Summary Report for an Immediate Soil Vapor Intrusion Investigation at Former Grumman Settling Ponds (1-30-003A) Bethpage, New York

Prepared for

New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233

Prepared by

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December 2007
Revision: FINAL
EA Project No. 14368.16

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7 December 2007
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7 December 2007
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1. INTRODUCTION

1.1 PROJECT BACKGROUND

The New York State Department of Environmental Conservation (NYSDEC) tasked EA Engineering, P.C., and its affiliate EA Science and Technology, Inc. (EA) to perform an Immediate Soil Vapor Intrusion (ISVI) investigation at the Former Grumman Settling Ponds site (NYSDEC Site No. 1-30-003A). The Former Grumman Settling Ponds site is located in the Town of Bethpage, Nassau County, New York, west of the Seaford-Gates Expressway (135) and south of the Long Island Expressway (I-495) (Figure 1). The ISVI investigation area was targeted for the residential homes located south of the Former Grumman Settling Ponds site and the area just east of Stewart Avenue and west of Bethpage High School.

This work assignment is being conducted under the NYSDEC State Superfund Standby Contract (Work Assignment No. D004438-16). The work was completed as an Immediate Investigation Work Assignment (IIWA). The field activities for the ISVI investigation were performed from 13 to 16 August 2007.

1.2 OBJECTIVE

The objectives of the ISVI investigation at the Former Grumman Settling Ponds site were to determine the nature and extent of potential volatile organic compound (VOC) contamination in the sub-slab soil vapor and basement indoor air in the residential structures located to the south of the site; and to determine the nature and extent of concentrations of VOC contamination in the soil vapor and the potential for migration to public properties located to the east of the site. A sampling program, consisting of sub-slab soil vapor sampling, and basement indoor air and outdoor ambient air sampling was performed at eight residential structures located within the evaluation area (Figure 2). Soil vapor sampling was performed at seven locations to the east of Stewart Avenue (Figure 3).

This ISVI Investigation Summary Report was prepared to discuss the field activities and summarize the soil vapor, sub-slab soil vapor, basement indoor air, and outdoor ambient air sample results.

1.3 REPORT ORGANIZATION

A summary of field activities completed in August 2007 are provided in Section 2. Data associated with the performance of field activities are presented in Section 3.

The following are provided as appendixes:

- Appendix A: Daily Field Reports and Photo Logs
- Appendix B: Boring logs, Field Sampling Forms, New York State Department of Health

(NYSDOH) Questionnaires and Product Inventories

- Appendix C: Data Usability Summary Reports (DUSR).

2. FIELD ACTIVITIES

This section presents the overall approach of the field investigation activities that were performed to meet the stated objectives of the investigation. The field sampling activities were designed to evaluate the presence or absence of VOCs in the evaluation areas. Environmental matrices sampled and analyzed were soil vapor, sub-slab soil vapor, basement indoor air, and outdoor ambient air. A summary of the soil vapor locations east of Stewart Avenue is provided in Table 1.

The field investigation program was performed during August 2007 and included the following activities:

- ***Structure Inspection/Inventory and Owner Questionnaire—***An inspection/inventory of general site conditions was performed and the NYSDOH Indoor Air Quality Questionnaire and Building Inventory was completed for each structure involved in the investigation.

- ***Sub-Slab Vapor Sampling—***Semi-permanent sub-slab soil vapor points were installed at each structure involved in the investigation.

- ***Basement Indoor Air and Outdoor Ambient Air Sampling—***Basement indoor air samples were collected at each structure involved in the investigation. Outdoor ambient air samples were collected at locations representative of outdoor ambient air conditions for the same time period that basement indoor air samples were collected.

- ***Soil Vapor Sampling—***Soil vapor samples were collected at seven locations east of Stewart Avenue near Bethpage High School. At two of the locations, one deep and one shallow soil vapor point were installed to provide an understanding of the vertical extent of potential VOC contamination.

Copies of the field sampling forms completed during the field investigation are provided in Appendix B.

2.1 STRUCTURE INSPECTION/INVENTORY AND OWNER QUESTIONNAIRE

2.1.1 Structure Inspection/Inventory and Questionnaire

Guidance for Evaluating Soil Vapor Intrusion in the State of New York (Final, October 2006) (Soil Vapor Intrusion [SVI] Guidance) and NYSDEC Department of Remediation *Draft DER-10 Technical Guidance for Site Investigation and Remediation* (December 2002) protocol were followed during the planning and implementation of this investigation.

EA inspected the general site conditions at each property location. The pre-sampling inspection included completion of the NYSDOH Indoor Air Quality Questionnaire and Building Inventory, documentation of weather conditions outside and temperatures inside, ambient basement air

screening using field equipment (i.e., ppbRAE Model PGM-7240 ppb VOC Monitor [ppbRAE]), and selection of air sampling locations. Potentially volatile products that were found in the vicinity of the basement indoor air sample location were screened, inventoried and recorded on the NYSDOH inventory forms. Completed NYSDOH Indoor Air Quality Questionnaire and Building Inventory forms and photo logs for each structure sampled during the field investigation are provided in Appendix B. Copies of the daily field reports are provided in Appendix A.

Ambient indoor air ppbRAE readings ranged from 0 to 850 ppb within the basements of the structures sampled. Sub-slab purge vapor ppbRAE readings ranged from 0 to 3,815 ppb within the structures sampled.

2.2 SUB-SLAB VAPOR SAMPLING

2.2.1 Sub-Slab Vapor Point Installation

The following procedures were followed for the selection and installation of all sub-slab vapor points within the structures sampled during the field investigation.

- A visual assessment of the condition of the basement floor was completed. The locations of the sub-slab vapor points were selected to be out of the line of traffic, away from major cracks and other floor penetrations (sumps, pipes, etc.), and a minimum of at least 5 ft from an exterior wall.

- Once the location was determined, a 0.25-in. diameter hole was drilled approximately 2 in. below the concrete floor slab using an electric hammer drill. A 1-in. diameter drill bit was then used to over drill the top 0.5 in. of the bore hole to create an annular space for the surface seal and stainless steel union.

- Concrete dust and flooring material was swept away from the drill hole and wiped with a dampened towel.

- Teflon-lined polyethylene tubing (3/16-in. inside diameter × 0.25-in. outside diameter) was connected to the stainless steel union and inserted into the bore hole drilled in the floor, extending no further than 2 in. below the bottom of the floor slab.

- Melted beeswax was then poured around the tubing and union at the floor penetration, and allowed to set tightly prior to the sample canister connection.

- A dedicated 60-cubic centimeter syringe was then used to purge approximately 100 ml of air/vapor from the sampling point. The syringe was capped and the purge air released outside the building into a ppbRAE as to not interfere with the basement indoor air sample collection. The purge air ppbRAE reading was recorded on the field sampling form.

- A 6-L Summa® canister equipped with a flow regulator and vacuum gauge were used to

collect the sub-slab vapor samples. The canisters and flow regulators were batch certified clean by the laboratory prior to use. The flow controllers were regulated by the laboratory to collect at 0.2 L/minute over a 24-hour collection period.

- The sample canisters were connected to the sample tubing using a compression fitting and placed on the floor adjacent to the sampling point.

- A digital photograph was taken of the canister setup and the surrounding area.

2.2.2 Sub-Slab Vapor Sampling

A total of eight sub-slab vapor samples and one duplicate sample were collected from the semi-permanent sub-slab vapor points installed at the structures located within the target area. Prior to initiating the sampling, the serial number of the canister and associated regulator were recorded on the field sampling form. Sample information including sample identification, sample start date/time, initial vacuum gauge pressure, and required analysis (U.S. Environmental Protection Agency [EPA] Method TO-15) were recorded on the canister identification tag and the field sampling form.

Following the 24-hour collection period, the canister valves were closed to terminate sample collection. The flow controller ending gauge pressure and sample end time were recorded on the canister identification tag and the field sampling forms. Once sample collection was terminated, the canister and flow controller were disconnected from the sample tubing and placed into a shipping box. All pertinent sample information was recorded on the associated chain-of-custody and repackaged into the originating box.

Sub-slab vapor samples were sent to Alpha Woods Hole Laboratories (Alpha Labs) in Westborough, MA for VOC analysis by EPA Method TO-15. Validated sub-slab vapor sampling results are summarized in Table 2.

Upon completion of the sampling, the semi-permanent sub-slab connections were capped. Sampling points were retained for any additional sub-slab vapor sampling events to be performed at a later date.

2.3 INDOOR AIR AND OUTDOOR AMBIENT AIR SAMPLING

2.3.1 Indoor Air Sampling

A total of eight basement indoor air samples and one duplicate sample were collected from structures located within the target area. In accordance with the NYSDOH SVI Guidance, basement indoor air samples were set up to collect a representative air sample from within the breathing zone (i.e., 3-5 ft above the floor). A 6-L Summa® canister equipped with a flow regulator and vacuum gauge were used to collect the indoor air samples. The canisters and flow regulators were batch certified clean by the laboratory prior to use. The flow controllers were regulated by the laboratory to collect at 0.2 L/minute over a 24-hour collection period.

Prior to initiating the sampling, the serial number of the canister and associated regulator were recorded on the field sampling form. Sample identification including sample identification, sample start date/time, initial vacuum gauge pressure, and required analysis (EPA Method TO-15) were recorded on the canister identification tag and the field sampling form.

Following the 24-hour collection period, the canister valves were closed to terminate the sample collection period. The flow controller ending gauge pressure and sample end time were recorded on the canister identification tag and the field sampling forms. Once sample collection was terminated, the canister and flow controller were removed from the sample tubing and placed into a shipping box. All pertinent sample information was recorded on the associated chain-of-custody and repackaged into the original box.

All indoor air samples were sent to Alpha Labs for VOC analysis by EPA Method TO-15. Validated basement indoor air sampling results are summarized in Table 2.

2.3.2 Outdoor Ambient Air Sampling

A total of four outdoor ambient air samples were collected concurrent with sub-slab vapor and basement indoor air sampling to represent outdoor ambient air quality. In accordance with the NYSDOH SVI Guidance, outdoor ambient air samples were set up to collect a representative air sample from within the breathing zone (i.e., 3-5 ft above the floor). If sample locations were unable to achieve the elevated sampling zone, dedicated Teflon-lined polyethylene tubing was used to reach the breathing zone. A 6-L Summa® canister equipped with a flow regulator and vacuum gauge were used to collect the outdoor ambient air samples. The canisters and flow regulators were batch certified clean by the laboratory prior to use. The flow controllers were regulated by the laboratory to collect at 0.2 L/minute over a 24-hour collection period

Prior to initiating the sampling, the serial number of the canister and associated regulator were recorded on the field sampling form. Sample identification including sample identification, sample start date/time, initial vacuum gauge pressure, and required analysis (EPA Method TO-15) were recorded on the canister identification tag and the field sampling form.

Following the 24-hour collection period, the canister valves were closed to terminate the sample collection period. Flow controller ending gauge pressure and sample end time were recorded on the canister identification tag and the field sampling forms. Once sample collection was terminated, the canister and flow controller were removed from the canister and placed into a shipping box. Pertinent sample information was recorded on the associated chain-of-custody and repackaged into the original box.

Outdoor ambient air samples were sent to Alpha Labs for VOC analysis by EPA Method TO-15. Validated outdoor ambient air sampling results are summarized in Table 2.

2.4 SOIL VAPOR POINTS

2.4.1 Soil Vapor Point Installation

EA representatives supervised the installation of seven temporary soil vapor points during the field investigation in August 2007. Land Air Water Environmental Services, Inc. from Center Moriches, New York, performed the drilling. The soil vapor points were installed using geoprobe macro-cores to install stainless steel drive points to approximately 8 ft below the ground surface. Two of the seven soil vapor points were installed to 40 ft below ground surface using direct-push methodologies. Once the sampling depth was reached, the 6-in. stainless steel sampling screen attached to a dedicated section of 0.25-in. inner diameter Teflon tubing was placed in the open bore hole. The bore hole was then backfilled with sand to a minimum of 6 in. above the screened interval. Granular bentonite pellets were then used to backfill to the ground surface, hydrating concurrently with placement. Helium tracer gas testing was performed on each of the five 8 ft soil vapor points. Helium tracer gas testing was not required for the two 40 ft soil vapor points due to the depth of the sampling screen. The soil vapor points were allowed to set for a minimum of 24 hours before sample collection commenced. The soil boring spoils were reworked into the surrounding ground surface. Soil boring logs are provided in Appendix B.

2.4.2 Soil Vapor Sampling

Samples were collected using 6-liter Summa® canisters, regulated to collect for a two-hour sampling interval. The soil gas points were allowed to set for 24 hours prior to sampling. One duplicate sample was collected at soil vapor location C1-30-003A-SV01. Upon completion of the sampling, the sample tubing was pulled out or cut flush to the ground surface.

Validated analytical results from the soil vapor samples are provided in Table 3. Soil vapor sampling logs are provided in Appendix B. The DUSR is provided in Appendix C.

2.5 FIELD DUPLICATE SAMPLING

2.5.1 Air/Vapor Field Duplicate Sampling

Field quality control samples included duplicate sample collection. Field duplicates were collected at the rate of 1 duplicate per 20 original samples per sample type (i.e., soil vapor, sub-slab vapor, basement indoor air). For field duplicates collected at soil vapor and sub-slab vapor points, an in-line stainless steel “tee” was used, which essentially splits the sub-slab and soil vapor sample into two canisters. At indoor air duplicate sampling locations, two canisters were set up adjacent to each other for sample collection. No outdoor air duplicate samples were collected.

A total of three duplicate air/vapor samples were collected during the field investigation. One duplicate was collected for each soil vapor, sub-slab vapor, and indoor air sample group.

2.6 LABORATORY ANALYSIS

2.6.1 Air/Vapor Laboratory Analysis

All air samples were analyzed by Alpha Labs, an Environmental Laboratory Approval Program (ELAP) certified laboratory for VOCs using EPA Method TO-15. Per the request of the NYSDEC Project Manager, the analysis for sub-slab vapor and basement indoor air samples were to achieve detection limits of 1 µg/m^3 for each compound.

Alpha Labs noted that the 1 µg/m^3 detection limit was not met for 19 of the 63 analytes. The analytes that did not meet the requested detection limit are provided below with the corresponding detection limit.

Analyte	Detection Limit
1,1,1-Trichloroethane	1.09
1,1,2,2-Tetrachloroethane	1.37
1,1,2-Trichloroethane	1.09
1,2,4-Trichlorobenzene	1.48
1,2-Dibromoethane	1.54
1,2-Dichlorobenzene	1.2
1,3-Dichlorobenzene	1.2
1,4-Dichlorobenzene	1.2
Benzyl chloride	1.03
Bromodichloromethane	1.34
Bromoform	2.06
Carbon tetrachloride	1.26
Dibromochloromethane	1.7
Freon-113	1.53
Freon-114	1.4
Hexachlorobutadiene	2.13
Tetrachloroethene	1.36
Trichloroethene	1.07
Trichlorofluoromethane	1.12

All analytical results are contained within the DUSR attached as Appendix C.

3. FIELD SAMPLING RESULTS

The following section presents the analytical results of the sub-slab vapor, basement indoor air and outdoor ambient air samples collected during the field investigation. The NYSDEC and NYSDOH have evaluated the data generated during the ISVI investigation. The NYSDEC, in consultation with the NYSDOH, will make follow-up recommendations based on the results. A summary table for the sub-slab vapor and basement indoor air and outdoor ambient air analytical data is provided as Table 1. A summary of the soil vapor points sampled east of Stewart Avenue are provided as Table 2. A summary table for the soil vapor analytical data is provided as Table 3.

Figure 4 depicts tetrachloroethene (PCE), trichloroethene (TCE), carbon tetrachloride, vinyl chloride, cis-1,2- dichloroethene (cis-1,2- DCE), and 1,1,1- trichloroethane (1,1,1-TCA) sample results for sub-slab vapor and basement indoor air samples. Figure 5 depicts the detected VOC analytical results for the soil vapor samples collected.

Copies of the DUSR for the sub-slab vapor, basement indoor air, and outdoor ambient air analytical data are provided in Appendix C.

3.1 SUB-SLAB VAPOR, BASEMENT INDOOR AIR, AND OUTDOOR AMBIENT AIR SAMPLING RESULTS

A total of 22 air/vapor samples were collected from within evaluation area, as identified below:

- 8 sub-slab vapor samples (Structure-01 through Structure-08) plus one duplicate
- 8 basement indoor air samples (Structure-01 through Structure-08) plus one duplicate
- 4 outdoor ambient air samples (various locations throughout the evaluation area).

3.1.1 Sub-Slab Vapor Results

Sub-slab vapor samples were collected at each of the eight structures within the evaluation area and analyzed for VOCs by EPA Method TO-15.

PCE was detected in three sub-slab vapor samples at concentrations ranging from 3.68 µg/m^3 (Structure 01) to 8.98 µg/m^3 (Structure 05).

TCE was detected in five sub-slab vapor samples at concentrations ranging from 3.84 µg/m^3 (Structure 01) to 68.7 µg/m^3 (Structure-05).

Carbon tetrachloride was detected in two sub-slab vapor samples at concentrations of 1.92 µg/m^3 in Structure 05 and 2.71 µg/m^3 in Structure 08.

1,1,1- TCA was detected in seven sub-slab vapor samples at concentrations ranging from 3.44 µg/m^3 (Structure 07) to 173 µg/m^3 (Structure 01).

Vinyl chloride and cis-1,2- DCE were not detected in any of the sub-slab vapor samples.

3.1.2 Basement Indoor Air Results

Basement indoor air samples were collected at each of the eight structures within the evaluation area and analyzed for VOCs by EPA Method TO-15.

PCE was detected in the basement indoor air of only Structure 01 with a concentration of 1.52 $\mu g/m^3$.

Carbon tetrachloride was detected in only Structure 05 with a concentration of 1.41 $\mu g/m^3$.

Vinyl chloride and cis-1,2- DCE were not detected in any of the basement indoor air samples.

3.1.3 Outdoor Ambient Air Results

Outdoor ambient air samples were collected at four locations throughout the evaluation area. None of the outdoor ambient air samples showed elevated levels of VOCs.

3.2 SOIL VAPOR SAMPLING RESULTS

A total of eight soil vapor samples were collected during the field investigation as identified below:

- Seven soil vapor samples (SV-01 through SV-07) plus one duplicate.

3.2.1 Soil Vapor Results

Soil vapor samples were collected at seven locations and analyzed for VOCs by EPA Method TO-15.

PCE was detected in six of the soil vapor samples at concentrations ranging from 3.22 to 88.7 $\mu g/m^3$.

TCE was detected in SV-01 at a concentration of 2.43 $\mu g/m^3$.

1,1,1- TCA was detected in three soil vapor samples at concentrations ranging from 2.43 to 3.75 $\mu g/m^3$ at.

Carbon Tetrachloride was detected in SV-03 at a concentration of 4.33 $\mu g/m^3$.

Freon 113 was detected in SV-06 at a concentration of 8.48 $\mu g/m^3$.

Freon 114 was detected in three soil vapor samples at concentrations ranging from 11.3 to 80.6 $\mu g/m^3$.

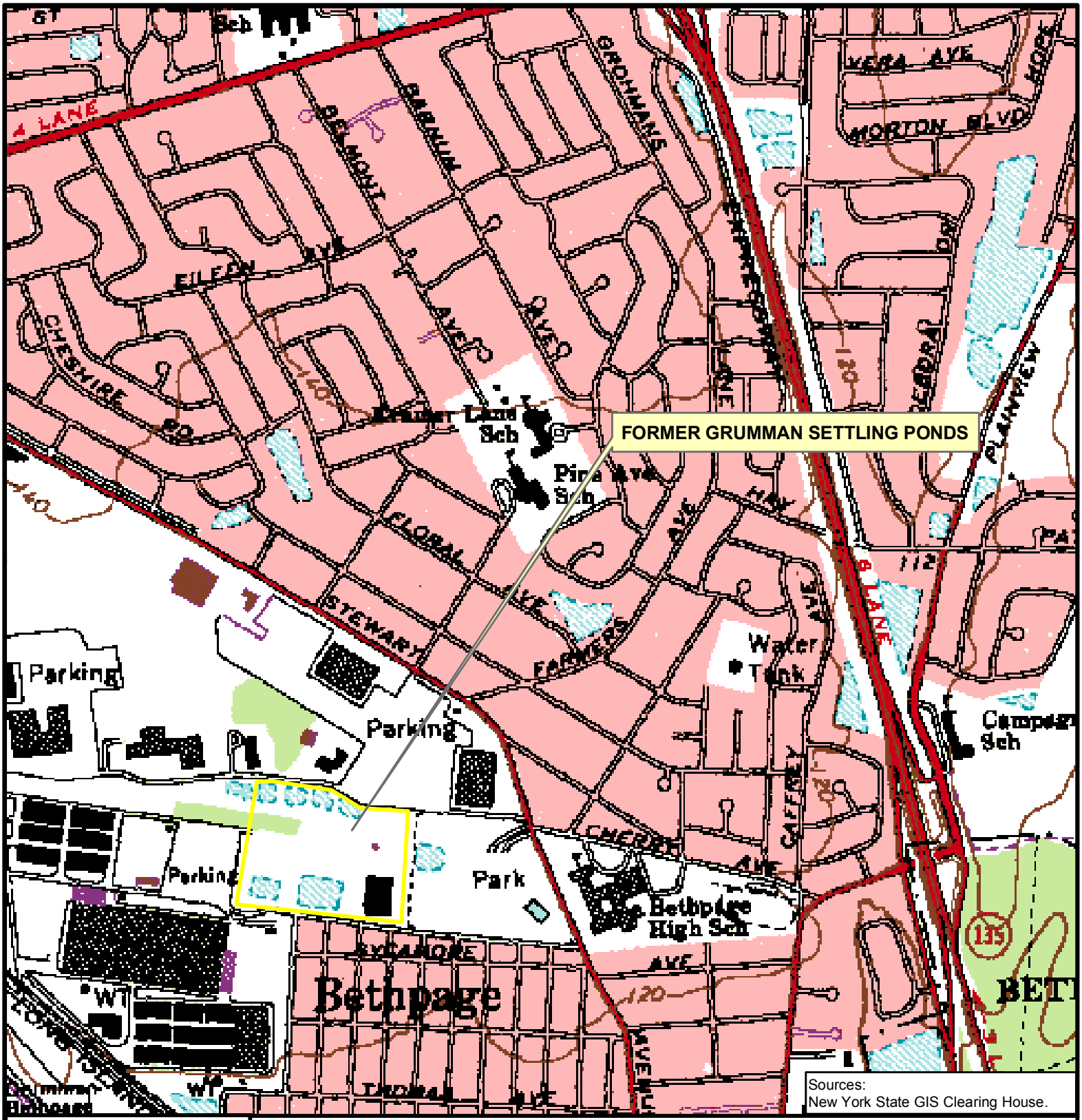
Chlorodifluoromethane was detected in all of the soil vapor samples at concentrations ranging from 7.04 (SV-02) to 98,100 EJ $\mu g/m^3$ (SV-06).

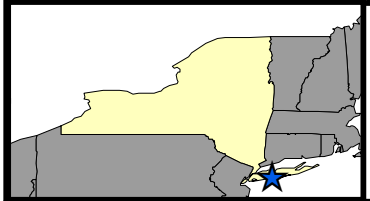
Dichlorodifluoromethane was detected in all of the soil vapor samples at concentrations ranging from 3.27 (SV-02) to 4,160 $\mu g/m^3$ (SV-06).

3.3 PROPOSED FURTHER ACTIONS

The NYSDOH approach for addressing exposures related to SVI (based on sub-slab vapor and indoor air concentrations) is described within Section 3.0 of the NYSDOH SVI Guidance.

The NYSDEC, in consultation with the NYSDOH, will make follow-up recommendations.





0 0.05 0.1 0.2 0.3 0.4 Miles

FORMER GRUMMAN SETTLING PONDS (1-30-003A)
BETHPAGE, NASSAU COUNTY, NEW YORK

FIGURE 1
SITE LOCATION

PROJECT MGR:	DESIGNED BY:	CREATED BY:	CHECKED BY:	SCALE:	DATE:	PROJECT NO:	FILE NO:
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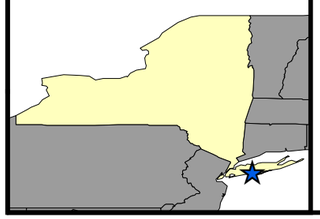
Stewart Avenue

Aerospace Blvd.

Sycamore Avenue



Legend

Evaluation Area

Structure Outline

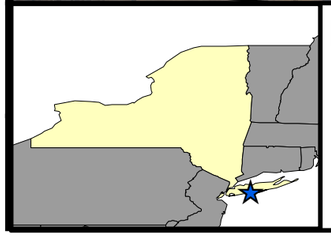
Roadway

Source: NYS GIS Clearing House

FORMER GRUMMAN SETTLING PONDS (1-30-003A)
ISVI INVESTIGATION
SUMMARY REPORT
BETHPAGE, NEW YORK

FIGURE 2
Evaluation Area

PROJECT MGR:	DESIGNED BY:	CREATED BY:	CHECKED BY:	SCALE:	DATE:	PROJECT NO:	FILE NO:
RSC	CJS	MS	RSC	AS SHOWN	DECEMBER 2007	14368.16	GIS/PROJECTS/ FIGURE3.MXD



Legend

Source: NYS GIS Clearing House

⊙	Soil Vapor Sampling Point
ug/m^3	Micrograms per cubic meter (ppbv)
EJ	Reported above the linear range and value is an estimate
J	Reported value is an estimate
U	Analyte detected below the method detection limit

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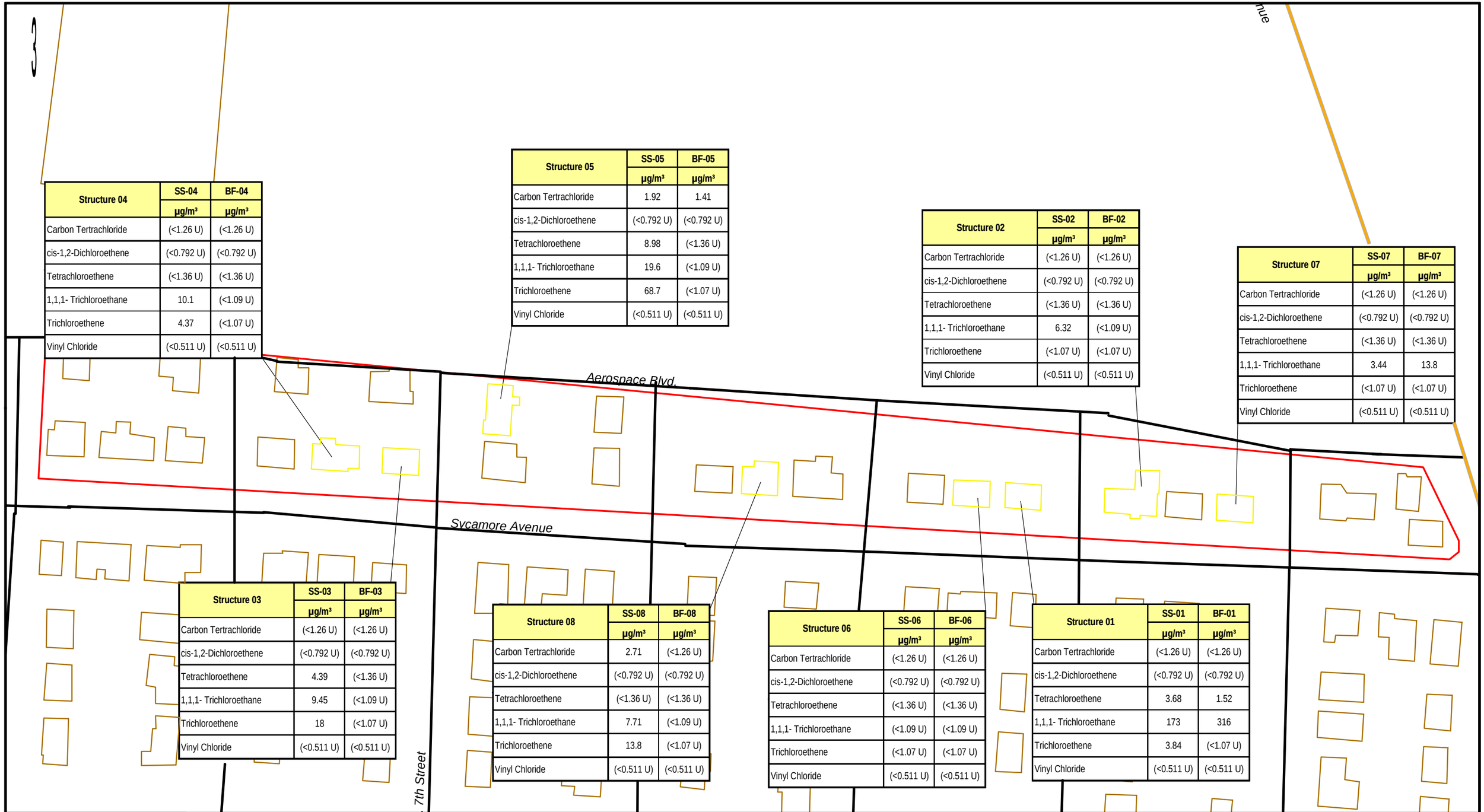
FIGURE 3
Soil Vapor Sampling Locations

PROJECT MGR:	DESIGNED BY:	CREATED BY:	CHECKED BY:	SCALE:	DATE:	PROJECT NO:	FILE NO:
RSC	CJS	MS	RSC	AS SHOWN	DECEMBER 2007	14368.16	GIS/PROJECTS/ FIGURE3.MXD



Structure 04	SS-04	BF-04
	µg/m³	µg/m³
Carbon Tertrachloride	(<1.26 U)	(<1.26 U)
cis-1,2-Dichloroethene	(<0.792 U)	(<0.792 U)
Tetrachloroethene	(<1.36 U)	(<1.36 U)
1,1,1- Trichloroethane	10.1	(<1.09 U)
Trichloroethene	4.37	(<1.07 U)
Vinyl Chloride	(<0.511 U)	(<0.511 U)

Structure 05	SS-05	BF-05
	µg/m³	µg/m³
Carbon Tertrachloride	1.92	1.41
cis-1,2-Dichloroethene	(<0.792 U)	(<0.792 U)
Tetrachloroethene	8.98	(<1.36 U)
1,1,1- Trichloroethane	19.6	(<1.09 U)
Trichloroethene	68.7	(<1.07 U)
Vinyl Chloride	(<0.511 U)	(<0.511 U)

Structure 02	SS-02	BF-02
	µg/m³	µg/m³
Carbon Tertrachloride	(<1.26 U)	(<1.26 U)
cis-1,2-Dichloroethene	(<0.792 U)	(<0.792 U)
Tetrachloroethene	(<1.36 U)	(<1.36 U)
1,1,1- Trichloroethane	6.32	(<1.09 U)
Trichloroethene	(<1.07 U)	(<1.07 U)
Vinyl Chloride	(<0.511 U)	(<0.511 U)

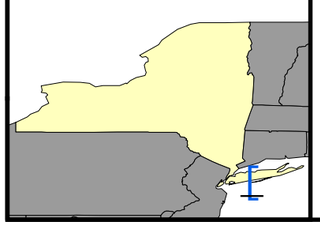
Structure 07	SS-07	BF-07
	µg/m³	µg/m³
Carbon Tertrachloride	(<1.26 U)	(<1.26 U)
cis-1,2-Dichloroethene	(<0.792 U)	(<0.792 U)
Tetrachloroethene	(<1.36 U)	(<1.36 U)
1,1,1- Trichloroethane	3.44	13.8
Trichloroethene	(<1.07 U)	(<1.07 U)
Vinyl Chloride	(<0.511 U)	(<0.511 U)

Structure 03	SS-03	BF-03
	µg/m³	µg/m³
Carbon Tertrachloride	(<1.26 U)	(<1.26 U)
cis-1,2-Dichloroethene	(<0.792 U)	(<0.792 U)
Tetrachloroethene	4.39	(<1.36 U)
1,1,1- Trichloroethane	9.45	(<1.09 U)
Trichloroethene	18	(<1.07 U)
Vinyl Chloride	(<0.511 U)	(<0.511 U)

Structure 08	SS-08	BF-08
	µg/m³	µg/m³
Carbon Tertrachloride	2.71	(<1.26 U)
cis-1,2-Dichloroethene	(<0.792 U)	(<0.792 U)
Tetrachloroethene	(<1.36 U)	(<1.36 U)
1,1,1- Trichloroethane	7.71	(<1.09 U)
Trichloroethene	13.8	(<1.07 U)
Vinyl Chloride	(<0.511 U)	(<0.511 U)

Structure 06	SS-06	BF-06
	µg/m³	µg/m³
Carbon Tertrachloride	(<1.26 U)	(<1.26 U)
cis-1,2-Dichloroethene	(<0.792 U)	(<0.792 U)
Tetrachloroethene	(<1.36 U)	(<1.36 U)
1,1,1- Trichloroethane	(<1.09 U)	(<1.09 U)
Trichloroethene	(<1.07 U)	(<1.07 U)
Vinyl Chloride	(<0.511 U)	(<0.511 U)

Structure 01	SS-01	BF-01
	µg/m³	µg/m³
Carbon Tertrachloride	(<1.26 U)	(<1.26 U)
cis-1,2-Dichloroethene	(<0.792 U)	(<0.792 U)
Tetrachloroethene	3.68	1.52
1,1,1- Trichloroethane	173	316
Trichloroethene	3.84	(<1.07 U)
Vinyl Chloride	(<0.511 U)	(<0.511 U)



Legend

- Evaluation Area
- Evaluation Area Structures - sampled
- Evaluation Area Structures - not sampled
- Roadway

SS = sub-slab vapor
BF = basement indoor air
ug/m3 = microgram per cubic meter

Source: NYS GIS Clearing House

FORMER GRUMMAN SETTLING PONDS (1-30-003A)
ISVI INVESTIGATION
SUMMARY REPORT
BETHPAGE, NEW YORK

FIGURE 4
Sub-Slab Vapor and Basement Indoor Air Data Results
August 2007

PROJECT MGR:	DESIGNED BY:	CREATED BY:	CHECKED BY:	SCALE:	DATE:	PROJECT NO:	FILE NO:
RSC	CJS	MS	RSC	AS SHOWN	DECEMBER 2007	14368.16	GIS/PROJECTS/ FIGURE3.MXD

1-30-003A-SV07	SV-07
	µg/m³
Acetone	22.5
Benzene	2.01
1,3-Butadiene	3.77 J
2-Butanone	3.96
Carbon disulfide	1.31
Chlorodifluoromethane	8,400 EJ
Chloroform	1.34 J
Chloromethane	0.355 J
3-Chloropropene	0.226 J
Dichlorodifluoromethane	320
Ethylbenzene	0.305 J
Freon-113	1.06 J
Freon-114	14.4
Heptane	1.98
n-Hexane	6.92 J
Isopropanol	1.95
Methylene chloride	2.23
Propylene	49.2 J
Tetrachloroethene	88.7
Toluene	5.66 J
1,1,1-Trichloroethane	3.75
Trichlorofluoromethane	19.7
1,2,4-Trimethylbenzene	0.436 J
2,2,4-Trimethylpentane	1.56 J
o-Xylene	0.907 J
p/m-Xylene	0.947 J

1-30-003A-SV05	SV-05
	µg/m³
Acetone	30.2
Benzene	2.78
1,3-Butadiene	4.76
2-Butanone	6.12
Carbon disulfide	1.14
Chlorodifluoromethane	13,900 EJ
Chloroform	1.8
Cyclohexane	0.419 J
Dichlorodifluoromethane	638
Ethylbenzene	0.453 J
4-Ethyltoluene	0.316 J
Freon-113	1.5 J
Freon-114	11.3
Heptane	3.05
n-Hexane	7.69
Isopropanol	0.769 J
Methylene chloride	1.91 J
Propylene	18.6
Tetrachloroethene	1.13 J
Toluene	2.85
1,1,1-Trichloroethane	0.702 J
Trichlorofluoromethane	10.8 J
1,3,5-Trimethybenzene	0.828 J
1,2,4-Trimethylbenzene	1.34 J
2,2,4-Trimethylpentane	0.739 J
o-Xylene	1.42 J
p/m-Xylene	1.8

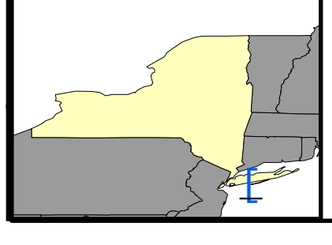
1-30-003A-SV04	SV-04
	µg/m³
Acetone	18.1
Benzene	2.09
1,3-Butadiene	1.8
2-Butanone	6.2
Carbon disulfide	0.947 J
Chlorodifluoromethane	814 EJ
Chloroform	0.857 J
Dichlorodifluoromethane	84.5
Ethylbenzene	0.754 J
n-Hexane	1.91
2-Hexanone	0.199 J
Isopropanol	1.65 J
Methylene chloride	2.58 J
Propylene	6.25
Tetrachloroethene	4.9
Toluene	5.93
1,1,1-Trichloroethane	2.43 J
Trichlorofluoromethane	8.63 J
p/m-Xylene	1.1 J

1-30-003A-SV02	SV-02
	µg/m³
Chloroform	1.61 J
Cyclohexane	2.61
Dichlorodifluoromethane	3.27
Ethylbenzene	18.6
4-Ethyltoluene	11.3
Heptane	17.1
n-Hexane	17.9
Isopropanol	2.87 J
Methyl tert butyl ether	9.66
Methylene chloride	2.55 J
Propylene	56.8
Tetrachloroethene	6.4
Toluene	116
Trichlorofluoromethane	7.55 J
1,3,5-Trimethybenzene	12.7
1,2,4-Trimethylbenzene	34.9
2,2,4-Trimethylpentane	24.8
o-Xylene	23.2
p/m-Xylene	67.9

1-30-003A-SV03	SV-03
	µg/m³
Chlorodifluoromethane	236
Chloroform	2.17
Cyclohexane	0.27 J
1,4-Dichlorobenzene	1.85 J
Dichlorodifluoromethane	526
Ethylbenzene	3.31
4-Ethyltoluene	3.81
Heptane	1.76
n-Hexane	3.79
2-Hexanone	0.224 J
Isopropanol	2.81 J
Methyl tert butyl ether	0.973 J
4-Methyl-2-pentanone	3.66
Methylene chloride	8.51 J
Propylene	21.7
Styrene	0.807 J
Tetrachloroethene	15.6
Tetrahydrofuran	3.59
Toluene	12.8
1,1,1-Trichloroethane	0.96 J
Trichloroethene	0.505 J
Trichlorofluoromethane	5.19 J
1,3,5-Trimethybenzene	2.86
1,2,4-Trimethylbenzene	17.4
2,2,4-Trimethylpentane	0.933 J
o-Xylene	5.48
p/m-Xylene	13.6

1-30-003A-SV06	SV-06
	µg/m³
Acetone	40.2
Benzene	1.59
1,3-Butadiene	1.32
2-Butanone	6.56
Carbon disulfide	2.56
Chlorodifluoromethane	98,100 EJ
Cyclohexane	0.718 J
1,4-Dichlorobenzene	1.86 J
Dichlorodifluoromethane	4160
Ethylbenzene	2.84
4-Ethyltoluene	2.26
Freon-113	8.48
Freon-114	80.6
Heptane	1.54
n-Hexane	2.13
2-Hexanone	0.256 J
Isopropanol	1.55 J
4-Methyl-2-pentanone	1.52
Methylene chloride	3.5 J
Styrene	0.851 J
Tetrachloroethene	3.22
Toluene	11.4
1,1,1-Trichloroethane	3.24 J
Trichloroethene	1.76 J
Trichlorofluoromethane	34.9 J
1,3,5-Trimethybenzene	2.02
1,2,4-Trimethylbenzene	10.3
2,2,4-Trimethylpentane	1.09 J
o-Xylene	3.63
p/m-Xylene	8.71

1-30-003A-SV01	SV-01	DUP-01
	µg/m³	µg/m³
Acetone	9.53	(<0.871 U)
Benzene	1.08 J	0.855 J
1,3-Butadiene	(<0.77 U)	0.681 J
2-Butanone	1.75	(<1.08 U)
Carbon disulfide	0.548 J	0.468 J
Chlorodifluoromethane	22.4	211
Chloroform	0.366 J	0.403 J
Chloromethane	0.658 J	(<0.757 U)
Dichlorodifluoromethane	3.44	5.28
Heptane	1.46	0.939 J
n-Hexane	1.38	0.737 J
Isopropanol	2.81 J	(<0.901 UJ)
Methylene chloride	12.1 J	2.23 J
Propylene	9.33	8.92
Tetrachloroethene	4	3.48
Toluene	2.21	(<2.24 U)
1,1,1-Trichloroethane	0.323 J	0.44 J
Trichloroethene	2.43	1.88 J
Trichlorofluoromethane	9.52 J	(<2.06 U)
2,2,4-Trimethylpentane	0.236 J	(<1.71 U)



Legend

Source: NYS GIS Clearing House

- ! — Soil Vapor Sampling Point
- ug/m³ — Micrograms per cubic meter (ppbv)
- EJ — Reported above the linear range and value is an estimate
- J — Reported value is an estimate
- U — Analyte detected below the method detection limit

FORMER GRUMMAN SETTLING PONDS (1-30-003A)
ISVI INVESTIGATION
SUMMARY REPORT
BETHPAGE, NEW YORK

FIGURE 5
Summary of Detected Volatile Organic Compounds (VOCs) in Soil Vapor Samples

PROJECT MGR: RSC	DESIGNED BY: CJS	CREATED BY: MS	CHECKED BY: RSC	SCALE: AS SHOWN	DATE: DECEMBER 2007	PROJECT NO: 14368.16	FILE NO: GIS/PROJECTS/ FIGURE3.MXD

Table 1
Summary of Soil Vapor Sample Locations
Immediate Soil Vapor Intrusion Investigation
Former Grumman Settling Ponds (NYSDEC Site No. 1-30-003A)
Bethpage, New York

Location ID	Sample ID	General Location/Comments	Sample Date	Depth to GW (ft. bgs)	Depth to Soil Vapor Implant Base (ft. bgs)	Sample Start Time	Initial Vacuum (in. Hg)	Sample End Time	End Vacuum (in. Hg)	Sample End Date
Soil Vapor Sampling Points										
1-30-003A-SV01	1-30-003A-SV01	Near S entrance to high school	8/16/2007	dry	8	7:22	-30+	9:22	-7	8/16/2007
1-30-003A-SV02	1-30-003A-SV02	Near N entrance to high school	8/16/2007	dry	8	7:37	-30+	9:37	-6	8/16/2007
1-30-003A-SV03	1-30-003A-SV03	Near N entrance to high school	8/16/2007	unknown	40	7:37	-30+	9:37	-7.5	8/16/2007
1-30-003A-SV04	1-30-003A-SV04	Near N end of high school	8/16/2007	dry	8	7:43	-30	9:43	-6	8/16/2007
1-30-003A-SV05	1-30-003A-SV05	S Corner of Cherry Ave and Stewart Ave	8/16/2007	dry	8	7:56	-30+	9:56	-7.5	8/16/2007
1-30-003A-SV06	1-30-003A-SV06	S Corner of Cherry Ave and Stewart Ave	8/16/2007	unknown	40	7:56	-30	9:56	-5.5	8/16/2007
1-30-003A-SV07	1-30-003A-SV07	N Corner of Cherry Ave and Stewart Ave	8/16/2007	dry	8	8:06	-30	10:06	-7	8/16/2007
1-30-003A-SV01	1-30-003A-SV-DUP01	Near S entrance to high school	8/16/2007	dry	8	7:22	-29	9:22	-6.5	8/16/2007

Table 2
Summary of Volatile Organic Compounds (VOCs) in Air/Vapor Samples
Immediate Soil Vapor Intrusion Investigation
Former Grumman Settling Ponds (NYSDEC Site No. 1-30-003A)
Bethpage, New York

Parameter List EPA Method TO-15	Property ID	Structure 01				Structure 02			
	Sample ID	1-30-003A-SS01		1-30-003A-BF01		1-30-003A-SS02		1-30-003A-BF02	
	Lab ID	L0711861-01		L0711861-02		L0711861-03		L0711861-04	
	Sample Type	Subslab Soil Vapor		Basement Indoor Air		Subslab Soil Vapor		Basement Indoor Air	
	Sample Date	8/14/2007		8/14/2007		8/14/2007		8/14/2007	
Acetone	(ug/m3)	**40.2**		**43.6**		**65.4**		**61.6**	
Benzene	(ug/m3)	**1.09**		**0.919**		**2**		**1.94**	
Benzyl chloride	(ug/m3)	1.03	U	1.03	U	1.03	U	1.03	U
Bromodichloromethane	(ug/m3)	1.34	U	1.34	U	1.34	U	1.34	U
Bromoform	(ug/m3)	2.06	U	2.06	U	2.06	U	2.06	U
Bromomethane	(ug/m3)	0.78	U	0.776	U	0.776	U	0.776	U
1,3- Butadiene	(ug/m3)	0.44	U	0.442	U	0.442	U	0.442	U
2- Butanone	(ug/m3)	**7.15**		**6.5**		**13.7**		**8.22**	
Carbon disulfide	(ug/m3)	0.622	U	0.622	U	0.622	U	0.622	U
Carbon tetrachloride	(ug/m3)	1.26	U	1.26	U	1.26	U	1.26	U
Chlorobenzene	(ug/m3)	0.92	U	0.92	U	0.92	U	0.92	U
Chloroethane	(ug/m3)	0.527	U	0.527	U	0.527	U	0.527	U
Chloroform	(ug/m3)	0.976	U	0.976	U	0.976	U	0.976	U
Chloromethane	(ug/m3)	**0.844**		**1.32**		**1.17**		**1.45**	
3- Chloropropene	(ug/m3)	0.626	U	0.626	U	0.626	U	0.626	U
Cyclohexane	(ug/m3)	**1.28**		**1.61**		**1.67**		**1.49**	
Dibromochloromethane	(ug/m3)	1.7	U	1.7	U	1.7	U	1.7	U
1,2- Dibromoethane	(ug/m3)	1.54	U	1.54	U	1.54	U	1.54	U
1,2- Dichlorobenzene	(ug/m3)	1.2	U	1.2 U	U	1.2	U	1.2	U
1,3- Dichlorobenzene	(ug/m3)	1.2	U	1.2 U	U	1.2	U	1.2	U
1,4- Dichlorobenzene	(ug/m3)	**23.2**		**32.2**		**5.15**		**3.47**	
Dichlorodifluoromethane	(ug/m3)	**3.61**		**4.19**		**3.51**		**4.03**	
1,1- Dichloroethane	(ug/m3)	0.809	U	0.809	U	0.809	U	0.809	U
1,2- Dichloroethane	(ug/m3)	0.809	U	0.809	U	**1.04**		**1.22**	
1,1- Dichloroethene	(ug/m3)	0.792	U	0.792	U	0.792	U	0.792	U
cis-1,2- Dichloroethene	(ug/m3)	0.792	U	0.792	U	0.792	U	0.792	U
trans-1,2- Dichloroethene	(ug/m3)	0.792	U	0.792	U	0.792	U	0.792	U
1,2- Dichloropropane	(ug/m3)	0.924	U	0.924	U	0.924	U	0.924	U
cis-1,3- Dichloropropene	(ug/m3)	0.907	U	0.907	U	0.907	U	0.907	U
trans-1,3- Dichloropropene	(ug/m3)	0.907	U	0.907	U	0.907	U	0.907	U
1,4- Dioxane	(ug/m3)	0.72	U	0.72	U	0.72	U	0.72	U
Ethyl Acetate	(ug/m3)	0.721	U	0.721	U	**4.9**		**6.54**	
Ethylbenzene	(ug/m3)	**1.57**		**1.96**		**1.93**		**1.33**	
4- Ethyltoluene	(ug/m3)	0.982	U	0.982	U	0.982	U	0.982	U
Freon-113	(ug/m3)	**6.06**		**11**		1.53	U	1.53	U
Freon-114	(ug/m3)	1.4	U	1.4	U	1.4	U	1.4	U
Heptane	(ug/m3)	**2.4**		**1.59**		**3.84**		**2.81**	
Hexachlorobutadiene	(ug/m3)	2.13	U	2.13	U	2.13	U	2.13	U
n- Hexane	(ug/m3)	**1.88**		**2.07**		**4.17**		**4.74**	
2- Hexanone	(ug/m3)	**1.62**		0.819	U	0.819	U	0.819	U
Isopropanol	(ug/m3)	**5.68**		**5.72**		**18.9**		**16.8**	
Methyl tert butyl ether	(ug/m3)	0.72	U	0.72	U	0.72	U	0.72	U
4- Methyl-2-pentanone	(ug/m3)	**1.01**		0.819	U	**2.52**		0.819	U
Methylene chloride	(ug/m3)	**8.76**		**13**		**2.25**		**2.21**	
Propylene	(ug/m3)	**1.02**		0.344	U	**1.38**		**1.97**	
Styrene	(ug/m3)	**2.58**		**2.67**		**0.919**		0.851	U
1,1,2,2- Tetrachloroethane	(ug/m3)	1.37	U	1.37	U	1.37	U	1.37	U
Tetrachloroethene	(ug/m3)	**3.68**		**1.52**		1.36	U	1.36	U
Tetrahydrofuran	(ug/m3)	**1.4**		0.59	U	**3.12**		**1.92**	
Toluene	(ug/m3)	**11.3**		**6.6**		**15.7**		**6.11**	
1,2,4- Trichlorobenzene	(ug/m3)	1.48	U	1.48	U	1.48	U	1.48	U
1,1,1- Trichloroethane	(ug/m3)	**173**		**316**		**6.32**		1.09	U
1,1,2- Trichloroethane	(ug/m3)	1.09	U	1.09	U	1.09	U	1.09	U
Trichloroethene	(ug/m3)	**3.84**		1.07	U	1.07	U	1.07	U
Trichlorofluoromethane	(ug/m3)	**3.3**		**4.54**		**2.41**		**2.76**	
1,3,5- Trimethybenzene	(ug/m3)	0.982	U	0.982	U	**1.02**		0.982	U
1,2,4- Trimethylbenzene	(ug/m3)	**2.02**		0.982	U	**3.88**		**2.42**	
2,2,4- Trimethylpentane	(ug/m3)	0.934	U	0.934	U	**0.98**		0.934	U
Vinyl acetate	(ug/m3)	0.704	U	0.704	U	0.704	U	0.704	U
Vinyl bromide	(ug/m3)	0.874	U	0.874	U	0.874	U	0.874	U
Vinyl chloride	(ug/m3)	0.511	U	0.511	U	0.511	U	0.511	U
o- Xylene	(ug/m3)	**1.7**		**1.6**		**2.54**		**1.57**	
p/m- Xylene	(ug/m3)	**5.14**		**5.5**		**7.16**		**4.26**	

Note:

EPA = Environmental Protection Agency
J = Reported value is an estimate
U = Analyte detected below the method detection limit.
ug/m3 = micrograms per cubic meter
Bold values indicate that the analyte was detected.

Table 2
Summary of Volatile Organic Compounds (VOCs) in Air/Vapor Samples
Immediate Soil Vapor Intrusion Investigation
Former Grumman Settling Ponds (NYSDEC Site No. 1-30-003A)
Bethpage, New York

Parameter List EPA Method TO-15	Property ID	Structure 03				Structure 04			
	Sample ID	1-30-003A-SS03		1-30-003A-BF03		1-30-003A-SS04		1-30-003A-BF04	
	Lab ID	L0711861-06		L0711861-07		L0711861-08		L0711861-09	
	Sample Type	Subslab Soil Vapor		Basement Indoor Air		Subslab Soil Vapor		Basement Indoor Air	
	Sample Date	8/14/2007		8/14/2007		8/14/2007		8/14/2007	
Acetone	(ug/m3)	**61.8**		**45.4**		**35.6**		**22.5**	
Benzene	(ug/m3)	**0.99**		0.638	U	**1.02**		0.638	U
Benzyl chloride	(ug/m3)	1.03	U	1.03	U	1.03	U	1.03	U
Bromodichloromethane	(ug/m3)	1.34	U	1.34	U	1.34	U	1.34	U
Bromoform	(ug/m3)	2.06	U	2.06	U	2.06	U	2.06	U
Bromomethane	(ug/m3)	0.776	U	0.776	U	0.776	U	0.776	U
1,3- Butadiene	(ug/m3)	0.442	U	0.442	U	0.442	U	0.442	U
2- Butanone	(ug/m3)	**8.24**		**3.12**		0.589	U	**2.24**	
Carbon disulfide	(ug/m3)	**0.859**		0.622	U	0.622	U	0.622	U
Carbon tetrachloride	(ug/m3)	1.26	U	1.26	U	1.26	U	1.26	U
Chlorobenzene	(ug/m3)	0.92	U	0.92	U	0.92	U	0.92	U
Chloroethane	(ug/m3)	0.527	U	0.527	U	0.527	U	0.527	U
Chloroform	(ug/m3)	**1.82**		0.976	U	**1.13**		0.976	U
Chloromethane	(ug/m3)	**0.951**		**1.25**		0.413	U	**1.19**	
3- Chloropropene	(ug/m3)	0.626	U	0.626	U	0.626	U	0.626	U
Cyclohexane	(ug/m3)	0.688	U	0.688	U	0.688	U	0.688	U
Dibromochloromethane	(ug/m3)	1.7	U	1.7	U	1.7	U	1.7	U
1,2- Dibromoethane	(ug/m3)	1.54	U	1.54	U	1.54	U	1.54	U
1,2- Dichlorobenzene	(ug/m3)	1.2	U	1.2	U	1.2	U	1.2	U
1,3- Dichlorobenzene	(ug/m3)	1.2	U	1.2	U	1.2	U	1.2	U
1,4- Dichlorobenzene	(ug/m3)	**20.5**		**22.2**		1.2	U	1.2	U
Dichlorodifluoromethane	(ug/m3)	**3.93**		**3.4**		**2.94**		**2.68**	
1,1- Dichloroethane	(ug/m3)	0.809	**U**	0.809	U	0.809	U	0.809	U
1,2- Dichloroethane	(ug/m3)	**1.18**		**1.61**		0.809	U	0.809	U
1,1- Dichloroethene	(ug/m3)	0.792	U	0.792	U	0.792	U	0.792	U
cis-1,2- Dichloroethene	(ug/m3)	0.792	U	0.792	U	0.792	U	0.792	U
trans-1,2- Dichloroethene	(ug/m3)	0.792	U	0.792	U	0.792	U	0.792	U
1,2- Dichloropropane	(ug/m3)	0.924	U	0.924	U	0.924	U	0.924	U
cis-1,3- Dichloropropene	(ug/m3)	0.907	U	0.907	U	0.907	U	0.907	U
trans-1,3- Dichloropropene	(ug/m3)	0.907	U	0.907	U	0.907	U	0.907	U
1,4- Dioxane	(ug/m3)	0.72	U	0.72	U	0.72	U	0.72	U
Ethyl Acetate	(ug/m3)	**1.45**		**4.95**		0.721	U	0.721	U
Ethylbenzene	(ug/m3)	**65.1**		**70.8**		0.868	U	0.868	U
4- Ethyltoluene	(ug/m3)	0.982	U	0.982	U	0.982	U	0.982	U
Freon-113	(ug/m3)	**3.15**		1.53	U	**1.84**		1.53	U
Freon-114	(ug/m3)	1.4	U	1.4	U	1.4	U	1.4	U
Heptane	(ug/m3)	**0.893**		0.819	U	**5.29**		0.819	U
Hexachlorobutadiene	(ug/m3)	2.13	U	2.13	U	2.13	U	2.13	U
n- Hexane	(ug/m3)	**0.88**		0.704	U	**1.68**		**0.817**	
2- Hexanone	(ug/m3)	0.819	U	0.819	U	0.819	U	0.819	U
Isopropanol	(ug/m3)	**6.09**		**32.7**		**2.7**		**3.02**	
Methyl tert butyl ether	(ug/m3)	0.72	U	0.72	U	0.72	U	0.72	U
4- Methyl-2-pentanone	(ug/m3)	**2.33**		0.819	U	0.819	U	0.819	U
Methylene chloride	(ug/m3)	**86.7**		**69**		**1.94**		**1.87**	
Propylene	(ug/m3)	**1.27**		**0.728**		**2.46**		0.344	U
Styrene	(ug/m3)	0.851	U	0.851	U	0.851	U	0.851	U
1,1,2,2- Tetrachloroethane	(ug/m3)	1.37	U	1.37	U	1.37	U	1.37	U
Tetrachloroethene	(ug/m3)	**4.39**		1.36	U	1.36	U	1.36	U
Tetrahydrofuran	(ug/m3)	**2.8**		0.59	U	0.59	U	0.59	U
Toluene	(ug/m3)	**265**		**312**		**14.9**		**2.94**	
1,2,4- Trichlorobenzene	(ug/m3)	1.48	U	1.48	U	1.48	U	1.48	U
1,1,1- Trichloroethane	(ug/m3)	**9.45**		1.09	U	**10.1**		1.09	U
1,1,2- Trichloroethane	(ug/m3)	1.09	U	1.09	U	1.09	U	1.09	U
Trichloroethene	(ug/m3)	**18**		1.07	U	**4.37**		1.07	U
Trichlorofluoromethane	(ug/m3)	**3.53**		**2.56**		**3.37**		**2.42**	
1,3,5- Trimethybenzene	(ug/m3)	**1.23**		0.982	U	0.982	U	0.982	U
1,2,4- Trimethylbenzene	(ug/m3)	**3.12**		0.982	U	**1.12**		0.982	U
2,2,4- Trimethylpentane	(ug/m3)	0.934	U	0.934	U	0.934	U	0.934	U
Vinyl acetate	(ug/m3)	0.704	U	0.704	U	0.704	U	0.704	U
Vinyl bromide	(ug/m3)	0.874	U	0.874	U	0.874	U	0.874	U
Vinyl chloride	(ug/m3)	0.511	U	0.511	U	0.511	U	0.511	U
o- Xylene	(ug/m3)	**113**		**119**		0.868	U	0.868	U
p/m- Xylene	(ug/m3)	**318**		**335**		**1.83**		0.868	U

Note:

EPA = Environmental Protection Agency
J = Reported value is an estimate
U = Analyte detected below the method detection limit.
ug/m3 = micrograms per cubic meter
Bold values indicate that the analyte was detected.

Table 2
Summary of Volatile Organic Compounds (VOCs) in Air/Vapor Samples
Immediate Soil Vapor Intrusion Investigation
Former Grumman Settling Ponds (NYSDEC Site No. 1-30-003A)
Bethpage, New York

Parameter List EPA Method TO-15	Property ID	Structure 05				Structure 06			
	Sample ID	1-30-003A-SS05		1-30-003A-BF05		1-30-003A-SS06		1-30-003A-BF06	
	Lab ID	L0711861-22		L0711861-21		L0711861-12		L0711861-11	
	Sample Type	Subslab Soil Vapor		Basement Indoor Air		Subslab Soil Vapor		Basement Indoor Air	
	Sample Date	8/14/2007		8/14/2007		8/14/2007		8/14/2007	
Acetone	(ug/m3)	**41.2**		**116**		**54.1**		**46.8**	
Benzene	(ug/m3)	**4.59**		**5.6**		**1.48**		**1.02**	
Benzyl chloride	(ug/m3)	1.03	U	1.03	U	1.03	U	1.03	U
Bromodichloromethane	(ug/m3)	1.34	U	1.34	U	1.34	U	1.34	U
Bromoform	(ug/m3)	2.06	U	2.06	U	2.06	U	2.06	U
Bromomethane	(ug/m3)	0.776	U	0.776	U	0.776	U	0.776	U
1,3- Butadiene	(ug/m3)	0.442	U	0.442	U	0.442	U	0.442	U
2- Butanone	(ug/m3)	0.589	U	**5.16**		**7.55**		**5.93**	
Carbon disulfide	(ug/m3)	**1.04**		0.622	U	0.6	U	0.622	U
Carbon tetrachloride	(ug/m3)	**1.92**		**1.41**		1.26	U	1.26	U
Chlorobenzene	(ug/m3)	0.92	U	0.92	U	0.92	U	0.92	U
Chloroethane	(ug/m3)	0.527	U	0.527	U	0.527	U	0.527	U
Chloroform	(ug/m3)	**3.61**		**1.2**		0.976	U	0.976	U
Chloromethane	(ug/m3)	0.413	U	**1.27**		**1.27**		**1.16**	
3- Chloropropene	(ug/m3)	0.626	U	0.626	U	0.626	U	0.626	U
Cyclohexane	(ug/m3)	**0.96**		**1.25**		0.688	U	0.688	U
Dibromochloromethane	(ug/m3)	1.7	U	1.7	U	1.7	U	1.7	U
1,2- Dibromoethane	(ug/m3)	1.54	U	1.54	U	1.54	U	1.54	U
1,2- Dichlorobenzene	(ug/m3)	1.2	U	1.2	U	1.2	U	1.2	U
1,3- Dichlorobenzene	(ug/m3)	1.2	U	1.2	U	1.2	U	1.2	U
1,4- Dichlorobenzene	(ug/m3)	1.2	U	1.2	U	1.2	U	1.2	U
Dichlorodifluoromethane	(ug/m3)	**6.08**		0.988	U	**2.69**		**2.83**	
1,1- Dichloroethane	(ug/m3)	**1.46**		0.809	U	0.809	U	0.809	U
1,2- Dichloroethane	(ug/m3)	0.809	U	0.809	U	0.809	U	0.809	U
1,1- Dichloroethene	(ug/m3)	0.792	U	0.792	U	0.792	U	0.792	U
cis-1,2- Dichloroethene	(ug/m3)	0.792	U	0.792	U	0.792	U	0.792	U
trans-1,2- Dichloroethene	(ug/m3)	0.792	U	0.792	U	0.792	U	0.792	U
1,2- Dichloropropane	(ug/m3)	0.924	U	0.924	U	0.924	U	0.924	U
cis-1,3- Dichloropropene	(ug/m3)	0.907	U	0.907	U	0.907	U	0.907	U
trans-1,3- Dichloropropene	(ug/m3)	0.907	U	0.907	U	0.907	U	0.907	U
1,4- Dioxane	(ug/m3)	0.72	U	0.72	U	0.72	U	0.72	U
Ethyl Acetate	(ug/m3)	**2.21**		**12.8**		0.721	U	0.721	U
Ethylbenzene	(ug/m3)	**3.79**		**4.12**		**1.28**		0.868	U
4- Ethyltoluene	(ug/m3)	0.982	U	**1.49**		0.982	U	0.982	U
Freon-113	(ug/m3)	**5.52**		1.53	U	1.53	U	1.53	U
Freon-114	(ug/m3)	1.4	U	1.4	U	1.4	U	1.4	U
Heptane	(ug/m3)	**2.83**		**3.65**		**1.65**		0.819	U
Hexachlorobutadiene	(ug/m3)	2.13	U	2.13	U	2.13	U	2.13	U
n- Hexane	(ug/m3)	**5.25**		**7.55**		**1.31**		**0.718**	
2- Hexanone	(ug/m3)	0.819	U	0.819	U	0.819	U	0.819	U
Isopropanol	(ug/m3)	**4.6**		**63.9**		**5.63**		**3.82**	
Methyl tert butyl ether	(ug/m3)	0.72	U	0.72	U	0.72	U	0.72	U
4- Methyl-2-pentanone	(ug/m3)	0.819	U	0.819	U	0.819	U	0.819	U
Methylene chloride	(ug/m3)	**2.62**		**2.31**		**3.47**		**2.32**	
Propylene	(ug/m3)	0.344	U	0.344	U	**2.47**		**2.63**	
Styrene	(ug/m3)	0.851	U	0.851	U	0.851	U	0.851	U
1,1,2,2- Tetrachloroethane	(ug/m3)	1.37	U	1.37	U	1.37	U	1.37	U
Tetrachloroethene	(ug/m3)	**8.98**		1.36	U	1.36	U	1.36	U
Tetrahydrofuran	(ug/m3)	0.59	U	**1.18**		**1**		0.59	U
Toluene	(ug/m3)	**31.1**		**30.3**		**7.9**		**2.91**	
1,2,4- Trichlorobenzene	(ug/m3)	1.48	U	1.48	U	1.48	U	1.48	U
1,1,1- Trichloroethane	(ug/m3)	**19.6**		1.09	U	1.09	U	1.09	U
1,1,2- Trichloroethane	(ug/m3)	1.09	U	1.09	U	1.09	U	1.09	U
Trichloroethene	(ug/m3)	**68.7**		1.07	U	1.07	U	1.07	U
Trichlorofluoromethane	(ug/m3)	**6.73**		**9.04**		**11.8**		**13.5**	
1,3,5- Trimethybenzene	(ug/m3)	**1.01**		**1.4**		0.982	U	0.982	U
1,2,4- Trimethylbenzene	(ug/m3)	**4.61**		**5.92**		0.982	U	0.982	U
2,2,4- Trimethylpentane	(ug/m3)	**4.01**		**4.87**		0.934	U	0.934	U
Vinyl acetate	(ug/m3)	0.704	U	0.704	U	0.704	U	0.704	U
Vinyl bromide	(ug/m3)	0.874	U	0.874	U	0.874	U	0.874	U
Vinyl chloride	(ug/m3)	0.511	U	0.511	U	0.511	U	0.511	U
o- Xylene	(ug/m3)	**4.62**		**5.42**		**1.03**		0.868	U
p/m- Xylene	(ug/m3)	**14.6**		**16.3**		**3.02**		**1.35**	

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U = Analyte detected below the method detection limit.
ug/m3 = micrograms per cubic meter
Bold values indicate that the analyte was detected.

Table 2
Summary of Volatile Organic Compounds (VOCs) in Air/Vapor Samples
Immediate Soil Vapor Intrusion Investigation
Former Grumman Settling Ponds (NYSDEC Site No. 1-30-003A)
Bethpage, New York

Parameter List EPA Method TO-15	Property ID	Structure 07				Structure 08			
	Sample ID	1-30-003A-SS07		1-30-003A-BF07		1-30-003A-SS08		1-30-003A-BF08	
	Lab ID	L0711861-13		L0711861-14		L0711861-16		L0711861-17	
	Sample Type	Subslab Soil Vapor		Basement Indoor Air		Subslab Soil Vapor		Basement Indoor Air	
	Sample Date	8/14/2007		8/14/2007		8/14/2007		8/14/2007	
Acetone	(ug/m3)	**>238**		**98.7**		**87.1**		**85.4**	
Benzene	(ug/m3)	**4.66**		**0.689**		**1.36**		**0.661**	
Benzyl chloride	(ug/m3)	1.03	U	1.03	U	1.03	U	1.03	U
Bromodichloromethane	(ug/m3)	1.34	U	1.34	U	1.34	U	1.34	U
Bromoform	(ug/m3)	2.06	U	2.06	U	2.06	U	2.06	U
Bromomethane	(ug/m3)	0.776	U	0.776	U	0.776	U	0.776	U
1,3- Butadiene	(ug/m3)	**4.2**		0.442	U	**2.5**		0.442	U
2- Butanone	(ug/m3)	**61.3**		0.589	U	**14**		0.589	U
Carbon disulfide	(ug/m3)	**0.806**		0.622	U	0.622	U	0.622	U
Carbon tetrachloride	(ug/m3)	1.26	U	1.26	U	**2.71**		1.26	U
Chlorobenzene	(ug/m3)	0.92	U	0.92	U	0.92	U	0.92	U
Chloroethane	(ug/m3)	0.527	U	0.527	U	0.527	U	0.527	U
Chloroform	(ug/m3)	0.976	U	0.976	U	**92**		**1.25**	
Chloromethane	(ug/m3)	0.413	U	**1.24**		0.413	U	**1.44**	
3- Chloropropene	(ug/m3)	0.626	U	0.626	U	0.626	U	0.626	U
Cyclohexane	(ug/m3)	**1.02**		**1.26**		0.688	U	0.688	U
Dibromochloromethane	(ug/m3)	1.7	U	1.7	U	1.7	U	1.7	U
1,2- Dibromoethane	(ug/m3)	1.54	U	1.54	U	1.54	U	1.54	U
1,2- Dichlorobenzene	(ug/m3)	1.2	U	1.2	U	1.2	U	1.2	U
1,3- Dichlorobenzene	(ug/m3)	1.2	U	1.2	U	1.2	U	1.2	U
1,4- Dichlorobenzene	(ug/m3)	**1.65**		1.2	U	1.2	U	1.2	U
Dichlorodifluoromethane	(ug/m3)	**2.72**		**3.11**		**2.9**		**3.03**	
1,1- Dichloroethane	(ug/m3)	0.809	U	0.809	U	0.809	U	0.809	U
1,2- Dichloroethane	(ug/m3)	**1.24**		**1.47**		0.809	U	0.809	U
1,1- Dichloroethene	(ug/m3)	0.792	U	0.792	U	0.792	U	0.792	U
cis-1,2- Dichloroethene	(ug/m3)	0.792	U	0.792	U	0.792	U	0.792	U
trans-1,2- Dichloroethene	(ug/m3)	0.792	U	0.792	U	0.792	U	0.792	U
1,2- Dichloropropane	(ug/m3)	0.924	U	0.924	U	0.924	U	0.924	U
cis-1,3- Dichloropropene	(ug/m3)	0.907	U	0.907	U	0.907	U	0.907	U
trans-1,3- Dichloropropene	(ug/m3)	0.907	U	0.907	U	0.907	U	0.907	U
1,4- Dioxane	(ug/m3)	0.72	U	0.72	U	0.72	U	0.72	U
Ethyl Acetate	(ug/m3)	0.721	U	0.721	U	0.721	U	**6.4**	
Ethylbenzene	(ug/m3)	**2.6**		**2.16**		**1.51**		0.868	U
4- Ethyltoluene	(ug/m3)	0.982	U	0.982	U	0.982	U	0.982	U
Freon-113	(ug/m3)	1.53	U	1.53	U	**2.5**		1.53	U
Freon-114	(ug/m3)	1.4	U	1.4	U	1.4	U	1.4	U
Heptane	(ug/m3)	**3.85**		**8.38**		**1.8**		**1.9**	
Hexachlorobutadiene	(ug/m3)	2.13	U	2.13	U	2.13	U	2.13	U
n- Hexane	(ug/m3)	**6.18**		**20.7**		0.704	U	0.704	U
2- Hexanone	(ug/m3)	**2.41**		0.819	U	0.819	U	0.819	U
Isopropanol	(ug/m3)	**31.4**		0.491	U	**7.81**		0.491	U
Methyl tert butyl ether	(ug/m3)	0.72	U	0.72	U	0.72	U	0.72	U
4- Methyl-2-pentanone	(ug/m3)	**10.8**		**9.71**		**2.55**		0.819	U
Methylene chloride	(ug/m3)	**3.36**		**8.9**		**26.2**		**20.3**	
Propylene	(ug/m3)	**15.9**		0.344	U	**8.11**		0.344	U
Styrene	(ug/m3)	**1.57**		1.3		0.851	U	0.851	U
1,1,2,2- Tetrachloroethane	(ug/m3)	1.37	U	1.37	U	1.37	U	1.37	U
Tetrachloroethene	(ug/m3)	1.36	U	1.36	U	1.36	U	1.36	U
Tetrahydrofuran	(ug/m3)	**4**		**3.3**		**4.64**		**9.02**	
Toluene	(ug/m3)	**30.6**		**27.6**		**9.81**		**4.49**	
1,2,4- Trichlorobenzene	(ug/m3)	1.48	U	1.48	U	1.48	U	1.48	U
1,1,1- Trichloroethane	(ug/m3)	**3.44**		**13.8**		**7.71**		1.09	U
1,1,2- Trichloroethane	(ug/m3)	1.09	U	1.09	U	1.09	U	1.09	U
Trichloroethene	(ug/m3)	1.07	U	1.07	U	**13.8**		1.07	U
Trichlorofluoromethane	(ug/m3)	**2.11**		**3.06**		**1.94**		**1.79**	
1,3,5- Trimethybenzene	(ug/m3)	0.982	U	0.982	U	0.982	U	0.982	U
1,2,4- Trimethylbenzene	(ug/m3)	**2.37**		**1.43**		**1.84**		0.982	U
2,2,4- Trimethylpentane	(ug/m3)	0.934	U	0.934	U	0.934	U	0.934	U
Vinyl acetate	(ug/m3)	0.704	U	0.704	U	0.704	U	0.704	U
Vinyl bromide	(ug/m3)	0.874	U	0.874	U	0.874	U	0.874	U
Vinyl chloride	(ug/m3)	0.511	U	0.511	U	0.511	U	0.511	U
o- Xylene	(ug/m3)	**3.31**		**2.01**		**2.22**		0.868	U
p/m- Xylene	(ug/m3)	**9.35**		**7.15**		**5.02**		**1.74**	

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Table 2
Summary of Volatile Organic Compounds (VOCs) in Air/Vapor Samples
Immediate Soil Vapor Intrusion Investigation
Former Grumman Settling Ponds (NYSDEC Site No. 1-30-003A)
Bethpage, New York

Parameter List EPA Method TO-15	Associated Property	Structures 01, 02 & 06		Structures 03, 04 & 05		Structure 07		Structure 08	
	Sample ID	1-30-003A-0A-81307-01		1-30-003A-0A-81307-02		1-30-003A-0A-81307-03		1-30-003A-0A-81307-04	
	Lab ID	L0711861-05		L0711861-10		L0711861-15		L0711861-18	
	Sample Type	Outdoor Air		Outdoor Air		Outdoor Air		Outdoor Air	
	Sample Date	8/14/2007		8/14/2007		8/14/2007		8/14/2007	
Acetone	(ug/m3)	0.475	U	**15**		**23.4**		**12.7**	
Benzene	(ug/m3)	0.638	U	**0.67**		0.638	U	0.638	U
Benzyl chloride	(ug/m3)	1.03	U	1.03	U	1.03	U	1.03	U
Bromodichloromethane	(ug/m3)	1.34	U	1.34	U	1.34	U	1.34	U
Bromoform	(ug/m3)	2.06	U	2.06	U	2.06	U	2.06	U
Bromomethane	(ug/m3)	0.776	U	0.776	U	0.776	U	0.776	U
1,3- Butadiene	(ug/m3)	0.442	U	0.442	U	0.442	U	0.442	U
2- Butanone	(ug/m3)	**0.99**		0.589	U	0.589	U	0.589	U
Carbon disulfide	(ug/m3)	0.622	U	0.622	U	0.622	U	0.622	U
Carbon tetrachloride	(ug/m3)	1.26	U	1.26	U	1.26	U	1.26	U
Chlorobenzene	(ug/m3)	0.92	U	0.92	U	0.92	U	0.92	U
Chloroethane	(ug/m3)	0.527	U	0.527	U	0.527	U	0.527	U
Chloroform	(ug/m3)	0.976	U	0.976	U	0.976	U	0.976	U
Chloromethane	(ug/m3)	**0.862**		**1.26**		**1.14**		**1.1**	
3- Chloropropene	(ug/m3)	0.626	U	0.626	U	0.626	U	0.626	U
Cyclohexane	(ug/m3)	0.688	U	0.688	U	0.688	U	0.688	U
Dibromochloromethane	(ug/m3)	1.7	U	1.7	U	1.7	U	1.7	U
1,2- Dibromoethane	(ug/m3)	1.54	U	1.54	U	1.54	U	1.54	U
1,2- Dichlorobenzene	(ug/m3)	1.2	U	1.2	U	1.2	U	1.2	U
1,3- Dichlorobenzene	(ug/m3)	1.2	U	1.2	U	1.2	U	1.2	U
1,4- Dichlorobenzene	(ug/m3)	1.2	U	1.2	U	1.2	U	1.2	U
Dichlorodifluoromethane	(ug/m3)	**2.26**		**2.96**		**2.72**		**2.89**	
1,1- Dichloroethane	(ug/m3)	0.809	U	0.809	U	0.809	U	0.809	U
1,2- Dichloroethane	(ug/m3)	0.809	U	0.809	U	0.809	U	0.809	U
1,1- Dichloroethene	(ug/m3)	0.792	U	0.792	U	0.792	U	0.792	U
cis-1,2- Dichloroethene	(ug/m3)	0.792	U	0.792	U	0.792	U	0.792	U
trans-1,2- Dichloroethene	(ug/m3)	0.792	U	0.792	U	0.792	U	0.792	U
1,2- Dichloropropane	(ug/m3)	0.924	U	0.924	U	0.924	U	0.924	U
cis-1,3- Dichloropropene	(ug/m3)	0.907	U	0.907	U	0.907	U	0.907	U
trans-1,3- Dichloropropene	(ug/m3)	0.907	U	0.907	U	0.907	U	0.907	U
1,4- Dioxane	(ug/m3)	0.72	U	0.72	U	0.72	U	0.72	U
Ethyl Acetate	(ug/m3)	0.721	U	0.721	U	0.721	U	0.721	U
Ethylbenzene	(ug/m3)	0.868	U	0.868	U	0.868	U	0.868	U
4- Ethyltoluene	(ug/m3)	0.982	U	0.982	U	0.982	U	0.982	U
Freon-113	(ug/m3)	1.53	U	1.53	U	1.53	U	1.53	U
Freon-114	(ug/m3)	1.4	U	1.4	U	1.4	U	1.4	U
Heptane	(ug/m3)	0.819	U	0.819	U	0.819	U	0.819	U
Hexachlorobutadiene	(ug/m3)	2.13	U	2.13	U	2.13	U	2.13	U
n- Hexane	(ug/m3)	0.704	U	**1.46**		0.704	U	0.704	U
2- Hexanone	(ug/m3)	0.819	U	0.819	U	0.819	U	0.819	U
Isopropanol	(ug/m3)	0.491	U	**3.2**		**1.97**		0.491	U
Methyl tert butyl ether	(ug/m3)	0.72	U	0.72	U	0.72	U	0.72	U
4- Methyl-2-pentanone	(ug/m3)	0.819	U	0.819	U	0.819	U	0.819	U
Methylene chloride	(ug/m3)	**1.38**		**1.85**		**1.79**		**2.18**	
Propylene	(ug/m3)	0.344	U	0.344	U	0.344	U	0.344	U
Styrene	(ug/m3)	0.851	U	0.851	U	0.851	U	0.851	U
1,1,2,2- Tetrachloroethane	(ug/m3)	1.37	U	1.37	U	1.37	U	1.37	U
Tetrachloroethene	(ug/m3)	1.36	U	1.36	U	1.36	U	1.36	U
Tetrahydrofuran	(ug/m3)	0.59	U	0.59	U	0.59	U	0.59	U
Toluene	(ug/m3)	0.753	U	**1.95**		**0.926**		0.753	U
1,2,4- Trichlorobenzene	(ug/m3)	1.48	U	1.48	U	1.48	U	1.48	U
1,1,1- Trichloroethane	(ug/m3)	1.09	U	1.09	U	1.09	U	1.09	U
1,1,2- Trichloroethane	(ug/m3)	1.09	U	1.09	U	1.09	U	1.09	U
Trichloroethene	(ug/m3)	1.07	U	1.07	U	1.07	U	1.07	U
Trichlorofluoromethane	(ug/m3)	**1.31**		**1.76**		**1.72**		**1.72**	
1,3,5- Trimethybenzene	(ug/m3)	0.982	U	0.982	U	0.982	U	0.982	U
1,2,4- Trimethylbenzene	(ug/m3)	0.982	U	0.982	U	0.982	U	0.982	U
2,2,4- Trimethylpentane	(ug/m3)	0.934	U	0.934	U	0.934	U	0.934	U
Vinyl acetate	(ug/m3)	0.704	U	0.704	U	0.704	U	0.704	U
Vinyl bromide	(ug/m3)	0.874	U	0.874	U	0.874	U	0.874	U
Vinyl chloride	(ug/m3)	0.511	U	0.511	U	0.511	U	0.511	U
o- Xylene	(ug/m3)	0.868	U	0.868	U	0.868	U	0.868	U
p/m- Xylene	(ug/m3)	0.868	U	0.868	U	0.868	U	0.868	U

Note:

EPA = Environmental Protection Agency
J = Reported value is an estimate
U = Analyte detected below the method detection limit.
ug/m3 = micrograms per cubic meter
Bold values indicate that the analyte was detected.

Table 2
Summary of Volatile Organic Compounds (VOCs) in Air/Vapor Samples
Immediate Soil Vapor Intrusion Investigation
Former Grumman Settling Ponds (NYSDEC Site No. 1-30-003A)
Bethpage, New York

Parameter List EPA Method TO-15	Associated Sample	1-30-003A-SS08		1-30-003A-BF07	
	Sample ID	1-30-003A-SS-DUP01		1-30-003A-BF-DUP01	
	Lab ID	L0711861-19		L0711861-20	
	Sample Type	Duplicate		Duplicate	
	Sample Date	8/14/2007		8/14/2007	
Acetone	(ug/m3)	**70**		**88.3**	
Benzene	(ug/m3)	**1.55**		**0.689**	
Benzyl chloride	(ug/m3)	1.03	U	1.03	U
Bromodichloromethane	(ug/m3)	1.34	U	1.34	U
Bromoform	(ug/m3)	2.06	U	2.06	U
Bromomethane	(ug/m3)	0.776	U	0.776	U
1,3- Butadiene	(ug/m3)	**2.3**		0.442	U
2- Butanone	(ug/m3)	**10.2**		0.589	U
Carbon disulfide	(ug/m3)	0.622	U	0.622	U
Carbon tetrachloride	(ug/m3)	**3.18**		1.26	U
Chlorobenzene	(ug/m3)	0.92	U	0.92	U
Chloroethane	(ug/m3)	0.527	U	0.527	U
Chloroform	(ug/m3)	**129**		0.976	U
Chloromethane	(ug/m3)	0.413	U	**1.06**	
3- Chloropropene	(ug/m3)	0.626	U	0.626	U
Cyclohexane	(ug/m3)	0.688	U	**1.22**	
Dibromochloromethane	(ug/m3)	1.7	U	1.7	U
1,2- Dibromoethane	(ug/m3)	1.54	U	1.54	U
1,2- Dichlorobenzene	(ug/m3)	1.2	U	1.2	U
1,3- Dichlorobenzene	(ug/m3)	1.2	U	1.2	U
1,4- Dichlorobenzene	(ug/m3)	1.2	U	1.2	U
Dichlorodifluoromethane	(ug/m3)	**2.41**		**2.57**	
1,1- Dichloroethane	(ug/m3)	0.809	U	0.809	U
1,2- Dichloroethane	(ug/m3)	0.809	U	**1.24**	
1,1- Dichloroethene	(ug/m3)	0.792	U	0.792	U
cis-1,2- Dichloroethene	(ug/m3)	0.792	U	0.792	U
trans-1,2- Dichloroethene	(ug/m3)	0.792	U	0.792	U
1,2- Dichloropropane	(ug/m3)	0.924	U	0.924	U
cis-1,3- Dichloropropene	(ug/m3)	0.907	U	0.907	U
trans-1,3- Dichloropropene	(ug/m3)	0.907	U	0.907	U
1,4- Dioxane	(ug/m3)	0.72	U	0.72	U
Ethyl Acetate	(ug/m3)	0.721	U	**13.8**	
Ethylbenzene	(ug/m3)	**1.11**		**1.54**	
4- Ethyltoluene	(ug/m3)	0.982	U	0.982	U
Freon-113	(ug/m3)	**2.24**		1.53	U
Freon-114	(ug/m3)	1.4	U	1.4	U
Heptane	(ug/m3)	**0.848**		**6.41**	
Hexachlorobutadiene	(ug/m3)	2.13	U	2.13	U
n- Hexane	(ug/m3)	0.704	U	**16.6**	
2- Hexanone	(ug/m3)	0.819	U	0.819	U
Isopropanol	(ug/m3)	**3.26**		**73.5**	
Methyl tert butyl ether	(ug/m3)	0.72	U	0.72	U
4- Methyl-2-pentanone	(ug/m3)	**1.04**		**7.49**	
Methylene chloride	(ug/m3)	**8.81**		**8.24**	
Propylene	(ug/m3)	**6.84**		0.344	U
Styrene	(ug/m3)	0.851	U	0.851	U
1,1,2,2- Tetrachloroethane	(ug/m3)	1.37	U	1.37	U
Tetrachloroethene	(ug/m3)	**2.47**		1.36	U
Tetrahydrofuran	(ug/m3)	**2.02**		**2.97**	
Toluene	(ug/m3)	**8.07**		**20.6**	
1,2,4- Trichlorobenzene	(ug/m3)	1.48	U	1.48	U
1,1,1- Trichloroethane	(ug/m3)	**9.39**		**11.7**	
1,1,2- Trichloroethane	(ug/m3)	1.09	U	1.09	U
Trichloroethene	(ug/m3)	**33.1**		1.07	U
Trichlorofluoromethane	(ug/m3)	**1.52**		**2.54**	
1,3,5- Trimethybenzene	(ug/m3)	0.982	U	0.982	U
1,2,4- Trimethylbenzene	(ug/m3)	**1.44**		0.982	U
2,2,4- Trimethylpentane	(ug/m3)	0.934	U	0.934	U
Vinyl acetate	(ug/m3)	0.704	U	0.704	U
Vinyl bromide	(ug/m3)	0.874	U	0.874	U
Vinyl chloride	(ug/m3)	0.511	U	0.511	U
o- Xylene	(ug/m3)	**1.54**		**1.49**	
p/m- Xylene	(ug/m3)	**3.66**		**4.78**	

Note:

EPA = Environmental Protection Agency
J = Reported value is an estimate
U = Analyte detected below the method detection limit.
ug/m3 = micrograms per cubic meter
Bold values indicate that the analyte was detected.

Table 3
Summary of Volatile Organic Compounds (VOCs) in Soil Vapor Samples
Immediate Soil Vapor Investigation
Former Grumman Settling Ponds (NYSDEC Site No. 1-30-003A)
Bethpage, New York

Parameter List EPA Method TO-15	Sample ID	1-30-003A-SV01		1-30-003A-SV02		1-30-003A-SV03		1-30-003A-SV04	
	Lab ID	L0711999-01		L0711999-02		L0711999-03		L0711999-04	
	Sample Depth	7.5 - 8 ft.		7.5 - 8 ft.		39.5 - 40 ft.		7.5 - 8 ft.	
	Sample Type	Soil Vapor		Soil Vapor		Soil Vapor		Soil Vapor	
	Sample Date	8/16/2007		8/16/2007		8/16/2007		8/16/2007	
Acetone	(ug/m3)	**9.53**		**35.5**		0.811	U	**18.1**	
Benzene	(ug/m3)	**1.08**	**J**	**33.5**		**2.57**		**2.09**	
Benzyl chloride	(ug/m3)	1.8	U	1.81	U	1.77	U	1.8	U
Bromodichloromethane	(ug/m3)	2.33	U	2.35	U	2.29	U	2.33	U
Bromoform	(ug/m3)	3.6	U	3.62	U	3.53	U	3.59	U
Bromomethane	(ug/m3)	1.35	U	1.36	U	1.33	U	1.35	U
1,3- Butadiene	(ug/m3)	0.77	U	**4.87**		**2.12**		**1.8**	
2- Butanone	(ug/m3)	**1.75**		1.03	U	**15**		**6.2**	
Carbon disulfide	(ug/m3)	**0.548**	**J**	**7.34**		**2.11**		**0.947**	**J**
Carbon tetrachloride	(ug/m3)	2.19	U	2.2	U	**4.33**		2.19	U
Chlorobenzene	(ug/m3)	1.6	U	1.61	U	1.57	U	1.6	U
Chlorodifluoromethane	(ug/m3)	**22.4**		**7.04**		**236**		**814**	**EJ**
Chloroethane	(ug/m3)	0.919	U	0.925	U	0.901	U	0.917	U
Chloroform	(ug/m3)	**0.366**	**J**	**1.61**	**J**	**2.17**		**0.857**	**J**
Chloromethane	(ug/m3)	**0.658**	**J**	0.724	U	0.705	U	0.718	U
3- Chloropropene	(ug/m3)	1.09	U	1.1	U	1.07	U	1.09	U
Cyclohexane	(ug/m3)	1.2	U	**2.61**		**0.27**	**J**	1.2	U
Dibromochloromethane	(ug/m3)	2.97	U	2.99	U	2.91	U	2.96	U
1,2- Dibromoethane	(ug/m3)	2.68	U	2.69	U	2.62	U	2.67	U
1,2- Dichlorobenzene	(ug/m3)	2.09	U	2.11	U	2.05	U	2.09	U
1,3- Dichlorobenzene	(ug/m3)	2.09	U	2.11	U	2.05	U	2.09	U
1,4- Dichlorobenzene	(ug/m3)	2.09	U	2.11	U	**1.85**	**J**	2.09	U
Dichlorodifluoromethane	(ug/m3)	**3.44**		**3.27**		**526**		**84.5**	
1,1- Dichloroethane	(ug/m3)	1.41	U	1.42	U	1.38	U	1.41	U
1,2- Dichloroethane	(ug/m3)	1.41	U	1.42	U	1.38	U	1.41	U
1,1- Dichloroethene	(ug/m3)	1.38	U	1.39	U	1.35	U	1.38	U
cis-1,2- Dichloroethene	(ug/m3)	1.38	U	1.39	U	1.35	U	1.38	U
trans-1,2- Dichloroethene	(ug/m3)	1.38	U	1.39	U	1.35	U	1.38	U
1,2- Dichloropropane	(ug/m3)	1.61	U	1.62	U	1.58	U	1.61	U
cis-1,3- Dichloropropene	(ug/m3)	1.58	U	1.59	U	1.55	U	1.58	U
trans-1,3- Dichloropropene	(ug/m3)	1.58	U	1.59	U	1.55	U	1.58	U
1,4- Dioxane	(ug/m3)	1.26	U	1.26	U	1.23	U	1.25	U
Ethyl Acetate	(ug/m3)	1.26	U	1.26	U	1.23	U	1.25	U
Ethylbenzene	(ug/m3)	1.51	U	**18.6**		**3.31**		**0.754**	**J**
4- Ethyltoluene	(ug/m3)	1.71	U	**11.3**		**3.81**		1.71	U
Freon-113	(ug/m3)	2.67	U	2.69	U	2.62	U	2.66	U
Freon-114	(ug/m3)	2.43	U	2.45	U	2.39	U	2.43	U
Heptane	(ug/m3)	**1.46**		**17.1**		**1.76**		1.42	U
Hexachlorobutadiene	(ug/m3)	3.71	U	3.74	U	3.64	U	3.71	U
n- Hexane	(ug/m3)	**1.38**		**17.9**		**3.79**		**1.91**	
2- Hexanone	(ug/m3)	1.43	U	1.44	U	**0.224**	**J**	**0.199**	**J**
Isopropanol	(ug/m3)	**2.81**	**J**	**2.87**	**J**	**2.81**	**J**	**1.65**	**J**
Methyl tert butyl ether	(ug/m3)	1.26	U	**9.66**		**0.973**	**J**	1.25	U
4- Methyl-2-pentanone	(ug/m3)	1.43	U	1.44	U	**3.66**		1.42	U
Methylene chloride	(ug/m3)	**12.1**	**J**	**2.55**	**J**	**8.51**	**J**	**2.58**	**J**
Propylene	(ug/m3)	**9.33**		**56.8**		**21.7**		**6.25**	
Styrene	(ug/m3)	1.48	U	1.49	U	**0.807**	**J**	1.48	U
1,1,2,2- Tetrachloroethane	(ug/m3)	2.39	U	2.41	U	2.34	U	2.38	U
Tetrachloroethene	(ug/m3)	**4**		**6.4**		**15.6**		**4.9**	
Tetrahydrofuran	(ug/m3)	1.03	U	1.03	U	**3.59**		1.02	U
Toluene	(ug/m3)	**2.21**		**116**		**12.8**		**5.93**	
1,2,4- Trichlorobenzene	(ug/m3)	2.58	U	2.6	U	2.53	U	2.58	U
1,1,1- Trichloroethane	(ug/m3)	**0.323**	**J**	1.91	U	**0.96**	**J**	**2.43**	**J**
1,1,2- Trichloroethane	(ug/m3)	1.9	U	1.91	U	1.86	U	1.9	U
Trichloroethene	(ug/m3)	**2.43**		1.88	U	**0.505**	**J**	1.87	U
Trichlorofluoromethane	(ug/m3)	**9.52**	**J**	**7.55**	**J**	**5.19**	**J**	**8.63**	**J**
1,3,5- Trimethybenzene	(ug/m3)	1.71	U	**12.7**		**2.86**		1.71	U
1,2,4- Trimethylbenzene	(ug/m3)	1.71	U	**34.9**		**17.4**		1.71	U
2,2,4- Trimethylpentane	(ug/m3)	**0.236**	**J**	**24.8**		**0.933**	**J**	1.62	U
Vinyl acetate	(ug/m3)	1.23	U	1.24	U	1.2	U	1.22	U
Vinyl bromide	(ug/m3)	1.52	U	1.53	U	1.49	U	1.52	U
Vinyl chloride	(ug/m3)	0.89	U	0.896	U	0.873	U	0.888	U
o- Xylene	(ug/m3)	1.51	U	**23.2**		**5.48**		1.51	U
p/m- Xylene	(ug/m3)	1.51	U	**67.9**		**13.6**		**1.1**	**J**

Note:

EPA = Environmental Protection Agency
EJ = Reported above the linear range and value is an estimate
J = Reported value is an estimate
U = Analyte detected below the method detection limit.
ug/m3 = micrograms per cubic meter
Bold values indicate that the analyte was detected.

Table 3
Summary of Volatile Organic Compounds (VOCs) in Soil Vapor Samples
Immediate Soil Vapor Investigation
Former Grumman Settling Ponds (NYSDEC Site No. 1-30-003A)
Bethpage, New York

Parameter List EPA Method TO-15	Sample ID	1-30-003A-SV05		1-30-003A-SV06		1-30-003A-SV07		1-30-003A-SV-DUP01[(a)]	
	Lab ID	L0711999-05		L0711999-06		L0711999-07		L0711999-08	
	Sample Depth	7.5 - 8 ft.		39.5 - 40 ft.		7.5 - 8 ft.		7.5 - 8 ft.	
	Sample Type	Soil Vapor		Soil Vapor		Soil Vapor		Soil Vapor	
	Sample Date	8/16/2007		8/16/2007		8/16/2007		8/16/2007	
Acetone	(ug/m3)	**30.2**		**40.2**		**22.5**		0.871	U
Benzene	(ug/m3)	**2.78**		**1.59**		**2.01**		**0.855**	**J**
Benzyl chloride	(ug/m3)	1.8	U	1.8	U	1.91	U	1.9	U
Bromodichloromethane	(ug/m3)	2.33	U	2.33	U	2.48	U	2.46	U
Bromoform	(ug/m3)	3.59	U	3.59	U	3.82	U	3.79	U
Bromomethane	(ug/m3)	1.35	U	1.35	U	1.44	U	1.42	U
1,3- Butadiene	(ug/m3)	**4.76**		**1.32**		**3.77**	**J**	**0.681**	**J**
2- Butanone	(ug/m3)	**6.12**		**6.56**		**3.96**		1.08	U
Carbon disulfide	(ug/m3)	**1.14**		**2.56**		**1.31**		**0.468**	**J**
Carbon tetrachloride	(ug/m3)	2.19	U	2.19	U	2.32	U	2.31	U
Chlorobenzene	(ug/m3)	1.6	U	1.6	U	1.7	U	1.69	U
Chlorodifluoromethane	(ug/m3)	**13,900**	**EJ**	**98,100**	**EJ**	**8,400**	**EJ**	**211**	
Chloroethane	(ug/m3)	0.917	U	0.917	U	0.976	U	0.968	U
Chloroform	(ug/m3)	**1.8**		1.7	U	**1.34**	**J**	**0.403**	**J**
Chloromethane	(ug/m3)	0.718	U	0.718	U	**0.355**	**J**	0.757	U
3- Chloropropene	(ug/m3)	1.09	U	1.09	U	**0.226**	**J**	1.15	U
Cyclohexane	(ug/m3)	**0.419**	**J**	**0.718**	**J**	1.27	U	1.26	U
Dibromochloromethane	(ug/m3)	2.96	U	2.96	U	3.15	U	3.12	U
1,2- Dibromoethane	(ug/m3)	2.67	U	2.67	U	2.84	U	2.82	U
1,2- Dichlorobenzene	(ug/m3)	2.09	U	2.09	U	2.22	U	2.2	U
1,3- Dichlorobenzene	(ug/m3)	2.09	U	2.09	U	2.22	U	2.2	U
1,4- Dichlorobenzene	(ug/m3)	2.09	U	**1.86**	**J**	2.22	U	2.2	U
Dichlorodifluoromethane	(ug/m3)	**638**		**4,160**		**320**		**5.28**	
1,1- Dichloroethane	(ug/m3)	1.41	U	1.41	U	1.5	U	1.48	U
1,2- Dichloroethane	(ug/m3)	1.41	U	1.41	U	1.5	U	1.48	U
1,1- Dichloroethene	(ug/m3)	1.38	U	1.38	U	1.46	U	1.45	U
cis-1,2- Dichloroethene	(ug/m3)	1.38	U	1.38	U	1.46	U	1.45	U
trans-1,2- Dichloroethene	(ug/m3)	1.38	U	1.38	U	1.46	U	1.45	U
1,2- Dichloropropane	(ug/m3)	1.61	U	1.61	U	1.71	U	1.69	U
cis-1,3- Dichloropropene	(ug/m3)	1.58	U	1.58	U	1.68	U	1.66	U
trans-1,3- Dichloropropene	(ug/m3)	1.58	U	1.58	U	1.68	U	1.66	U
1,4- Dioxane	(ug/m3)	1.25	U	1.25	U	1.33	U	1.32	U
Ethyl Acetate	(ug/m3)	1.25	U	1.25	U	1.33	U	1.32	U
Ethylbenzene	(ug/m3)	**0.453**	**J**	**2.84**		**0.305**	**J**	1.59	U
4- Ethyltoluene	(ug/m3)	**0.316**	**J**	**2.26**		1.82	U	1.8	U
Freon-113	(ug/m3)	**1.5**	**J**	**8.48**		**1.06**	**J**	2.81	U
Freon-114	(ug/m3)	**11.3**		**80.6**		**14.4**		2.56	U
Heptane	(ug/m3)	**3.05**		**1.54**		**1.98**		**0.939**	**J**
Hexachlorobutadiene	(ug/m3)	3.71	U	3.71	U	3.94	U	3.91	U
n- Hexane	(ug/m3)	**7.69**		**2.13**		**6.92**	**J**	**0.737**	**J**
2- Hexanone	(ug/m3)	1.42	U	**0.256**	**J**	1.52	U	1.5	U
Isopropanol	(ug/m3)	**0.769**	**J**	**1.55**	**J**	**1.95**		0.901	UJ
Methyl tert butyl ether	(ug/m3)	1.25	U	1.25	U	1.33	U	1.32	U
4- Methyl-2-pentanone	(ug/m3)	1.42	U	**1.52**		1.51	U	1.5	U
Methylene chloride	(ug/m3)	**1.91**	**J**	**3.5**	**J**	**2.23**		**2.23**	**J**
Propylene	(ug/m3)	**18.6**		0.598	U	**49.2**	**J**	**8.92**	
Styrene	(ug/m3)	1.48	U	**0.851**	**J**	1.57	U	1.56	U
1,1,2,2- Tetrachloroethane	(ug/m3)	2.38	U	2.38	U	2.54	U	2.52	U
Tetrachloroethene	(ug/m3)	**1.13**	**J**	**3.22**		**88.7**		**3.48**	
Tetrahydrofuran	(ug/m3)	1.02	U	1.02	U	1.09	U	1.08	U
Toluene	(ug/m3)	**2.85**		**11.4**		**5.66**	**J**	2.24	U
1,2,4- Trichlorobenzene	(ug/m3)	2.58	U	2.58	U	2.74	U	2.72	U
1,1,1- Trichloroethane	(ug/m3)	**0.702**	**J**	**3.24**	**J**	**3.75**		**0.44**	**J**
1,1,2- Trichloroethane	(ug/m3)	1.9	U	1.9	U	2.02	U	2.0	U
Trichloroethene	(ug/m3)	1.87	U	**1.76**	**J**	1.99	U	**1.88**	**J**
Trichlorofluoromethane	(ug/m3)	**10.8**	**J**	**34.9**	**J**	**19.7**		2.06	U
1,3,5- Trimethybenzene	(ug/m3)	**0.828**	**J**	**2.02**		1.82	U	1.8	U
1,2,4- Trimethylbenzene	(ug/m3)	**1.34**	**J**	**10.3**		**0.436**	**J**	1.8	U
2,2,4- Trimethylpentane	(ug/m3)	**0.739**	**J**	**1.09**	**J**	**1.56**	**J**	1.71	U
Vinyl acetate	(ug/m3)	1.22	U	1.22	U	1.3	U	1.29	U
Vinyl bromide	(ug/m3)	1.52	U	1.52	U	1.62	U	1.6	U
Vinyl chloride	(ug/m3)	0.888	U	0.888	U	0.945	U	0.937	U
o- Xylene	(ug/m3)	**1.42**	**J**	**3.63**		**0.907**	**J**	1.59	U
p/m- Xylene	(ug/m3)	**1.8**		**8.71**		**0.947**	**J**	1.59	U

Note:

(a) 1-30-003A-SV-DUP01 collected at 1-30-003A-SV01
EPA = Environmental Protection Agency
EJ = Reported above the linear range and value is an estimate
J = Reported value is an estimate
U = Analyte detected below the method detection limit.
ug/m3 = micrograms per cubic meter
Bold values indicate that the analyte was detected.

Appendix A

Daily Field Reports and Photo Logs

DAILY FIELD REPORT **Day: Monday** **Date: 8/13/07**

NYSDEC

Temperature: (F) 75 (am) 85 (pm)

Wind Direction: None (am) None (pm)

Weather: (am) Sunny and humid
(pm) Sunny and humid

Project Name
Former Grumman Settling Ponds
NYSDEC Site # 1-30-003A

Contract # D-004438.16

Bethpage, New York

Arrive at site 5:45 (am)

Leave site: 7:45 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan? Yes ( ) No (x)
(If yes, list the deviation under items for concern)

Are monitoring results at acceptable levels?

Soil	Yes ( )	n/a (x)	* No ( )
Waters	Yes ( )	n/a (x)	* No ( )
Air	Yes (x)	n/a ( )	* No ( )

- *If No, provide comments*

OTHER ITEMS:

Site Sketch Attached: Yes ( ) No (x)
Photos Taken: Yes (x) No ( )

DESCRIPTION OF DAILY WORK PERFORMED:

Arrived onsite at 0545. Installed basement indoor air canisters and semi-permanent subslab vapor sampling points in 8 homes. Subslab sampling completed by drilling through foundation and install Teflon 1/4in. ID tubing connected to Stainless steel coupler. Beeswax used to seal point. Summa canisters (6L) and 24 hour regulators attached to point to sample subslab. Completed DOH questionnaire with residents and took chemical inventory in basements. Took one subslab vapor duplicate sample and one basement indoor air duplicate sample. Steve Schraf was onsite from 1330 to 1630 and observed the installation of points at Structure 05. Bob Casey and Steve met with neighborhood residents regarding concerns about sampling program. Three of the original 11 homes to be sampled backed out of sampling. High humidity may have elevated PPB readings. Left site at 1945.

DAILY FIELD REPORT **Day: Monday** **Date: 8/13/07**

PROJECT TOTALS:

SAMPLING (Soil/Water/Air): Samplers set for 24 hour sample period

Contractor Sample ID:	DEC Sample ID:	Description:
1-30-003A-SS01		Subslab soil vapor
1-30-003A-BF01		Basement indoor air
1-30-003A-SS02		Subslab soil vapor
1-30-003A-BF02		Basement indoor air
1-30-003A-SS03		Subslab soil vapor
1-30-003A-BF03		Basement indoor air
1-30-003A-SS04		Subslab soil vapor
1-30-003A-BF04		Basement indoor air
1-30-003A-SS05		Subslab soil vapor
1-30-003A-BF05		Basement indoor air
1-30-003A-SS06		Subslab soil vapor
1-30-003A-BF06		Basement indoor air
1-30-003A-SS07		Subslab soil vapor
1-30-003A-BF07		Basement indoor air
1-30-003A-BF-DUP-01		Basement indoor air duplicate
1-30-003A-SS08		Subslab soil vapor
1-30-003A-BF08		Basement indoor air
1-30-003A-SS-DUP-01		Subslab soil vapor duplicate
1-30-003A-0A-81307-01		Outdoor air
1-30-003A-OA-81307-02		Outdoor air
1-30-003A-OA-81307-03		Outdoor air
1-30-003A-OA-81307-04		Outdoor air

DAILY FIELD REPORT Day: Monday Date: 8/13/07

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

EA personnel: Megan Scott, David Crandall, and Bob Casey

Subcontractor personnel: none

equipment: Hammer drill and bits, PPBrae, soil vapor point materials

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1. Steve Schraff
2. Residents

PROJECT SCHEDULE ISSUES: Three residents declined sampling.

PROJECT BUDGET ISSUES:

None.

ITEMS OF CONCERN:

none

COMMENTS:

none

ATTACHMENT(S) TO THIS REPORT: none

SITE REPRESENTATIVE:

Name: Megan Scott

cc:

DAILY PHOTOLOG

Basement Indoor Air Sample

Sub-Slab Vapor Sample

Outdoor Air Sample

Final Set-up of Sub-Slab Vapor Sample

Sealing Sub-Slab Sample Point with Melted Beeswax

Duplicate Sub-Slab Sample Collection

DAILY FIELD REPORT **Day: Tuesday** **Date: 8/14/07**

NYSDEC

Temperature: (F)	70	(am)	80	(pm)
Wind Direction:	Slight breeze	(am)	none	(pm)
Weather:	(am) Sunny			
	(pm) Sunny			

Project Name
Former Grumman Settling Ponds
NYSDEC Site # 1-30-003A

Contract # D-004438.16

Bethpage, New York

Arrive at site 6:30 (am)

Leave site: 7:00 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan? Yes ( ) No (x)
(If yes, list the deviation under items for concern)

Are monitoring results at acceptable levels?	Soil	Yes ( )	n/a (x)	* No ( )
	Waters	Yes ( )	n/a (x)	* No ( )
	Air	Yes (x)	n/a ( )	* No ( )

OTHER ITEMS:

- *If No, provide comments*

Site Sketch Attached: Yes ( ) No (x)
Photos Taken: Yes ( ) No (x)

DESCRIPTION OF DAILY WORK PERFORMED:

Arrived onsite at 0630. Collected basement indoor air, semi subslab vapor, outdoor air, and duplicate samples in 7 of 8 homes and properties. Resident not present at Structure 08. Structure 08 samples, outdoor air sample 04 and SS-DUP01 not collected from house as no access to property. Bob left message with home owner to turn off all samplers as soon as possible. He will consult with Steve Schraff as to whether to submit samples for analysis as 24-hour sampling period was exceeded. Semi-permanent sample points remain in all 7 homes where samples were picked up. Stainless steel cap placed over samplers. Left site @ 7:30pm, message left with homeowner of Structure 08.

DAILY FIELD REPORT

Day: Tuesday **Date: 8/14/07**

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:	DEC Sample ID:	Description:
1-30-003A-SS01		Subslab soil vapor
1-30-003A-BF01		Basement indoor air
1-30-003A-SS02		Subslab soil vapor
1-30-003A-BF02		Basement indoor air
1-30-003A-SS03		Subslab soil vapor
1-30-003A-BF03		Basement indoor air
1-30-003A-SS04		Subslab soil vapor
1-30-003A-BF04		Basement indoor air
1-30-003A-SS05		Subslab soil vapor
1-30-003A-BF05		Basement indoor air
1-30-003A-SS06		Subslab soil vapor
1-30-003A-BF06		Basement indoor air
1-30-003A-SS07		Subslab soil vapor
1-30-003A-BF07		Basement indoor air
1-30-003A-BF-DUP-01		Basement indoor air duplicate (1-30-003A-BF07)
1-30-003A-0A-81307-01		Outdoor air
1-30-003A-OA-81307-02		Outdoor air
1-30-003A-OA-81307-03		Outdoor air

DAILY FIELD REPORT **Day: Tuesday Date: 8/14/07**

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: Megan Scott, David Crandall, and Bob Casey

(Name of Subcontractor) personnel: none

(Name of contractor) equipment: adjustable wrench, tubing cutter, soil vapor point materials

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1. Residents

PROJECT SCHEDULE ISSUES:

STRUCTURE 08 not collected within 24 hour sample time. Residents not at home.

PROJECT BUDGET ISSUES:

None.

ITEMS OF CONCERN:

STRUCTURE 08 not collected within 24 hour sample time. Residents not at home.

COMMENTS:

ATTACHMENT(S) TO THIS REPORT: none

SITE REPRESENTATIVE:

Name: Megan Scott/David Crandall

cc:

DAILY FIELD REPORT **Day: Wednesday** **Date: 8/15/07**

NYSDEC

Temperature: (F)	70	(am)	80	(pm)
Wind Direction:	Slight breeze	(am)	none	(pm)
Weather:	(am) Sunny			
	(pm) Sunny			

Project Name
Former Grumman Settling Ponds
NYSDEC Site # 1-30-003A

Contract # D-004438.16

Bethpage, New York

Arrive at site 7:00 (am)

Leave site: 6:30 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan? Yes ( ) No (x)
(If yes, list the deviation under items for concern)

Are monitoring results at acceptable levels?	Soil	Yes (x)	n/a ( )	* No ( )
	Waters	Yes ( )	n/a (x)	* No ( )
	Air	Yes (x)	n/a ( )	* No ( )

OTHER ITEMS:

- *If No, provide comments*

Site Sketch Attached: Yes ( ) No (x)
Photos Taken: Yes (x) No ( )

DESCRIPTION OF DAILY WORK PERFORMED:

Arrived onsite at 0700. Went over location of Soil Vapor Sampling Points with Bob Casey. Land Air Water Environmental Services arrives on-site 0800. 5 soil vapor points installed to 8 ft bgs along on east side of Stewart Ave. 2 soil vapor points installed to 40 ft. bgs nearby SV02 and SV06. All points installed utilizing direct push techniques (7720DT Track Mount Geoprobe). Points installed to 8 ft bgs were classified for soil characteristics and ppbRAE readings, no noticeable impact during classification or through ppbRAE readings. 40 ft. points installed using a drive points (ppb readings or soil characterizing). 6-inch stainless steel samplers installed for each sampling point with ¼' ID Teflon tubing intalled to surface. Sand utilized at base of hole to cover samplers, bentonite to surface.

Helium leak test performed on each sample point to installed at 8 ft. bgs. Pure helium pumped into closed container pressed down onto ground over soil vapor point. With helium reach >99%, air pump used to purge soil vapor point into a tedlar bag (approximately 2L). The tedlar bag is then purged using the helium detector and ppbRAE.

10:30am. Was able to pick up Structure 08 samples that were not able to be picked up within 24 hour sample period due to occupants not being home on 8/14. Per resident the samplers were turned off at 8:00 pm (~ 45 minutes after the 24 hour sample period). All samples were gauged for ending pressure. Each Structure 08 sample read <-1 on gauge. Per Steve Scharf, samples were submitted to Alpha Woods Hole Lab for analysis.

Upon completion of Soil Vapor Points, prepared to take GPS coordinates of each sample point. Trimble unit not charged. Returned to hotel at 12:30pm to charge unit and meet courier to ship out samples to Lab. Return to site at 6:00pm to take GPS coordinates. Coordinates collected and left site at 6:30pm.

DAILY FIELD REPORT **Day: Wednesday Date: 8/15/07**

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:	DEC Sample ID:	Description:
1-30-003A-SS08		Subslab soil vapor
1-30-003A-BF08		Basement indoor air
1-30-003A-SS-DUP-01		Subslab soil vapor duplicate (1-30-003A-SS08)
1-30-003A-OA-81307-04		Outdoor air

DAILY FIELD REPORT **Day: Wednesday Date: 8/15/07**

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: Megan Scott, David Crandall, Joe Vonuderitz and Bob Casey

(Name of Subcontractor) personnel: Land Air Water Environmental Services

(Name of contractor) equipment: adjustable wrench, tubing cutter, soil vapor point materials, 7720DT Geoprobe, Helium leak test materials

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1. Residents for soil vapor point sample collection.

PROJECT SCHEDULE ISSUES:

PROJECT BUDGET ISSUES:

ITEMS OF CONCERN:

STRUCTURE 08 not collected within 24 hour sample time. Reportedly (Mr. Fassano) regulators were turned off at 8:00pm (45 minutes over 24 hour period). Each canister gauged at <-1

COMMENTS:

none

ATTACHMENT(S) TO THIS REPORT: none

SITE REPRESENTATIVE:

Name: David Crandall
cc:

DAILY PHOTOLOG

Installation of Soil Vapor Point

Helium Leak Testing

DAILY FIELD REPORT **Day: Thursday Date: 8/16/07**

NYSDEC

Temperature: (F) 75 (am) na (pm)

Wind Direction: Slight breeze (am) na (pm)

Weather: (am) Sunny
(pm) na

Project Name
Former Grumman Settling Ponds
NYSDEC Site # 1-30-003A

Contract # D-004438.16

Bethpage, New York

Arrive at site 7:00 (am)

Leave site: 10:30 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan? Yes ( ) No (x)
(If yes, list the deviation under items for concern)

Are monitoring results at acceptable levels?				
	Soil	Yes ( )	n/a (x)	* No ( )
	Waters	Yes ( )	n/a (x)	* No ( )
	Air	Yes (x)	n/a ( )	* No ( )

- *If No, provide comments*

OTHER ITEMS:

Site Sketch Attached: Yes ( ) No (x)
Photos Taken: Yes (x) No ( )

DESCRIPTION OF DAILY WORK PERFORMED:

Arrived onsite at 0700. Soil vapor samplers (6L summa canisters with 2 hour regulators) set for each of the seven soil vapor points. DUPLICATE sample collected from SV01. 40 ft deep SV points were purged and ppbRAE reading collected from purged air prior to sampling. 8 ft SV points were purged and read with ppbRAE on 8/15/07 during leak testing. Points pulled and/or cut flush to ground surface upon completion of sampling. Samples collected and left site @ 10:30am.

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:	DEC Sample ID:	Description:
1-30-003A-SV01		Soil vapor
1-30-003A-SV02		Soil vapor
1-30-003A-SV03		Soil vapor
1-30-003A-SV04		Soil vapor
1-30-003A-SV05		Soil vapor
1-30-003A-SV06		Soil vapor
1-30-003A-SV07		Soil vapor
1-30-003A-SV-DUP01		Duplicate sample (1-30-003A-SV01)

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: David Crandall

(Name of Subcontractor) personnel: none

(Name of contractor) equipment: soil vapor sampling materials.

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1.

PROJECT SCHEDULE ISSUES:

none

PROJECT BUDGET ISSUES:

ITEMS OF CONCERN:

none

COMMENTS:

none

ATTACHMENT(S) TO THIS REPORT: none

SITE REPRESENTATIVE:

Name: David Crandall
cc:

DAILY PHOTOLOG

Sampling of Soil Vapor Point and Duplicate Sample

Sampling of Shallow and Deep Soil Vapor Points

Appendix B

Boring Logs, Field Sampling Forms, NYSDOH Questionnaires and Product Inventories (CD Attachment)

Appendix C

Data Usability Summary Report

SUMMARY OF THE ANALYTICAL DATA USABILITY
Grumman, Bethpage, NY

Method TO-15
Samples Collected August 13, 2007
Samples Received August 15, 2007
Sample Delivery Group: L0711861
Laboratory Reference Numbers:

1-30-003A-SS01	L0711861-01
1-30-003A-SS01 DUP	L0711861-01 DUP
1-30-003A-BF01	L0711861-02
1-30-003A-SS02	L0711861-03
1-30-003A-BF02	L0711861-04
1-30-003A-0A-81307-02	L0711861-05
1-30-003A-SS03	L0711861-06
1-30-003A-BF03	L0711861-07
1-30-003A-SS04	L0711861-08
1-30-003A-BF04	L0711861-09
1-30-003A-0A-81307-02	L0711861-10
1-30-003A-BF06	L0711861-11
1-30-003A-SS06	L0711861-12
1-30-003A-SS07	L0711861-13
1-30-003A-SS07 DL	L0711861-13 DL
1-30-003A-BF07	L0711861-14
1-30-003A-0A-81307-03	L0711861-15
1-30-003A-SS-08	L0711861-16
1-30-003A-BF-08	L0711861-17
1-30-003A-0A81307-04	L0711861-18
1-30-003A-SS-DUP01	L0711861-19
1-30-003A-SS-DUP01 DUP	L0711861-19 DUP
1-30-003A-BF-DUP01	L0711861-20
1-30-003A-BF-05	L0711861-21
1-30-003A-SS-05	L0711861-22

Air samples were validated for analyses of volatile organics by the US EPA Region II checklist. Data were reviewed for usability according to the following criteria:

- Data Completeness
* - GC/MS Tuning
* - Holding Times
- Calibrations
* - Laboratory Blanks
- Trip Blanks
- Storage Blank
- Equipment Blank
* - Internal Standard Recoveries
- Matrix Spike / Matrix Spike Duplicate
- Laboratory Control Sample
- Compound Identification
- Compound Quantitation

- - Indicates that all criteria were met for this parameter.

DATA USABILITY SUMMARY

Low level data and several of the summary forms were not found in the original copy of the analytical report. These were received from the laboratory in a 10/23 email. Data for chlorodifluoromethane were also included in the revised report.

Summary forms were included with the data package that reported detected concentrations between the detection limit and the reporting limit, but this data was not included in the Excel spreadsheet provided by the laboratory. These concentrations were added in red to the spreadsheet during the validation. The data for these low concentrations were flagged with the "J" qualifier since the low concentrations are estimated values.

The laboratory's case narrative states:

3-Chloropropene was not included in the spike solution for the LCS/ICV standard. 3-Chloropropene is included in the daily continuing calibration standard, however, it is not a second source from the initial calibration. A percent recovery is not being reported in the LCS. The associated samples are non-detect for this compound. No further action taken.

The LCS % recovery for 4-methyl-2-pentanone [137%] is above method acceptance criteria.

No other problems were found that would affect the end use of the data.

Holding Times

All samples were analyzed within 14 days of sample collection

Tunes

No problems were detected with the tunes associated with the samples of this delivery group.

Calibrations

The percent RSDs for each target compound in the initial calibration were within ±30 percent.

All of the percent differences in the 8/24 continuing calibration associated with samples -01 to -14 were less than 30% with the exception of ethyl acetate (33%).

All of the percent differences in the 8/27 continuing calibration associated with samples -15 to -22 were less than 30% with the exception of toluene (34%), tetrachloroethene (34%), chlorobenzene (33%), ethylbenzene (31%), styrene (33%) and 1,2,4-trichlorobenzene (31%) .

The data for these compounds were only flagged with the "J" qualifier when they were detected in a sample since the percent difference was less than 50%.

All of the relative response factors were greater than 0.05.

Laboratory Duplicate

Two samples were used for laboratory duplicates:

Sample 1-30-003A-SS01 (L0711861-01) of this sample delivery group was used for the first laboratory duplicate for the GC/MS run associated with the analyses of samples -01 to -014. All RPDs that could be accurately calculated were less than the laboratory's 25% quality assurance limits.

Sample 1-30-003A-SS-DUP01 (L0711861-19) of this sample delivery group was used for the second laboratory duplicate. All RPDs that could be accurately calculated were less than the laboratory's 25% quality assurance limits with the exceptions of 1,3-butadiene (27%), benzene (26%), dichlorodifluoromethane (28%), trichloroethene (26%) and propylene (34%).

An RPD of 30% was used for the purposes of the validation. Only propylene had an RPD greater than 30%. The propylene data for samples 15-22 were flagged with the "J" qualifier and are estimated values.

Laboratory Control Samples

The laboratory's case narrative states:

3-Chloropropene was not included in the spike solution for the WG292774-2 LCS/ICV standard. This compound is included in the daily continuing calibration standard, however, it is not a second source from the initial calibration. A percent recovery is not being reported in the LCS. The associated samples are non-detect for this compound. No further action taken.

The LCS % recovery for 4-methyl-2-pentanone [137%] is above method acceptance criteria.

The 4-methyl-2-pentanone with the high recovery was only associated with the analyses of sample 1-30-003A-SS07 DL (L0711861-13 DL). This compound was not quantitated from this analysis and the data were not qualified for the high recoveries.

All other laboratory control samples were within the required 70% - 130% quality assurance limits.

Method Blanks

No compounds were detected in any of the method blanks associated with the analyses of these samples at concentrations great than the PQL.

Trip Blank

A trip blank was not analyzed with this sample delivery group.

Equipment Blanks

An equipment blank was not analyzed with this sample delivery group.

Method Detection Limit

Copies of the method detection limits were not included in the analytical reports.

Internal Standard Areas and Retention Times

All of the internal standard recoveries were within the +/- 40% quality assurance limits.

Sample Results

No other problems were detected with any of the sample results.

SUMMARY OF THE ANALYTICAL DATA USABILITY
Grumman, Bethpage, NY

Method TO-15
Samples Collected August 13, 2007
Samples Received August 15, 2007
Sample Delivery Group: L0711861
Laboratory Reference Numbers:

1-30-003A-SS01	L0711861-01
1-30-003A-SS01 DUP	L0711861-01 DUP
1-30-003A-BF01	L0711861-02
1-30-003A-SS02	L0711861-03
1-30-003A-BF02	L0711861-04
1-30-003A-0A-81307-02	L0711861-05
1-30-003A-SS03	L0711861-06
1-30-003A-BF03	L0711861-07
1-30-003A-SS04	L0711861-08
1-30-003A-BF04	L0711861-09
1-30-003A-0A-81307-02	L0711861-10
1-30-003A-BF06	L0711861-11
1-30-003A-SS06	L0711861-12
1-30-003A-SS07	L0711861-13
1-30-003A-SS07 DL	L0711861-13 DL
1-30-003A-BF07	L0711861-14
1-30-003A-0A-81307-03	L0711861-15
1-30-003A-SS-08	L0711861-16
1-30-003A-BF-08	L0711861-17
1-30-003A-0A81307-04	L0711861-18
1-30-003A-SS-DUP01	L0711861-19
1-30-003A-BF-DUP01	L0711861-20
1-30-003A-BF-05	L0711861-21
1-30-003A-SS-05	L0711861-22

VOLATILE ORGANICS
INITIAL CALIBRATION

Instrument ID:
Level: Low
Tune File ID: R22888 **Acceptable:** Yes **Time Requirements Met:** Yes
Initial Calibration File ID:R22891 **Date:** 8/12/2007 **Page:** 25
Associated Samples: -01, -01DUP, 02, -03, -04, -05, -06, -07, -08, -09, -10, -11, -12, -13, -14

	QC %RSD	STD %RSD	QC RRF	STD RRF		QC %RSD	STD %RSD	QC RRF	STD RRF
dichlorodifluoromethane	<30		>0.010		1,1-dichloropropene	<30		>0.010	
chloromethane	<30		>0.050		carbon tetrachloride *	<30		>0.050	
vinyl chloride *	<30		>0.050		benzene *	<30		>0.050	
bromomethane *	<30		>0.050		methylmethacrylate	<30		>0.010	
chloroethane	<30		>0.050		trichloroethene *	<30		>0.050	
acetone	<30		>0.050		1,2-dichloropropane	<30		>0.050	
acetonitrile	<30		>0.010		dibromomethane	<30		>0.010	
allylchloride	<30		>0.010		bromodichloromethane *	<30		>0.050	
acrolein	<30		>0.010		cis-1,3-dichloropropene *	<30		>0.050	
acrylonitrile	<30		>0.010		toluene *	<30		>0.050	
iodomethane	<30		>0.010		ethylmethacrylate	<30		>0.010	
vinyl acetate	<30		>0.010		trans-1,3-dichloropropene	<30		>0.050	
chloroprene	<30		>0.010		1,1,2-trichloroethane *	<30		>0.050	
2-butanone	<30		>0.050		1,2-dibromoethane	<30		>0.010	
carbon disulfide	<30		>0.050		4-methyl-2-pentanone	<30		>0.050	
trichlorofluoromethane	<30		>0.010		chlorobenzene *	<30		>0.050	
1,1-dichloroethene *	<30		>0.050		1,3-dichloropropane	<30		>0.010	
methylene chloride	<30		>0.050		tetrachloroethene *	<30		>0.050	
trans-1,2-dichloroethene	<30		>0.050		dibromochloromethane *	<30		>0.050	
1,1-dichloroethane *	<30		>0.050		2-hexanone	<30		>0.050	
propionitrile	<30		>0.010		1,1,1,2-tetrachloroethane	<30		>0.010	
isobutyl alcohol	<30		>0.010		ethylbenzene *	<30		>0.050	
methacrylonitrile	<30		>0.010		xylenes (total) *	<30		>0.050	
cis-1,2-dichloroethene	<30		>0.050		styrene *	<30		>0.050	
bromochloromethane	<30		>0.050		bromoform *	<30		>0.050	
2,2-dichloropropane	<30		>0.010		trans-1,4-dichloro-2-butene	<30		>0.010	
chloroform *	<30		>0.050		1,1,2,2-tetrachloroethane *	<30		>0.050	
1,2-dichloroethane *	<30		>0.050		1,2,3-trichloropropane	<30		>0.010	
1,1,1-trichloroethane *	<30		>0.050		1,2,4-Trichlorobenzene	<30		>0.010	

	QC %RSD	STD %RSD	QC RRF	STD RRF
Surrogates:				
1,2-Dichloroethane-d4	<30%		>0.050	
toluene-d8	<30%		>0.050	
4-bromofluorobenzene	<30%		>0.050	

All TCL Compounds Average RRF > 0.050: Yes

All TCL Compounds %D < QC Limit: Yes
TCL Compounds %D between 30% and 60% (J - qualify) N/A
TCL Compounds %D between 60% and 90% (J - qualify) N/A
TCL Compounds %D > 90% (R - reject undetected / J - detected) N/A

CALIBRATION VERIFICATION:

Compound	Benzene				Tetrachloroethene			
	Area x	**Area IS**	**calc rrf**	**Rprtd rrf**	**Area x**	**Area IS**	**calc rrf**	**Rprtd rrf**
PPB								
0.2	8,801	434,452	1.013	1.013	4,019	140,042	1.435	1.415
0.5	22,547	430,521	1.047	1.047	11,691	137,187	1.704	1.704
1.0	42,232	436,974	0.966	0.966	22,044	137,271	1.606	1.606
2.5	100,959	405,116	0.997	0.997	57,800	133,061	1.738	1.738
5	224,921	437,474	1.028	1.028	121,831	139,068	1.752	1.752
10	376,630	405,715	0.928	0.928	213,390	130,934	1.630	1.630
20	815,523	435,238	0.937	0.937	451,752	138,320	1.633	1.633
50	1,589,995	448,454	0.709	0.709	1,021,645	146,611	1.394	1.394
100	3,491,606	437,665	0.798	0.798	2,081,647	137,050	1.519	1.519
Average			0.936	0.936			1.601	1.601
			Calc	**Reported**			**Calc**	**Reported**
%RSD			12.07	12.07%			8.00	8.00%

VOLATILE ORGANICS
CONTINUING CALIBRATION

Instrument ID:
Level: Low
Tune File ID: R23121 **Acceptable:** Yes **Time Requirements Met:** Yes
Calibration File ID:R23121 **Date:** 8/24/2007 **Page:** 610
Initial Calibration File ID:R22891 **Date:** 8/12/2007 **Page:** 25
Associated Samples: -01, -01DUP, 02, -03, -04, -05, -06, -07, -08, -09, -10, -11, -12, -13, -14

COMPOUND LIST

	QC %RSD	STD %RSD	QC RRF	STD RRF		QC %RSD	STD %RSD	QC RRF	STD RRF
dichlorodifluoromethane	<30		>0.010		1,1-dichloropropene	<30		>0.010	
chloromethane	<30		>0.050		carbon tetrachloride *	<30		>0.050	
vinyl chloride *	<30		>0.050		benzene *	<30		>0.050	
bromomethane *	<30		>0.050		methylmethacrylate	<30		>0.010	
chloroethane	<30		>0.050		trichloroethene *	<30		>0.050	
acetone	<30		>0.050		1,2-dichloropropane	<30		>0.050	
acetonitrile	<30		>0.010		dibromomethane	<30		>0.010	
allylchloride	<30		>0.010		bromodichloromethane *	<30		>0.050	
acrolein	<30		>0.010		cis-1,3-dichloropropene *	<30		>0.050	
acrylonitrile	<30		>0.010		toluene *	<30		>0.050	
iodomethane	<30		>0.010		ethyl acetate	<30	33%	>0.010	
vinyl acetate	<30		>0.010		trans-1,3-dichloropropene	<30		>0.050	
chloroprene	<30		>0.010		1,1,2-trichloroethane *	<30		>0.050	
2-butanone	<30		>0.050		1,2-dibromoethane	<30		>0.010	
carbon disulfide	<30		>0.050		4-methyl-2-pentanone	<30		>0.050	
trichlorofluoromethane	<30		>0.010		chlorobenzene *	<30		>0.050	
1,1-dichloroethene *	<30		>0.050		1,3-dichloropropane	<30		>0.010	
methylene chloride	<30		>0.050		tetrachloroethene *	<30		>0.050	
trans-1,2-dichloroethene	<30		>0.050		dibromochloromethane *	<30		>0.050	
1,1-dichloroethane *	<30		>0.050		2-hexanone	<30		>0.050	
propionitrile	<30		>0.010		1,1,1,2-tetrachloroethane	<30		>0.010	
isobutyl alcohol	<30		>0.010		ethylbenzene *	<30		>0.050	
methacrylonitrile	<30		>0.010		xylenes (total) *	<30		>0.050	
cis-1,2-dichloroethene	<30		>0.050		styrene *	<30		>0.050	
bromochloromethane	<30		>0.050		bromoform *	<30		>0.050	
2,2-dichloropropane	<30		>0.010		trans-1,4-dichloro-2-butene	<30		>0.010	
chloroform *	<30		>0.050		1,1,2,2-tetrachloroethane *	<30		>0.050	
1,2-dichloroethane *	<30		>0.050		1,2,3-trichloropropane	<30		>0.010	
1,1,1-trichloroethane *	<30	33%	>0.050		1,2,4-Trichlorobenzene	<30		>0.010	
Propylene	<30		>0.050						

	QC %D	STD %D	QC RRF	STD RRF
Surrogates:				
1,2-Dichloroethane-d4	<30		>0.050	
toluene-d8	<30		>0.050	
4-bromofluorobenzene	<30		>0.050	

All TCL Compounds Average RRF > 0.050: Yes

All TCL Compounds %D < QC Limit: Yes
TCL Compounds %D between 25% and 50% (J - qualify) N/A
TCL Compounds %D between 50% and 90% (J - qualify) N/A
TCL Compounds %D > 90% (R - reject undetected / J - detected) N/A

CALIBRATION VERIFICATION:

Compound	Chloromethane				1,1-Dichloropropene			
	Area x	**Area IS**	**calc rrf**	**Rprtd rrf**	**Area x**	**Area IS**	**calc rrf**	**Rprtd rrf**
PPB								
10	122,828	195,564	0.628	0.628	207,829	317,739	0.654	0.654
% D		**Avg RRF**	**% D**	**% D**		**Avg RRF**	**% D**	**% D**
		0.657	**Calc**	**Reported**		0.584	**Calc**	**Reported**
			-4.40	4.40			12.00	12.00

VOLATILE ORGANICS
CONTINUING CALIBRATION

Instrument ID:
Level: Low
Tune File ID: R23121 **Acceptable:** Yes **Time Requirements Met:** Yes
Calibration File ID:R23121 **Date:** 8/24/2007 **Page:** 1502
Initial Calibration File ID:R22891 **Date:** 8/12/2007 **Page:** 25
Associated Samples: -15 through -22

COMPOUND LIST

	QC %RSD	STD %RSD	QC RRF	STD RRF		QC %RSD	STD %RSD	QC RRF	STD RRF
dichlorodifluoromethane	<30		>0.010		1,1-dichloropropene	<30		>0.010	
chloromethane	<30		>0.050		carbon tetrachloride *	<30		>0.050	
vinyl chloride *	<30		>0.050		benzene *	<30		>0.050	
bromomethane *	<30		>0.050		methylmethacrylate	<30		>0.010	
chloroethane	<30		>0.050		trichloroethene *	<30		>0.050	
acetone	<30		>0.050		1,2-dichloropropane	<30		>0.050	
acetonitrile	<30		>0.010		dibromomethane	<30		>0.010	
allylchloride	<30		>0.010		bromodichloromethane *	<30		>0.050	
acrolein	<30		>0.010		cis-1,3-dichloropropene *	<30		>0.050	
acrylonitrile	<30		>0.010		toluene *	<30	34%	>0.050	
iodomethane	<30		>0.010		ethyl acetate	<30		>0.010	
vinyl acetate	<30		>0.010		trans-1,3-dichloropropene	<30		>0.050	
chloroprene	<30		>0.010		1,1,2-trichloroethane *	<30		>0.050	
2-butanone	<30		>0.050		1,2-dibromoethane	<30		>0.010	
carbon disulfide	<30		>0.050		4-methyl-2-pentanone	<30		>0.050	
trichlorofluoromethane	<30		>0.010		chlorobenzene *	<30	33%	>0.050	
1,1-dichloroethene *	<30		>0.050		1,3-dichloropropane	<30		>0.010	
methylene chloride	<30		>0.050		tetrachloroethene *	<30	34%	>0.050	
trans-1,2-dichloroethene	<30		>0.050		dibromochloromethane *	<30		>0.050	
1,1-dichloroethane *	<30		>0.050		2-hexanone	<30		>0.050	
propionitrile	<30		>0.010		1,1,1,2-tetrachloroethane	<30		>0.010	
isobutyl alcohol	<30		>0.010		ethylbenzene *	<30	31%	>0.050	
methacrylonitrile	<30		>0.010		xylenes (total) *	<30		>0.050	
cis-1,2-dichloroethene	<30		>0.050		styrene *	<30	33%	>0.050	
bromochloromethane	<30		>0.050		bromoform *	<30		>0.050	
2,2-dichloropropane	<30		>0.010		trans-1,4-dichloro-2-butene	<30		>0.010	
chloroform *	<30		>0.050		1,1,2,2-tetrachloroethane *	<30		>0.050	
1,2-dichloroethane *	<30		>0.050		1,2,3-trichloropropane	<30		>0.010	
1,1,1-trichloroethane *	<30	33%	>0.050		1,2,4-Trichlorobenzene	<30	31%	>0.010	
Propylene	<30		>0.050						

	QC %D	STD %D	QC RRF	STD RRF
Surrogates:				
1,2-Dichloroethane-d4	<30		>0.050	
toluene-d8	<30		>0.050	
4-bromofluorobenzene	<30		>0.050	

All TCL Compounds Average RRF > 0.050: Yes

All TCL Compounds %D < QC Limit: Yes
TCL Compounds %D between 25% and 50% (J - qualify) N/A
TCL Compounds %D between 50% and 90% (J - qualify) N/A
TCL Compounds %D > 90% (R - reject undetected / J - detected) N/A

CALIBRATION VERIFICATION:

Compound	Trichlorofluoromethane				1,2,4-Trimethylbenzene			
	Area x	**Area IS**	**calc rrf**	**Rprtd rrf**	**Area x**	**Area IS**	**calc rrf**	**Rprtd rrf**
PPB								
10	369,522	175,852	2.101	2.101	332,932	124,720	2.669	2.669
% D		**Avg RRF**	**% D**	**% D**		**Avg RRF**	**% D**	**% D**
		1.875	**Calc**	**Reported**		3.496	**Calc**	**Reported**
			12.07	12.10			-23.64	23.70

VOLATILE ORGANICS
CONTINUING CALIBRATION

Instrument ID:
Level: Low
Tune File ID: R23121 **Acceptable:** Yes **Time Requirements Met:** Yes
Calibration File ID:R23121 **Date:** 8/24/2007 **Page:** 1500
Initial Calibration File ID:R22891 **Date:** 8/12/2007 **Page:** 25
Associated Samples: -15 through 22

COMPOUND LIST

	QC %RSD	STD %RSD	QC RRF	STD RRF		QC %RSD	STD %RSD	QC RRF	STD RRF
dichlorodifluoromethane	<30		>0.010		1,1-dichloropropene	<30		>0.010	
chloromethane	<30		>0.050		carbon tetrachloride *	<30		>0.050	
vinyl chloride *	<30		>0.050		benzene *	<30		>0.050	
bromomethane *	<30		>0.050		methylmethacrylate	<30		>0.010	
chloroethane	<30		>0.050		trichloroethene *	<30		>0.050	
acetone	<30		>0.050		1,2-dichloropropane	<30		>0.050	
acetonitrile	<30		>0.010		dibromomethane	<30		>0.010	
allylchloride	<30		>0.010		bromodichloromethane *	<30		>0.050	
acrolein	<30		>0.010		cis-1,3-dichloropropene *	<30		>0.050	
acrylonitrile	<30		>0.010		toluene *	<30		>0.050	
iodomethane	<30		>0.010		ethyl acetate	<30		>0.010	
vinyl acetate	<30		>0.010		trans-1,3-dichloropropene	<30		>0.050	
chloroprene	<30		>0.010		1,1,2-trichloroethane *	<30		>0.050	
2-butanone	<30		>0.050		1,2-dibromoethane	<30		>0.010	
carbon disulfide	<30		>0.050		4-methyl-2-pentanone	<30		>0.050	
trichlorofluoromethane	<30		>0.010		chlorobenzene *	<30		>0.050	
1,1-dichloroethene *	<30		>0.050		1,3-dichloropropane	<30		>0.010	
methylene chloride	<30		>0.050		tetrachloroethene *	<30		>0.050	
trans-1,2-dichloroethene	<30		>0.050		dibromochloromethane *	<30		>0.050	
1,1-dichloroethane *	<30		>0.050		2-hexanone	<30		>0.050	
propionitrile	<30		>0.010		1,1,1,2-tetrachloroethane	<30		>0.010	
isobutyl alcohol	<30		>0.010		ethylbenzene *	<30		>0.050	
methacrylonitrile	<30		>0.010		xylenes (total) *	<30		>0.050	
cis-1,2-dichloroethene	<30		>0.050		styrene *	<30		>0.050	
bromochloromethane	<30		>0.050		bromoform *	<30		>0.050	
2,2-dichloropropane	<30		>0.010		trans-1,4-dichloro-2-butene	<30		>0.010	
chloroform *	<30		>0.050		1,1,2,2-tetrachloroethane *	<30		>0.050	
1,2-dichloroethane *	<30		>0.050		1,2,3-trichloropropane	<30		>0.010	
1,1,1-trichloroethane *	<30	33%	>0.050		1,2,4-Trichlorobenzene	<30		>0.010	
Propylene	<30		>0.050						

	QC %D	STD %D	QC RRF	STD RRF
Surrogates:				
1,2-Dichloroethane-d4	<30		>0.050	
toluene-d8	<30		>0.050	
4-bromofluorobenzene	<30		>0.050	

All TCL Compounds Average RRF > 0.050: Yes

All TCL Compounds %D < QC Limit: Yes
TCL Compounds %D between 25% and 50% (J - qualify) N/A
TCL Compounds %D between 50% and 90% (J - qualify) N/A
TCL Compounds %D > 90% (R - reject undetected / J - detected) N/A

CALIBRATION VERIFICATION:

Compound	Chloromethane				1,1-Dichloropropene			
	Area x	**Area IS**	**calc rrf**	**Rprtd rrf**	**Area x**	**Area IS**	**calc rrf**	**Rprtd rrf**
PPB								
10	122,828	195,564	0.628	0.628	207,829	317,739	0.654	0.654
% D		**Avg RRF**	**% D Calc**	**% D Reported**		**Avg RRF**	**% D Calc**	**% D Reported**
		0.657	-4.40	4.40		0.584	12.00	12.00

Alpha Analytical Labs

Summary of Results

Analysis: Volatile Organic Compounds by EPA Method TO-15

Sample Name: L0711861-01 1-30-003A-SS01

Compound	ppbv	ug/m3	DV Qualifier
1,1,1-Trichloroethane	31.8	173	
1,1,2,2-Tetrachloroethane	ND	ND	
1,1,2-Trichloroethane	ND	ND	
1,1-Dichloroethane	ND	ND	
1,1-Dichloroethene	ND	ND	
1,2,4-Trichlorobenzene	ND	ND	
1,2,4-Trimethylbenzene	0.411	2.02	
1,2-Dibromoethane	ND	ND	
1,2-Dichlorobenzene	ND	ND	
1,2-Dichloroethane	ND	ND	
1,2-Dichloropropane	ND	ND	
1,3,5-Trimethybenzene	0.097	0.476	J
1,3-Butadiene	0.03	0.0663	J
1,3-Dichlorobenzene	ND	ND	
1,4-Dichlorobenzene	3.86	23.2	
1,4-Dioxane	ND	ND	
2,2,4-Trimethylpentane	0.076	0.355	J
2-Butanone	2.42	7.15	
2-Hexanone	0.395	1.62	
3-Chloropropene	ND	ND	
4-Ethyltoluene	0.09	0.442	J
Acetone	16.9	40.2	
Benzene	0.341	1.09	
Benzyl chloride	ND	ND	
Bromodichloromethane	ND	ND	
Bromoform	ND	ND	
Bromomethane	ND	ND	
Carbon disulfide	0.145	0.451	J
Carbon tetrachloride	0.064	0.402	J
Chlorobenzene	ND	ND	
Chlorodifluoromethane	0.665	2.35	
Chloroethane	ND	ND	
Chloroform	0.16	0.78	J
Chloromethane	0.409	0.844	
cis-1,2-Dichloroethene	ND	ND	
cis-1,3-Dichloropropene	ND	ND	
Cyclohexane	0.373	1.28	
Dibromochloromethane	ND	ND	
Dichlorodifluoromethane	0.73	3.61	
Ethylbenzene	0.361	1.57	

Freon-113		0.791		6.06
Freon-114	ND		ND	
Heptane		0.586		2.4
Hexachlorobutadiene	ND		ND	
n-Hexane		0.535		1.88
Isopropanol		2.32		5.68
Methylene chloride		2.52		8.76
4-Methyl-2-pentanone		0.246		1.01
Methyl tert butyl ether	ND		ND	
p/m-Xylene		1.18		5.14
o-Xylene		0.392		1.7
Styrene		0.606		2.58
Tetrachloroethene		0.543		3.68
Toluene		3.01		11.3
trans-1,2-Dichloroethene	ND		ND	
trans-1,3-Dichloropropene	ND		ND	
Trichloroethene		0.716		3.84
Trichlorofluoromethane		0.587		3.3
Vinyl bromide	ND		ND	
Vinyl chloride	ND		ND	
Ethyl Acetate	ND		ND	
Propylene		0.591		1.02
Tetrahydrofuran		0.475		1.4
Vinyl acetate	ND		ND	

Alpha Analytical Labs

Summary of Results

Analysis: Volatile Organic Compounds by EPA Method TO-15

Sample Name: L0711861-02 1-30-003A-BF01

Compound	ppbv	ug/m3	DV Qualifier
1,1,1-Trichloroethane	57.9	316	
1,1,2,2-Tetrachloroethane	ND	ND	
1,1,2-Trichloroethane	ND	ND	
1,1-Dichloroethane	0.025	0.101	J
1,1-Dichloroethene	0.039	0.154	J
1,2,4-Trichlorobenzene	ND	ND	
1,2,4-Trimethylbenzene	0.172	0.845	J
1,2-Dibromoethane	ND	ND	
1,2-Dichlorobenzene	ND	ND	
1,2-Dichloroethane	ND	ND	
1,2-Dichloropropane	ND	ND	
1,3,5-Trimethybenzene	0.041	0.201	J
1,3-Butadiene	ND	ND	
1,3-Dichlorobenzene	ND	ND	
1,4-Dichlorobenzene	5.36	32.2	
1,4-Dioxane	ND	ND	
2,2,4-Trimethylpentane	0.116	0.541	J
2-Butanone	2.21	6.5	
2-Hexanone	ND	ND	
3-Chloropropene	ND	ND	
4-Ethyltoluene	0.05	0.246	J
Acetone	18.4	43.6	
Benzene	0.288	0.919	
Benzyl chloride	ND	ND	
Bromodichloromethane	ND	ND	
Bromoform	ND	ND	
Bromomethane	ND	ND	
Carbon disulfide	ND	ND	
Carbon tetrachloride	ND	ND	
Chlorobenzene	ND	ND	
Chlorodifluoromethane	0.532	1.88	
Chloroethane	ND	ND	
Chloroform	0.112	0.546	J
Chloromethane	0.641	1.32	
cis-1,2-Dichloroethene	ND	ND	
cis-1,3-Dichloropropene	ND	ND	
Cyclohexane	0.469	1.61	
Dibromochloromethane	ND	ND	
Dichlorodifluoromethane	0.848	4.19	
Ethylbenzene	0.453	1.96	

Freon-113		1.44		11
Freon-114	ND		ND	
Heptane		0.388		1.59
Hexachlorobutadiene	ND		ND	
n-Hexane		0.589		2.07
Isopropanol		2.33		5.72
Methylene chloride		3.74		13
4-Methyl-2-pentanone	ND		ND	
Methyl tert butyl ether	ND		ND	
p/m-Xylene		1.27		5.5
o-Xylene		0.37		1.6
Styrene		0.627		2.67
Tetrachloroethene		0.225		1.52
Toluene		1.75		6.6
trans-1,2-Dichloroethene	ND		ND	
trans-1,3-Dichloropropene	ND		ND	
Trichloroethene	ND		ND	
Trichlorofluoromethane		0.809		4.54
Vinyl bromide	ND		ND	
Vinyl chloride	ND		ND	
Ethyl Acetate	ND		ND	
Propylene	ND		ND	
Tetrahydrofuran	ND		ND	
Vinyl acetate	ND		ND	

Alpha Analytical Labs

Summary of Results

Analysis: Volatile Organic Compounds by EPA Method TO-15

Sample Name: L0711861-03 1-30-003A-SS02

Compound	ppbv	ug/m3	DV Qualifier
1,1,1-Trichloroethane	1.16	6.32	
1,1,2,2-Tetrachloroethane	ND	ND	
1,1,2-Trichloroethane	ND	ND	
1,1-Dichloroethane	ND	ND	
1,1-Dichloroethene	ND	ND	
1,2,4-Trichlorobenzene	ND	ND	
1,2,4-Trimethylbenzene	0.791	3.88	
1,2-Dibromoethane	ND	ND	
1,2-Dichlorobenzene	ND	ND	
1,2-Dichloroethane	0.256	1.04	
1,2-Dichloropropane	ND	ND	
1,3,5-Trimethybenzene	0.208	1.02	
1,3-Butadiene	ND	ND	
1,3-Dichlorobenzene	ND	ND	
1,4-Dichlorobenzene	0.858	5.15	
1,4-Dioxane	ND	ND	
2,2,4-Trimethylpentane	0.21	0.98	
2-Butanone	4.64	13.7	
2-Hexanone	ND	ND	
3-Chloropropene	ND	ND	
4-Ethyltoluene	0.182	0.894	J
Acetone	27.6	65.4	
Benzene	0.626	2	
Benzyl chloride	ND	ND	
Bromodichloromethane	ND	ND	
Bromoform	ND	ND	
Bromomethane	ND	ND	
Carbon disulfide	0.112	0.348	J
Carbon tetrachloride	0.104	0.654	J
Chlorobenzene	0.039	0.179	J
Chlorodifluoromethane	ND	ND	
Chloroethane	ND	ND	
Chloroform	0.111	0.542	J
Chloromethane	0.567	1.17	
cis-1,2-Dichloroethene	ND	ND	
cis-1,3-Dichloropropene	ND	ND	
Cyclohexane	0.486	1.67	
Dibromochloromethane	ND	ND	
Dichlorodifluoromethane	0.71	3.51	
Ethylbenzene	0.444	1.93	

Freon-113	ND		ND			
Freon-114	ND		ND			
Heptane		0.938		3.84		
Hexachlorobutadiene	ND		ND			
n-Hexane		1.18		4.17		
Isopropanol		7.69		18.9		
Methylene chloride		0.648		2.25		
4-Methyl-2-pentanone		0.617		2.52		
Methyl tert butyl ether	ND		ND			
p/m-Xylene		1.65		7.16		
o-Xylene		0.585		2.54		
Styrene		0.216		0.919		
Tetrachloroethene	ND		ND			
Toluene		4.17		15.7		
trans-1,2-Dichloroethene	ND		ND			
trans-1,3-Dichloropropene	ND		ND			
Trichloroethene		0.08		0.43	J	
Trichlorofluoromethane		0.43		2.41		
Vinyl bromide	ND		ND			
Vinyl chloride	ND		ND			
Ethyl Acetate		1.36		4.9		J
Propylene		0.799		1.38		
Tetrahydrofuran		1.06		3.12		
Vinyl acetate	ND		ND			

Alpha Analytical Labs

Summary of Results

Analysis: Volatile Organic Compounds by EPA Method TO-15

Sample Name: L0711861-04 1-30-003A-BF02

Compound	ppbv	ug/m3	DV Qualifier			
1,1,1-Trichloroethane	ND	ND				
1,1,2,2-Tetrachloroethane	ND	ND				
1,1,2-Trichloroethane	ND	ND				
1,1-Dichloroethane	ND	ND				
1,1-Dichloroethene	ND	ND				
1,2,4-Trichlorobenzene	ND	ND				
1,2,4-Trimethylbenzene	0.493	2.42				
1,2-Dibromoethane	ND	ND				
1,2-Dichlorobenzene	ND	ND				
1,2-Dichloroethane	0.303	1.22				
1,2-Dichloropropane	ND	ND				
1,3,5-Trimethybenzene	0.134	0.658	J			
1,3-Butadiene	ND	ND				
1,3-Dichlorobenzene	ND	ND				
1,4-Dichlorobenzene	0.577	3.47				
1,4-Dioxane	ND	ND				
2,2,4-Trimethylpentane	0.16	0.747	J			
2-Butanone	2.79	8.22				
2-Hexanone	ND	ND				
3-Chloropropene	ND	ND				
4-Ethyltoluene	0.13	0.638	J			
Acetone	25.9	61.6				
Benzene	0.607	1.94				
Benzyl chloride	ND	ND				
Bromodichloromethane	ND	ND				
Bromoform	ND	ND				
Bromomethane	ND	ND				
Carbon disulfide	ND	ND				
Carbon tetrachloride	0.112	0.704	J			
Chlorobenzene	ND	ND				
Chlorodifluoromethane	0.844	2.98		0.844	x	
Chloroethane	ND	ND		2.98		1.77
Chloroform	0.075	0.366	J			
Chloromethane	0.703	1.45		0.501302		
cis-1,2-Dichloroethene	ND	ND				
cis-1,3-Dichloropropene	ND	ND				
Cyclohexane	0.434	1.49				
Dibromochloromethane	ND	ND				
Dichlorodifluoromethane	0.816	4.03				
Ethylbenzene	0.307	1.33				

Freon-113		0.106		0.812	J	
Freon-114	ND		ND			
Heptane		0.686		2.81		
Hexachlorobutadiene	ND		ND			
n-Hexane		1.35		4.74		
Isopropanol		6.82		16.8		
Methylene chloride		0.638		2.21		
4-Methyl-2-pentanone	ND		ND			
Methyl tert butyl ether	ND		ND			
p/m-Xylene		0.983		4.26		
o-Xylene		0.363		1.57		
Styrene		0.122		0.519	J	
Tetrachloroethene	ND		ND			
Toluene		1.62		6.11		
trans-1,2-Dichloroethene	ND		ND			
trans-1,3-Dichloropropene	ND		ND			
Trichloroethene	ND		ND			
Trichlorofluoromethane		0.491		2.76		
Vinyl bromide	ND		ND			
Vinyl chloride	ND		ND			
Ethyl Acetate		1.82		6.54		J
Propylene		1.14		1.97		
Tetrahydrofuran		0.653		1.92		
Vinyl acetate	ND		ND			

Alpha Analytical Labs

Summary of Results

Analysis: Volatile Organic Compounds by EPA Method TO-15

Sample Name: L0711861-05 1-30-003A-0A-81307-01

Compound	ppbv	ug/m3	DV Qualifier
1,1,1-Trichloroethane	ND	ND	
1,1,2,2-Tetrachloroethane	ND	ND	
1,1,2-Trichloroethane	ND	ND	
1,1-Dichloroethane	ND	ND	
1,1-Dichloroethene	ND	ND	
1,2,4-Trichlorobenzene	ND	ND	
1,2,4-Trimethylbenzene	ND	ND	
1,2-Dibromoethane	ND	ND	
1,2-Dichlorobenzene	ND	ND	
1,2-Dichloroethane	ND	ND	
1,2-Dichloropropane	ND	ND	
1,3,5-Trimethybenzene	ND	ND	
1,3-Butadiene	ND	ND	
1,3-Dichlorobenzene	ND	ND	
1,4-Dichlorobenzene	ND	ND	
1,4-Dioxane	ND	ND	
2,2,4-Trimethylpentane	0.03	0.14	J
2-Butanone	0.336	0.99	
2-Hexanone	ND	ND	
3-Chloropropene	ND	ND	
4-Ethyltoluene	ND	ND	
Acetone	ND	ND	
Benzene	0.083	0.265	J
Benzyl chloride	ND	ND	
Bromodichloromethane	ND	ND	
Bromoform	ND	ND	
Bromomethane	ND	ND	
Carbon disulfide	ND	ND	
Carbon tetrachloride	0.066	0.415	J
Chlorobenzene	ND	ND	
Chlorodifluoromethane	ND	ND	
Chloroethane	ND	ND	
Chloroform	ND	ND	
Chloromethane	0.418	0.862	
cis-1,2-Dichloroethene	ND	ND	
cis-1,3-Dichloropropene	ND	ND	
Cyclohexane	ND	ND	
Dibromochloromethane	ND	ND	
Dichlorodifluoromethane	0.458	2.26	
Ethylbenzene	ND	ND	

Freon-113	ND		ND		
Freon-114	ND		ND		
Heptane	ND		ND		
Hexachlorobutadiene	ND		ND		
n-Hexane		0.113		0.398	J
Isopropanol	ND		ND		
Methylene chloride		0.399		1.38	
4-Methyl-2-pentanone	ND		ND		
Methyl tert butyl ether	ND		ND		
p/m-Xylene	ND		ND		
o-Xylene	ND		ND		
Styrene	ND		ND		
Tetrachloroethene	ND		ND		
Toluene		0.139		0.523	J
trans-1,2-Dichloroethene	ND		ND		
trans-1,3-Dichloropropene	ND		ND		
Trichloroethene	ND		ND		
Trichlorofluoromethane		0.233		1.31	
Vinyl bromide	ND		ND		
Vinyl chloride	ND		ND		
Ethyl Acetate	ND		ND		
Propylene	ND		ND		
Tetrahydrofuran	ND		ND		
Vinyl acetate	ND		ND		

Alpha Analytical Labs

Summary of Results

Analysis: Volatile Organic Compounds by EPA Method TO-15

Sample Name: L0711861-06 1-30-003A-SS03

Compound	ppbv	ug/m3	DV Qualifier
1,1,1-Trichloroethane	1.73	9.45	
1,1,2,2-Tetrachloroethane	ND	ND	
1,1,2-Trichloroethane	ND	ND	
1,1-Dichloroethane	0.025	0.101	J
1,1-Dichloroethene	ND	ND	
1,2,4-Trichlorobenzene	ND	ND	
1,2,4-Trimethylbenzene	0.636	3.12	
1,2-Dibromoethane	ND	ND	
1,2-Dichlorobenzene	ND	ND	
1,2-Dichloroethane	0.293	1.18	
1,2-Dichloropropane	ND	ND	
1,3,5-Trimethybenzene	0.25	1.23	
1,3-Butadiene	ND	ND	
1,3-Dichlorobenzene	ND	ND	
1,4-Dichlorobenzene	3.42	20.5	
1,4-Dioxane	ND	ND	
2,2,4-Trimethylpentane	0.112	0.523	J
2-Butanone	2.8	8.24	
2-Hexanone	ND	ND	
3-Chloropropene	ND	ND	
4-Ethyltoluene	0.167	0.82	J
Acetone	26	61.8	
Benzene	0.31	0.99	
Benzyl chloride	ND	ND	
Bromodichloromethane	ND	ND	
Bromoform	ND	ND	
Bromomethane	ND	ND	
Carbon disulfide	0.276	0.859	
Carbon tetrachloride	0.184	0.83	J
Chlorobenzene	ND	ND	
Chlorodifluoromethane	0.747	2.64	
Chloroethane	ND	ND	
Chloroform	0.374	1.82	
Chloromethane	0.461	0.951	
cis-1,2-Dichloroethene	ND	ND	
cis-1,3-Dichloropropene	ND	ND	
Cyclohexane	0.184	0.633	J
Dibromochloromethane	ND	ND	
Dichlorodifluoromethane	0.796	3.93	
Ethylbenzene	15	65.1	

Freon-113		0.412		3.15		
Freon-114	ND		ND			
Heptane		0.218		0.893		
Hexachlorobutadiene	ND		ND			
n-Hexane		0.25		0.88		
Isopropanol		2.48		6.09		
Methylene chloride		25		86.7		
4-Methyl-2-pentanone		0.569		2.33		
Methyl tert butyl ether	ND		ND			
p/m-Xylene		73.3		318		
o-Xylene		26.1		113		
Styrene		0.193		0.821	J	
Tetrachloroethene		0.648		4.39		
Toluene		70.3		265		
trans-1,2-Dichloroethene	ND		ND			
trans-1,3-Dichloropropene	ND		ND			
Trichloroethene		3.35		18		
Trichlorofluoromethane		0.629		3.53		
Vinyl bromide	ND		ND			
Vinyl chloride	ND		ND			
Ethyl Acetate		0.403		1.45		J
Propylene		0.736		1.27		
Tetrahydrofuran		0.95		2.8		
Vinyl acetate	ND		ND			

Alpha Analytical Labs

Summary of Results

Analysis: Volatile Organic Compounds by EPA Method TO-15

Sample Name: L0711861-07 1-30-003A-BF03

Compound	ppbv	ug/m3		DV Qualifier
1,1,1-Trichloroethane	**0.030**	0.164	J	
1,1,2,2-Tetrachloroethane	**ND**	ND		
1,1,2-Trichloroethane	**ND**	ND		
1,1-Dichloroethane	**ND**	ND		
1,1-Dichloroethene	**ND**	ND		
1,2,4-Trichlorobenzene	**ND**	ND		
1,2,4-Trimethylbenzene	**0.160**	0.786	J	
1,2-Dibromoethane	**ND**	ND		
1,2-Dichlorobenzene	**ND**	ND		
1,2-Dichloroethane	0.398	1.61		
1,2-Dichloropropane	**ND**	ND		
1,3,5-Trimethybenzene	**0.054**	0.265	J	
1,3-Butadiene	**ND**	ND		
1,3-Dichlorobenzene	**ND**	ND		
1,4-Dichlorobenzene	3.69	22.2		
1,4-Dioxane	**ND**	ND		
2,2,4-Trimethylpentane	**0.069**	0.322	J	
2-Butanone	1.06	3.12		
2-Hexanone	**ND**	ND		
3-Chloropropene	**ND**	ND		
4-Ethyltoluene	**0.071**	0.349	J	
Acetone	19.1	45.4		
Benzene	**0.165**	0.527	J	
Benzyl chloride	**ND**	ND		
Bromodichloromethane	**ND**	ND		
Bromoform	**ND**	ND		
Bromomethane	**ND**	ND		
Carbon disulfide	**ND**	ND		
Carbon tetrachloride	**0.083**	0.522	J	
Chlorobenzene	**ND**	ND		
Chlorodifluoromethane	**ND**	ND		
Chloroethane	**ND**	ND		
Chloroform	**0.047**	0.229	J	
Chloromethane	0.608	1.25		
cis-1,2-Dichloroethene	**ND**	ND		
cis-1,3-Dichloropropene	**ND**	ND		
Cyclohexane	**0.143**	0.492	J	
Dibromochloromethane	**ND**	ND		
Dichlorodifluoromethane	0.689	3.4		
Ethylbenzene	16.3	70.8		

Freon-113	**ND**		ND			
Freon-114	**ND**		ND			
Heptane		**0.075**		0.307	J	
Hexachlorobutadiene	**ND**		ND			
n-Hexane	**ND**		ND			
Isopropanol		13.3		32.7		
Methylene chloride		19.9		69		
4-Methyl-2-pentanone	**ND**		ND			
Methyl tert butyl ether	**ND**		ND			
p/m-Xylene		77.2		335		
o-Xylene		27.5		119		
Styrene		**0.061**		0.26	J	
Tetrachloroethene		**0.079**		0.535	J	
Toluene		82.8		312		
trans-1,2-Dichloroethene	**ND**		ND			
trans-1,3-Dichloropropene	**ND**		ND			
Trichloroethene	**ND**		ND			
Trichlorofluoromethane		0.456		2.56		
Vinyl bromide	**ND**		ND			
Vinyl chloride	**ND**		ND			
Ethyl Acetate		1.38		4.95		J
Propylene		0.423		0.728		
Tetrahydrofuran	**ND**		ND			
Vinyl acetate	**ND**		ND			

Alpha Analytical Labs

Summary of Results

Analysis: Volatile Organic Compounds by EPA Method TO-15

Sample Name: L0711861-08 1-30-003A-SS04

Compound	ppbv	ug/m3	DV Qualifier
1,1,1-Trichloroethane	1.86	10.1	
1,1,2,2-Tetrachloroethane	ND	ND	
1,1,2-Trichloroethane	ND	ND	
1,1-Dichloroethane	ND	ND	
1,1-Dichloroethene	ND	ND	
1,2,4-Trichlorobenzene	ND	ND	
1,2,4-Trimethylbenzene	0.229	1.12	
1,2-Dibromoethane	ND	ND	
1,2-Dichlorobenzene	0.036	0.216	J
1,2-Dichloroethane	ND	ND	
1,2-Dichloropropane	ND	ND	
1,3,5-Trimethybenzene	0.022	0.58	J
1,3-Butadiene	ND	ND	
1,3-Dichlorobenzene	ND	ND	
1,4-Dichlorobenzene	0.034	0.204	J
1,4-Dioxane	ND	ND	
2,2,4-Trimethylpentane	0.029	0.135	J
2-Butanone	ND	ND	
2-Hexanone	ND	ND	
3-Chloropropene	ND	ND	
4-Ethyltoluene	0.050	0.246	J
Acetone	15	35.6	
Benzene	0.318	1.02	
Benzyl chloride	ND	ND	
Bromodichloromethane	ND	ND	
Bromoform	ND	ND	
Bromomethane	ND	ND	
Carbon disulfide	ND	ND	
Carbon tetrachloride	0.096	0.603	J
Chlorobenzene	ND	ND	
Chlorodifluoromethane	0.65	2.3	
Chloroethane	ND	ND	
Chloroform	0.231	1.13	
Chloromethane	0.140	0.289	J
cis-1,2-Dichloroethene	ND	ND	
cis-1,3-Dichloropropene	ND	ND	
Cyclohexane	0.199	0.684	J
Dibromochloromethane	ND	ND	
Dichlorodifluoromethane	0.596	2.94	
Ethylbenzene	0.152	0.659	J

Freon-113		0.241		1.84	
Freon-114	ND		ND		
Heptane		1.29		5.29	
Hexachlorobutadiene	ND		ND		
n-Hexane		0.477		1.68	
Isopropanol		1.1		2.7	
Methylene chloride		0.558		1.94	
4-Methyl-2-pentanone	ND		ND		
Methyl tert butyl ether	ND		ND		
p/m-Xylene		0.421		1.83	
o-Xylene		0.175		0.759	J
Styrene		0.060		0.255	J
Tetrachloroethene		0.189		1.28	J
Toluene		3.97		14.9	
trans-1,2-Dichloroethene	ND		ND		
trans-1,3-Dichloropropene	ND		ND		
Trichloroethene		0.814		4.37	
Trichlorofluoromethane		0.601		3.37	
Vinyl bromide	ND		ND		
Vinyl chloride	ND		ND		
Ethyl Acetate	ND		ND		
Propylene		1.43		2.46	
Tetrahydrofuran	ND		ND		
Vinyl acetate	ND		ND		

Alpha Analytical Labs

Summary of Results

Analysis: Volatile Organic Compounds by EPA Method TO-15

Sample Name: L0711861-09 1-30-003A-BF04

Compound	ppbv	ug/m3	DV Qualifier
1,1,1-Trichloroethane	**ND**	ND	
1,1,2,2-Tetrachloroethane	**ND**	ND	
1,1,2-Trichloroethane	**ND**	ND	
1,1-Dichloroethane	**ND**	ND	
1,1-Dichloroethene	**ND**	ND	
1,2,4-Trichlorobenzene	**0.051**	0.25	J
1,2,4-Trimethylbenzene	**ND**	ND	
1,2-Dibromoethane	**ND**	ND	
1,2-Dichlorobenzene	**ND**	ND	
1,2-Dichloroethane	**ND**	ND	
1,2-Dichloropropane	**ND**	ND	
1,3,5-Trimethybenzene	**ND**	ND	
1,3-Butadiene	**ND**	ND	
1,3-Dichlorobenzene	**ND**	ND	
1,4-Dichlorobenzene	**ND**	ND	
1,4-Dioxane	**ND**	ND	
2,2,4-Trimethylpentane	**0.040**	0.187	J
2-Butanone	0.76	2.24	
2-Hexanone	**ND**	ND	
3-Chloropropene	**ND**	ND	
4-Ethyltoluene	**ND**	ND	
Acetone	9.5	22.5	
Benzene	**0.123**	0.393	J
Benzyl chloride	**ND**	ND	
Bromodichloromethane	**ND**	ND	
Bromoform	**ND**	ND	
Bromomethane	**ND**	ND	
Carbon disulfide	**ND**	ND	
Carbon tetrachloride	**0.072**	0.453	J
Chlorobenzene	**ND**	ND	
Chlorodifluoromethane	**ND**	ND	
Chloroethane	**ND**	ND	
Chloroform	**ND**	ND	
Chloromethane	0.575	1.19	
cis-1,2-Dichloroethene	**ND**	ND	
cis-1,3-Dichloropropene	**ND**	ND	
Cyclohexane	**0.041**	0.141	J
Dibromochloromethane	**ND**	ND	
Dichlorodifluoromethane	**0.543**	0.234	J
Ethylbenzene	**ND**	ND	

D = Extra dilution required for this compound

Analyst: J. Schmitt

Freon-113	**ND**		ND		
Freon-114	**ND**		ND		
Heptane		**0.087**		0.356	J
Hexachlorobutadiene	**ND**		ND		
n-Hexane		0.232		0.817	
Isopropanol		1.23		3.02	
Methylene chloride		0.538		1.87	
4-Methyl-2-pentanone	**ND**		ND		
Methyl tert butyl ether	**ND**		ND		
p/m-Xylene		**0.151**		0.655	J
o-Xylene		**0.060**		0.260	J
Styrene		**0.041**		0.174	J
Tetrachloroethene	**ND**		ND		
Toluene		0.782		2.94	
trans-1,2-Dichloroethene	**ND**		ND		
trans-1,3-Dichloropropene	**ND**		ND		
Trichloroethene	**ND**		ND		
Trichlorofluoromethane		0.432		2.42	
Vinyl bromide	**ND**		ND		
Vinyl chloride	**ND**		ND		
Ethyl Acetate	**ND**		ND		
Propylene	**ND**		ND		
Tetrahydrofuran	**ND**		ND		
Vinyl acetate	**ND**		ND		

Alpha Analytical Labs

Summary of Results

Analysis: Volatile Organic Compounds by EPA Method TO-15

Sample Name: L0711861-10 1-30-003A-0A-81307-02

Compound	ppbv	ug/m3	DV Qualifier
1,1,1-Trichloroethane	ND	ND	
1,1,2,2-Tetrachloroethane	ND	ND	
1,1,2-Trichloroethane	ND	ND	
1,1-Dichloroethane	ND	ND	
1,1-Dichloroethene	ND	ND	
1,2,4-Trichlorobenzene	ND	ND	
1,2,4-Trimethylbenzene	0.035	0.172	J
1,2-Dibromoethane	ND	ND	
1,2-Dichlorobenzene	ND	ND	
1,2-Dichloroethane	ND	ND	
1,2-Dichloropropane	ND	ND	
1,3,5-Trimethybenzene	ND	ND	
1,3-Butadiene	ND	ND	
1,3-Dichlorobenzene	ND	ND	
1,4-Dichlorobenzene	ND	ND	
1,4-Dioxane	ND	ND	
2,2,4-Trimethylpentane	0.063	0.294	J
2-Butanone	ND	ND	
2-Hexanone	ND	ND	
3-Chloropropene	ND	ND	
4-Ethyltoluene	ND	ND	
Acetone	6.32	15	
Benzene	0.21	0.67	
Benzyl chloride	ND	ND	
Bromodichloromethane	ND	ND	
Bromoform	ND	ND	
Bromomethane	ND	ND	
Carbon disulfide	ND	ND	
Carbon tetrachloride	0.11	0.691	J
Chlorobenzene	ND	ND	
Chlorodifluoromethane	0.525	1.86	
Chloroethane	ND	ND	
Chloroform	ND	ND	
Chloromethane	0.613	1.26	
cis-1,2-Dichloroethene	ND	ND	
cis-1,3-Dichloropropene	ND	ND	
Cyclohexane	0.042	0.144	J
Dibromochloromethane	ND	ND	
Dichlorodifluoromethane	0.599	2.96	
Ethylbenzene	0.067	0.291	J

Freon-113	ND		ND		
Freon-114	ND		ND		
Heptane		0.094		0.385	J
Hexachlorobutadiene	ND		ND		
n-Hexane		0.416		1.46	
Isopropanol		1.3		3.2	
Methylene chloride		0.534		1.85	
4-Methyl-2-pentanone	ND		ND		
Methyl tert butyl ether	ND		ND		
p/m-Xylene		0.154		0.668	J
o-Xylene		0.06		0.260	J
Styrene	ND		ND		
Tetrachloroethene	ND		ND		
Toluene		0.518		1.95	
trans-1,2-Dichloroethene	ND		ND		
trans-1,3-Dichloropropene	ND		ND		
Trichloroethene	ND		ND		
Trichlorofluoromethane		0.313		1.76	
Vinyl bromide	ND		ND		
Vinyl chloride	ND		ND		
Ethyl Acetate	ND		ND		
Propylene	ND		ND		
Tetrahydrofuran	ND		ND		
Vinyl acetate	ND		ND		

Alpha Analytical Labs

Summary of Results

Analysis: Volatile Organic Compounds by EPA Method TO-15

Sample Name: L0711861-11 1-30-003A-BF06

Compound	ppbv	ug/m3	DV Qualifier
1,1,1-Trichloroethane	ND	ND	
1,1,2,2-Tetrachloroethane	ND	ND	
1,1,2-Trichloroethane	ND	ND	
1,1-Dichloroethane	ND	ND	
1,1-Dichloroethene	ND	ND	
1,2,4-Trichlorobenzene	ND	ND	
1,2,4-Trimethylbenzene	0.081	0.398	J
1,2-Dibromoethane	ND	ND	
1,2-Dichlorobenzene	ND	ND	
1,2-Dichloroethane	0.074	0.299	J
1,2-Dichloropropane	ND	ND	
1,3,5-Trimethybenzene	ND	ND	
1,3-Butadiene	ND	ND	
1,3-Dichlorobenzene	ND	ND	
1,4-Dichlorobenzene	0.108	0.649	J
1,4-Dioxane	ND	ND	
2,2,4-Trimethylpentane	0.073	0.341	J
2-Butanone	2.01	5.93	
2-Hexanone	ND	ND	
3-Chloropropene	ND	ND	
4-Ethyltoluene	ND	ND	
Acetone	19.7	46.8	
Benzene	0.319	1.02	
Benzyl chloride	ND	ND	
Bromodichloromethane	ND	ND	
Bromoform	ND	ND	
Bromomethane	ND	ND	
Carbon disulfide	ND	ND	
Carbon tetrachloride	0.101	0.635	J
Chlorobenzene	ND	ND	
Chlorodifluoromethane	ND	ND	
Chloroethane	ND	ND	
Chloroform	0.051	0.249	J
Chloromethane	0.561	1.16	
cis-1,2-Dichloroethene	ND	ND	
cis-1,3-Dichloropropene	ND	ND	
Cyclohexane	0.048	0.165	J
Dibromochloromethane	ND	ND	
Dichlorodifluoromethane	0.572	2.83	
Ethylbenzene	0.192	0.833	J

Freon-113	ND		ND		
Freon-114	ND		ND		
Heptane		0.151		0.618	J
Hexachlorobutadiene	ND		ND		
n-Hexane		0.204		0.718	
Isopropanol		1.56		3.82	
Methylene chloride		0.667		2.32	
4-Methyl-2-pentanone	ND		ND		
Methyl tert butyl ether	ND		ND		
p/m-Xylene		0.311		1.35	
o-Xylene		0.117		0.508	J
Styrene		0.11		0.468	J
Tetrachloroethene	ND		ND		
Toluene		0.774		2.91	
trans-1,2-Dichloroethene	ND		ND		
trans-1,3-Dichloropropene	ND		ND		
Trichloroethene	ND		ND		
Trichlorofluoromethane		2.4		13.5	
Vinyl bromide	ND		ND		
Vinyl chloride	ND		ND		
Ethyl Acetate	ND		ND		
Propylene		1.53		2.63	
Tetrahydrofuran	ND		ND		
Vinyl acetate	ND		ND		

Alpha Analytical Labs

Summary of Results

Analysis: Volatile Organic Compounds by EPA Method TO-15

Sample Name: L0711861-12 1-30-003A-SS06

Compound	ppbv	ug/m3	DV Qualifier
1,1,1-Trichloroethane	ND	ND	
1,1,2,2-Tetrachloroethane	ND	ND	
1,1,2-Trichloroethane	ND	ND	
1,1-Dichloroethane	ND	ND	
1,1-Dichloroethene	ND	ND	
1,2,4-Trichlorobenzene	ND	ND	
1,2,4-Trimethylbenzene	0.159	0.781	J
1,2-Dibromoethane	ND	ND	
1,2-Dichlorobenzene	ND	ND	
1,2-Dichloroethane	0.095	0.384	J
1,2-Dichloropropane	ND	ND	
1,3,5-Trimethybenzene	ND	ND	
1,3-Butadiene	ND	ND	
1,3-Dichlorobenzene	ND	ND	
1,4-Dichlorobenzene	0.127	0.763	J
1,4-Dioxane	ND	ND	
2,2,4-Trimethylpentane	0.104	0.485	J
2-Butanone	2.56	7.55	
2-Hexanone	0.175	0.717	J
3-Chloropropene	ND	ND	
4-Ethyltoluene	0.045	0.221	J
Acetone	22.8	54.1	
Benzene	0.463	1.48	
Benzyl chloride	ND	ND	
Bromodichloromethane	ND	ND	
Bromoform	ND	ND	
Bromomethane	ND	ND	
Carbon disulfide	0.139	0.432	J
Carbon tetrachloride	0.115	0.723	J
Chlorobenzene	ND	ND	
Chlorodifluoromethane	ND	ND	
Chloroethane	ND	ND	
Chloroform	0.066	0.322	J
Chloromethane	0.617	1.27	
cis-1,2-Dichloroethene	ND	ND	
cis-1,3-Dichloropropene	ND	ND	
Cyclohexane	0.113	0.389	J
Dibromochloromethane	ND	ND	
Dichlorodifluoromethane	0.545	2.69	
Ethylbenzene	0.296	1.28	

Freon-113	ND		ND		
Freon-114	ND		ND		
Heptane		0.404		1.65	
Hexachlorobutadiene	ND		ND		
n-Hexane		0.371		1.31	
Isopropanol		2.29		5.63	
Methylene chloride		1		3.47	
4-Methyl-2-pentanone	ND		ND		
Methyl tert butyl ether	ND		ND		
p/m-Xylene		0.696		3.02	
o-Xylene		0.238		1.03	
Styrene		0.132		0.562	J
Tetrachloroethene	ND		ND		
Toluene		2.1		7.9	
trans-1,2-Dichloroethene	ND		ND		
trans-1,3-Dichloropropene	ND		ND		
Trichloroethene	ND		ND		
Trichlorofluoromethane		2.11		11.8	
Vinyl bromide	ND		ND		
Vinyl chloride	ND		ND		
Ethyl Acetate	ND		ND		
Propylene		1.44		2.47	
Tetrahydrofuran		0.34		1	
Vinyl acetate	ND		ND		

Alpha Analytical Labs

Summary of Results

Analysis: Volatile Organic Compounds by EPA Method TO-15

Sample Name: L0711861-13 1-30-003A-SS07

Compound	ppbv	ug/m3	DV Qualifier
1,1,1-Trichloroethane	0.632	3.44	
1,1,2,2-Tetrachloroethane	**ND**	ND	
1,1,2-Trichloroethane	**ND**	ND	
1,1-Dichloroethane	**ND**	ND	
1,1-Dichloroethene	**ND**	ND	
1,2,4-Trichlorobenzene	**ND**	ND	
1,2,4-Trimethylbenzene	0.483	2.37	
1,2-Dibromoethane	**ND**	ND	
1,2-Dichlorobenzene	**ND**	ND	
1,2-Dichloroethane	0.307	1.24	
1,2-Dichloropropane	**ND**	ND	
1,3,5-Trimethybenzene	0.107	0.526	J
1,3-Butadiene	1.9	4.2	
1,3-Dichlorobenzene	**ND**	ND	
1,4-Dichlorobenzene	0.275	1.65	
1,4-Dioxane	**ND**	ND	
2,2,4-Trimethylpentane	0.0144	0.672	J
2-Butanone	20.8	61.3	
2-Hexanone	0.588	2.41	
3-Chloropropene	**ND**	ND	
4-Ethyltoluene	0.0115	0.565	J
Acetone	**>100**	>238	Report from diluted anlaysis below
Benzene	1.46	4.66	
Benzyl chloride	**ND**	ND	
Bromodichloromethane	**ND**	ND	
Bromoform	**ND**	ND	
Bromomethane	**ND**	ND	
Carbon disulfide	0.259	0.806	
Carbon tetrachloride	**ND**	ND	
Chlorobenzene	**ND**	ND	
Chlorodifluoromethane	1.42	5.04	
Chloroethane	**ND**	ND	
Chloroform	0.05	0.244	J
Chloromethane	**ND**	ND	
cis-1,2-Dichloroethene	**ND**	ND	
cis-1,3-Dichloropropene	**ND**	ND	
Cyclohexane	0.296	1.02	
Dibromochloromethane	**ND**	ND	
Dichlorodifluoromethane	0.55	2.72	
Ethylbenzene	0.599	2.6	

Freon-113	**ND**		ND		
Freon-114	**ND**		ND		
Heptane		0.94		3.85	
Hexachlorobutadiene	**ND**		ND		
n-Hexane		1.76		6.18	
Isopropanol		12.8		31.4	
Methylene chloride		0.967		3.36	
4-Methyl-2-pentanone		2.65		10.8	
Methyl tert butyl ether	**ND**		ND		
p/m-Xylene		2.16		9.35	
o-Xylene		0.763		3.31	
Styrene		0.37		1.57	
Tetrachloroethene		0.127		0.861	J
Toluene		8.12		30.6	
trans-1,2-Dichloroethene	**ND**		ND		
trans-1,3-Dichloropropene	**ND**		ND		
Trichloroethene		0.064		0.344	J
Trichlorofluoromethane		0.376		2.11	
Vinyl bromide	**ND**		ND		
Vinyl chloride	**ND**		ND		
Ethyl Acetate	**ND**		ND		
Propylene		9.24		15.9	
Tetrahydrofuran		1.36		4	
Vinyl acetate	**ND**		ND		
Acetone		**129**		306	

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Summary of Results

Analysis: Volatile Organic Compounds by EPA Method TO-15

Sample Name: L0711861-14 1-30-003A-BF07

Compound	ppbv	ug/m3	DV Qualifier
1,1,1-Trichloroethane	2.53	13.8	
1,1,2,2-Tetrachloroethane	**ND**	ND	
1,1,2-Trichloroethane	**ND**	ND	
1,1-Dichloroethane	**ND**	ND	
1,1-Dichloroethene	**ND**	ND	
1,2,4-Trichlorobenzene	**ND**	ND	
1,2,4-Trimethylbenzene	0.291	1.43	
1,2-Dibromoethane	**ND**	ND	
1,2-Dichlorobenzene	**ND**	ND	
1,2-Dichloroethane	0.363	1.47	
1,2-Dichloropropane	**ND**	ND	
1,3,5-Trimethybenzene	**0.09**	0.442	J
1,3-Butadiene	**0.039**	0.0862	J
1,3-Dichlorobenzene	**ND**	ND	
1,4-Dichlorobenzene	**0.104**	0.625	J
1,4-Dioxane	**ND**	ND	
2,2,4-Trimethylpentane	**0.084**	0.392	J
2-Butanone	**ND**	ND	
2-Hexanone	**ND**	ND	
3-Chloropropene	**ND**	ND	
4-Ethyltoluene	**0.075**	0.368	J
Acetone	41.6	98.7	
Benzene	0.216	0.689	
Benzyl chloride	**ND**	ND	
Bromodichloromethane	**ND**	ND	
Bromoform	**ND**	ND	
Bromomethane	**ND**	ND	
Carbon disulfide	**0.146**	0.454	J
Carbon tetrachloride	**0.066**	0.415	J
Chlorobenzene	**ND**	ND	
Chlorodifluoromethane	6.4	22.6	
Chloroethane	**ND**	ND	
Chloroform	**0.048**	0.234	J
Chloromethane	0.599	1.24	
cis-1,2-Dichloroethene	**ND**	ND	
cis-1,3-Dichloropropene	**ND**	ND	
Cyclohexane	0.367	1.26	
Dibromochloromethane	**ND**	ND	
Dichlorodifluoromethane	0.629	3.11	
Ethylbenzene	0.497	2.16	

Freon-113	**ND**		ND		
Freon-114	**ND**		ND		
Heptane		2.05		8.38	
Hexachlorobutadiene	**ND**		ND		
n-Hexane		5.88		20.7	
Isopropanol	**ND**		ND		
Methylene chloride		2.56		8.9	
4-Methyl-2-pentanone		2.37		9.71	
Methyl tert butyl ether	**ND**		ND		
p/m-Xylene		1.65		7.15	
o-Xylene		0.463		2.01	
Styrene		0.305		1.3	
Tetrachloroethene		**0.196**		1.33	J
Toluene		7.33		27.6	
trans-1,2-Dichloroethene	**ND**		ND		
trans-1,3-Dichloropropene	**ND**		ND		
Trichloroethene	**ND**		ND		
Trichlorofluoromethane		0.545		3.06	
Vinyl bromide	**ND**		ND		
Vinyl chloride	**ND**		ND		
Ethyl Acetate	**ND**		ND		
Propylene	**ND**		ND		
Tetrahydrofuran		1.12		3.3	
Vinyl acetate	**ND**		ND		

Summary of Results

Analysis: Volatile Organic Compounds by EPA Method TO-15

Sample Name: L0711861-15 1-30-003A-0A-81307-03

Compound	ppbv	ug/m3	DV Qualifier
1,1,1-Trichloroethane	ND	ND	
1,1,2,2-Tetrachloroethane	ND	ND	
1,1,2-Trichloroethane	ND	ND	
1,1-Dichloroethane	ND	ND	
1,1-Dichloroethene	ND	ND	
1,2,4-Trichlorobenzene	ND	ND	
1,2,4-Trimethylbenzene	ND	ND	
1,2-Dibromoethane	ND	ND	
1,2-Dichlorobenzene	ND	ND	
1,2-Dichloroethane	ND	ND	
1,2-Dichloropropane	ND	ND	
1,3,5-Trimethybenzene	ND	ND	
1,3-Butadiene	ND	ND	
1,3-Dichlorobenzene	ND	ND	
1,4-Dichlorobenzene	ND	ND	
1,4-Dioxane	ND	ND	
2,2,4-Trimethylpentane	0.045	0.21	J
2-Butanone	ND	ND	
2-Hexanone	ND	ND	
3-Chloropropene	ND	ND	
4-Ethyltoluene	ND	ND	
Acetone	9.87	23.4	
Benzene	0.094	0.3	J
Benzyl chloride	ND	ND	
Bromodichloromethane	ND	ND	
Bromoform	ND	ND	
Bromomethane	ND	ND	
Carbon disulfide	0.129	0.401	J
Carbon tetrachloride	0.108	0.679	J
Chlorobenzene	ND	ND	
Chlorodifluoromethane	ND	ND	
Chloroethane	ND	ND	
Chloroform	ND	ND	
Chloromethane	0.554	1.14	
cis-1,2-Dichloroethene	ND	ND	
cis-1,3-Dichloropropene	ND	ND	
Cyclohexane	ND	ND	
Dibromochloromethane	ND	ND	
Dichlorodifluoromethane	0.551	2.72	
Ethylbenzene	ND	ND	

Freon-113	ND		ND			
Freon-114	ND		ND			
Heptane	ND		ND			
Hexachlorobutadiene	ND		ND			
n-Hexane		0.153		0.539	J	
Isopropanol		0.803		1.97		
Methylene chloride		0.516		1.79		
4-Methyl-2-pentanone	ND		ND			
Methyl tert butyl ether	ND		ND			
p/m-Xylene	ND		ND			
o-Xylene	ND		ND			
Styrene	ND		ND			
Tetrachloroethene	ND		ND			
Toluene		0.246		0.926		J
trans-1,2-Dichloroethene	ND		ND			
trans-1,3-Dichloropropene	ND		ND			
Trichloroethene	ND		ND			
Trichlorofluoromethane		0.307		1.72		
Vinyl bromide	ND		ND			
Vinyl chloride	ND		ND			
Ethyl Acetate	ND		ND			
Propylene	ND		ND			J
Tetrahydrofuran	ND		ND			
Vinyl acetate	ND		ND			

Alpha Analytical Labs

Summary of Results

Analysis: Volatile Organic Compounds by EPA Method TO-15

Sample Name: L0711861-16 1-30-003A-SS-08

Compound	ppbv	ug/m3	DV Qualifier
1,1,1-Trichloroethane	1.42	7.71	
1,1,2,2-Tetrachloroethane	**ND**	ND	
1,1,2-Trichloroethane	**ND**	ND	
1,1-Dichloroethane	**0.039**	0.158	J
1,1-Dichloroethene	**ND**	ND	
1,2,4-Trichlorobenzene	**ND**	ND	
1,2,4-Trimethylbenzene	0.374	1.84	
1,2-Dibromoethane	**ND**	ND	
1,2-Dichlorobenzene	**ND**	ND	
1,2-Dichloroethane	**0.076**	0.307	J
1,2-Dichloropropane	**ND**	ND	
1,3,5-Trimethybenzene	**0.094**	0.462	J
1,3-Butadiene	1.13	2.5	
1,3-Dichlorobenzene	**ND**	ND	
1,4-Dichlorobenzene	**0.182**	1.09	J
1,4-Dioxane	**ND**	ND	
2,2,4-Trimethylpentane	**0.07**	0.327	J
2-Butanone	4.76	14	
2-Hexanone	**0.091**	0.373	J
3-Chloropropene	**ND**	ND	
4-Ethyltoluene	**0.082**	0.403	J
Acetone	36.7	87.1	
Benzene	0.426	1.36	
Benzyl chloride	**ND**	ND	
Bromodichloromethane		0.495	J
Bromoform	**ND**	ND	
Bromomethane	**ND**	ND	
Carbon disulfide	**0.137**	0.426	J
Carbon tetrachloride	0.431	2.71	
Chlorobenzene	**ND**	ND	
Chlorodifluoromethane	**ND**	ND	
Chloroethane	**ND**	ND	
Chloroform	18.9	92	
Chloromethane	**0.17**	0.351	J
cis-1,2-Dichloroethene	**ND**	ND	
cis-1,3-Dichloropropene	**ND**	ND	
Cyclohexane	**0.096**	0.33	J
Dibromochloromethane	**ND**	ND	
Dichlorodifluoromethane	0.586	2.9	

D = Extra dilution required for this compound

Analyst: J. Schmitt

Ethylbenzene		0.348		1.51		J
Freon-113		0.326		2.5		
Freon-114	**ND**		ND			
Heptane		0.441		1.8		
Hexachlorobutadiene	**ND**		ND			
n-Hexane		**0.173**		0.609	J	
Isopropanol		3.18		7.81		
Methylene chloride		7.54		26.2		
4-Methyl-2-pentanone		0.623		2.55		
Methyl tert butyl ether	**ND**		ND			
p/m-Xylene		1.16		5.02		
o-Xylene		0.511		2.22		
Styrene		0.156		0.664	J	
Tetrachloroethene		**0.037**		0.251	J	
Toluene		2.61		9.81		J
trans-1,2-Dichloroethene	**ND**		ND			
trans-1,3-Dichloropropene	**ND**		ND			
Trichloroethene		2.58		13.8		
Trichlorofluoromethane		0.346		1.94		
Vinyl bromide	**ND**		ND			
Vinyl chloride	**ND**		ND			
Ethyl Acetate	**ND**		ND			
Propylene		4.72		8.11		J
Tetrahydrofuran		1.57		4.64		
Vinyl acetate	**ND**		ND			

Alpha Analytical Labs

Summary of Results

Analysis: Volatile Organic Compounds by EPA Method TO-15

Sample Name: L0711861-17

1-30-003A-BF-08

Compound	ppbv	ug/m3	DV Qualifier
1,1,1-Trichloroethane	ND	ND	
1,1,2,2-Tetrachloroethane	ND	ND	
1,1,2-Trichloroethane	ND	ND	
1,1-Dichloroethane	ND	ND	
1,1-Dichloroethene	ND	ND	
1,2,4-Trichlorobenzene	ND	ND	
1,2,4-Trimethylbenzene	0.128	0.629	J
1,2-Dibromoethane	ND	ND	
1,2-Dichlorobenzene	ND	ND	
1,2-Dichloroethane	0.106	0.429	J
1,2-Dichloropropane	ND	ND	
1,3,5-Trimethybenzene	ND	ND	
1,3-Butadiene	ND	ND	
1,3-Dichlorobenzene	ND	ND	
1,4-Dichlorobenzene	ND	ND	
1,4-Dioxane	ND	ND	
2,2,4-Trimethylpentane	0.102	0.476	J
2-Butanone	ND	ND	
2-Hexanone	0.055	0.225	J
3-Chloropropene	ND	ND	
4-Ethyltoluene	ND	ND	
Acetone	36	85.4	
Benzene	0.207	0.661	
Benzyl chloride	ND	ND	
Bromodichloromethane	ND	ND	
Bromoform	ND	ND	
Bromomethane	ND	ND	
Carbon disulfide	ND	ND	
Carbon tetrachloride	0.144	0.905	J
Chlorobenzene	ND	ND	
Chlorodifluoromethane	ND	ND	
Chloroethane	ND	ND	
Chloroform	0.257	1.25	
Chloromethane	0.697	1.44	
cis-1,2-Dichloroethene	ND	ND	
cis-1,3-Dichloropropene	ND	ND	
Cyclohexane	0.154	0.53	J
Dibromochloromethane	ND	ND	
Dichlorodifluoromethane	0.613	3.03	
Ethylbenzene	0.167	0.724	J

Freon-113	ND		ND			
Freon-114	ND		ND			
Heptane		0.463		1.9		
Hexachlorobutadiene	ND		ND			
n-Hexane	ND		ND			
Isopropanol	ND		ND			
Methylene chloride		5.84		20.3		
4-Methyl-2-pentanone	ND		ND			
Methyl tert butyl ether	ND		ND			
p/m-Xylene		0.4		1.74		
o-Xylene		0.16		0.694	J	
Styrene		0.088		0.374	J	
Tetrachloroethene	ND		ND			
Toluene		1.19		4.49		J
trans-1,2-Dichloroethene	ND		ND			
trans-1,3-Dichloropropene	ND		ND			
Trichloroethene	ND		ND			
Trichlorofluoromethane		0.319		1.79		
Vinyl bromide	ND		ND			
Vinyl chloride	ND		ND			
Ethyl Acetate		1.78		6.4		
Propylene	ND		ND			J
Tetrahydrofuran		3.06		9.02		
Vinyl acetate	ND		ND			

Alpha Analytical Labs

Summary of Results

Analysis: Volatile Organic Compounds by EPA Method TO-15

Sample Name: L0711861-18 1-30-003A-0A-81307-04

Compound	ppbv	ug/m3	DV Qualifier
1,1,1-Trichloroethane	ND	ND	
1,1,2,2-Tetrachloroethane	ND	ND	
1,1,2-Trichloroethane	ND	ND	
1,1-Dichloroethane	ND	ND	
1,1-Dichloroethene	ND	ND	
1,2,4-Trichlorobenzene	ND	ND	
1,2,4-Trimethylbenzene	ND	ND	
1,2-Dibromoethane	ND	ND	
1,2-Dichlorobenzene	ND	ND	
1,2-Dichloroethane	ND	ND	
1,2-Dichloropropane	ND	ND	
1,3,5-Trimethybenzene	ND	ND	
1,3-Butadiene	ND	ND	
1,3-Dichlorobenzene	ND	ND	
1,4-Dichlorobenzene	ND	ND	
1,4-Dioxane	ND	ND	
2,2,4-Trimethylpentane	0.036	0.168	J
2-Butanone	0.086	0.253	J
2-Hexanone	ND	ND	
3-Chloropropene	ND	ND	
4-Ethyltoluene	ND	ND	
Acetone	5.35	12.7	
Benzene	0.051	0.163	J
Benzyl chloride	ND	ND	
Bromodichloromethane	ND	ND	
Bromoform	ND	ND	
Bromomethane	ND	ND	
Carbon disulfide	ND	ND	
Carbon tetrachloride	0.117	0.735	J
Chlorobenzene	ND	ND	
Chlorodifluoromethane	ND	ND	
Chloroethane	ND	ND	
Chloroform	0.024	0.117	J
Chloromethane	0.536	1.1	
cis-1,2-Dichloroethene	ND	ND	
cis-1,3-Dichloropropene	ND	ND	
Cyclohexane	ND	ND	
Dibromochloromethane	ND	ND	
Dichlorodifluoromethane	0.585	2.89	
Ethylbenzene	ND	ND	

Freon-113	ND		ND			
Freon-114	ND		ND			
Heptane		0.042		0.172	J	
Hexachlorobutadiene	ND		ND			
n-Hexane		0.146		0.514	J	
Isopropanol		0.074		0.182	J	
Methylene chloride		0.628		2.18		
4-Methyl-2-pentanone	ND		ND			
Methyl tert butyl ether	ND		ND			
p/m-Xylene	ND		ND			
o-Xylene		0.055		0.239	J	
Styrene		0.043		0.183	J	
Tetrachloroethene	ND		ND			
Toluene		0.195		0.734	J	
trans-1,2-Dichloroethene	ND		ND			
trans-1,3-Dichloropropene	ND		ND			
Trichloroethene	ND		ND			
Trichlorofluoromethane		0.307		1.72		
Vinyl bromide	ND		ND			
Vinyl chloride	ND		ND			
Ethyl Acetate	ND		ND			
Propylene	ND		ND			J
Tetrahydrofuran	ND		ND			
Vinyl acetate	ND		ND			

Alpha Analytical Labs

Summary of Results

Analysis: Volatile Organic Compounds by EPA Method TO-15

Sample Name: L0711861-19 1-30-003A-SS-DUP01

Compound	ppbv		ug/m3		DV Qualifier
1,1,1-Trichloroethane		1.72		9.39	
1,1,2,2-Tetrachloroethane	ND		ND		
1,1,2-Trichloroethane	ND		ND		
1,1-Dichloroethane		0.056		0.226	J
1,1-Dichloroethene	ND		ND		
1,2,4-Trichlorobenzene	ND		ND		
1,2,4-Trimethylbenzene		0.294		1.44	
1,2-Dibromoethane	ND		ND		
1,2-Dichlorobenzene	ND		ND		
1,2-Dichloroethane	ND		ND		
1,2-Dichloropropane	ND		ND		
1,3,5-Trimethybenzene		0.067		0.329	J
1,3-Butadiene		1.04		2.3	
1,3-Dichlorobenzene	ND		ND		
1,4-Dichlorobenzene		0.149		0.895	J
1,4-Dioxane	ND		ND		
2,2,4-Trimethylpentane	ND		ND		
2-Butanone		3.44		10.2	
2-Hexanone	ND		ND		
3-Chloropropene		0.071		0.222	J
4-Ethyltoluene		0.068		0.334	J
Acetone		29.5		70	
Benzene		0.485		1.55	
Benzyl chloride	ND		ND		
Bromodichloromethane		0.153		1.02	J
Bromoform	ND		ND		
Bromomethane	ND		ND		
Carbon disulfide	ND		ND		
Carbon tetrachloride		0.506		3.18	
Chlorobenzene	ND		ND		
Chlorodifluoromethane	ND		ND		
Chloroethane	ND		ND		
Chloroform		26.4		129	
Chloromethane		0.093		0.192	J
cis-1,2-Dichloroethene		0.025		0.099	J
cis-1,3-Dichloropropene	ND		ND		
Cyclohexane	ND		ND		
Dibromochloromethane	ND		ND		
Dichlorodifluoromethane		0.487		2.41	
Ethylbenzene		0.255		1.11	J

Freon-113		0.293		2.24		
Freon-114	ND		ND			
Heptane		0.207		0.848		
Hexachlorobutadiene	ND		ND			
n-Hexane		0.141		0.496	J	
Isopropanol		1.33		3.26		
Methylene chloride		2.54		8.81		
4-Methyl-2-pentanone		0.255		1.04		
Methyl tert butyl ether	ND		ND			
p/m-Xylene		0.844		3.66		
o-Xylene		0.356		1.54		
Styrene		0.123		0.524	J	
Tetrachloroethene		0.364		2.47		J
Toluene		2.14		8.07		J
trans-1,2-Dichloroethene	ND		ND			
trans-1,3-Dichloropropene	ND		ND			
Trichloroethene		6.16		33.1		
Trichlorofluoromethane		0.271		1.52		
Vinyl bromide	ND		ND			
Vinyl chloride	ND		ND			
Ethyl Acetate	ND		ND			
Propylene		3.98		6.84		J
Tetrahydrofuran		0.685		2.02		
Vinyl acetate	ND		ND			

Alpha Analytical Labs

Summary of Results

Analysis: Volatile Organic Compounds by EPA Method TO-15

Sample Name: L0711861-20 1-30-003A-BF-DUP01

Compound	ppbv		ug/m3		DV Qualifier
1,1,1-Trichloroethane	2.15		11.7		
1,1,2,2-Tetrachloroethane	ND		ND		
1,1,2-Trichloroethane	ND		ND		
1,1-Dichloroethane	ND		ND		
1,1-Dichloroethene	ND		ND		
1,2,4-Trichlorobenzene	ND		ND		
1,2,4-Trimethylbenzene	0.194		0.953	J	
1,2-Dibromoethane	ND		ND		
1,2-Dichlorobenzene	0.089		0.535	J	
1,2-Dichloroethane	0.306		1.24		
1,2-Dichloropropane	ND		ND		
1,3,5-Trimethybenzene	0.052		0.255	J	
1,3-Butadiene	ND		ND		
1,3-Dichlorobenzene	0.082		0.493	J	
1,4-Dichlorobenzene	0.084		0.505	J	
1,4-Dioxane	ND		ND		
2,2,4-Trimethylpentane	0.072		0.336	J	
2-Butanone	ND		ND		
2-Hexanone	ND		ND		
3-Chloropropene	ND		ND		
4-Ethyltoluene	0.049		0.241	J	
Acetone	37.2		88.3		
Benzene	0.216		0.689		
Benzyl chloride	ND		ND		
Bromodichloromethane	ND		ND		
Bromoform	ND		ND		
Bromomethane	ND		ND		
Carbon disulfide	0.166		0.516	J	
Carbon tetrachloride	ND		ND		
Chlorobenzene	ND		ND		
Chlorodifluoromethane	5.52		19.5		
Chloroethane	ND		ND		
Chloroform	0.042		0.205	J	
Chloromethane	0.514		1.06		
cis-1,2-Dichloroethene	ND		ND		
cis-1,3-Dichloropropene	ND		ND		
Cyclohexane	0.356		1.22		
Dibromochloromethane	ND		ND		
Dichlorodifluoromethane	0.521		2.57		
Ethylbenzene	0.354		1.54		J

D = Extra dilution required for this compound

Analyst: J. Schmitt

Freon-113	ND		ND			
Freon-114	ND		ND			
Heptane		1.57		6.41		
Hexachlorobutadiene	ND		ND			
n-Hexane		4.71		16.6		
Isopropanol		29.9		73.5		
Methylene chloride		2.37		8.24		
4-Methyl-2-pentanone		1.83		7.49		
Methyl tert butyl ether	ND		ND			
p/m-Xylene		1.1		4.78		
o-Xylene		0.343		1.49		
Styrene		0.141		0.6	J	
Tetrachloroethene		0.185		1.25	J	
Toluene		5.48		20.6		J
trans-1,2-Dichloroethene	ND		ND			
trans-1,3-Dichloropropene	ND		ND			
Trichloroethene	ND		ND			
Trichlorofluoromethane		0.453		2.54		
Vinyl bromide	ND		ND			
Vinyl chloride	ND		ND			
Ethyl Acetate		3.83		13.8		
Propylene	ND		ND			J
Tetrahydrofuran		1.01		2.97		
Vinyl acetate	ND		ND			

Alpha Analytical Labs

Summary of Results

Analysis: Volatile Organic Compounds by EPA Method TO-15

Sample Name: L0711861-21 1-30-003A-BF-05

Compound	ppbv	ug/m3		DV Qualifier
1,1,1-Trichloroethane	0.04	0.219	J	
1,1,2,2-Tetrachloroethane	ND	ND		
1,1,2-Trichloroethane	ND	ND		
1,1-Dichloroethane	ND	ND		
1,1-Dichloroethene	ND	ND		
1,2,4-Trichlorobenzene	ND	ND		
1,2,4-Trimethylbenzene	1.21	5.92		
1,2-Dibromoethane	ND	ND		
1,2-Dichlorobenzene	ND	ND		
1,2-Dichloroethane	0.088	0.356	J	
1,2-Dichloropropane	ND	ND		
1,3,5-Trimethybenzene	0.284	1.4		
1,3-Butadiene	ND	ND		
1,3-Dichlorobenzene	ND	ND		
1,4-Dichlorobenzene	ND	ND		
1,4-Dioxane	ND	ND		
2,2,4-Trimethylpentane	1.04	4.87		
2-Butanone	1.75	5.16		
2-Hexanone	ND	ND		
3-Chloropropene	ND	ND		
4-Ethyltoluene	0.303	1.49		
Acetone	48.8	116		
Benzene	1.76	5.6		
Benzyl chloride	ND	ND		
Bromodichloromethane	ND	ND		
Bromoform	ND	ND		
Bromomethane	ND	ND		
Carbon disulfide	ND	ND		
Carbon tetrachloride	0.224	1.41		
Chlorobenzene	ND	ND		
Chlorodifluoromethane	2.453	8.67		
Chloroethane	ND	ND		
Chloroform	0.246	1.2		
Chloromethane	0.614	1.27		
cis-1,2-Dichloroethene	ND	ND		
cis-1,3-Dichloropropene	ND	ND		
Cyclohexane	0.364	1.25		
Dibromochloromethane	ND	ND		
Dichlorodifluoromethane	ND	ND		
Ethylbenzene	0.949	4.12		J

Freon-113	ND		ND			
Freon-114	ND		ND			
Heptane		0.891		3.65		
Hexachlorobutadiene	ND		ND			
n-Hexane		2.14		7.55		
Isopropanol		26		63.9		
Methylene chloride		0.665		2.31		
4-Methyl-2-pentanone		0.043		0.176	J	
Methyl tert butyl ether		0.067		0.241	J	
p/m-Xylene		3.75		16.3		
o-Xylene		1.25		5.42		
Styrene		0.098		0.417	J	
Tetrachloroethene		0.082		0.556	J	
Toluene		8.04		30.3		J
trans-1,2-Dichloroethene	ND		ND			
trans-1,3-Dichloropropene	ND		ND			
Trichloroethene		0.114		0.612	J	
Trichlorofluoromethane		1.61		9.04		
Vinyl bromide	ND		ND			
Vinyl chloride	ND		ND			
Ethyl Acetate		3.55		12.8		
Propylene	ND		ND			J
Tetrahydrofuran		0.4		1.18		
Vinyl acetate	ND		ND			

Alpha Analytical Labs

Summary of Results

Analysis: Volatile Organic Compounds by EPA Method TO-15

Sample Name: L0711861-22 1-30-003A-SS-05

Compound	ppbv	ug/m3	DV Qualifier
1,1,1-Trichloroethane	3.59	19.6	
1,1,2,2-Tetrachloroethane	ND	ND	
1,1,2-Trichloroethane	ND	ND	
1,1-Dichloroethane	0.36	1.46	
1,1-Dichloroethene	ND	ND	
1,2,4-Trichlorobenzene	ND	ND	
1,2,4-Trimethylbenzene	0.938	4.61	
1,2-Dibromoethane	ND	ND	
1,2-Dichlorobenzene	ND	ND	
1,2-Dichloroethane	ND	ND	
1,2-Dichloropropane	ND	ND	
1,3,5-Trimethybenzene	0.206	1.01	
1,3-Butadiene	ND	ND	
1,3-Dichlorobenzene	0.081	0.487	J
1,4-Dichlorobenzene	0.082	0.493	J
1,4-Dioxane	ND	ND	
2,2,4-Trimethylpentane	0.859	4.01	
2-Butanone	ND	ND	
2-Hexanone	0.07	0.287	J
3-Chloropropene	ND	ND	
4-Ethyltoluene	0.083	0.408	J
Acetone	17.4	41.2	
Benzene	1.44	4.59	
Benzyl chloride	ND	ND	
Bromodichloromethane	ND	ND	
Bromoform	ND	ND	
Bromomethane	ND	ND	
Carbon disulfide	0.336	1.04	
Carbon tetrachloride	0.305	1.92	
Chlorobenzene	ND	ND	
Chlorodifluoromethane	ND	ND	
Chloroethane	ND	ND	
Chloroform	0.741	3.61	
Chloromethane	ND	ND	
cis-1,2-Dichloroethene	0.075	0.297	J
cis-1,3-Dichloropropene	ND	ND	
Cyclohexane	0.279	0.96	
Dibromochloromethane	ND	ND	
Dichlorodifluoromethane	1.23	6.08	
Ethylbenzene	0.873	3.79	J

Freon-113		0.721		5.52		
Freon-114	ND		ND			
Heptane		0.692		2.83		
Hexachlorobutadiene	ND		ND			
n-Hexane		1.49		5.25		
Isopropanol		1.87		4.6		
Methylene chloride		0.756		2.62		
4-Methyl-2-pentanone	ND		ND			
Methyl tert butyl ether	ND		ND			
p/m-Xylene		3.36		14.6		
o-Xylene		1.06		4.62		
Styrene		0.119		0.506	J	
Tetrachloroethene		1.32		8.98		J
Toluene		8.27		31.1		J
trans-1,2-Dichloroethene		0.02		0.0792	J	
trans-1,3-Dichloropropene	ND		ND			
Trichloroethene		12.8		68.7		
Trichlorofluoromethane		1.2		6.73		
Vinyl bromide	ND		ND			
Vinyl chloride	ND		ND			
Ethyl Acetate		0.614		2.21		
Propylene	ND		ND			J
Tetrahydrofuran	ND		ND			
Vinyl acetate	ND		ND			

SUMMARY OF THE ANALYTICAL DATA USABILITY
Grumman, Bethpage, NY

Method TO-15
Samples Collected August 15, 2007
Samples Received August 20, 2007
Sample Delivery Group: L0711999
Laboratory Reference Numbers:

1-30-003-SV01	L0711999-01
1-30-003-SV01 DUP	L0711999-01 DUP
1-30-003-SV02	L0711999-02
1-30-003-SV03	L0711999-03
1-30-003-SV04	L0711999-04
1-30-003-SV05	L0711999-05
1-30-003-SV06	L0711999-06
1-30-003-SV06 DL	L0711999-06 DL
1-30-003-SV07	L0711999-07
DUP01 (1-30-003-SV01)	L0711999-08

Air samples were validated for analyses of volatile organics by the US EPA Region II checklist. Data were reviewed for usability according to the following criteria:

- Data Completeness
* - GC/MS Tuning
* - Holding Times
- Calibrations
* - Laboratory Blanks
- Trip Blanks
- Storage Blank
- Equipment Blank
* - Internal Standard Recoveries
- Matrix Spike / Matrix Spike Duplicate
- Laboratory Control Sample
- Compound Identification
- Compound Quantitation

- - Indicates that all criteria were met for this parameter.

DATA USABILITY SUMMARY

Data for chlorodifluoromethane were also included in the 10/23 revised report. This compound was not included in the target list in the original report.

The chlorodifluoromethane data for samples -04, -05, -06 and -07 were above the linear range of the analysis. The data for these compounds are highly estimated.

Since this compound was not originally part of the target list these samples were not reanalyzed at a dilution.

Summary forms were included with the data package that reported detected concentrations between the detection limit and the reporting limit, but this data was not included in the Excel

spreadsheet provided by the laboratory. These concentrations were added in red to the spreadsheet during the validation. The data for these low concentrations were flagged with the "J" qualifier since the low concentrations are estimated values.

The laboratory's case narrative states:

3-Chloropropene was not included in the spike solution for the WG292774-2 LCS/ICV standard. This compound is included in the daily continuing calibration standard, however, it is not a second source from the initial calibration. A percent recovery is not being reported in the LCS. The associated samples are non-detect for this compound. No further action taken.

No other problems were found that would affect the end use of the data.

Holding Times

All samples were analyzed within 14 days of sample collection

Tunes

No problems were detected with the tunes associated with the samples of this delivery group.

Calibrations

The percent RSDs for each target compound in the initial calibration were within ±30 percent.

All of the percent differences in the one continuing calibration were less than 30% with the exceptions of trichlorofluoromethane (31%), 1,1,1-trichloroetehane (33%) and bromodichloromethane (32%).

The data for these compounds were only flagged with the "J" qualifier when they were detected in a sample since the percent difference was less than 50%.

All of the relative response factors were greater than 0.05.

Laboratory Duplicate

Sample 1-30-003-SV01 (L0711999-01) of this sample delivery group was used for the laboratory duplicate. All RPDs that could be accurately calculated were less than the laboratory's 25% quality assurance limits with the exceptions of isopropanol (44%) and methylene chloride (90%). An RPD of 30% was used for the purposes of the validation.

The data for these two compounds were flagged with the "J" qualifier and are estimated values.

Laboratory Control Samples

The laboratory's case narrative states:

3-Chloropropene was not included in the spike solution for the WG292774-2 LCS/ICV standard. This compound is included in the daily continuing calibration standard, however, it is not a

second source from the initial calibration. A percent recovery is not being reported in the LCS. The associated samples are non-detect for this compound. No further action taken.

All other laboratory control samples were within the required 70% - 130% quality assurance limits.

Method Blanks

No compounds were detected in any of the method blanks associated with the analyses of these samples at concentrations great than the PQL.

Trip Blank

A trip blank was not analyzed with this sample delivery group.

Equipment Blanks

An equipment blank was not analyzed with this sample delivery group.

Method Detection Limit

Copies of the method detection limits were not included in the analytical reports.

Internal Standard Areas and Retention Times

All of the internal standard recoveries were within the +/- 40% quality assurance limits.

Sample Results

No other problems were detected with any of the sample results.

SUMMARY OF THE ANALYTICAL DATA USABILITY
Grumman, Bethpage, NY

Method TO-15
Samples Collected August 15, 2007
Samples Received August 20, 2007
Sample Delivery Group: L0711999
Laboratory Reference Numbers:

1-30-003-SV01	L0711999-01
1-30-003-SV01 DUP	L0711999-01 DUP
1-30-003-SV02	L0711999-02
1-30-003-SV03	L0711999-03
1-30-003-SV04	L0711999-04
1-30-003-SV05	L0711999-05
1-30-003-SV06	L0711999-06
1-30-003-SV06 DL	L0711999-06 DL
1-30-003-SV07	L0711999-07
DUP01 (1-30-003-SV01)	L0711999-08

VOLATILE ORGANICS
INITIAL CALIBRATION

Instrument ID:
Level: Low
Tune File ID: R22888 **Acceptable:** Yes **Time Requirements Met:** Yes
Initial Calibration File ID:R22891 **Date:** 8/12/2007 **Page:** 19
Associated Samples: All

	QC %RSD	STD %RSD	QC RRF	STD RRF		QC %RSD	STD %RSD	QC RRF	STD RRF
dichlorodifluoromethane	<30		>0.010		1,1-dichloropropene	<30		>0.010	
chloromethane	<30		>0.050		carbon tetrachloride *	<30		>0.050	
vinyl chloride *	<30		>0.050		benzene *	<30		>0.050	
bromomethane *	<30		>0.050		methylmethacrylate	<30		>0.010	
chloroethane	<30		>0.050		trichloroethene *	<30		>0.050	
acetone	<30		>0.050		1,2-dichloropropane	<30		>0.050	
acetonitrile	<30		>0.010		dibromomethane	<30		>0.010	
allylchloride	<30		>0.010		bromodichloromethane *	<30		>0.050	
acrolein	<30		>0.010		cis-1,3-dichloropropene *	<30		>0.050	
acrylonitrile	<30		>0.010		toluene *	<30		>0.050	
iodomethane	<30		>0.010		ethylmethacrylate	<30		>0.010	
vinyl acetate	<30		>0.010		trans-1,3-dichloropropene *	<30		>0.050	
chloroprene	<30		>0.010		1,1,2-trichloroethane *	<30		>0.050	
2-butanone	<30		>0.050		1,2-dibromoethane	<30		>0.010	
carbon disulfide	<30		>0.050		4-methyl-2-pentanone	<30		>0.050	
trichlorofluoromethane	<30		>0.010		chlorobenzene *	<30		>0.050	
1,1-dichloroethene *	<30		>0.050		1,3-dichloropropane	<30		>0.010	
methylene chloride	<30		>0.050		tetrachloroethene *	<30		>0.050	
trans-1,2-dichloroethene	<30		>0.050		dibromochloromethane *	<30		>0.050	
1,1-dichloroethane *	<30		>0.050		2-hexanone	<30		>0.050	
propionitrile	<30		>0.010		1,1,1,2-tetrachloroethane	<30		>0.010	
isobutyl alcohol	<30		>0.010		ethylbenzene *	<30		>0.050	
methacrylonitrile	<30		>0.010		xylenes (total) *	<30		>0.050	
cis-1,2-dichloroethene	<30		>0.050		styrene *	<30		>0.050	
bromochloromethane	<30		>0.050		bromoform *	<30		>0.050	
2,2-dichloropropane	<30		>0.010		trans-1,4-dichloro-2-butene	<30		>0.010	
chloroform *	<30		>0.050		1,1,2,2-tetrachloroethane *	<30		>0.050	
1,2-dichloroethane *	<30		>0.050		1,2,3-trichloropropane	<30		>0.010	
1,1,1-trichloroethane *	<30		>0.050		1,2,4-Trichlorobenzene	<30		>0.010	

	QC %RSD	STD %RSD	QC RRF	STD RRF
Surrogates:				
1,2-Dichloroethane-d4	<30%		>0.050	
toluene-d8	<30%		>0.050	
4-bromofluorobenzene	<30%		>0.050	

All TCL Compounds Average RRF > 0.050: Yes

All TCL Compounds %D < QC Limit: Yes
TCL Compounds %D between 30% and 60% (J - qualify) N/A
TCL Compounds %D between 60% and 90% (J - qualify) N/A
TCL Compounds %D > 90% (R - reject undetected / J - detected) N/A

CALIBRATION VERIFICATION:

Compound	Benzene				Tetrachloroethene			
	Area x	**Area IS**	**calc rrf**	**Rprtd rrf**	**Area x**	**Area IS**	**calc rrf**	**Rprtd rrf**
PPB								
0.2	8,801	434,452	1.013	1.013	4,019	140,042	1.435	1.415
0.5	22,547	430,521	1.047	1.047	11,691	137,187	1.704	1.704
1.0	42,232	436,974	0.966	0.966	22,044	137,271	1.606	1.606
2.5	100,959	405,116	0.997	0.997	57,800	133,061	1.738	1.738
5	224,921	437,474	1.028	1.028	121,831	139,068	1.752	1.752
10	376,630	405,715	0.928	0.928	213,390	130,934	1.630	1.630
20	815,523	435,238	0.937	0.937	451,752	138,320	1.633	1.633
50	1,589,995	448,454	0.709	0.709	1,021,645	146,611	1.394	1.394
100	3,491,606	437,665	0.798	0.798	2,081,647	137,050	1.519	1.519
Average			0.936	0.936			1.601	1.601
			Calc	**Reported**			**Calc**	**Reported**
%RSD			12.07	12.07%			8.00	8.00%

VOLATILE ORGANICS
CONTINUING CALIBRATION

Instrument ID:
Level: Low
Tune File ID: R23089 **Acceptable:** Yes **Time Requirements Met:** Yes
Calibration File ID:R23089 **Date:** 8/23/2007 **Page:** 597
Initial Calibration File ID:R22891 **Date:** 8/12/2007 **Page:** 19
Associated Samples: All

COMPOUND LIST

	QC %RSD	STD %RSD	QC RRF	STD RRF		QC %RSD	STD %RSD	QC RRF	STD RRF
dichlorodifluoromethane	<30		>0.010		1,1-dichloropropene	<30		>0.010	
chloromethane	<30		>0.050		carbon tetrachloride *	<30		>0.050	
vinyl chloride *	<30		>0.050		benzene *	<30		>0.050	
bromomethane *	<30		>0.050		methylmethacrylate	<30		>0.010	
chloroethane	<30		>0.050		trichloroethene *	<30		>0.050	
acetone	<30		>0.050		1,2-dichloropropane	<30		>0.050	
acetonitrile	<30		>0.010		dibromomethane	<30		>0.010	
allylchloride	<30		>0.010		bromodichloromethane *	<30	32%	>0.050	
acrolein	<30		>0.010		cis-1,3-dichloropropene *	<30		>0.050	
acrylonitrile	<30		>0.010		toluene *	<30		>0.050	
iodomethane	<30		>0.010		ethylmethacrylate	<30		>0.010	
vinyl acetate	<30		>0.010		trans-1,3-dichloropropene *	<30		>0.050	
chloroprene	<30		>0.010		1,1,2-trichloroethane *	<30		>0.050	
2-butanone	<30		>0.050		1,2-dibromoethane	<30		>0.010	
carbon disulfide	<30		>0.050		4-methyl-2-pentanone	<30		>0.050	
trichlorofluoromethane	<30	31%	>0.010		chlorobenzene *	<30		>0.050	
1,1-dichloroethene *	<30		>0.050		1,3-dichloropropane	<30		>0.010	
methylene chloride	<30		>0.050		tetrachloroethene *	<30		>0.050	
trans-1,2-dichloroethene	<30		>0.050		dibromochloromethane *	<30		>0.050	
1,1-dichloroethane *	<30		>0.050		2-hexanone	<30		>0.050	
propionitrile	<30		>0.010		1,1,1,2-tetrachloroethane	<30		>0.010	
isobutyl alcohol	<30		>0.010		ethylbenzene *	<30		>0.050	
methacrylonitrile	<30		>0.010		xylenes (total) *	<30		>0.050	
cis-1,2-dichloroethene	<30		>0.050		styrene *	<30		>0.050	
bromochloromethane	<30		>0.050		bromoform *	<30		>0.050	
2,2-dichloropropane	<30		>0.010		trans-1,4-dichloro-2-butene	<30		>0.010	
chloroform *	<30		>0.050		1,1,2,2-tetrachloroethane *	<30		>0.050	
1,2-dichloroethane *	<30		>0.050		1,2,3-trichloropropane	<30		>0.010	
1,1,1-trichloroethane *	<30	33%	>0.050		1,2,4-Trichlorobenzene	<30		>0.010	
Propylene	<30		>0.050						

	QC %D	STD %D	QC RRF	STD RRF
Surrogates:				
1,2-Dichloroethane-d4	<30		>0.050	
toluene-d8	<30		>0.050	
4-bromofluorobenzene	<30		>0.050	

All TCL Compounds Average RRF > 0.050: Yes

All TCL Compounds %D < QC Limit: Yes
TCL Compounds %D between 25% and 50% (J - qualify) N/A
TCL Compounds %D between 50% and 90% (J - qualify) N/A
TCL Compounds %D > 90% (R - reject undetected / J - detected) N/A

CALIBRATION VERIFICATION:

Compound	Chloromethane				1,1-Dichloropropene			
	Area x	**Area IS**	**calc rrf**	**Rprtd rrf**	**Area x**	**Area IS**	**calc rrf**	**Rprtd rrf**
PPB								
10	103,574	160,924	0.644	0.644	177,517	260,100	0.682	0.682
% D		**Avg RRF**	**% D**	**% D**		**Avg RRF**	**% D**	**% D**
		0.657	**Calc**	**Reported**		0.584	**Calc**	**Reported**
			-2.04	2.00			16.87	16.8

Alpha Analytical Labs

Summary of Results

Analysis: Volatile Organic Compounds by EPA Method TO-15

Sample Name: L0711999-01 1-30-003A-SV01

IAL ID:

Compound	ppbv	ug/m3	DV Qualifier
1,1,1-Trichloroethane	0.059	0.323	J
1,1,2,2-Tetrachloroethane	ND	ND	
1,1,2-Trichloroethane	ND	ND	
1,1-Dichloroethane	ND	ND	
1,1-Dichloroethene	ND	ND	
1,2,4-Trichlorobenzene	ND	ND	
1,2,4-Trimethylbenzene	ND	ND	
1,2-Dibromoethane	ND	ND	
1,2-Dichlorobenzene	ND	ND	
1,2-Dichloroethane	ND	ND	
1,2-Dichloropropane	ND	ND	
1,3,5-Trimethybenzene	ND	ND	
1,3-Butadiene	ND	ND	
1,3-Dichlorobenzene	ND	ND	
1,4-Dichlorobenzene	ND	ND	
1,4-Dioxane	ND	ND	
2,2,4-Trimethylpentane	0.051	0.236	J
2-Butanone	0.593	1.75	
2-Hexanone	ND	ND	
3-Chloropropene	ND	ND	
4-Ethyltoluene	ND	ND	
Acetone	4.01	9.53	
Benzene	0.338	1.08	J
Benzyl chloride	ND	ND	
Bromodichloromethane	ND	ND	
Bromoform	ND	ND	
Bromomethane	ND	ND	
Carbon disulfide	0.18	0.548	J
Carbon tetrachloride	ND	ND	
Chlorobenzene	ND	ND	
Chlorodifluoromethane	6.34	22.4	
Chloroethane	ND	ND	
Chloroform	0.075	0.366	J
Chloromethane	0.319	0.658	J
cis-1,2-Dichloroethene	ND	ND	
cis-1,3-Dichloropropene	ND	ND	
Cyclohexane	ND	ND	
Dibromochloromethane	ND	ND	
Dichlorodifluoromethane	0.697	3.44	
Ethylbenzene	ND	ND	

Freon-113	ND		ND		
Freon-114	ND		ND		
Heptane		0.356		1.46	
Hexachlorobutadiene	ND		ND		
n-Hexane		0.392		1.38	
Isopropanol		1.14		2.81	J
Methylene chloride		3.49		12.1	J
4-Methyl-2-pentanone	ND		ND		
Methyl tert butyl ether	ND		ND		
p/m-Xylene	ND		ND		
o-Xylene	ND		ND		
Styrene	ND		ND		
Tetrachloroethene		0.591		4	
Toluene		0.587		2.21	
trans-1,2-Dichloroethene	ND		ND		
trans-1,3-Dichloropropene	ND		ND		
Trichloroethene		0.453		2.43	
Trichlorofluoromethane		1.7		9.52	J
Vinyl bromide	ND		ND		
Vinyl chloride	ND		ND		
Ethyl Acetate	ND		ND		
Propylene		5.42		9.33	
Tetrahydrofuran	ND		ND		
Vinyl acetate	ND		ND		

Summary of Results

Analysis: Volatile Organic Compounds by EPA Method TO-15

Sample Name: L0711999-02 1-30-003A-SV02
IAL ID:

Compound	ppbv	ug/m3	DV Qualifier
1,1,1-Trichloroethane	**ND**	ND	
1,1,2,2-Tetrachloroethane	**ND**	ND	
1,1,2-Trichloroethane	**ND**	ND	
1,1-Dichloroethane	**ND**	ND	
1,1-Dichloroethene	**ND**	ND	
1,2,4-Trichlorobenzene	**ND**	ND	
1,2,4-Trimethylbenzene	7.11	34.9	
1,2-Dibromoethane	**ND**	ND	
1,2-Dichlorobenzene	**ND**	ND	
1,2-Dichloroethane	**ND**	ND	
1,2-Dichloropropane	**ND**	ND	
1,3,5-Trimethybenzene	2.58	12.7	
1,3-Butadiene	2.2	4.87	
1,3-Dichlorobenzene	**ND**	ND	
1,4-Dichlorobenzene	**ND**	ND	
1,4-Dioxane	**ND**	ND	
2,2,4-Trimethylpentane	5.32	24.8	
2-Butanone	**ND**	ND	
2-Hexanone	**ND**	ND	
3-Chloropropene	**ND**	ND	
4-Ethyltoluene	2.3	11.3	
Acetone	15	35.5	
Benzene	10.5	33.5	
Benzyl chloride	**ND**	ND	
Bromodichloromethane	**ND**	ND	
Bromoform	**ND**	ND	
Bromomethane	**ND**	ND	
Carbon disulfide	2.36	7.34	
Carbon tetrachloride	**ND**	ND	
Chlorobenzene	**ND**	ND	
Chlorodifluoromethane	1.99	7.04	
Chloroethane	**ND**	ND	
Chloroform	0.33	1.61	J
Chloromethane	**ND**	ND	
cis-1,2-Dichloroethene	**ND**	ND	
cis-1,3-Dichloropropene	**ND**	ND	
Cyclohexane	0.758	2.61	
Dibromochloromethane	**ND**	ND	
Dichlorodifluoromethane	0.661	3.27	
Ethylbenzene	4.3	18.6	

Freon-113	**ND**		ND		
Freon-114	**ND**		ND		
Heptane		4.18		17.1	
Hexachlorobutadiene	**ND**		ND		
n-Hexane		5.08		17.9	
Isopropanol		1.17		2.87	J
Methylene chloride		0.735		2.55	J
4-Methyl-2-pentanone	**ND**		ND		
Methyl tert butyl ether		2.68		9.66	
p/m-Xylene		15.6		67.9	
o-Xylene		5.34		23.2	
Styrene	**ND**		ND		
Tetrachloroethene		0.944		6.4	
Toluene		30.7		116	
trans-1,2-Dichloroethene	**ND**		ND		
trans-1,3-Dichloropropene	**ND**		ND		
Trichloroethene	**ND**		ND		
Trichlorofluoromethane		1.34		7.55	J
Vinyl bromide	**ND**		ND		
Vinyl chloride	**ND**		ND		
Ethyl Acetate	**ND**		ND		
Propylene		33		56.8	
Tetrahydrofuran	**ND**		ND		
Vinyl acetate	**ND**		ND		

Summary of Results

Analysis: Volatile Organic Compounds by EPA Method TO-15

Sample Name: L0711999-03 1-30-003A-SV03
IAL ID:

Compound	ppbv	ug/m3	DV Qualifier
1,1,1-Trichloroethane	0.176	0.96	J
1,1,2,2-Tetrachloroethane	ND	ND	
1,1,2-Trichloroethane	ND	ND	
1,1-Dichloroethane	ND	ND	
1,1-Dichloroethene	ND	ND	
1,2,4-Trichlorobenzene	ND	ND	
1,2,4-Trimethylbenzene	3.55	17.4	
1,2-Dibromoethane	ND	ND	
1,2-Dichlorobenzene	ND	ND	
1,2-Dichloroethane	ND	ND	
1,2-Dichloropropane	ND	ND	
1,3,5-Trimethybenzene	0.583	2.86	
1,3-Butadiene	0.959	2.12	
1,3-Dichlorobenzene	ND	ND	
1,4-Dichlorobenzene	0.308	1.85	J
1,4-Dioxane	ND	ND	
2,2,4-Trimethylpentane	0.200	0.933	J
2-Butanone	5.08	15	
2-Hexanone	0.055	0.224	J
3-Chloropropene	ND	ND	
4-Ethyltoluene	0.776	3.81	
Acetone	ND	ND	
Benzene	0.807	2.57	
Benzyl chloride	ND	ND	
Bromodichloromethane	ND	ND	
Bromoform	ND	ND	
Bromomethane	ND	ND	
Carbon disulfide	0.678	2.11	
Carbon tetrachloride	0.689	4.33	
Chlorobenzene	ND	ND	
Chlorodifluoromethane	66.6	236	
Chloroethane	ND	ND	
Chloroform	0.444	2.17	
Chloromethane	ND	ND	
cis-1,2-Dichloroethene	ND	ND	
cis-1,3-Dichloropropene	ND	ND	
Cyclohexane	0.079	0.27	J
Dibromochloromethane	ND	ND	
Dichlorodifluoromethane	106	526	
Ethylbenzene	0.762	3.31	

Freon-113	ND		ND		
Freon-114	ND		ND		
Heptane		0.429		1.76	
Hexachlorobutadiene	ND		ND		
n-Hexane		1.08		3.79	
Isopropanol		1.14		2.81	J
Methylene chloride		2.45		8.51	J
4-Methyl-2-pentanone		0.894		3.66	
Methyl tert butyl ether		0.27		0.973	J
p/m-Xylene		3.15		13.6	
o-Xylene		1.26		5.48	
Styrene		0.19		0.807	J
Tetrachloroethene		2.31		15.6	
Toluene		3.41		12.8	
trans-1,2-Dichloroethene	ND		ND		
trans-1,3-Dichloropropene	ND		ND		
Trichloroethene		0.094		0.505	J
Trichlorofluoromethane		0.924		5.19	J
Vinyl bromide	ND		ND		
Vinyl chloride	ND		ND		
Ethyl Acetate	ND		ND		
Propylene		12.6		21.7	
Tetrahydrofuran		1.22		3.59	
Vinyl acetate	ND		ND		

Summary of Results

Analysis: Volatile Organic Compounds by EPA Method TO-15

Sample Name: L0711999-04 1-30-003A-SV04
IAL ID:

Compound	ppbv	ug/m3	DV Qualifier	
1,1,1-Trichloroethane	0.445	2.43	J	
1,1,2,2-Tetrachloroethane	ND	ND		
1,1,2-Trichloroethane	ND	ND		
1,1-Dichloroethane	ND	ND		
1,1-Dichloroethene	ND	ND		
1,2,4-Trichlorobenzene	ND	ND		
1,2,4-Trimethylbenzene	ND	ND		
1,2-Dibromoethane	ND	ND		
1,2-Dichlorobenzene	ND	ND		
1,2-Dichloroethane	ND	ND		
1,2-Dichloropropane	ND	ND		
1,3,5-Trimethybenzene	ND	ND		
1,3-Butadiene	0.816	1.8		
1,3-Dichlorobenzene	ND	ND		
1,4-Dichlorobenzene	ND	ND		
1,4-Dioxane	ND	ND		
2,2,4-Trimethylpentane	ND	ND		
2-Butanone	2.1	6.2		
2-Hexanone	0.049	0.199	J	
3-Chloropropene	ND	ND		
4-Ethyltoluene	ND	ND		
Acetone	7.64	18.1		
Benzene	0.656	2.09		
Benzyl chloride	ND	ND		
Bromodichloromethane	ND	ND		
Bromoform	ND	ND		
Bromomethane	ND	ND		
Carbon disulfide	0.304	0.947	J	
Carbon tetrachloride	ND	ND		
Chlorobenzene	ND	ND		
Chlorodifluoromethane	**230**	**814**	**EJ**	**Greater than linear range**
Chloroethane	ND	ND		
Chloroform	0.176	0.857	J	
Chloromethane	ND	ND		
cis-1,2-Dichloroethene	ND	ND		
cis-1,3-Dichloropropene	ND	ND		
Cyclohexane	ND	ND		
Dibromochloromethane	ND	ND		
Dichlorodifluoromethane	17.1	84.5		
Ethylbenzene	0.1739	0.754	J	

Freon-113	**ND**		ND		
Freon-114	**ND**		ND		
Heptane	**ND**		ND		
Hexachlorobutadiene	**ND**		ND		
n-Hexane		0.542		1.91	
Isopropanol		0.673		1.65	J
Methylene chloride		0.744		2.58	J
4-Methyl-2-pentanone	**ND**		ND		
Methyl tert butyl ether	**ND**		ND		
p/m-Xylene		0.254		1.1	J
o-Xylene	**ND**		ND		
Styrene	**ND**		ND		
Tetrachloroethene		0.723		4.9	
Toluene		1.58		5.93	
trans-1,2-Dichloroethene	**ND**		ND		
trans-1,3-Dichloropropene	**ND**		ND		
Trichloroethene	**ND**		ND		
Trichlorofluoromethane		1.54		8.63	J
Vinyl bromide	**ND**		ND		
Vinyl chloride	**ND**		ND		
Ethyl Acetate	**ND**		ND		
Propylene		3.63		6.25	
Tetrahydrofuran	**ND**		ND		
Vinyl acetate	**ND**		ND		

Summary of Results

Analysis: Volatile Organic Compounds by EPA Method TO-15

Sample Name: L0711999-05 1-30-003A-SV05
IAL ID:

Compound	ppbv	ug/m3	DV Qualifier	
1,1,1-Trichloroethane	0.129	0.702	J	
1,1,2,2-Tetrachloroethane	ND	ND		
1,1,2-Trichloroethane	ND	ND		
1,1-Dichloroethane	ND	ND		
1,1-Dichloroethene	ND	ND		
1,2,4-Trichlorobenzene	ND	ND		
1,2,4-Trimethylbenzene	0.273	1.34	J	
1,2-Dibromoethane	ND	ND		
1,2-Dichlorobenzene	ND	ND		
1,2-Dichloroethane	ND	ND		
1,2-Dichloropropane	ND	ND		
1,3,5-Trimethybenzene	0.169	0.828	J	
1,3-Butadiene	2.15	4.76		
1,3-Dichlorobenzene	ND	ND		
1,4-Dichlorobenzene	ND	ND		
1,4-Dioxane	ND	ND		
2,2,4-Trimethylpentane	0.158	0.739	J	
2-Butanone	2.08	6.12		
2-Hexanone	ND	ND		
3-Chloropropene	ND	ND		
4-Ethyltoluene	0.064	0.316	J	
Acetone	12.7	30.2		
Benzene	0.87	2.78		
Benzyl chloride	ND	ND		
Bromodichloromethane	ND	ND		
Bromoform	ND	ND		
Bromomethane	ND	ND		
Carbon disulfide	0.367	1.14		
Carbon tetrachloride	ND	ND		
Chlorobenzene	ND	ND		
Chlorodifluoromethane	**3940**	**13900**	**EJ**	**Greater than linear range**
Chloroethane	ND	ND		
Chloroform	0.369	1.8		
Chloromethane	ND	ND		
cis-1,2-Dichloroethene	ND	ND		
cis-1,3-Dichloropropene	ND	ND		
Cyclohexane	0.122	0.419	J	
Dibromochloromethane	ND	ND		
Dichlorodifluoromethane	129	638		
Ethylbenzene	0.104	0.453	J	

Freon-113		0.197		1.5	J
Freon-114		1.62		11.3	
Heptane		0.744		3.05	
Hexachlorobutadiene	ND		ND		
n-Hexane		2.18		7.69	
Isopropanol		0.313		0.769	J
Methylene chloride		0.551		1.91	J
4-Methyl-2-pentanone	ND		ND		
Methyl tert butyl ether	ND		ND		
p/m-Xylene		0.414		1.8	
o-Xylene		0.327		1.42	J
Styrene	ND		ND		
Tetrachloroethene		0.167		1.13	J
Toluene		0.756		2.85	
trans-1,2-Dichloroethene	ND		ND		
trans-1,3-Dichloropropene	ND		ND		
Trichloroethene	ND		ND		
Trichlorofluoromethane		1.93		10.8	J
Vinyl bromide	ND		ND		
Vinyl chloride	ND		ND		
Ethyl Acetate	ND		ND		
Propylene		10.8		18.6	
Tetrahydrofuran	ND		ND		
Vinyl acetate	ND		ND		

Summary of Results

Analysis: Volatile Organic Compounds by EPA Method TO-15

Sample Name: L0711999-06 1-30-003A-SV06
IAL ID:

Compound	ppbv	ug/m3	DV Qualifier	
1,1,1-Trichloroethane	0.595	3.24	J	
1,1,2,2-Tetrachloroethane	ND	ND		
1,1,2-Trichloroethane	ND	ND		
1,1-Dichloroethane	ND	ND		
1,1-Dichloroethene	ND	ND		
1,2,4-Trichlorobenzene	ND	ND		
1,2,4-Trimethylbenzene	2.1	10.3		
1,2-Dibromoethane	ND	ND		
1,2-Dichlorobenzene	ND	ND		
1,2-Dichloroethane	ND	ND		
1,2-Dichloropropane	ND	ND		
1,3,5-Trimethybenzene	0.412	2.02		
1,3-Butadiene	0.598	1.32		
1,3-Dichlorobenzene	ND	ND		
1,4-Dichlorobenzene	0.310	1.86	J	
1,4-Dioxane	ND	ND		
2,2,4-Trimethylpentane	0.233	1.09	J	
2-Butanone	2.22	6.56		
2-Hexanone	0.063	0.256	J	
3-Chloropropene	ND	ND		
4-Ethyltoluene	0.461	2.26		
Acetone	16.9	40.2		
Benzene	0.497	1.59		
Benzyl chloride	ND	ND		
Bromodichloromethane	ND	ND		
Bromoform	ND	ND		
Bromomethane	ND	ND		
Carbon disulfide	0.822	2.56		
Carbon tetrachloride	ND	ND		
Chlorobenzene	ND	ND		
Chlorodifluoromethane	**27800**	**98100**	**EJ**	**Greater than the Linear Range**
Chloroethane	ND	ND		
Chloroform	0.165	ND	J	
Chloromethane	ND	ND		
cis-1,2-Dichloroethene	ND	ND		
cis-1,3-Dichloropropene	ND	ND		
Cyclohexane	0.209	0.718	J	
Dibromochloromethane	ND	ND		
Dichlorodifluoromethane	>174	>860	E >LR	use data below
Ethylbenzene	0.654	2.84		

Freon-113		1.11		8.48	
Freon-114		11.5		80.6	
Heptane		0.377		1.54	
Hexachlorobutadiene	ND		ND		
n-Hexane		0.605		2.13	
Isopropanol		0.633		1.55	J
Methylene chloride		1.01		3.5	J
4-Methyl-2-pentanone		0.372		1.52	
Methyl tert butyl ether	ND		ND		
p/m-Xylene		2.01		8.71	
o-Xylene		0.836		3.63	
Styrene		0.200		0.851	J
Tetrachloroethene		0.475		3.22	
Toluene		3.04		11.4	
trans-1,2-Dichloroethene	ND		ND		
trans-1,3-Dichloropropene	ND		ND		
Trichloroethene		0.329		1.76	J
Trichlorofluoromethane		6.22		34.9	J
Vinyl bromide	ND		ND		
Vinyl chloride	ND		ND		
Ethyl Acetate	ND		ND		
Propylene	ND		ND		
Tetrahydrofuran	ND		ND		
Vinyl acetate	ND		ND		
Dichlorodifluoromethane		**841**		**4160**	**use for final reporting**

Summary of Results

Analysis: Volatile Organic Compounds by EPA Method TO-15

Sample Name: L0711999-07 1-30-003A-SV07
IAL ID:

Compound	ppbv	ug/m3	DV Qualifier	
1,1,1-Trichloroethane	0.688	3.75	J	
1,1,2,2-Tetrachloroethane	ND	ND		
1,1,2-Trichloroethane	ND	ND		
1,1-Dichloroethane	ND	ND		
1,1-Dichloroethene	ND	ND		
1,2,4-Trichlorobenzene	ND	ND		
1,2,4-Trimethylbenzene	0.089	0.436	J	
1,2-Dibromoethane	ND	ND		
1,2-Dichlorobenzene	ND	ND		
1,2-Dichloroethane	ND	ND		
1,2-Dichloropropane	ND	ND		
1,3,5-Trimethybenzene	ND	ND		
1,3-Butadiene	1.71	3.77		
1,3-Dichlorobenzene	ND	ND		
1,4-Dichlorobenzene	ND	ND		
1,4-Dioxane	ND	ND		
2,2,4-Trimethylpentane	0.335	1.56	J	
2-Butanone	1.34	3.96		
2-Hexanone	ND	ND		
3-Chloropropene	0.072	0.226	J	
4-Ethyltoluene	ND	ND		
Acetone	9.48	22.5		
Benzene	0.631	2.01		
Benzyl chloride	ND	ND		
Bromodichloromethane	ND	ND		
Bromoform	ND	ND		
Bromomethane	ND	ND		
Carbon disulfide	0.422	1.31		
Carbon tetrachloride	ND	ND		
Chlorobenzene	ND	ND		
Chlorodifluoromethane	**2380**	**8400**	**EJ**	**Greater then the Linear Range**
Chloroethane	ND	ND		
Chloroform	0.274	1.34	J	
Chloromethane	0.172	0.355	J	
cis-1,2-Dichloroethene	ND	ND		
cis-1,3-Dichloropropene	ND	ND		
Cyclohexane	ND	ND		
Dibromochloromethane	ND	ND		
Dichlorodifluoromethane	64.8	320		
Ethylbenzene	0.070	0.305	J	

D = Extra dilution required for this compound

Analyst: J. Schmitt

Freon-113		0.139		1.06	J
Freon-114		2.06		14.4	
Heptane		0.483		1.98	
Hexachlorobutadiene	ND		ND		
n-Hexane		1.97		6.92	
Isopropanol		0.796		1.95	J
Methylene chloride		0.642		2.23	J
4-Methyl-2-pentanone	ND		ND		
Methyl tert butyl ether	ND		ND		
p/m-Xylene		0.218		0.947	J
o-Xylene		0.209		0.907	J
Styrene	ND		ND		
Tetrachloroethene		13.1		88.7	
Toluene		1.5		5.66	
trans-1,2-Dichloroethene	ND		ND		
trans-1,3-Dichloropropene	ND		ND		
Trichloroethene	ND		ND		
Trichlorofluoromethane		3.5		19.7	J
Vinyl bromide	ND		ND		
Vinyl chloride	ND		ND		
Ethyl Acetate	ND		ND		
Propylene		28.6		49.2	
Tetrahydrofuran	ND		ND		
Vinyl acetate	ND		ND		

Summary of Results

Analysis: Volatile Organic Compounds by EPA Method TO-15

Sample Name: L0711999-08 DUP01 (1-20-003A-SV-DUP01)
IAL ID:

Compound	ppbv	ug/m3	DV Qualifier
1,1,1-Trichloroethane	0.081	0.44	J
1,1,2,2-Tetrachloroethane	ND	ND	
1,1,2-Trichloroethane	ND	ND	
1,1-Dichloroethane	ND	ND	
1,1-Dichloroethene	ND	ND	
1,2,4-Trichlorobenzene	ND	ND	
1,2,4-Trimethylbenzene	ND	ND	
1,2-Dibromoethane	ND	ND	
1,2-Dichlorobenzene	ND	ND	
1,2-Dichloroethane	ND	ND	
1,2-Dichloropropane	ND	ND	
1,3,5-Trimethybenzene	ND	ND	
1,3-Butadiene	0.308	0.681	J
1,3-Dichlorobenzene	ND	ND	
1,4-Dichlorobenzene	ND	ND	
1,4-Dioxane	ND	ND	
2,2,4-Trimethylpentane	ND	ND	
2-Butanone	ND	ND	
2-Hexanone	ND	ND	
3-Chloropropene	ND	ND	
4-Ethyltoluene	ND	ND	
Acetone	ND	ND	
Benzene	0.268	0.855	J
Benzyl chloride	ND	ND	
Bromodichloromethane	ND	ND	
Bromoform	ND	ND	
Bromomethane	ND	ND	
Carbon disulfide	0.150	0.468	J
Carbon tetrachloride	ND	ND	
Chlorobenzene	ND	ND	
Chlorodifluoromethane	59.8	211	
Chloroethane	ND	ND	
Chloroform	0.083	0.403	J
Chloromethane	ND	ND	
cis-1,2-Dichloroethene	ND	ND	
cis-1,3-Dichloropropene	ND	ND	
Cyclohexane	ND	ND	
Dibromochloromethane	ND	ND	
Dichlorodifluoromethane	1.07	5.28	
Ethylbenzene	ND	ND	

Freon-113	ND		ND		
Freon-114	ND		ND		
Heptane		0.229		0.939	J
Hexachlorobutadiene	ND		ND		
n-Hexane		0.209		0.737	J
Isopropanol	ND		ND		J
Methylene chloride		0.642		2.23	J
4-Methyl-2-pentanone	ND		ND		
Methyl tert butyl ether	ND		ND		
p/m-Xylene	ND		ND		
o-Xylene	ND		ND		
Styrene	ND		ND		
Tetrachloroethene		0.514		3.48	
Toluene		0.594		2.24	
trans-1,2-Dichloroethene	ND		ND		
trans-1,3-Dichloropropene	ND		ND		
Trichloroethene		0.350		1.88	J
Trichlorofluoromethane	ND		ND		
Vinyl bromide	ND		ND		
Vinyl chloride	ND		ND		
Ethyl Acetate	ND		ND		
Propylene		5.18		8.92	
Tetrahydrofuran	ND		ND		
Vinyl acetate	ND		ND		