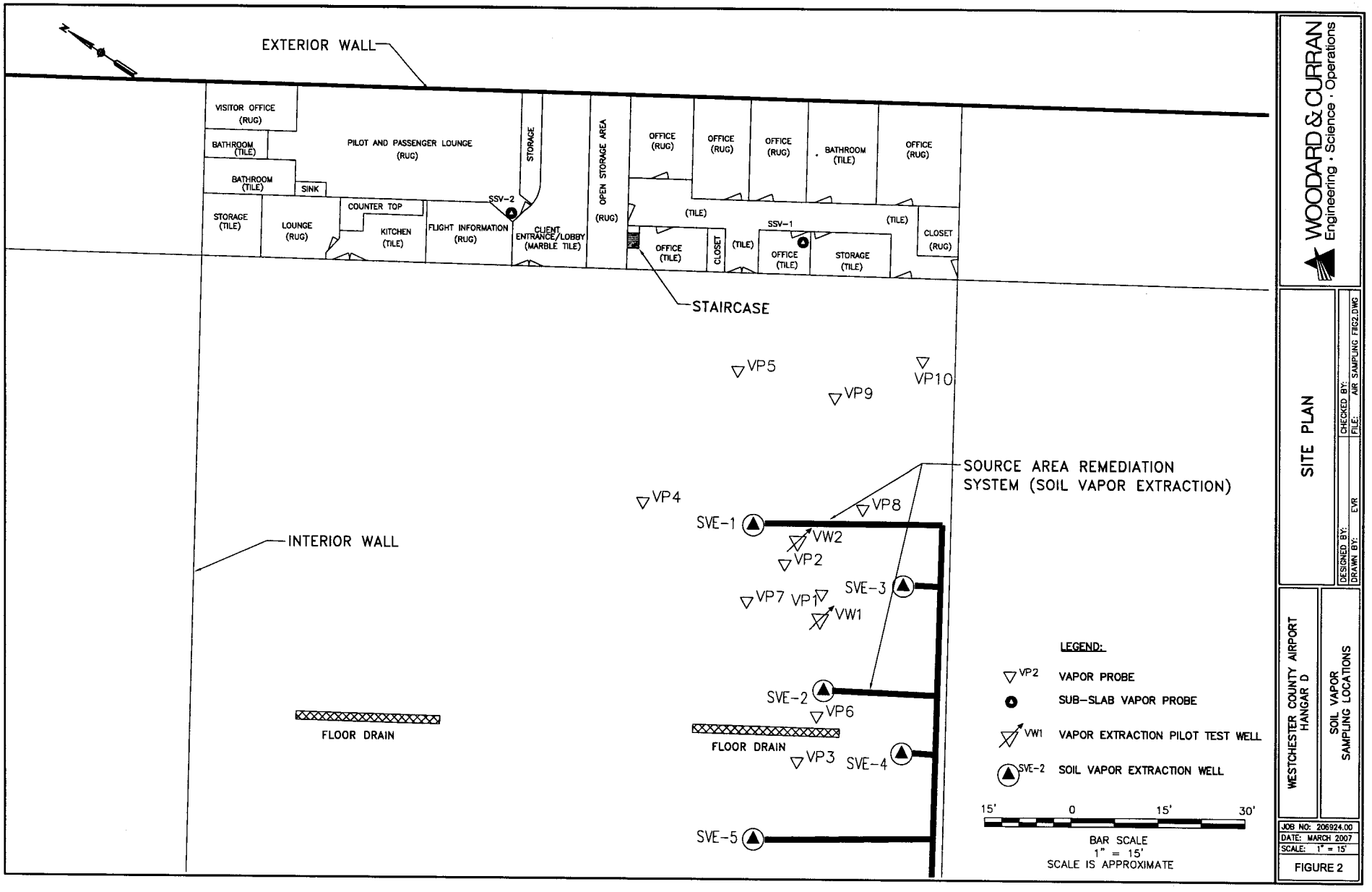


FIGURE 1
SITE LOCUS

Hangar D, Westchester County Airport
White Plains, New York



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SITE PLAN

DESIGNED BY:
DRAWN BY: EVR
CHECKED BY:
FILE: AIR SAMPLING FIG2.DWG

WESTCHESTER COUNTY AIRPORT
HANGAR D

SOIL VAPOR
SAMPLING LOCATIONS

JOB NO: 206924.00
DATE: MARCH 2007
SCALE: 1" = 15'

FIGURE 2

Chronology of Soil Vapor Investigations

Hangar D, Westchester County Airport, New York

Rev. 2, March 8, 2007

1991	January	Soil Gas Survey (Target Environmental Services) - 19 locations at 2 feet deep - Primary COCs: 1,1,1-TCA, PCE, 1,1-DCA and 1,1-DCE
	April	Soil Vapor Extraction Pilot Test (Vapex Environmental Technologies)
1997	July, Dec.	Soil Vapor Probes VP-1 through VP-10 and vapor extraction wells VW-1 and VW-2 were sampled in July and December (Xpert Design & Diagnostics) - 17 locations at 1.5 to 9 feet deep - Primary COCs: : 1,1,1-TCA, PCE, 1,1-DCA and 1,1-DCE
2001	April	Potassium Permanganate Applications in the vicinity of well MW-01 and MW-02
2004	February	SVE System Start-up
	September	Potassium Permanganate Applications in the vicinity of well MW-01 and MW-02
2005	January	NYSDEC faxed November 16, 2004 letter from NYSDOH: - Expressed concern over suspending operation of the SVE system during Potassium Permanganate Application. - Requested sampling plan for review to evaluate the potential for vapor intrusion and subsequent human exposures within the office spaces based on review of historic data. Response to Nov. 16, 2004 NYSDOH letter sent to NYSDEC: - Reason for suspending operation SVE system explained (to mitigate the withdrawal of permanganate solution into the SVE blower). - Vapor migration pathways, groundwater flow, indoor sources, and remedial efforts were discussed
	February	*Draft Guidance for Evaluating Soil Vapor Intrusion in the State of New York* posted on the NYSDOH website for public comment.
	March	NYSDEC faxed February 8, 2005 letter from NYSDOH: - Cited 1997 vapor data as evidence of plume under slab - Concern over limited influence of the SVE system - Migration pathways discussed: VOCs in groundwater, coarse material under slab, measures to isolate indoor sources of VOCs during sampling - Requested Soil Vapor Investigation Plan for state review

Chronology of Soil Vapor Investigations

Hangar D, Westchester County Airport, New York

Rev. 2, March 8, 2007

	April	Vapor samples were collected to update the 1997 vapor data and sub-slab vapor pressure monitoring was expanded to update SVE operating parameters cited in the Feb. 8, 2005 NYDSOH letter.
	June	Response to Feb. 8, 2005 NYDSOH letter sent to NYSDEC: Data from the April monitoring event provided: - Vapor concentrations have decreased 2-3 orders of magnitude since 1997 - SVE system radius of influence is upwards of 50 feet under actual operating conditions - Migration pathways discussed: remedial activities reiterated, sampling conducted specific to soil vapor NYSDEC faxed June 23, 2005 letter from NYSDOH reiterating request for Soil Vapor Investigation Work Plan for state review - Problems with April event: samples not sub-slab, SVE system operating, not during the heating season, not at the office area, high analytical detection limits, not enough details (methods, tracer compounds, weather conditions) - Referenced *Draft Guidance for Evaluating Soil vapor Intrusion in New York State* - Levels of VOCs in soil vapor indicate the need to further evaluate vapor intrusion. Options are to either conduct sampling and monitoring or provide a sub-slab depressurization system.
	July	Meeting with NYSDEC, NYSDOH and ExxonMobil on July 19, 2005
	September	Submit Soil Vapor Investigation Work Plan dated Sept. 30, 2005
	October	NYSDEC approves Sept. 2005 Work Plan incorporating NYSDOH comments in letter dated Oct. 5, 2005
2006	February	Install sub-slab soil vapor sampling probes (SSV-1 and SSV-2) and conduct sub-slab soil vapor sampling event on Feb. 21 and 22, 2006 *Note: The SVE system was in operation.*
	April	Issue soil vapor investigation report dated April 20, 2006 Receive comments from NYSDEC in electronic mail of April 24, 2006
	May	Respond to NYSDEC comments via electronic mail on May 4, 2006. Proposed to conduct a second soil vapor sampling event.

	November	The SVE system was off upon arrival for the November monthly field visit. The blower had failed and needed to be replaced. With the system off and following consultation with the NYSDOH, soil vapor samples were collected in the vicinity of the SVE system area to support system remedial data. Follow-up soil vapor sampling event, including sub-slab and soil vapor samples, conducted Nov. 27 and 28, 2006 *Note: The SVE system was <u>not</u> in operation.*
2007	March	Report soil vapor results.

ENVIRONMENTAL CONSULTING & MANAGEMENT
ROUX ASSOCIATES INC

67 SOUTH BEDFORD STREET
SUITE 101W
BURLINGTON, MASSACHUSETTS 01803 TEL: 781-270-6600 FAX: 781-270-9066

March 5, 2007

Ms. Anne Proctor
Project Manager
Woodard & Curran
1520 Highland Avenue
Cheshire, Connecticut 06410

Re: Soil Vapor Investigation
Hangar D, Westchester County Airport
White Plains, New York
Site #360037

Dear Anne:

Roux Associates completed a second soil vapor intrusion investigation for Hangar D, Bay 2 located at the Westchester Country Airport in White Plains, New York. This investigation was completed at the request of the New York State Department of Health (NYSDOH) and the New York State Department of Environmental Conservation (NYSDEC) as additional data points to support the Soil Vapor Investigation described in April 2006. The work was outlined in the Vapor Intrusion Investigation Work Plan (Work Plan) dated September 30, 2005 that was approved by the NYSDEC on October 5, 2005, incorporating NYSDOH comments. Two soil vapor samples were also collected from the soil vapor extraction (SVE) unit; these results will be presented under a separate cover.

The Work Plan was implemented in general accordance with the February 2005 NYSDOH *Draft Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (NYSDOH Draft Guidance), on which it was based, and the more recent *Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (NYSDOH Final Guidance). Field tasks for the soil vapor investigation were conducted on November 27 and 28, 2006. The primary chemicals of concern (COCs) for the project (refer to Section 3.1 of the Work Plan) were chlorinated solvents and their breakdown products, including: 1,1,1-Trichloroethane, Tetrachloroethene, Trichloroethene, 1,1-Dichloroethane, 1,1-Dichloroethene, cis-1,2-Dichloroethene, trans-1,2-Dichloroethene, Chloroethane and Vinyl Chloride. This report summarizes the field tasks and presents the results of the soil vapor investigation.

Work Plan Implementation

Field tasks for the soil vapor investigation were conducted on November 27 and 28, 2006. On November 27, 2006, sub-slab soil vapor samples were collected and a brief chemical survey was conducted to identify additional products in the hangar that could contain the COCs.

Building Survey and Product Review

A building survey and product inventory had been conducted on February 22, 2006. The building use remains as it was in February 2006; therefore, the evaluation identified changes to the building and additional observations. In February 2006, Gonzalo Montoya of Landmark Aviation, supervisor for Hangar D1 Bay 2 and Hangar D3, was interviewed for the survey. He was not available to describe changes; however, building tenants confirmed that the maintenance (south) side of the office portion of the hangar had been renovated in approximately late September 2006. The area was recarpeted, and some painting may have occurred. Notes showing the area of recarpeting, floor staining (in the bay of the hangar), drums and a parts washer containing (unlabelled) fluid, are attached. As identified in April 2006, various chemical products stored and used at the hangar, coupled with the presence of new carpeting, paint, and laundry, provide several potential sources of COCs within the hangar building.

Sample Collection and Analysis

Soil vapor samples were collected from permanent sampling points that had been previously installed. Soil vapor samples SSV-1 and SSV-2 were collected on November 27, 2006. The outdoor temperature was 54°F and the heating units were operational. Air movement within the hangar shifted during the day, depending on whether the hangar door was open or closed. The airflow was qualitatively measured when the hangar door was closed, and showed that air was generally flowing into the building through doorways and toward ventilation system ductwork located in the vicinity of sampling points.

Soil vapor samples were collected in lab certified clean Summa canisters equipped with pre-set flow meters at a rate less than 0.2 liters per minute. Prior to collecting samples, the sample probes were purged of three times the volume of the sampling point. In addition, Helium tracer gas screening was performed to verify that no short-circuiting was present at the sample location. Soil vapor from sampling points SSV-1 and SSV-2 were each collected for a period of 4.02 hours (Sample durations were a function of the pre-set flow meters integral to the Summa canisters.). Following collection, the canisters were transported to Accutest Laboratories of Dayton, New Jersey, an Environmental Laboratory Approval Program (ELAP) certified analytical laboratory.

Results

Results for COCs are summarized on Table 1. 1,1,1-TCA, TCE and PCE were the only COCs detected in subsurface soil vapor in the office portion of the building; 1,1,1-TCA and PCE were also detected in the February 2006 sampling round. PCE results increased slightly from February, while 1,1,1-TCA results were mixed (SSV-1 increased while SSV-2 decreased). As detailed below, the concentrations were compared to three sets of comparison criteria:

- SSV-1 and SSV-2 concentrations were compared to the most stringent soil vapor comparison value in Matrices 1 and 2 of the NYSDOH Final Guidance.
- SSV-1 and SSV-2 concentrations were also compared to soil vapor concentrations above which no indoor air impact over background would be anticipated to occur (refer to Section 3.2.4 of the NYSDOH Final Guidance)
- SSV-1 and SSV-2 concentrations were compared to soil vapor concentrations above which no indoor air impact over NYSDOH Indoor Air Guidance would be anticipated to occur (refer to Section 3.2.5 of the NYSDOH Final Guidance).

As most of the COCs were not detected in soil vapor, detection limits for non-detect COCs were evaluated to confirm that they were appropriate for the investigation. Surrogate concentrations, equal to one half the detection limit, were also compared to the above criteria.

First, concentrations were compared to soil vapor comparison values presented in the NYSDOH Final Guidance. As shown in Table 2, 1,1,1-TCA and PCE were detected at concentrations well below the most stringent soil vapor comparison values presented in the Final Soil Vapor/Indoor Air Matrix 1 and Matrix 2 of the NYSDOH Final Guidance. In addition, method detection limits for all non-detect compounds were below the most stringent 'No Further Action' criteria. TCE was detected in soil vapor at concentrations of 7 and 9.1 ug/m^3. These concentrations are in excess of the lowest 'No Further Action' sub-slab vapor value of 5 ug/m^3. In order to determine whether further action is warranted, indoor air concentrations were estimated[1] and compared to the concentrations in Matrix 1. As estimated indoor air concentrations are between 0.25 and 1 ug/m^3, the decision based on the matrix would be to monitor TCE concentrations.

Second, concentrations were compared to derived target soil vapor concentrations based on background indoor air concentrations. This comparison was completed as background levels of certain contaminants are expected to be present in indoor air, regardless of a subsurface source. Background soil vapor comparison values were derived by multiplying the background indoor air concentration (cited in the NYSDOH Final Guidance) by an attenuation factor of twenty. (An adjustment of 20 was used as it represents the lower of the two attenuation factors provided in Decision Matrices 1 and 2

[1] Indoor air concentrations were calculated assuming an attenuation of 20. Therefore, indoor air concentration estimates are 0.46 ug/m^3 (SSV-1) and 0.35 ug/m^3 (SSV-2).

of the NYSDOH Draft Guidance.) Table 2 presents the comparison of detected and surrogate soil vapor concentrations to the soil vapor background target. As shown on Table 2, no sub-slab vapor concentrations exceeded the target 'background' sub-slab vapor concentrations.

Concentrations were also compared to derived target soil vapor concentrations based on NYSDOH Indoor Air Guidelines. The Indoor Air Guidelines, which are available for TCE and PCE, were developed by NYSDOH to be protective of residential indoor air exposures. The values were multiplied by 20 to estimate the target sub-slab soil vapor concentration. As shown on Table 2, no sub-slab vapor concentrations exceeded the target air guideline sub-slab vapor concentrations.

Conclusions

Only three of the nine identified COCs were detected in sub-slab soil vapor samples. The concentrations of the COCs were below or within the 'No Further Action' target vapor concentration ranges identified in the NYSDOH Draft Guidance, with the exception of TCE, which was within the 'Monitor' vapor concentration range. All constituents were below target soil vapor concentrations based on indoor air background and NYSDOH Indoor Air Guidelines. Sampling conditions represented conservative, worst-case conditions (*i.e.*, in the winter during the heating season with falling barometric pressure). Therefore, Roux Associates recommends monitoring the sub slab soil vapor for TCE; no further action is proposed to address the other COCs.

Please contact me at 781-270-6600 if I can respond to any questions or comments, or you require any additional information.

Sincerely,

ROUX ASSOCIATES, INC.

Denise Kmetzo
Senior Risk Assessor

cc: Noelle Clarke, Roux Associates
Michael Lamarre, ExxonMobil

Attachments

Table 1
Soil Vapor Sampling Results for Chemicals of Concern
Hangar D, Westchester County Airport

Analyte	SSV-1	SSV-2	VP-1S	VP-6
Chloroethane	0.53 U	2.6 U	0.53 U	7.1
1,1-Dichloroethane	0.81 U	4 U	514	2270
1,1-Dichloroethylene	0.79 U	4 U	40	259
cis-1,2-Dichlooethylene	0.79 U	4 U	7.1	599
trans-1,2-Dichloroethylene	0.79 U	4 U	0.59 J	14
1,1,1-Trichloroethane	2.7	2.9 J	339	4300
Tetrachloroethylene	11	59	1840	1200
Trichloroethylene	9.1	7	75.2	747
Vinyl chloride	0.51 U	2.6 U	0.31 J	0.56

Notes:
samples were collected on November 27 and 28, 2006
Results in ug/m³
U = Undetected
J = Estimated concentration below the detection limit

Table 2
Soil Vapor Results Comparisons for Chemicals of Concern (1)
Hangar D, Westchester County Airport

	Soil Vapor Results		Indoor Air Values		Soil Vapor Comparison Values		
Analyte	**SSV-1**	**SSV-2**	**Background Indoor Air Value (2) (BV)**	**Indoor Air Guideline Value (3) (GV)**	**Target Background Soil Vapor (4) (BV x 20)**	**Target Soil Vapor Guideline Value (5) (GV x 20)**	**Soil Vapor Matrix Comparison Value (6)**
Chloroethane	0.53 U	2.6 U	1.1 U		11		5
1,1-Dichloroethane	0.81 U	4 U	0.7 U		7		5
1,1-dichloroethylene	0.79 U	4 U	1.4 U		14		5
cis-1,2-Dichlooethylene	0.79 U	4 U	1.9 U		19		5
trans-1,2-Dichloroethylene	0.79 U	4 U	NA		NA		5
1,1,1-Trichloroethane	2.7	2.9 J	20.6		412		100
Tetrachloroethylene	11	59	15.9	100	318	2000	100
Trichloroethylene	9.1	7	4.2	5	84	100	5
Vinyl chloride	0.51 U	2.6 U	1.9 U		19		5

Notes:
(1) All values are in ug/m³
(2) Background indoor air value is equal to the 90th percentile value from the EPA 2001 BASE study, as provided by NYSDOH in Appendix C, (NYSDOH, 2006)
(3) Indoor air guideline values were derived by the NYSDOH and were obtained from Table 3.1 (NYSDOH, 2006).
(4) Target background soil vapor concentration is equal to the background indoor air target (or one-half the detection limit, if it was not detected) multiplied by an attenuation factor of 20.
(5) Target soil vapor guideline values are equal to the indoor air guideline value multiplied by an attenuation factor of 20.
(6) Soil matrix comparison value is the lowest 'No Further Action' sub-slab vapor value for the chemical presented in Decision Matrices 1 and 2, NYSDOH, 2006. In the absence of a chemical-specific value, the lowest value of 5 ug/m³ was used as a default comparison value.
Samples were collected on November 27 and 28, 2006
U = Undetected
J = Estimated concentration below the detection limit

If the property is residential, type? (Circle appropriate response)

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other:_____

If multiple units, how many? _____

If the property is commercial, type?

Business Type(s) _____

Does it include residences (i.e., multi-use)? Y / N If yes, how many? _____

Other characteristics:

Number of floors_____ Building age_____

Is the building insulated? Y / N How air tight? Tight / Average / Not Tight

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:
Measured at approximately 2 pm, 11/27/06

Airflow between floors
air is flowing up stairs near front door

Airflow near source Samples
air flowing from reception area into lounge / closet (SSV-2)
air flowing from office to hallway (SSV-2)
air flowing to center of hangar and mixing (VP-6)
air flowing toward maintence / office area (VP-15)
Hangar (garage) door open for at least 1 hr. ~~for~~ during sampling. Door from hangar → hallway propped open for at least 2 hours during sampling.

Outdoor air infiltration
front door - neutral; air was flowing from exit stairwell at the south end of hallway into hallway; hangar exit door (through hangar door) - air flowing into hangar.

Infiltration into air ducts
air flowing into ductwork ~~into~~ in office where sample SSV-1 was located. ceiling fans in hangar and heating units were turned on during sampling

ROUX

CALCULATION FORM

CLIENT/PROJECT XOM - Westchester County Airport PAGE ____ OF ____
BY Denise Kmetzo DATE 11/27/2006 PROJECT NO. ____
CHECKED BY ____ DATE ____

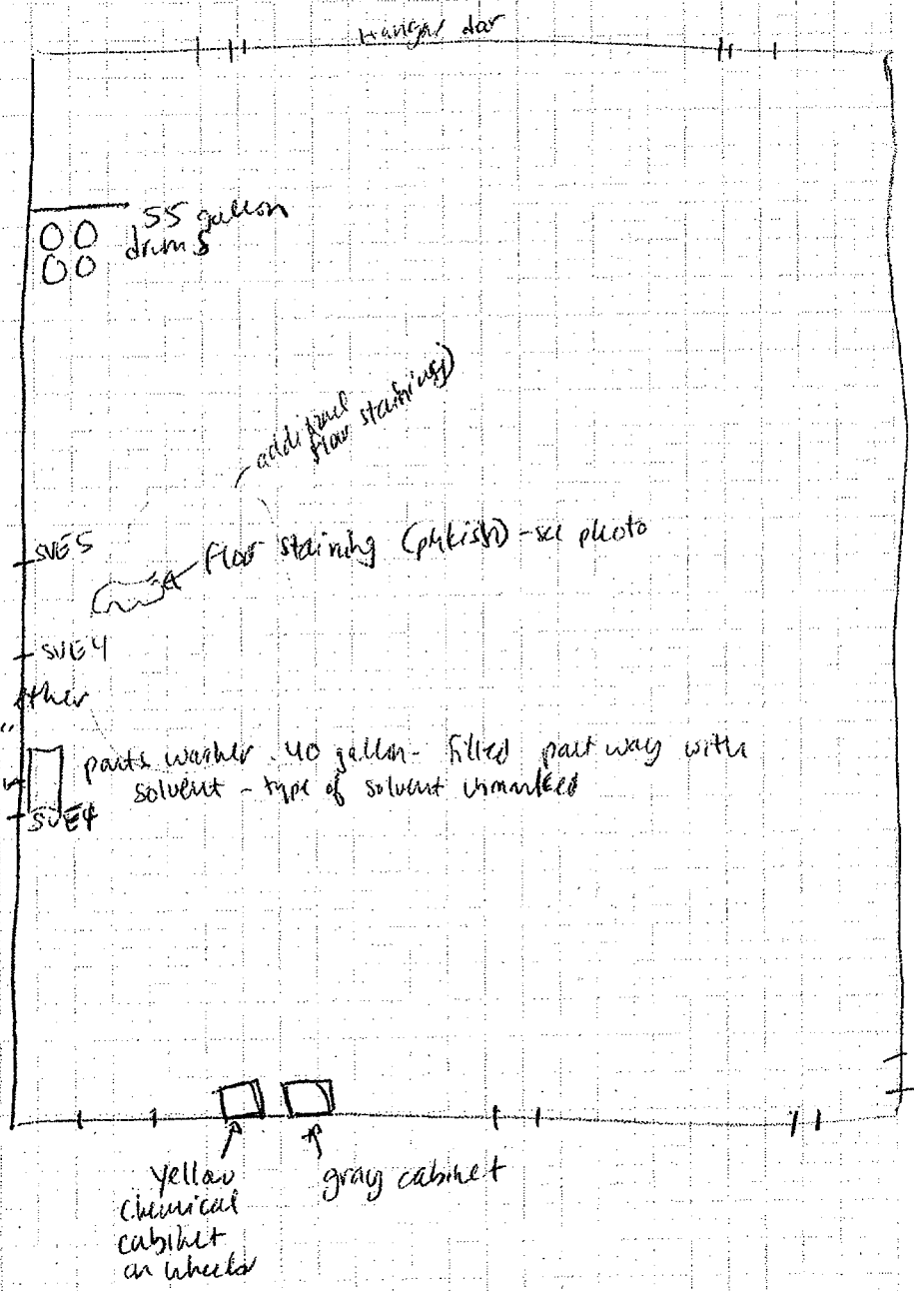
DESCRIPTION Hangar D inventory review

Generally, hangar/equipment have not changed since 2/2006 visit. Additional cabinets (gray, yellow chemical) were are located near the fire suppression system on the N wall. Below, changes / observations not marked on 2/2006 hand drawn maps are noted.

Drums

- plastic 55 gal - labelled sump fluid only - vented at top
- plastic 55 gal - NO LABEL TAPE hose coming out of top
- metal 55 gal - mineral spirits - closed
- red metal 55 gal - unlabelled, could not access back of drum to see if label facing wall
  - open at top w/ funnel
  - funnel stained dark
- Diethylene Glycol monomethyl ether labelled "Parts Washer Fluid"
- 5 gallon Red Thunder cleaner
- Degreaser - ethylene glycol monobutyl ether

(see photos)



CALCULATION FORM

ROUX

CLIENT/PROJECT XOM / WCA

PAGE ____ OF ____

BY Denise Kmetzo

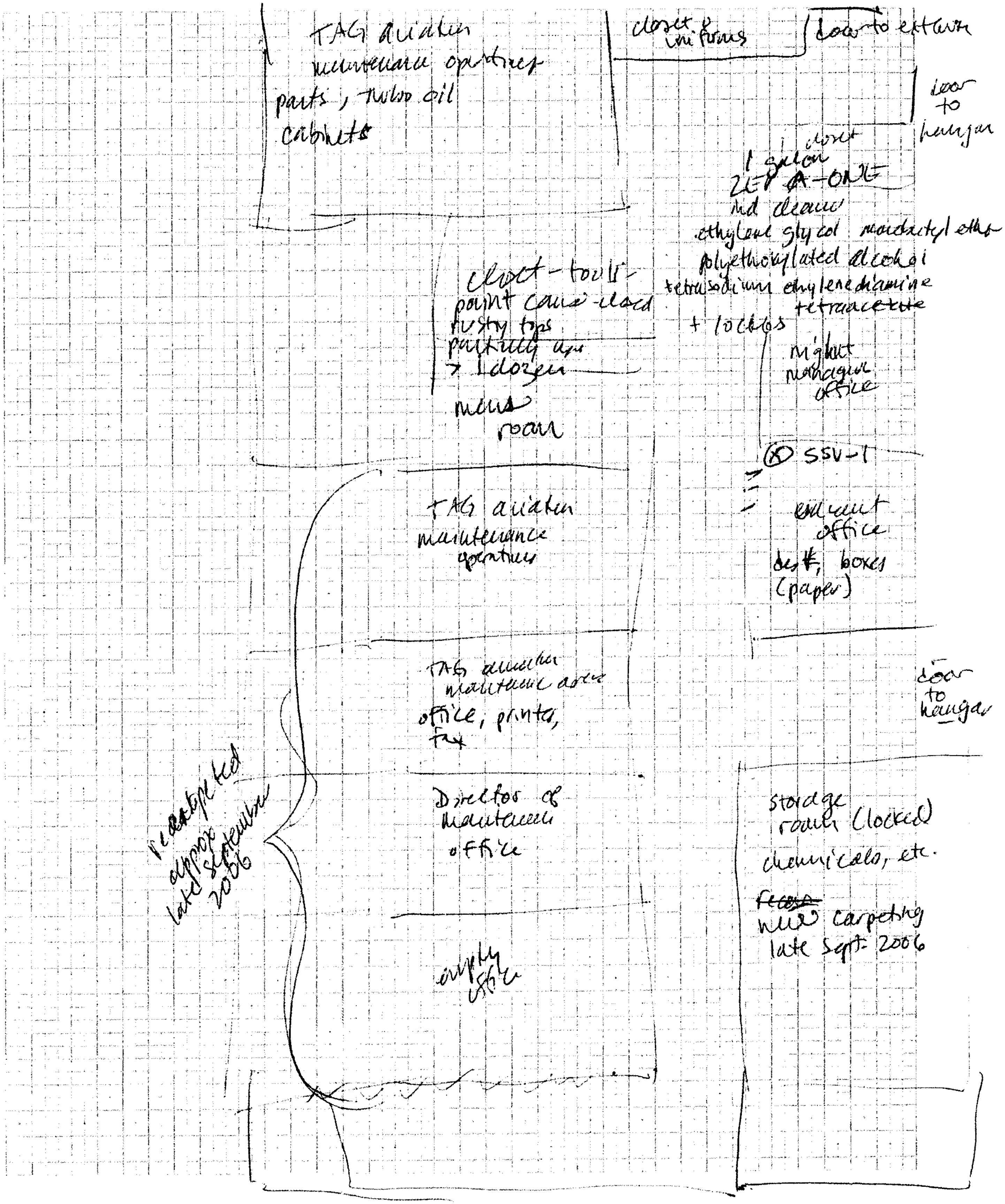
DATE 11/27/2006

PROJECT NO. ____

CHECKED BY ____

DATE ____

DESCRIPTION ____



Indoor Air Quality Questionnaire and Building Inventory Update
Performed by Denise Kmetzo, Roux Associates, November 21, 2006

A complete questionnaire was completed on February 21, 2006, during an interview with Gonzalo Montoya. Mr. Montoya was unavailable on November 27, 2006 to complete a follow-up questionnaire. The building owner/occupancy/use remains as it was in February 2006.

The airflow was qualitatively evaluated using tracer smoke and section 4 of the questionnaire was completed and is attached. In addition, an inventory review was performed. As no guide was available to open doors/closets and answer questions, the inventory was conducted as a self-tour. Generally, the hangar appears to contain the same types of equipment, compressed air, cabinets and workstations as were present in February 2006. The attached photographs and notes identify changes or additional information that was collected.

During the time of soil vapor sampling, activity in the hangar included the movement of planes (at least two planes were moved out of the hangar, four planes were moved into the hangar and one plane remained in the hangar throughout sampling), plane maintenance, and opening and closing of the large hangar door numerous times. The hangar door remained open for approximately 40 minutes during the early afternoon. Ceiling fans in the main area of the hangar and heating units were operating during sampling.

The air current evaluation was performed when the large hangar door was closed, and is documented on the attached sheet of paper, Section 4 of the NYSDOH Indoor Air Quality Questionnaire (obtained from Appendix B, Final NYSDOH CEH BEEI Soil Vapor Intrusion Guidance, October 2006).

Soil Vapor Sampling Form
Weschester County Airport
ExxonMobil Refining & Supply Company
White Plains, New York

Date: 11/27/06 **Time:** 0915
Weather : 47° (high of 64°), clear skies
Temperature: 54°F/12.2°C Humidity: 67%
Wind Magnitude: 0 m/h Wind Direction: NA
Barometric Pressure: 30.28 in Hg (Falling) / Rising

Sampling Team: T. Pitkin, J. Hime (Roux)
Sampling Location: VP-6
Site Condition (i.e. any adjacent questionable facilities, vent pipes, tanks, etc. and what type of basements are present)
Inside active airport hangar; jets present; slight jet fuel odor; SVE system off; hanger doors open; maintenance work taking place on jets

Prior to commencing the GeoProbe activity, ensure that all the rods were properly deconed and a new disposable tip is present at the end of the rods.

Calibrate the Helium detection meter

Utility Clearance Completed: Y (N) NA
Sampling Depth: 3' feet below land surface
Sealed at land surface and rod tip: (Y) N
Purge Rate: 0.199 L/min Must be less than 0.2 L/min
Purge Time: 1.5 min note : Assuming 0.17" I.D. tubing purge 15 sec. for every 10 ft of tubing
Helium Rate at enclosure: 4×10^{-3}; 2nd time: 4×10^{-3}; 3rd time: 4×10^{-3} mL/sec
Helium Rate from sample tubing: 3×10^{-3} Is this rate <20% of the rate at the enclosure (Y) N
2nd time: 3×10^{-3}; 3rd time: 0×10^{-5} mL/sec

If the Helium readings have a greater ratio than 20% the seals should be rechecked and the tracer gas should be reapplied.

Once the tracer gas screening procedures are completed and no short-circuiting is determined to be present at the location the soil vapor sample can be collected in a lab certified clean summa canister at a rate less than 0.2 L/min.

Finishing pressure should be within 0.5 - 4 " of Hg

Is the Summa Canister Certified Clean and within the proper holding time ? (Y) N

Starting Pressure: -28 in. of Hg
Starting Time: 0953
Ending Time: 1423
Ending Pressure: -2.5 in. of Hg

Summa Canister Identification #: 6473
Flow Regulator ID # FC183
Sample ID # VP-6 **Time** 0953
Analysis TO-15

Soil Vapor Sampling Form
Weschester County Airport
ExxonMobil Refining & Supply Company
White Plains, New York

Date: 11/27/06 **Time:** 1020
Weather : 47° (high of 64°) clear skies
Temperature: 54°F/12.2°C Humidity: 67%
Wind Magnitude: 0 mph Wind Direction: NA
Barometric Pressure: 30.28 in Hg (Falling) Rising

Sampling Team: T. Pitturk, J. Hinze (Roux)
Sampling Location: SSV-2
Site Condition (i.e. any adjacent questionable facilities, vent pipes, tanks, etc. and what type of basements are present)
Sampling location ~10' from active airport hangar, inside closet near high traffic area. Chair located in nice passenger lounge by kitchen right out door. Possibility of nearby crawlspace ~8' away. Old carpeting in closet. Added additional adhesive for carpeting. Building leaks operating.

Prior to commencing the GeoProbe activity, ensure that all the rods were properly deconed and a new disposable tip is present at the end of the rods.

Calibrate the Helium detection meter

Utility Clearance Completed: Y (N) NA
Sampling Depth: 6.5" feet below land surface
Sealed at land surface and rod tip: (Y) N
Purge Rate: 0.1991 L/min Must be less than 0.2 L/min
Purge Time: 30 sec note : Assuming 0.17" I.D. tubing purge 15 sec. for every 10 ft of tubing
Helium Rate at enclosure: 7×10^{-3} mL/sec
Helium Rate from sample tubing: 0×10^{-3} mL/sec Is this rate <20% of the rate at the enclosure (Y) N

If the Helium readings have a greater ratio than 20% the seals should be rechecked and the tracer gas should be reapplied.

Once the tracer gas screening procedures are completed and no short-circuiting is determined to be present at the location the soil vapor sample can be collected in a lab certified clean summa canister at a rate less than 0.2 L/min.

Finishing pressure should be within 0.5 - 4 " of Hg

Is the Summa Canister Certified Clean and within the proper holding time ? (Y) N

Starting Pressure: -31 in. of Hg
Starting Time: 1032
Ending Time: 1433
Ending Pressure: -3.2 in. of Hg

Summa Canister Identification #: 6549
Flow Regulator ID # FC305
Sample ID # SSV-2 **Time** 1032
Analysis TO-15

Soil Vapor Sampling Form
Weschester County Airport
ExxonMobil Refining & Supply Company
White Plains, New York

Date: 11/23/16 **Time:** 1035
Weather : 47° (high of 64°), clear skies
Temperature: 59°F/12.2°C Humidity: 67%
Wind Magnitude: 0 mph Wind Direction: NA
Barometric Pressure: 30.28 in Hg (Falling) / Rising

Sampling Team: T. Pitkin, J. Hinz (Roux)
Sampling Location: SSV-1
Site Condition (i.e. any adjacent questionable facilities, vent pipes, tanks, etc. and what type of basements are present)
Sampling location adjacent to chemical storage workshop (i.e., oil, etc.); also adjacent to 2 other workshops (1 stockroom, 1 locked room); ~10' from active airport hangar; inside unused office space; bathroom across the hall; intake vents inside the sampling office; UST outside in front of office ~30' away; carpeting ~1.5 yrs old; walls painted ~1.5 yrs ago; building heater operating

Prior to commencing the GeoProbe activity, ensure that all the rods were properly deconed and a new disposable tip is present at the end of the rods.

Calibrate the Helium detection meter

Utility Clearance Completed: Y/N/NA
Sampling Depth: 6.5' feet below land surface
Sealed at land surface and rod tip: Y / N
Purge Rate: 0.199 L/min Must be less than 0.2 L/min
Purge Time: 30 sec note : Assuming 0.17" I.D. tubing purge 15 sec. for every 10 ft of tubing
Helium Rate at enclosure: 1.10^{-2} ml/sec
Helium Rate from sample tubing: 0.8×10^{-3} ml/sec Is this rate <20% of the rate at the enclosure (Y) N

If the Helium readings have a greater ratio than 20% the seals should be rechecked and the tracer gas should be reapplied.

Once the tracer gas screening procedures are completed and no short-circuiting is determined to be present at the location the soil vapor sample can be collected in a lab certified clean summa canister at a rate less than 0.2 L/min.

Finishing pressure should be within 0.5 - 4 " of Hg

Is the Summa Canister Certified Clean and within the proper holding time ? (Y) N

Starting Pressure: -28.5 in. of Hg
Starting Time: 1044
Ending Time: 1445
Ending Pressure: -2.9 in. of Hg

Summa Canister Identification #: 5723
Flow Regulator ID # FC 225
Sample ID # SSV-1 **Time** 1044
Analysis TO-15

Soil Vapor Sampling Form
Weschester County Airport
ExxonMobil Refining & Supply Company
White Plains, New York

Date: 11/27/06 **Time:** 1000
Weather : 47° (high of 64°), clear skies
Temperature: 54°F/12.2°C Humidity: 67%
Wind Magnitude: 0 mph Wind Direction: NA
Barometric Pressure: 30.28 inHg (Falling) / Rising

Sampling Team: T. Pitterle, J. Hince (Roux)
Sampling Location: VP-15
Site Condition (i.e. any adjacent questionable facilities, vent pipes, tanks, etc. and what type of basements are present)
Inside active airport hangar; jets present; slight jet fuel odor; SVE system off; hanger doors open; maintenance work taking place on jets

Prior to commencing the GeoProbe activity, ensure that all the rods were properly deconed and a new disposable tip is present at the end of the rods.

Calibrate the Helium detection meter

Utility Clearance Completed: (Y)/N NA
Sampling Depth: 2' feet below land surface
Sealed at land surface and rod tip: (Y) N
Purge Rate: 0.199 L/min Must be less than 0.2 L/min
Purge Time: 1 min note : Assuming 0.17" I.D. tubing purge 15 sec. for every 10 ft of tubing
Helium Rate at enclosure: 1×10^{-2} mL/sec
Helium Rate from sample tubing: 0×10^{-5} mL/sec Is this rate <20% of the rate at the enclosure (Y) N

If the Helium readings have a greater ratio than 20% the seals should be rechecked and the tracer gas should be reapplied.

Once the tracer gas screening procedures are completed and no short-circuiting is determined to be present at the location the soil vapor sample can be collected in a lab certified clean summa canister at a rate less than 0.2 L/min.

Finishing pressure should be within 0.5 - 4 " of Hg

Is the Summa Canister Certified Clean and within the proper holding time ? (Y) N

Starting Pressure: -31 in. of Hg
Starting Time: 1014
Ending Time:
Ending Pressure: in. of Hg

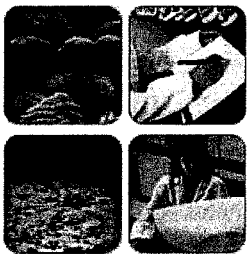
Summa Canister Identification #: 4215
Flow Regulator ID # FC161
Sample ID # VP-15 **Time** 1014
Analysis TO-15

* After almost 24 hrs, summa canister regulator still reading -28.5" Hg
→ Collect grab air sample @ 0945 on 11/28/06

New Jersey ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

02/28/07



Technical Report for

Woodard & Curran

ExxonMobil Terminal Orphin, Hanger D, Westchester Airport, White Plains, NY

PO#4505926268 WBS#08

Accutest Job Number: J47603

Sampling Dates: 11/27/06 - 11/28/06

Report to:

Woodard & Curran

Aproctor@woodardcurran.com

ATTN: Anne Proctor

Total number of pages in report: **19**

ACCUTEST LABORATORIES 50 YEARS 1956-2006

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Vincent J. Pugliese
President

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, PA, RI, SC, TN, VA, WV

Sections:

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Sample Summary

Woodard & Curran

Job No: J47603

ExxonMobil Terminal Orphin, Hanger D, Westchester Airport, White Plains, NY
Project No: PO#4505926268 WBS#08

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
J47603-1	11/27/06	14:45	TP	11/29/06	AIR	Air	SSV-1
J47603-2	11/27/06	14:33	TP	11/29/06	AIR	Air	SSV-2
J47603-3	11/27/06	14:23	TP	11/29/06	AIR	Air	VP-6
J47603-4	11/28/06	09:45	TP	11/29/06	AIR	Air	VP-15

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	SSV-1		
Lab Sample ID:	J47603-1	Date Sampled:	11/27/06
Matrix:	AIR - Air Summa ID: A343	Date Received:	11/29/06
Method:	TO-15	Percent Solids:	n/a
Project:	ExxonMobil Terminal Orphin, Hanger D, Westchester Airport, White Plains, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2W10854.D	1	12/13/06	WG	n/a	n/a	V2W474
Run #2	W11502.D	8	12/19/06	WG	n/a	n/a	VW494

	Initial Volume
Run #1	400 ml
Run #2	400 ml

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
67-64-1	58.08	Acetone	3.5	0.20	ppbv		8.3	0.48	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	ppbv		ND	0.44	ug/m3
71-43-2	78.11	Benzene	2.8	0.20	ppbv		8.9	0.64	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	ppbv		ND	1.3	ug/m3
75-25-2	252.8	Bromoform	ND	0.20	ppbv		ND	2.1	ug/m3
74-83-9	94.94	Bromomethane	ND	0.20	ppbv		ND	0.78	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	ppbv		ND	0.87	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.20	ppbv		ND	1.0	ug/m3
75-15-0	76.14	Carbon disulfide	0.25	0.20	ppbv		0.78	0.62	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	ppbv		ND	0.92	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	ppbv		ND	0.53	ug/m3
67-66-3	119.4	Chloroform	ND	0.20	ppbv		ND	0.98	ug/m3
74-87-3	50.49	Chloromethane	ND	0.20	ppbv		ND	0.41	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	ppbv		ND	0.63	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.20	ppbv		ND	1.0	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.20	ppbv		ND	1.3	ug/m3
110-82-7	84.16	Cyclohexane	2.6	0.20	ppbv		8.9	0.69	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	ppbv		ND	1.5	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	ppbv		ND	0.92	ug/m3
123-91-1	88	1,4-Dioxane	ND	0.20	ppbv		ND	0.72	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.48	0.20	ppbv		2.4	0.99	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	ppbv		ND	1.7	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	ppbv		ND	0.79	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SSV-1		
Lab Sample ID:	J47603-1	Date Sampled:	11/27/06
Matrix:	AIR - Air Summa ID: A343	Date Received:	11/29/06
Method:	TO-15	Percent Solids:	n/a
Project:	ExxonMobil Terminal Orphin, Hanger D, Westchester Airport, White Plains, NY		

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
64-17-5	46	Ethanol	2.3	0.50	ppbv		4.3	0.94	ug/m3
100-41-4	106.2	Ethylbenzene	9.9	0.20	ppbv		43	0.87	ug/m3
141-78-6	88	Ethyl Acetate	ND	0.20	ppbv		ND	0.72	ug/m3
622-96-8	120.2	4-Ethyltoluene	2.5	0.20	ppbv		12	0.98	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	ppbv		ND	1.5	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	ppbv		ND	1.4	ug/m3
142-82-5	100.2	Heptane	3.1	0.20	ppbv		13	0.82	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	ppbv		ND	2.1	ug/m3
110-54-3	86.17	Hexane	300 [a]	1.6	ppbv		1060 [a]	5.6	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	ppbv		ND	0.82	ug/m3
67-63-0	60	Isopropyl Alcohol	ND	0.20	ppbv		ND	0.49	ug/m3
75-09-2	84.94	Methylene chloride	0.13	0.20	ppbv	J	0.45	0.69	ug/m3
78-93-3	72.11	Methyl ethyl ketone	ND	0.20	ppbv		ND	0.59	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	ppbv		ND	0.82	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	ppbv		ND	0.72	ug/m3
115-07-1	42	Propylene	ND	0.50	ppbv		ND	0.86	ug/m3
100-42-5	104.1	Styrene	4.0	0.20	ppbv		17	0.85	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	0.50	0.20	ppbv		2.7	1.1	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	ppbv		ND	1.4	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	ppbv		ND	1.1	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.20	ppbv		ND	1.5	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	6.5	0.20	ppbv		32	0.98	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	1.9	0.20	ppbv		9.3	0.98	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	0.51	0.20	ppbv		2.4	0.93	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	0.55	0.20	ppbv		1.7	0.61	ug/m3
127-18-4	165.8	Tetrachloroethylene	1.6	0.20	ppbv		11	1.4	ug/m3
109-99-9	72	Tetrahydrofuran	ND	0.20	ppbv		ND	0.59	ug/m3
108-88-3	92.14	Toluene	38.6	0.20	ppbv		145	0.75	ug/m3
79-01-6	131.4	Trichloroethylene	1.7	0.20	ppbv		9.1	1.1	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.36	0.20	ppbv		2.0	1.1	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	ppbv		ND	0.51	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.20	ppbv		ND	0.70	ug/m3
	106.2	m,p-Xylene	33.6	0.20	ppbv		146	0.87	ug/m3
95-47-6	106.2	o-Xylene	10.4	0.20	ppbv		45.2	0.87	ug/m3
1330-20-7	106.2	Xylenes (total)	43.9	0.20	ppbv		191	0.87	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	104%	90%	78-124%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SSV-1		
Lab Sample ID:	J47603-1	Date Sampled:	11/27/06
Matrix:	AIR - Air Summa ID: A343	Date Received:	11/29/06
Method:	TO-15	Percent Solids:	n/a
Project:	ExxonMobil Terminal Orphin, Hanger D, Westchester Airport, White Plains, NY		

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units

(a) Result is from Run# 2

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SSV-2		
Lab Sample ID:	J47603-2	Date Sampled:	11/27/06
Matrix:	AIR - Air Summa ID: A647	Date Received:	11/29/06
Method:	TO-15	Percent Solids:	n/a
Project:	ExxonMobil Terminal Orphin, Hanger D, Westchester Airport, White Plains, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2W10856.D	5	12/13/06	WG	n/a	n/a	V2W474
Run #2	W11503.D	8	12/19/06	WG	n/a	n/a	VW494

	Initial Volume
Run #1	400 ml
Run #2	400 ml

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
67-64-1	58.08	Acetone	4.7	1.0	ppbv		11	2.4	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	1.0	ppbv		ND	2.2	ug/m3
71-43-2	78.11	Benzene	2.4	1.0	ppbv		7.7	3.2	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	1.0	ppbv		ND	6.7	ug/m3
75-25-2	252.8	Bromoform	ND	1.0	ppbv		ND	10	ug/m3
74-83-9	94.94	Bromomethane	ND	1.0	ppbv		ND	3.9	ug/m3
593-60-2	106.9	Bromoethene	ND	1.0	ppbv		ND	4.4	ug/m3
100-44-7	126	Benzyl Chloride	ND	1.0	ppbv		ND	5.2	ug/m3
75-15-0	76.14	Carbon disulfide	2.1	1.0	ppbv		6.5	3.1	ug/m3
108-90-7	112.6	Chlorobenzene	ND	1.0	ppbv		ND	4.6	ug/m3
75-00-3	64.52	Chloroethane	ND	1.0	ppbv		ND	2.6	ug/m3
67-66-3	119.4	Chloroform	ND	1.0	ppbv		ND	4.9	ug/m3
74-87-3	50.49	Chloromethane	ND	1.0	ppbv		ND	2.1	ug/m3
107-05-1	76.53	3-Chloropropene	ND	1.0	ppbv		ND	3.1	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	1.0	ppbv		ND	5.2	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	1.0	ppbv		ND	6.3	ug/m3
110-82-7	84.16	Cyclohexane	ND	1.0	ppbv		ND	3.4	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	1.0	ppbv		ND	4.0	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	1.0	ppbv		ND	4.0	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	1.0	ppbv		ND	7.7	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	1.0	ppbv		ND	4.0	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	1.0	ppbv		ND	4.6	ug/m3
123-91-1	88	1,4-Dioxane	ND	1.0	ppbv		ND	3.6	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.43	1.0	ppbv	J	2.1	4.9	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	1.0	ppbv		ND	8.5	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	1.0	ppbv		ND	4.0	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	1.0	ppbv		ND	4.0	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	1.0	ppbv		ND	4.5	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	1.0	ppbv		ND	6.0	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	1.0	ppbv		ND	6.0	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	1.0	ppbv		ND	6.0	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	1.0	ppbv		ND	4.5	ug/m3

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SSV-2		
Lab Sample ID:	J47603-2	Date Sampled:	11/27/06
Matrix:	AIR - Air Summa ID: A647	Date Received:	11/29/06
Method:	TO-15	Percent Solids:	n/a
Project:	ExxonMobil Terminal Orphin, Hanger D, Westchester Airport, White Plains, NY		

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
64-17-5	46	Ethanol	ND	2.5	ppbv		ND	4.7	ug/m3
100-41-4	106.2	Ethylbenzene	7.5	1.0	ppbv		33	4.3	ug/m3
141-78-6	88	Ethyl Acetate	ND	1.0	ppbv		ND	3.6	ug/m3
622-96-8	120.2	4-Ethyltoluene	1.6	1.0	ppbv		7.9	4.9	ug/m3
76-13-1	187.4	Freon 113	ND	1.0	ppbv		ND	7.7	ug/m3
76-14-2	170.9	Freon 114	ND	1.0	ppbv		ND	7.0	ug/m3
142-82-5	100.2	Heptane	2.5	1.0	ppbv		10	4.1	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	1.0	ppbv		ND	11	ug/m3
110-54-3	86.17	Hexane	292 [a]	1.6	ppbv		1030 [a]	5.6	ug/m3
591-78-6	100	2-Hexanone	ND	1.0	ppbv		ND	4.1	ug/m3
67-63-0	60	Isopropyl Alcohol	ND	1.0	ppbv		ND	2.5	ug/m3
75-09-2	84.94	Methylene chloride	ND	1.0	ppbv		ND	3.5	ug/m3
78-93-3	72.11	Methyl ethyl ketone	ND	1.0	ppbv		ND	2.9	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	1.0	ppbv		ND	4.1	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	1.0	ppbv		ND	3.6	ug/m3
115-07-1	42	Propylene	ND	2.5	ppbv		ND	4.3	ug/m3
100-42-5	104.1	Styrene	4.8	1.0	ppbv		20	4.3	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	0.53	1.0	ppbv	J	2.9	5.5	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	1.0	ppbv		ND	6.9	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	1.0	ppbv		ND	5.5	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	1.0	ppbv		ND	7.4	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	3.4	1.0	ppbv		17	4.9	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	0.93	1.0	ppbv	J	4.6	4.9	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	1.0	ppbv		ND	4.7	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	3.3	1.0	ppbv		10	3.0	ug/m3
127-18-4	165.8	Tetrachloroethylene	8.7	1.0	ppbv		59	6.8	ug/m3
109-99-9	72	Tetrahydrofuran	ND	1.0	ppbv		ND	2.9	ug/m3
108-88-3	92.14	Toluene	34.1	1.0	ppbv		129	3.8	ug/m3
79-01-6	131.4	Trichloroethylene	1.3	1.0	ppbv		7.0	5.4	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.95	1.0	ppbv	J	5.3	5.6	ug/m3
75-01-4	62.5	Vinyl chloride	ND	1.0	ppbv		ND	2.6	ug/m3
108-05-4	86	Vinyl Acetate	ND	1.0	ppbv		ND	3.5	ug/m3
	106.2	m,p-Xylene	24.2	1.0	ppbv		105	4.3	ug/m3
95-47-6	106.2	o-Xylene	7.4	1.0	ppbv		32	4.3	ug/m3
1330-20-7	106.2	Xylenes (total)	31.5	1.0	ppbv		137	4.3	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	99%	89%	78-124%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SSV-2		
Lab Sample ID:	J47603-2	Date Sampled:	11/27/06
Matrix:	AIR - Air Summa ID: A647	Date Received:	11/29/06
Method:	TO-15	Percent Solids:	n/a
Project:	ExxonMobil Terminal Orphin, Hanger D, Westchester Airport, White Plains, NY		

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units

(a) Result is from Run# 2

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
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N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	VP-6		
Lab Sample ID:	J47603-3	Date Sampled:	11/27/06
Matrix:	AIR - Air Summa ID: A553,A230	Date Received:	11/29/06
Method:	TO-15	Percent Solids:	n/a
Project:	ExxonMobil Terminal Orphin, Hanger D, Westchester Airport, White Plains, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2W10857.D	1	12/14/06	WG	n/a	n/a	V2W474
Run #2	W11504.D	16	12/19/06	WG	n/a	n/a	VW494
Run #3	W11529.D	53.2	12/20/06	WG	n/a	n/a	VW495

	Initial Volume
Run #1	400 ml
Run #2	400 ml
Run #3	400 ml

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
67-64-1	58.08	Acetone	2.5	0.20	ppbv		5.9	0.48	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	ppbv		ND	0.44	ug/m3
71-43-2	78.11	Benzene	2.3	0.20	ppbv		7.3	0.64	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	ppbv		ND	1.3	ug/m3
75-25-2	252.8	Bromoform	ND	0.20	ppbv		ND	2.1	ug/m3
74-83-9	94.94	Bromomethane	ND	0.20	ppbv		ND	0.78	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	ppbv		ND	0.87	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.20	ppbv		ND	1.0	ug/m3
75-15-0	76.14	Carbon disulfide	2.0	0.20	ppbv		6.2	0.62	ug/m3
108-90-7	112.6	Chlorobenzene	0.54	0.20	ppbv		2.5	0.92	ug/m3
75-00-3	64.52	Chloroethane	2.7	0.20	ppbv		7.1	0.53	ug/m3
67-66-3	119.4	Chloroform	0.88	0.20	ppbv		4.3	0.98	ug/m3
74-87-3	50.49	Chloromethane	ND	0.20	ppbv		ND	0.41	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	ppbv		ND	0.63	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.20	ppbv		ND	1.0	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.20	ppbv		ND	1.3	ug/m3
110-82-7	84.16	Cyclohexane	1.3	0.20	ppbv		4.5	0.69	ug/m3
75-34-3	98.96	1,1-Dichloroethane	562 [a]	3.2	ppbv		2270 [a]	13	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	65.3 [a]	3.2	ppbv		259 [a]	13	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	ppbv		ND	1.5	ug/m3
107-06-2	98.96	1,2-Dichloroethane	0.60	0.20	ppbv		2.4	0.81	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	ppbv		ND	0.92	ug/m3
123-91-1	88	1,4-Dioxane	ND	0.20	ppbv		ND	0.72	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.45	0.20	ppbv		2.2	0.99	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	ppbv		ND	1.7	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	3.6	0.20	ppbv		14	0.79	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	151 [a]	3.2	ppbv		599 [a]	13	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
95-50-1	147	o-Dichlorobenzene	0.48	0.20	ppbv		2.9	1.2	ug/m3

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	VP-6		
Lab Sample ID:	J47603-3	Date Sampled:	11/27/06
Matrix:	AIR - Air Summa ID: A553,A230	Date Received:	11/29/06
Method:	TO-15	Percent Solids:	n/a
Project:	ExxonMobil Terminal Orphin, Hanger D, Westchester Airport, White Plains, NY		

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
106-46-7	147	p-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3
64-17-5	46	Ethanol	1.8	0.50	ppbv		3.4	0.94	ug/m3
100-41-4	106.2	Ethylbenzene	4.8	0.20	ppbv		21	0.87	ug/m3
141-78-6	88	Ethyl Acetate	3.2	0.20	ppbv		12	0.72	ug/m3
622-96-8	120.2	4-Ethyltoluene	1.4	0.20	ppbv		6.9	0.98	ug/m3
76-13-1	187.4	Freon 113	0.17	0.20	ppbv	J	1.3	1.5	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	ppbv		ND	1.4	ug/m3
142-82-5	100.2	Heptane	1.7	0.20	ppbv		7.0	0.82	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	ppbv		ND	2.1	ug/m3
110-54-3	86.17	Hexane	21.3	0.20	ppbv		75.1	0.70	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	ppbv		ND	0.82	ug/m3
67-63-0	60	Isopropyl Alcohol	ND	0.20	ppbv		ND	0.49	ug/m3
75-09-2	84.94	Methylene chloride	1.8	0.20	ppbv		6.3	0.69	ug/m3
78-93-3	72.11	Methyl ethyl ketone	ND	0.20	ppbv		ND	0.59	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	ppbv		ND	0.82	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	ppbv		ND	0.72	ug/m3
115-07-1	42	Propylene	ND	0.50	ppbv		ND	0.86	ug/m3
100-42-5	104.1	Styrene	2.0	0.20	ppbv		8.5	0.85	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	788 [b]	11	ppbv		4300 [b]	60	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	ppbv		ND	1.4	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	ppbv		ND	1.1	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.20	ppbv		ND	1.5	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	3.3	0.20	ppbv		16	0.98	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	0.91	0.20	ppbv		4.5	0.98	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	0.27	0.20	ppbv		1.3	0.93	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	0.32	0.20	ppbv		0.97	0.61	ug/m3
127-18-4	165.8	Tetrachloroethylene	177 [a]	3.2	ppbv		1200 [a]	22	ug/m3
109-99-9	72	Tetrahydrofuran	0.96	0.20	ppbv		2.8	0.59	ug/m3
108-88-3	92.14	Toluene	17.4	0.20	ppbv		65.6	0.75	ug/m3
79-01-6	131.4	Trichloroethylene	139 [a]	3.2	ppbv		747 [a]	17	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.23	0.20	ppbv		1.3	1.1	ug/m3
75-01-4	62.5	Vinyl chloride	0.22	0.20	ppbv		0.56	0.51	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.20	ppbv		ND	0.70	ug/m3
	106.2	m,p-Xylene	15.9	0.20	ppbv		69.1	0.87	ug/m3
95-47-6	106.2	o-Xylene	5.0	0.20	ppbv		22	0.87	ug/m3
1330-20-7	106.2	Xylenes (total)	20.9	0.20	ppbv		90.8	0.87	ug/m3

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	VP-6		
Lab Sample ID:	J47603-3	Date Sampled:	11/27/06
Matrix:	AIR - Air Summa ID: A553,A230	Date Received:	11/29/06
Method:	TO-15	Percent Solids:	n/a
Project:	ExxonMobil Terminal Orphin, Hanger D, Westchester Airport, White Plains, NY		

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
460-00-4	4-Bromofluorobenzene	100%	86%	83%	78-124%

(a) Result is from Run# 2
(b) Result is from Run# 3

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	VP-15		
Lab Sample ID:	J47603-4	Date Sampled:	11/28/06
Matrix:	AIR - Air Summa ID: A663	Date Received:	11/29/06
Method:	TO-15	Percent Solids:	n/a
Project:	ExxonMobil Terminal Orphin, Hanger D, Westchester Airport, White Plains, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2W10858.D	1	12/14/06	WG	n/a	n/a	V2W474
Run #2	W11505.D	8	12/19/06	WG	n/a	n/a	VW494

	Initial Volume
Run #1	400 ml
Run #2	400 ml

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
67-64-1	58.08	Acetone	8.7	0.20	ppbv		21	0.48	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	ppbv		ND	0.44	ug/m3
71-43-2	78.11	Benzene	1.2	0.20	ppbv		3.8	0.64	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	ppbv		ND	1.3	ug/m3
75-25-2	252.8	Bromoform	ND	0.20	ppbv		ND	2.1	ug/m3
74-83-9	94.94	Bromomethane	ND	0.20	ppbv		ND	0.78	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	ppbv		ND	0.87	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.20	ppbv		ND	1.0	ug/m3
75-15-0	76.14	Carbon disulfide	1.3	0.20	ppbv		4.0	0.62	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	ppbv		ND	0.92	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	ppbv		ND	0.53	ug/m3
67-66-3	119.4	Chloroform	2.2	0.20	ppbv		11	0.98	ug/m3
74-87-3	50.49	Chloromethane	0.30	0.20	ppbv		0.62	0.41	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	ppbv		ND	0.63	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.20	ppbv		ND	1.0	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.20	ppbv		ND	1.3	ug/m3
110-82-7	84.16	Cyclohexane	1.4	0.20	ppbv		4.8	0.69	ug/m3
75-34-3	98.96	1,1-Dichloroethane	127 [a]	1.6	ppbv		514 [a]	6.5	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	10	0.20	ppbv		40	0.79	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	ppbv		ND	1.5	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.20	ppbv		ND	0.81	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	ppbv		ND	0.92	ug/m3
123-91-1	88	1,4-Dioxane	ND	0.20	ppbv		ND	0.72	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.48	0.20	ppbv		2.4	0.99	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	ppbv		ND	1.7	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	0.15	0.20	ppbv	J	0.59	0.79	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	1.8	0.20	ppbv		7.1	0.79	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	ppbv		ND	1.2	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	ppbv		ND	0.91	ug/m3

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	VP-15		
Lab Sample ID:	J47603-4	Date Sampled:	11/28/06
Matrix:	AIR - Air Summa ID: A663	Date Received:	11/29/06
Method:	TO-15	Percent Solids:	n/a
Project:	ExxonMobil Terminal Orphin, Hanger D, Westchester Airport, White Plains, NY		

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units
64-17-5	46	Ethanol	3.7	0.50	ppbv		7.0	0.94	ug/m3
100-41-4	106.2	Ethylbenzene	1.9	0.20	ppbv		8.3	0.87	ug/m3
141-78-6	88	Ethyl Acetate	1.1	0.20	ppbv		4.0	0.72	ug/m3
622-96-8	120.2	4-Ethyltoluene	0.46	0.20	ppbv		2.3	0.98	ug/m3
76-13-1	187.4	Freon 113	0.10	0.20	ppbv	J	0.77	1.5	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	ppbv		ND	1.4	ug/m3
142-82-5	100.2	Heptane	1.6	0.20	ppbv		6.6	0.82	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	ppbv		ND	2.1	ug/m3
110-54-3	86.17	Hexane	175 [a]	1.6	ppbv		617 [a]	5.6	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	ppbv		ND	0.82	ug/m3
67-63-0	60	Isopropyl Alcohol	9.0	0.20	ppbv		22	0.49	ug/m3
75-09-2	84.94	Methylene chloride	ND	0.20	ppbv		ND	0.69	ug/m3
78-93-3	72.11	Methyl ethyl ketone	ND	0.20	ppbv		ND	0.59	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	ppbv		ND	0.82	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	ppbv		ND	0.72	ug/m3
115-07-1	42	Propylene	ND	0.50	ppbv		ND	0.86	ug/m3
100-42-5	104.1	Styrene	0.46	0.20	ppbv		2.0	0.85	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	62.1 [a]	1.6	ppbv		339 [a]	8.7	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	ppbv		ND	1.4	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	ppbv		ND	1.1	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.20	ppbv		ND	1.5	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	1.3	0.20	ppbv		6.4	0.98	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	0.36	0.20	ppbv		1.8	0.98	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	0.58	0.20	ppbv		2.7	0.93	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	ND	0.20	ppbv		ND	0.61	ug/m3
127-18-4	165.8	Tetrachloroethylene	272 [a]	1.6	ppbv		1840 [a]	11	ug/m3
109-99-9	72	Tetrahydrofuran	ND	0.20	ppbv		ND	0.59	ug/m3
108-88-3	92.14	Toluene	13.1	0.20	ppbv		49.4	0.75	ug/m3
79-01-6	131.4	Trichloroethylene	14.0	0.20	ppbv		75.2	1.1	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.26	0.20	ppbv		1.5	1.1	ug/m3
75-01-4	62.5	Vinyl chloride	0.12	0.20	ppbv	J	0.31	0.51	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.20	ppbv		ND	0.70	ug/m3
	106.2	m,p-Xylene	5.6	0.20	ppbv		24	0.87	ug/m3
95-47-6	106.2	o-Xylene	1.7	0.20	ppbv		7.4	0.87	ug/m3
1330-20-7	106.2	Xylenes (total)	7.3	0.20	ppbv		32	0.87	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	94%	87%	78-124%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	VP-15		
Lab Sample ID:	J47603-4	Date Sampled:	11/28/06
Matrix:	AIR - Air Summa ID: A663	Date Received:	11/29/06
Method:	TO-15	Percent Solids:	n/a
Project:	ExxonMobil Terminal Orphin, Hanger D, Westchester Airport, White Plains, NY		

CAS No.	MW	Compound	Result	RL	Units	Q	Result	RL	Units

(a) Result is from Run# 2

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Summa Canister and Flow Controller Log

AIR

CHAIN OF CUSTODY

ACCUTEST

Air Sampling Field Data Sheet

FED-EX Tracking #: | Bottle Order Control #: MC-11/21/2006-8 | PAGE 1 OF 1

Lab Quote #: | Lab Job #: J47603

Client / Reporting Information

Company Name: Woodard & Curran
Address: 1520 Highland Ave
City: Cheshire State: CT Zip: 06410
Project Contact: Anne Procter E-mail: aprocter@woodardcurran.com
Phone #: 203-271-0579 Fax #: 203-271-7952

Project Name: Exxon Mobil - Westchester Co. Airport
Street: 240 Airport Rd
City: White Plains State: NY
Project #: 172152485 (Rose)
Client Purchase Order #:

Sampler(s) Name(s): Therese Pitterle/Jason Hines (Rose Associates)

Weather Parameters

Temperature (Fahrenheit): Start: 54°F Maximum: 63°F; Stop: 63°F Minimum: 54°F
Atmospheric Pressure (inches of Hg): Start: 30.28"Hg Maximum: 30.28"Hg; Stop: 30.22"Hg Minimum: 30.22"Hg
Other weather comment: somewhat cloudy

Lab Sample #	Field ID / Point of Collection	Air Type: Indoor(I) Soil Vap(SV) Ambient(A)	Sampling Equipment Info: Canister Serial #	Canister Size 6L or 1L	Flow Controller Serial #	Start Sampling Information: Date	Time (24hr clock)	Canister Pressure ("Hg)	Interior Temp (F)	Sampler Init.	Stop Sampling Information: Date	Time (24hr clock)	Canister Pressure ("Hg)	Interior Temp (F)	Sampler Init.	Requested Analysis: Standard TO-15 Reporting List		
1 A343	SSV-1	SV	5723	6L	FC225	11/27/06	1044	-29.5	~70°	TP,JH	11/27/06	1445	-2.9	~70°	TP,JH	1		
2 A647	SSV-2	SV	6549	6L	FC305	11/27/06	1032	-31	~72°	TP,JH	11/27/06	1433	-3.2	~72°	TP,JH	1		
	~~VP-15~~	~~SV~~	~~6473~~ 4215	~~6L~~	~~FC183~~ FC161	11/27/06	1044	-31	~60°	TP,JH	11/28/06			~60°	TP,JH	1		BS
3 A630	VP-6	SV	~~6473~~ 4215	6L	~~FC183~~ FC161	11/27/06	0953	-28	~60°	TP,JH	11/27/06	1423	-2.5	~60°	TP,JH	1		
	? VP-15 sample (canister # 6473, regulator # FC183) could not be collected → regulator reading -28.5 "Hg after 24hrs																	
	⇒ collected grab sample for VP-15																	
4 A663	VP-15	SV	6473	6L	NA	11/28/06	0945	NA	~60°	TP	11/28/06	0945	NA	~60°	TP	1		

Turnaround Time (Business days): Standard - 10 Days; 10 Day; 5 Day; 3 Day; 2 Day; 1 Day; Other

Approved By: Date:

Data Deliverable Information: Comm A; Comm B; Reduced T2; Full T1; Other:

Paid 4 FC's 11/28/06 mc

Comments / Remarks: Bill to: Exxon Mobil Manager Mike Lamarre 401-434-7358
See Compounds of Concern below

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Laboratory:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 [signature]	11/21/06 1800	1 [signature] 11/22/06	2 [signature] 11/29/06	1600	2
Relinquished by: 3 [signature]	Date Time: 11/28/06 1700	Received By: 3 [signature] 11/29/06	Relinquished By: 4 [signature] 11/29/06	Date Time: 1940	Received By: 4 [signature]
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal #		

Compounds of Concern:
- Chloroethane
- 1,1-Dichloroethane
- cis-1,2-Dichloroethene
- trans-1,2-Dichloroethene
- 1,1,1-Trichloroethane
- Tetrachloroethene
- Trichloroethene
- Vinyl Chloride

3

for

3.1.3

J47603: Chain of Custody
Page 1 of 1

Summa Canister and Flow Controller Log

Job Number: J47603
Account: WCMAD Woodard & Curran
Project: ExxonMobil Terminal Orphin, Hanger D, Westchester Airport, White Plains, NY
Received: 11/29/06

SUMMA CANISTERS

Shipping							Receiving					
Summa ID	L	Vac " Hg	Date Out	By	SCC Batch	SCC FileID	Sample Number	Date In	By	Vac " Hg	Pres psig	Final psig	Dil Fact
A343	6	29.4	11/21/06	HSC	CP2009	W11085.D	J47603-1	11/30/06	HSC	4			1
A647	6	29.4	11/21/06	HSC	CP2009	W11085.D	J47603-2	11/30/06	HSC	1			1
A230	6	29.4	11/21/06	HSC	CP2009	W11085.D	J47603-3	11/30/06	HSC	4			1
A663	6	29.4	11/21/06	HSC	CP2009	W11085.D	J47603-4	11/30/06	HSC	3.5			1

FLOW CONTROLLERS

Shipping					Receiving		
Flow Crtl ID	Date Out	By	cc/ min	Time hrs.	Date In	By	cc/ min
FC161	11/21/06	HSC	20	4	11/30/06	HSC	20.9
FC183	11/21/06	HSC	20	4	11/30/06	HSC	19.9
FC225	11/21/06	HSC	20	4	11/30/06	HSC	22.8
FC305	11/21/06	HSC	20	4	11/30/06	HSC	23.6

Accutest Bottle Order(s):
MC-11/21/2006-8

Prep Date	Room Temp(F)	Bar Pres "Hg
11/21/06	68.9	30.3