

**SUB-SLAB VAPOR, INDOOR AIR AND VAPOR
INTRUSION ANNUAL MONITORING REPORT 2019
LA FITNESS**

**Former Unisys Facility Site
Lake Success, New York
NYSDEC Site ID# 130045**

Prepared for:
Lockheed Martin Corporation

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**LOCKHEED MARTIN FORMER UNISYS FACILITY
SOIL VAPOR AND VAPOR INTRUSION ANNUAL MONITORING REPORT
GREAT NECK, NEW YORK**

I certify that I am currently a New York State registered professional engineer and that this Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the Division of Environmental Remediation (DER) Technical Guidance for Site Investigation and Remediation (DER-10)

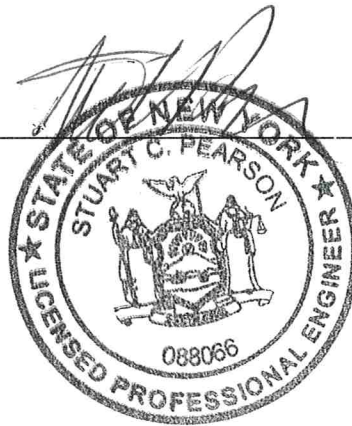
Name

Signature

Date

Stuart C. Pearson
Engineer of Record

August 14, 2019



ACRONYMS AND ABBREVIATIONS

AMEC	AMEC E&E, PC
DER	Division of Environmental Remediation
DUSR	Data Usability Summary Reports
EP	extraction point
IA	indoor air
Lockheed Martin	Lockheed Martin Corporation
$\mu\text{g}/\text{m}^3$	micrograms per cubic meter
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
PCE	Tetrachloroethene
Report	Soil Vapor and Vapor Intrusion Annual Monitoring Report
SSDS	sub-slab depressurization system
SSV	sub-slab vapor
SV	soil vapor
TCE	trichloroethene
Unisys	Unisys Corporation
VI	Vapor Intrusion
VOC	volatile organic compound

SECTION 1

INTRODUCTION

On behalf of Lockheed Martin Corporation (Lockheed Martin), AMEC E&E, PC (AMEC) has prepared this Soil Vapor and Vapor Intrusion Annual Monitoring Report (Report) for the 2019 monitoring program for the LA Fitness building located at 1111 Marcus Avenue in Lake Success, New York.

The LA Fitness Northwest Portion Sub-Slab Depressurization System (SSDS) was installed in January 2019 to address the potential for soil vapor intrusion to impact the indoor air quality in the northwest portion of the LA Fitness building. The LA Fitness Northwest Portion SSDS consists of two extraction points (EPs), EP-C5F and EP-E2F (refer to **Figure 1**), each with roof-top mounted extraction blowers that are controlled from a single control panel. Further information on the LA Fitness active SSDS is provided in the LA Fitness Northwest Portion Sub-Slab Depressurization System Commissioning Technical Memorandum (AMEC, 2019) provided in **Appendix A**. The LA Fitness Northwest Portion SSDS is operating as designed.

This Report details the annual sub-slab vapor (SSV) and indoor air (IA) sampling conducted in the LA Fitness building outside areas under the influence of the LA Fitness Northwest Portion SSDS during the 2019/20 heating season (defined as November 15th through March 31st) in accordance with the New York Department of Environmental Conservation (NYSDEC)-approved Sub-Slab Vapor, Indoor Air and Vapor Intrusion Monitoring Work Plan 2019, dated February 7, 2019 (Work Plan) (AMEC, 2019). The following information presented in this Report:

1. Discussion of 2019 paired SSV / IA sampling and laboratory analytical activities;
2. Tables presenting 2019 SSV, IA, and ambient sampling locations and analytical data;
3. Data Usability Summary Report (DUSR);
4. Copies of Property Owner and Tenant letters presenting the results of the 2019 SSV sampling event;

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5. Presentation and discussion of the results of the 2019 paired SSV / IA results (along with ambient sampling results), including assessment and comparison to New York State Department of Health (NYSDOH) Final Vapor Intrusion Guidance (NYSDOH, 2017).

SECTION 2 SITE DESCRIPTION AND SITE HISTORY

2.1 SITE DESCRIPTION

The former Unisys Corporation Facility occupies 90.5 acres that includes the main former manufacturing building and attached office building and three smaller buildings located south of the main building including the former foundry converted to a fitness center (the LA Fitness building), Powerhouse, and the former maintenance garage (which currently houses the equipment for the SSDS covering the main building and the garage). **Figure 1** shows the LA Fitness building with the locations that were sampled highlighted.

2.2 REGULATORY BACKGROUND

A passive venting system was constructed in 2010 at the LA Fitness building. This system consists of a vent pipe and an air inlet pipe, which penetrates the limited basement area along the south/central portion of this building and extends to the roof. A wind turbine located on the top of the exhaust pipe allows for suctioning of the basement air, thereby exhausting the basement air to the building exterior and introducing fresh air into the basement through the air inlet pipe. The inlet pipe also extends to the roof bringing ambient air into the basement area.

The NYSDOH revised their soil vapor (SV)/IA matrices in May 2017. The November 2017 and March 2018 results indicated that based on the comparisons of indoor air and sub-slab soil vapor data to the revised NYSDOH Matrices, mitigation was required in the northwest portion of the building

Based upon the current NYSDOH Soil Vapor Intrusion guidance (updated in May 2017), a portion of the LA Fitness building requires mitigation to address the potential for exposure via soil vapor intrusion in the northwestern portion of the building. The objectives and approach for mitigation were presented in the approved LA Fitness (Northwest Portion) Sub-Slab Depressurization System Design (AMEC, 2018). Construction was completed in January 2019, and commissioning and start-up activities were completed in February and March 2019. Commissioning and start-up

activities were documented in the LA Fitness Northwest Portion Sub-Slab Depressurization System Commissioning Technical Memorandum (AMEC, 2019).

2.3 PREVIOUS VAPOR INTRUSION SAMPLING

Vapor intrusion investigations began in 2007 at the LA Fitness building with a collection of SSV and IA samples. In 2008, the LA Fitness basement was entered to collect basement SSV samples to determine if vapor intrusion mitigation was needed. The 2008 basement SSV sampling results indicated the presence of low levels of volatile organic compounds (VOCs) in the basement space (URS, 2015). In 2010, a passive venting system was installed for the basement area to reduce the likelihood of SSV entering the occupied building. Between 2011 and 2013, two SSV samples (SS-LAC8 and SS-14) were collected and results indicated no elevated VOC concentrations under the building. Between 2011 and 2014, three IA samples (IA-13, IA-LAC8, and IA-14) were collected, and the results indicated that IA levels of VOCs in the building were below detection limits or at concentrations comparable to ambient air (URS, 2015).

In 2015, the NYSDEC requested that additional SSV monitoring points be installed at LA Fitness to finalize Site closure activities. Additional vapor intrusion (VI) assessment was performed through the comparison of eight co-located IA and SSV samples collected before and after temporary shutdown of the passive SSDS. This rebound analysis suggested that the passive SSDS should be kept in operation in the unused partial basement of the LA Fitness building. On February 8, 2016, 11 SSV, 12 IA, one basement air, one ambient air, and four duplicate samples were collected from the LA Fitness building to evaluate concentrations of VOCs present in IA and SSV. Based on these results, reduced VI monitoring was recommended in an email dated May 13, 2016, from NYSDEC and NYSDOH for the 2017/18 heating season.

Subsequent to that recommendation, the NYSDOH updated the vapor intrusion guidance documents in May 2017 (NYSDOH, 2017). The updates included lower mitigation threshold values for SSV. Lockheed Martin provided an addendum to the 2017 sampling event that included installation of six new sub-slab vapor monitoring points (Tetra Tech, 2017). The six new SSV sampling locations were sampled along with four pre-existing sampling locations in November 2017. No IA samples were collected as part of the sampling event. Results of the 2017 supplemental sampling event indicated four SSV locations with trichloroethene (TCE) levels

above the mitigation threshold of 60 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$); SS-D3F, SS-E2F, SS-C7F, and SS-D5F.

During the March 2018 sampling event, TCE results for SS-D3F and SS-D5F were above the mitigation threshold; the result for SS-C7F was below the threshold; and SS-E2F was not sampled. Analytical results consistently higher than the new mitigation threshold for the SSV necessitated the installation of the SSDS in the northwestern portion of the building.

SECTION 3 SAMPLING METHODOLOGY

3.1 SUB-SLAB VAPOR AND IA SAMPLING

The SSV, IA, and ambient samples were collected consistent with the NYSDOH Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York (NYSDOH, 2006, 2017) and the approved Work Plan.

Samples were collected on March 14, 2019 while the Northwest Portion SSDS and passive venting system were in operation. Nine paired SSV and IA samples from areas not under (outside of) the influence of the LA Fitness Northwest Portion SSDS, two representative IA samples from the area under influence of the LA Fitness Northwest Portion SSDS, plus one duplicate IA and one duplicate SSV sample were collected from the LA Fitness building. Additionally, one basement IA sample (IA-12) and one ambient air sample were collected during the sampling event. Refer to **Table 1** for a summary of sample locations.

Samples were submitted to ALS Environmental located in Simi Valley, California for analysis. Samples were analyzed by United States Environmental Protection Agency method VOCs by Method TO-15. A DUSR review was completed based on the NYSDEC Division of Environmental Remediation guidance (NYSDEC, 2010). The DUSR is included in **Appendix B**.

Copies of the sampling logs can be found in **Appendix C**.

SECTION 4

SUMMARY OF RESULTS

Results of the 2019 heating season SSV and IA sampling event in LA Fitness are presented in **Table 2** and summarized in **Figure 1**.

The following is a summary of the 2019 LA Fitness SSV and IA results for analytes included in the NYSDOH SV/IA matrices:

Analyte	Range of SSV Detected Values ($\mu\text{g}/\text{m}^3$)	Range of IA Detected Values ($\mu\text{g}/\text{m}^3$)
1,1,1-Trichloroethane	Not Detected (25U)	Not Detected (0.96U)
1,1-Dichloroethene	Not Detected (25U)	Not Detected (0.96U)
Carbon Tetrachloride	Not Detected (4.6U)	0.36 to 0.45
cis-1,2-Dichloroethene	Not Detected (25U)	Not Detected (0.94U)
Methylene Chloride	Not Detected (25U)	0.34 J to 0.52 J
Tetrachloroethene	Non-detect to 240	0.22 J to 0.33 J
Trichloroethene	Non-detect to 7.9	Not Detected (1.2U)
Vinyl Chloride	Not Detected (5.1)	Not Detected (0.2U)

TCE was not detected in any IA or ambient air samples collected during the 2019 SSV and IA sampling event.

Tetrachloroethene (PCE) was detected at all eleven of the IA samples, but not in the ambient air sample. The detections of PCE in IA ranged from estimated concentration of 0.22 $\mu\text{g}/\text{m}^3$ to an estimated 0.33 $\mu\text{g}/\text{m}^3$, all of which are well below the NYSDOH indoor air mitigation threshold of 10 $\mu\text{g}/\text{m}^3$.

Carbon Tetrachloride and Methylene Chloride were detected in all IA samples, but was not detected in SSV samples.

In the unoccupied basement air sample IA-12, TCE was detected at $1.2 \mu\text{g}/\text{m}^3$, and PCE was detected at $1.0 \mu\text{g}/\text{m}^3$. Concentrations of PCE and TCE in IA-12 are well below the NYSDOH mitigation thresholds for sub-slab vapor of $1,000 \mu\text{g}/\text{m}^3$ and $60 \mu\text{g}/\text{m}^3$, respectively.

A comparison of results for analytes detected in SSV or IA to the applicable criteria in Matrices A/B/C of the NYSDOH VI Guidance (NYSDOH, 2017) is provided in **Table 3**.

SECTION 5

CONCLUSIONS AND RECOMMENDATIONS

The purpose of the 2019 vapor intrusion sampling at the LA Fitness Building was to 1) provide post-mitigation/confirmation testing of the LA Fitness Northwest Portion SSDS in accordance with NYSDOH Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York (NYSDOH, 2006, 2017); 2) assess the effectiveness of the passive venting system in reducing VOC concentrations in the unused partial basement; 3) identify current VOC concentrations in SSV and in IA; and 4) evaluate the potential for vapor intrusion into IA within the remaining areas of the building.

The LA Fitness Northwest Portion SSDS has been installed and is now operating consistent with the NYSDEC-approved design. Results indicate a differential pressure of at least -0.004 inches of water column is being maintained under the concrete floor slab throughout the northwest portion area identified as requiring mitigation. The radius of influence of each of the two installed EPs is estimated to be at least 80 feet based on the step testing and start-up results. Prior to the construction of the LA Fitness Northwest Portion SSDS, an inspection of the LA Fitness facility was conducted to identify any potential infiltration points between the floor slab and the indoor environment. There were no potential infiltration points identified.

Key results of the 2019 vapor intrusion sampling are as follows:

1. IA samples collected from locations IA-E2F and IA-C7F to provide post-mitigation confirmation indicate concentrations of TCE are non-detect and estimated concentrations of PCE are well below NYSDOH criteria;
2. The passive venting system continues to ensure that indoor air concentrations of PCE and TCE in the unused, partial basement are below the NYSDOH Air Guideline Values of 30 $\mu\text{g}/\text{m}^3$ and 2 $\mu\text{g}/\text{m}^3$, respectively;
3. Carbon Tetrachloride and Methylene Chloride were detected in multiple IA samples, and the Ambient Air sample, but were not detected in any SSV samples. The Matrix A/B/C Determination for these analytes is No Further Action;

-
4. PCE results for SSV location SS-D13F and SS-C20F remain elevated (greater than 100 $\mu\text{g}/\text{m}^3$), but below criteria for mitigation. Based upon IA sample results for these locations, the Matrix A/B/C Determination is No Further Action; and
 5. TCE results for SSV location SS-D13F remain elevated (greater than 6 $\mu\text{g}/\text{m}^3$), but below criteria for mitigation. Based upon the IA sample results for this location, the Matrix A/B/C Determination is No Further Action.

Based upon the results of the 2019 vapor intrusion sampling and performance of the LA Fitness Northwest Portion SSDS, the areas of LA Fitness requiring vapor intrusion mitigation are being adequately addressed by the passive venting and Northwest Portion SSDS operations and the concentrations of TCE and PCE in SSV areas outside the mitigation area are well below the threshold requiring mitigation.

It is recommended that the LA Fitness annual IA sampling in areas not mitigated by the Northwest Portion SSDS should continue in order to confirm that exposures are not occurring in the other parts of the building not influenced by the current SSDS. Annual SSV sampling in LA Fitness can be discontinued at this time..

Copies of Property Owner and Tenant Letters presenting the results of the 2019 sub-slab soil vapor and indoor air investigation can be found in **Appendix D**.

SECTION 6 REFERENCES

- AMEC, 2019. LA Fitness Northwest Portion Sub-Slab Depressurization System Commissioning Technical Memorandum, Former Unisys Facility – Great Neck, Lake Success, New York (NYSDEC Site ID# 130045). April.
- AMEC, 2019. Final Sub-Slab Vapor, Indoor Air and Vapor Intrusion Monitoring Work Plan 2019, Former Unisys Facility – Great Neck, Lake Success, New York (NYSDEC Site ID# 130045). February
- AMEC, 2018. LA Fitness (Northwest Portion) Sub-Slab Depressurization System Design, Former Unisys Facility, Lake Success, New York, NYSDEC Site ID #130045. December.
- New York State Department of Environmental Conservation (NYSDEC), 2010. DER-10, Technical Guidance for Site Investigation and Remediation, Division of Environmental Remediation. May.
- New York State Department of Health (NYSDOH), 2006. Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York. October.
- New York State Department of Health (NYSDOH), 2017. Updates to Soil Vapor/Indoor Air Decision Matrices. May.
- Tetra Tech, 2017. 2017 Additional Soil Vapor and Vapor Intrusion Monitoring Point Installation and Vapor Monitoring Work Plan, Former Unisys Facility, Lake Success, New York. September.
- URS Corporation, 2015. Soil Vapor Monitoring Report 2015, Former Unisys Facility, Lake Success, New York. July.

FIGURES

Analyte	Result (ug/m3)
1,1,1-Trichloroethane	0.96 U
1,1-Dichloroethene	0.96 U
Carbon tetrachloride	0.38
cis-1,2-Dichloroethene	0.94 U
Methylene chloride	0.35 J
Tetrachloroethene	0.32 J
Trichloroethene	0.2 U
Vinyl chloride	0.2 U

Analyte	Result (ug/m3)
1,1,1-Trichloroethane	0.9 U
1,1-Dichloroethene	0.9 U
Carbon tetrachloride	0.36
cis-1,2-Dichloroethene	0.89 U
Methylene chloride	0.52 J
Tetrachloroethene	0.32 J
Trichloroethene	0.18 U
Vinyl chloride	0.18 U

Analyte	Result (ug/m3)
1,1,1-Trichloroethane	0.9 U
1,1-Dichloroethene	0.9 U
Carbon tetrachloride	0.44
cis-1,2-Dichloroethene	0.89 U
Methylene chloride	0.38 J
Tetrachloroethene	0.3 J
Trichloroethene	0.18 U
Vinyl chloride	0.18 U

Analyte	Result (ug/m3)
1,1,1-Trichloroethane	0.8 U
1,1-Dichloroethene	0.8 U
Carbon tetrachloride	0.42
cis-1,2-Dichloroethene	0.78 U
Methylene chloride	0.4 J
Tetrachloroethene	0.22 J
Trichloroethene	0.16 U
Vinyl chloride	0.16 U

Analyte	Result (ug/m3)
1,1,1-Trichloroethane	0.9 U
1,1-Dichloroethene	0.9 U
Carbon tetrachloride	0.4
cis-1,2-Dichloroethene	0.89 U
Methylene chloride	0.38 J
Tetrachloroethene	0.29 J
Trichloroethene	0.18 U
Vinyl chloride	0.18 U

Analyte	Result (ug/m3)
1,1,1-Trichloroethane	0.88 U
1,1-Dichloroethene	0.88 U
Carbon tetrachloride	0.45
cis-1,2-Dichloroethene	0.86 U
Methylene chloride	0.38 J
Tetrachloroethene	0.33 J
Trichloroethene	0.18 U
Vinyl chloride	0.18 U

Analyte	Result (ug/m3)
1,1,1-Trichloroethane	0.73 U
1,1-Dichloroethene	0.73 U
Carbon tetrachloride	0.4
cis-1,2-Dichloroethene	0.72 U
Methylene chloride	0.48 J
Tetrachloroethene	0.28 J
Trichloroethene	0.15 U
Vinyl chloride	0.15 U

Analyte	Result (ug/m3)
1,1,1-Trichloroethane	0.91 U
1,1-Dichloroethene	0.91 U
Carbon tetrachloride	0.42
cis-1,2-Dichloroethene	0.89 U
Methylene chloride	0.38 J
Tetrachloroethene	1
Trichloroethene	1.2
Vinyl chloride	0.18 U

Analyte	Result (ug/m3)
1,1,1-Trichloroethane	0.9 U
1,1-Dichloroethene	0.9 U
Carbon tetrachloride	0.44
cis-1,2-Dichloroethene	0.89 U
Methylene chloride	0.38 J
Tetrachloroethene	0.32 J
Trichloroethene	0.18 U
Vinyl chloride	0.18 U

Analyte	Result (ug/m3)
1,1,1-Trichloroethane	0.85 U
1,1-Dichloroethene	0.85 U
Carbon tetrachloride	0.4
cis-1,2-Dichloroethene	0.84 U
Methylene chloride	0.32 J
Tetrachloroethene	0.25 J
Trichloroethene	0.17 U
Vinyl chloride	0.17 U

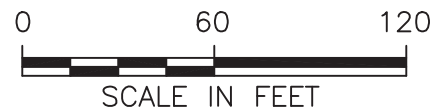
Analyte	Result (ug/m3)
1,1,1-Trichloroethane	0.86 U
1,1-Dichloroethene	0.86 U
Carbon tetrachloride	0.42
cis-1,2-Dichloroethene	0.84 U
Methylene chloride	0.37 J
Tetrachloroethene	0.29 J
Trichloroethene	0.17 U
Vinyl chloride	0.17 U

Analyte	Result (ug/m3)
1,1,1-Trichloroethane	0.93 U
1,1-Dichloroethene	0.93 U
Carbon tetrachloride	0.44
cis-1,2-Dichloroethene	0.92 U
Methylene chloride	0.37 J
Tetrachloroethene	0.29 J
Trichloroethene	0.19 U
Vinyl chloride	0.19 U

Analyte	Result (ug/m3)
1,1,1-Trichloroethane	0.95 U
1,1-Dichloroethene	0.95 U
Carbon tetrachloride	0.43
cis-1,2-Dichloroethene	0.93 U
Methylene chloride	0.34 J
Tetrachloroethene	0.29 J
Trichloroethene	0.19 U
Vinyl chloride	0.19 U

NOTES:

- SUB-SLAB MONITORING POINTS SS-A5F AND SS-G5F-R WERE INSTALLED MARCH 8, 2019. SS-G5F-R REPLACES FORMER SS-G5F WHICH IS CLOSED. SAMPLE SS-G5 WAS COLLECTED FROM LOCATION SS-G5F-R.
- U = NOT DETECTED AT THE REPORTED DETECTION LIMIT.
J = ESTIMATED VALUE.



TITLE: 2019 VI SAMPLING RESULTS LA FITNESS

LOCATION: Former UNISYS Facility
Lake Success, New York

ameco

APPROVED	RTB	FIGURE
DRAFTED	BRT	1
PROJECT#	117-0507644	
DATE	05/24/19	



LEGEND

- IA-H21F INDOOR AIR SAMPLE LOCATION
- SS-A5F SUB-SLAB MONITORING POINT
- EP-C5F ACTIVE EXTRACTION POINT
- 80 - FOOT RADIUS OF INFLUENCE
- PASSIVE VENT EXHAUST
- PASSIVE VENT INLET
- AA-01 AMBIENT AIR SAMPLE LOCATION
- DENOTES LOCATIONS SAMPLED IN 2019

TABLES

TABLE 1

Summary of Sub-Slab Vapor and Indoor Air Samples for the LA Fitness Facility
Former Unisys Facility, Lake Success, New York

Location	Sample Type and Sample ID			
	Indoor Air	Sub-Slab	Duplicate	Ambient
IA-E2F	IA-E2			
IA-C7F	IA-C7			
IA-G5F/SS-G5F	IA-G5	SS-G5	SS-DUP	
IA-E10F/SS-E10F	IA-E10	SS-E10		
IA-D13F/SS-D13F	IA-D13	SS-D13		
IA-F13F/SS-F13F	IA-F13	SS-F13		
IA-E16F/SS-E16F	IA-E16	SS-E16	IA-DUP	
IA-G18F/SS-G18F	IA-G18	SS-G18		
IA-C20F/SS-C20F	IA-C20	SS-C20		
IA-E21.5F/SS-E21.5F	IA-E21.5	SS-E21.5		
IA-H21F/SS-H21F	IA-H21	SS-H21		
IA-12F	IA-12			
AA				AA-01
NUMBER OF SAMPLES	12	9	2	1

Table 2
March 2019 - LA Fitness Sampling Results
Former Unisys Facility, Lake Success, New York

Sample ID	SS-DUP				SS-G5				SS-H21			
Lab Sample ID	P1901438-024				P1901438-015				P1901438-023			
Sampling Date	3/14/2019				3/14/2019				3/14/2019			
Matrix	AIR				AIR				AIR			
Dilution Factor	23.71				36				27			
Unit	UG/M3				UG/M3				UG/M3			
AIR - GC/MS VOA-TO-15-UG/M3	Result	Q	MDL	MRL	Result	Q	MDL	MRL	Result	Q	MDL	MRL
IA-E16 TO-15												
1,1,1-Trichloroethane	13 U		1.6	13	19 U		2.4	19	15 U		1.8	15
1,1,2,2-Tetrachloroethane	13 U		1.8	13	19 U		2.7	19	14 U		2	14
1,1,2-Trichloro-1,2,2-Trifluoroethane	13 U		1.8	13	19 U		2.7	19	24		2.1	14
1,1,2-Trichloroethane	13 U		1.3	13	19 U		1.9	19	15 U		1.5	15
1,1-Dichloroethane	12 U		1.8	12	19 U		2.8	19	14 U		2.1	14
1,1-Dichloroethene	13 U		1.8	13	19 U		2.7	19	15 U		2	15
1,2,4-Trichlorobenzene	13 U		3.1	13	19 U		4.7	19	14 U		3.5	14
1,2,4-Trimethylbenzene	13 U		1.8	13	19 U		2.7	19	2.3 J		2	14
1,2-Dibromo-3-chloropropane	12 U		2.4	12	19 U		3.6	19	14 U		2.7	14
1,2-Dibromoethane	13 U		1.5	13	19 U		2.2	19	15 U		1.7	15
1,2-Dichloro-1,1,2,2-tetrafluoroethane	12 U		2	12	18 U		3	18	14 U		2.3	14
1,2-Dichlorobenzene	13 U		1.9	13	19 U		2.8	19	15 U		2.1	15
1,2-Dichloroethane	13 U		1.4	13	19 U		2.1	19	14 U		1.6	14
1,2-Dichloroethene (total)	13 U		1.8	13	19 U		2.7	19	14 U		2	14
1,2-Dichloropropane	13 U		1.6	13	19 U		2.4	19	15 U		1.8	15
1,3,5-Trimethylbenzene	13 U		1.8	13	19 U		2.8	19	14 U		2.1	14
1,3-Butadiene	12 U		2.1	12	19 U		3.2	19	14 U		2.4	14
1,3-Dichlorobenzene	13 U		1.9	13	19 U		2.9	19	15 U		2.2	15
1,4-Dichlorobenzene	13 U		1.9	13	19 U		3	19	15 U		2.2	15
1,4-Dioxane	13 U		1.5	13	19 U		2.3	19	14 U		1.7	14
2-Butanone	3.9 J		2.6	24	4.1 J		4	36	3.6 J		3	27
2-Hexanone	13 U		1.6	13	19 U		2.4	19	15 U		1.8	15
2-Propanol	80		5.2	50	93		7.9	76	57 U		5.9	57
4-Ethyltoluene	13 U		2	13	19 U		3.1	19	14 U		2.3	14
4-Methyl-2-pentanone	13 U		1.7	13	19 U		2.6	19	14 U		2	14
Acetic acid, methyl ester	12 U		5.7	12	18 U		8.6	18	14 U		6.5	14
Acetone	53 J		28	130	68 J		43	190	150 U		32	150
Allyl chloride	13 U		1.7	13	19 U		2.6	19	14 U		1.9	14
Benzene	12 U		1.8	12	19 U		2.8	19	14 U		2.1	14
Bromodichloromethane	13 U		1.8	13	19 U		2.8	19	14 U		2.1	14
Bromoforn	13 U		2.6	13	19 U		4	19	14 U		3	14
Bromomethane	12 U		1.8	12	18 U		2.7	18	14 U		2	14
Carbon disulfide	26 U		3.8	26	40 U		5.8	40	30 U		4.3	30
Carbon tetrachloride	2.4 U		1.8	2.4	3.6 U		2.7	3.6	2.7 U		2	2.7
Chlorobenzene	13 U		1.7	13	19 U		2.6	19	14 U		1.9	14
Chlorodifluoromethane	12 U		5.9	12	18 U		9	18	14 U		6.8	14
Chloroethane	12 U		1.6	12	18 U		2.4	18	14 U		1.8	14
Chloroform	2.7 J		1.7	13	2.7 J		2.6	19	6.5 J		1.9	15
Chloromethane	12 U		2	12	18 U		3.1	18	14 U		2.3	14
cis-1,2-Dichloroethene	13 U		1.8	13	19 U		2.7	19	14 U		2	14
cis-1,3-Dichloropropene	13 U		2	13	20 U		3	20	15 U		2.2	15
Cyclohexane	24 U		3.6	24	36 U		5.4	36	27 U		4.1	27
Dibromodichloromethane	13 U		1.7	13	19 U		2.5	19	15 U		1.9	15
Dichlorodifluoromethane	12 U		2.1	12	19 U		3.1	19	14 U		2.3	14
Difluoroethane	30		6.2	12	36		9.4	18	14 U		7	14
Ethylbenzene	12 U		1.8	12	19 U		2.7	19	14 U		2	14
Freon 115	12 U		5.5	12	18 U		8.3	18	14 U		6.2	14
Freon 123	12 U		5.7	12	18 U		8.6	18	14 U		6.5	14
Hexachlorobutadiene	13 U		2.6	13	19 U		4	19	14 U		3	14
Hexane	13 U		2.6	13	19 U		4	19	15 U		3	15
Isopropylbenzene	13 U		1.8	13	19 U		2.8	19	14 U		2.1	14
Methyl cyclohexane	12 U		6.2	12	18 U		9.4	18	14 U		7	14
Methyl Tertbutyl Ether	13 U		1.5	13	19 U		2.3	19	15 U		1.7	15
Methylene chloride	13 U		3.6	13	19 U		5.4	19	15 U		4.1	15
Styrene	13 U		2	13	19 U		3.1	19	14 U		2.3	14
Tetrachloroethene	13 U		1.6	13	19 U		2.5	19	39		1.9	14
Toluene	15		1.5	13	13 J		2.3	19	15		1.8	14
trans-1,2-Dichloroethene	13 U		1.8	13	19 U		2.7	19	14 U		2	14
trans-1,3-Dichloropropene	13 U		2.6	13	19 U		4	19	14 U		3	14
Trichloroethene	2.1 J		1.7	2.6	4 U		2.6	4	3 U		1.9	3
Trichlorofluoromethane	13 U		1.9	13	19 U		2.9	19	14 U		2.2	14
Vinyl chloride	2.6 U		1.4	2.6	4 U		2.1	4	3 U		1.5	3
Xylene, o	13 U		1.8	13	19 U		2.8	19	14 U		2.1	14
Xylenes (m&p)	26 U		3.3	26	40 U		5	40	30 U		3.8	30

Q : Data Qualifier

J : Value is estimated

U : Indicates the analyte was analyzed for but not detected. Results are reported to the Method Reporting Limit.

Field duplicates (IA-DUP, SS-DUP) were collected for the following locations: IA-E16 and SS-G5.

MDL : Method Detection Limit / MRL : Method Reporting Limit

TABLE 3
Comparison of LA Fitness Sampling Results to Soil Vapor / Indoor Air Decision Matrices
Former Unisys Facility, Lake Success, New York

Location	Analyte	Results (µg/m3)		NYSDOH Matrix A/B/C Recommendation
		Indoor Air	Sub-Slab Vapor	
IA-E2F	Carbon tetrachloride	0.38	NS	No Further Action
	Methylene chloride	0.35 J	NS	No Further Action
	Tetrachloroethene	0.32 J	NS	No Further Action
	Trichloroethene	0.2 U	NS	No Further Action
IA-C7F	Carbon tetrachloride	0.36	NS	No Further Action
	Methylene chloride	0.52 J	NS	No Further Action
	Tetrachloroethene	0.32 J	NS	No Further Action
	Trichloroethene	0.18 U	NS	No Further Action
IA-G5F/SS-G5F	Carbon tetrachloride	0.45	3.6 U	No Further Action
	Methylene chloride	0.38 J	19 U	No Further Action
	Tetrachloroethene	0.33 J	19 U	No Further Action
	Trichloroethene	0.18 U	4 U	No Further Action
IA-E10F/SS-E10F	Carbon tetrachloride	0.4	4.6 U	No Further Action
	Methylene chloride	0.48 J	25 U	No Further Action
	Tetrachloroethene	0.28 J	25 U	No Further Action
	Trichloroethene	0.15 U	5.1 U	No Further Action
IA-D13F/SS-D13F	Carbon tetrachloride	0.44	2.7 U	No Further Action
	Methylene chloride	0.38 J	15 U	No Further Action
	Tetrachloroethene	0.3 J	120	No Further Action
	Trichloroethene	0.18 U	7.9	No Further Action
IA-F13F/SS-F13F	Carbon tetrachloride	0.44	2.3 U	No Further Action
	Methylene chloride	0.38 J	13 U	No Further Action
	Tetrachloroethene	0.32 J	7.2 J	No Further Action
	Trichloroethene	0.18 U	4.6	No Further Action
IA-E16F/SS-E16F	Carbon tetrachloride	0.42	2.4 U	No Further Action
	Methylene chloride	0.37 J	13 U	No Further Action
	Tetrachloroethene	0.29 J	40	No Further Action
	Trichloroethene	0.17 U	2.7 U	No Further Action
IA-G18F/SS-G18F	Carbon tetrachloride	0.42	3.3 U	No Further Action
	Methylene chloride	0.4 J	18 U	No Further Action
	Tetrachloroethene	0.22 J	34	No Further Action
	Trichloroethene	0.16 U	4.1	No Further Action
IA-C20F/SS-C20F	Carbon tetrachloride	0.4	3 U	No Further Action
	Methylene chloride	0.38 J	16 U	No Further Action
	Tetrachloroethene	0.29 J	240	No Further Action
	Trichloroethene	0.18 U	3.3 U	No Further Action
IA-E21.5F/SS-E21.5F	Carbon tetrachloride	0.43	2.7 U	No Further Action
	Methylene chloride	0.34 J	15 U	No Further Action
	Tetrachloroethene	0.29 J	14 U	No Further Action
	Trichloroethene	0.19 U	3 U	No Further Action
IA-H21F/SS-H21F	Carbon tetrachloride	0.44	2.7 U	No Further Action
	Methylene chloride	0.37 J	15 U	No Further Action
	Tetrachloroethene	0.29 J	39	No Further Action
	Trichloroethene	0.19 U	3 U	No Further Action
IA-12F	Carbon tetrachloride	0.42	NA	No Further Action
	Methylene chloride	0.38 J	NA	No Further Action
	Tetrachloroethene	1	NA	No Further Action
	Trichloroethene	1.2	NA	Continued Mitigation

Notes:

Bold - Indicates detected value

Bold-highlighted indicates value is above one of the Matrix A/B/C criteria

NA - Not Applicable

NS - Not Sampled

APPENDIX A

**LA FITNESS NORTHWEST PORTION SUB-SLAB DEPRESSURIZATION
SYSTEM COMMISSIONING TECHNICAL MEMORANDUM**



August 16, 2019

Mr. Girish Desai, P.E.
New York State Department of Environmental Conservation
SUNY at Stony Brook
50 Circle Road
Stony Brook, New York 11790

**Subject: LA Fitness Northwest Portion Sub-Slab Depressurization System
Commissioning Technical Memorandum
Former Unisys Facility – Great Neck
Lake Success, New York
NYSDEC Site ID# 130045**

Dear Mr. Desai:

On behalf of Lockheed Martin Corporation (Lockheed Martin), AMEC E&E, PC (AMEC) has prepared this Technical Memorandum summarizing the LA Fitness Northwest Portion Sub-Slab Depressurization System (SSDS) commissioning and start-up results. The LA Fitness SSDS was installed in January and February 2019 and consists of two extraction points (EPs), EP-C5F and EP-E2F (refer to Figure 1), each with roof-top mounted extraction blowers that are controlled from a single control panel. Results of the start-up monitoring indicate that the mitigation goal of maintaining the required vacuum under the concrete floor slab within the northwest portion of the facility was achieved as defined in the approved Sub-Slab Vapor, Indoor Air and Vapor Intrusion Monitoring Work Plan 2019, dated February 7, 2019 (Work Plan).

The commissioning and start-up activities (first 30 days) were completed in accordance with the approved Work Plan. The commissioning and start-up activities of the LA Fitness Northwest Portion SSDS activities included:

- Inspection of the concrete floor slab;
- SSDS flow-vacuum step testing;
- Collection of soil vapor (SV) samples from the EPs; and
- Differential pressure monitoring.



Prior to the construction of the LA Fitness Northwest Portion SSDS, an inspection of the LA Fitness facility was conducted to identify any potential infiltration points between the floor slab and the indoor environment. In general, the facility walls and floors are finished, and the concrete floor slab and concrete masonry unit walls are not visible. Floor finishes include carpeting, rubber matting (free weights area), hardwood, linoleum (spinning room), and tile (locker and shower rooms). The concrete floor slab is exposed in the main electrical room and adjacent storage room, within which components of the LA Fitness Northwest Portion SSDS electrical and controls were installed. There is an unused partial basement area in the central-southern portion of the building as shown on Figure 1. A passive venting system was installed in the basement in 2010 to address low levels of PCE and TCE in the basement air. AMEC performed an inspection of the visible floor slab and did not identify potential vapor intrusion pathways. Photographs of the electrical and storage room floors are included in Attachment 1. Furthermore, during the installation of the two SSDS extraction points EP-E2F and EP-C5F (Figure 1), the floor slab was observed to be highly competent and varied in thickness from approximately 11 inches at EP-E2F to over 30 inches at EP-C5F. LA Fitness is scheduled to complete renovations in 2019, which will include removal and replacement of existing flooring within areas of the building. During these renovations at LA Fitness, AMEC will inspect the uncovered concrete slab for integrity and submit additional information.

Step testing of EP-E2F and EP-C5F for flow and vacuum was conducted on February 4, 2019. The objective was to determine the radius of influence of each extraction point operating independently. The blower for each extraction point was operated at each rate step for a period of at least one hour while collecting differential pressure readings at 5-minute intervals at the monitoring points within the target area of influence. Results of the step testing, which are presented in Attachment 2, indicate the mitigation goal is achieved operating the blowers for both extraction points at the manufacturer's recommended slowest speed (35 Hz). The system is currently operating with both blowers running at 48 Hz (EP-E2F) and 40 Hz (EP-C5F).

The start-up of the LA Fitness Northwest Portion SSDS occurred on February 7, 2019. EP SV samples were collected from each EP on February 7, 2019, with periodic samples collected on



days 7, 14, and 28 after startup. EP samples were collected over 10-minutes in 1-liter samples and submitted to ALS Environmental for TO-15 analysis. Laboratory analytical reports are included as Attachment 3. The sub-slab vapors directly discharge from the LA Fitness Northwest SSDS to the atmosphere through a discharge stack at a height of two feet above the highest roof. Air emissions were calculated based on these vapor samples from the two extraction points. The mass estimates indicate that VOC emissions are well below the Division of Air Resources Annual Guidance Concentrations and Short-Term Guidance Concentrations (refer to Attachment 4).

Differential pressure monitoring was conducted continuously during the first seven days, and on days 14, 21, and 28 (refer to Attachment 2). On March 8, 2019, a new sub-slab monitoring point (SS-A5F) and a replacement sub-slab monitoring point for SS-G5F (SS-G5F-R) were installed in LA Fitness. These monitoring points were installed as flush-mounted Vapor Pin® points. On March 14, 2019, differential pressure monitoring was conducted at locations SS-A5F, SS-E2F, and SS-G5F-R. This data is included in the table provided in Attachment 2.

The results of the differential pressure monitoring indicate that the minimum required vacuum of 0.004 inches of water column (in. w.c.) is being achieved beyond the target area. The radius of influence (ROI) of each of the EPs is estimated to be at least 80 feet based on the step testing and start-up results which indicate influence at SS-G5F-R (80 feet from nearest EP) and potentially at SS-E10F (130 feet from nearest EP). Figure 1 depicts differential pressure (average reading) isobars and the estimated minimum radius of influence of the EPs based upon the initial SSDS operations. The table in Attachment 2 provides the distance between the sub-slab monitoring points and each of the EPs.

The LA Fitness SSDS includes a monitoring and remote notification system to provide notification in the event of operational issues. Each EP has instrumentation consisting of flow and vacuum gauges with low level alarm relays. A Room Status Monitor (RSM) continuously monitors the differential pressure between the building interior and sub-slab and has an alarm relay. The alarm relays are connected to an auto dialer that monitors and provides alarm call outs for the following alarm conditions:

- E-Stop/Loss of Power



- EP-E2 Low Vacuum
- EP-E2 Low Flow
- EP-C5 Low Vacuum
- EP-C5 Low Flow
- RSM differential pressure reading of less than -0.004 in. w.c.

When an alarm occurs, the auto dialer sends an alarm callout to the Lead Operator, Backup Operator, and OMM Task Leader. The auto dialer has a web-based interface where the alarms can be configured, viewed, and managed. The Operator logs in daily to the web-based interface to conduct a system check and documents the status of the system. Alarms were tested during commissioning and are retested on a quarterly basis. The Operator also conducts a weekly system inspection of the LA Fitness SSDS, documenting the operating parameters, including flow and vacuum for each EP, RSM reading, and EP blower variable frequency drive settings.

The following summary is based on the LA Fitness Northwest Portion SSDS performance during the first 30 days of operation.

1. The LA Fitness Northwest Portion SSDS has been installed and is now operating consistent with the NYSDEC-approved design.
2. A differential pressure of at least -0.004 in. w.c. is being maintained under the concrete floor slab throughout the northwest portion area identified as requiring mitigation.
3. LA Fitness SSDS uncontrolled air emissions are well below the published Division of Air Resources Annual Guidance Concentrations and Short-Term Guidance Concentrations.
4. No additional SSDS construction is anticipated based upon current site conditions. Additional vapor sampling was conducted in March over the remaining portions of the facility and will be provided in a separate report.

Consistent with the approved Work Plan, EP sampling and differential pressure monitoring will continue on a monthly basis through June 2019, transitioning to quarterly thereafter as part of the Site-wide monitoring program. Future reporting of the LA Fitness SSDS will be covered in the



Quarterly Operable Unit 1 Sub-Slab Depressurization System Operations, Maintenance and Monitoring Reports starting with the March 1, 2019 through May 31, 2019 report.

Please contact me at if you have any questions.

Sincerely,

AMEC E&E PC

A handwritten signature in blue ink, appearing to read "W. J. Weber".

William J. Weber, P.E.
Project Manager

cc: Renata Ockerby/NYSDOH
Glenda Clark/Lockheed Martin

Figures:

Figure 1 – Isobars of Sub-Slab Monitoring Differential Pressure (Average Readings)

Attachments:

Attachment 1 – Vapor Intrusion Pathway Inspection Photographs

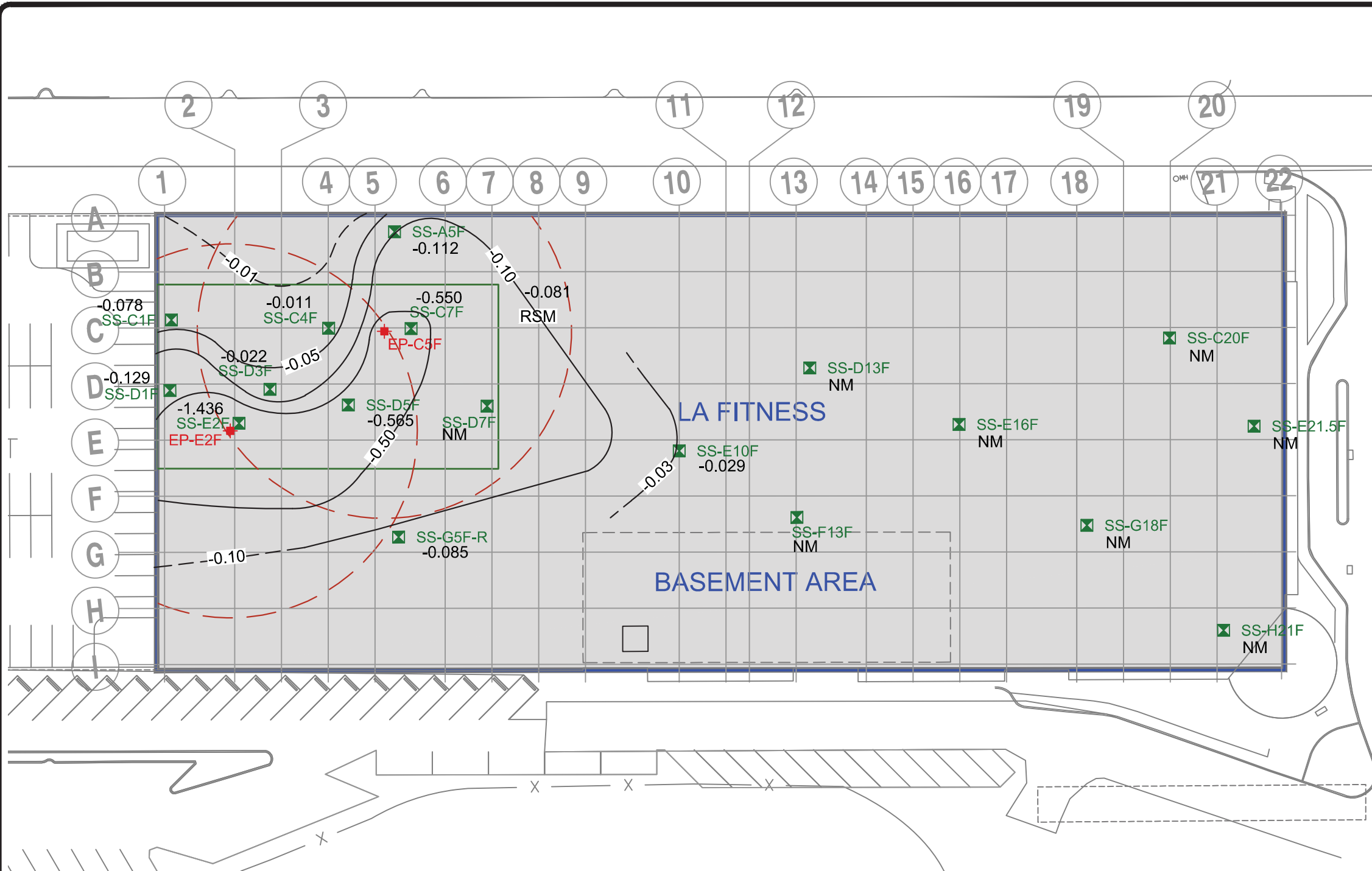
Attachment 2 – Differential Pressure Monitoring Data

Attachment 3 – Extraction Point Analytical Data

Attachment 4 – Air Emissions Analysis



FIGURE 1
ISOBARS OF SUB-SLAB MONITORING DIFFERENTIAL PRESSURE
(AVERAGE READINGS)



LEGEND

- SS-A5F EXISTING SUB-SLAB MONITORING POINT LA FITNESS
- EP-C5F ACTIVE EXTRACTION POINT LA FITNESS
- 0.0976 DIFFERENTIAL PRESSURE MEASUREMENT (IN INCHES OF WATER COLUMN)
- 0.2 DIFFERENTIAL PRESSURE CONTOUR
- 0.2 INFERRED DIFFERENTIAL PRESSURE CONTOUR
- RSM ROOM STATUS MONITOR LOCATION
- ESTIMATED MINIMUM RADIUS OF INFLUENCE (80 FEET)
- NM NOT MEASURED

NOTES:

- SUB-SLAB MONITORING POINTS SS-A5F AND SS-G5F-R WERE INSTALLED MARCH 2019.
- DATA REPRESENTED IS AVERAGE OF DIFFERENTIAL PRESSURE READINGS RECORDED DURING 30-DAY START-UP PERIOD (REFER TO ATTACHMENT 2).



TITLE: ISOBARS OF SUB-SLAB MONITORING DIFFERENTIAL PRESSURE (AVERAGE READING)			
LOCATION: Former UNISYS Facility Lake Success, New York			
amec	APPROVED	RTB	FIGURE 1
	DRAFTED	JVM	
	PROJECT#	117-0507644	
		DATE	04/03/19



ATTACHMENT 1
VAPOR INTRUSION PATHWAY INSPECTION PHOTOGRAPHS

**LA Fitness Northwest Portion Sub-Slab Depressurization System
Commissioning Technical Memorandum
Attachment 1 - Vapor Intrusion Pathway Inspection Photographs
Former Unisys Facility, Lake Success, New York**



Electrical Room Floor Condition – Facing North

**LA Fitness Northwest Portion Sub-Slab Depressurization System
Commissioning Technical Memorandum
Attachment 1 - Vapor Intrusion Pathway Inspection Photographs
Former Unisys Facility, Lake Success, New York**



Storage Room Floor Condition – Facing North



ATTACHMENT 2
DIFFERENTIAL PRESSURE MONITORING DATA

LA Fitness Northwest Portion Sub-Slab Depressurization System
Commissioning Technical Memorandum
Attachment 2 - Differential Pressure Monitoring Data
Former Unisys Facility, Lake Success, New York

Location	Sub-Slab Monitoring Point	Distance (feet) from		Base-line (January 29, 2019)	Step Testing (February 4, 2019)			Start-up (February 7, 2019 through March 14, 2019)					
		EP-E2F	EP-C5F		EP-E2F (60 Hz)	EP-C5F (60 Hz)	EP-E2F and EP- C5F (35 Hz)	Day 1 - 7	Day 14	Day 21	Day 28	Day 35	Average
LA Fitness (Northwest Portion)	SS-A5F	110	40									-0.112	-0.112
LA Fitness (Northwest Portion)	SS-C1F	50	90	0.014	-0.008	-0.003	-0.006	-0.054	-0.086	-0.084	-0.089	NM	-0.078
LA Fitness (Northwest Portion)	SS-D1F	30	90	0.012	-0.168	-0.025	-0.107	-0.092	-0.138	-0.134	-0.152	NM	-0.129
LA Fitness (Northwest Portion)	SS-E2F	10	70	NM	NM	NM	NM	NM	NM	NM	NM	-1.436	-1.436
LA Fitness (Northwest Portion)	SS-D3F	30	50	0.000	-0.012	-0.016	-0.017	-0.016	-0.023	-0.022	-0.024	NM	-0.022
LA Fitness (Northwest Portion)	SS-C4F	60	20	0.000	-0.005	-0.011	-0.009	-0.010	-0.012	-0.011	-0.013	NM	-0.011
LA Fitness (Northwest Portion)	SS-D5F	50	30	NM	NM	NM	NM	NM	-0.552	-0.547	-0.598	NM	-0.565
LA Fitness (Northwest Portion)	SS-C7F	90	10	0.001	-0.080	-0.767	-0.443	-0.460	-0.602	-0.571	-0.568	NM	-0.550
LA Fitness (Northwest Portion)	Room Status Monitor	140	60		-0.024	-0.084	-0.060	-0.079	NM	-0.087	-0.065	-0.091	-0.081
LA Fitness	SS-G5F	80	90	*	*	*	*	*	*	*	*	*	*
LA Fitness	SS-G5F-R	80	90									-0.085	-0.085
LA Fitness	SS-E10F	190	130	-0.010	-0.015	-0.034	-0.027	-0.003	-0.042	-0.036	-0.035	NM	-0.029
LA Fitness	SS-D13F			-0.002	NM	NM	NM	NM	NM	NM	NM	NM	NM
LA Fitness	SS-F13F			0.000	NM	NM	NM	NM	NM	NM	NM	NM	NM
LA Fitness	SS-E16F			NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
LA Fitness	SS-G18F			-0.002	NM	NM	NM	NM	NM	NM	NM	NM	NM
LA Fitness	SS-C20F			-0.003	NM	NM	NM	NM	NM	NM	NM	NM	NM
LA Fitness	SS-E21.5F			0.001	NM	NM	NM	NM	NM	NM	NM	NM	NM
LA Fitness	SS-H21F			0.003	NM	NM	NM	NM	NM	NM	NM	NM	NM

Notes:

Unless noted otherwise, data presented are the average of differential pressure readings collected at 5-minute intervals for the time-frame indicated.

SS-A5F was installed on March 8, 2019.

*SS-G5F location was determined to be blocked and was replaced with SS-G5F-R installed on March 8, 2019.

Start-up data presented for Room Status Monitor are instantaneous readings collected on February 7, February 28, March 5, and March 14, 2019, respectively.

Locations SS-D13F, SS-F13F, SS-E16F, SS-G18F, SS-C20F, SS-E21.5F, and SS-H21F are located outside the area requiring mitigation and are not anticipated to be significantly influenced by EP-E2F and EP-C5F operation.

NM- Not Monitored

Prepared by: RTB 8-8-2019
Checked by: SCP 8-13-2019



ATTACHMENT 3
EXTRACTION POINT ANALYTICAL DATA



2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
www.alsglobal.com

LABORATORY REPORT

February 1, 2019

Randy Talbot
Wood
511 Congress Street
Portland, ME 04101

RE: Lockheed Martin Great Neck LAF / 3617187448

Dear Randy:

Enclosed are the results of the samples submitted to our laboratory on January 31, 2019. For your reference, these analyses have been assigned our service request number P1900472.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

By Sue Anderson at 2:09 pm, Feb 01, 2019

Sue Anderson
Project Manager



2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
www.alsglobal.com

Client: Wood
Project: Lockheed Martin Great Neck LAF / 3617187448

Service Request No: P1900472

CASE NARRATIVE

The samples were received intact under chain of custody on January 31, 2019 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

Volatile Organic Compound Analysis

The samples were analyzed for volatile organic compounds in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. This procedure is described in laboratory SOP VOA-TO15. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator. This method is included on the laboratory's NELAP and DoD-ELAP scope of accreditation. Any analytes flagged with an X are not included on the NELAP or DoD-ELAP accreditation.

The containers were cleaned, prior to sampling, down to the method reporting limit (MRL) reported for this project. For projects requiring DoD QSM 5.1 compliance canisters were cleaned to <1/2 the MRL. Please note, projects which require reporting below the MRL could have results between the MRL and method detection limit (MDL) that are biased high.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.



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 Simi Valley, CA 93065
 T: +1 805 526 7161
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ALS Environmental – Simi Valley

CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
Alaska DEC	http://dec.alaska.gov/eh/lab.aspx	17-019
Arizona DHS	http://www.azdhs.gov/preparedness/state-laboratory/lab-licensure-certification/index.php#laboratory-licensure-home	AZ0694
Florida DOH (NELAP)	http://www.floridahealth.gov/licensing-and-regulation/environmental-laboratories/index.html	E871020
Louisiana DEQ (NELAP)	http://www.deq.louisiana.gov/page/la-lab-accreditation	05071
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/professionals/labCert.shtml	2018027
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	1521096
New Jersey DEP (NELAP)	http://www.nj.gov/dep/enforcement/oqa.html	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oregon PHD (NELAP)	http://www.oregon.gov/oha/ph/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	4068-005
Pennsylvania DEP	http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx	68-03307 (Registration)
PJLA (DoD ELAP)	http://www.pjlab.com/search-accredited-labs	65818 (Testing)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/agency/qa/env_lab_accreditation.html	T104704413-18-9
Utah DOH (NELAP)	http://health.utah.gov/lab/lab_cert_env	CA016272018-9
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946
Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at www.alsglobal.com, or at the accreditation body's website. Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.		

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: Wood
Project ID: Lockheed Martin Great Neck LAF / 3617187448

Service Request: P1900472

Date Received: 1/31/2019
Time Received: 09:30

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	TO-15 - VOC Cans	NA - Return B-QC Can
EP-E2	P1900472-001	Air	1/29/2019	18:34	AS01376	-2.33	3.75	X	
EP-C5	P1900472-002	Air	1/29/2019	18:28	AS01008	-3.30	4.07	X	



Air - Chain of Custody Record & Analytical Service Request

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Page 1 of 1

Company Name & Address (Reporting Information) AMEC E+EP/ WOOD 511 CONGRESS ST PORTLAND, ME 04101				Requested Turnaround Time in Business Days (Surcharges) please circle 1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day-Standard				ALS Project No. 24180 472	
Project Manager William Weber				Project Name Lockheed Martin Great Neck LAF				ALS Contact Sue Anderson	
Phone 207 775 5401				Project Number 3617187448				Analysis Method Great Neck 64 compound List + custom compds	
Fax 207 772 4762				P.O. # / Billing Information CO12506323					
Email Address for Result Reporting RYAN.BELCHER@WOODPLC.COM				Sampler (Print & Sign) RYAN BELCHER MrTBell					
Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure "Hg	Canister End Pressure (Hapsig)	Sample Volume	Comments e.g. Actual Preservative or specific instructions
EP-E2	1	1/29/19	18:34	AS01376	0A00831	>30	-7	6L	
EP-C5	2	1/29/19	18:20	AS01008	0A01072	-29	-9	6L	
				AC00703					
				AC02213					
				AC02341					
				AS00399					
				AS00560					
				AS01029					
Report Tier Levels - please select Tier I - Results (Default if not specified) _____ Tier II (Results + QC Summaries) X Tier III (Results + QC & Calibration Summaries) _____ Tier IV (Data Validation Package) 10% Surcharge _____				Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT				Project Requirements (MRLs, QAPP)	
Relinquished by: (Signature) MrTBell				Received by: (Signature)				Date: 1/31/19 Time: 0936	
Relinquished by: (Signature)				Received by: (Signature)				Date: 1/31/19 Time: 0936	

Client: Wood	Work order: P1900472
Project: Lockheed Martin Great Neck LAF / 3617187448	
Sample(s) received on: 1/31/19	Date opened: 1/31/19 by: ADAVID

		Yes	No	N/A
1	Were sample containers properly marked with client sample ID?	☒	☐	☐
2	Did sample containers arrive in good condition?	☒	☐	☐
3	Were chain-of-custody papers used and filled out?	☒	☐	☐
4	Did sample container labels and/or tags agree with custody papers?	☒	☐	☐
5	Was sample volume received adequate for analysis?	☒	☐	☐
6	Are samples within specified holding times?	☒	☐	☐
7	Was proper temperature (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
8	Were custody seals on outside of cooler/Box/Container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
9	Do containers have appropriate preservation , according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are pH preserved?	☐	☐	☒
	Were VOA vials checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and <u>if necessary</u> alter it?	☐	☐	☒
10	Tubes: Are the tubes capped and intact?	☐	☐	☒
11	Badges: Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

[illegible]

Explain any discrepancies: (include lab sample ID numbers):

P1900472_Wood_Lockheed Martin Great Neck_3617187448.xls - Page 1 of 1

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 3

Client: Wood

Client Sample ID: EP-E2

Client Project ID: Lockheed Martin Great Neck LAF / 3617187448

ALS Project ID: P1900472

ALS Sample ID: P1900472-001

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16

Analyst: Lusine Hakobyan

Sampling Media: 6.0 L Silonite Canister

Test Notes:

Container ID: AS01376

Date Collected: 1/29/19

Date Received: 1/31/19

Date Analyzed: 1/31/19

Volume(s) Analyzed: 0.15 Liter(s)

Initial Pressure (psig): -2.33 Final Pressure (psig): 3.75

Container Dilution Factor: 1.49

CAS #	Compound	Result µg/m ³	MRL µg/m ³	MDL µg/m ³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
75-71-8	Dichlorodifluoromethane (CFC 12)	2.4	5.2	0.86	0.49	1.0	0.17	J
74-87-3	Chloromethane	ND	5.0	0.85	ND	2.4	0.41	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	5.1	0.83	ND	0.73	0.12	
75-01-4	Vinyl Chloride	ND	1.1	0.57	ND	0.43	0.22	
106-99-0	1,3-Butadiene	ND	5.2	0.87	ND	2.3	0.40	
74-83-9	Bromomethane	ND	5.0	0.74	ND	1.3	0.19	
75-00-3	Chloroethane	ND	5.1	0.66	ND	1.9	0.25	
67-64-1	Acetone	450	54	12	190	23	5.0	
75-69-4	Trichlorofluoromethane	2.6	5.3	0.80	0.46	0.94	0.14	J
67-63-0	2-Propanol (Isopropyl Alcohol)	5.5	21	2.2	2.2	8.5	0.89	J
75-35-4	1,1-Dichloroethene	ND	5.4	0.74	ND	1.4	0.19	
75-09-2	Methylene Chloride	ND	5.4	1.5	ND	1.5	0.43	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	5.3	0.72	ND	1.7	0.23	
76-13-1	Trichlorotrifluoroethane	16	5.3	0.75	2.1	0.69	0.099	
75-15-0	Carbon Disulfide	ND	11	1.6	ND	3.5	0.51	
156-60-5	trans-1,2-Dichloroethene	ND	5.3	0.74	ND	1.3	0.19	
75-34-3	1,1-Dichloroethane	ND	5.2	0.77	ND	1.3	0.19	
1634-04-4	Methyl tert-Butyl Ether	ND	5.4	0.63	ND	1.5	0.17	
78-93-3	2-Butanone (MEK)	2.3	9.9	1.1	0.78	3.4	0.37	J
156-59-2	cis-1,2-Dichloroethene	ND	5.3	0.75	ND	1.3	0.19	
110-54-3	n-Hexane	ND	5.4	1.1	ND	1.5	0.31	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 2 of 3

Client: Wood

Client Sample ID: EP-E2

Client Project ID: Lockheed Martin Great Neck LAF / 3617187448

ALS Project ID: P1900472

ALS Sample ID: P1900472-001

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16

Analyst: Lusine Hakobyan

Sampling Media: 6.0 L Silonite Canister

Test Notes:

Container ID: AS01376

Date Collected: 1/29/19

Date Received: 1/31/19

Date Analyzed: 1/31/19

Volume(s) Analyzed: 0.15 Liter(s)

Initial Pressure (psig): -2.33 Final Pressure (psig): 3.75

Container Dilution Factor: 1.49

CAS #	Compound	Result µg/m ³	MRL µg/m ³	MDL µg/m ³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
67-66-3	Chloroform	0.94	5.4	0.71	0.19	1.1	0.14	J
107-06-2	1,2-Dichloroethane	ND	5.3	0.59	ND	1.3	0.14	
71-55-6	1,1,1-Trichloroethane	19	5.4	0.66	3.6	0.98	0.12	
71-43-2	Benzene	1.3	5.2	0.76	0.40	1.6	0.24	J
56-23-5	Carbon Tetrachloride	ND	0.99	0.74	ND	0.16	0.12	
110-82-7	Cyclohexane	ND	9.9	1.5	ND	2.9	0.43	
78-87-5	1,2-Dichloropropane	ND	5.4	0.66	ND	1.2	0.14	
75-27-4	Bromodichloromethane	ND	5.3	0.76	ND	0.79	0.11	
79-01-6	Trichloroethene	210	1.1	0.72	39	0.20	0.13	
123-91-1	1,4-Dioxane	ND	5.3	0.63	ND	1.5	0.17	
10061-01-5	cis-1,3-Dichloropropene	ND	5.6	0.82	ND	1.2	0.18	
108-10-1	4-Methyl-2-pentanone	4.8	5.3	0.73	1.2	1.3	0.18	J
10061-02-6	trans-1,3-Dichloropropene	ND	5.3	1.1	ND	1.2	0.24	
79-00-5	1,1,2-Trichloroethane	ND	5.4	0.54	ND	0.98	0.098	
108-88-3	Toluene	14	5.3	0.65	3.7	1.4	0.17	
591-78-6	2-Hexanone	ND	5.4	0.66	ND	1.3	0.16	
124-48-1	Dibromochloromethane	ND	5.4	0.70	ND	0.63	0.082	
106-93-4	1,2-Dibromoethane	ND	5.4	0.62	ND	0.70	0.080	
127-18-4	Tetrachloroethene	15	5.3	0.69	2.2	0.78	0.10	
108-90-7	Chlorobenzene	ND	5.3	0.71	ND	1.1	0.15	
100-41-4	Ethylbenzene	2.4	5.2	0.75	0.55	1.2	0.17	J
179601-23-1	m,p-Xylenes	10	11	1.4	2.3	2.5	0.32	J

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 3 of 3

Client: Wood
Client Sample ID: EP-E2
Client Project ID: Lockheed Martin Great Neck LAF / 3617187448

ALS Project ID: P1900472
 ALS Sample ID: P1900472-001

Test Code: EPA TO-15
 Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16
 Analyst: Lusine Hakobyan
 Sampling Media: 6.0 L Silonite Canister
 Test Notes:
 Container ID: AS01376

Date Collected: 1/29/19
 Date Received: 1/31/19
 Date Analyzed: 1/31/19
 Volume(s) Analyzed: 0.15 Liter(s)

Initial Pressure (psig): -2.33 Final Pressure (psig): 3.75

Container Dilution Factor: 1.49

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
75-25-2	Bromoform	ND	5.3	1.1	ND	0.51	0.11	
100-42-5	Styrene	2.0	5.3	0.85	0.47	1.2	0.20	J
95-47-6	o-Xylene	3.8	5.3	0.76	0.87	1.2	0.18	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.3	0.74	ND	0.77	0.11	
98-82-8	Cumene	1.2	5.3	0.76	0.25	1.1	0.16	J
622-96-8	4-Ethyltoluene	1.4	5.3	0.84	0.29	1.1	0.17	J
108-67-8	1,3,5-Trimethylbenzene	1.4	5.3	0.76	0.28	1.1	0.16	J
95-63-6	1,2,4-Trimethylbenzene	4.6	5.3	0.74	0.94	1.1	0.15	J
541-73-1	1,3-Dichlorobenzene	ND	5.4	0.79	ND	0.89	0.13	
106-46-7	1,4-Dichlorobenzene	ND	5.4	0.81	ND	0.89	0.14	
95-50-1	1,2-Dichlorobenzene	ND	5.4	0.78	ND	0.89	0.13	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.2	0.99	ND	0.53	0.10	
120-82-1	1,2,4-Trichlorobenzene	ND	5.3	1.3	ND	0.71	0.17	
87-68-3	Hexachlorobutadiene	ND	5.3	1.1	ND	0.49	0.10	
76-15-3	Chloropentafluoroethane	ND	5.0	2.3	ND	0.79	0.36	X
75-37-6	1,1-Difluoroethane	ND	5.0	2.6	ND	1.8	0.96	X
75-45-6	Chlorodifluoromethane (CFC 22)	ND	5.0	2.5	ND	1.4	0.70	X
306-83-2	2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND	5.0	2.4	ND	0.79	0.38	X
79-20-9	Methyl Acetate	ND	5.0	2.4	ND	1.6	0.79	X
108-87-2	Methylcyclohexane	ND	5.0	2.6	ND	1.2	0.64	X
540-59-0	1,2-Dichloroethene, Total	ND	5.3	0.75	ND	1.3	0.19	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

X = See case narrative.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 3

Client: Wood

Client Sample ID: EP-C5

Client Project ID: Lockheed Martin Great Neck LAF / 3617187448

ALS Project ID: P1900472

ALS Sample ID: P1900472-002

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16

Analyst: Lusine Hakobyan

Sampling Media: 6.0 L Silonite Canister

Test Notes:

Container ID: AS01008

Date Collected: 1/29/19

Date Received: 1/31/19

Date Analyzed: 1/31/19

Volume(s) Analyzed: 0.15 Liter(s)

Initial Pressure (psig): -3.30 Final Pressure (psig): 4.07

Container Dilution Factor: 1.65

CAS #	Compound	Result µg/m ³	MRL µg/m ³	MDL µg/m ³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
75-71-8	Dichlorodifluoromethane (CFC 12)	2.3	5.7	0.96	0.47	1.2	0.19	J
74-87-3	Chloromethane	ND	5.5	0.95	ND	2.7	0.46	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	5.6	0.92	ND	0.80	0.13	
75-01-4	Vinyl Chloride	ND	1.2	0.63	ND	0.47	0.25	
106-99-0	1,3-Butadiene	ND	5.7	0.97	ND	2.6	0.44	
74-83-9	Bromomethane	ND	5.5	0.81	ND	1.4	0.21	
75-00-3	Chloroethane	ND	5.6	0.73	ND	2.1	0.28	
67-64-1	Acetone	260	59	13	110	25	5.6	
75-69-4	Trichlorofluoromethane	1.8	5.8	0.89	0.32	1.0	0.16	J
67-63-0	2-Propanol (Isopropyl Alcohol)	47	23	2.4	19	9.4	0.98	
75-35-4	1,1-Dichloroethene	ND	5.9	0.81	ND	1.5	0.21	
75-09-2	Methylene Chloride	ND	5.9	1.7	ND	1.7	0.48	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	5.8	0.79	ND	1.9	0.25	
76-13-1	Trichlorotrifluoroethane	3.0	5.8	0.84	0.39	0.76	0.11	J
75-15-0	Carbon Disulfide	ND	12	1.8	ND	3.9	0.57	
156-60-5	trans-1,2-Dichloroethene	ND	5.8	0.81	ND	1.5	0.21	
75-34-3	1,1-Dichloroethane	ND	5.7	0.86	ND	1.4	0.21	
1634-04-4	Methyl tert-Butyl Ether	ND	5.9	0.69	ND	1.6	0.19	
78-93-3	2-Butanone (MEK)	16	11	1.2	5.4	3.7	0.41	
156-59-2	cis-1,2-Dichloroethene	ND	5.8	0.83	ND	1.5	0.21	
110-54-3	n-Hexane	1.9	5.9	1.2	0.54	1.7	0.34	J

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 2 of 3

Client: Wood

Client Sample ID: EP-C5

Client Project ID: Lockheed Martin Great Neck LAF / 3617187448

ALS Project ID: P1900472

ALS Sample ID: P1900472-002

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16

Analyst: Lusine Hakobyan

Sampling Media: 6.0 L Silonite Canister

Test Notes:

Container ID: AS01008

Date Collected: 1/29/19

Date Received: 1/31/19

Date Analyzed: 1/31/19

Volume(s) Analyzed: 0.15 Liter(s)

Initial Pressure (psig): -3.30 Final Pressure (psig): 4.07

Container Dilution Factor: 1.65

CAS #	Compound	Result µg/m ³	MRL µg/m ³	MDL µg/m ³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
67-66-3	Chloroform	4.3	5.9	0.78	0.89	1.2	0.16	J
107-06-2	1,2-Dichloroethane	ND	5.8	0.65	ND	1.4	0.16	
71-55-6	1,1,1-Trichloroethane	4.0	5.9	0.73	0.74	1.1	0.13	J
71-43-2	Benzene	2.5	5.7	0.85	0.78	1.8	0.27	J
56-23-5	Carbon Tetrachloride	ND	1.1	0.81	ND	0.17	0.13	
110-82-7	Cyclohexane	ND	11	1.7	ND	3.2	0.48	
78-87-5	1,2-Dichloropropane	ND	5.9	0.73	ND	1.3	0.16	
75-27-4	Bromodichloromethane	ND	5.8	0.85	ND	0.87	0.13	
79-01-6	Trichloroethene	86	1.2	0.79	16	0.23	0.15	
123-91-1	1,4-Dioxane	3.1	5.8	0.69	0.87	1.6	0.19	J
10061-01-5	cis-1,3-Dichloropropene	ND	6.2	0.91	ND	1.4	0.20	
108-10-1	4-Methyl-2-pentanone	ND	5.8	0.80	ND	1.4	0.20	
10061-02-6	trans-1,3-Dichloropropene	ND	5.8	1.2	ND	1.3	0.27	
79-00-5	1,1,2-Trichloroethane	ND	5.9	0.59	ND	1.1	0.11	
108-88-3	Toluene	20	5.8	0.72	5.2	1.5	0.19	
591-78-6	2-Hexanone	ND	5.9	0.73	ND	1.5	0.18	
124-48-1	Dibromochloromethane	ND	5.9	0.77	ND	0.70	0.090	
106-93-4	1,2-Dibromoethane	ND	5.9	0.68	ND	0.77	0.089	
127-18-4	Tetrachloroethene	3.2	5.8	0.76	0.48	0.86	0.11	J
108-90-7	Chlorobenzene	ND	5.8	0.78	ND	1.3	0.17	
100-41-4	Ethylbenzene	2.9	5.7	0.83	0.68	1.3	0.19	J
179601-23-1	m,p-Xylenes	11	12	1.5	2.6	2.8	0.35	J

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 3 of 3

Client: Wood
Client Sample ID: EP-C5
Client Project ID: Lockheed Martin Great Neck LAF / 3617187448

ALS Project ID: P1900472
 ALS Sample ID: P1900472-002

Test Code: EPA TO-15
 Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16
 Analyst: Lusine Hakobyan
 Sampling Media: 6.0 L Silonite Canister
 Test Notes:
 Container ID: AS01008

Date Collected: 1/29/19
 Date Received: 1/31/19
 Date Analyzed: 1/31/19
 Volume(s) Analyzed: 0.15 Liter(s)

Initial Pressure (psig): -3.30 Final Pressure (psig): 4.07

Container Dilution Factor: 1.65

CAS #	Compound	Result µg/m ³	MRL µg/m ³	MDL µg/m ³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
75-25-2	Bromoform	ND	5.8	1.2	ND	0.56	0.12	
100-42-5	Styrene	1.9	5.8	0.95	0.45	1.4	0.22	J
95-47-6	o-Xylene	4.3	5.8	0.85	0.99	1.3	0.20	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.8	0.81	ND	0.85	0.12	
98-82-8	Cumene	4.3	5.8	0.85	0.87	1.2	0.17	J
622-96-8	4-Ethyltoluene	1.4	5.8	0.94	0.29	1.2	0.19	J
108-67-8	1,3,5-Trimethylbenzene	1.3	5.8	0.85	0.27	1.2	0.17	J
95-63-6	1,2,4-Trimethylbenzene	4.5	5.8	0.81	0.92	1.2	0.17	J
541-73-1	1,3-Dichlorobenzene	ND	5.9	0.88	ND	0.99	0.15	
106-46-7	1,4-Dichlorobenzene	ND	5.9	0.90	ND	0.99	0.15	
95-50-1	1,2-Dichlorobenzene	ND	5.9	0.87	ND	0.99	0.14	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.7	1.1	ND	0.59	0.11	
120-82-1	1,2,4-Trichlorobenzene	ND	5.8	1.4	ND	0.79	0.19	
87-68-3	Hexachlorobutadiene	ND	5.8	1.2	ND	0.55	0.11	
76-15-3	Chloropentafluoroethane	ND	5.5	2.5	ND	0.87	0.40	X
75-37-6	1,1-Difluoroethane	25	5.5	2.9	9.3	2.0	1.1	X
75-45-6	Chlorodifluoromethane (CFC 22)	ND	5.5	2.8	ND	1.6	0.78	X
306-83-2	2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND	5.5	2.6	ND	0.88	0.42	X
79-20-9	Methyl Acetate	ND	5.5	2.6	ND	1.8	0.87	X
108-87-2	Methylcyclohexane	4.2	5.5	2.9	1.1	1.4	0.71	J, X
540-59-0	1,2-Dichloroethene, Total	ND	5.8	0.83	ND	1.5	0.21	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

X = See case narrative.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 3

Client: Wood
Client Sample ID: Method Blank
Client Project ID: Lockheed Martin Great Neck LAF / 3617187448

ALS Project ID: P1900472
 ALS Sample ID: P190131-MB

Test Code: EPA TO-15
 Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16
 Analyst: Lusine Hakobyan
 Sampling Media: 6.0 L Silonite Canister
 Test Notes:

Date Collected: NA
 Date Received: NA
 Date Analyzed: 1/31/19
 Volume(s) Analyzed: 1.00 Liter(s)

Container Dilution Factor: 1.00

CAS #	Compound	Result µg/m ³	MRL µg/m ³	MDL µg/m ³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.52	0.087	ND	0.11	0.018	
74-87-3	Chloromethane	ND	0.50	0.086	ND	0.24	0.042	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.51	0.084	ND	0.073	0.012	
75-01-4	Vinyl Chloride	ND	0.11	0.057	ND	0.043	0.022	
106-99-0	1,3-Butadiene	ND	0.52	0.088	ND	0.24	0.040	
74-83-9	Bromomethane	ND	0.50	0.074	ND	0.13	0.019	
75-00-3	Chloroethane	ND	0.51	0.066	ND	0.19	0.025	
67-64-1	Acetone	ND	5.4	1.2	ND	2.3	0.51	
75-69-4	Trichlorofluoromethane	ND	0.53	0.081	ND	0.094	0.014	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	2.1	0.22	ND	0.85	0.090	
75-35-4	1,1-Dichloroethene	ND	0.54	0.074	ND	0.14	0.019	
75-09-2	Methylene Chloride	ND	0.54	0.15	ND	0.16	0.043	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.53	0.072	ND	0.17	0.023	
76-13-1	Trichlorotrifluoroethane	ND	0.53	0.076	ND	0.069	0.0099	
75-15-0	Carbon Disulfide	ND	1.1	0.16	ND	0.35	0.051	
156-60-5	trans-1,2-Dichloroethene	ND	0.53	0.074	ND	0.13	0.019	
75-34-3	1,1-Dichloroethane	ND	0.52	0.078	ND	0.13	0.019	
1634-04-4	Methyl tert-Butyl Ether	ND	0.54	0.063	ND	0.15	0.017	
78-93-3	2-Butanone (MEK)	ND	1.0	0.11	ND	0.34	0.037	
156-59-2	cis-1,2-Dichloroethene	ND	0.53	0.075	ND	0.13	0.019	
110-54-3	n-Hexane	ND	0.54	0.11	ND	0.15	0.031	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 2 of 3

Client: Wood
Client Sample ID: Method Blank
Client Project ID: Lockheed Martin Great Neck LAF / 3617187448

ALS Project ID: P1900472
 ALS Sample ID: P190131-MB

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16
Analyst: Lusine Hakobyan
Sampling Media: 6.0 L Silonite Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 1/31/19
Volume(s) Analyzed: 1.00 Liter(s)

Container Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
67-66-3	Chloroform	ND	0.54	0.071	ND	0.11	0.015	
107-06-2	1,2-Dichloroethane	ND	0.53	0.059	ND	0.13	0.015	
71-55-6	1,1,1-Trichloroethane	ND	0.54	0.066	ND	0.099	0.012	
71-43-2	Benzene	ND	0.52	0.077	ND	0.16	0.024	
56-23-5	Carbon Tetrachloride	ND	0.10	0.074	ND	0.016	0.012	
110-82-7	Cyclohexane	ND	1.0	0.15	ND	0.29	0.044	
78-87-5	1,2-Dichloropropane	ND	0.54	0.066	ND	0.12	0.014	
75-27-4	Bromodichloromethane	ND	0.53	0.077	ND	0.079	0.011	
79-01-6	Trichloroethene	ND	0.11	0.072	ND	0.020	0.013	
123-91-1	1,4-Dioxane	ND	0.53	0.063	ND	0.15	0.017	
10061-01-5	cis-1,3-Dichloropropene	ND	0.56	0.083	ND	0.12	0.018	
108-10-1	4-Methyl-2-pentanone	ND	0.53	0.073	ND	0.13	0.018	
10061-02-6	trans-1,3-Dichloropropene	ND	0.53	0.11	ND	0.12	0.024	
79-00-5	1,1,2-Trichloroethane	ND	0.54	0.054	ND	0.099	0.0099	
108-88-3	Toluene	ND	0.53	0.065	ND	0.14	0.017	
591-78-6	2-Hexanone	ND	0.54	0.066	ND	0.13	0.016	
124-48-1	Dibromochloromethane	ND	0.54	0.070	ND	0.063	0.0082	
106-93-4	1,2-Dibromoethane	ND	0.54	0.062	ND	0.070	0.0081	
127-18-4	Tetrachloroethene	ND	0.53	0.069	ND	0.078	0.010	
108-90-7	Chlorobenzene	ND	0.53	0.071	ND	0.12	0.015	
100-41-4	Ethylbenzene	ND	0.52	0.075	ND	0.12	0.017	
179601-23-1	m,p-Xylenes	ND	1.1	0.14	ND	0.25	0.032	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 3 of 3

Client: Wood
Client Sample ID: Method Blank
Client Project ID: Lockheed Martin Great Neck LAF / 3617187448

ALS Project ID: P1900472
 ALS Sample ID: P190131-MB

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16
Analyst: Lusine Hakobyan
Sampling Media: 6.0 L Silonite Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 1/31/19
Volume(s) Analyzed: 1.00 Liter(s)

Container Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
75-25-2	Bromoform	ND	0.53	0.11	ND	0.051	0.011	
100-42-5	Styrene	ND	0.53	0.086	ND	0.12	0.020	
95-47-6	o-Xylene	ND	0.53	0.077	ND	0.12	0.018	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.53	0.074	ND	0.077	0.011	
98-82-8	Cumene	ND	0.53	0.077	ND	0.11	0.016	
622-96-8	4-Ethyltoluene	ND	0.53	0.085	ND	0.11	0.017	
108-67-8	1,3,5-Trimethylbenzene	ND	0.53	0.077	ND	0.11	0.016	
95-63-6	1,2,4-Trimethylbenzene	ND	0.53	0.074	ND	0.11	0.015	
541-73-1	1,3-Dichlorobenzene	ND	0.54	0.080	ND	0.090	0.013	
106-46-7	1,4-Dichlorobenzene	ND	0.54	0.082	ND	0.090	0.014	
95-50-1	1,2-Dichlorobenzene	ND	0.54	0.079	ND	0.090	0.013	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.52	0.10	ND	0.054	0.010	
120-82-1	1,2,4-Trichlorobenzene	ND	0.53	0.13	ND	0.071	0.018	
87-68-3	Hexachlorobutadiene	ND	0.53	0.11	ND	0.050	0.010	
76-15-3	Chloropentafluoroethane	ND	0.50	0.23	ND	0.079	0.036	X
75-37-6	1,1-Difluoroethane	ND	0.50	0.26	ND	0.19	0.096	X
75-45-6	Chlorodifluoromethane (CFC 22)	ND	0.50	0.25	ND	0.14	0.071	X
306-83-2	2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND	0.50	0.24	ND	0.080	0.038	X
79-20-9	Methyl Acetate	ND	0.50	0.24	ND	0.17	0.079	X
108-87-2	Methylcyclohexane	ND	0.50	0.26	ND	0.12	0.065	X
540-59-0	1,2-Dichloroethene, Total	ND	0.53	0.075	ND	0.13	0.019	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

X = See case narrative.

ALS ENVIRONMENTAL

SURROGATE SPIKE RECOVERY RESULTS

Page 1 of 1

Client: Wood

Client Project ID: Lockheed Martin Great Neck LAF / 3617187448

ALS Project ID: P1900472

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16

Analyst: Lusine Hakobyan

Sample Type: 6.0 L Silonite Canister(s)

Test Notes:

Date(s) Collected: 1/29/19

Date(s) Received: 1/31/19

Date(s) Analyzed: 1/31/19

Client Sample ID	ALS Sample ID	1,2-Dichloroethane-d4	Toluene-d8	Bromofluorobenzene	Acceptance Limits	Data Qualifier
		Percent Recovered	Percent Recovered	Percent Recovered		
Method Blank	P190131-MB	101	94	101	70-130	
Lab Control Sample	P190131-LCS	100	94	103	70-130	
EP-E2	P1900472-001	102	92	103	70-130	
EP-C5	P1900472-002	102	91	101	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.

Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE SUMMARY

Page 1 of 3

Client: Wood
Client Sample ID: Lab Control Sample
Client Project ID: Lockheed Martin Great Neck LAF / 3617187448

ALS Project ID: P1900472
 ALS Sample ID: P190131-LCS

Test Code: EPA TO-15
 Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16
 Analyst: Lusine Hakobyan
 Sample Type: 6.0 L Silonite Canister
 Test Notes:

Date Collected: NA
 Date Received: NA
 Date Analyzed: 1/31/19
 Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount µg/m ³	Result µg/m ³	% Recovery	ALS Acceptance Limits	Data Qualifier
75-71-8	Dichlorodifluoromethane (CFC 12)	210	206	98	62-103	
74-87-3	Chloromethane	211	227	108	51-121	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	211	210	100	56-111	
75-01-4	Vinyl Chloride	214	219	102	57-117	
106-99-0	1,3-Butadiene	210	227	108	53-134	
74-83-9	Bromomethane	212	216	102	65-110	
75-00-3	Chloroethane	214	211	99	64-111	
67-64-1	Acetone	1,060	988	93	60-113	
75-69-4	Trichlorofluoromethane	211	207	98	63-104	
67-63-0	2-Propanol (Isopropyl Alcohol)	413	442	107	60-124	
75-35-4	1,1-Dichloroethene	218	214	98	68-107	
75-09-2	Methylene Chloride	217	205	94	66-105	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	216	223	103	63-127	
76-13-1	Trichlorotrifluoroethane	216	209	97	59-109	
75-15-0	Carbon Disulfide	218	219	100	67-109	
156-60-5	trans-1,2-Dichloroethene	214	211	99	70-115	
75-34-3	1,1-Dichloroethane	216	212	98	66-106	
1634-04-4	Methyl tert-Butyl Ether	214	213	100	67-109	
78-93-3	2-Butanone (MEK)	208	214	103	71-116	
156-59-2	cis-1,2-Dichloroethene	211	208	99	67-110	
110-54-3	n-Hexane	216	223	103	60-115	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
 Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE SUMMARY

Page 2 of 3

Client: Wood
Client Sample ID: Lab Control Sample
Client Project ID: Lockheed Martin Great Neck LAF / 3617187448

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16
Analyst: Lusine Hakobyan
Sample Type: 6.0 L Silonite Canister
Test Notes:

ALS Project ID: P1900472
ALS Sample ID: P190131-LCS

Date Collected: NA
Date Received: NA
Date Analyzed: 1/31/19
Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount µg/m ³	Result µg/m ³	% Recovery	ALS Acceptance Limits	Data Qualifier
67-66-3	Chloroform	217	211	97	66-105	
107-06-2	1,2-Dichloroethane	215	208	97	60-110	
71-55-6	1,1,1-Trichloroethane	215	217	101	64-108	
71-43-2	Benzene	211	195	92	67-106	
56-23-5	Carbon Tetrachloride	212	217	102	64-112	
110-82-7	Cyclohexane	416	425	102	67-110	
78-87-5	1,2-Dichloropropane	216	219	101	66-112	
75-27-4	Bromodichloromethane	215	229	107	67-113	
79-01-6	Trichloroethene	213	214	100	66-108	
123-91-1	1,4-Dioxane	214	210	98	70-116	
10061-01-5	cis-1,3-Dichloropropene	214	233	109	75-120	
108-10-1	4-Methyl-2-pentanone	209	227	109	65-124	
10061-02-6	trans-1,3-Dichloropropene	213	236	111	77-123	
79-00-5	1,1,2-Trichloroethane	215	222	103	68-112	
108-88-3	Toluene	212	209	99	62-111	
591-78-6	2-Hexanone	214	223	104	59-128	
124-48-1	Dibromochloromethane	213	231	108	67-123	
106-93-4	1,2-Dibromoethane	216	219	101	66-122	
127-18-4	Tetrachloroethene	213	209	98	55-120	
108-90-7	Chlorobenzene	215	208	97	61-114	
100-41-4	Ethylbenzene	212	206	97	64-113	
179601-23-1	m,p-Xylenes	426	419	98	64-114	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE SUMMARY

Page 3 of 3

Client: Wood

Client Sample ID: Lab Control Sample

Client Project ID: Lockheed Martin Great Neck LAF / 3617187448

ALS Project ID: P1900472

ALS Sample ID: P190131-LCS

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16

Analyst: Lusine Hakobyan

Sample Type: 6.0 L Silonite Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 1/31/19

Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount µg/m ³	Result µg/m ³	% Recovery	ALS Acceptance Limits	Data Qualifier
75-25-2	Bromoform	213	237	111	65-132	
100-42-5	Styrene	212	220	104	67-124	
95-47-6	o-Xylene	214	210	98	65-114	
79-34-5	1,1,2,2-Tetrachloroethane	214	220	103	66-119	
98-82-8	Cumene	214	207	97	61-116	
622-96-8	4-Ethyltoluene	214	224	105	63-124	
108-67-8	1,3,5-Trimethylbenzene	214	203	95	60-117	
95-63-6	1,2,4-Trimethylbenzene	215	210	98	61-122	
541-73-1	1,3-Dichlorobenzene	216	216	100	61-125	
106-46-7	1,4-Dichlorobenzene	216	213	99	59-123	
95-50-1	1,2-Dichlorobenzene	216	214	99	61-126	
96-12-8	1,2-Dibromo-3-chloropropane	209	233	111	67-138	
120-82-1	1,2,4-Trichlorobenzene	214	229	107	62-141	
87-68-3	Hexachlorobutadiene	209	210	100	49-131	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.

Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 1

Client: Wood
Client Project ID: Lockheed Martin Great Neck LAF / 3617187448
ALS Project ID: P1900472

Method Blank Summary

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16
Analyst: Lusine Hakobyan
Sampling Media: 6.0 L Silonite Canister(s)
Test Notes:
Lab File ID: 01311903.D
Date Analyzed: 1/31/19
Time Analyzed: 06:11

Client Sample ID	ALS Sample ID	Lab File ID	Time Analyzed
Lab Control Sample	P190131-LCS	01311904.D	06:44
EP-E2	P1900472-001	01311915.D	15:45
EP-C5	P1900472-002	01311916.D	16:18

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 1

Client: Wood
Client Project ID: Lockheed Martin Great Neck LAF / 3617187448

ALS Project ID: P1900472

Internal Standard Area and RT Summary

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16
Analyst: Lusine Hakobyan
Sampling Media: 6.0 L Silonite Canister(s)
Test Notes:

Lab File ID: 01311901.D
Date Analyzed: 1/31/19
Time Analyzed: 05:05

	IS1 (BCM)		IS2 (DFB)		IS3 (CBZ)	
	AREA	#	RT	#	AREA	#
24 Hour Standard	282420	11.33	1189350	13.43	513304	17.72
Upper Limit	395388	11.66	1665090	13.76	718626	18.05
Lower Limit	169452	11.00	713610	13.10	307982	17.39

Client Sample ID						
01	Method Blank	269358	11.31	1161132	13.43	502615
02	Lab Control Sample	274459	11.33	1157770	13.43	499315
03	EP-E2	280508	11.32	1176571	13.43	513665
04	EP-C5	273708	11.31	1158714	13.43	510036
05						
06						
07						
08						
09						
10						
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15						
16						
17						
18						
19						
20						

IS1 (BCM) = Bromochloromethane

IS2 (DFB) = 1,4-Difluorobenzene

IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = 140% of internal standard area

AREA LOWER LIMIT = 60% of internal standard area

RT UPPER LIMIT = 0.33 minutes of internal standard RT

RT LOWER LIMIT = 0.33 minutes of internal standard RT

Column used to flag values outside QC limits with an I.

I = Internal standard not within the specified limits. See case narrative.



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LABORATORY REPORT

February 11, 2019

Randy Talbot
Wood
511 Congress Street
Portland, ME 04101

RE: LAF Lockheed Martin Great Neck / 3617187448

Dear Randy:

Enclosed are the results of the samples submitted to our laboratory on February 8, 2019. For your reference, these analyses have been assigned our service request number P1900621.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

By Michael Conejo at 3:52 pm, Feb 11, 2019

For Sue Anderson
Project Manager



2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
www.alsglobal.com

Client: Wood
Project: LAF Lockheed Martin Great Neck / 3617187448

Service Request No: P1900621

CASE NARRATIVE

The samples were received intact under chain of custody on February 8, 2019 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

Volatile Organic Compound Analysis

The samples were analyzed for volatile organic compounds and in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. This procedure is described in laboratory SOP VOA-TO15. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator. This method is included on the laboratory's NELAP and DoD-ELAP scope of accreditation. Any analytes flagged with an X are not included on the NELAP or DoD-ELAP accreditation.

The containers were cleaned, prior to sampling, down to the method reporting limit (MRL) reported for this project. For projects requiring DoD QSM 5.1 compliance canisters were cleaned to <1/2 the MRL. Please note, projects which require reporting below the MRL could have results between the MRL and method detection limit (MDL) that are biased high.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.



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ALS Environmental – Simi Valley

CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
Alaska DEC	http://dec.alaska.gov/eh/lab.aspx	17-019
Arizona DHS	http://www.azdhs.gov/preparedness/state-laboratory/lab-licensure-certification/index.php#laboratory-licensure-home	AZ0694
Florida DOH (NELAP)	http://www.floridahealth.gov/licensing-and-regulation/environmental-laboratories/index.html	E871020
Louisiana DEQ (NELAP)	http://www.deq.louisiana.gov/page/la-lab-accreditation	05071
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/professionals/labCert.shtml	2018027
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	1521096
New Jersey DEP (NELAP)	http://www.nj.gov/dep/enforcement/oqa.html	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oregon PHD (NELAP)	http://www.oregon.gov/oha/ph/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	4068-005
Pennsylvania DEP	http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx	68-03307 (Registration)
PJLA (DoD ELAP)	http://www.pjlabs.com/search-accredited-labs	65818 (Testing)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/agency/qa/env_lab_accreditation.html	T104704413-18-9
Utah DOH (NELAP)	http://health.utah.gov/lab/lab_cert_env	CA016272018-9
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946
Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at www.alsglobal.com, or at the accreditation body's website. Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.		

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: Wood
Project ID: LAF Lockheed Martin Great Neck / 3617187448

Service Request: P1900621

Date Received: 2/8/2019
Time Received: 09:30

TO-15 - VOC Cans

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	
EP-E2	P1900621-001	Air	2/7/2019	16:27	1SC00299	-2.86	5.50	X
EP-C5	P1900621-002	Air	2/7/2019	16:11	1SC00161	-3.35	5.40	X



2655 Park Center Drive, Suite A
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Phone (805) 526-7161
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[illegible]

ALS Environmental **Sample Acceptance Check Form**

Client: Wood Work order: P1900621
 Project: LAF Lockheed Martin Great Neck / 3617187448
 Sample(s) received on: 2/8/19 Date opened: 2/8/19 by: ADAVID

Note: This form is used for all samples received by ALS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

- | | <u>Yes</u> | <u>No</u> | <u>N/A</u> |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1 Were sample containers properly marked with client sample ID? | ☒ | ☐ | ☐ |
| 2 Did sample containers arrive in good condition? | ☒ | ☐ | ☐ |
| 3 Were chain-of-custody papers used and filled out? | ☒ | ☐ | ☐ |
| 4 Did sample container labels and/or tags agree with custody papers? | ☒ | ☐ | ☐ |
| 5 Was sample volume received adequate for analysis? | ☒ | ☐ | ☐ |
| 6 Are samples within specified holding times? | ☒ | ☐ | ☐ |
| 7 Was proper temperature (thermal preservation) of cooler at receipt adhered to? | ☐ | ☐ | ☒ |
| 8 Were custody seals on outside of cooler/Box/Container? | ☐ | ☒ | ☐ |
| Location of seal(s)? _____ Sealing Lid? | ☐ | ☐ | ☒ |
| Were signature and date included? | ☐ | ☐ | ☒ |
| Were seals intact? | ☐ | ☐ | ☒ |
| 9 Do containers have appropriate preservation , according to method/SOP or Client specified information? | ☐ | ☐ | ☒ |
| Is there a client indication that the submitted samples are pH preserved? | ☐ | ☐ | ☒ |
| Were VOA vials checked for presence/absence of air bubbles? | ☐ | ☐ | ☒ |
| Does the client/method/SOP require that the analyst check the sample pH and <u>if necessary</u> alter it? | ☐ | ☐ | ☒ |
| 10 Tubes: Are the tubes capped and intact? | ☐ | ☐ | ☒ |
| 11 Badges: Are the badges properly capped and intact? | ☐ | ☐ | ☒ |
| Are dual bed badges separated and individually capped and intact? | ☐ | ☐ | ☒ |

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P1900621-001.01	1.0 L Source Can					
P1900621-002.01	1.0 L Source Can					

Explain any discrepancies: (include lab sample ID numbers): _____

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 3

Client: Wood
Client Sample ID: EP-E2
Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1900621
 ALS Sample ID: P1900621-001

Test Code: EPA TO-15
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
 Analyst: Simon Cao
 Sampling Media: 1.0 L Summa Canister
 Test Notes:
 Container ID: 1SC00299

Date Collected: 2/7/19
 Date Received: 2/8/19
 Date Analyzed: 2/8/19
 Volume(s) Analyzed: 0.20 Liter(s)

Initial Pressure (psig): -2.86 Final Pressure (psig): 5.50

Container Dilution Factor: 1.71

CAS #	Compound	Result µg/m ³	MRL µg/m ³	MDL µg/m ³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
75-71-8	Dichlorodifluoromethane (CFC 12)	1.7	4.4	0.74	0.35	0.90	0.15	J
74-87-3	Chloromethane	0.77	4.3	0.74	0.37	2.1	0.36	J
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	4.4	0.72	ND	0.62	0.10	
75-01-4	Vinyl Chloride	ND	0.94	0.49	ND	0.37	0.19	
106-99-0	1,3-Butadiene	ND	4.4	0.75	ND	2.0	0.34	
74-83-9	Bromomethane	ND	4.3	0.63	ND	1.1	0.16	
75-00-3	Chloroethane	ND	4.4	0.56	ND	1.7	0.21	
67-64-1	Acetone	78	46	10	33	19	4.3	
75-69-4	Trichlorofluoromethane	1.2	4.5	0.69	0.21	0.81	0.12	J
67-63-0	2-Propanol (Isopropyl Alcohol)	15	18	1.9	6.0	7.3	0.77	J
75-35-4	1,1-Dichloroethene	ND	4.6	0.63	ND	1.2	0.16	
75-09-2	Methylene Chloride	ND	4.6	1.3	ND	1.3	0.37	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	4.5	0.62	ND	1.4	0.20	
76-13-1	Trichlorotrifluoroethane	2.7	4.5	0.65	0.36	0.59	0.085	J
75-15-0	Carbon Disulfide	ND	9.4	1.4	ND	3.0	0.44	
156-60-5	trans-1,2-Dichloroethene	ND	4.5	0.63	ND	1.1	0.16	
75-34-3	1,1-Dichloroethane	ND	4.4	0.67	ND	1.1	0.16	
1634-04-4	Methyl tert-Butyl Ether	ND	4.6	0.54	ND	1.3	0.15	
78-93-3	2-Butanone (MEK)	24	8.6	0.94	8.3	2.9	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	4.5	0.64	ND	1.1	0.16	
110-54-3	n-Hexane	ND	4.6	0.94	ND	1.3	0.27	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 2 of 3

Client: Wood

Client Sample ID: EP-E2

Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1900621

ALS Sample ID: P1900621-001

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Simon Cao

Sampling Media: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00299

Date Collected: 2/7/19

Date Received: 2/8/19

Date Analyzed: 2/8/19

Volume(s) Analyzed: 0.20 Liter(s)

Initial Pressure (psig): -2.86 Final Pressure (psig): 5.50

Container Dilution Factor: 1.71

CAS #	Compound	Result µg/m ³	MRL µg/m ³	MDL µg/m ³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
67-66-3	Chloroform	0.98	4.6	0.61	0.20	0.95	0.12	J
107-06-2	1,2-Dichloroethane	ND	4.5	0.50	ND	1.1	0.12	
71-55-6	1,1,1-Trichloroethane	2.6	4.6	0.56	0.48	0.85	0.10	J
71-43-2	Benzene	1.3	4.4	0.66	0.40	1.4	0.21	J
56-23-5	Carbon Tetrachloride	ND	0.86	0.63	ND	0.14	0.10	
110-82-7	Cyclohexane	ND	8.6	1.3	ND	2.5	0.37	
78-87-5	1,2-Dichloropropane	ND	4.6	0.56	ND	1.0	0.12	
75-27-4	Bromodichloromethane	ND	4.5	0.66	ND	0.68	0.098	
79-01-6	Trichloroethene	53	0.94	0.62	9.8	0.18	0.11	
123-91-1	1,4-Dioxane	ND	4.5	0.54	ND	1.3	0.15	
10061-01-5	cis-1,3-Dichloropropene	ND	4.8	0.71	ND	1.1	0.16	
108-10-1	4-Methyl-2-pentanone	ND	4.5	0.62	ND	1.1	0.15	
10061-02-6	trans-1,3-Dichloropropene	ND	4.5	0.94	ND	1.0	0.21	
79-00-5	1,1,2-Trichloroethane	ND	4.6	0.46	ND	0.85	0.085	
108-88-3	Toluene	3.7	4.5	0.56	0.97	1.2	0.15	J
591-78-6	2-Hexanone	0.71	4.6	0.56	0.17	1.1	0.14	J
124-48-1	Dibromochloromethane	ND	4.6	0.60	ND	0.54	0.070	
106-93-4	1,2-Dibromoethane	ND	4.6	0.53	ND	0.60	0.069	
127-18-4	Tetrachloroethene	7.6	4.5	0.59	1.1	0.67	0.087	
108-90-7	Chlorobenzene	ND	4.5	0.61	ND	0.98	0.13	
100-41-4	Ethylbenzene	ND	4.4	0.64	ND	1.0	0.15	
179601-23-1	m,p-Xylenes	2.6	9.4	1.2	0.60	2.2	0.28	J

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 3 of 3

Client: Wood
Client Sample ID: EP-E2
Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1900621
 ALS Sample ID: P1900621-001

Test Code: EPA TO-15
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
 Analyst: Simon Cao
 Sampling Media: 1.0 L Summa Canister
 Test Notes:
 Container ID: 1SC00299

Date Collected: 2/7/19
 Date Received: 2/8/19
 Date Analyzed: 2/8/19
 Volume(s) Analyzed: 0.20 Liter(s)

Initial Pressure (psig): -2.86 Final Pressure (psig): 5.50

Container Dilution Factor: 1.71

CAS #	Compound	Result µg/m ³	MRL µg/m ³	MDL µg/m ³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
75-25-2	Bromoform	ND	4.5	0.94	ND	0.44	0.091	
100-42-5	Styrene	ND	4.5	0.74	ND	1.1	0.17	
95-47-6	o-Xylene	1.1	4.5	0.66	0.24	1.0	0.15	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.5	0.63	ND	0.66	0.092	
98-82-8	Cumene	1.3	4.5	0.66	0.26	0.92	0.13	J
622-96-8	4-Ethyltoluene	ND	4.5	0.73	ND	0.92	0.15	
108-67-8	1,3,5-Trimethylbenzene	ND	4.5	0.66	ND	0.92	0.13	
95-63-6	1,2,4-Trimethylbenzene	2.2	4.5	0.63	0.46	0.92	0.13	J
541-73-1	1,3-Dichlorobenzene	ND	4.6	0.68	ND	0.77	0.11	
106-46-7	1,4-Dichlorobenzene	1.1	4.6	0.70	0.18	0.77	0.12	J
95-50-1	1,2-Dichlorobenzene	ND	4.6	0.68	ND	0.77	0.11	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.4	0.86	ND	0.46	0.088	
120-82-1	1,2,4-Trichlorobenzene	ND	4.5	1.1	ND	0.61	0.15	
87-68-3	Hexachlorobutadiene	ND	4.5	0.94	ND	0.43	0.088	
76-15-3	Chloropentafluoroethane	ND	4.3	2.0	ND	0.68	0.31	X
75-37-6	1,1-Difluoroethane	9.7	4.3	2.2	3.6	1.6	0.82	X
75-45-6	Chlorodifluoromethane (CFC 22)	ND	4.3	2.1	ND	1.2	0.60	X
306-83-2	2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND	4.3	2.1	ND	0.68	0.33	X
79-20-9	Methyl Acetate	ND	4.3	2.1	ND	1.4	0.68	X
108-87-2	Methylcyclohexane	ND	4.3	2.2	ND	1.1	0.55	X
540-59-0	1,2-Dichloroethene, Total	ND	4.5	0.64	ND	1.1	0.16	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

X = See case narrative.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 3

Client: Wood

Client Sample ID: EP-C5

Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1900621

ALS Sample ID: P1900621-002

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Simon Cao

Sampling Media: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00161

Date Collected: 2/7/19

Date Received: 2/8/19

Date Analyzed: 2/8/19

Volume(s) Analyzed: 0.20 Liter(s)

Initial Pressure (psig): -3.35 Final Pressure (psig): 5.40

Container Dilution Factor: 1.77

CAS #	Compound	Result µg/m ³	MRL µg/m ³	MDL µg/m ³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
75-71-8	Dichlorodifluoromethane (CFC 12)	1.8	4.6	0.77	0.36	0.93	0.16	J
74-87-3	Chloromethane	ND	4.4	0.76	ND	2.1	0.37	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	4.5	0.74	ND	0.65	0.11	
75-01-4	Vinyl Chloride	ND	0.97	0.50	ND	0.38	0.20	
106-99-0	1,3-Butadiene	ND	4.6	0.78	ND	2.1	0.35	
74-83-9	Bromomethane	ND	4.4	0.65	ND	1.1	0.17	
75-00-3	Chloroethane	ND	4.5	0.58	ND	1.7	0.22	
67-64-1	Acetone	65	48	11	27	20	4.5	
75-69-4	Trichlorofluoromethane	0.98	4.7	0.72	0.17	0.84	0.13	J
67-63-0	2-Propanol (Isopropyl Alcohol)	20	19	1.9	8.0	7.6	0.79	
75-35-4	1,1-Dichloroethene	ND	4.8	0.65	ND	1.2	0.17	
75-09-2	Methylene Chloride	ND	4.8	1.3	ND	1.4	0.38	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	4.7	0.64	ND	1.5	0.20	
76-13-1	Trichlorotrifluoroethane	0.69	4.7	0.67	0.090	0.61	0.088	J
75-15-0	Carbon Disulfide	ND	9.7	1.4	ND	3.1	0.45	
156-60-5	trans-1,2-Dichloroethene	ND	4.7	0.65	ND	1.2	0.17	
75-34-3	1,1-Dichloroethane	ND	4.6	0.69	ND	1.1	0.17	
1634-04-4	Methyl tert-Butyl Ether	ND	4.8	0.56	ND	1.3	0.15	
78-93-3	2-Butanone (MEK)	50	8.9	0.97	17	3.0	0.33	
156-59-2	cis-1,2-Dichloroethene	ND	4.7	0.66	ND	1.2	0.17	
110-54-3	n-Hexane	ND	4.8	0.97	ND	1.4	0.28	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 2 of 3

Client: Wood

Client Sample ID: EP-C5

Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1900621

ALS Sample ID: P1900621-002

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Simon Cao

Sampling Media: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00161

Date Collected: 2/7/19

Date Received: 2/8/19

Date Analyzed: 2/8/19

Volume(s) Analyzed: 0.20 Liter(s)

Initial Pressure (psig): -3.35 Final Pressure (psig): 5.40

Container Dilution Factor: 1.77

CAS #	Compound	Result µg/m ³	MRL µg/m ³	MDL µg/m ³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
67-66-3	Chloroform	3.1	4.8	0.63	0.63	0.98	0.13	J
107-06-2	1,2-Dichloroethane	ND	4.7	0.52	ND	1.2	0.13	
71-55-6	1,1,1-Trichloroethane	ND	4.8	0.58	ND	0.88	0.11	
71-43-2	Benzene	3.3	4.6	0.68	1.0	1.4	0.21	J
56-23-5	Carbon Tetrachloride	ND	0.89	0.65	ND	0.14	0.10	
110-82-7	Cyclohexane	ND	8.9	1.3	ND	2.6	0.39	
78-87-5	1,2-Dichloropropane	ND	4.8	0.58	ND	1.0	0.13	
75-27-4	Bromodichloromethane	ND	4.7	0.68	ND	0.70	0.10	
79-01-6	Trichloroethene	24	0.97	0.64	4.6	0.18	0.12	
123-91-1	1,4-Dioxane	ND	4.7	0.56	ND	1.3	0.15	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	0.73	ND	1.1	0.16	
108-10-1	4-Methyl-2-pentanone	ND	4.7	0.65	ND	1.1	0.16	
10061-02-6	trans-1,3-Dichloropropene	ND	4.7	0.97	ND	1.0	0.21	
79-00-5	1,1,2-Trichloroethane	ND	4.8	0.48	ND	0.88	0.088	
108-88-3	Toluene	28	4.7	0.58	7.6	1.2	0.15	
591-78-6	2-Hexanone	1.1	4.8	0.58	0.26	1.2	0.14	J
124-48-1	Dibromochloromethane	ND	4.8	0.62	ND	0.56	0.073	
106-93-4	1,2-Dibromoethane	ND	4.8	0.55	ND	0.62	0.071	
127-18-4	Tetrachloroethene	4.0	4.7	0.61	0.59	0.69	0.090	J
108-90-7	Chlorobenzene	ND	4.7	0.63	ND	1.0	0.14	
100-41-4	Ethylbenzene	0.80	4.6	0.66	0.18	1.1	0.15	J
179601-23-1	m,p-Xylenes	3.8	9.7	1.2	0.86	2.2	0.29	J

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 3 of 3

Client: Wood
Client Sample ID: EP-C5
Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1900621
 ALS Sample ID: P1900621-002

Test Code: EPA TO-15
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
 Analyst: Simon Cao
 Sampling Media: 1.0 L Summa Canister
 Test Notes:
 Container ID: 1SC00161

Date Collected: 2/7/19
 Date Received: 2/8/19
 Date Analyzed: 2/8/19
 Volume(s) Analyzed: 0.20 Liter(s)

Initial Pressure (psig): -3.35 Final Pressure (psig): 5.40

Container Dilution Factor: 1.77

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
75-25-2	Bromoform	ND	4.7	0.97	ND	0.45	0.094	
100-42-5	Styrene	ND	4.7	0.76	ND	1.1	0.18	
95-47-6	o-Xylene	1.7	4.7	0.68	0.40	1.1	0.16	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.7	0.65	ND	0.68	0.095	
98-82-8	Cumene	58	4.7	0.68	12	0.95	0.14	
622-96-8	4-Ethyltoluene	ND	4.7	0.75	ND	0.95	0.15	
108-67-8	1,3,5-Trimethylbenzene	1.2	4.7	0.68	0.25	0.95	0.14	J
95-63-6	1,2,4-Trimethylbenzene	3.2	4.7	0.65	0.64	0.95	0.13	J
541-73-1	1,3-Dichlorobenzene	ND	4.8	0.71	ND	0.80	0.12	
106-46-7	1,4-Dichlorobenzene	1.0	4.8	0.73	0.17	0.80	0.12	J
95-50-1	1,2-Dichlorobenzene	ND	4.8	0.70	ND	0.80	0.12	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.6	0.89	ND	0.48	0.092	
120-82-1	1,2,4-Trichlorobenzene	ND	4.7	1.2	ND	0.63	0.16	
87-68-3	Hexachlorobutadiene	ND	4.7	0.97	ND	0.44	0.091	
76-15-3	Chloropentafluoroethane	ND	4.4	2.0	ND	0.70	0.32	X
75-37-6	1,1-Difluoroethane	17	4.4	2.3	6.4	1.6	0.85	X
75-45-6	Chlorodifluoromethane (CFC 22)	ND	4.4	2.2	ND	1.3	0.63	X
306-83-2	2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND	4.4	2.1	ND	0.71	0.34	X
79-20-9	Methyl Acetate	ND	4.4	2.1	ND	1.5	0.70	X
108-87-2	Methylcyclohexane	6.7	4.4	2.3	1.7	1.1	0.57	X
540-59-0	1,2-Dichloroethene, Total	ND	4.7	0.66	ND	1.2	0.17	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

X = See case narrative.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 3

Client: Wood
Client Sample ID: Method Blank
Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1900621
 ALS Sample ID: P190208-MB

Test Code: EPA TO-15
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
 Analyst: Simon Cao
 Sampling Media: 1.0 L Summa Canister
 Test Notes:

Date Collected: NA
 Date Received: NA
 Date Analyzed: 2/8/19
 Volume(s) Analyzed: 1.00 Liter(s)

Container Dilution Factor: 1.00

CAS #	Compound	Result µg/m ³	MRL µg/m ³	MDL µg/m ³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.52	0.087	ND	0.11	0.018	
74-87-3	Chloromethane	ND	0.50	0.086	ND	0.24	0.042	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.51	0.084	ND	0.073	0.012	
75-01-4	Vinyl Chloride	ND	0.11	0.057	ND	0.043	0.022	
106-99-0	1,3-Butadiene	ND	0.52	0.088	ND	0.24	0.040	
74-83-9	Bromomethane	ND	0.50	0.074	ND	0.13	0.019	
75-00-3	Chloroethane	ND	0.51	0.066	ND	0.19	0.025	
67-64-1	Acetone	ND	5.4	1.2	ND	2.3	0.51	
75-69-4	Trichlorofluoromethane	ND	0.53	0.081	ND	0.094	0.014	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	2.1	0.22	ND	0.85	0.090	
75-35-4	1,1-Dichloroethene	ND	0.54	0.074	ND	0.14	0.019	
75-09-2	Methylene Chloride	ND	0.54	0.15	ND	0.16	0.043	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.53	0.072	ND	0.17	0.023	
76-13-1	Trichlorotrifluoroethane	ND	0.53	0.076	ND	0.069	0.0099	
75-15-0	Carbon Disulfide	ND	1.1	0.16	ND	0.35	0.051	
156-60-5	trans-1,2-Dichloroethene	ND	0.53	0.074	ND	0.13	0.019	
75-34-3	1,1-Dichloroethane	ND	0.52	0.078	ND	0.13	0.019	
1634-04-4	Methyl tert-Butyl Ether	ND	0.54	0.063	ND	0.15	0.017	
78-93-3	2-Butanone (MEK)	ND	1.0	0.11	ND	0.34	0.037	
156-59-2	cis-1,2-Dichloroethene	ND	0.53	0.075	ND	0.13	0.019	
110-54-3	n-Hexane	ND	0.54	0.11	ND	0.15	0.031	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 2 of 3

Client: Wood
Client Sample ID: Method Blank
Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1900621
 ALS Sample ID: P190208-MB

Test Code: EPA TO-15
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
 Analyst: Simon Cao
 Sampling Media: 1.0 L Summa Canister
 Test Notes:

Date Collected: NA
 Date Received: NA
 Date Analyzed: 2/8/19
 Volume(s) Analyzed: 1.00 Liter(s)

Container Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
67-66-3	Chloroform	ND	0.54	0.071	ND	0.11	0.015	
107-06-2	1,2-Dichloroethane	ND	0.53	0.059	ND	0.13	0.015	
71-55-6	1,1,1-Trichloroethane	ND	0.54	0.066	ND	0.099	0.012	
71-43-2	Benzene	ND	0.52	0.077	ND	0.16	0.024	
56-23-5	Carbon Tetrachloride	ND	0.10	0.074	ND	0.016	0.012	
110-82-7	Cyclohexane	ND	1.0	0.15	ND	0.29	0.044	
78-87-5	1,2-Dichloropropane	ND	0.54	0.066	ND	0.12	0.014	
75-27-4	Bromodichloromethane	ND	0.53	0.077	ND	0.079	0.011	
79-01-6	Trichloroethene	ND	0.11	0.072	ND	0.020	0.013	
123-91-1	1,4-Dioxane	ND	0.53	0.063	ND	0.15	0.017	
10061-01-5	cis-1,3-Dichloropropene	ND	0.56	0.083	ND	0.12	0.018	
108-10-1	4-Methyl-2-pentanone	ND	0.53	0.073	ND	0.13	0.018	
10061-02-6	trans-1,3-Dichloropropene	ND	0.53	0.11	ND	0.12	0.024	
79-00-5	1,1,2-Trichloroethane	ND	0.54	0.054	ND	0.099	0.0099	
108-88-3	Toluene	ND	0.53	0.065	ND	0.14	0.017	
591-78-6	2-Hexanone	ND	0.54	0.066	ND	0.13	0.016	
124-48-1	Dibromochloromethane	ND	0.54	0.070	ND	0.063	0.0082	
106-93-4	1,2-Dibromoethane	ND	0.54	0.062	ND	0.070	0.0081	
127-18-4	Tetrachloroethene	ND	0.53	0.069	ND	0.078	0.010	
108-90-7	Chlorobenzene	ND	0.53	0.071	ND	0.12	0.015	
100-41-4	Ethylbenzene	ND	0.52	0.075	ND	0.12	0.017	
179601-23-1	m,p-Xylenes	ND	1.1	0.14	ND	0.25	0.032	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 3 of 3

Client: Wood
Client Sample ID: Method Blank
Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1900621
 ALS Sample ID: P190208-MB

Test Code: EPA TO-15
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
 Analyst: Simon Cao
 Sampling Media: 1.0 L Summa Canister
 Test Notes:

Date Collected: NA
 Date Received: NA
 Date Analyzed: 2/8/19
 Volume(s) Analyzed: 1.00 Liter(s)

Container Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
75-25-2	Bromoform	ND	0.53	0.11	ND	0.051	0.011	
100-42-5	Styrene	ND	0.53	0.086	ND	0.12	0.020	
95-47-6	o-Xylene	ND	0.53	0.077	ND	0.12	0.018	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.53	0.074	ND	0.077	0.011	
98-82-8	Cumene	ND	0.53	0.077	ND	0.11	0.016	
622-96-8	4-Ethyltoluene	ND	0.53	0.085	ND	0.11	0.017	
108-67-8	1,3,5-Trimethylbenzene	ND	0.53	0.077	ND	0.11	0.016	
95-63-6	1,2,4-Trimethylbenzene	ND	0.53	0.074	ND	0.11	0.015	
541-73-1	1,3-Dichlorobenzene	ND	0.54	0.080	ND	0.090	0.013	
106-46-7	1,4-Dichlorobenzene	ND	0.54	0.082	ND	0.090	0.014	
95-50-1	1,2-Dichlorobenzene	ND	0.54	0.079	ND	0.090	0.013	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.52	0.10	ND	0.054	0.010	
120-82-1	1,2,4-Trichlorobenzene	ND	0.53	0.13	ND	0.071	0.018	
87-68-3	Hexachlorobutadiene	ND	0.53	0.11	ND	0.050	0.010	
76-15-3	Chloropentafluoroethane	ND	0.50	0.23	ND	0.079	0.036	X
75-37-6	1,1-Difluoroethane	ND	0.50	0.26	ND	0.19	0.096	X
75-45-6	Chlorodifluoromethane (CFC 22)	ND	0.50	0.25	ND	0.14	0.071	X
306-83-2	2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND	0.50	0.24	ND	0.080	0.038	X
79-20-9	Methyl Acetate	ND	0.50	0.24	ND	0.17	0.079	X
108-87-2	Methylcyclohexane	ND	0.50	0.26	ND	0.12	0.065	X
540-59-0	1,2-Dichloroethene, Total	ND	0.53	0.075	ND	0.13	0.019	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

X = See case narrative.

ALS ENVIRONMENTAL

SURROGATE SPIKE RECOVERY RESULTS

Page 1 of 1

Client: Wood

Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1900621

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Simon Cao

Sample Type: 1.0 L Summa Canister(s)

Test Notes:

Date(s) Collected: 2/7/19

Date(s) Received: 2/8/19

Date(s) Analyzed: 2/8/19

Client Sample ID	ALS Sample ID	1,2-Dichloroethane-d4	Toluene-d8	Bromofluorobenzene	Acceptance Limits	Data Qualifier
		Percent Recovered	Percent Recovered	Percent Recovered		
Method Blank	P190208-MB	87	99	101	70-130	
Lab Control Sample	P190208-LCS	87	99	102	70-130	
EP-E2	P1900621-001	88	98	104	70-130	
EP-C5	P1900621-002	87	98	104	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.

Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE SUMMARY

Page 1 of 3

Client: Wood
Client Sample ID: Lab Control Sample
Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1900621
 ALS Sample ID: P190208-LCS

Test Code: EPA TO-15
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
 Analyst: Simon Cao
 Sample Type: 1.0 L Summa Canister
 Test Notes:

Date Collected: NA
 Date Received: NA
 Date Analyzed: 2/8/19
 Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount µg/m ³	Result µg/m ³	% Recovery	ALS Acceptance Limits	Data Qualifier
75-71-8	Dichlorodifluoromethane (CFC 12)	210	159	76	62-103	
74-87-3	Chloromethane	211	160	76	51-121	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	211	184	87	56-111	
75-01-4	Vinyl Chloride	214	185	86	57-117	
106-99-0	1,3-Butadiene	210	182	87	53-134	
74-83-9	Bromomethane	212	186	88	65-110	
75-00-3	Chloroethane	214	177	83	64-111	
67-64-1	Acetone	1,060	824	78	60-113	
75-69-4	Trichlorofluoromethane	211	169	80	63-104	
67-63-0	2-Propanol (Isopropyl Alcohol)	413	320	77	60-124	
75-35-4	1,1-Dichloroethene	218	192	88	68-107	
75-09-2	Methylene Chloride	217	190	88	66-105	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	216	172	80	63-127	
76-13-1	Trichlorotrifluoroethane	216	185	86	59-109	
75-15-0	Carbon Disulfide	218	186	85	67-109	
156-60-5	trans-1,2-Dichloroethene	214	172	80	70-115	
75-34-3	1,1-Dichloroethane	216	176	81	66-106	
1634-04-4	Methyl tert-Butyl Ether	214	183	86	67-109	
78-93-3	2-Butanone (MEK)	208	191	92	71-116	
156-59-2	cis-1,2-Dichloroethene	211	171	81	67-110	
110-54-3	n-Hexane	216	187	87	60-115	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
 Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE SUMMARY

Page 2 of 3

Client: Wood
Client Sample ID: Lab Control Sample
Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1900621
 ALS Sample ID: P190208-LCS

Test Code: EPA TO-15
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
 Analyst: Simon Cao
 Sample Type: 1.0 L Summa Canister
 Test Notes:

Date Collected: NA
 Date Received: NA
 Date Analyzed: 2/8/19
 Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount µg/m ³	Result µg/m ³	% Recovery	ALS Acceptance Limits	Data Qualifier
67-66-3	Chloroform	217	178	82	66-105	
107-06-2	1,2-Dichloroethane	215	162	75	60-110	
71-55-6	1,1,1-Trichloroethane	215	169	79	64-108	
71-43-2	Benzene	211	174	82	67-106	
56-23-5	Carbon Tetrachloride	212	171	81	64-112	
110-82-7	Cyclohexane	416	377	91	67-110	
78-87-5	1,2-Dichloropropane	216	182	84	66-112	
75-27-4	Bromodichloromethane	215	182	85	67-113	
79-01-6	Trichloroethene	213	185	87	66-108	
123-91-1	1,4-Dioxane	214	191	89	70-116	
10061-01-5	cis-1,3-Dichloropropene	214	193	90	75-120	
108-10-1	4-Methyl-2-pentanone	209	185	89	65-124	
10061-02-6	trans-1,3-Dichloropropene	213	194	91	77-123	
79-00-5	1,1,2-Trichloroethane	215	188	87	68-112	
108-88-3	Toluene	212	177	83	62-111	
591-78-6	2-Hexanone	214	168	79	59-128	
124-48-1	Dibromochloromethane	213	187	88	67-123	
106-93-4	1,2-Dibromoethane	216	190	88	66-122	
127-18-4	Tetrachloroethene	213	175	82	55-120	
108-90-7	Chlorobenzene	215	185	86	61-114	
100-41-4	Ethylbenzene	212	179	84	64-113	
179601-23-1	m,p-Xylenes	426	365	86	64-114	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
 Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE SUMMARY

Page 3 of 3

Client: Wood

Client Sample ID: Lab Control Sample

Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1900621

ALS Sample ID: P190208-LCS

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Simon Cao

Sample Type: 1.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 2/8/19

Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount µg/m ³	Result µg/m ³	% Recovery	ALS Acceptance Limits	Data Qualifier
75-25-2	Bromoform	213	187	88	65-132	
100-42-5	Styrene	212	200	94	67-124	
95-47-6	o-Xylene	214	180	84	65-114	
79-34-5	1,1,2,2-Tetrachloroethane	214	186	87	66-119	
98-82-8	Cumene	214	183	86	61-116	
622-96-8	4-Ethyltoluene	214	185	86	63-124	
108-67-8	1,3,5-Trimethylbenzene	214	181	85	60-117	
95-63-6	1,2,4-Trimethylbenzene	215	190	88	61-122	
541-73-1	1,3-Dichlorobenzene	216	188	87	61-125	
106-46-7	1,4-Dichlorobenzene	216	185	86	59-123	
95-50-1	1,2-Dichlorobenzene	216	187	87	61-126	
96-12-8	1,2-Dibromo-3-chloropropane	209	189	90	67-138	
120-82-1	1,2,4-Trichlorobenzene	214	194	91	62-141	
87-68-3	Hexachlorobutadiene	209	169	81	49-131	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 1

Client: Wood
Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1900621

Method Blank Summary

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Analyst: Simon Cao
Sampling Media: 1.0 L Summa Canister(s)
Test Notes:

Lab File ID: 02081903.D
Date Analyzed: 2/8/19
Time Analyzed: 09:55

Client Sample ID	ALS Sample ID	Lab File ID	Time Analyzed
Lab Control Sample	P190208-LCS	02081904.D	10:28
EP-E2	P1900621-001	02081910.D	14:08
EP-C5	P1900621-002	02081911.D	14:41

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 1

Client: Wood

ALS Project ID: P1900621

Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

Internal Standard Area and RT Summary

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Lab File ID: 02081901.D

Analyst: Simon Cao

Date Analyzed: 2/8/19

Sampling Media: 1.0 L Summa Canister(s)

Time Analyzed: 08:48

Test Notes:

	IS1 (BCM)		IS2 (DFB)		IS3 (CBZ)	
	AREA	#	RT	#	AREA	#
24 Hour Standard	124769		9.17		565138	11.13
Upper Limit	174677		9.50		791193	11.46
Lower Limit	74861		8.84		339083	10.80

Client Sample ID		IS1 (BCM)		IS2 (DFB)		IS3 (CBZ)	
		AREA	#	RT	#	AREA	#
01	Method Blank	116750		9.15		538147	11.13
02	Lab Control Sample	122717		9.18		549893	11.14
03	EP-E2	125691		9.15		572723	11.12
04	EP-C5	120894		9.16		553866	11.13
05						248655	15.47
06						255019	15.47
07						269767	15.47
08						261399	15.47
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

IS1 (BCM) = Bromochloromethane

IS2 (DFB) = 1,4-Difluorobenzene

IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = 140% of internal standard area

AREA LOWER LIMIT = 60% of internal standard area

RT UPPER LIMIT = 0.33 minutes of internal standard RT

RT LOWER LIMIT = 0.33 minutes of internal standard RT

Column used to flag values outside QC limits with an I.

I = Internal standard not within the specified limits. See case narrative.



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LABORATORY REPORT

February 20, 2019

Randy Talbot
Wood
511 Congress Street
Portland, ME 04101

RE: LAF Lockheed Martin Great Neck / 3617187448

Dear Randy:

Enclosed are the results of the samples submitted to our laboratory on February 19, 2019. For your reference, these analyses have been assigned our service request number P1900832.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

By Sue Anderson at 10:59 am, Feb 20, 2019

Sue Anderson
Project Manager



2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
www.alsglobal.com

Client: Wood
Project: LAF Lockheed Martin Great Neck / 3617187448

Service Request No: P1900832

CASE NARRATIVE

The samples were received intact under chain of custody on February 19, 2019 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

Volatile Organic Compound Analysis

The samples were analyzed for volatile organic compounds in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. This procedure is described in laboratory SOP VOA-TO15. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator. This method is included on the laboratory's NELAP and DoD-ELAP scope of accreditation. Any analytes flagged with an X are not included on the NELAP or DoD-ELAP accreditation.

The containers were cleaned, prior to sampling, down to the method reporting limit (MRL) reported for this project. For projects requiring DoD QSM 5.1 compliance canisters were cleaned to <1/2 the MRL. Please note, projects which require reporting below the MRL could have results between the MRL and method detection limit (MDL) that are biased high.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.



2655 Park Center Dr., Suite A
 Simi Valley, CA 93065
 T: +1 805 526 7161
www.alsglobal.com

ALS Environmental – Simi Valley

CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
Alaska DEC	http://dec.alaska.gov/eh/lab.aspx	17-019
Arizona DHS	http://www.azdhs.gov/preparedness/state-laboratory/lab-licensure-certification/index.php#laboratory-licensure-home	AZ0694
Florida DOH (NELAP)	http://www.floridahealth.gov/licensing-and-regulation/environmental-laboratories/index.html	E871020
Louisiana DEQ (NELAP)	http://www.deq.louisiana.gov/page/la-lab-accreditation	05071
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/professionals/labCert.shtml	2018027
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	1521096
New Jersey DEP (NELAP)	http://www.nj.gov/dep/enforcement/oqa.html	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oregon PHD (NELAP)	http://www.oregon.gov/oha/ph/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	4068-005
Pennsylvania DEP	http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx	68-03307 (Registration)
PJLA (DoD ELAP)	http://www.pjlabs.com/search-accredited-labs	65818 (Testing)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/agency/qa/env_lab_accreditation.html	T104704413-18-9
Utah DOH (NELAP)	http://health.utah.gov/lab/lab_cert_env	CA016272018-9
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946
Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at www.alsglobal.com, or at the accreditation body's website. Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.		

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: Wood
Project ID: LAF Lockheed Martin Great Neck / 3617187448

Service Request: P1900832

Date Received: 2/19/2019
Time Received: 09:30

TO-15 - VOC Cans

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	
EP-C5	P1900832-001	Air	2/14/2019	07:40	1SC00933	-2.71	7.61	X
EP-E2	P1900832-002	Air	2/14/2019	07:56	1SC00307	-2.46	5.35	X



Air - Chain of Custody Record & Analytical Service Request

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Page 1 of 1

Requested Turnaround Time In Business Days (Surcharges) please circle 1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day-Standard				ALS Project #						
Company Name & Address (Reporting Information) AMEC E+E PC/WOOD 511 Congress Street Portland, Me, 04101				Project Name LAF Lockheed Martin Great Neck						
Project Manager William Weber				Project Number 3617187448						
Phone 207 775 5401				P.O. # / Billing Information C012506323						
Fax Ryon.Belcher@woodpic.com				Sampler (Print & Sign) John Zator						
Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	ALS Contact: SVP Anderson	Comments e.g. Actual Preservative or specific instructions Great Neck 64 compound List Custom compounds
EP-CS	1	2/4/19	7:40	ISC00933	DA02140	-28	-7	1L	Analysis Method	
EP-E2	2	2/4/19	7:56	ISC00307	DA00014	-29.5	-7	1L	Great Neck 64 compound List Custom compounds	
Report Tier Levels - please select Tier I - Results (Default if not specified) _____ Tier II (Results + QC Summaries) X _____ Tier III (Results + QC & Calibration Summaries) _____ Tier IV (Data Validation Package) 10% Surcharge _____				CAT B		Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT		Project Requirements (MRLs, QAPP)		
Relinquished by: (Signature)				Date: 2/4/19 Time: 14:00		Received by: (Signature)		Date: 2/19/19 Time: 09:30		
Relinquished by: (Signature)				Date: _____ Time: _____		Received by: (Signature)		Date: _____ Time: _____		

ALS Environmental Sample Acceptance Check Form

Client: Wood Work order: P1900832
 Project: LAF Lockheed Martin Great Neck / 3617187448
 Sample(s) received on: 2/19/19 Date opened: 2/19/19 by: ADAVID

Note: This form is used for all samples received by ALS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

- | | Yes | No | N/A |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1 Were sample containers properly marked with client sample ID? | ☒ | ☐ | ☐ |
| 2 Did sample containers arrive in good condition? | ☒ | ☐ | ☐ |
| 3 Were chain-of-custody papers used and filled out? | ☒ | ☐ | ☐ |
| 4 Did sample container labels and/or tags agree with custody papers? | ☒ | ☐ | ☐ |
| 5 Was sample volume received adequate for analysis? | ☒ | ☐ | ☐ |
| 6 Are samples within specified holding times? | ☒ | ☐ | ☐ |
| 7 Was proper temperature (thermal preservation) of cooler at receipt adhered to? | ☐ | ☐ | ☒ |
| 8 Were custody seals on outside of cooler/Box/Container? | ☐ | ☒ | ☐ |
| Location of seal(s)? _____ Sealing Lid? | ☐ | ☐ | ☒ |
| Were signature and date included? | ☐ | ☐ | ☒ |
| Were seals intact? | ☐ | ☐ | ☒ |
| 9 Do containers have appropriate preservation , according to method/SOP or Client specified information? | ☐ | ☐ | ☒ |
| Is there a client indication that the submitted samples are pH preserved? | ☐ | ☐ | ☒ |
| Were VOA vials checked for presence/absence of air bubbles? | ☐ | ☐ | ☒ |
| Does the client/method/SOP require that the analyst check the sample pH and <u>if necessary</u> alter it? | ☐ | ☐ | ☒ |
| 10 Tubes: Are the tubes capped and intact? | ☐ | ☐ | ☒ |
| 11 Badges: Are the badges properly capped and intact? | ☐ | ☐ | ☒ |
| Are dual bed badges separated and individually capped and intact? | ☐ | ☐ | ☒ |

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P1900832-001.01	1.0 L Source Can					
P1900832-002.01	1.0 L Source Can					

Explain any discrepancies: (include lab sample ID numbers): _____

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 3

Client: Wood

Client Sample ID: EP-C5

Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1900832

ALS Sample ID: P1900832-001

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Wida Ang

Sampling Media: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00933

Date Collected: 2/14/19

Date Received: 2/19/19

Date Analyzed: 2/19/19

Volume(s) Analyzed: 0.20 Liter(s)

Initial Pressure (psig): -2.71 Final Pressure (psig): 7.61

Container Dilution Factor: 1.86

CAS #	Compound	Result µg/m ³	MRL µg/m ³	MDL µg/m ³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
75-71-8	Dichlorodifluoromethane (CFC 12)	2.2	4.8	0.81	0.44	0.98	0.16	J
74-87-3	Chloromethane	ND	4.7	0.80	ND	2.3	0.39	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	4.7	0.78	ND	0.68	0.11	
75-01-4	Vinyl Chloride	ND	1.0	0.53	ND	0.40	0.21	
106-99-0	1,3-Butadiene	ND	4.8	0.82	ND	2.2	0.37	
74-83-9	Bromomethane	ND	4.7	0.69	ND	1.2	0.18	
75-00-3	Chloroethane	ND	4.7	0.61	ND	1.8	0.23	
67-64-1	Acetone	47	50	11	20	21	4.7	J
75-69-4	Trichlorofluoromethane	1.1	4.9	0.75	0.20	0.88	0.13	J
67-63-0	2-Propanol (Isopropyl Alcohol)	16	20	2.0	6.5	7.9	0.83	J
75-35-4	1,1-Dichloroethene	ND	5.0	0.69	ND	1.3	0.17	
75-09-2	Methylene Chloride	ND	5.0	1.4	ND	1.4	0.40	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	4.9	0.67	ND	1.6	0.21	
76-13-1	Trichlorotrifluoroethane	ND	4.9	0.71	ND	0.64	0.092	
75-15-0	Carbon Disulfide	2.2	10	1.5	0.71	3.3	0.48	J
156-60-5	trans-1,2-Dichloroethene	ND	4.9	0.69	ND	1.2	0.17	
75-34-3	1,1-Dichloroethane	ND	4.8	0.73	ND	1.2	0.18	
1634-04-4	Methyl tert-Butyl Ether	ND	5.0	0.59	ND	1.4	0.16	
78-93-3	2-Butanone (MEK)	21	9.3	1.0	7.0	3.2	0.35	
156-59-2	cis-1,2-Dichloroethene	ND	4.9	0.70	ND	1.2	0.18	
110-54-3	n-Hexane	ND	5.0	1.0	ND	1.4	0.29	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 2 of 3

Client: Wood

Client Sample ID: EP-C5

Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1900832

ALS Sample ID: P1900832-001

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Wida Ang

Sampling Media: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00933

Date Collected: 2/14/19

Date Received: 2/19/19

Date Analyzed: 2/19/19

Volume(s) Analyzed: 0.20 Liter(s)

Initial Pressure (psig): -2.71 Final Pressure (psig): 7.61

Container Dilution Factor: 1.86

CAS #	Compound	Result µg/m ³	MRL µg/m ³	MDL µg/m ³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
67-66-3	Chloroform	4.7	5.0	0.66	0.97	1.0	0.14	J
107-06-2	1,2-Dichloroethane	ND	4.9	0.55	ND	1.2	0.14	
71-55-6	1,1,1-Trichloroethane	ND	5.0	0.61	ND	0.92	0.11	
71-43-2	Benzene	1.4	4.8	0.72	0.44	1.5	0.22	J
56-23-5	Carbon Tetrachloride	ND	0.93	0.69	ND	0.15	0.11	
110-82-7	Cyclohexane	ND	9.3	1.4	ND	2.7	0.41	
78-87-5	1,2-Dichloropropane	ND	5.0	0.61	ND	1.1	0.13	
75-27-4	Bromodichloromethane	ND	4.9	0.72	ND	0.74	0.11	
79-01-6	Trichloroethene	14	1.0	0.67	2.7	0.19	0.12	
123-91-1	1,4-Dioxane	ND	4.9	0.59	ND	1.4	0.16	
10061-01-5	cis-1,3-Dichloropropene	ND	5.2	0.77	ND	1.1	0.17	
108-10-1	4-Methyl-2-pentanone	ND	4.9	0.68	ND	1.2	0.17	
10061-02-6	trans-1,3-Dichloropropene	ND	4.9	1.0	ND	1.1	0.23	
79-00-5	1,1,2-Trichloroethane	ND	5.0	0.50	ND	0.92	0.092	
108-88-3	Toluene	12	4.9	0.60	3.3	1.3	0.16	
591-78-6	2-Hexanone	1.6	5.0	0.61	0.38	1.2	0.15	J
124-48-1	Dibromochloromethane	ND	5.0	0.65	ND	0.59	0.076	
106-93-4	1,2-Dibromoethane	ND	5.0	0.58	ND	0.65	0.075	
127-18-4	Tetrachloroethene	2.9	4.9	0.64	0.42	0.73	0.095	J
108-90-7	Chlorobenzene	ND	4.9	0.66	ND	1.1	0.14	
100-41-4	Ethylbenzene	0.73	4.8	0.70	0.17	1.1	0.16	J
179601-23-1	m,p-Xylenes	3.2	10	1.3	0.74	2.4	0.30	J

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 3 of 3

Client: Wood
Client Sample ID: EP-C5
Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1900832
 ALS Sample ID: P1900832-001

Test Code: EPA TO-15
 Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
 Analyst: Wida Ang
 Sampling Media: 1.0 L Summa Canister
 Test Notes:
 Container ID: 1SC00933

Date Collected: 2/14/19
 Date Received: 2/19/19
 Date Analyzed: 2/19/19
 Volume(s) Analyzed: 0.20 Liter(s)

Initial Pressure (psig): -2.71 Final Pressure (psig): 7.61

Container Dilution Factor: 1.86

CAS #	Compound	Result µg/m ³	MRL µg/m ³	MDL µg/m ³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
75-25-2	Bromoform	ND	4.9	1.0	ND	0.48	0.099	
100-42-5	Styrene	ND	4.9	0.80	ND	1.2	0.19	
95-47-6	o-Xylene	1.4	4.9	0.72	0.32	1.1	0.16	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.9	0.69	ND	0.72	0.10	
98-82-8	Cumene	28	4.9	0.72	5.8	1.0	0.15	
622-96-8	4-Ethyltoluene	ND	4.9	0.79	ND	1.0	0.16	
108-67-8	1,3,5-Trimethylbenzene	0.90	4.9	0.72	0.18	1.0	0.15	J
95-63-6	1,2,4-Trimethylbenzene	2.7	4.9	0.69	0.54	1.0	0.14	J
541-73-1	1,3-Dichlorobenzene	ND	5.0	0.74	ND	0.84	0.12	
106-46-7	1,4-Dichlorobenzene	ND	5.0	0.76	ND	0.84	0.13	
95-50-1	1,2-Dichlorobenzene	ND	5.0	0.73	ND	0.84	0.12	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.8	0.93	ND	0.50	0.096	
120-82-1	1,2,4-Trichlorobenzene	ND	4.9	1.2	ND	0.66	0.16	
87-68-3	Hexachlorobutadiene	ND	4.9	1.0	ND	0.46	0.096	
76-15-3	Chloropentafluoroethane	ND	4.7	2.1	ND	0.74	0.34	X
75-37-6	1,1-Difluoroethane	6.9	4.7	2.4	2.5	1.7	0.90	X
75-45-6	Chlorodifluoromethane (CFC 22)	ND	4.7	2.3	ND	1.3	0.66	X
306-83-2	2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND	4.7	2.2	ND	0.74	0.36	X
79-20-9	Methyl Acetate	ND	4.7	2.2	ND	1.5	0.74	X
108-87-2	Methylcyclohexane	3.3	4.7	2.4	0.81	1.2	0.60	J, X
540-59-0	1,2-Dichloroethene, Total	ND	4.9	0.70	ND	1.2	0.18	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

X = See case narrative.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 3

Client: Wood

Client Sample ID: EP-E2

Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1900832

ALS Sample ID: P1900832-002

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Wida Ang

Sampling Media: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00307

Date Collected: 2/14/19

Date Received: 2/19/19

Date Analyzed: 2/20/19

Volume(s) Analyzed: 0.20 Liter(s)

Initial Pressure (psig): -2.46 Final Pressure (psig): 5.35

Container Dilution Factor: 1.64

CAS #	Compound	Result µg/m ³	MRL µg/m ³	MDL µg/m ³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
75-71-8	Dichlorodifluoromethane (CFC 12)	2.2	4.3	0.71	0.45	0.86	0.14	J
74-87-3	Chloromethane	ND	4.1	0.71	ND	2.0	0.34	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	4.2	0.69	ND	0.60	0.099	
75-01-4	Vinyl Chloride	ND	0.90	0.47	ND	0.35	0.18	
106-99-0	1,3-Butadiene	ND	4.3	0.72	ND	1.9	0.33	
74-83-9	Bromomethane	ND	4.1	0.61	ND	1.1	0.16	
75-00-3	Chloroethane	ND	4.2	0.54	ND	1.6	0.21	
67-64-1	Acetone	41	44	9.8	17	19	4.1	J
75-69-4	Trichlorofluoromethane	1.4	4.3	0.66	0.25	0.77	0.12	J
67-63-0	2-Propanol (Isopropyl Alcohol)	13	17	1.8	5.3	7.0	0.73	J
75-35-4	1,1-Dichloroethene	ND	4.4	0.61	ND	1.1	0.15	
75-09-2	Methylene Chloride	ND	4.4	1.2	ND	1.3	0.35	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	4.3	0.59	ND	1.4	0.19	
76-13-1	Trichlorotrifluoroethane	3.1	4.3	0.62	0.41	0.57	0.081	J
75-15-0	Carbon Disulfide	ND	9.0	1.3	ND	2.9	0.42	
156-60-5	trans-1,2-Dichloroethene	ND	4.3	0.61	ND	1.1	0.15	
75-34-3	1,1-Dichloroethane	ND	4.3	0.64	ND	1.1	0.16	
1634-04-4	Methyl tert-Butyl Ether	1.6	4.4	0.52	0.45	1.2	0.14	J
78-93-3	2-Butanone (MEK)	12	8.2	0.90	4.1	2.8	0.31	
156-59-2	cis-1,2-Dichloroethene	ND	4.3	0.62	ND	1.1	0.16	
110-54-3	n-Hexane	ND	4.4	0.90	ND	1.3	0.26	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 2 of 3

Client: Wood

Client Sample ID: EP-E2

Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1900832

ALS Sample ID: P1900832-002

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Wida Ang

Sampling Media: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00307

Date Collected: 2/14/19

Date Received: 2/19/19

Date Analyzed: 2/20/19

Volume(s) Analyzed: 0.20 Liter(s)

Initial Pressure (psig): -2.46 Final Pressure (psig): 5.35

Container Dilution Factor: 1.64

CAS #	Compound	Result µg/m ³	MRL µg/m ³	MDL µg/m ³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
67-66-3	Chloroform	0.96	4.4	0.58	0.20	0.91	0.12	J
107-06-2	1,2-Dichloroethane	ND	4.3	0.48	ND	1.1	0.12	
71-55-6	1,1,1-Trichloroethane	2.9	4.4	0.54	0.54	0.81	0.099	J
71-43-2	Benzene	0.93	4.3	0.63	0.29	1.3	0.20	J
56-23-5	Carbon Tetrachloride	ND	0.82	0.61	ND	0.13	0.097	
110-82-7	Cyclohexane	ND	8.2	1.2	ND	2.4	0.36	
78-87-5	1,2-Dichloropropane	ND	4.4	0.54	ND	0.96	0.12	
75-27-4	Bromodichloromethane	ND	4.3	0.63	ND	0.65	0.094	
79-01-6	Trichloroethene	44	0.90	0.59	8.2	0.17	0.11	
123-91-1	1,4-Dioxane	ND	4.3	0.52	ND	1.2	0.14	
10061-01-5	cis-1,3-Dichloropropene	ND	4.6	0.68	ND	1.0	0.15	
108-10-1	4-Methyl-2-pentanone	ND	4.3	0.60	ND	1.1	0.15	
10061-02-6	trans-1,3-Dichloropropene	ND	4.3	0.90	ND	0.96	0.20	
79-00-5	1,1,2-Trichloroethane	ND	4.4	0.44	ND	0.81	0.081	
108-88-3	Toluene	3.2	4.3	0.53	0.84	1.2	0.14	J
591-78-6	2-Hexanone	ND	4.4	0.54	ND	1.1	0.13	
124-48-1	Dibromochloromethane	ND	4.4	0.57	ND	0.52	0.067	
106-93-4	1,2-Dibromoethane	ND	4.4	0.51	ND	0.58	0.066	
127-18-4	Tetrachloroethene	6.5	4.3	0.57	0.95	0.64	0.083	
108-90-7	Chlorobenzene	ND	4.3	0.58	ND	0.94	0.13	
100-41-4	Ethylbenzene	ND	4.3	0.62	ND	0.98	0.14	
179601-23-1	m,p-Xylenes	2.4	9.0	1.1	0.56	2.1	0.26	J

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 3 of 3

Client: Wood
Client Sample ID: EP-E2
Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1900832
 ALS Sample ID: P1900832-002

Test Code: EPA TO-15
 Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
 Analyst: Wida Ang
 Sampling Media: 1.0 L Summa Canister
 Test Notes:
 Container ID: 1SC00307

Date Collected: 2/14/19
 Date Received: 2/19/19
 Date Analyzed: 2/20/19
 Volume(s) Analyzed: 0.20 Liter(s)

Initial Pressure (psig): -2.46 Final Pressure (psig): 5.35

Container Dilution Factor: 1.64

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
75-25-2	Bromoform	ND	4.3	0.90	ND	0.42	0.087	
100-42-5	Styrene	ND	4.3	0.71	ND	1.0	0.17	
95-47-6	o-Xylene	1.1	4.3	0.63	0.26	1.0	0.15	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.3	0.61	ND	0.63	0.088	
98-82-8	Cumene	5.8	4.3	0.63	1.2	0.88	0.13	
622-96-8	4-Ethyltoluene	ND	4.3	0.70	ND	0.88	0.14	
108-67-8	1,3,5-Trimethylbenzene	0.71	4.3	0.63	0.14	0.88	0.13	J
95-63-6	1,2,4-Trimethylbenzene	2.4	4.3	0.61	0.48	0.88	0.12	J
541-73-1	1,3-Dichlorobenzene	ND	4.4	0.66	ND	0.74	0.11	
106-46-7	1,4-Dichlorobenzene	ND	4.4	0.67	ND	0.74	0.11	
95-50-1	1,2-Dichlorobenzene	ND	4.4	0.65	ND	0.74	0.11	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.3	0.82	ND	0.44	0.085	
120-82-1	1,2,4-Trichlorobenzene	ND	4.3	1.1	ND	0.59	0.14	
87-68-3	Hexachlorobutadiene	ND	4.3	0.90	ND	0.41	0.085	
76-15-3	Chloropentafluoroethane	ND	4.1	1.9	ND	0.65	0.30	X
75-37-6	1,1-Difluoroethane	4.4	4.1	2.1	1.6	1.5	0.79	X
75-45-6	Chlorodifluoromethane (CFC 22)	ND	4.1	2.1	ND	1.2	0.58	X
306-83-2	2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND	4.1	2.0	ND	0.66	0.31	X
79-20-9	Methyl Acetate	ND	4.1	2.0	ND	1.4	0.65	X
108-87-2	Methylcyclohexane	ND	4.1	2.1	ND	1.0	0.53	X
540-59-0	1,2-Dichloroethene, Total	ND	4.3	0.62	ND	1.1	0.16	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

X = See case narrative.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 3

Client: Wood
Client Sample ID: Method Blank
Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1900832
 ALS Sample ID: P190219-MB

Test Code: EPA TO-15
 Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
 Analyst: Wida Ang
 Sampling Media: 1.0 L Summa Canister
 Test Notes:

Date Collected: NA
 Date Received: NA
 Date Analyzed: 2/19/19
 Volume(s) Analyzed: 1.00 Liter(s)

Container Dilution Factor: 1.00

CAS #	Compound	Result µg/m ³	MRL µg/m ³	MDL µg/m ³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.52	0.087	ND	0.11	0.018	
74-87-3	Chloromethane	ND	0.50	0.086	ND	0.24	0.042	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.51	0.084	ND	0.073	0.012	
75-01-4	Vinyl Chloride	ND	0.11	0.057	ND	0.043	0.022	
106-99-0	1,3-Butadiene	ND	0.52	0.088	ND	0.24	0.040	
74-83-9	Bromomethane	ND	0.50	0.074	ND	0.13	0.019	
75-00-3	Chloroethane	ND	0.51	0.066	ND	0.19	0.025	
67-64-1	Acetone	ND	5.4	1.2	ND	2.3	0.51	
75-69-4	Trichlorofluoromethane	ND	0.53	0.081	ND	0.094	0.014	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	2.1	0.22	ND	0.85	0.090	
75-35-4	1,1-Dichloroethene	ND	0.54	0.074	ND	0.14	0.019	
75-09-2	Methylene Chloride	ND	0.54	0.15	ND	0.16	0.043	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.53	0.072	ND	0.17	0.023	
76-13-1	Trichlorotrifluoroethane	ND	0.53	0.076	ND	0.069	0.0099	
75-15-0	Carbon Disulfide	ND	1.1	0.16	ND	0.35	0.051	
156-60-5	trans-1,2-Dichloroethene	ND	0.53	0.074	ND	0.13	0.019	
75-34-3	1,1-Dichloroethane	ND	0.52	0.078	ND	0.13	0.019	
1634-04-4	Methyl tert-Butyl Ether	ND	0.54	0.063	ND	0.15	0.017	
78-93-3	2-Butanone (MEK)	ND	1.0	0.11	ND	0.34	0.037	
156-59-2	cis-1,2-Dichloroethene	ND	0.53	0.075	ND	0.13	0.019	
110-54-3	n-Hexane	ND	0.54	0.11	ND	0.15	0.031	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 2 of 3

Client: Wood
Client Sample ID: Method Blank
Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1900832
 ALS Sample ID: P190219-MB

Test Code: EPA TO-15
 Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
 Analyst: Wida Ang
 Sampling Media: 1.0 L Summa Canister
 Test Notes:

Date Collected: NA
 Date Received: NA
 Date Analyzed: 2/19/19
 Volume(s) Analyzed: 1.00 Liter(s)

Container Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
67-66-3	Chloroform	ND	0.54	0.071	ND	0.11	0.015	
107-06-2	1,2-Dichloroethane	ND	0.53	0.059	ND	0.13	0.015	
71-55-6	1,1,1-Trichloroethane	ND	0.54	0.066	ND	0.099	0.012	
71-43-2	Benzene	ND	0.52	0.077	ND	0.16	0.024	
56-23-5	Carbon Tetrachloride	ND	0.10	0.074	ND	0.016	0.012	
110-82-7	Cyclohexane	ND	1.0	0.15	ND	0.29	0.044	
78-87-5	1,2-Dichloropropane	ND	0.54	0.066	ND	0.12	0.014	
75-27-4	Bromodichloromethane	ND	0.53	0.077	ND	0.079	0.011	
79-01-6	Trichloroethene	ND	0.11	0.072	ND	0.020	0.013	
123-91-1	1,4-Dioxane	ND	0.53	0.063	ND	0.15	0.017	
10061-01-5	cis-1,3-Dichloropropene	ND	0.56	0.083	ND	0.12	0.018	
108-10-1	4-Methyl-2-pentanone	ND	0.53	0.073	ND	0.13	0.018	
10061-02-6	trans-1,3-Dichloropropene	ND	0.53	0.11	ND	0.12	0.024	
79-00-5	1,1,2-Trichloroethane	ND	0.54	0.054	ND	0.099	0.0099	
108-88-3	Toluene	ND	0.53	0.065	ND	0.14	0.017	
591-78-6	2-Hexanone	ND	0.54	0.066	ND	0.13	0.016	
124-48-1	Dibromochloromethane	ND	0.54	0.070	ND	0.063	0.0082	
106-93-4	1,2-Dibromoethane	ND	0.54	0.062	ND	0.070	0.0081	
127-18-4	Tetrachloroethene	ND	0.53	0.069	ND	0.078	0.010	
108-90-7	Chlorobenzene	ND	0.53	0.071	ND	0.12	0.015	
100-41-4	Ethylbenzene	ND	0.52	0.075	ND	0.12	0.017	
179601-23-1	m,p-Xylenes	ND	1.1	0.14	ND	0.25	0.032	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 3 of 3

Client: Wood
Client Sample ID: Method Blank
Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1900832
 ALS Sample ID: P190219-MB

Test Code: EPA TO-15
 Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
 Analyst: Wida Ang
 Sampling Media: 1.0 L Summa Canister
 Test Notes:

Date Collected: NA
 Date Received: NA
 Date Analyzed: 2/19/19
 Volume(s) Analyzed: 1.00 Liter(s)

Container Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
75-25-2	Bromoform	ND	0.53	0.11	ND	0.051	0.011	
100-42-5	Styrene	ND	0.53	0.086	ND	0.12	0.020	
95-47-6	o-Xylene	ND	0.53	0.077	ND	0.12	0.018	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.53	0.074	ND	0.077	0.011	
98-82-8	Cumene	ND	0.53	0.077	ND	0.11	0.016	
622-96-8	4-Ethyltoluene	ND	0.53	0.085	ND	0.11	0.017	
108-67-8	1,3,5-Trimethylbenzene	ND	0.53	0.077	ND	0.11	0.016	
95-63-6	1,2,4-Trimethylbenzene	ND	0.53	0.074	ND	0.11	0.015	
541-73-1	1,3-Dichlorobenzene	ND	0.54	0.080	ND	0.090	0.013	
106-46-7	1,4-Dichlorobenzene	ND	0.54	0.082	ND	0.090	0.014	
95-50-1	1,2-Dichlorobenzene	ND	0.54	0.079	ND	0.090	0.013	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.52	0.10	ND	0.054	0.010	
120-82-1	1,2,4-Trichlorobenzene	ND	0.53	0.13	ND	0.071	0.018	
87-68-3	Hexachlorobutadiene	ND	0.53	0.11	ND	0.050	0.010	
76-15-3	Chloropentafluoroethane	ND	0.50	0.23	ND	0.079	0.036	X
75-37-6	1,1-Difluoroethane	ND	0.50	0.26	ND	0.19	0.096	X
75-45-6	Chlorodifluoromethane (CFC 22)	ND	0.50	0.25	ND	0.14	0.071	X
306-83-2	2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND	0.50	0.24	ND	0.080	0.038	X
79-20-9	Methyl Acetate	ND	0.50	0.24	ND	0.17	0.079	X
108-87-2	Methylcyclohexane	ND	0.50	0.26	ND	0.12	0.065	X
540-59-0	1,2-Dichloroethene, Total	ND	0.53	0.075	ND	0.13	0.019	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

X = See case narrative.

ALS ENVIRONMENTAL

SURROGATE SPIKE RECOVERY RESULTS

Page 1 of 1

Client: Wood

Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1900832

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Wida Ang

Sample Type: 1.0 L Summa Canister(s)

Test Notes:

Date(s) Collected: 2/14/19

Date(s) Received: 2/19/19

Date(s) Analyzed: 2/19 - 2/20/19

Client Sample ID	ALS Sample ID	1,2-Dichloroethane-d4	Toluene-d8	Bromofluorobenzene	Acceptance Limits	Data Qualifier
		Percent Recovered	Percent Recovered	Percent Recovered		
Method Blank	P190219-MB	109	97	101	70-130	
Lab Control Sample	P190219-LCS	106	95	102	70-130	
EP-C5	P1900832-001	110	94	100	70-130	
EP-E2	P1900832-002	108	95	101	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.

Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE SUMMARY

Page 1 of 3

Client: Wood
Client Sample ID: Lab Control Sample
Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1900832
 ALS Sample ID: P190219-LCS

Test Code: EPA TO-15
 Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
 Analyst: Wida Ang
 Sample Type: 1.0 L Summa Canister
 Test Notes:

Date Collected: NA
 Date Received: NA
 Date Analyzed: 2/19/19
 Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount µg/m ³	Result µg/m ³	% Recovery	ALS Acceptance Limits	Data Qualifier
75-71-8	Dichlorodifluoromethane (CFC 12)	210	191	91	62-103	
74-87-3	Chloromethane	211	195	92	51-121	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	211	184	87	56-111	
75-01-4	Vinyl Chloride	214	202	94	57-117	
106-99-0	1,3-Butadiene	210	203	97	53-134	
74-83-9	Bromomethane	212	195	92	65-110	
75-00-3	Chloroethane	214	196	92	64-111	
67-64-1	Acetone	1,060	932	88	60-113	
75-69-4	Trichlorofluoromethane	211	190	90	63-104	
67-63-0	2-Propanol (Isopropyl Alcohol)	413	407	99	60-124	
75-35-4	1,1-Dichloroethene	218	199	91	68-107	
75-09-2	Methylene Chloride	217	210	97	66-105	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	216	218	101	63-127	
76-13-1	Trichlorotrifluoroethane	216	187	87	59-109	
75-15-0	Carbon Disulfide	218	185	85	67-109	
156-60-5	trans-1,2-Dichloroethene	214	223	104	70-115	
75-34-3	1,1-Dichloroethane	216	197	91	66-106	
1634-04-4	Methyl tert-Butyl Ether	214	197	92	67-109	
78-93-3	2-Butanone (MEK)	208	200	96	71-116	
156-59-2	cis-1,2-Dichloroethene	211	204	97	67-110	
110-54-3	n-Hexane	216	185	86	60-115	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
 Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE SUMMARY

Page 2 of 3

Client: Wood

Client Sample ID: Lab Control Sample

Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1900832

ALS Sample ID: P190219-LCS

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Wida Ang

Sample Type: 1.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 2/19/19

Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount µg/m ³	Result µg/m ³	% Recovery	ALS Acceptance Limits	Data Qualifier
67-66-3	Chloroform	217	198	91	66-105	
107-06-2	1,2-Dichloroethane	215	210	98	60-110	
71-55-6	1,1,1-Trichloroethane	215	199	93	64-108	
71-43-2	Benzene	211	184	87	67-106	
56-23-5	Carbon Tetrachloride	212	199	94	64-112	
110-82-7	Cyclohexane	416	368	88	67-110	
78-87-5	1,2-Dichloropropane	216	198	92	66-112	
75-27-4	Bromodichloromethane	215	210	98	67-113	
79-01-6	Trichloroethene	213	193	91	66-108	
123-91-1	1,4-Dioxane	214	201	94	70-116	
10061-01-5	cis-1,3-Dichloropropene	214	205	96	75-120	
108-10-1	4-Methyl-2-pentanone	209	208	100	65-124	
10061-02-6	trans-1,3-Dichloropropene	213	215	101	77-123	
79-00-5	1,1,2-Trichloroethane	215	201	93	68-112	
108-88-3	Toluene	212	163	77	62-111	
591-78-6	2-Hexanone	214	208	97	59-128	
124-48-1	Dibromochloromethane	213	199	93	67-123	
106-93-4	1,2-Dibromoethane	216	200	93	66-122	
127-18-4	Tetrachloroethene	213	174	82	55-120	
108-90-7	Chlorobenzene	215	174	81	61-114	
100-41-4	Ethylbenzene	212	170	80	64-113	
179601-23-1	m,p-Xylenes	426	344	81	64-114	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE SUMMARY

Page 3 of 3

Client: Wood

Client Sample ID: Lab Control Sample

Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1900832

ALS Sample ID: P190219-LCS

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Wida Ang

Sample Type: 1.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 2/19/19

Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount µg/m ³	Result µg/m ³	% Recovery	ALS Acceptance Limits	Data Qualifier
75-25-2	Bromoform	213	202	95	65-132	
100-42-5	Styrene	212	189	89	67-124	
95-47-6	o-Xylene	214	173	81	65-114	
79-34-5	1,1,2,2-Tetrachloroethane	214	182	85	66-119	
98-82-8	Cumene	214	169	79	61-116	
622-96-8	4-Ethyltoluene	214	172	80	63-124	
108-67-8	1,3,5-Trimethylbenzene	214	166	78	60-117	
95-63-6	1,2,4-Trimethylbenzene	215	175	81	61-122	
541-73-1	1,3-Dichlorobenzene	216	182	84	61-125	
106-46-7	1,4-Dichlorobenzene	216	174	81	59-123	
95-50-1	1,2-Dichlorobenzene	216	181	84	61-126	
96-12-8	1,2-Dibromo-3-chloropropane	209	191	91	67-138	
120-82-1	1,2,4-Trichlorobenzene	214	186	87	62-141	
87-68-3	Hexachlorobutadiene	209	160	77	49-131	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.

Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 1

Client: Wood
Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1900832

Method Blank Summary

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
Analyst: Wida Ang
Sampling Media: 1.0 L Summa Canister(s)
Test Notes:

Lab File ID: 02191904.D
Date Analyzed: 2/19/19
Time Analyzed: 05:16

Client Sample ID	ALS Sample ID	Lab File ID	Time Analyzed
Lab Control Sample	P190219-LCS	02191905.D	05:49
EP-C5	P1900832-001	02191935.D	23:08
EP-E2	P1900832-002	02191937.D	00:14

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 1

Client: Wood

ALS Project ID: P1900832

Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

Internal Standard Area and RT Summary

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Lab File ID: 02191903.D

Analyst: Wida Ang

Date Analyzed: 2/19/19

Sampling Media: 1.0 L Summa Canister(s)

Time Analyzed: 04:42

Test Notes:

	IS1 (BCM)		IS2 (DFB)		IS3 (CBZ)	
	AREA	#	RT	#	AREA	#
24 Hour Standard	109335	10.97	472529	13.10	199320	17.42
Upper Limit	153069	11.30	661541	13.43	279048	17.75
Lower Limit	65601	10.64	283517	12.77	119592	17.09

Client Sample ID						
01	Method Blank	103277	10.96	458456	13.10	193345
02	Lab Control Sample	111702	10.98	473566	13.10	202263
03	EP-C5	106207	10.96	464180	13.10	200070
04	EP-E2	106656	10.96	464088	13.10	198636
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

IS1 (BCM) = Bromochloromethane

IS2 (DFB) = 1,4-Difluorobenzene

IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = 140% of internal standard area

AREA LOWER LIMIT = 60% of internal standard area

RT UPPER LIMIT = 0.33 minutes of internal standard RT

RT LOWER LIMIT = 0.33 minutes of internal standard RT

Column used to flag values outside QC limits with an I.

I = Internal standard not within the specified limits. See case narrative.



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www.alsglobal.com

LABORATORY REPORT

March 11, 2019

Randy Talbot
Wood
511 Congress Street
Portland, ME 04101

RE: LAF Lockheed Martin Great Neck / 3617187448

Dear Randy:

Enclosed are the results of the samples submitted to our laboratory on February 25, 2019. For your reference, these analyses have been assigned our service request number P1900966.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental


By Sue Anderson at 3:42 pm, Mar 11, 2019

Sue Anderson
Project Manager



2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
www.alsglobal.com

Client: Wood
Project: LAF Lockheed Martin Great Neck / 3617187448

Service Request No: P1900966

CASE NARRATIVE

The samples were received intact under chain of custody on February 25, 2019 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

Volatile Organic Compound Analysis

The samples were analyzed for volatile organic compounds in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. This procedure is described in laboratory SOP VOA-TO15. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator. This method is included on the laboratory's NELAP and DoD-ELAP scope of accreditation. Any analytes flagged with an X are not included on the NELAP or DoD-ELAP accreditation.

The containers were cleaned, prior to sampling, down to the method reporting limit (MRL) reported for this project. For projects requiring DoD QSM 5.1 compliance canisters were cleaned to <1/2 the MRL. Please note, projects which require reporting below the MRL could have results between the MRL and method detection limit (MDL) that are biased high.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.



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 Simi Valley, CA 93065
 T: +1 805 526 7161
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ALS Environmental – Simi Valley

CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
Alaska DEC	http://dec.alaska.gov/eh/lab.aspx	17-019
Arizona DHS	http://www.azdhs.gov/preparedness/state-laboratory/lab-licensure-certification/index.php#laboratory-licensure-home	AZ0694
Florida DOH (NELAP)	http://www.floridahealth.gov/licensing-and-regulation/environmental-laboratories/index.html	E871020
Louisiana DEQ (NELAP)	http://www.deq.louisiana.gov/page/la-lab-accreditation	05071
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/professionals/labCert.shtml	2018027
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	1521096
New Jersey DEP (NELAP)	http://www.nj.gov/dep/enforcement/oqa.html	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oregon PHD (NELAP)	http://www.oregon.gov/oha/ph/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	4068-006
Pennsylvania DEP	http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx	68-03307 (Registration)
PJLA (DoD ELAP)	http://www.pjlabs.com/search-accredited-labs	65818 (Testing)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/agency/qa/env_lab_accreditation.html	T104704413-18-9
Utah DOH (NELAP)	http://health.utah.gov/lab/lab_cert_env	CA016272018-9
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946
Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at www.alsglobal.com, or at the accreditation body's website. Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.		

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: Wood
Project ID: LAF Lockheed Martin Great Neck / 3617187448

Service Request: P1900966

Date Received: 2/25/2019
Time Received: 09:30

TO-15 - VOC Cans

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	
EP-C5	P1900966-001	Air	2/21/2019	15:13	1SC00054	-0.01	5.21	X
EP-E2	P1900966-002	Air	2/21/2019	15:28	1SC00765	-3.01	5.75	X



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Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Air - Chain of Custody Record & Analytical Service Request

Requested Turnaround Time in Business Days (Surcharges) please circle 1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day (Standard)		ALS Project No. 1790966	
Company Name & Address (Reporting Information) AMEC E+E PC/wood 511 Congress Street Pittsford, ME, 04101 Project Manager William Weber Phone 207-775-5401 Fax Email Address for Result Reporting Ryan.Bellevue@woodplc.com Project Name Lockheed Martin Great Neck Project Number 3617187418 P.O. # / Billing Information CO12506323 ALS Contact: Sue Anderson Analysis Method Great Neck 64 Compound List + Custom Compounds Comments e.g. Actual Preservative or specific instructions			
Project Name LAF Project Number 3617187418 P.O. # / Billing Information CO12506323		ALS Contact: Sue Anderson Analysis Method Great Neck 64 Compound List + Custom Compounds	
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Project Name LAF Project Number 3617187418 P.O. # / Billing Information CO12506323		ALS Contact: Sue Anderson Analysis Method Great Neck 64 Compound List + Custom Compounds	
Project Name LAF Project Number 			

ALS Environmental **Sample Acceptance Check Form**

Client: Wood Work order: P1900966
 Project: LAF Lockheed Martin Great Neck / 3617187448
 Sample(s) received on: 2/25/19 Date opened: 2/25/19 by: HAYDEN.AKERS

Note: This form is used for all samples received by ALS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

- | | Yes | No | N/A |
|---|-------------------------------------|--------------------------|-------------------------------------|
| 1 Were sample containers properly marked with client sample ID? | ☒ | ☐ | ☐ |
| 2 Did sample containers arrive in good condition? | ☒ | ☐ | ☐ |
| 3 Were chain-of-custody papers used and filled out? | ☒ | ☐ | ☐ |
| 4 Did sample container labels and/or tags agree with custody papers? | ☒ | ☐ | ☐ |
| 5 Was sample volume received adequate for analysis? | ☒ | ☐ | ☐ |
| 6 Are samples within specified holding times? | ☒ | ☐ | ☐ |
| 7 Was proper temperature (thermal preservation) of cooler at receipt adhered to? | ☐ | ☐ | ☒ |
| 8 Were custody seals on outside of cooler/Box/Container? | ☐ | ☐ | ☒ |
| Location of seal(s)? _____ Sealing Lid? | ☐ | ☐ | ☒ |
| Were signature and date included? | ☐ | ☐ | ☒ |
| Were seals intact? | ☐ | ☐ | ☒ |
| 9 Do containers have appropriate preservation , according to method/SOP or Client specified information? | ☐ | ☐ | ☒ |
| Is there a client indication that the submitted samples are pH preserved? | ☐ | ☐ | ☒ |
| Were VOA vials checked for presence/absence of air bubbles? | ☐ | ☐ | ☒ |
| Does the client/method/SOP require that the analyst check the sample pH and <u>if necessary</u> alter it? | ☐ | ☐ | ☒ |
| 10 Tubes: Are the tubes capped and intact? | ☐ | ☐ | ☒ |
| 11 Badges: Are the badges properly capped and intact? | ☐ | ☐ | ☒ |
| Are dual bed badges separated and individually capped and intact? | ☐ | ☐ | ☒ |

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P1900966-001.01	1.0 L Source Can					
P1900966-002.01	1.0 L Source Can					

Explain any discrepancies: (include lab sample ID numbers): _____

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 3

Client: Wood

Client Sample ID: EP-C5

Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1900966

ALS Sample ID: P1900966-001

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16

Analyst: Lusine Hakobyan

Sampling Media: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00054

Date Collected: 2/21/19

Date Received: 2/25/19

Date Analyzed: 2/28/19

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -0.01 Final Pressure (psig): 5.21

Container Dilution Factor: 1.36

CAS #	Compound	Result µg/m ³	MRL µg/m ³	MDL µg/m ³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
75-71-8	Dichlorodifluoromethane (CFC 12)	2.1	1.8	0.30	0.43	0.36	0.060	
74-87-3	Chloromethane	0.43	1.7	0.29	0.21	0.82	0.14	J
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	1.7	0.29	ND	0.25	0.041	
75-01-4	Vinyl Chloride	ND	0.37	0.19	ND	0.15	0.076	
106-99-0	1,3-Butadiene	ND	1.8	0.30	ND	0.80	0.14	
74-83-9	Bromomethane	ND	1.7	0.25	ND	0.44	0.065	
75-00-3	Chloroethane	0.27	1.7	0.22	0.10	0.66	0.085	J
67-64-1	Acetone	39	18	4.1	16	7.7	1.7	
75-69-4	Trichlorofluoromethane	1.2	1.8	0.28	0.21	0.32	0.049	J
67-63-0	2-Propanol (Isopropyl Alcohol)	15	7.1	0.75	6.2	2.9	0.30	
75-35-4	1,1-Dichloroethene	ND	1.8	0.25	ND	0.46	0.063	
75-09-2	Methylene Chloride	16	1.8	0.51	4.7	0.53	0.15	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	1.8	0.24	ND	0.58	0.078	
76-13-1	Trichlorotrifluoroethane	0.68	1.8	0.26	0.088	0.24	0.034	J
75-15-0	Carbon Disulfide	ND	3.7	0.54	ND	1.2	0.17	
156-60-5	trans-1,2-Dichloroethene	ND	1.8	0.25	ND	0.45	0.063	
75-34-3	1,1-Dichloroethane	ND	1.8	0.27	ND	0.44	0.066	
1634-04-4	Methyl tert-Butyl Ether	ND	1.8	0.21	ND	0.51	0.059	
78-93-3	2-Butanone (MEK)	12	3.4	0.37	3.9	1.2	0.13	
156-59-2	cis-1,2-Dichloroethene	ND	1.8	0.26	ND	0.45	0.064	
110-54-3	n-Hexane	0.83	1.8	0.37	0.23	0.52	0.11	J

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 2 of 3

Client: Wood

Client Sample ID: EP-C5

Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1900966

ALS Sample ID: P1900966-001

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16

Analyst: Lusine Hakobyan

Sampling Media: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00054

Date Collected: 2/21/19

Date Received: 2/25/19

Date Analyzed: 2/28/19

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -0.01 Final Pressure (psig): 5.21

Container Dilution Factor: 1.36

CAS #	Compound	Result µg/m ³	MRL µg/m ³	MDL µg/m ³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
67-66-3	Chloroform	4.6	1.8	0.24	0.95	0.38	0.049	
107-06-2	1,2-Dichloroethane	ND	1.8	0.20	ND	0.45	0.050	
71-55-6	1,1,1-Trichloroethane	ND	1.8	0.22	ND	0.34	0.041	
71-43-2	Benzene	1.4	1.8	0.26	0.44	0.55	0.082	J
56-23-5	Carbon Tetrachloride	0.39	0.34	0.25	0.063	0.054	0.040	
110-82-7	Cyclohexane	ND	3.4	0.51	ND	0.99	0.15	
78-87-5	1,2-Dichloropropane	ND	1.8	0.22	ND	0.40	0.049	
75-27-4	Bromodichloromethane	0.33	1.8	0.26	0.049	0.27	0.039	J
79-01-6	Trichloroethene	9.8	0.37	0.24	1.8	0.070	0.046	
123-91-1	1,4-Dioxane	0.30	1.8	0.21	0.082	0.50	0.059	J
10061-01-5	cis-1,3-Dichloropropene	ND	1.9	0.28	ND	0.42	0.062	
108-10-1	4-Methyl-2-pentanone	0.53	1.8	0.25	0.13	0.44	0.061	J
10061-02-6	trans-1,3-Dichloropropene	ND	1.8	0.37	ND	0.40	0.082	
79-00-5	1,1,2-Trichloroethane	ND	1.8	0.18	ND	0.34	0.034	
108-88-3	Toluene	13	1.8	0.22	3.4	0.48	0.059	
591-78-6	2-Hexanone	0.97	1.8	0.22	0.24	0.45	0.055	J
124-48-1	Dibromochloromethane	ND	1.8	0.24	ND	0.22	0.028	
106-93-4	1,2-Dibromoethane	ND	1.8	0.21	ND	0.24	0.027	
127-18-4	Tetrachloroethene	3.5	1.8	0.23	0.52	0.27	0.035	
108-90-7	Chlorobenzene	ND	1.8	0.24	ND	0.39	0.052	
100-41-4	Ethylbenzene	7.5	1.8	0.26	1.7	0.41	0.059	
179601-23-1	m,p-Xylenes	22	3.7	0.48	5.1	0.86	0.11	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 3 of 3

Client: Wood
Client Sample ID: EP-C5
Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1900966
 ALS Sample ID: P1900966-001

Test Code: EPA TO-15
 Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16
 Analyst: Lusine Hakobyan
 Sampling Media: 1.0 L Summa Canister
 Test Notes:
 Container ID: 1SC00054

Date Collected: 2/21/19
 Date Received: 2/25/19
 Date Analyzed: 2/28/19
 Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -0.01 Final Pressure (psig): 5.21

Container Dilution Factor: 1.36

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
75-25-2	Bromoform	ND	1.8	0.37	ND	0.17	0.036	
100-42-5	Styrene	ND	1.8	0.29	ND	0.42	0.069	
95-47-6	o-Xylene	3.4	1.8	0.26	0.79	0.42	0.060	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.8	0.25	ND	0.26	0.037	
98-82-8	Cumene	25	1.8	0.26	5.2	0.37	0.053	
622-96-8	4-Ethyltoluene	ND	1.8	0.29	ND	0.37	0.059	
108-67-8	1,3,5-Trimethylbenzene	0.30	1.8	0.26	0.062	0.37	0.053	J
95-63-6	1,2,4-Trimethylbenzene	0.40	1.8	0.25	0.081	0.37	0.051	J
541-73-1	1,3-Dichlorobenzene	ND	1.8	0.27	ND	0.31	0.045	
106-46-7	1,4-Dichlorobenzene	ND	1.8	0.28	ND	0.31	0.046	
95-50-1	1,2-Dichlorobenzene	ND	1.8	0.27	ND	0.31	0.045	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.8	0.34	ND	0.18	0.035	
120-82-1	1,2,4-Trichlorobenzene	ND	1.8	0.44	ND	0.24	0.060	
87-68-3	Hexachlorobutadiene	ND	1.8	0.37	ND	0.17	0.035	
76-15-3	Chloropentafluoroethane	ND	1.7	0.78	ND	0.27	0.12	X
75-37-6	1,1-Difluoroethane	17	1.7	0.88	6.1	0.63	0.33	X
75-45-6	Chlorodifluoromethane (CFC 22)	1.8	1.7	0.85	0.52	0.48	0.24	X
306-83-2	2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND	1.7	0.82	ND	0.27	0.13	X
79-20-9	Methyl Acetate	ND	1.7	0.82	ND	0.56	0.27	X
108-87-2	Methylcyclohexane	2.3	1.7	0.88	0.56	0.42	0.22	X
540-59-0	1,2-Dichloroethene, Total	ND	1.8	0.26	ND	0.45	0.064	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

X = See case narrative.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 3

Client: Wood

Client Sample ID: EP-E2

Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1900966

ALS Sample ID: P1900966-002

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16

Analyst: Lusine Hakobyan

Sampling Media: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00765

Date Collected: 2/21/19

Date Received: 2/25/19

Date Analyzed: 2/28/19

Volume(s) Analyzed: 0.20 Liter(s)

Initial Pressure (psig): -3.01 Final Pressure (psig): 5.75

Container Dilution Factor: 1.75

CAS #	Compound	Result µg/m ³	MRL µg/m ³	MDL µg/m ³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
75-71-8	Dichlorodifluoromethane (CFC 12)	2.2	4.6	0.76	0.44	0.92	0.15	J
74-87-3	Chloromethane	ND	4.4	0.75	ND	2.1	0.36	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	4.5	0.74	ND	0.64	0.11	
75-01-4	Vinyl Chloride	ND	0.96	0.50	ND	0.38	0.20	
106-99-0	1,3-Butadiene	ND	4.6	0.77	ND	2.1	0.35	
74-83-9	Bromomethane	ND	4.4	0.65	ND	1.1	0.17	
75-00-3	Chloroethane	ND	4.5	0.58	ND	1.7	0.22	
67-64-1	Acetone	39	47	11	16	20	4.4	J
75-69-4	Trichlorofluoromethane	1.3	4.6	0.71	0.23	0.83	0.13	J
67-63-0	2-Propanol (Isopropyl Alcohol)	13	18	1.9	5.1	7.5	0.78	J
75-35-4	1,1-Dichloroethene	ND	4.7	0.65	ND	1.2	0.16	
75-09-2	Methylene Chloride	ND	4.7	1.3	ND	1.4	0.38	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	4.6	0.63	ND	1.5	0.20	
76-13-1	Trichlorotrifluoroethane	3.1	4.6	0.67	0.41	0.61	0.087	J
75-15-0	Carbon Disulfide	ND	9.6	1.4	ND	3.1	0.45	
156-60-5	trans-1,2-Dichloroethene	ND	4.6	0.65	ND	1.2	0.16	
75-34-3	1,1-Dichloroethane	ND	4.6	0.68	ND	1.1	0.17	
1634-04-4	Methyl tert-Butyl Ether	ND	4.7	0.55	ND	1.3	0.15	
78-93-3	2-Butanone (MEK)	14	8.8	0.96	4.7	3.0	0.33	
156-59-2	cis-1,2-Dichloroethene	ND	4.6	0.66	ND	1.2	0.17	
110-54-3	n-Hexane	ND	4.7	0.96	ND	1.3	0.27	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 2 of 3

Client: Wood

Client Sample ID: EP-E2

Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1900966

ALS Sample ID: P1900966-002

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16

Analyst: Lusine Hakobyan

Sampling Media: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00765

Date Collected: 2/21/19

Date Received: 2/25/19

Date Analyzed: 2/28/19

Volume(s) Analyzed: 0.20 Liter(s)

Initial Pressure (psig): -3.01 Final Pressure (psig): 5.75

Container Dilution Factor: 1.75

CAS #	Compound	Result µg/m ³	MRL µg/m ³	MDL µg/m ³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
67-66-3	Chloroform	1.1	4.7	0.62	0.22	0.97	0.13	J
107-06-2	1,2-Dichloroethane	ND	4.6	0.52	ND	1.1	0.13	
71-55-6	1,1,1-Trichloroethane	2.7	4.7	0.58	0.50	0.87	0.11	J
71-43-2	Benzene	0.88	4.6	0.67	0.28	1.4	0.21	J
56-23-5	Carbon Tetrachloride	ND	0.88	0.65	ND	0.14	0.10	
110-82-7	Cyclohexane	ND	8.8	1.3	ND	2.5	0.38	
78-87-5	1,2-Dichloropropane	ND	4.7	0.58	ND	1.0	0.13	
75-27-4	Bromodichloromethane	ND	4.6	0.67	ND	0.69	0.10	
79-01-6	Trichloroethene	43	0.96	0.63	7.9	0.18	0.12	
123-91-1	1,4-Dioxane	0.94	4.6	0.55	0.26	1.3	0.15	J
10061-01-5	cis-1,3-Dichloropropene	ND	4.9	0.73	ND	1.1	0.16	
108-10-1	4-Methyl-2-pentanone	ND	4.6	0.64	ND	1.1	0.16	
10061-02-6	trans-1,3-Dichloropropene	ND	4.6	0.96	ND	1.0	0.21	
79-00-5	1,1,2-Trichloroethane	ND	4.7	0.47	ND	0.87	0.087	
108-88-3	Toluene	2.6	4.6	0.57	0.68	1.2	0.15	J
591-78-6	2-Hexanone	1.5	4.7	0.58	0.37	1.2	0.14	J
124-48-1	Dibromochloromethane	ND	4.7	0.61	ND	0.55	0.072	
106-93-4	1,2-Dibromoethane	ND	4.7	0.54	ND	0.62	0.071	
127-18-4	Tetrachloroethene	8.3	4.6	0.60	1.2	0.68	0.089	
108-90-7	Chlorobenzene	ND	4.6	0.62	ND	1.0	0.13	
100-41-4	Ethylbenzene	ND	4.6	0.66	ND	1.0	0.15	
179601-23-1	m,p-Xylenes	2.2	9.6	1.2	0.50	2.2	0.28	J

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 3 of 3

Client: Wood
Client Sample ID: EP-E2
Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1900966
 ALS Sample ID: P1900966-002

Test Code: EPA TO-15
 Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16
 Analyst: Lusine Hakobyan
 Sampling Media: 1.0 L Summa Canister
 Test Notes:
 Container ID: 1SC00765

Date Collected: 2/21/19
 Date Received: 2/25/19
 Date Analyzed: 2/28/19
 Volume(s) Analyzed: 0.20 Liter(s)

Initial Pressure (psig): -3.01 Final Pressure (psig): 5.75

Container Dilution Factor: 1.75

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
75-25-2	Bromoform	ND	4.6	0.96	ND	0.45	0.093	
100-42-5	Styrene	ND	4.6	0.75	ND	1.1	0.18	
95-47-6	o-Xylene	0.95	4.6	0.67	0.22	1.1	0.16	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.6	0.65	ND	0.68	0.094	
98-82-8	Cumene	1.7	4.6	0.67	0.35	0.94	0.14	J
622-96-8	4-Ethyltoluene	ND	4.6	0.74	ND	0.94	0.15	
108-67-8	1,3,5-Trimethylbenzene	0.71	4.6	0.67	0.14	0.94	0.14	J
95-63-6	1,2,4-Trimethylbenzene	2.5	4.6	0.65	0.51	0.94	0.13	J
541-73-1	1,3-Dichlorobenzene	ND	4.7	0.70	ND	0.79	0.12	
106-46-7	1,4-Dichlorobenzene	ND	4.7	0.72	ND	0.79	0.12	
95-50-1	1,2-Dichlorobenzene	ND	4.7	0.69	ND	0.79	0.12	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.6	0.88	ND	0.47	0.091	
120-82-1	1,2,4-Trichlorobenzene	ND	4.6	1.1	ND	0.62	0.15	
87-68-3	Hexachlorobutadiene	ND	4.6	0.96	ND	0.43	0.090	
76-15-3	Chloropentafluoroethane	ND	4.4	2.0	ND	0.69	0.32	X
75-37-6	1,1-Difluoroethane	12	4.4	2.3	4.6	1.6	0.84	X
75-45-6	Chlorodifluoromethane (CFC 22)	ND	4.4	2.2	ND	1.2	0.62	X
306-83-2	2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND	4.4	2.1	ND	0.70	0.34	X
79-20-9	Methyl Acetate	ND	4.4	2.1	ND	1.4	0.69	X
108-87-2	Methylcyclohexane	ND	4.4	2.3	ND	1.1	0.57	X
540-59-0	1,2-Dichloroethene, Total	ND	4.6	0.66	ND	1.2	0.17	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

X = See case narrative.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 3

Client: Wood
Client Sample ID: Method Blank
Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1900966
 ALS Sample ID: P190228-MB

Test Code: EPA TO-15
 Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16
 Analyst: Lusine Hakobyan
 Sampling Media: 1.0 L Summa Canister
 Test Notes:

Date Collected: NA
 Date Received: NA
 Date Analyzed: 2/28/19
 Volume(s) Analyzed: 1.00 Liter(s)

Container Dilution Factor: 1.00

CAS #	Compound	Result µg/m ³	MRL µg/m ³	MDL µg/m ³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.52	0.087	ND	0.11	0.018	
74-87-3	Chloromethane	ND	0.50	0.086	ND	0.24	0.042	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.51	0.084	ND	0.073	0.012	
75-01-4	Vinyl Chloride	ND	0.11	0.057	ND	0.043	0.022	
106-99-0	1,3-Butadiene	ND	0.52	0.088	ND	0.24	0.040	
74-83-9	Bromomethane	ND	0.50	0.074	ND	0.13	0.019	
75-00-3	Chloroethane	ND	0.51	0.066	ND	0.19	0.025	
67-64-1	Acetone	ND	5.4	1.2	ND	2.3	0.51	
75-69-4	Trichlorofluoromethane	ND	0.53	0.081	ND	0.094	0.014	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	2.1	0.22	ND	0.85	0.090	
75-35-4	1,1-Dichloroethene	ND	0.54	0.074	ND	0.14	0.019	
75-09-2	Methylene Chloride	ND	0.54	0.15	ND	0.16	0.043	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.53	0.072	ND	0.17	0.023	
76-13-1	Trichlorotrifluoroethane	ND	0.53	0.076	ND	0.069	0.0099	
75-15-0	Carbon Disulfide	ND	1.1	0.16	ND	0.35	0.051	
156-60-5	trans-1,2-Dichloroethene	ND	0.53	0.074	ND	0.13	0.019	
75-34-3	1,1-Dichloroethane	ND	0.52	0.078	ND	0.13	0.019	
1634-04-4	Methyl tert-Butyl Ether	ND	0.54	0.063	ND	0.15	0.017	
78-93-3	2-Butanone (MEK)	ND	1.0	0.11	ND	0.34	0.037	
156-59-2	cis-1,2-Dichloroethene	ND	0.53	0.075	ND	0.13	0.019	
110-54-3	n-Hexane	ND	0.54	0.11	ND	0.15	0.031	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 2 of 3

Client: Wood
Client Sample ID: Method Blank
Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1900966
 ALS Sample ID: P190228-MB

Test Code: EPA TO-15
 Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16
 Analyst: Lusine Hakobyan
 Sampling Media: 1.0 L Summa Canister
 Test Notes:

Date Collected: NA
 Date Received: NA
 Date Analyzed: 2/28/19
 Volume(s) Analyzed: 1.00 Liter(s)

Container Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
67-66-3	Chloroform	ND	0.54	0.071	ND	0.11	0.015	
107-06-2	1,2-Dichloroethane	ND	0.53	0.059	ND	0.13	0.015	
71-55-6	1,1,1-Trichloroethane	ND	0.54	0.066	ND	0.099	0.012	
71-43-2	Benzene	ND	0.52	0.077	ND	0.16	0.024	
56-23-5	Carbon Tetrachloride	ND	0.10	0.074	ND	0.016	0.012	
110-82-7	Cyclohexane	ND	1.0	0.15	ND	0.29	0.044	
78-87-5	1,2-Dichloropropane	ND	0.54	0.066	ND	0.12	0.014	
75-27-4	Bromodichloromethane	ND	0.53	0.077	ND	0.079	0.011	
79-01-6	Trichloroethene	ND	0.11	0.072	ND	0.020	0.013	
123-91-1	1,4-Dioxane	ND	0.53	0.063	ND	0.15	0.017	
10061-01-5	cis-1,3-Dichloropropene	ND	0.56	0.083	ND	0.12	0.018	
108-10-1	4-Methyl-2-pentanone	ND	0.53	0.073	ND	0.13	0.018	
10061-02-6	trans-1,3-Dichloropropene	ND	0.53	0.11	ND	0.12	0.024	
79-00-5	1,1,2-Trichloroethane	ND	0.54	0.054	ND	0.099	0.0099	
108-88-3	Toluene	ND	0.53	0.065	ND	0.14	0.017	
591-78-6	2-Hexanone	ND	0.54	0.066	ND	0.13	0.016	
124-48-1	Dibromochloromethane	ND	0.54	0.070	ND	0.063	0.0082	
106-93-4	1,2-Dibromoethane	ND	0.54	0.062	ND	0.070	0.0081	
127-18-4	Tetrachloroethene	ND	0.53	0.069	ND	0.078	0.010	
108-90-7	Chlorobenzene	ND	0.53	0.071	ND	0.12	0.015	
100-41-4	Ethylbenzene	ND	0.52	0.075	ND	0.12	0.017	
179601-23-1	m,p-Xylenes	ND	1.1	0.14	ND	0.25	0.032	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 3 of 3

Client: Wood
Client Sample ID: Method Blank
Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1900966
 ALS Sample ID: P190228-MB

Test Code: EPA TO-15
 Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16
 Analyst: Lusine Hakobyan
 Sampling Media: 1.0 L Summa Canister
 Test Notes:

Date Collected: NA
 Date Received: NA
 Date Analyzed: 2/28/19
 Volume(s) Analyzed: 1.00 Liter(s)

Container Dilution Factor: 1.00

CAS #	Compound	Result µg/m ³	MRL µg/m ³	MDL µg/m ³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
75-25-2	Bromoform	ND	0.53	0.11	ND	0.051	0.011	
100-42-5	Styrene	ND	0.53	0.086	ND	0.12	0.020	
95-47-6	o-Xylene	ND	0.53	0.077	ND	0.12	0.018	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.53	0.074	ND	0.077	0.011	
98-82-8	Cumene	ND	0.53	0.077	ND	0.11	0.016	
622-96-8	4-Ethyltoluene	ND	0.53	0.085	ND	0.11	0.017	
108-67-8	1,3,5-Trimethylbenzene	ND	0.53	0.077	ND	0.11	0.016	
95-63-6	1,2,4-Trimethylbenzene	ND	0.53	0.074	ND	0.11	0.015	
541-73-1	1,3-Dichlorobenzene	ND	0.54	0.080	ND	0.090	0.013	
106-46-7	1,4-Dichlorobenzene	ND	0.54	0.082	ND	0.090	0.014	
95-50-1	1,2-Dichlorobenzene	ND	0.54	0.079	ND	0.090	0.013	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.52	0.10	ND	0.054	0.010	
120-82-1	1,2,4-Trichlorobenzene	ND	0.53	0.13	ND	0.071	0.018	
87-68-3	Hexachlorobutadiene	ND	0.53	0.11	ND	0.050	0.010	
76-15-3	Chloropentafluoroethane	ND	0.50	0.23	ND	0.079	0.036	X
75-37-6	1,1-Difluoroethane	ND	0.50	0.26	ND	0.19	0.096	X
75-45-6	Chlorodifluoromethane (CFC 22)	ND	0.50	0.25	ND	0.14	0.071	X
306-83-2	2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND	0.50	0.24	ND	0.080	0.038	X
79-20-9	Methyl Acetate	ND	0.50	0.24	ND	0.17	0.079	X
108-87-2	Methylcyclohexane	ND	0.50	0.26	ND	0.12	0.065	X
540-59-0	1,2-Dichloroethene, Total	ND	0.53	0.075	ND	0.13	0.019	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

X = See case narrative.

ALS ENVIRONMENTAL

SURROGATE SPIKE RECOVERY RESULTS

Page 1 of 1

Client: Wood

Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1900966

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister(s)

Test Notes:

Date(s) Collected: 2/21/19

Date(s) Received: 2/25/19

Date(s) Analyzed: 2/28/19

Client Sample ID	ALS Sample ID	1,2-Dichloroethane-d4	Toluene-d8	Bromofluorobenzene	Acceptance Limits	Data Qualifier
		Percent Recovered	Percent Recovered	Percent Recovered		
Method Blank	P190228-MB	90	124	113	70-130	
Lab Control Sample	P190228-LCS	90	123	113	70-130	
EP-C5	P1900966-001	90	120	114	70-130	
EP-E2	P1900966-002	90	121	117	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.

Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE SUMMARY

Page 1 of 3

Client: Wood

Client Sample ID: Lab Control Sample

Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1900966

ALS Sample ID: P190228-LCS

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 2/28/19

Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount µg/m ³	Result µg/m ³	% Recovery	ALS Acceptance Limits	Data Qualifier
75-71-8	Dichlorodifluoromethane (CFC 12)	210	188	90	62-103	
74-87-3	Chloromethane	211	198	94	51-121	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	211	209	99	56-111	
75-01-4	Vinyl Chloride	214	197	92	57-117	
106-99-0	1,3-Butadiene	210	209	100	53-134	
74-83-9	Bromomethane	212	213	100	65-110	
75-00-3	Chloroethane	214	195	91	64-111	
67-64-1	Acetone	1,060	873	82	60-113	
75-69-4	Trichlorofluoromethane	211	191	91	63-104	
67-63-0	2-Propanol (Isopropyl Alcohol)	413	383	93	60-124	
75-35-4	1,1-Dichloroethene	218	207	95	68-107	
75-09-2	Methylene Chloride	217	196	90	66-105	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	216	201	93	63-127	
76-13-1	Trichlorotrifluoroethane	216	213	99	59-109	
75-15-0	Carbon Disulfide	218	205	94	67-109	
156-60-5	trans-1,2-Dichloroethene	214	193	90	70-115	
75-34-3	1,1-Dichloroethane	216	194	90	66-106	
1634-04-4	Methyl tert-Butyl Ether	214	200	93	67-109	
78-93-3	2-Butanone (MEK)	208	200	96	71-116	
156-59-2	cis-1,2-Dichloroethene	211	187	89	67-110	
110-54-3	n-Hexane	216	199	92	60-115	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.

Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE SUMMARY

Page 2 of 3

Client: Wood

Client Sample ID: Lab Control Sample

Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1900966

ALS Sample ID: P190228-LCS

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 2/28/19

Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount µg/m ³	Result µg/m ³	% Recovery	ALS Acceptance Limits	Data Qualifier
67-66-3	Chloroform	217	195	90	66-105	
107-06-2	1,2-Dichloroethane	215	185	86	60-110	
71-55-6	1,1,1-Trichloroethane	215	198	92	64-108	
71-43-2	Benzene	211	181	86	67-106	
56-23-5	Carbon Tetrachloride	212	201	95	64-112	
110-82-7	Cyclohexane	416	396	95	67-110	
78-87-5	1,2-Dichloropropane	216	197	91	66-112	
75-27-4	Bromodichloromethane	215	206	96	67-113	
79-01-6	Trichloroethene	213	210	99	66-108	
123-91-1	1,4-Dioxane	214	192	90	70-116	
10061-01-5	cis-1,3-Dichloropropene	214	212	99	75-120	
108-10-1	4-Methyl-2-pentanone	209	198	95	65-124	
10061-02-6	trans-1,3-Dichloropropene	213	213	100	77-123	
79-00-5	1,1,2-Trichloroethane	215	208	97	68-112	
108-88-3	Toluene	212	206	97	62-111	
591-78-6	2-Hexanone	214	198	93	59-128	
124-48-1	Dibromochloromethane	213	225	106	67-123	
106-93-4	1,2-Dibromoethane	216	215	100	66-122	
127-18-4	Tetrachloroethene	213	214	100	55-120	
108-90-7	Chlorobenzene	215	207	96	61-114	
100-41-4	Ethylbenzene	212	196	92	64-113	
179601-23-1	m,p-Xylenes	426	395	93	64-114	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.

Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE SUMMARY

Page 3 of 3

Client: Wood

Client Sample ID: Lab Control Sample

Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1900966

ALS Sample ID: P190228-LCS

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 2/28/19

Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount µg/m ³	Result µg/m ³	% Recovery	ALS Acceptance Limits	Data Qualifier
75-25-2	Bromoform	213	238	112	65-132	
100-42-5	Styrene	212	213	100	67-124	
95-47-6	o-Xylene	214	199	93	65-114	
79-34-5	1,1,2,2-Tetrachloroethane	214	201	94	66-119	
98-82-8	Cumene	214	201	94	61-116	
622-96-8	4-Ethyltoluene	214	217	101	63-124	
108-67-8	1,3,5-Trimethylbenzene	214	195	91	60-117	
95-63-6	1,2,4-Trimethylbenzene	215	202	94	61-122	
541-73-1	1,3-Dichlorobenzene	216	214	99	61-125	
106-46-7	1,4-Dichlorobenzene	216	210	97	59-123	
95-50-1	1,2-Dichlorobenzene	216	212	98	61-126	
96-12-8	1,2-Dibromo-3-chloropropane	209	225	108	67-138	
120-82-1	1,2,4-Trichlorobenzene	214	224	105	62-141	
87-68-3	Hexachlorobutadiene	209	205	98	49-131	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.

Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 1

Client: Wood
Client Project ID: LAF Lockheed Martin Great Neck / 3617187448
ALS Project ID: P1900966

Method Blank Summary

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16
Analyst: Lusine Hakobyan
Sampling Media: 1.0 L Summa Canister(s)
Test Notes:
Lab File ID: 02281904.D
Date Analyzed: 2/28/19
Time Analyzed: 07:54

Client Sample ID	ALS Sample ID	Lab File ID	Time Analyzed
Lab Control Sample	P190228-LCS	02281905.D	08:27
EP-C5	P1900966-001	02281926.D	22:31
EP-E2	P1900966-002	02281927.D	23:04

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 1

Client: Wood

ALS Project ID: P1900966

Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

Internal Standard Area and RT Summary

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16

Lab File ID: 02281901.D

Analyst: Lusine Hakobyan

Date Analyzed: 2/28/19

Sampling Media: 1.0 L Summa Canister(s)

Time Analyzed: 06:14

Test Notes:

	IS1 (BCM)		IS2 (DFB)		IS3 (CBZ)	
	AREA	#	RT	#	AREA	#
24 Hour Standard	301572	11.33	1278634	13.43	536319	17.72
Upper Limit	422201	11.66	1790088	13.76	750847	18.05
Lower Limit	180943	11.00	767180	13.10	321791	17.39

Client Sample ID		IS1 (BCM)		IS2 (DFB)		IS3 (CBZ)	
		AREA	#	RT	#	AREA	#
01	Method Blank	287209	11.32	1259739	13.43	531566	17.72
02	Lab Control Sample	293794	11.33	1261881	13.44	528569	17.72
03	EP-C5	292222	11.32	1271527	13.43	549282	17.72
04	EP-E2	294313	11.32	1272967	13.43	541399	17.72
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

IS1 (BCM) = Bromochloromethane

IS2 (DFB) = 1,4-Difluorobenzene

IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = 140% of internal standard area

AREA LOWER LIMIT = 60% of internal standard area

RT UPPER LIMIT = 0.33 minutes of internal standard RT

RT LOWER LIMIT = 0.33 minutes of internal standard RT

Column used to flag values outside QC limits with an I.

I = Internal standard not within the specified limits. See case narrative.



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Simi Valley, CA 93065
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www.alsglobal.com

LABORATORY REPORT

March 27, 2019

Randy Talbot
Wood
511 Congress Street
Portland, ME 04101

RE: LAF Lockheed Martin Great Neck / 3617187448

Dear Randy:

Your Tier II report number P1901263 has been amended for the samples submitted to our laboratory on March 11, 2019. The report has been amended because the canisters were incorrectly labeled initially. The can labels were corrected to match the chain of custody and the affected pages have been indicated by the "Revised Page" footer located at the bottom right of each page.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

By Sue Anderson at 5:21 pm, Mar 27, 2019

Sue Anderson
Project Manager



2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
www.alsglobal.com

Client: Wood
Project: LAF Lockheed Martin Great Neck / 3617187448

Service Request No: P1901263

CASE NARRATIVE

The samples were received intact under chain of custody on March 11, 2019 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

Volatile Organic Compound Analysis

The samples were analyzed for volatile organic compounds in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. This procedure is described in laboratory SOP VOA-TO15. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator. This method is included on the laboratory's NELAP and DoD-ELAP scope of accreditation. Any analytes flagged with an X are not included on the NELAP or DoD-ELAP accreditation.

The spike recoveries of trichlorofluoromethane and methyl tert-butyl ether for the Laboratory Control Sample (LCS) were outside the laboratory generated control criteria. The recovery errors equate to a potential high bias. However, the spike recoveries of the analytes in question were within the method criteria; therefore, the data quality has not been significantly affected. No corrective action was taken.

The containers were cleaned, prior to sampling, down to the method reporting limit (MRL) reported for this project. For projects requiring DoD QSM 5.1 compliance canisters were cleaned to <1/2 the MRL. Please note, projects which require reporting below the MRL could have results between the MRL and method detection limit (MDL) that are biased high.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.



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ALS Environmental – Simi Valley

CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
Alaska DEC	http://dec.alaska.gov/eh/lab.aspx	17-019
Arizona DHS	http://www.azdhs.gov/preparedness/state-laboratory/lab-licensure-certification/index.php#laboratory-licensure-home	AZ0694
Florida DOH (NELAP)	http://www.floridahealth.gov/licensing-and-regulation/environmental-laboratories/index.html	E871020
Louisiana DEQ (NELAP)	http://www.deq.louisiana.gov/page/la-lab-accreditation	05071
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/professionals/labCert.shtml	2018027
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	1521096
New Jersey DEP (NELAP)	http://www.nj.gov/dep/enforcement/oqa.html	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oregon PHD (NELAP)	http://www.oregon.gov/oha/ph/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	4068-006
Pennsylvania DEP	http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx	68-03307 (Registration)
PJLA (DoD ELAP)	http://www.pjlab.com/search-accredited-labs	65818 (Testing)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/agency/qa/env_lab_accreditation.html	T104704413-18-9
Utah DOH (NELAP)	http://health.utah.gov/lab/lab_cert_env	CA016272018-9
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946
Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at www.alsglobal.com, or at the accreditation body's website. Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.		

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: Wood
Project ID: LAF Lockheed Martin Great Neck / 3617187448

Service Request: P1901263

Date Received: 3/11/2019
Time Received: 09:30

TO-15 - VOC Cans

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	
EP-E2	P1901263-001	Air	3/7/2019	15:28	1SC00766	-2.35	6.16	X
EP-C5	P1901263-002	Air	3/7/2019	15:47	1SC00988	-2.77	5.72	X



Air - Chain of Custody Record & Analytical Service Request

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Page 1 of 1

Company Name & Address (Reporting Information)				Requested Turnaround Time in Business Days (Surcharges) please circle				ALS Project No.			
AMEC E+E PC/wood				1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day-Standard				D1901263			
511 Congress Street				Project Name				ALS Contact:			
Portland, ME, 04101				LAF Lockwood Martin Great Neck				Sue Anderson			
Project Manager				Project Number				Analysis Method			
William Weber				3617187448				Great Neck			
Phone				P.O. # / Billing Information				61			
207-775-5401				C012506323				Compound List +			
Fax				Sampler (Print & Sign)				CUSTOM			
Email Address for Result Reporting				John Zator				COMPOUNDS			
Ryan.Belcher@woodpic.com											
Client Sample ID		Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	Comments e.g. Actual Preservative or specific instructions	
EP-E2		3/7/19	15:28	15:28	1SC00766	0A01908	-29	-7	1L		
EP-C5		3/7/19	15:47	15:47	1SC00988	0A00662	-28	-6	1L		
Report Tier Levels - please select				CAT B				Chain of Custody Seal: (Circle)			
Tier I - Results (Default if not specified)				Tier III (Results + QC & Calibration Summaries)				INTACT BROKEN ABSENT			
Tier II (Results + QC Summaries) X				Tier IV (Data Validation Package) 10% Surcharge				Units: No			
Relinquished by: (Signature)				Received by: (Signature)				Date: 3-11-19 Time: 0930			
Relinquished by: (Signature)				Received by: (Signature)				Date: Time: Cooler / Blank Temperature °C			

ALS Environmental Sample Acceptance Check Form

Client: Wood Work order: P1901263
 Project: LAF Lockheed Martin Great Neck / 3617187448
 Sample(s) received on: 3/11/19 Date opened: 3/11/19 by: CHRIS.GLEASON

Note: This form is used for all samples received by ALS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

- | | Yes | No | N/A |
|---|-------------------------------------|--------------------------|-------------------------------------|
| 1 Were sample containers properly marked with client sample ID? | ☒ | ☐ | ☐ |
| 2 Did sample containers arrive in good condition? | ☒ | ☐ | ☐ |
| 3 Were chain-of-custody papers used and filled out? | ☒ | ☐ | ☐ |
| 4 Did sample container labels and/or tags agree with custody papers? | ☒ | ☐ | ☐ |
| 5 Was sample volume received adequate for analysis? | ☒ | ☐ | ☐ |
| 6 Are samples within specified holding times? | ☒ | ☐ | ☐ |
| 7 Was proper temperature (thermal preservation) of cooler at receipt adhered to? | ☒ | ☐ | ☐ |
| 8 Were custody seals on outside of cooler/Box/Container? | ☐ | ☐ | ☒ |
| Location of seal(s)? _____ Sealing Lid? | ☐ | ☐ | ☒ |
| Were signature and date included? | ☐ | ☐ | ☒ |
| Were seals intact? | ☐ | ☐ | ☒ |
| 9 Do containers have appropriate preservation , according to method/SOP or Client specified information? | ☐ | ☐ | ☒ |
| Is there a client indication that the submitted samples are pH preserved? | ☐ | ☐ | ☒ |
| Were VOA vials checked for presence/absence of air bubbles? | ☐ | ☐ | ☒ |
| Does the client/method/SOP require that the analyst check the sample pH and <u>if necessary</u> alter it? | ☐ | ☐ | ☒ |
| 10 Tubes: Are the tubes capped and intact? | ☐ | ☐ | ☒ |
| 11 Badges: Are the badges properly capped and intact? | ☐ | ☐ | ☒ |
| Are dual bed badges separated and individually capped and intact? | ☐ | ☐ | ☒ |

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P1901263-001.01	1.0 L Source Can					
P1901263-002.01	1.0 L Source Can					

Explain any discrepancies: (include lab sample ID numbers): _____

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 3

Client: Wood

Client Sample ID: EP-E2

Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1901263

ALS Sample ID: P1901263-001

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8

Analyst: Raneem Sahtah

Sampling Media: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00766

Date Collected: 3/7/19

Date Received: 3/11/19

Date Analyzed: 3/15/19

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -2.35 Final Pressure (psig): 6.16

Container Dilution Factor: 1.69

CAS #	Compound	Result µg/m ³	MRL µg/m ³	MDL µg/m ³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
75-71-8	Dichlorodifluoromethane (CFC 12)	2.9	2.2	0.37	0.59	0.44	0.074	
74-87-3	Chloromethane	0.95	2.1	0.36	0.46	1.0	0.18	J
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.2	0.35	ND	0.31	0.051	
75-01-4	Vinyl Chloride	ND	0.46	0.24	ND	0.18	0.094	
106-99-0	1,3-Butadiene	ND	2.2	0.37	ND	0.99	0.17	
74-83-9	Bromomethane	0.56	2.1	0.31	0.14	0.54	0.081	J
75-00-3	Chloroethane	0.55	2.2	0.28	0.21	0.82	0.11	J
67-64-1	Acetone	86	23	5.1	36	9.6	2.1	
75-69-4	Trichlorofluoromethane	1.7	2.2	0.34	0.30	0.40	0.061	J
67-63-0	2-Propanol (Isopropyl Alcohol)	10	8.9	0.93	4.1	3.6	0.38	
75-35-4	1,1-Dichloroethene	ND	2.3	0.31	ND	0.58	0.079	
75-09-2	Methylene Chloride	ND	2.3	0.63	ND	0.66	0.18	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.2	0.30	ND	0.72	0.097	
76-13-1	Trichlorotrifluoroethane	2.9	2.2	0.32	0.38	0.29	0.042	
75-15-0	Carbon Disulfide	0.81	4.6	0.68	0.26	1.5	0.22	J
156-60-5	trans-1,2-Dichloroethene	ND	2.2	0.31	ND	0.57	0.079	
75-34-3	1,1-Dichloroethane	ND	2.2	0.33	ND	0.54	0.081	
1634-04-4	Methyl tert-Butyl Ether	ND	2.3	0.27	ND	0.63	0.074	
78-93-3	2-Butanone (MEK)	28	4.2	0.46	9.6	1.4	0.16	
156-59-2	cis-1,2-Dichloroethene	ND	2.2	0.32	ND	0.57	0.080	
110-54-3	n-Hexane	ND	2.3	0.46	ND	0.65	0.13	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 2 of 3

Client: Wood

Client Sample ID: EP-E2

Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1901263

ALS Sample ID: P1901263-001

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8

Analyst: Raneem Sahtah

Sampling Media: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00766

Date Collected: 3/7/19

Date Received: 3/11/19

Date Analyzed: 3/15/19

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -2.35 Final Pressure (psig): 6.16

Container Dilution Factor: 1.69

CAS #	Compound	Result µg/m ³	MRL µg/m ³	MDL µg/m ³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
67-66-3	Chloroform	1.7	2.3	0.30	0.36	0.47	0.061	J
107-06-2	1,2-Dichloroethane	ND	2.2	0.25	ND	0.55	0.062	
71-55-6	1,1,1-Trichloroethane	3.0	2.3	0.28	0.55	0.42	0.051	
71-43-2	Benzene	1.0	2.2	0.33	0.33	0.69	0.10	J
56-23-5	Carbon Tetrachloride	0.44	0.42	0.31	0.070	0.067	0.050	
110-82-7	Cyclohexane	ND	4.2	0.63	ND	1.2	0.18	
78-87-5	1,2-Dichloropropane	ND	2.3	0.28	ND	0.49	0.060	
75-27-4	Bromodichloromethane	ND	2.2	0.33	ND	0.33	0.049	
79-01-6	Trichloroethene	37	0.46	0.30	6.9	0.087	0.057	
123-91-1	1,4-Dioxane	ND	2.2	0.27	ND	0.62	0.074	
10061-01-5	cis-1,3-Dichloropropene	ND	2.4	0.35	ND	0.52	0.077	
108-10-1	4-Methyl-2-pentanone	ND	2.2	0.31	ND	0.55	0.075	
10061-02-6	trans-1,3-Dichloropropene	ND	2.2	0.46	ND	0.49	0.10	
79-00-5	1,1,2-Trichloroethane	ND	2.3	0.23	ND	0.42	0.042	
108-88-3	Toluene	3.4	2.2	0.27	0.89	0.59	0.073	
591-78-6	2-Hexanone	1.5	2.3	0.28	0.36	0.56	0.068	J
124-48-1	Dibromochloromethane	ND	2.3	0.30	ND	0.27	0.035	
106-93-4	1,2-Dibromoethane	ND	2.3	0.26	ND	0.30	0.034	
127-18-4	Tetrachloroethene	7.6	2.2	0.29	1.1	0.33	0.043	
108-90-7	Chlorobenzene	ND	2.2	0.30	ND	0.49	0.065	
100-41-4	Ethylbenzene	0.43	2.2	0.32	0.098	0.51	0.073	J
179601-23-1	m,p-Xylenes	2.2	4.6	0.59	0.50	1.1	0.14	J

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 3 of 3

Client: Wood
Client Sample ID: EP-E2
Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1901263
 ALS Sample ID: P1901263-001

Test Code: EPA TO-15
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8
 Analyst: Raneem Sahtah
 Sampling Media: 1.0 L Summa Canister
 Test Notes:
 Container ID: 1SC00766

Date Collected: 3/7/19
 Date Received: 3/11/19
 Date Analyzed: 3/15/19
 Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -2.35 Final Pressure (psig): 6.16

Container Dilution Factor: 1.69

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
75-25-2	Bromoform	ND	2.2	0.46	ND	0.22	0.045	
100-42-5	Styrene	ND	2.2	0.36	ND	0.53	0.085	
95-47-6	o-Xylene	0.87	2.2	0.33	0.20	0.52	0.075	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.2	0.31	ND	0.33	0.046	
98-82-8	Cumene	2.5	2.2	0.33	0.50	0.46	0.066	
622-96-8	4-Ethyltoluene	0.48	2.2	0.36	0.097	0.46	0.073	J
108-67-8	1,3,5-Trimethylbenzene	0.62	2.2	0.33	0.13	0.46	0.066	J
95-63-6	1,2,4-Trimethylbenzene	2.2	2.2	0.31	0.45	0.46	0.064	J
541-73-1	1,3-Dichlorobenzene	ND	2.3	0.34	ND	0.38	0.056	
106-46-7	1,4-Dichlorobenzene	0.52	2.3	0.35	0.087	0.38	0.058	J
95-50-1	1,2-Dichlorobenzene	ND	2.3	0.33	ND	0.38	0.056	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.2	0.42	ND	0.23	0.044	
120-82-1	1,2,4-Trichlorobenzene	ND	2.2	0.55	ND	0.30	0.074	
87-68-3	Hexachlorobutadiene	ND	2.2	0.46	ND	0.21	0.044	
76-15-3	Chloropentafluoroethane	ND	2.1	0.97	ND	0.33	0.15	X
75-37-6	1,1-Difluoroethane	5.6	2.1	1.1	2.1	0.78	0.41	X
75-45-6	Chlorodifluoromethane (CFC 22)	ND	2.1	1.1	ND	0.60	0.30	X
306-83-2	2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND	2.1	1.0	ND	0.34	0.16	X
79-20-9	Methyl Acetate	ND	2.1	1.0	ND	0.70	0.33	X
108-87-2	Methylcyclohexane	ND	2.1	1.1	ND	0.53	0.27	X
540-59-0	1,2-Dichloroethene, Total	ND	2.2	0.32	ND	0.56	0.080	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

X = See case narrative.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 3

Client: Wood

Client Sample ID: EP-C5

Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1901263

ALS Sample ID: P1901263-002

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8

Analyst: Raneem Sahtah

Sampling Media: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00988

Date Collected: 3/7/19

Date Received: 3/11/19

Date Analyzed: 3/15/19

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -2.77 Final Pressure (psig): 5.72

Container Dilution Factor: 1.71

CAS #	Compound	Result µg/m ³	MRL µg/m ³	MDL µg/m ³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
75-71-8	Dichlorodifluoromethane (CFC 12)	2.8	2.2	0.37	0.56	0.45	0.075	
74-87-3	Chloromethane	ND	2.1	0.37	ND	1.0	0.18	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.2	0.36	ND	0.31	0.051	
75-01-4	Vinyl Chloride	ND	0.47	0.24	ND	0.18	0.095	
106-99-0	1,3-Butadiene	ND	2.2	0.38	ND	1.0	0.17	
74-83-9	Bromomethane	ND	2.1	0.32	ND	0.55	0.082	
75-00-3	Chloroethane	ND	2.2	0.28	ND	0.83	0.11	
67-64-1	Acetone	54	23	5.1	23	9.7	2.2	
75-69-4	Trichlorofluoromethane	1.4	2.3	0.35	0.25	0.40	0.062	J
67-63-0	2-Propanol (Isopropyl Alcohol)	25	9.0	0.94	10	3.7	0.38	
75-35-4	1,1-Dichloroethene	ND	2.3	0.32	ND	0.58	0.080	
75-09-2	Methylene Chloride	ND	2.3	0.64	ND	0.66	0.18	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.3	0.31	ND	0.72	0.098	
76-13-1	Trichlorotrifluoroethane	0.61	2.3	0.32	0.079	0.30	0.042	J
75-15-0	Carbon Disulfide	1.3	4.7	0.68	0.41	1.5	0.22	J
156-60-5	trans-1,2-Dichloroethene	ND	2.3	0.32	ND	0.57	0.080	
75-34-3	1,1-Dichloroethane	ND	2.2	0.33	ND	0.55	0.082	
1634-04-4	Methyl tert-Butyl Ether	ND	2.3	0.27	ND	0.64	0.075	
78-93-3	2-Butanone (MEK)	31	4.3	0.47	11	1.5	0.16	
156-59-2	cis-1,2-Dichloroethene	ND	2.3	0.32	ND	0.57	0.081	
110-54-3	n-Hexane	ND	2.3	0.47	ND	0.66	0.13	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 2 of 3

Client: Wood

Client Sample ID: EP-C5

Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1901263

ALS Sample ID: P1901263-002

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8

Analyst: Raneem Sahtah

Sampling Media: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00988

Date Collected: 3/7/19

Date Received: 3/11/19

Date Analyzed: 3/15/19

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -2.77 Final Pressure (psig): 5.72

Container Dilution Factor: 1.71

CAS #	Compound	Result µg/m ³	MRL µg/m ³	MDL µg/m ³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
67-66-3	Chloroform	8.9	2.3	0.30	1.8	0.47	0.062	
107-06-2	1,2-Dichloroethane	ND	2.3	0.25	ND	0.56	0.062	
71-55-6	1,1,1-Trichloroethane	ND	2.3	0.28	ND	0.42	0.052	
71-43-2	Benzene	1.6	2.2	0.33	0.49	0.70	0.10	J
56-23-5	Carbon Tetrachloride	0.43	0.43	0.32	0.068	0.068	0.050	
110-82-7	Cyclohexane	ND	4.3	0.64	ND	1.2	0.19	
78-87-5	1,2-Dichloropropane	ND	2.3	0.28	ND	0.50	0.061	
75-27-4	Bromodichloromethane	0.48	2.3	0.33	0.071	0.34	0.049	J
79-01-6	Trichloroethene	8.8	0.47	0.31	1.6	0.088	0.057	
123-91-1	1,4-Dioxane	ND	2.3	0.27	ND	0.63	0.075	
10061-01-5	cis-1,3-Dichloropropene	ND	2.4	0.35	ND	0.53	0.078	
108-10-1	4-Methyl-2-pentanone	1.0	2.3	0.31	0.25	0.55	0.076	J
10061-02-6	trans-1,3-Dichloropropene	ND	2.3	0.47	ND	0.50	0.10	
79-00-5	1,1,2-Trichloroethane	ND	2.3	0.23	ND	0.42	0.042	
108-88-3	Toluene	14	2.3	0.28	3.8	0.60	0.074	
591-78-6	2-Hexanone	2.2	2.3	0.28	0.55	0.56	0.069	J
124-48-1	Dibromochloromethane	ND	2.3	0.30	ND	0.27	0.035	
106-93-4	1,2-Dibromoethane	ND	2.3	0.27	ND	0.30	0.035	
127-18-4	Tetrachloroethene	3.9	2.3	0.29	0.58	0.33	0.044	
108-90-7	Chlorobenzene	ND	2.3	0.30	ND	0.49	0.066	
100-41-4	Ethylbenzene	0.47	2.2	0.32	0.11	0.51	0.074	J
179601-23-1	m,p-Xylenes	2.2	4.7	0.60	0.50	1.1	0.14	J

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

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ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 3 of 3

Client: Wood
Client Sample ID: EP-C5
Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1901263
 ALS Sample ID: P1901263-002

Test Code: EPA TO-15
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8
 Analyst: Raneem Sahtah
 Sampling Media: 1.0 L Summa Canister
 Test Notes:
 Container ID: 1SC00988

Date Collected: 3/7/19
 Date Received: 3/11/19
 Date Analyzed: 3/15/19
 Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -2.77 Final Pressure (psig): 5.72

Container Dilution Factor: 1.71

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
75-25-2	Bromoform	ND	2.3	0.47	ND	0.22	0.045	
100-42-5	Styrene	ND	2.3	0.37	ND	0.53	0.086	
95-47-6	o-Xylene	0.94	2.3	0.33	0.22	0.52	0.076	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.3	0.32	ND	0.33	0.046	
98-82-8	Cumene	46	2.3	0.33	9.4	0.46	0.067	
622-96-8	4-Ethyltoluene	0.56	2.3	0.36	0.11	0.46	0.074	J
108-67-8	1,3,5-Trimethylbenzene	1.0	2.3	0.33	0.20	0.46	0.067	J
95-63-6	1,2,4-Trimethylbenzene	2.7	2.3	0.32	0.55	0.46	0.064	
541-73-1	1,3-Dichlorobenzene	ND	2.3	0.34	ND	0.38	0.057	
106-46-7	1,4-Dichlorobenzene	0.85	2.3	0.35	0.14	0.38	0.058	J
95-50-1	1,2-Dichlorobenzene	ND	2.3	0.34	ND	0.38	0.056	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.2	0.43	ND	0.23	0.044	
120-82-1	1,2,4-Trichlorobenzene	ND	2.3	0.56	ND	0.31	0.075	
87-68-3	Hexachlorobutadiene	ND	2.3	0.47	ND	0.21	0.044	
76-15-3	Chloropentafluoroethane	ND	2.1	0.98	ND	0.34	0.16	X
75-37-6	1,1-Difluoroethane	11	2.1	1.1	4.2	0.79	0.41	X
75-45-6	Chlorodifluoromethane (CFC 22)	1.1	2.1	1.1	0.31	0.60	0.30	J, X
306-83-2	2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND	2.1	1.0	ND	0.34	0.16	X
79-20-9	Methyl Acetate	ND	2.1	1.0	ND	0.71	0.34	X
108-87-2	Methylcyclohexane	2.9	2.1	1.1	0.73	0.53	0.28	X
540-59-0	1,2-Dichloroethene, Total	ND	2.3	0.32	ND	0.57	0.081	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

X = See case narrative.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 3

Client: Wood
Client Sample ID: Method Blank
Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1901263
 ALS Sample ID: P190314-MB

Test Code: EPA TO-15
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8
 Analyst: Raneem Sahtah
 Sampling Media: 1.0 L Summa Canister
 Test Notes:

Date Collected: NA
 Date Received: NA
 Date Analyzed: 3/14/19
 Volume(s) Analyzed: 1.00 Liter(s)

Container Dilution Factor: 1.00

CAS #	Compound	Result µg/m ³	MRL µg/m ³	MDL µg/m ³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.52	0.087	ND	0.11	0.018	
74-87-3	Chloromethane	ND	0.50	0.086	ND	0.24	0.042	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.51	0.084	ND	0.073	0.012	
75-01-4	Vinyl Chloride	ND	0.11	0.057	ND	0.043	0.022	
106-99-0	1,3-Butadiene	ND	0.52	0.088	ND	0.24	0.040	
74-83-9	Bromomethane	ND	0.50	0.074	ND	0.13	0.019	
75-00-3	Chloroethane	ND	0.51	0.066	ND	0.19	0.025	
67-64-1	Acetone	ND	5.4	1.2	ND	2.3	0.51	
75-69-4	Trichlorofluoromethane	ND	0.53	0.081	ND	0.094	0.014	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	2.1	0.22	ND	0.85	0.090	
75-35-4	1,1-Dichloroethene	ND	0.54	0.074	ND	0.14	0.019	
75-09-2	Methylene Chloride	ND	0.54	0.15	ND	0.16	0.043	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.53	0.072	ND	0.17	0.023	
76-13-1	Trichlorotrifluoroethane	ND	0.53	0.076	ND	0.069	0.0099	
75-15-0	Carbon Disulfide	ND	1.1	0.16	ND	0.35	0.051	
156-60-5	trans-1,2-Dichloroethene	ND	0.53	0.074	ND	0.13	0.019	
75-34-3	1,1-Dichloroethane	ND	0.52	0.078	ND	0.13	0.019	
1634-04-4	Methyl tert-Butyl Ether	ND	0.54	0.063	ND	0.15	0.017	
78-93-3	2-Butanone (MEK)	ND	1.0	0.11	ND	0.34	0.037	
156-59-2	cis-1,2-Dichloroethene	ND	0.53	0.075	ND	0.13	0.019	
110-54-3	n-Hexane	ND	0.54	0.11	ND	0.15	0.031	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 2 of 3

Client: Wood
Client Sample ID: Method Blank
Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1901263
 ALS Sample ID: P190314-MB

Test Code: EPA TO-15
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8
 Analyst: Raneem Sahtah
 Sampling Media: 1.0 L Summa Canister
 Test Notes:

Date Collected: NA
 Date Received: NA
 Date Analyzed: 3/14/19
 Volume(s) Analyzed: 1.00 Liter(s)

Container Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
67-66-3	Chloroform	ND	0.54	0.071	ND	0.11	0.015	
107-06-2	1,2-Dichloroethane	ND	0.53	0.059	ND	0.13	0.015	
71-55-6	1,1,1-Trichloroethane	ND	0.54	0.066	ND	0.099	0.012	
71-43-2	Benzene	ND	0.52	0.077	ND	0.16	0.024	
56-23-5	Carbon Tetrachloride	ND	0.10	0.074	ND	0.016	0.012	
110-82-7	Cyclohexane	ND	1.0	0.15	ND	0.29	0.044	
78-87-5	1,2-Dichloropropane	ND	0.54	0.066	ND	0.12	0.014	
75-27-4	Bromodichloromethane	ND	0.53	0.077	ND	0.079	0.011	
79-01-6	Trichloroethene	ND	0.11	0.072	ND	0.020	0.013	
123-91-1	1,4-Dioxane	ND	0.53	0.063	ND	0.15	0.017	
10061-01-5	cis-1,3-Dichloropropene	ND	0.56	0.083	ND	0.12	0.018	
108-10-1	4-Methyl-2-pentanone	ND	0.53	0.073	ND	0.13	0.018	
10061-02-6	trans-1,3-Dichloropropene	ND	0.53	0.11	ND	0.12	0.024	
79-00-5	1,1,2-Trichloroethane	ND	0.54	0.054	ND	0.099	0.0099	
108-88-3	Toluene	ND	0.53	0.065	ND	0.14	0.017	
591-78-6	2-Hexanone	ND	0.54	0.066	ND	0.13	0.016	
124-48-1	Dibromochloromethane	ND	0.54	0.070	ND	0.063	0.0082	
106-93-4	1,2-Dibromoethane	ND	0.54	0.062	ND	0.070	0.0081	
127-18-4	Tetrachloroethene	ND	0.53	0.069	ND	0.078	0.010	
108-90-7	Chlorobenzene	ND	0.53	0.071	ND	0.12	0.015	
100-41-4	Ethylbenzene	ND	0.52	0.075	ND	0.12	0.017	
179601-23-1	m,p-Xylenes	ND	1.1	0.14	ND	0.25	0.032	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

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Client: Wood
Client Sample ID: Method Blank
Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1901263
 ALS Sample ID: P190314-MB

Test Code: EPA TO-15
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8
 Analyst: Raneem Sahtah
 Sampling Media: 1.0 L Summa Canister
 Test Notes:

Date Collected: NA
 Date Received: NA
 Date Analyzed: 3/14/19
 Volume(s) Analyzed: 1.00 Liter(s)

Container Dilution Factor: 1.00

CAS #	Compound	Result µg/m ³	MRL µg/m ³	MDL µg/m ³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
75-25-2	Bromoform	ND	0.53	0.11	ND	0.051	0.011	
100-42-5	Styrene	ND	0.53	0.086	ND	0.12	0.020	
95-47-6	o-Xylene	ND	0.53	0.077	ND	0.12	0.018	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.53	0.074	ND	0.077	0.011	
98-82-8	Cumene	ND	0.53	0.077	ND	0.11	0.016	
622-96-8	4-Ethyltoluene	ND	0.53	0.085	ND	0.11	0.017	
108-67-8	1,3,5-Trimethylbenzene	ND	0.53	0.077	ND	0.11	0.016	
95-63-6	1,2,4-Trimethylbenzene	ND	0.53	0.074	ND	0.11	0.015	
541-73-1	1,3-Dichlorobenzene	ND	0.54	0.080	ND	0.090	0.013	
106-46-7	1,4-Dichlorobenzene	ND	0.54	0.082	ND	0.090	0.014	
95-50-1	1,2-Dichlorobenzene	ND	0.54	0.079	ND	0.090	0.013	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.52	0.10	ND	0.054	0.010	
120-82-1	1,2,4-Trichlorobenzene	ND	0.53	0.13	ND	0.071	0.018	
87-68-3	Hexachlorobutadiene	ND	0.53	0.11	ND	0.050	0.010	
76-15-3	Chloropentafluoroethane	ND	0.50	0.23	ND	0.079	0.036	X
75-37-6	1,1-Difluoroethane	ND	0.50	0.26	ND	0.19	0.096	X
75-45-6	Chlorodifluoromethane (CFC 22)	ND	0.50	0.25	ND	0.14	0.071	X
306-83-2	2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND	0.50	0.24	ND	0.080	0.038	X
79-20-9	Methyl Acetate	ND	0.50	0.24	ND	0.17	0.079	X
108-87-2	Methylcyclohexane	ND	0.50	0.26	ND	0.12	0.065	X
540-59-0	1,2-Dichloroethene, Total	ND	0.53	0.075	ND	0.13	0.019	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

X = See case narrative.

ALS ENVIRONMENTAL

SURROGATE SPIKE RECOVERY RESULTS

Page 1 of 1

Client: Wood

Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1901263

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8

Analyst: Raneem Sahtah

Sample Type: 1.0 L Summa Canister(s)

Test Notes:

Date(s) Collected: 3/7/19

Date(s) Received: 3/11/19

Date(s) Analyzed: 3/14 - 3/15/19

Client Sample ID	ALS Sample ID	1,2-Dichloroethane-d4	Toluene-d8	Bromofluorobenzene	Acceptance Limits	Data Qualifier
		Percent Recovered	Percent Recovered	Percent Recovered		
Method Blank	P190314-MB	107	99	99	70-130	
Lab Control Sample	P190314-LCS	104	98	102	70-130	
EP-E2	P1901263-001	103	98	103	70-130	
EP-C5	P1901263-002	105	97	104	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.

Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE SUMMARY

Page 1 of 3

Client: Wood
Client Sample ID: Lab Control Sample
Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1901263
 ALS Sample ID: P190314-LCS

Test Code: EPA TO-15
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8
 Analyst: Raneem Sahtah
 Sample Type: 1.0 L Summa Canister
 Test Notes:

Date Collected: NA
 Date Received: NA
 Date Analyzed: 3/14/19
 Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount µg/m ³	Result µg/m ³	% Recovery	ALS Acceptance Limits	Data Qualifier
75-71-8	Dichlorodifluoromethane (CFC 12)	210	204	97	62-103	
74-87-3	Chloromethane	211	170	81	51-121	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	211	202	96	56-111	
75-01-4	Vinyl Chloride	214	203	95	57-117	
106-99-0	1,3-Butadiene	210	196	93	53-134	
74-83-9	Bromomethane	212	219	103	65-110	
75-00-3	Chloroethane	214	211	99	64-111	
67-64-1	Acetone	1,060	1040	98	60-113	
75-69-4	Trichlorofluoromethane	211	221	105	63-104	L
67-63-0	2-Propanol (Isopropyl Alcohol)	413	416	101	60-124	
75-35-4	1,1-Dichloroethene	218	220	101	68-107	
75-09-2	Methylene Chloride	217	227	105	66-105	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	216	226	105	63-127	
76-13-1	Trichlorotrifluoroethane	216	213	99	59-109	
75-15-0	Carbon Disulfide	218	209	96	67-109	
156-60-5	trans-1,2-Dichloroethene	214	238	111	70-115	
75-34-3	1,1-Dichloroethane	216	219	101	66-106	
1634-04-4	Methyl tert-Butyl Ether	214	239	112	67-109	L
78-93-3	2-Butanone (MEK)	208	234	113	71-116	
156-59-2	cis-1,2-Dichloroethene	211	220	104	67-110	
110-54-3	n-Hexane	216	216	100	60-115	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
 Reported results are shown in concentration units and as a result of the calculation, may vary slightly.
 L = Laboratory control sample recovery outside the specified limits, results may be biased high.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE SUMMARY

Page 2 of 3

Client: Wood

Client Sample ID: Lab Control Sample

Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1901263

ALS Sample ID: P190314-LCS

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8

Analyst: Raneem Sahtah

Sample Type: 1.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 3/14/19

Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount µg/m ³	Result µg/m ³	% Recovery	ALS Acceptance Limits	Data Qualifier
67-66-3	Chloroform	217	223	103	66-105	
107-06-2	1,2-Dichloroethane	215	232	108	60-110	
71-55-6	1,1,1-Trichloroethane	215	227	106	64-108	
71-43-2	Benzene	211	211	100	67-106	
56-23-5	Carbon Tetrachloride	212	223	105	64-112	
110-82-7	Cyclohexane	416	423	102	67-110	
78-87-5	1,2-Dichloropropane	216	221	102	66-112	
75-27-4	Bromodichloromethane	215	239	111	67-113	
79-01-6	Trichloroethene	213	216	101	66-108	
123-91-1	1,4-Dioxane	214	221	103	70-116	
10061-01-5	cis-1,3-Dichloropropene	214	245	114	75-120	
108-10-1	4-Methyl-2-pentanone	209	227	109	65-124	
10061-02-6	trans-1,3-Dichloropropene	213	258	121	77-123	
79-00-5	1,1,2-Trichloroethane	215	231	107	68-112	
108-88-3	Toluene	212	209	99	62-111	
591-78-6	2-Hexanone	214	215	100	59-128	
124-48-1	Dibromochloromethane	213	246	115	67-123	
106-93-4	1,2-Dibromoethane	216	239	111	66-122	
127-18-4	Tetrachloroethene	213	216	101	55-120	
108-90-7	Chlorobenzene	215	214	100	61-114	
100-41-4	Ethylbenzene	212	214	101	64-113	
179601-23-1	m,p-Xylenes	426	435	102	64-114	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.

Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE SUMMARY

Page 3 of 3

Client: Wood

Client Sample ID: Lab Control Sample

Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1901263

ALS Sample ID: P190314-LCS

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8

Analyst: Raneem Sahtah

Sample Type: 1.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 3/14/19

Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount µg/m ³	Result µg/m ³	% Recovery	ALS Acceptance Limits	Data Qualifier
75-25-2	Bromoform	213	248	116	65-132	
100-42-5	Styrene	212	238	112	67-124	
95-47-6	o-Xylene	214	221	103	65-114	
79-34-5	1,1,2,2-Tetrachloroethane	214	229	107	66-119	
98-82-8	Cumene	214	220	103	61-116	
622-96-8	4-Ethyltoluene	214	220	103	63-124	
108-67-8	1,3,5-Trimethylbenzene	214	216	101	60-117	
95-63-6	1,2,4-Trimethylbenzene	215	231	107	61-122	
541-73-1	1,3-Dichlorobenzene	216	231	107	61-125	
106-46-7	1,4-Dichlorobenzene	216	228	106	59-123	
95-50-1	1,2-Dichlorobenzene	216	235	109	61-126	
96-12-8	1,2-Dibromo-3-chloropropane	209	247	118	67-138	
120-82-1	1,2,4-Trichlorobenzene	214	244	114	62-141	
87-68-3	Hexachlorobutadiene	209	212	101	49-131	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 1

Client: Wood
Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1901263

Method Blank Summary

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8
Analyst: Raneem Sahtah
Sampling Media: 1.0 L Summa Canister(s)
Test Notes:

Lab File ID: 03141906.D
Date Analyzed: 3/14/19
Time Analyzed: 07:58

Client Sample ID	ALS Sample ID	Lab File ID	Time Analyzed
Lab Control Sample	P190314-LCS	03141910.D	10:10
EP-E2	P1901263-001	03141936.D	00:55
EP-C5	P1901263-002	03141935.D	00:22

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 1

Client: Wood
Client Project ID: LAF Lockheed Martin Great Neck / 3617187448

ALS Project ID: P1901263

Internal Standard Area and RT Summary

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8
Analyst: Raneem Sahtah
Sampling Media: 1.0 L Summa Canister(s)
Test Notes:

Lab File ID: 03141902.D
Date Analyzed: 3/14/19
Time Analyzed: 03:05

	IS1 (BCM)		IS2 (DFB)		IS3 (CBZ)	
	AREA	#	RT	#	AREA	#
24 Hour Standard	157596	11.24	666959	13.36	347689	17.67
Upper Limit	220634	11.57	933743	13.69	486765	18.00
Lower Limit	94558	10.91	400175	13.03	208613	17.34

Client Sample ID						
01	Method Blank	144524	11.22	634081	13.34	336191
02	Lab Control Sample	144631	11.24	613609	13.36	323842
03	EP-E2	123337	11.23	523390	13.35	273137
04	EP-C5	115495	11.22	477529	13.35	260219
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

IS1 (BCM) = Bromochloromethane

IS2 (DFB) = 1,4-Difluorobenzene

IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = 140% of internal standard area

AREA LOWER LIMIT = 60% of internal standard area

RT UPPER LIMIT = 0.33 minutes of internal standard RT

RT LOWER LIMIT = 0.33 minutes of internal standard RT

Column used to flag values outside QC limits with an I.

I = Internal standard not within the specified limits. See case narrative.



ATTACHMENT 4
AIR EMISSIONS ANALYSIS

LA Fitness Northwest Portion Sub-Slab Depressurization System
Commissioning Technical Memorandum
Attachment 4 - Air Emissions Analysis
Former Unisys Facility, Lake Success, New York

Calc by: RTB 3/26/2019
Check by: WJW 3/29/2019

Results in micrograms per cubic meter (µg/m3)												
Analyte	CAS No.	Sub-Slab Vapor (Note 1)	Baseline		Day 1 (2/7/2019)		Day 7 (2/14/2019)		Day 14 (2/21/2019)		Day 28 (3/7/2019)	
			EP-E2	EP-C5	EP-E2	EP-C5	EP-E2	EP-C5	EP-E2	EP-C5	EP-E2	EP-C5
1,1,1-Trichloroethane (1,1,1-TCA)	71-55-6	13	19	4	2.6	4.8	2.9	5	2.7	1.8	3	2.3
1,1-Dichloroethene (1,1-DCE)	75-35-4	0.79	5.4	5.9	4.6	4.8	4.4	5	4.7	1.8	2.3	2.3
Carbon Tetrachloride	56-23-5	0.91	0.99	1.1	0.86	0.89	0.82	0.93	0.88	0.39	0.44	0.43
cis 1,2-Dichloroethene (DCE)	156-59-2	47	5.3	5.8	4.5	4.7	4.3	4.9	4.6	1.8	2.2	2.3
Methylene Chloride	75-09-2	3.7	5.4	5.9	4.6	4.8	4.4	5	4.7	16	2.3	2.3
Tetrachloroethene (PCE)	127-18-4	260	15	3.2	7.6	4	6.5	2.9	8.3	3.5	7.6	3.9
Trichloroethene (TCE)	79-01-6	380	210	86	53	24	44	14	43	9.8	37	8.8
Vinyl chloride	75-01-4	3	1.1	1.2	0.94	0.97	0.9	1	0.96	0.37	0.46	0.47
Flow Rate (cubic feet per minute)		NA	NA	NA	60	50	60	50	60	50	70	70

Notes:

1. Values are conservatively based on the highest sub-slab soil vapor sample concentrations detected in sub-slab soil vapor samples collected from the LA Fitness building for each individual constituent based on a review of sub-slab soil vapor analytical data collected in November 2017 and March 2018.
2. Annual Guideline Concentration (AGCs) values and Short-Term Guideline Concentrations (SGCs) were obtained from the August 10, 2016 Guidelines for the Evaluation and Control of Ambient Air Contaminants Under Part 212 prepared by the New York State Department of Environmental Conservation.
3. Method Reporting Limit used for Non-detect results.

		Calculated Emissions Rate											
		Day 1			Day 7			Day 14			Day 28		
		Max Result (µg/m3)	Total Flow (cfm)	Mass Emissions (lbs/day)	Max Result (µg/m3)	Flow (cfm)	Mass Emissions (lbs/day)	Max Result (µg/m3)	Flow (cfm)	Mass Emissions (lbs/day)	Max Result (µg/m3)	Flow (cfm)	Mass Emissions (lbs/day)
Analyte	CAS No.												
1,1,1-Trichloroethane (1,1,1-TCA)	71-55-6	4.8	110	4.74E-05	5	110	4.93E-05	2.7	110	2.66E-05	2.3	140	2.89E-05
1,1-Dichloroethene (1,1-DCE)	75-35-4	4.8	110	4.74E-05	5	110	4.93E-05	4.7	110	4.64E-05	2.3	140	2.89E-05
Carbon Tetrachloride	56-23-5	0.89	110	8.78E-06	0.93	110	9.18E-06	0.88	110	8.68E-06	0.43	140	5.4E-06
cis 1,2-Dichloroethene (DCE)	156-59-2	4.7	110	4.64E-05	4.9	110	4.84E-05	4.6	110	4.54E-05	2.3	140	2.89E-05
Methylene Chloride	75-09-2	4.8	110	4.74E-05	5	110	4.93E-05	16	110	0.000158	2.3	140	2.89E-05
Tetrachloroethene (PCE)	127-18-4	7.6	110	7.5E-05	6.5	110	6.41E-05	8.3	110	8.19E-05	3.9	140	4.9E-05
Trichloroethene (TCE)	79-01-6	53	110	0.000523	44	110	0.000434	43	110	0.000424	8.8	140	0.000111
Vinyl chloride	75-01-4	0.97	110	9.57E-06	1	110	9.87E-06	0.96	110	9.47E-06	0.47	140	5.9E-06

Notes:

Highest of the two EP concentrations used to calculate emission rate and AGC/SGC. For example: On Day 1, 4.8 ug/m3 for 1,1,1-TCA is used to calculate emission rate from a combined stack.

LA Fitness Northwest Portion Sub-Slab Depressurization System
Commissioning Technical Memorandum
Attachment 4 - Air Emissions Analysis
Former Unisys Facility, Lake Success, New York

Standard Point Source Method (Appendix B – Division of Air Resources):

Hs (Height of Stack) = 34' Hb (Height of Building) = 32'

Hs/Hb = 1.1 < 1.5 No Plume Rise

Therefore effective stack height = Hs, H_e= 34 feet

Calc by: RTB 3/26/2019

Check by: WJW 3/29/2019

		Comparison to Annual Guideline Concentration (AGC)								
		AGC (ug/m3)	Maximum Annual Impact Concentration, Ca (ug/m3)							
			Day 1		Day 7		Day 14		Day 28	
Analyte	CAS No.									
1,1,1-Trichloroethane (1,1,1-TCA)	71-55-6	5000	3.72E-05	OK	3.87E-05	OK	2.09E-05	OK	2.27E-05	OK
1,1-Dichloroethene (1,1-DCE)	75-35-4	200	3.72E-05	OK	3.87E-05	OK	3.64E-05	OK	2.27E-05	OK
Carbon Tetrachloride	56-23-5	0.17	6.89E-06	OK	7.2E-06	OK	6.81E-06	OK	4.24E-06	OK
cis 1,2-Dichloroethene (DCE)	156-59-2	63	3.64E-05	OK	3.79E-05	OK	3.56E-05	OK	2.27E-05	OK
Methylene Chloride	75-09-2	60	3.72E-05	OK	3.87E-05	OK	0.000124	OK	2.27E-05	OK
Tetrachloroethene (PCE)	127-18-4	4	5.88E-05	OK	5.03E-05	OK	6.43E-05	OK	3.84E-05	OK
Trichloroethene (TCE)	79-01-6	0.2	0.00041	OK	0.000341	OK	0.000333	OK	8.67E-05	OK
Vinyl chloride	75-01-4	0.11	7.51E-06	OK	7.74E-06	OK	7.43E-06	OK	4.63E-06	OK

Notes:

Ca = Maximum Annual Impact Concentration

$$Ca = 6 * Q_a / H_e^{2.25}$$

Q_a = Emission Rate in pounds per year calculated above

Calculated concentration less than AGC =

OK

		Comparison to Short-Term Guideline Concentration (SGC)								
		SGC (ug/m3)	Maximum Short-term Impact Concentration, Cst (µg/m3)							
			Day 1		Day 7		Day 14		Day 28	
Analyte	CAS No.									
1,1,1-Trichloroethane (1,1,1-TCA)	71-55-6	9000	0.002413	OK	0.002513	OK	0.001357	OK	0.001471	OK
1,1-Dichloroethene (1,1-DCE)	75-35-4	NL	0.002413	NA	0.002513	NA	0.002362	NA	0.001471	NA
Carbon Tetrachloride	56-23-5	1900	0.000447	OK	0.000467	OK	0.000442	OK	0.000275	OK
cis 1,2-Dichloroethene (DCE)	156-59-2	NL	0.002362	NA	0.002463	NA	0.002312	NA	0.001471	NA
Methylene Chloride	75-09-2	14000	0.002413	OK	0.002513	OK	0.008042	OK	0.001471	OK
Tetrachloroethene (PCE)	127-18-4	300	0.00382	OK	0.003267	OK	0.004172	OK	0.002495	OK
Trichloroethene (TCE)	79-01-6	20	0.02664	OK	0.022116	OK	0.021613	OK	0.00563	OK
Vinyl chloride	75-01-4	180000	0.000488	OK	0.000503	OK	0.000483	OK	0.000301	OK

Notes:

$$Cst (\mu g/m^3) = Cp * 65$$

$$Cp = \text{Maximum Potential Annual Impact} = 52,500 * Q / H_e^{2.25}$$

Q = Emission Rate in pounds per hour calculated above

Calculated concentration less than SGC =

OK

APPENDIX B
DATA USABILITY SUMMARY REPORT

**DATA USABILITY SUMMARY REPORT
SVI MONITORING – MARCH 2019 IA/SS SAMPLING
LOCKHEED MARTIN CORPORATION
FORMER UNISYS FACILITY -- GREAT NECK
LAKE SUCCESS, NEW YORK**

1.0 INTRODUCTION

Vapor samples were collected at the Lockheed Martin Corporation Former Unisys Facility -- Great Neck Site in March 2019 and submitted to ALS Environmental located in Simi Valley, California (ALS) for analysis. Samples were analyzed by the following United States Environmental Protection Agency (USEPA) method:

- Volatile Organic Compounds (VOCs) by Method TO-15

A Data Usability Summary Report (DUSR) review was completed based on the New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation guidance (NYSDEC, 2010). Sample event information included in this DUSR is presented in the following Tables:

- Table 1 – Summary of Samples and Analytical Method
- Table 2 – Summary of Analytical Results
- Table 3 – Summary of Qualification Actions

Laboratory deliverables included:

- Category B deliverables as defined in the NYSDEC Analytical Services Protocols (NYSDEC, 2005).

The DUSR review included the following evaluations as applicable. A table of the project control limits is presented in Attachment A. Applicable laboratory QC summary forms are included in Attachment B to document QC outliers associated with qualification actions.

- Lab Report Narrative Review
- Data Package Completeness and COC records (Table 1 verification)
- Sample Preservation and Holding Times
- Instrument Calibration (report narrative/lab-qualifier evaluation)
- QC Blanks
- Laboratory Control Samples (LCS)
- Surrogate Spikes (if applicable)
- Field Duplicates
- Target Analyte Identification and Quantitation
- Raw Data (chromatograms), Calculation Checks and Transcription Verifications
- Reporting Limits
- Electronic Data Qualification and Verification

Data qualification actions are applied when necessary based on general procedures in USEPA validation guidelines (USEPA, 2006) and the judgment of the project chemist. The following laboratory qualifiers are used in the final data presentation:

U = target analyte is not detected above the reported detection limit

J = concentration is estimated

UJ = target analyte is not detected and value is estimated

Results are interpreted to be usable as reported by the laboratory or as qualified in the following sections.

2.0 POTENTIAL DATA LIMITATIONS

Based on the DUSR review the majority of data meet the data quality objectives; however, the following potential limitations were identified:

Field Duplicates

Field duplicates (IA-DUP, SS-DUP) were collected for the following locations:

IA-E16

SS-G5

All results showed good agreement for field duplicate pairs IA-E16/IA-DUP and SS-G5/SS-DUP, with the exception of carbon disulfide in IA-E16/IA-DUP. Inconsistent results were reported for carbon disulfide in IA-E16 and associated field duplicate IA-DUP. Carbon disulfide was reported at a concentration greater than the reporting limit in the field duplicate but was not detected in sample IA-E16. The positive and non-detect results for carbon disulfide in IA-E16 and IA-DUP were qualified estimated (J/UJ). Qualified results are summarized in Table 3 with reason code FD.

3.0 ADDITIONAL QC EXCEEDANCES AND OBSERVATIONS

There were no other additional observations or quality control exceedances not specifically addressed above (Section 2.0).

Reference:

New York State Department of Environmental Conservation (NYSDEC), 2005. "Analytical Services Protocols"; June 2005.

NYSDEC, 2010. "Technical Guidance for Site Investigation and Remediation-Appendix 2B"; DER-10; Division of Environmental Remediation; May 2010.

USEPA Region 2, 2006. "Validating Volatile Organic Analysis of Ambient Air in Canister by Method TO-15"; SOP # HW-31, Revision 4, Hazardous Waste Support Branch; October 2006.

*Lockheed Martin Corporation
Former Unisys Facility -- Great Neck
Lake Success, New York
AMEC E&E, PC*

Data Validator: Julie Ricardi

April 16, 2019

A handwritten signature in black ink that reads "Julie Ricardi". The signature is written in a cursive, flowing style.

Reviewed by: Bradley B. LaForest, NRCC-EAC

April 17, 2019

A handwritten signature in blue ink that reads "Bradley B. LaForest". The signature is written in a cursive, flowing style.

TABLE 1 - SUMMARY OF SAMPLES AND ANALYTICAL METHODS
DATA USABILITY SUMMARY REPORT
SVI MONITORING – MARCH 2019 IA/SS SAMPLING
LOCKHEED MARTIN CORPORATION
FORMER UNISYS FACILITY -- GREAT NECK
LAKE SUCCESS, NEW YORK

SDG	Location	Field Sample ID	Sample Date	Media	Lab Sample ID	Method Class	VOCs
						Analysis Method Fraction QC Code	TO-15 Total Count
P1901438	AA-01	AA-01	3/14/2019	AIR	P1901438-001	FS	64
P1901438	IA-C20F	IA-C20	3/14/2019	AIR	P1901438-010	FS	64
P1901438	IA-C7F	IA-C7	3/14/2019	AIR	P1901438-003	FS	64
P1901438	IA-E16F	IA-DUP	3/14/2019	AIR	P1901438-014	FD	64
P1901438	IA-D13F	IA-D13	3/14/2019	AIR	P1901438-006	FS	64
P1901438	IA-E10F	IA-E10	3/14/2019	AIR	P1901438-005	FS	64
P1901438	IA-E16F	IA-E16	3/14/2019	AIR	P1901438-008	FS	64
P1901438	IA-E21.5F	IA-E21.5	3/14/2019	AIR	P1901438-011	FS	64
P1901438	IA-E2F	IA-E2	3/14/2019	AIR	P1901438-002	FS	64
P1901438	IA-F13F	IA-F13	3/14/2019	AIR	P1901438-007	FS	64
P1901438	IA-G18F	IA-G18	3/15/2019	AIR	P1901438-009	FS	64
P1901438	IA-G5F	IA-G5	3/14/2019	AIR	P1901438-004	FS	64
P1901438	IA-H21F	IA-H21	3/14/2019	AIR	P1901438-012	FS	64
P1901438	IA-I12	IA-I12	3/14/2019	AIR	P1901438-013	FS	64
P1901438	SS-C20F	SS-C20	3/14/2019	AIR	P1901438-021	FS	64
P1901438	SS-D13F	SS-D13	3/14/2019	AIR	P1901438-017	FS	64
P1901438	SS-E10F	SS-E10	3/14/2019	AIR	P1901438-016	FS	64
P1901438	SS-E16F	SS-E16	3/14/2019	AIR	P1901438-019	FS	64
P1901438	SS-G5F	SS-DUP	3/14/2019	AIR	P1901438-024	FD	64
P1901438	SS-E21.5F	SS-E21.5	3/14/2019	AIR	P1901438-022	FS	64
P1901438	SS-F13F	SS-F13	3/14/2019	AIR	P1901438-018	FS	64
P1901438	SS-G18F	SS-G18	3/14/2019	AIR	P1901438-020	FS	64
P1901438	SS-G5F	SS-G5	3/14/2019	AIR	P1901438-015	FS	64
P1901438	SS-H21F	SS-H21	3/14/2019	AIR	P1901438-023	FS	64

Notes:

FD = Field Duplicate

FS = Field Sample

QC = Quality Control

SDG = Sample Delivery Group

VOC = Volatile Organic Compound

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
SVI MONITORING – MARCH 2019 IA/SS SAMPLING
LOCKHEED MARTIN CORPORATION
FORMER UNISYS FACILITY -- GREAT NECK
LAKE SUCCESS, NEW YORK

		SDG	P1901438		P1901438		P1901438		P1901438	
		Location	AA-01		IA-C20F		IA-C7F		IA-D13F	
		Sample Date	3/14/2019		3/14/2019		3/14/2019		3/14/2019	
		Sample ID	AA-01		IA-C20		IA-C7		IA-D13	
		QC Code	FS		FS		FS		FS	
Method	Parameter	Unit	Final Result	Final Qual	Final Result	Final Qual	Final Result	Final Qual	Final Result	Final Qual
EPA TO-15	1,1,1-Trichloroethane	UG/M3	0.85	U	0.9	U	0.9	U	0.9	U
EPA TO-15	1,1,2,2-Tetrachloroethane	UG/M3	0.83	U	0.89	U	0.89	U	0.89	U
EPA TO-15	1,1,2-Trichloro-1,2,2-Trifluoroethane	UG/M3	0.48	J	0.48	J	0.51	J	0.46	J
EPA TO-15	1,1,2-Trichloroethane	UG/M3	0.85	U	0.9	U	0.9	U	0.9	U
EPA TO-15	1,1-Dichloroethane	UG/M3	0.82	U	0.87	U	0.87	U	0.87	U
EPA TO-15	1,1-Dichloroethene	UG/M3	0.85	U	0.9	U	0.9	U	0.9	U
EPA TO-15	1,2,4-Trichlorobenzene	UG/M3	0.83	U	0.89	U	0.89	U	0.89	U
EPA TO-15	1,2,4-Trimethylbenzene	UG/M3	0.23	J	0.16	J	0.89	U	0.19	J
EPA TO-15	1,2-Dibromo-3-chloropropane	UG/M3	0.82	U	0.87	U	0.87	U	0.87	U
EPA TO-15	1,2-Dibromoethane	UG/M3	0.85	U	0.9	U	0.9	U	0.9	U
EPA TO-15	1,2-Dichloro-1,1,2,2-tetrafluoroethane	UG/M3	0.8	U	0.85	U	0.85	U	0.85	U
EPA TO-15	1,2-Dichlorobenzene	UG/M3	0.85	U	0.9	U	0.9	U	0.9	U
EPA TO-15	1,2-Dichloroethane	UG/M3	0.83	U	0.89	U	0.89	U	0.89	U
EPA TO-15	1,2-Dichloroethene (total)	UG/M3	0.83	U	0.89	U	0.89	U	0.89	U
EPA TO-15	1,2-Dichloropropane	UG/M3	0.85	U	0.9	U	0.43	J	0.9	U
EPA TO-15	1,3,5-Trimethylbenzene	UG/M3	0.83	U	0.89	U	0.89	U	0.89	U
EPA TO-15	1,3-Butadiene	UG/M3	0.82	U	0.87	U	0.87	U	0.87	U
EPA TO-15	1,3-Dichlorobenzene	UG/M3	0.85	U	0.9	U	0.9	U	0.9	U
EPA TO-15	1,4-Dichlorobenzene	UG/M3	0.85	U	3.2		4.6		2.7	
EPA TO-15	1,4-Dioxane	UG/M3	0.83	U	0.44	J	0.11	J	0.13	J
EPA TO-15	2-Butanone	UG/M3	0.82	J	2.5		4.1		5.9	
EPA TO-15	2-Hexanone	UG/M3	0.11	J	0.33	J	0.68	J	0.3	J
EPA TO-15	2-Propanol	UG/M3	0.43	J	67		81		88	
EPA TO-15	4-Ethyltoluene	UG/M3	0.83	U	0.89	U	0.89	U	0.89	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
SVI MONITORING – MARCH 2019 IA/SS SAMPLING
LOCKHEED MARTIN CORPORATION
FORMER UNISYS FACILITY -- GREAT NECK
LAKE SUCCESS, NEW YORK

		SDG	P1901438	P1901438	P1901438	P1901438
		Location	AA-01	IA-C20F	IA-C7F	IA-D13F
		Sample Date	3/14/2019	3/14/2019	3/14/2019	3/14/2019
		Sample ID	AA-01	IA-C20	IA-C7	IA-D13
		QC Code	FS	FS	FS	FS
Method	Parameter	Unit	Final Result	Final Qual	Final Result	Final Qual
EPA TO-15	4-Methyl-2-pentanone	UG/M3	0.83 U	0.17 J	0.37 J	0.27 J
EPA TO-15	Acetic acid, methyl ester	UG/M3	0.79 U	0.84 U	0.61 J	0.84 U
EPA TO-15	Acetone	UG/M3	5 J	39	58	47
EPA TO-15	Allyl chloride	UG/M3	0.83 U	0.89 U	0.89 U	0.89 U
EPA TO-15	Benzene	UG/M3	0.53 J	0.5 J	0.53 J	0.53 J
EPA TO-15	Bromodichloromethane	UG/M3	0.83 U	0.16 J	0.25 J	0.26 J
EPA TO-15	Bromoform	UG/M3	0.83 U	0.89 U	0.89 U	0.89 U
EPA TO-15	Bromomethane	UG/M3	0.79 U	0.84 U	0.84 U	0.84 U
EPA TO-15	Carbon disulfide	UG/M3	1.7 U	2.3	1.8 U	4.1
EPA TO-15	Carbon tetrachloride	UG/M3	0.4	0.4	0.36	0.44
EPA TO-15	Chlorobenzene	UG/M3	0.83 U	0.89 U	0.89 U	0.89 U
EPA TO-15	Chlorodifluoromethane	UG/M3	0.61 J	1.6	1.3	1.5
EPA TO-15	Chloroethane	UG/M3	0.8 U	0.85 U	0.12 J	0.85 U
EPA TO-15	Chloroform	UG/M3	0.85 U	3.6	4.7	5
EPA TO-15	Chloromethane	UG/M3	0.34 J	0.44 J	0.41 J	0.56 J
EPA TO-15	cis-1,2-Dichloroethene	UG/M3	0.83 U	0.89 U	0.89 U	0.89 U
EPA TO-15	cis-1,3-Dichloropropene	UG/M3	0.88 U	0.94 U	0.94 U	0.94 U
EPA TO-15	Cyclohexane	UG/M3	1.6 U	1.7 U	0.36 J	1.7 U
EPA TO-15	Dibromochloromethane	UG/M3	0.85 U	0.9 U	0.9 U	0.9 U
EPA TO-15	Dichlorodifluoromethane	UG/M3	2.3	2.4	2.4	2.4
EPA TO-15	Difluoroethane	UG/M3	0.79 U	6.3	12	11
EPA TO-15	Ethylbenzene	UG/M3	0.26 J	0.15 J	0.15 J	0.15 J
EPA TO-15	Freon 115	UG/M3	0.79 U	0.84 U	0.84 U	0.84 U
EPA TO-15	Freon 123	UG/M3	0.79 U	0.84 U	0.84 U	0.84 U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
SVI MONITORING – MARCH 2019 IA/SS SAMPLING
LOCKHEED MARTIN CORPORATION
FORMER UNISYS FACILITY -- GREAT NECK
LAKE SUCCESS, NEW YORK

		SDG	P1901438		P1901438		P1901438		P1901438	
		Location	AA-01		IA-C20F		IA-C7F		IA-D13F	
		Sample Date	3/14/2019		3/14/2019		3/14/2019		3/14/2019	
		Sample ID	AA-01		IA-C20		IA-C7		IA-D13	
		QC Code	FS		FS		FS		FS	
Method	Parameter	Unit	Final Result	Final Qual	Final Result	Final Qual	Final Result	Final Qual	Final Result	Final Qual
EPA TO-15	Hexachlorobutadiene	UG/M3	0.83	U	0.89	U	0.89	U	0.89	U
EPA TO-15	Hexane	UG/M3	0.3	J	0.3	J	0.37	J	0.27	J
EPA TO-15	Isopropylbenzene	UG/M3	0.83	U	0.89	U	0.89	U	0.89	U
EPA TO-15	Methyl cyclohexane	UG/M3	0.79	U	0.84	U	0.84	U	0.84	U
EPA TO-15	Methyl Tertbutyl Ether	UG/M3	0.85	U	0.9	U	0.9	U	0.9	U
EPA TO-15	Methylene chloride	UG/M3	0.32	J	0.38	J	0.52	J	0.38	J
EPA TO-15	Styrene	UG/M3	0.83	U	0.89	U	0.89	U	0.89	U
EPA TO-15	Tetrachloroethene	UG/M3	0.25	J	0.29	J	0.32	J	0.3	J
EPA TO-15	Toluene	UG/M3	1.4		1.3		4.4		1.3	
EPA TO-15	trans-1,2-Dichloroethene	UG/M3	0.83	U	0.89	U	0.89	U	0.89	U
EPA TO-15	trans-1,3-Dichloropropene	UG/M3	0.83	U	0.89	U	0.89	U	0.89	U
EPA TO-15	Trichloroethene	UG/M3	0.17	U	0.18	U	0.18	U	0.18	U
EPA TO-15	Trichlorofluoromethane	UG/M3	1.2		1.2		1.2		1.2	
EPA TO-15	Vinyl chloride	UG/M3	0.17	U	0.18	U	0.18	U	0.18	U
EPA TO-15	Xylene, o	UG/M3	0.23	J	0.18	J	0.14	J	0.19	J
EPA TO-15	Xylenes (m&p)	UG/M3	0.53	J	0.47	J	0.44	J	0.49	J

Notes:

FS = Field Sample

FD = Field Duplicate

UG/M3 = micrograms per cubic meter of air

U = Not detected J = Value is estimated

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
SVI MONITORING – MARCH 2019 IA/SS SAMPLING
LOCKHEED MARTIN CORPORATION
FORMER UNISYS FACILITY -- GREAT NECK
LAKE SUCCESS, NEW YORK

			SDG		P1901438		P1901438		P1901438		P1901438	
			Location		IA-E10F		IA-E16F		IA-E16F		IA-E21.5F	
			Sample Date		3/14/2019		3/14/2019		3/14/2019		3/14/2019	
			Sample ID		IA-E10		IA-E16		IA-DUP		IA-E21.5	
			QC Code		FS		FS		FD		FS	
Method	Parameter	Unit	Final Result	Final Qual	Final Result	Final Qual	Final Result	Final Qual	Final Result	Final Qual	Final Result	Final Qual
EPA TO-15	1,1,1-Trichloroethane	UG/M3	0.73	U	0.86	U	0.81	U	0.95	U		
EPA TO-15	1,1,2,2-Tetrachloroethane	UG/M3	0.72	U	0.84	U	0.8	U	0.93	U		
EPA TO-15	1,1,2-Trichloro-1,2,2-Trifluoroethane	UG/M3	0.45	J	0.49	J	0.49	J	0.47	J		
EPA TO-15	1,1,2-Trichloroethane	UG/M3	0.73	U	0.86	U	0.81	U	0.95	U		
EPA TO-15	1,1-Dichloroethane	UG/M3	0.71	U	0.83	U	0.78	U	0.91	U		
EPA TO-15	1,1-Dichloroethene	UG/M3	0.73	U	0.86	U	0.81	U	0.95	U		
EPA TO-15	1,2,4-Trichlorobenzene	UG/M3	0.72	U	0.84	U	0.8	U	0.93	U		
EPA TO-15	1,2,4-Trimethylbenzene	UG/M3	1		0.23	J	0.36	J	0.23	J		
EPA TO-15	1,2-Dibromo-3-chloropropane	UG/M3	0.71	U	0.83	U	0.78	U	0.91	U		
EPA TO-15	1,2-Dibromoethane	UG/M3	0.73	U	0.86	U	0.81	U	0.95	U		
EPA TO-15	1,2-Dichloro-1,1,2,2-tetrafluoroethane	UG/M3	0.69	U	0.81	U	0.77	U	0.89	U		
EPA TO-15	1,2-Dichlorobenzene	UG/M3	0.73	U	0.86	U	0.81	U	0.95	U		
EPA TO-15	1,2-Dichloroethane	UG/M3	0.72	U	0.84	U	0.8	U	0.93	U		
EPA TO-15	1,2-Dichloroethene (total)	UG/M3	0.72	U	0.84	U	0.8	U	0.93	U		
EPA TO-15	1,2-Dichloropropane	UG/M3	0.47	J	0.86	U	0.81	U	0.95	U		
EPA TO-15	1,3,5-Trimethylbenzene	UG/M3	0.27	J	0.84	U	0.8	U	0.93	U		
EPA TO-15	1,3-Butadiene	UG/M3	0.71	U	0.83	U	0.78	U	0.91	U		
EPA TO-15	1,3-Dichlorobenzene	UG/M3	0.73	U	0.86	U	0.81	U	0.95	U		
EPA TO-15	1,4-Dichlorobenzene	UG/M3	11		3.1		3.6		2.9			
EPA TO-15	1,4-Dioxane	UG/M3	0.72	U	0.84	U	0.14	J	0.93	U		
EPA TO-15	2-Butanone	UG/M3	1.5		1.6	J	2.1		1.1	J		
EPA TO-15	2-Hexanone	UG/M3	0.14	J	0.1	J	0.29	J	0.95	U		
EPA TO-15	2-Propanol	UG/M3	81		77		79		83			
EPA TO-15	4-Ethyltoluene	UG/M3	0.16	J	0.84	U	0.8	U	0.93	U		

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
SVI MONITORING – MARCH 2019 IA/SS SAMPLING
LOCKHEED MARTIN CORPORATION
FORMER UNISYS FACILITY -- GREAT NECK
LAKE SUCCESS, NEW YORK

		SDG	P1901438		P1901438		P1901438		P1901438	
		Location	IA-E10F		IA-E16F		IA-E16F		IA-E21.5F	
		Sample Date	3/14/2019		3/14/2019		3/14/2019		3/14/2019	
		Sample ID	IA-E10		IA-E16		IA-DUP		IA-E21.5	
		QC Code	FS		FS		FD		FS	
Method	Parameter	Unit	Final Result	Final Qual	Final Result	Final Qual	Final Result	Final Qual	Final Result	Final Qual
EPA TO-15	4-Methyl-2-pentanone	UG/M3	0.18 J		0.14 J		0.18 J		0.93 U	
EPA TO-15	Acetic acid, methyl ester	UG/M3	0.48 J		0.8 U		0.75 U		0.88 U	
EPA TO-15	Acetone	UG/M3	46		35		39		34	
EPA TO-15	Allyl chloride	UG/M3	0.72 U		0.84 U		0.8 U		0.93 U	
EPA TO-15	Benzene	UG/M3	0.49 J		0.49 J		0.68 J		0.49 J	
EPA TO-15	Bromodichloromethane	UG/M3	0.22 J		0.19 J		0.21 J		0.18 J	
EPA TO-15	Bromoform	UG/M3	0.72 U		0.84 U		0.8 U		0.93 U	
EPA TO-15	Bromomethane	UG/M3	0.68 U		0.8 U		0.75 U		0.88 U	
EPA TO-15	Carbon disulfide	UG/M3	1.5 U		1.7 UJ		2.3 J		1.9 U	
EPA TO-15	Carbon tetrachloride	UG/M3	0.4		0.42		0.44		0.43	
EPA TO-15	Chlorobenzene	UG/M3	0.72 U		0.84 U		0.8 U		0.93 U	
EPA TO-15	Chlorodifluoromethane	UG/M3	0.99		1.6		1.5		1.7	
EPA TO-15	Chloroethane	UG/M3	0.69 U		0.81 U		0.77 U		0.89 U	
EPA TO-15	Chloroform	UG/M3	4.4		4.4		4.6		4.4	
EPA TO-15	Chloromethane	UG/M3	0.29 J		0.39 J		0.32 J		0.43 J	
EPA TO-15	cis-1,2-Dichloroethene	UG/M3	0.72 U		0.84 U		0.8 U		0.93 U	
EPA TO-15	cis-1,3-Dichloropropene	UG/M3	0.76 U		0.89 U		0.84 U		0.98 U	
EPA TO-15	Cyclohexane	UG/M3	1.4 U		1.6 U		0.28 J		1.8 U	
EPA TO-15	Dibromochloromethane	UG/M3	0.73 U		0.86 U		0.81 U		0.95 U	
EPA TO-15	Dichlorodifluoromethane	UG/M3	2.2		2.4		2.3		2.4	
EPA TO-15	Difluoroethane	UG/M3	9.5		8.1		7.9		6.8	
EPA TO-15	Ethylbenzene	UG/M3	0.2 J		0.17 J		0.25 J		0.15 J	
EPA TO-15	Freon 115	UG/M3	0.68 U		0.8 U		0.75 U		0.88 U	
EPA TO-15	Freon 123	UG/M3	0.68 U		0.8 U		0.75 U		0.88 U	

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
SVI MONITORING – MARCH 2019 IA/SS SAMPLING
LOCKHEED MARTIN CORPORATION
FORMER UNISYS FACILITY -- GREAT NECK
LAKE SUCCESS, NEW YORK

		SDG	P1901438		P1901438		P1901438		P1901438	
		Location	IA-E10F		IA-E16F		IA-E16F		IA-E21.5F	
		Sample Date	3/14/2019		3/14/2019		3/14/2019		3/14/2019	
		Sample ID	IA-E10		IA-E16		IA-DUP		IA-E21.5	
		QC Code	FS		FS		FD		FS	
Method	Parameter	Unit	Final Result	Final Qual	Final Result	Final Qual	Final Result	Final Qual	Final Result	Final Qual
EPA TO-15	Hexachlorobutadiene	UG/M3	0.72	U	0.84	U	0.8	U	0.93	U
EPA TO-15	Hexane	UG/M3	0.24	J	0.25	J	0.45	J	0.25	J
EPA TO-15	Isopropylbenzene	UG/M3	0.72	U	0.84	U	0.8	U	0.93	U
EPA TO-15	Methyl cyclohexane	UG/M3	0.68	U	0.8	U	0.51	J	0.88	U
EPA TO-15	Methyl Tertbutyl Ether	UG/M3	0.73	U	0.86	U	0.81	U	0.95	U
EPA TO-15	Methylene chloride	UG/M3	0.48	J	0.37	J	0.42	J	0.34	J
EPA TO-15	Styrene	UG/M3	0.39	J	0.16	J	0.8	U	0.93	U
EPA TO-15	Tetrachloroethene	UG/M3	0.28	J	0.29	J	0.3	J	0.29	J
EPA TO-15	Toluene	UG/M3	5.1		2.4		2.4		1.2	
EPA TO-15	trans-1,2-Dichloroethene	UG/M3	0.72	U	0.84	U	0.8	U	0.93	U
EPA TO-15	trans-1,3-Dichloropropene	UG/M3	0.72	U	0.84	U	0.8	U	0.93	U
EPA TO-15	Trichloroethene	UG/M3	0.15	U	0.17	U	0.17	U	0.19	U
EPA TO-15	Trichlorofluoromethane	UG/M3	1.1		1.2		1.2		1.2	
EPA TO-15	Vinyl chloride	UG/M3	0.15	U	0.17	U	0.17	U	0.19	U
EPA TO-15	Xylene, o	UG/M3	0.31	J	0.22	J	0.32	J	0.2	J
EPA TO-15	Xylenes (m&p)	UG/M3	0.73	J	0.55	J	0.95	J	0.5	J

Notes:

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UG/M3 = micrograms per cubic meter of air

U = Not detected J = Value is estimated

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
SVI MONITORING – MARCH 2019 IA/SS SAMPLING
LOCKHEED MARTIN CORPORATION
FORMER UNISYS FACILITY -- GREAT NECK
LAKE SUCCESS, NEW YORK

		SDG	P1901438		P1901438		P1901438		P1901438	
		Location	IA-E2F		IA-F13F		IA-G18F		IA-G5F	
		Sample Date	3/14/2019		3/14/2019		3/15/2019		3/14/2019	
		Sample ID	IA-E2		IA-F13		IA-G18		IA-G5	
		QC Code	FS		FS		FS		FS	
Method	Parameter	Unit	Final Result	Final Qual	Final Result	Final Qual	Final Result	Final Qual	Final Result	Final Qual
EPA TO-15	1,1,1-Trichloroethane	UG/M3	0.96	U	0.9	U	0.8	U	0.88	U
EPA TO-15	1,1,2,2-Tetrachloroethane	UG/M3	0.94	U	0.89	U	0.78	U	0.86	U
EPA TO-15	1,1,2-Trichloro-1,2,2-Trifluoroethane	UG/M3	0.46	J	0.5	J	0.49	J	0.5	J
EPA TO-15	1,1,2-Trichloroethane	UG/M3	0.96	U	0.9	U	0.8	U	0.88	U
EPA TO-15	1,1-Dichloroethane	UG/M3	0.93	U	0.87	U	0.77	U	0.85	U
EPA TO-15	1,1-Dichloroethene	UG/M3	0.96	U	0.9	U	0.8	U	0.88	U
EPA TO-15	1,2,4-Trichlorobenzene	UG/M3	0.94	U	0.89	U	0.78	U	0.86	U
EPA TO-15	1,2,4-Trimethylbenzene	UG/M3	0.29	J	0.28	J	0.28	J	0.29	J
EPA TO-15	1,2-Dibromo-3-chloropropane	UG/M3	0.93	U	0.87	U	0.77	U	0.85	U
EPA TO-15	1,2-Dibromoethane	UG/M3	0.96	U	0.9	U	0.8	U	0.88	U
EPA TO-15	1,2-Dichloro-1,1,2,2-tetrafluoroethane	UG/M3	0.91	U	0.85	U	0.75	U	0.83	U
EPA TO-15	1,2-Dichlorobenzene	UG/M3	0.96	U	0.9	U	0.8	U	0.88	U
EPA TO-15	1,2-Dichloroethane	UG/M3	0.94	U	0.89	U	0.78	U	0.86	U
EPA TO-15	1,2-Dichloroethene (total)	UG/M3	0.94	U	0.89	U	0.78	U	0.86	U
EPA TO-15	1,2-Dichloropropane	UG/M3	0.96	U	0.9	U	0.8	U	0.15	J
EPA TO-15	1,3,5-Trimethylbenzene	UG/M3	0.94	U	0.89	U	0.78	U	0.86	U
EPA TO-15	1,3-Butadiene	UG/M3	0.93	U	0.87	U	0.77	U	0.85	U
EPA TO-15	1,3-Dichlorobenzene	UG/M3	0.96	U	0.9	U	0.8	U	0.88	U
EPA TO-15	1,4-Dichlorobenzene	UG/M3	10		8.4		2.3		9.5	
EPA TO-15	1,4-Dioxane	UG/M3	0.2	J	0.89	U	0.78	U	0.22	J
EPA TO-15	2-Butanone	UG/M3	3.1		1.6	J	1.4	J	4.5	
EPA TO-15	2-Hexanone	UG/M3	0.51	J	0.17	J	0.11	J	0.32	J
EPA TO-15	2-Propanol	UG/M3	87		83		88		86	
EPA TO-15	4-Ethyltoluene	UG/M3	0.94	U	0.89	U	0.78	U	0.86	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
SVI MONITORING – MARCH 2019 IA/SS SAMPLING
LOCKHEED MARTIN CORPORATION
FORMER UNISYS FACILITY -- GREAT NECK
LAKE SUCCESS, NEW YORK

		SDG	P1901438		P1901438		P1901438		P1901438	
		Location	IA-E2F		IA-F13F		IA-G18F		IA-G5F	
		Sample Date	3/14/2019		3/14/2019		3/15/2019		3/14/2019	
		Sample ID	IA-E2		IA-F13		IA-G18		IA-G5	
		QC Code	FS		FS		FS		FS	
Method	Parameter	Unit	Final Result	Final Qual	Final Result	Final Qual	Final Result	Final Qual	Final Result	Final Qual
EPA TO-15	4-Methyl-2-pentanone	UG/M3	0.37	J	0.18	J	0.16	J	0.27	J
EPA TO-15	Acetic acid, methyl ester	UG/M3	0.89	U	0.84	U	0.74	U	0.82	U
EPA TO-15	Acetone	UG/M3	58		44		34		55	
EPA TO-15	Allyl chloride	UG/M3	0.94	U	0.89	U	0.78	U	0.86	U
EPA TO-15	Benzene	UG/M3	0.49	J	0.51	J	0.57	J	0.5	J
EPA TO-15	Bromodichloromethane	UG/M3	0.24	J	0.27	J	0.15	J	0.26	J
EPA TO-15	Bromoform	UG/M3	0.94	U	0.89	U	0.78	U	0.86	U
EPA TO-15	Bromomethane	UG/M3	0.89	U	0.84	U	0.74	U	0.82	U
EPA TO-15	Carbon disulfide	UG/M3	2	U	1.8	U	1.6	U	8	
EPA TO-15	Carbon tetrachloride	UG/M3	0.38		0.44		0.42		0.45	
EPA TO-15	Chlorobenzene	UG/M3	0.94	U	0.89	U	0.78	U	0.86	U
EPA TO-15	Chlorodifluoromethane	UG/M3	1.3		1.5		1.1		1.4	
EPA TO-15	Chloroethane	UG/M3	0.91	U	0.85	U	0.75	U	0.83	U
EPA TO-15	Chloroform	UG/M3	4.6		5.4		3.8		4.9	
EPA TO-15	Chloromethane	UG/M3	0.38	J	0.42	J	0.41	J	0.44	J
EPA TO-15	cis-1,2-Dichloroethene	UG/M3	0.94	U	0.89	U	0.78	U	0.86	U
EPA TO-15	cis-1,3-Dichloropropene	UG/M3	1	U	0.94	U	0.83	U	0.91	U
EPA TO-15	Cyclohexane	UG/M3	1.8	U	1.7	U	1.5	U	1.6	U
EPA TO-15	Dibromochloromethane	UG/M3	0.96	U	0.9	U	0.8	U	0.88	U
EPA TO-15	Dichlorodifluoromethane	UG/M3	2.4		2.4		2.4		2.5	
EPA TO-15	Difluoroethane	UG/M3	12		13		7.1		13	
EPA TO-15	Ethylbenzene	UG/M3	0.18	J	0.18	J	0.16	J	0.18	J
EPA TO-15	Freon 115	UG/M3	0.89	U	0.84	U	0.74	U	0.82	U
EPA TO-15	Freon 123	UG/M3	0.89	U	0.84	U	0.74	U	0.82	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
SVI MONITORING – MARCH 2019 IA/SS SAMPLING
LOCKHEED MARTIN CORPORATION
FORMER UNISYS FACILITY -- GREAT NECK
LAKE SUCCESS, NEW YORK

		SDG	P1901438		P1901438		P1901438		P1901438	
		Location	IA-E2F		IA-F13F		IA-G18F		IA-G5F	
		Sample Date	3/14/2019		3/14/2019		3/15/2019		3/14/2019	
		Sample ID	IA-E2		IA-F13		IA-G18		IA-G5	
		QC Code	FS		FS		FS		FS	
Method	Parameter	Unit	Final Result	Final Qual	Final Result	Final Qual	Final Result	Final Qual	Final Result	Final Qual
EPA TO-15	Hexachlorobutadiene	UG/M3	0.94	U	0.89	U	0.78	U	0.86	U
EPA TO-15	Hexane	UG/M3	0.25	J	0.28	J	0.28	J	0.25	J
EPA TO-15	Isopropylbenzene	UG/M3	0.94	U	0.89	U	0.78	U	0.86	U
EPA TO-15	Methyl cyclohexane	UG/M3	0.89	U	0.84	U	0.74	U	0.82	U
EPA TO-15	Methyl Tertbutyl Ether	UG/M3	0.96	U	0.9	U	0.8	U	0.88	U
EPA TO-15	Methylene chloride	UG/M3	0.35	J	0.38	J	0.4	J	0.38	J
EPA TO-15	Styrene	UG/M3	0.94	U	0.16	J	0.14	J	0.86	U
EPA TO-15	Tetrachloroethene	UG/M3	0.32	J	0.32	J	0.22	J	0.33	J
EPA TO-15	Toluene	UG/M3	1.5		2		2.4		2.3	
EPA TO-15	trans-1,2-Dichloroethene	UG/M3	0.94	U	0.89	U	0.78	U	0.86	U
EPA TO-15	trans-1,3-Dichloropropene	UG/M3	0.94	U	0.89	U	0.78	U	0.86	U
EPA TO-15	Trichloroethene	UG/M3	0.2	U	0.18	U	0.16	U	0.18	U
EPA TO-15	Trichlorofluoromethane	UG/M3	1.2		1.2		1.2		1.2	
EPA TO-15	Vinyl chloride	UG/M3	0.2	U	0.18	U	0.16	U	0.18	U
EPA TO-15	Xylene, o	UG/M3	0.23	J	0.24	J	0.24	J	0.27	J
EPA TO-15	Xylenes (m&p)	UG/M3	0.6	J	0.6	J	0.57	J	0.62	J

Notes:

FS = Field Sample

FD = Field Duplicate

UG/M3 = micrograms per cubic meter of air

U = Not detected J = Value is estimated

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
SVI MONITORING – MARCH 2019 IA/SS SAMPLING
LOCKHEED MARTIN CORPORATION
FORMER UNISYS FACILITY -- GREAT NECK
LAKE SUCCESS, NEW YORK

		SDG	P1901438	P1901438	P1901438	P1901438
		Location	IA-H21F	IA-I12	SS-C20F	SS-D13F
		Sample Date	3/14/2019	3/14/2019	3/14/2019	3/14/2019
		Sample ID	IA-H21	IA-I12	SS-C20	SS-D13
		QC Code	FS	FS	FS	FS
Method	Parameter	Unit	Final Result	Final Qual	Final Result	Final Qual
EPA TO-15	1,1,1-Trichloroethane	UG/M3	0.93 U	0.91 U	16 U	15 U
EPA TO-15	1,1,2,2-Tetrachloroethane	UG/M3	0.92 U	0.89 U	16 U	15 U
EPA TO-15	1,1,2-Trichloro-1,2,2-Trifluoroethane	UG/M3	0.49 J	0.5 J	27	15 U
EPA TO-15	1,1,2-Trichloroethane	UG/M3	0.93 U	0.91 U	16 U	15 U
EPA TO-15	1,1-Dichloroethane	UG/M3	0.9 U	0.87 U	16 U	14 U
EPA TO-15	1,1-Dichloroethene	UG/M3	0.93 U	0.91 U	16 U	15 U
EPA TO-15	1,2,4-Trichlorobenzene	UG/M3	0.92 U	0.89 U	16 U	15 U
EPA TO-15	1,2,4-Trimethylbenzene	UG/M3	0.26 J	1.7	2.7 J	2.5 J
EPA TO-15	1,2-Dibromo-3-chloropropane	UG/M3	0.9 U	0.87 U	16 U	14 U
EPA TO-15	1,2-Dibromoethane	UG/M3	0.93 U	0.91 U	16 U	15 U
EPA TO-15	1,2-Dichloro-1,1,2,2-tetrafluoroethane	UG/M3	0.88 U	0.86 U	15 U	14 U
EPA TO-15	1,2-Dichlorobenzene	UG/M3	0.93 U	0.91 U	16 U	15 U
EPA TO-15	1,2-Dichloroethane	UG/M3	0.92 U	0.89 U	16 U	15 U
EPA TO-15	1,2-Dichloroethene (total)	UG/M3	0.92 U	0.89 U	16 U	15 U
EPA TO-15	1,2-Dichloropropane	UG/M3	0.93 U	0.91 U	16 U	15 U
EPA TO-15	1,3,5-Trimethylbenzene	UG/M3	0.92 U	0.51 J	16 U	15 U
EPA TO-15	1,3-Butadiene	UG/M3	0.9 U	0.87 U	16 U	14 U
EPA TO-15	1,3-Dichlorobenzene	UG/M3	0.93 U	0.91 U	16 U	15 U
EPA TO-15	1,4-Dichlorobenzene	UG/M3	2.4	0.61 J	16 U	15 U
EPA TO-15	1,4-Dioxane	UG/M3	0.27 J	0.29 J	16 U	15 U
EPA TO-15	2-Butanone	UG/M3	1.4 J	1.7 J	30 U	27 U
EPA TO-15	2-Hexanone	UG/M3	0.14 J	0.26 J	16 U	15 U
EPA TO-15	2-Propanol	UG/M3	81	11	63 U	7.4 J
EPA TO-15	4-Ethyltoluene	UG/M3	0.92 U	0.36 J	16 U	15 U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
SVI MONITORING – MARCH 2019 IA/SS SAMPLING
LOCKHEED MARTIN CORPORATION
FORMER UNISYS FACILITY -- GREAT NECK
LAKE SUCCESS, NEW YORK

		SDG	P1901438	P1901438	P1901438	P1901438
		Location	IA-H21F	IA-I12	SS-C20F	SS-D13F
		Sample Date	3/14/2019	3/14/2019	3/14/2019	3/14/2019
		Sample ID	IA-H21	IA-I12	SS-C20	SS-D13
		QC Code	FS	FS	FS	FS
Method	Parameter	Unit	Final Result	Final Qual	Final Result	Final Qual
EPA TO-15	4-Methyl-2-pentanone	UG/M3	0.13 J	0.14 J	16 U	15 U
EPA TO-15	Acetic acid, methyl ester	UG/M3	0.87 U	0.84 U	15 U	14 U
EPA TO-15	Acetone	UG/M3	34	45	160 U	150 U
EPA TO-15	Allyl chloride	UG/M3	0.92 U	0.89 U	16 U	15 U
EPA TO-15	Benzene	UG/M3	0.54 J	0.32 J	16 U	14 U
EPA TO-15	Bromodichloromethane	UG/M3	0.18 J	0.46 J	16 U	15 U
EPA TO-15	Bromoform	UG/M3	0.92 U	0.89 U	16 U	15 U
EPA TO-15	Bromomethane	UG/M3	0.87 U	0.84 U	15 U	14 U
EPA TO-15	Carbon disulfide	UG/M3	1.7 J	1.8 U	33 U	30 U
EPA TO-15	Carbon tetrachloride	UG/M3	0.44	0.42	3 U	2.7 U
EPA TO-15	Chlorobenzene	UG/M3	0.92 U	0.89 U	16 U	15 U
EPA TO-15	Chlorodifluoromethane	UG/M3	1.8	0.79 J	15 U	14 U
EPA TO-15	Chloroethane	UG/M3	0.88 U	0.86 U	15 U	14 U
EPA TO-15	Chloroform	UG/M3	5.5	15	16 U	7 J
EPA TO-15	Chloromethane	UG/M3	0.44 J	0.17 J	15 U	14 U
EPA TO-15	cis-1,2-Dichloroethene	UG/M3	0.92 U	0.89 U	16 U	15 U
EPA TO-15	cis-1,3-Dichloropropene	UG/M3	0.97 U	0.94 U	17 U	15 U
EPA TO-15	Cyclohexane	UG/M3	1.7 U	1.7 U	30 U	27 U
EPA TO-15	Dibromochloromethane	UG/M3	0.93 U	0.91 U	16 U	15 U
EPA TO-15	Dichlorodifluoromethane	UG/M3	2.4	2.4	16 U	14 U
EPA TO-15	Difluoroethane	UG/M3	6.8	3.4	15 U	14 U
EPA TO-15	Ethylbenzene	UG/M3	0.17 J	0.45 J	16 U	14 U
EPA TO-15	Freon 115	UG/M3	0.87 U	0.84 U	15 U	14 U
EPA TO-15	Freon 123	UG/M3	0.87 U	0.84 U	15 U	14 U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
SVI MONITORING – MARCH 2019 IA/SS SAMPLING
LOCKHEED MARTIN CORPORATION
FORMER UNISYS FACILITY -- GREAT NECK
LAKE SUCCESS, NEW YORK

		SDG	P1901438	P1901438	P1901438	P1901438
		Location	IA-H21F	IA-I12	SS-C20F	SS-D13F
		Sample Date	3/14/2019	3/14/2019	3/14/2019	3/14/2019
		Sample ID	IA-H21	IA-I12	SS-C20	SS-D13
		QC Code	FS	FS	FS	FS
Method	Parameter	Unit	Final Result	Final Qual	Final Result	Final Qual
EPA TO-15	Hexachlorobutadiene	UG/M3	0.92 U	0.89 U	16 U	15 U
EPA TO-15	Hexane	UG/M3	0.26 J	0.91 U	16 U	15 U
EPA TO-15	Isopropylbenzene	UG/M3	0.92 U	0.89 U	16 U	15 U
EPA TO-15	Methyl cyclohexane	UG/M3	0.87 U	0.84 U	15 U	14 U
EPA TO-15	Methyl Tertbutyl Ether	UG/M3	0.93 U	0.91 U	16 U	15 U
EPA TO-15	Methylene chloride	UG/M3	0.37 J	0.38 J	16 U	15 U
EPA TO-15	Styrene	UG/M3	0.92 U	0.27 J	16 U	15 U
EPA TO-15	Tetrachloroethene	UG/M3	0.29 J	1	240	120
EPA TO-15	Toluene	UG/M3	1.4	2.9	6.6 J	8.7 J
EPA TO-15	trans-1,2-Dichloroethene	UG/M3	0.92 U	0.89 U	16 U	15 U
EPA TO-15	trans-1,3-Dichloropropene	UG/M3	0.92 U	0.89 U	16 U	15 U
EPA TO-15	Trichloroethene	UG/M3	0.19 U	1.2	3.3 U	7.9
EPA TO-15	Trichlorofluoromethane	UG/M3	1.2	1.2	16 U	15 U
EPA TO-15	Vinyl chloride	UG/M3	0.19 U	0.18 U	3.3 U	3 U
EPA TO-15	Xylene, o	UG/M3	0.22 J	0.88 J	16 U	15 U
EPA TO-15	Xylenes (m&p)	UG/M3	0.56 J	2	33 U	30 U

Notes:

FS = Field Sample

FD = Field Duplicate

UG/M3 = micrograms per cubic meter of air

U = Not detected J = Value is estimated

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
SVI MONITORING – MARCH 2019 IA/SS SAMPLING
LOCKHEED MARTIN CORPORATION
FORMER UNISYS FACILITY -- GREAT NECK
LAKE SUCCESS, NEW YORK

		SDG	P1901438		P1901438		P1901438		P1901438	
		Location	SS-E10F		SS-E16F		SS-E21.5F		SS-F13F	
		Sample Date	3/14/2019		3/14/2019		3/14/2019		3/14/2019	
		Sample ID	SS-E10		SS-E16		SS-E21.5		SS-F13	
		QC Code	FS		FS		FS		FS	
Method	Parameter	Unit	Final Result	Final Qual	Final Result	Final Qual	Final Result	Final Qual	Final Result	Final Qual
EPA TO-15	1,1,1-Trichloroethane	UG/M3	25	U	13	U	15	U	13	U
EPA TO-15	1,1,2,2-Tetrachloroethane	UG/M3	25	U	13	U	14	U	12	U
EPA TO-15	1,1,2-Trichloro-1,2,2-Trifluoroethane	UG/M3	25	U	13	U	14	U	12	U
EPA TO-15	1,1,2-Trichloroethane	UG/M3	25	U	13	U	15	U	13	U
EPA TO-15	1,1-Dichloroethane	UG/M3	24	U	13	U	14	U	12	U
EPA TO-15	1,1-Dichloroethene	UG/M3	25	U	13	U	15	U	13	U
EPA TO-15	1,2,4-Trichlorobenzene	UG/M3	25	U	13	U	14	U	12	U
EPA TO-15	1,2,4-Trimethylbenzene	UG/M3	25	U	2.8	J	14	U	5.6	J
EPA TO-15	1,2-Dibromo-3-chloropropane	UG/M3	24	U	13	U	14	U	12	U
EPA TO-15	1,2-Dibromoethane	UG/M3	25	U	13	U	15	U	13	U
EPA TO-15	1,2-Dichloro-1,1,2,2-tetrafluoroethane	UG/M3	24	U	12	U	14	U	12	U
EPA TO-15	1,2-Dichlorobenzene	UG/M3	25	U	13	U	15	U	13	U
EPA TO-15	1,2-Dichloroethane	UG/M3	25	U	13	U	14	U	12	U
EPA TO-15	1,2-Dichloroethene (total)	UG/M3	25	U	13	U	14	U	12	U
EPA TO-15	1,2-Dichloropropane	UG/M3	25	U	13	U	15	U	13	U
EPA TO-15	1,3,5-Trimethylbenzene	UG/M3	25	U	13	U	14	U	2.1	J
EPA TO-15	1,3-Butadiene	UG/M3	24	U	13	U	14	U	12	U
EPA TO-15	1,3-Dichlorobenzene	UG/M3	25	U	13	U	15	U	13	U
EPA TO-15	1,4-Dichlorobenzene	UG/M3	25	U	13	U	15	U	13	U
EPA TO-15	1,4-Dioxane	UG/M3	25	U	13	U	14	U	12	U
EPA TO-15	2-Butanone	UG/M3	46	U	24	U	27	U	4.2	J
EPA TO-15	2-Hexanone	UG/M3	25	U	13	U	15	U	13	U
EPA TO-15	2-Propanol	UG/M3	97	U	51	U	120		7.6	J
EPA TO-15	4-Ethyltoluene	UG/M3	25	U	13	U	14	U	12	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
SVI MONITORING – MARCH 2019 IA/SS SAMPLING
LOCKHEED MARTIN CORPORATION
FORMER UNISYS FACILITY -- GREAT NECK
LAKE SUCCESS, NEW YORK

		SDG	P1901438		P1901438		P1901438		P1901438	
		Location	SS-E10F		SS-E16F		SS-E21.5F		SS-F13F	
		Sample Date	3/14/2019		3/14/2019		3/14/2019		3/14/2019	
		Sample ID	SS-E10		SS-E16		SS-E21.5		SS-F13	
		QC Code	FS		FS		FS		FS	
Method	Parameter	Unit	Final Result	Final Qual	Final Result	Final Qual	Final Result	Final Qual	Final Result	Final Qual
EPA TO-15	4-Methyl-2-pentanone	UG/M3	25	U	13	U	14	U	12	U
EPA TO-15	Acetic acid, methyl ester	UG/M3	23	U	12	U	14	U	12	U
EPA TO-15	Acetone	UG/M3	250	U	130	U	34	J	30	J
EPA TO-15	Allyl chloride	UG/M3	25	U	13	U	14	U	12	U
EPA TO-15	Benzene	UG/M3	24	U	13	U	14	U	12	U
EPA TO-15	Bromodichloromethane	UG/M3	25	U	13	U	14	U	12	U
EPA TO-15	Bromoform	UG/M3	25	U	13	U	14	U	12	U
EPA TO-15	Bromomethane	UG/M3	23	U	12	U	14	U	12	U
EPA TO-15	Carbon disulfide	UG/M3	51	U	27	U	30	U	16	J
EPA TO-15	Carbon tetrachloride	UG/M3	4.6	U	2.4	U	2.7	U	2.3	U
EPA TO-15	Chlorobenzene	UG/M3	25	U	13	U	14	U	12	U
EPA TO-15	Chlorodifluoromethane	UG/M3	23	U	12	U	14	U	12	U
EPA TO-15	Chloroethane	UG/M3	24	U	12	U	14	U	12	U
EPA TO-15	Chloroform	UG/M3	8.2	J	3.1	J	3.1	J	2.7	J
EPA TO-15	Chloromethane	UG/M3	23	U	12	U	14	U	12	U
EPA TO-15	cis-1,2-Dichloroethene	UG/M3	25	U	13	U	14	U	12	U
EPA TO-15	cis-1,3-Dichloropropene	UG/M3	26	U	14	U	15	U	13	U
EPA TO-15	Cyclohexane	UG/M3	46	U	24	U	27	U	4	J
EPA TO-15	Dibromochloromethane	UG/M3	25	U	13	U	15	U	13	U
EPA TO-15	Dichlorodifluoromethane	UG/M3	24	U	13	U	14	U	12	U
EPA TO-15	Difluoroethane	UG/M3	20	J	9.8	J	11	J	12	U
EPA TO-15	Ethylbenzene	UG/M3	24	U	13	U	14	U	4.3	J
EPA TO-15	Freon 115	UG/M3	23	U	12	U	14	U	12	U
EPA TO-15	Freon 123	UG/M3	23	U	12	U	14	U	12	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
SVI MONITORING – MARCH 2019 IA/SS SAMPLING
LOCKHEED MARTIN CORPORATION
FORMER UNISYS FACILITY -- GREAT NECK
LAKE SUCCESS, NEW YORK

		SDG	P1901438		P1901438		P1901438		P1901438	
		Location	SS-E10F		SS-E16F		SS-E21.5F		SS-F13F	
		Sample Date	3/14/2019		3/14/2019		3/14/2019		3/14/2019	
		Sample ID	SS-E10		SS-E16		SS-E21.5		SS-F13	
		QC Code	FS		FS		FS		FS	
Method	Parameter	Unit	Final Result	Final Qual	Final Result	Final Qual	Final Result	Final Qual	Final Result	Final Qual
EPA TO-15	Hexachlorobutadiene	UG/M3	25	U	13	U	14	U	12	U
EPA TO-15	Hexane	UG/M3	25	U	13	U	15	U	13	U
EPA TO-15	Isopropylbenzene	UG/M3	25	U	13	U	14	U	12	U
EPA TO-15	Methyl cyclohexane	UG/M3	23	U	12	U	14	U	10	J
EPA TO-15	Methyl Tertbutyl Ether	UG/M3	25	U	13	U	15	U	13	U
EPA TO-15	Methylene chloride	UG/M3	25	U	13	U	15	U	13	U
EPA TO-15	Styrene	UG/M3	25	U	13	U	14	U	12	U
EPA TO-15	Tetrachloroethene	UG/M3	25	U	40		14	U	7.2	J
EPA TO-15	Toluene	UG/M3	5.8	J	8.6	J	2.7	J	41	
EPA TO-15	trans-1,2-Dichloroethene	UG/M3	25	U	13	U	14	U	12	U
EPA TO-15	trans-1,3-Dichloropropene	UG/M3	25	U	13	U	14	U	12	U
EPA TO-15	Trichloroethene	UG/M3	5.1	U	2.7	U	3	U	4.6	
EPA TO-15	Trichlorofluoromethane	UG/M3	25	U	13	U	14	U	12	U
EPA TO-15	Vinyl chloride	UG/M3	5.1	U	2.7	U	3	U	2.6	U
EPA TO-15	Xylene, o	UG/M3	25	U	13	U	14	U	8.5	J
EPA TO-15	Xylenes (m&p)	UG/M3	51	U	27	U	30	U	20	J

Notes:

FS = Field Sample

FD = Field Duplicate

UG/M3 = micrograms per cubic meter of air

U = Not detected J = Value is estimated

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
SVI MONITORING – MARCH 2019 IA/SS SAMPLING
LOCKHEED MARTIN CORPORATION
FORMER UNISYS FACILITY -- GREAT NECK
LAKE SUCCESS, NEW YORK

		SDG	P1901438	P1901438	P1901438	P1901438
		Location	SS-G18F	SS-G5F	SS-G5F	SS-H21F
		Sample Date	3/14/2019	3/14/2019	3/14/2019	3/14/2019
		Sample ID	SS-G18	SS-DUP	SS-G5	SS-H21
		QC Code	FS	FD	FS	FS
Method	Parameter	Unit	Final Result	Final Qual	Final Result	Final Qual
EPA TO-15	1,1,1-Trichloroethane	UG/M3	18 U	13 U	19 U	15 U
EPA TO-15	1,1,2,2-Tetrachloroethane	UG/M3	18 U	13 U	19 U	14 U
EPA TO-15	1,1,2-Trichloro-1,2,2-Trifluoroethane	UG/M3	9.8 J	13 U	19 U	24
EPA TO-15	1,1,2-Trichloroethane	UG/M3	18 U	13 U	19 U	15 U
EPA TO-15	1,1-Dichloroethane	UG/M3	17 U	12 U	19 U	14 U
EPA TO-15	1,1-Dichloroethene	UG/M3	18 U	13 U	19 U	15 U
EPA TO-15	1,2,4-Trichlorobenzene	UG/M3	18 U	13 U	19 U	14 U
EPA TO-15	1,2,4-Trimethylbenzene	UG/M3	2.7 J	13 U	19 U	2.3 J
EPA TO-15	1,2-Dibromo-3-chloropropane	UG/M3	17 U	12 U	19 U	14 U
EPA TO-15	1,2-Dibromoethane	UG/M3	18 U	13 U	19 U	15 U
EPA TO-15	1,2-Dichloro-1,1,2,2-tetrafluoroethane	UG/M3	17 U	12 U	18 U	14 U
EPA TO-15	1,2-Dichlorobenzene	UG/M3	18 U	13 U	19 U	15 U
EPA TO-15	1,2-Dichloroethane	UG/M3	18 U	13 U	19 U	14 U
EPA TO-15	1,2-Dichloroethene (total)	UG/M3	18 U	13 U	19 U	14 U
EPA TO-15	1,2-Dichloropropane	UG/M3	18 U	13 U	19 U	15 U
EPA TO-15	1,3,5-Trimethylbenzene	UG/M3	18 U	13 U	19 U	14 U
EPA TO-15	1,3-Butadiene	UG/M3	17 U	12 U	19 U	14 U
EPA TO-15	1,3-Dichlorobenzene	UG/M3	18 U	13 U	19 U	15 U
EPA TO-15	1,4-Dichlorobenzene	UG/M3	18 U	13 U	19 U	15 U
EPA TO-15	1,4-Dioxane	UG/M3	18 U	13 U	19 U	14 U
EPA TO-15	2-Butanone	UG/M3	33 U	3.9 J	4.1 J	3.6 J
EPA TO-15	2-Hexanone	UG/M3	18 U	13 U	19 U	15 U
EPA TO-15	2-Propanol	UG/M3	70 U	80	93	57 U
EPA TO-15	4-Ethyltoluene	UG/M3	18 U	13 U	19 U	14 U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
SVI MONITORING – MARCH 2019 IA/SS SAMPLING
LOCKHEED MARTIN CORPORATION
FORMER UNISYS FACILITY -- GREAT NECK
LAKE SUCCESS, NEW YORK

		SDG	P1901438		P1901438		P1901438		P1901438	
		Location	SS-G18F		SS-G5F		SS-G5F		SS-H21F	
		Sample Date	3/14/2019		3/14/2019		3/14/2019		3/14/2019	
		Sample ID	SS-G18		SS-DUP		SS-G5		SS-H21	
		QC Code	FS		FD		FS		FS	
Method	Parameter	Unit	Final Result	Final Qual	Final Result	Final Qual	Final Result	Final Qual	Final Result	Final Qual
EPA TO-15	4-Methyl-2-pentanone	UG/M3	18 U		13 U		19 U		14 U	
EPA TO-15	Acetic acid, methyl ester	UG/M3	17 U		12 U		18 U		14 U	
EPA TO-15	Acetone	UG/M3	180 U		53 J		68 J		150 U	
EPA TO-15	Allyl chloride	UG/M3	18 U		13 U		19 U		14 U	
EPA TO-15	Benzene	UG/M3	17 U		12 U		19 U		14 U	
EPA TO-15	Bromodichloromethane	UG/M3	18 U		13 U		19 U		14 U	
EPA TO-15	Bromoform	UG/M3	18 U		13 U		19 U		14 U	
EPA TO-15	Bromomethane	UG/M3	17 U		12 U		18 U		14 U	
EPA TO-15	Carbon disulfide	UG/M3	11 J		26 U		40 U		30 U	
EPA TO-15	Carbon tetrachloride	UG/M3	3.3 U		2.4 U		3.6 U		2.7 U	
EPA TO-15	Chlorobenzene	UG/M3	18 U		13 U		19 U		14 U	
EPA TO-15	Chlorodifluoromethane	UG/M3	17 U		12 U		18 U		14 U	
EPA TO-15	Chloroethane	UG/M3	17 U		12 U		18 U		14 U	
EPA TO-15	Chloroform	UG/M3	170		2.7 J		2.7 J		6.5 J	
EPA TO-15	Chloromethane	UG/M3	17 U		12 U		18 U		14 U	
EPA TO-15	cis-1,2-Dichloroethene	UG/M3	18 U		13 U		19 U		14 U	
EPA TO-15	cis-1,3-Dichloropropene	UG/M3	19 U		13 U		20 U		15 U	
EPA TO-15	Cyclohexane	UG/M3	33 U		24 U		36 U		27 U	
EPA TO-15	Dibromochloromethane	UG/M3	18 U		13 U		19 U		15 U	
EPA TO-15	Dichlorodifluoromethane	UG/M3	17 U		12 U		19 U		14 U	
EPA TO-15	Difluoroethane	UG/M3	17 U		30		36		14 U	
EPA TO-15	Ethylbenzene	UG/M3	17 U		12 U		19 U		14 U	
EPA TO-15	Freon 115	UG/M3	17 U		12 U		18 U		14 U	
EPA TO-15	Freon 123	UG/M3	17 U		12 U		18 U		14 U	

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
SVI MONITORING – MARCH 2019 IA/SS SAMPLING
LOCKHEED MARTIN CORPORATION
FORMER UNISYS FACILITY -- GREAT NECK
LAKE SUCCESS, NEW YORK

		SDG	P1901438	P1901438	P1901438	P1901438
		Location	SS-G18F	SS-G5F	SS-G5F	SS-H21F
		Sample Date	3/14/2019	3/14/2019	3/14/2019	3/14/2019
		Sample ID	SS-G18	SS-DUP	SS-G5	SS-H21
		QC Code	FS	FD	FS	FS
Method	Parameter	Unit	Final Result	Final Qual	Final Result	Final Qual
EPA TO-15	Hexachlorobutadiene	UG/M3	18 U	13 U	19 U	14 U
EPA TO-15	Hexane	UG/M3	18 U	13 U	19 U	15 U
EPA TO-15	Isopropylbenzene	UG/M3	18 U	13 U	19 U	14 U
EPA TO-15	Methyl cyclohexane	UG/M3	17 U	12 U	18 U	14 U
EPA TO-15	Methyl Tertbutyl Ether	UG/M3	18 U	13 U	19 U	15 U
EPA TO-15	Methylene chloride	UG/M3	18 U	13 U	19 U	15 U
EPA TO-15	Styrene	UG/M3	18 U	13 U	19 U	14 U
EPA TO-15	Tetrachloroethene	UG/M3	34	13 U	19 U	39
EPA TO-15	Toluene	UG/M3	3 J	15	13 J	15
EPA TO-15	trans-1,2-Dichloroethene	UG/M3	18 U	13 U	19 U	14 U
EPA TO-15	trans-1,3-Dichloropropene	UG/M3	18 U	13 U	19 U	14 U
EPA TO-15	Trichloroethene	UG/M3	4.1	2.1 J	4 U	3 U
EPA TO-15	Trichlorofluoromethane	UG/M3	18 U	13 U	19 U	14 U
EPA TO-15	Vinyl chloride	UG/M3	3.7 U	2.6 U	4 U	3 U
EPA TO-15	Xylene, o	UG/M3	18 U	13 U	19 U	14 U
EPA TO-15	Xylenes (m&p)	UG/M3	37 U	26 U	40 U	30 U

Notes:

FS = Field Sample

FD = Field Duplicate

UG/M3 = micrograms per cubic meter of air

U = Not detected J = Value is estimated

TABLE 3 - SUMMARY OF QUALIFICATION ACTIONS
DATA USABILITY SUMMARY REPORT
SVI MONITORING – MARCH 2019 IA/SS SAMPLING
LOCKHEED MARTIN CORPORATION
FORMER UNISYS FACILITY -- GREAT NECK
LAKE SUCCESS, NEW YORK

SDG	Method	Lab Sample ID	Field Sample ID	Parameter Name	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Val Reason Code	Units
P1901438	EPA TO-15	P1901438-014	IA-DUP	Carbon disulfide	2.3		2.3	J	FD	UG/M3
P1901438	EPA TO-15	P1901438-008	IA-E16	Carbon disulfide	1.7	U	1.7	UJ	FD	UG/M3

Notes:

FD = Field Duplicate precision goal exceeded

ATTACHMENT A
SUMMARY OF VALIDATION QC LIMITS FOR SURROGATES, SPIKES, AND DUPLICATES
BASED ON THE REGION 2 VALIDATION GUIDELINES

PARAMETER	QC TEST	ANALYTE	AIR	AIR
			(%R)	(RPD)
Volatiles TO-15	Surrogate	All Surrogate Compounds	Lab Limits	
	LCS	All Target Compounds	70 - 130	
	Field Duplicate	All Target Compounds		50

Notes:

LCS - Laboratory Control Sample

RPD = Relative percent difference

%R = percent recovery

QC Limits are based on USEPA Region II Data Validation Guidelines and Project QA/QC Objectives

Surrogates for air samples are not specified in the Region II Data Validation Guidelines (2016)

*Lockheed Martin Corporation
Former Unisys Facility -- Great Neck
Lake Success, New York
AMEC E&E, PC*

**DATA USABILITY SUMMARY REPORT
SVI MONITORING – MARCH 2019 IA/SS SAMPLING
LOCKHEED MARTIN CORPORATION
FORMER UNISYS FACILITY -- GREAT NECK
LAKE SUCCESS, NEW YORK**

ATTACHMENT B

No Quals
2/15/19

VOCs in Air

NYSDEC DUSR PROJECT CHEMIST REVIEW RECORD

Project: LMC Great Neck IA/SS Air Sampling March 2019

Method: TO-15

Laboratory and SDG(s): ALS CA SDG# P1901438

Date: 4/15/19

Reviewer: Julie Ricardi

Review Level ☒ NYSDEC DUSR

USEPA Region II Guideline

Control limits are from EPA Region 2 - SOP# HW-31, October 2006.

1. ☒ **Case Narrative Review and Data Package Completeness** COMMENTS
Were problems noted? *See attached & below*
Are Field Sample IDs and Locations assigned correctly? YES NO (circle one)
Were all the samples on the COC analyzed for the requested analyses? YES NO (circle one)
2. ☒ **Holding time and Sample Collection**
Were samples analyzed within the 30 day holding time? YES NO (circle one)
3. ☒ **QC Blanks** (use 5x rule for calculating action levels)
Are method blanks free of contamination? YES NO (circle one)
4. ☒ **Instrument Tuning - Data Package Narrative Review**
Did the laboratory narrative identify any results that were not within method criteria? YES NO (circle one)
If yes, use professional judgment to evaluate data and qualify results if needed
5. ☒ **Instrument Calibration - Data Package Narrative Review**
Did the laboratory narrative identify compounds that were not within method criteria (%RSD $\leq$ 30; %D $\leq$ 30) in the initial calibration and/or continuing calibration standards? YES NO (circle one)
Did the laboratory qualify results based on initial or continuing calibration exceedances? YES NO NA
If yes to above, use professional judgment to evaluate data and qualify results if needed
6. ☒ **Internal Standards - Data Package Narrative Review**
(Area Limits = +40% to -40%, RTs within 20 seconds of daily CCAL standard (or ICAL mid-point if samples follow ICAL))
Did the laboratory narrative identify any sample internal standards that were not within criteria? YES NO (circle one)
Did the laboratory qualify results based on internal standard exceedances? YES NO NA
If yes to above, use professional judgment to evaluate data and qualify results if needed
7. ☒ **Surrogate Recovery**
Were all results within laboratory limits? YES NO (circle one)
8. ☒ **Field Duplicates**
Were Field Duplicates submitted/analyzed? YES NO
IA-E16/IA-DUP; OK *SS-G5/SS-DUP; OK*
Were all results were within criteria (Field Dup RPD goal = 50). YES NO NA (circle one)
9. ☒ **Laboratory Control Sample Results** (limits 70-130%)
Were all results within limits? YES NO (circle one) *All w/in 70-130*
10. ☒ **Raw Data Review and Calculation Checks**
See attached; OK

11. ☒ **Electronic Data Review and Edits**

Does the EDD match the Form Is? ☒ YES ☐ NO (circle one)

12. ☒ **Tables Review**

Table 1 (Samples and Analytical Methods)

Table 2 (Analytical Results)

Table 3 (Qualification Actions) **NIA**

Were all tables produced and reviewed? ☒ YES ☐ NO (circle one)

Table 4 (TICs) Did lab report TICs? YES ☒ NO (circle one)

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: Wood
Project ID: Former Unisys Facility / 3617187442

Service Request: P1901438

Date Received: 3/18/2019
Time Received: 09:30

TO-15 - VOC Cans

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pil (psig)	Pfl (psig)	
AA-01	P1901438-001	Air	3/14/2019	17:20	AS00927	-3.07	3.51	X
IA-E2	P1901438-002	Air	3/14/2019	17:46	SC01946	-4.27	3.84	X
IA-C7	P1901438-003	Air	3/14/2019	18:00	SC00544	-3.65	3.78	X
IA-G5	P1901438-004	Air	3/14/2019	17:55	SC00819	-3.04	4.32	X
IA-E10	P1901438-005	Air	3/14/2019	15:42	SC01875	-0.92	4.00	X
IA-D13	P1901438-006	Air	3/14/2019	17:52	SC00928	-3.62	3.76	X
IA-F13	P1901438-007	Air	3/14/2019	17:25	AS01297	-3.69	3.72	X
IA-E16	P1901438-008	Air	3/14/2019	17:44	AC02179	-2.90	4.06	X
IA-G18	P1901438-009	Air	3/15/2019	07:15	AS00720	-2.13	3.95	X
IA-C20	P1901438-010	Air	3/14/2019	17:10	SC01761	-3.59	3.90	X
IA-E21.5	P1901438-011	Air	3/14/2019	17:40	AC02425	-3.71	4.58	X
IA-H21	P1901438-012	Air	3/14/2019	17:50	AS00434	-3.79	4.18	X
IA-I12	P1901438-013	Air	3/14/2019	17:15	AS01223	-3.60	4.00	X
IA-DUP / IA-E16	P1901438-014	Air	3/14/2019	18:20	SC00936	-2.50	3.61	X
SS-G5	P1901438-015	Air	3/14/2019	18:13	AC02427	-3.95	4.67	X
SS-E10	P1901438-016	Air	3/14/2019	17:25	AS00837	-4.62	3.93	X
SS-D13	P1901438-017	Air	3/14/2019	17:30	SC02198	-4.30	3.85	X
SS-F13	P1901438-018	Air	3/14/2019	18:55	SC01785	-3.36	3.76	X
SS-E16	P1901438-019	Air	3/14/2019	18:27	SC00963	-3.63	4.18	X
SS-G18	P1901438-020	Air	3/14/2019	17:37	SSC00275	-3.54	3.86	X
SS-C20	P1901438-021	Air	3/14/2019	17:40	SC02096	-3.72	5.11	X
SS-E21.5	P1901438-022	Air	3/14/2019	15:51	AC02428	-4.91	4.00	X
SS-H21	P1901438-023	Air	3/14/2019	17:38	AS01306	-3.28	3.85	X
SS-DUP / SS-G5	P1901438-024	Air	3/14/2019	16:30	AS01327	-3.54	3.85	X



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Simi Valley, CA 93065
T: +1 805 526 7161
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Client: Wood
Project: Former Unisys Facility / 3617187442

Service Request No: P1901438
New York Lab ID: 11221

CASE NARRATIVE

The samples were received intact under chain of custody on March 18, 2019 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

Volatile Organic Compound Analysis

The samples were analyzed for volatile organic compounds in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. This procedure is described in laboratory SOP VOA-TO15. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator. This method is included on the laboratory's NELAP and DoD-ELAP scope of accreditation. Any analytes flagged with an X are not included on the NELAP or DoD-ELAP accreditation.

The spike recoveries of dichlorodifluoromethane and bromomethane for the Laboratory Control Sample (LCS) analyzed on March 25, 2019 and March 27, 2019 were outside the laboratory generated control criteria. The recovery errors equate to a potential high bias. However, the spike recoveries of the analytes in question were within the method criteria; therefore, the data quality has not been significantly affected. No corrective action was taken.

See checklist

The containers were cleaned, prior to sampling, down to the method reporting limit (MRL) reported for this project. For projects requiring DoD QSM 5.1 compliance canisters were cleaned to <1/2 the MRL. Please note, projects which require reporting below the MRL could have results between the MRL and method detection limit (MDL) that are biased high.

jr
4/15/19

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.

loc_name	field_san	qc_cc	lab_sample_id	param_name	final_re	final_c	Val_Re	result_uc	detection	SQL_tr	dilutio	RPD
IA-E16F	IA-E16	FS	P1901438-008	1,1,1-Trichloroethane	0.86	U		UG/M3	0.10	0.86	1.59	6.0 OK
IA-E16F	IA-E16	FS	P1901438-008	1,1,2,2-Tetrachloroethane	0.84	U		UG/M3	0.12	0.84	1.59	4.9 OK
IA-E16F	IA-E16	FS	P1901438-008	1,1,2-Trichloro-1,2,2-Trifluoroethane	0.49	J		UG/M3	0.12	0.84	1.59	0.0 OK
IA-E16F	IA-E16	FS	P1901438-008	1,1,2-Trichloroethane	0.86	U		UG/M3	0.086	0.86	1.59	6.0 OK
IA-E16F	IA-E16	FS	P1901438-008	1,1-Dichloroethane	0.83	U		UG/M3	0.12	0.83	1.59	6.2 OK
IA-E16F	IA-E16	FS	P1901438-008	1,1-Dichloroethene	0.86	U		UG/M3	0.12	0.86	1.59	6.0 OK
IA-E16F	IA-E16	FS	P1901438-008	1,2,4-Trichlorobenzene	0.84	U		UG/M3	0.21	0.84	1.59	4.9 OK
IA-E16F	IA-E16	FS	P1901438-008	1,2,4-Trimethylbenzene	0.23	J		UG/M3	0.12	0.84	1.59	44.1 OK
IA-E16F	IA-E16	FS	P1901438-008	1,2-Dibromo-3-chloropropane	0.83	U		UG/M3	0.16	0.83	1.59	6.2 OK
IA-E16F	IA-E16	FS	P1901438-008	1,2-Dibromoethane	0.86	U		UG/M3	0.099	0.86	1.59	6.0 OK
IA-E16F	IA-E16	FS	P1901438-008	1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.81	U		UG/M3	0.13	0.81	1.59	5.1 OK
IA-E16F	IA-E16	FS	P1901438-008	1,2-Dichlorobenzene	0.86	U		UG/M3	0.13	0.86	1.59	6.0 OK
IA-E16F	IA-E16	FS	P1901438-008	1,2-Dichloroethane	0.84	U		UG/M3	0.094	0.84	1.59	4.9 OK
IA-E16F	IA-E16	FS	P1901438-008	1,2-Dichloroethene (total)	0.84	U		UG/M3	0.12	0.84	1.59	4.9 OK
IA-E16F	IA-E16	FS	P1901438-008	1,2-Dichloropropane	0.86	U		UG/M3	0.10	0.86	1.59	6.0 OK
IA-E16F	IA-E16	FS	P1901438-008	1,3,5-Trimethylbenzene	0.84	U		UG/M3	0.12	0.84	1.59	4.9 OK
IA-E16F	IA-E16	FS	P1901438-008	1,3-Butadiene	0.83	U		UG/M3	0.14	0.83	1.59	6.2 OK
IA-E16F	IA-E16	FS	P1901438-008	1,3-Dichlorobenzene	0.86	U		UG/M3	0.13	0.86	1.59	6.0 OK
IA-E16F	IA-E16	FS	P1901438-008	1,4-Dichlorobenzene	3.1			UG/M3	0.13	0.86	1.59	14.9 OK
IA-E16F	IA-E16	FS	P1901438-008	1,4-Dioxane	0.84	U		UG/M3	0.10	0.84	1.59	142.9 OK <RL
IA-E16F	IA-E16	FS	P1901438-008	2-Butanone	1.6	J		UG/M3	0.17	1.6	1.59	27.0 OK
IA-E16F	IA-E16	FS	P1901438-008	2-Hexanone	0.10	J		UG/M3	0.10	0.86	1.59	97.4 OK <RL
IA-E16F	IA-E16	FS	P1901438-008	2-Propanol	77			UG/M3	0.35	3.3	1.59	2.6 OK
IA-E16F	IA-E16	FS	P1901438-008	4-Ethyltoluene	0.84	U		UG/M3	0.14	0.84	1.59	4.9 OK
IA-E16F	IA-E16	FS	P1901438-008	4-Methyl-2-pentanone	0.14	J		UG/M3	0.12	0.84	1.59	25.0 OK
IA-E16F	IA-E16	FS	P1901438-008	Acetic acid, methyl ester	0.80	U,X		UG/M3	0.38	0.80	1.59	6.5 OK
IA-E16F	IA-E16	FS	P1901438-008	Acetone	35			UG/M3	1.9	8.6	1.59	10.8 OK
IA-E16F	IA-E16	FS	P1901438-008	Allyl chloride	0.84	U		UG/M3	0.11	0.84	1.59	4.9 OK
IA-E16F	IA-E16	FS	P1901438-008	Benzene	0.49	J		UG/M3	0.12	0.83	1.59	32.5 OK
IA-E16F	IA-E16	FS	P1901438-008	Bromodichloromethane	0.19	J		UG/M3	0.12	0.84	1.59	10.0 OK
IA-E16F	IA-E16	FS	P1901438-008	Bromoform	0.84	U		UG/M3	0.17	0.84	1.59	4.9 OK
IA-E16F	IA-E16	FS	P1901438-008	Bromomethane	0.80	U		UG/M3	0.12	0.80	1.59	6.5 OK
IA-E16F	IA-E16	FS	P1901438-008	Carbon disulfide	1.7	U		UG/M3	0.25	1.7	1.59	30.0 OK
IA-E16F	IA-E16	FS	P1901438-008	Carbon tetrachloride	0.42			UG/M3	0.12	0.16	1.59	4.7 OK
IA-E16F	IA-E16	FS	P1901438-008	Chlorobenzene	0.84	U		UG/M3	0.11	0.84	1.59	4.9 OK
IA-E16F	IA-E16	FS	P1901438-008	Chlorodifluoromethane	1.6	X		UG/M3	0.40	0.80	1.59	6.5 OK
IA-E16F	IA-E16	FS	P1901438-008	Chloroethane	0.81	U		UG/M3	0.10	0.81	1.59	5.1 OK
IA-E16F	IA-E16	FS	P1901438-008	Chloroform	4.4			UG/M3	0.11	0.86	1.59	4.4 OK
IA-E16F	IA-E16	FS	P1901438-008	Chloromethane	0.39	J		UG/M3	0.14	0.80	1.59	19.7 OK
IA-E16F	IA-E16	FS	P1901438-008	cis-1,2-Dichloroethene	0.84	U		UG/M3	0.12	0.84	1.59	4.9 OK
IA-E16F	IA-E16	FS	P1901438-008	cis-1,3-Dichloropropene	0.89	U		UG/M3	0.13	0.89	1.59	5.8 OK
IA-E16F	IA-E16	FS	P1901438-008	Cyclohexane	1.6	U		UG/M3	0.24	1.6	1.59	140.4 OK <RL
IA-E16F	IA-E16	FS	P1901438-008	Dibromochloromethane	0.86	U		UG/M3	0.11	0.86	1.59	6.0 OK
IA-E16F	IA-E16	FS	P1901438-008	Dichlorodifluoromethane	2.4			UG/M3	0.14	0.83	1.59	4.3 OK
IA-E16F	IA-E16	FS	P1901438-008	Difluoroethane	8.1	X		UG/M3	0.41	0.80	1.59	2.5 OK
IA-E16F	IA-E16	FS	P1901438-008	Ethylbenzene	0.17	J		UG/M3	0.12	0.83	1.59	38.1 OK
IA-E16F	IA-E16	FS	P1901438-008	Freon 115	0.80	U,X		UG/M3	0.37	0.80	1.59	6.5 OK
IA-E16F	IA-E16	FS	P1901438-008	Freon 123	0.80	U,X		UG/M3	0.38	0.80	1.59	6.5 OK
IA-E16F	IA-E16	FS	P1901438-008	Hexachlorobutadiene	0.84	U		UG/M3	0.17	0.84	1.59	4.9 OK
IA-E16F	IA-E16	FS	P1901438-008	Hexane	0.25	J		UG/M3	0.17	0.86	1.59	57.1 OK <RL
IA-E16F	IA-E16	FS	P1901438-008	Isopropylbenzene	0.84	U		UG/M3	0.12	0.84	1.59	4.9 OK
IA-E16F	IA-E16	FS	P1901438-008	Methyl cyclohexane	0.80	U,X		UG/M3	0.41	0.80	1.59	44.3 OK
IA-E16F	IA-E16	FS	P1901438-008	Methyl Tertbutyl Ether	0.86	U		UG/M3	0.10	0.86	1.59	6.0 OK
IA-E16F	IA-E16	FS	P1901438-008	Methylene chloride	0.37	J		UG/M3	0.24	0.86	1.59	12.7 OK

loc_name	field_san	qc_cc	lab_sample_id	param_name	final_re	final_c	Val_Re	result_uc	detection	SQL_tr	dilutio	RPD
IA-E16F	IA-E16	FS	P1901438-008	Styrene	0.16	J		UG/M3	0.14	0.84	1.59	133.3 OK <RL
IA-E16F	IA-E16	FS	P1901438-008	Tetrachloroethene	0.29	J		UG/M3	0.11	0.84	1.59	3.4 OK
IA-E16F	IA-E16	FS	P1901438-008	Toluene	2.4			UG/M3	0.10	0.84	1.59	0.0 OK
IA-E16F	IA-E16	FS	P1901438-008	trans-1,2-Dichloroethene	0.84	U		UG/M3	0.12	0.84	1.59	4.9 OK
IA-E16F	IA-E16	FS	P1901438-008	trans-1,3-Dichloropropene	0.84	U		UG/M3	0.17	0.84	1.59	4.9 OK
IA-E16F	IA-E16	FS	P1901438-008	Trichloroethene	0.17	U		UG/M3	0.11	0.17	1.59	0.0 OK
IA-E16F	IA-E16	FS	P1901438-008	Trichlorofluoromethane	1.2			UG/M3	0.13	0.84	1.59	0.0 OK
IA-E16F	IA-E16	FS	P1901438-008	Vinyl chloride	0.17	U		UG/M3	0.091	0.17	1.59	0.0 OK
IA-E16F	IA-E16	FS	P1901438-008	Xylene, o	0.22	J		UG/M3	0.12	0.84	1.59	37.0 OK
IA-E16F	IA-E16	FS	P1901438-008	Xylenes (m&p)	0.55	J		UG/M3	0.22	1.7	1.59	53.3 OK <RL
IA-E16F	IA-DUP	FD	P1901438-014	1,1,1-Trichloroethane	0.81	U		UG/M3	0.099	0.81	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	1,1,2,2-Tetrachloroethane	0.80	U		UG/M3	0.11	0.80	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	1,1,2-Trichloro-1,2,2-Trifluoroel	0.49	J		UG/M3	0.11	0.80	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	1,1,2-Trichloroethane	0.81	U		UG/M3	0.081	0.81	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	1,1-Dichloroethane	0.78	U		UG/M3	0.12	0.78	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	1,1-Dichloroethene	0.81	U		UG/M3	0.11	0.81	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	1,2,4-Trichlorobenzene	0.80	U		UG/M3	0.20	0.80	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	1,2,4-Trimethylbenzene	0.36	J		UG/M3	0.11	0.80	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	1,2-Dibromo-3-chloropropane	0.78	U		UG/M3	0.15	0.78	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	1,2-Dibromoethane	0.81	U		UG/M3	0.093	0.81	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	1,2-Dichloro-1,1,2,2-tetrafluoro	0.77	U		UG/M3	0.13	0.77	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	1,2-Dichlorobenzene	0.81	U		UG/M3	0.12	0.81	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	1,2-Dichloroethane	0.80	U		UG/M3	0.089	0.80	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	1,2-Dichloroethene (total)	0.80	U		UG/M3	0.11	0.80	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	1,2-Dichloropropane	0.81	U		UG/M3	0.099	0.81	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	1,3,5-Trimethylbenzene	0.80	U		UG/M3	0.12	0.80	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	1,3-Butadiene	0.78	U		UG/M3	0.13	0.78	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	1,3-Dichlorobenzene	0.81	U		UG/M3	0.12	0.81	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	1,4-Dichlorobenzene	3.6			UG/M3	0.12	0.81	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	1,4-Dioxane	0.14	J		UG/M3	0.095	0.80	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	2-Butanone	2.1			UG/M3	0.17	1.5	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	2-Hexanone	0.29	J		UG/M3	0.099	0.81	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	2-Propanol	79			UG/M3	0.33	3.2	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	4-Ethyltoluene	0.80	U		UG/M3	0.13	0.80	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	4-Methyl-2-pentanone	0.18	J		UG/M3	0.11	0.80	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	Acetic acid, methyl ester	0.75	U,X		UG/M3	0.36	0.75	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	Acetone	39			UG/M3	1.8	8.1	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	Allyl chloride	0.80	U		UG/M3	0.11	0.80	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	Benzene	0.68	J		UG/M3	0.12	0.78	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	Bromodichloromethane	0.21	J		UG/M3	0.12	0.80	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	Bromoform	0.80	U		UG/M3	0.17	0.80	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	Bromomethane	0.75	U		UG/M3	0.11	0.75	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	Carbon disulfide	2.3			UG/M3	0.24	1.7	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	Carbon tetrachloride	0.44			UG/M3	0.11	0.15	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	Chlorobenzene	0.80	U		UG/M3	0.11	0.80	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	Chlorodifluoromethane	1.5	X		UG/M3	0.38	0.75	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	Chloroethane	0.77	U		UG/M3	0.099	0.77	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	Chloroform	4.6			UG/M3	0.11	0.81	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	Chloromethane	0.32	J		UG/M3	0.13	0.75	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	cis-1,2-Dichloroethene	0.80	U		UG/M3	0.11	0.80	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	cis-1,3-Dichloropropene	0.84	U		UG/M3	0.12	0.84	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	Cyclohexane	0.28	J		UG/M3	0.23	1.5	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	Dibromochloromethane	0.81	U		UG/M3	0.11	0.81	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	Dichlorodifluoromethane	2.3			UG/M3	0.13	0.78	1.5	

loc_name	field_san	qc_cc	lab_sample_id	param_name	final_re	final_c	Val_Re	result_uc	detection	SQL_tr	dilutio	RPD
IA-E16F	IA-DUP	FD	P1901438-014	Difluoroethane	7.9	X		UG/M3	0.39	0.75	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	Ethylbenzene	0.25	J		UG/M3	0.11	0.78	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	Freon 115	0.75	U,X		UG/M3	0.35	0.75	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	Freon 123	0.75	U,X		UG/M3	0.36	0.75	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	Hexachlorobutadiene	0.80	U		UG/M3	0.17	0.80	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	Hexane	0.45	J		UG/M3	0.17	0.81	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	Isopropylbenzene	0.80	U		UG/M3	0.12	0.80	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	Methyl cyclohexane	0.51	J,X		UG/M3	0.39	0.75	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	Methyl Tertbutyl Ether	0.81	U		UG/M3	0.095	0.81	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	Methylene chloride	0.42	J		UG/M3	0.23	0.81	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	Styrene	0.80	U		UG/M3	0.13	0.80	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	Tetrachloroethene	0.30	J		UG/M3	0.10	0.80	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	Toluene	2.4			UG/M3	0.098	0.80	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	trans-1,2-Dichloroethene	0.80	U		UG/M3	0.11	0.80	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	trans-1,3-Dichloropropene	0.80	U		UG/M3	0.17	0.80	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	Trichloroethene	0.17	U		UG/M3	0.11	0.17	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	Trichlorofluoromethane	1.2			UG/M3	0.12	0.80	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	Vinyl chloride	0.17	U		UG/M3	0.086	0.17	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	Xylene, o	0.32	J		UG/M3	0.12	0.80	1.5	
IA-E16F	IA-DUP	FD	P1901438-014	Xylenes (m&p)	0.95	J		UG/M3	0.21	1.7	1.5	RPD
SS-G5F	SS-G5	FS	P1901438-015	1,1,1-Trichloroethane	19	U		UG/M3	2.4	19	36	37.5 OK
SS-G5F	SS-G5	FS	P1901438-015	1,1,2,2-Tetrachloroethane	19	U		UG/M3	2.7	19	36	37.5 OK
SS-G5F	SS-G5	FS	P1901438-015	1,1,2-Trichloro-1,2,2-Trifluoroel	19	U		UG/M3	2.7	19	36	37.5 OK
SS-G5F	SS-G5	FS	P1901438-015	1,1,2-Trichloroethane	19	U		UG/M3	1.9	19	36	37.5 OK
SS-G5F	SS-G5	FS	P1901438-015	1,1-Dichloroethane	19	U		UG/M3	2.8	19	36	45.2 OK
SS-G5F	SS-G5	FS	P1901438-015	1,1-Dichloroethene	19	U		UG/M3	2.7	19	36	37.5 OK
SS-G5F	SS-G5	FS	P1901438-015	1,2,4-Trichlorobenzene	19	U		UG/M3	4.7	19	36	37.5 OK
SS-G5F	SS-G5	FS	P1901438-015	1,2,4-Trimethylbenzene	19	U		UG/M3	2.7	19	36	37.5 OK
SS-G5F	SS-G5	FS	P1901438-015	1,2-Dibromo-3-chloropropane	19	U		UG/M3	3.6	19	36	45.2 OK
SS-G5F	SS-G5	FS	P1901438-015	1,2-Dibromoethane	19	U		UG/M3	2.2	19	36	37.5 OK
SS-G5F	SS-G5	FS	P1901438-015	1,2-Dichloro-1,1,2,2-tetrafluoro	18	U		UG/M3	3.0	18	36	40.0 OK
SS-G5F	SS-G5	FS	P1901438-015	1,2-Dichlorobenzene	19	U		UG/M3	2.8	19	36	37.5 OK
SS-G5F	SS-G5	FS	P1901438-015	1,2-Dichloroethane	19	U		UG/M3	2.1	19	36	37.5 OK
SS-G5F	SS-G5	FS	P1901438-015	1,2-Dichloroethene (total)	19	U		UG/M3	2.7	19	36	37.5 OK
SS-G5F	SS-G5	FS	P1901438-015	1,2-Dichloropropane	19	U		UG/M3	2.4	19	36	37.5 OK
SS-G5F	SS-G5	FS	P1901438-015	1,3,5-Trimethylbenzene	19	U		UG/M3	2.8	19	36	37.5 OK
SS-G5F	SS-G5	FS	P1901438-015	1,3-Butadiene	19	U		UG/M3	3.2	19	36	45.2 OK
SS-G5F	SS-G5	FS	P1901438-015	1,3-Dichlorobenzene	19	U		UG/M3	2.9	19	36	37.5 OK
SS-G5F	SS-G5	FS	P1901438-015	1,4-Dichlorobenzene	19	U		UG/M3	3.0	19	36	37.5 OK
SS-G5F	SS-G5	FS	P1901438-015	1,4-Dioxane	19	U		UG/M3	2.3	19	36	37.5 OK
SS-G5F	SS-G5	FS	P1901438-015	2-Butanone	4.1	J		UG/M3	4.0	36	36	5.0 OK
SS-G5F	SS-G5	FS	P1901438-015	2-Hexanone	19	U		UG/M3	2.4	19	36	37.5 OK
SS-G5F	SS-G5	FS	P1901438-015	2-Propanol	93			UG/M3	7.9	76	36	15.0 OK
SS-G5F	SS-G5	FS	P1901438-015	4-Ethyltoluene	19	U		UG/M3	3.1	19	36	37.5 OK
SS-G5F	SS-G5	FS	P1901438-015	4-Methyl-2-pentanone	19	U		UG/M3	2.6	19	36	37.5 OK
SS-G5F	SS-G5	FS	P1901438-015	Acetic acid, methyl ester	18	U,X		UG/M3	8.6	18	36	40.0 OK
SS-G5F	SS-G5	FS	P1901438-015	Acetone	68	J		UG/M3	43	190	36	24.8 OK
SS-G5F	SS-G5	FS	P1901438-015	Allyl chloride	19	U		UG/M3	2.6	19	36	37.5 OK
SS-G5F	SS-G5	FS	P1901438-015	Benzene	19	U		UG/M3	2.8	19	36	45.2 OK
SS-G5F	SS-G5	FS	P1901438-015	Bromodichloromethane	19	U		UG/M3	2.8	19	36	37.5 OK
SS-G5F	SS-G5	FS	P1901438-015	Bromoform	19	U		UG/M3	4.0	19	36	37.5 OK
SS-G5F	SS-G5	FS	P1901438-015	Bromomethane	18	U		UG/M3	2.7	18	36	40.0 OK
SS-G5F	SS-G5	FS	P1901438-015	Carbon disulfide	40	U		UG/M3	5.8	40	36	42.4 OK
SS-G5F	SS-G5	FS	P1901438-015	Carbon tetrachloride	3.6	U		UG/M3	2.7	3.6	36	40.0 OK

loc_name	field_san	qc_cc	lab_sample_id	param_name	final_re	final_c	Val_Re	result_uc	detection	SQL_tr	dilutio	RPD
SS-G5F	SS-G5	FS	P1901438-015	Chlorobenzene	19	U		UG/M3	2.6	19	36	37.5 OK
SS-G5F	SS-G5	FS	P1901438-015	Chlorodifluoromethane	18	U,X		UG/M3	9.0	18	36	40.0 OK
SS-G5F	SS-G5	FS	P1901438-015	Chloroethane	18	U		UG/M3	2.4	18	36	40.0 OK
SS-G5F	SS-G5	FS	P1901438-015	Chloroform	2.7	J		UG/M3	2.6	19	36	0.0 OK
SS-G5F	SS-G5	FS	P1901438-015	Chloromethane	18	U		UG/M3	3.1	18	36	40.0 OK
SS-G5F	SS-G5	FS	P1901438-015	cis-1,2-Dichloroethene	19	U		UG/M3	2.7	19	36	37.5 OK
SS-G5F	SS-G5	FS	P1901438-015	cis-1,3-Dichloropropene	20	U		UG/M3	3.0	20	36	42.4 OK
SS-G5F	SS-G5	FS	P1901438-015	Cyclohexane	36	U		UG/M3	5.4	36	36	40.0 OK
SS-G5F	SS-G5	FS	P1901438-015	Dibromochloromethane	19	U		UG/M3	2.5	19	36	37.5 OK
SS-G5F	SS-G5	FS	P1901438-015	Dichlorodifluoromethane	19	U		UG/M3	3.1	19	36	45.2 OK
SS-G5F	SS-G5	FS	P1901438-015	Difluoroethane	36	X		UG/M3	9.4	18	36	18.2 OK
SS-G5F	SS-G5	FS	P1901438-015	Ethylbenzene	19	U		UG/M3	2.7	19	36	45.2 OK
SS-G5F	SS-G5	FS	P1901438-015	Freon 115	18	U,X		UG/M3	8.3	18	36	40.0 OK
SS-G5F	SS-G5	FS	P1901438-015	Freon 123	18	U,X		UG/M3	8.6	18	36	40.0 OK
SS-G5F	SS-G5	FS	P1901438-015	Hexachlorobutadiene	19	U		UG/M3	4.0	19	36	37.5 OK
SS-G5F	SS-G5	FS	P1901438-015	Hexane	19	U		UG/M3	4.0	19	36	37.5 OK
SS-G5F	SS-G5	FS	P1901438-015	Isopropylbenzene	19	U		UG/M3	2.8	19	36	37.5 OK
SS-G5F	SS-G5	FS	P1901438-015	Methyl cyclohexane	18	U,X		UG/M3	9.4	18	36	40.0 OK
SS-G5F	SS-G5	FS	P1901438-015	Methyl Tertbutyl Ether	19	U		UG/M3	2.3	19	36	37.5 OK
SS-G5F	SS-G5	FS	P1901438-015	Methylene chloride	19	U		UG/M3	5.4	19	36	37.5 OK
SS-G5F	SS-G5	FS	P1901438-015	Styrene	19	U		UG/M3	3.1	19	36	37.5 OK
SS-G5F	SS-G5	FS	P1901438-015	Tetrachloroethene	19	U		UG/M3	2.5	19	36	37.5 OK
SS-G5F	SS-G5	FS	P1901438-015	Toluene	13	J		UG/M3	2.3	19	36	14.3 OK
SS-G5F	SS-G5	FS	P1901438-015	trans-1,2-Dichloroethene	19	U		UG/M3	2.7	19	36	37.5 OK
SS-G5F	SS-G5	FS	P1901438-015	trans-1,3-Dichloropropene	19	U		UG/M3	4.0	19	36	37.5 OK
SS-G5F	SS-G5	FS	P1901438-015	Trichloroethene	4.0	U		UG/M3	2.6	4.0	36	62.3 OK <RL
SS-G5F	SS-G5	FS	P1901438-015	Trichlorofluoromethane	19	U		UG/M3	2.9	19	36	37.5 OK
SS-G5F	SS-G5	FS	P1901438-015	Vinyl chloride	4.0	U		UG/M3	2.1	4.0	36	42.4 OK
SS-G5F	SS-G5	FS	P1901438-015	Xylene, o	19	U		UG/M3	2.8	19	36	37.5 OK
SS-G5F	SS-G5	FS	P1901438-015	Xylenes (m&p)	40	U		UG/M3	5.0	40	36	42.4 OK
SS-G5F	SS-DUP	FD	P1901438-024	1,1,1-Trichloroethane	13	U		UG/M3	1.6	13	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	1,1,2,2-Tetrachloroethane	13	U		UG/M3	1.8	13	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	1,1,2-Trichloro-1,2,2-Trifluoroethane	13	U		UG/M3	1.8	13	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	1,1,2-Trichloroethane	13	U		UG/M3	1.3	13	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	1,1-Dichloroethane	12	U		UG/M3	1.8	12	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	1,1-Dichloroethene	13	U		UG/M3	1.8	13	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	1,2,4-Trichlorobenzene	13	U		UG/M3	3.1	13	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	1,2,4-Trimethylbenzene	13	U		UG/M3	1.8	13	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	1,2-Dibromo-3-chloropropane	12	U		UG/M3	2.4	12	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	1,2-Dibromoethane	13	U		UG/M3	1.5	13	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	1,2-Dichloro-1,1,2,2-tetrafluoroethane	12	U		UG/M3	2.0	12	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	1,2-Dichlorobenzene	13	U		UG/M3	1.9	13	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	1,2-Dichloroethane	13	U		UG/M3	1.4	13	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	1,2-Dichloroethene (total)	13	U		UG/M3	1.8	13	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	1,2-Dichloropropane	13	U		UG/M3	1.6	13	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	1,3,5-Trimethylbenzene	13	U		UG/M3	1.8	13	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	1,3-Butadiene	12	U		UG/M3	2.1	12	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	1,3-Dichlorobenzene	13	U		UG/M3	1.9	13	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	1,4-Dichlorobenzene	13	U		UG/M3	1.9	13	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	1,4-Dioxane	13	U		UG/M3	1.5	13	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	2-Butanone	3.9	J		UG/M3	2.6	24	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	2-Hexanone	13	U		UG/M3	1.6	13	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	2-Propanol	80			UG/M3	5.2	50	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	4-Ethyltoluene	13	U		UG/M3	2.0	13	23.7	

loc_name	field_san	qc_cc	lab_sample_id	param_name	final_re	final_c	Val_Re	result_uc	detection	SQL_tr	dilutio	RPD
SS-G5F	SS-DUP	FD	P1901438-024	4-Methyl-2-pentanone	13	U		UG/M3	1.7	13	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	Acetic acid, methyl ester	12	U,X		UG/M3	5.7	12	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	Acetone	53	J		UG/M3	28	130	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	Allyl chloride	13	U		UG/M3	1.7	13	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	Benzene	12	U		UG/M3	1.8	12	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	Bromodichloromethane	13	U		UG/M3	1.8	13	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	Bromoform	13	U		UG/M3	2.6	13	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	Bromomethane	12	U		UG/M3	1.8	12	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	Carbon disulfide	26	U		UG/M3	3.8	26	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	Carbon tetrachloride	2.4	U		UG/M3	1.8	2.4	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	Chlorobenzene	13	U		UG/M3	1.7	13	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	Chlorodifluoromethane	12	U,X		UG/M3	5.9	12	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	Chloroethane	12	U		UG/M3	1.6	12	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	Chloroform	2.7	J		UG/M3	1.7	13	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	Chloromethane	12	U		UG/M3	2.0	12	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	cis-1,2-Dichloroethene	13	U		UG/M3	1.8	13	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	cis-1,3-Dichloropropene	13	U		UG/M3	2.0	13	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	Cyclohexane	24	U		UG/M3	3.6	24	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	Dibromochloromethane	13	U		UG/M3	1.7	13	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	Dichlorodifluoromethane	12	U		UG/M3	2.1	12	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	Difluoroethane	30	X		UG/M3	6.2	12	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	Ethylbenzene	12	U		UG/M3	1.8	12	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	Freon 115	12	U,X		UG/M3	5.5	12	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	Freon 123	12	U,X		UG/M3	5.7	12	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	Hexachlorobutadiene	13	U		UG/M3	2.6	13	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	Hexane	13	U		UG/M3	2.6	13	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	Isopropylbenzene	13	U		UG/M3	1.8	13	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	Methyl cyclohexane	12	U,X		UG/M3	6.2	12	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	Methyl Tertbutyl Ether	13	U		UG/M3	1.5	13	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	Methylene chloride	13	U		UG/M3	3.6	13	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	Styrene	13	U		UG/M3	2.0	13	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	Tetrachloroethene	13	U		UG/M3	1.6	13	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	Toluene	15			UG/M3	1.5	13	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	trans-1,2-Dichloroethene	13	U		UG/M3	1.8	13	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	trans-1,3-Dichloropropene	13	U		UG/M3	2.6	13	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	Trichloroethene	2.1	J		UG/M3	1.7	2.6	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	Trichlorofluoromethane	13	U		UG/M3	1.9	13	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	Vinyl chloride	2.6	U		UG/M3	1.4	2.6	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	Xylene, o	13	U		UG/M3	1.8	13	23.7	
SS-G5F	SS-DUP	FD	P1901438-024	Xylenes (m&p)	26	U		UG/M3	3.3	26	23.7	

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 2 of 3

Client: Wood
 Client Sample ID: SS-C20
 Client Project ID: Former Unisys Facility / 3617187442

ALS Project ID: P1901438
 ALS Sample ID: P1901438-021

Test Code: EPA TO-15
 Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16
 Analyst: Lusine Hakobyan
 Sampling Media: 6.0 L Summa Canister
 Test Notes:
 Container ID: SC02096

Date Collected: 3/14/19

Date Received: 3/18/19

Date Analyzed: 3/27/19

Volume(s) Analyzed: 0.060 Liter(s) ✓

$$\text{Can DF} = \frac{14.7 + 5.11}{14.7 - 3.72} = 1.804$$

Initial Pressure (psig): -3.72 Final Pressure (psig): 5.11

$$\text{Vol DF} = \frac{12}{0.066} \checkmark$$

Container Dilution Factor: 1.80 ✓

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
67-66-3	Chloroform	ND	16	2.1	ND	3.3	0.44	
107-06-2	1,2-Dichloroethane	ND	16	1.8	ND	3.9	0.44	
71-55-6	1,1,1-Trichloroethane	ND	16	2.0	ND	3.0	0.36	
71-43-2	Benzene	ND	16	2.3	ND	4.9	0.72	
56-23-5	Carbon Tetrachloride	ND	3.0	2.2	ND	0.48	0.35	
110-82-7	Cyclohexane	ND	30	4.5	ND	8.7	1.3	
78-87-5	1,2-Dichloropropane	ND	16	2.0	ND	3.5	0.43	
75-27-4	Bromodichloromethane	ND	16	2.3	ND	2.4	0.34	
79-01-6	Trichloroethene	ND	3.3	2.2	ND	0.61	0.40	
123-91-1	1,4-Dioxane	ND	16	1.9	ND	4.4	0.52	
10061-01-5	cis-1,3-Dichloropropene	ND	17	2.5	ND	3.7	0.55	
108-10-1	4-Methyl-2-pentanone	ND	16	2.2	ND	3.9	0.53	
10061-02-6	trans-1,3-Dichloropropene	ND	16	3.3	ND	3.5	0.73	
79-00-5	1,1,2-Trichloroethane	ND	16	1.6	ND	3.0	0.30	
108-88-3	Toluene	6.6	16	2.0	1.8	4.2	0.52	J
591-78-6	2-Hexanone	ND	16	2.0	ND	4.0	0.48	
124-48-1	Dibromochloromethane	ND	16	2.1	ND	1.9	0.25	
106-93-4	1,2-Dibromoethane	ND	16	1.9	ND	2.1	0.24	
127-18-4	Tetrachloroethene	✓ 240	16	2.1	35	2.3	0.31	
108-90-7	Chlorobenzene	ND	16	2.1	ND	3.5	0.46	
100-41-4	Ethylbenzene	ND	16	2.3	ND	3.6	0.52	
179601-23-1	m,p-Xylenes	ND	33	4.2	ND	7.6	0.97	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

Acq On : 27 Mar 2019 20:35

Operator: LH

Sample : P1901438-021 (60mL)

Misc : S31-02111911

ALS Vial : 7 Sample Multiplier: 1

Sample Calc

Quant Time: Apr 01 14:27:59 2019

Quant Method : I:\MS16\METHODS\R16032219.M

Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)

LH 4/1/19

QLast Update : Fri Mar 22 11:09:04 2019

Response via : Initial Calibration

DataAcq Meth:TO15.M

See attached

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS1)	11.32	130	261211	12.500	ng	-0.03
37) 1,4-Difluorobenzene (IS2)	13.43	114	1041873	12.500	ng	-0.02
56) Chlorobenzene-d5 (IS3)	17.72	82	445711	12.500	ng	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4(...)	12.17	65	305364	12.200	ng	-0.02
Spiked Amount	12.500	Range	70 - 130	Recovery	=	97.60%
57) Toluene-d8 (SS2)	15.87	98	979479	12.012	ng	0.00
Spiked Amount	12.500	Range	70 - 130	Recovery	=	96.08%
73) Bromofluorobenzene (SS3)	19.09	174	439408	12.741	ng	0.00
Spiked Amount	12.500	Range	70 - 130	Recovery	=	101.92%

Target Compounds

						Qvalue
2) Propene	4.10	42	162	N.D.		
3) Dichlorodifluoromethan...	4.25	85	2632	0.058 ng	#	85
4) Chloromethane	0.00	50	0	N.D.		
5) 1,2-Dichloro-1,1,2,2-t...	0.00	135	0	N.D.		
6) Vinyl Chloride	0.00	62	0	N.D.		
7) 1,3-Butadiene	0.00	54	0	N.D.		
8) Bromomethane	0.00	94	0	N.D.		
9) Chloroethane	0.00	64	0	N.D.		
10) Ethanol	6.44	45	31514	2.076 ng		98
11) Acetonitrile	0.00	41	0	N.D.		
12) Acrolein	6.97	56	64	N.D.		
13) Acetone	7.17	58	8116	0.484 ng	#	82
14) Trichlorofluoromethane	7.37	101	1374	N.D.		
15) 2-Propanol (Isopropanol)	0.00	45	0	N.D. d		
16) Acrylonitrile	0.00	53	0	N.D.		
17) 1,1-Dichloroethene	0.00	96	0	N.D.		
18) 2-Methyl-2-Propanol (t...	0.00	59	0	N.D. d		
19) Methylene Chloride	0.00	84	0	N.D.		
20) 3-Chloro-1-propene (Al...	0.00	41	0	N.D.		
21) Trichlorotrifluoroethane	8.99	151	22763	0.894 ng		97
22) Carbon Disulfide	8.88	76	5145	0.059 ng	#	75
23) trans-1,2-Dichloroethene	0.00	61	0	N.D.		
24) 1,1-Dichloroethane	10.25	63	919	N.D.		
25) Methyl tert-Butyl Ether	0.00	73	0	N.D. d		
26) Vinyl Acetate	0.00	86	0	N.D.		
27) 2-Butanone (MEK)	10.67	72	1438	0.093 ng	#	44
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.		
29) Diisopropyl Ether	0.00	87	0	N.D.		
30) Ethyl Acetate	11.45	61	6660	0.849 ng		92
31) n-Hexane	11.42	57	496	N.D.		
32) Chloroform	11.49	83	917	N.D.		
34) Tetrahydrofuran (THF)	0.00	72	0	N.D.		
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	0.00	62	0	N.D.		
38) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
39) Isopropyl Acetate	0.00	61	0	N.D.		
40) 1-Butanol	0.00	56	0	N.D. d		
41) Benzene	13.04	78	3089	N.D.		
42) Carbon Tetrachloride	0.00	117	0	N.D.		
43) Cyclohexane	13.32	84	513	N.D.		
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.		
45) 1,2-Dichloropropane	0.00	63	0	N.D.		
46) Bromodichloromethane	0.00	83	0	N.D.		
47) Trichloroethene	14.14	130	1485	0.051 ng	#	58
48) 1,4-Dioxane	0.00	88	0	N.D.		
49) 2,2,4-Trimethylpentane...	14.19	57	964	N.D.		

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Acq On : 27 Mar 2019 20:35

Operator: LH

Sample : P1901438-021 (60mL)

Misc : S31-02111911

ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 01 14:27:59 2019

Quant Method : I:\MS16\METHODS\R16032219.M

Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)

QLast Update : Fri Mar 22 11:09:04 2019

Response via : Initial Calibration

DataAcq Meth:TO15.M

Sample calc

$$\text{Conc} = \frac{266063}{445711} \times \frac{12.5 \text{ ng}}{.942} \times \frac{1 \text{ L}}{106 \text{ L}} \times 1.8 = 237.6 \frac{\text{ug}}{\text{m}^3}$$

(Vol DF) (Con DF)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
50) Methyl Methacrylate	0.00	100	0	N.D.		
51) n-Heptane	0.00	71	0	N.D.		
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	0.00	58	0	N.D.		
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
55) 1,1,2-Trichloroethane	0.00	97	0	N.D.		
58) Toluene	15.98	91	21663	0.220 ng		98
59) 2-Hexanone	16.20	43	336	N.D.		
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) n-Butyl Acetate	16.88	43	986	N.D.		
63) n-Octane	16.96	57	1105	0.061 ng	#	40
64) Tetrachloroethene	17.11	166	266063	7.921 ng	✓	100
65) Chlorobenzene	0.00	112	0	N.D.		
66) Ethylbenzene	18.11	91	2409	N.D.		
67) m- & p-Xylenes	18.26	91	7796	0.091 ng		97
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	18.60	104	1450	N.D.		
70) o-Xylene	18.69	91	3603	N.D.		
71) n-Nonane	18.87	43	3305	0.083 ng		85
72) 1,1,2,2-Tetrachloroethane	18.65	83	660	N.D.		
74) Cumene	19.21	105	579	N.D.		
75) alpha-Pinene	19.54	93	12857	0.221 ng	#	47
76) n-Propylbenzene	19.65	91	1876	N.D.		
77) 3-Ethyltoluene	19.73	105	4680	N.D.		
78) 4-Ethyltoluene	19.77	105	2544	N.D.		
79) 1,3,5-Trimethylbenzene	19.84	105	2362	N.D.		
80) alpha-Methylstyrene	0.00	118	0	N.D. d		
81) 2-Ethyltoluene	20.00	105	2193	N.D.		
82) 1,2,4-Trimethylbenzene	20.19	105	8146	0.089 ng		87
83) n-Decane	0.00	57	0	N.D. d		
84) Benzyl Chloride	20.36	91	2076	N.D.		
85) 1,3-Dichlorobenzene	20.32	146	127	N.D.		
86) 1,4-Dichlorobenzene	20.40	146	315	N.D.		
87) sec-Butylbenzene	20.42	105	312	N.D.		
88) 4-Isopropyltoluene (p-...	20.56	119	4044	N.D.		
89) 1,2,3-Trimethylbenzene	20.56	105	2639	N.D.		
90) 1,2-Dichlorobenzene	0.00	146	0	N.D.		
91) d-Limonene	20.68	68	38307	1.183 ng		98
92) 1,2-Dibromo-3-Chloropr...	20.92	157	698	N.D.		
93) n-Undecane	0.00	57	0	N.D. d		
94) 1,2,4-Trichlorobenzene	22.18	180	167	N.D.		
95) Naphthalene	22.29	128	4833	N.D.		
96) n-Dodecane	0.00	57	0	N.D. d		
97) Hexachlorobutadiene	0.00	225	0	N.D.		
98) Cyclohexanone	0.00	55	0	N.D. d		
99) tert-Butylbenzene	20.19	119	1086	N.D.		
100) n-Butylbenzene	20.92	91	2000	N.D.		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

6) IR	Chlorobenzene-d5 (...	-----ISTD-----									
7) S	Toluene-d8 (SS2)	2.342	2.327	2.325	2.328	2.570	2.123	2.142	2.136	2.287	6.58
8) T	Toluene		2.997	2.953	2.803	3.206	2.492	2.610	2.276	2.762	11.67
9) T	2-Hexanone	0.978	1.031	1.247	1.243	1.449	1.182	1.253	1.041	1.178	13.18
0) T	Dibromochlorom...	0.837	0.780	0.797	0.797	0.963	0.809	0.878	0.763	0.828	7.83
1) T	1,2-Dibromoethane	0.799	0.744	0.775	0.783	0.913	0.746	0.795	0.695	0.781	8.09
2) T	n-Butyl Acetate	1.022	1.064	1.244	1.310	1.591	1.315	1.417	1.158	1.265	14.79
3) T	n-Octane	0.578	0.542	0.556	0.522	0.531	0.457	0.496	0.399	0.510	11.40
4) T	Tetrachloroethene	1.114	0.987	0.980	0.935	0.965	0.901	0.893	0.761	0.942	10.67
5) T	Chlorobenzene	2.388	2.115	2.075	1.987	2.084	1.983	1.907	1.781	2.040	8.70
6) T	Ethylbenzene	3.783	3.228	3.331	3.202	3.380	3.172	3.040	2.797	3.242	8.77
7) T	m- & p-Xylenes	2.737	2.463	2.496	2.409	2.507	2.404	2.202	1.977	2.399	9.40
8) T	Bromoform	0.719	0.685	0.714	0.709	0.840	0.838	0.812	0.769	0.761	8.21
9) T	Styrene	2.028	1.797	1.957	1.964	2.148	2.072	1.961	1.794	1.965	6.28
0) T	o-Xylene	2.786	2.506	2.538	2.483	2.573	2.417	2.213	1.958	2.434	10.27
1) T	n-Nonane	1.279	1.207	1.210	1.134	1.174	1.067	0.994	0.819	1.111	13.30
2) T	1,1,2,2-Tetrac...	1.307	1.186	1.264	1.220	1.317	1.261	1.143	0.988	1.211	8.87
3) S	Bromofluoroben...	0.969	0.979	0.991	0.997	0.991	0.955	0.940	0.916	0.967	2.93
4) T	Cumene	3.891	3.276	3.375	3.237	3.417	3.164	3.006	2.661	3.253	10.83
5) T	alpha-Pinene	1.821	1.612	1.698	1.637	1.765	1.518	1.614	1.414	1.635	7.98
6) T	n-Propylbenzene		3.869	3.915	3.853	3.980	3.354	3.423	3.039	3.633	9.91
7) T	3-Ethyltoluene	3.739	3.129	3.323	3.258	3.416	2.882	3.194	2.581	3.191	10.88
8) T	4-Ethyltoluene	3.396	3.204	3.239	3.043	3.200	2.731	2.620	2.334	2.971	12.40
9) T	1,3,5-Trimethy...		2.853	2.824	2.738	2.801	2.375	2.426	2.000	2.574	12.38
0) T	alpha-Methylst...	1.384	1.336	1.449	1.467	1.613	1.379	1.418	1.152	1.400	9.30
1) T	2-Ethyltoluene		3.347	3.428	3.238	3.315	2.780	2.800	2.281	3.027	13.88
2) T	1,2,4-Trimethy...	2.970	2.710	2.761	2.737	2.821	2.336	2.353	1.871	2.570	13.94
3) T	n-Decane	1.431	1.338	1.377	1.344	1.357	1.112	1.090	0.840	1.236	16.41
4) T	Benzyl Chloride				1.569	2.129	2.075	2.189	1.805	1.953	13.32
5) T	1,3-Dichlorobe...	1.940	1.799	1.864	1.779	1.836	1.554	1.571	1.267	1.701	13.03
6) T	1,4-Dichlorobe...	2.119	1.878	1.886	1.821	1.893	1.563	1.581	1.301	1.755	14.64
7) T	sec-Butylbenzene		3.830	3.830	3.734	3.809	3.171	3.130	2.496	3.429	15.00
8) T	4-Isopropyltol...	3.806	3.490	3.630	3.544	3.650	2.996	2.972	2.263	3.294	15.64
9) T	1,2,3-Trimethy...		2.862	2.854	2.757	2.851	2.338	2.372	1.835	2.553	15.26
0) T	1,2-Dichlorobe...	1.921	1.784	1.794	1.724	1.767	1.455	1.432	1.140	1.627	15.97
1) T	d-Limonene	0.959	0.882	1.017	1.006	1.075	0.867	0.839	0.621	0.908	15.64
2) T	1,2-Dibromo-3-...	0.430	0.532	0.591	0.603	0.692	0.616	0.637	0.534	0.579	13.80
3) T	n-Undecane	1.340	1.357	1.457	1.422	1.517	1.185	1.077	0.891	1.281	16.67
4) T	1,2,4-Trichlor...	1.440	1.293	1.408	1.401	1.529	1.284	1.215	1.125	1.337	9.84
5) T	Naphthalene	4.238	3.607	4.160	4.206	4.597	3.726	3.499	3.091	3.890	12.63
6) T	n-Dodecane	1.296	1.192	1.334	1.397	1.578	1.106	1.003	0.867	1.222	18.65
7) T	Hexachlorobuta...	1.210	0.987	0.978	0.967	1.001	0.837	0.792	0.776	0.944	15.01
8) T	Cyclohexanone	0.886	0.874	0.886	0.876	0.942	0.987	0.939	0.858	0.906	4.95
9) T	tert-Butylbenzene	3.063	2.861	2.850	2.697	2.789	2.325	2.319	1.834	2.592	15.51
0) T	n-Butylbenzene	2.966	2.846	3.003	2.892	3.081	2.526	2.534	2.017	2.733	12.99

#) = Out of Range

6032219.M Mon Mar 25 12:09:49 2019

Acq On : 22 Mar 2019 4:10

Operator: LH

Sample : 5.0ng TO-15 ICAL STD

Misc : S31-02111911/S31-03201907 (4/18)

ALS Vial : 4 Sample Multiplier: 1

Sec attached

Quant Time: Mar 22 10:55:04 2019

Quant Method : I:\MS16\METHODS\R16032219.M

Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)

QLast Update : Fri Mar 22 10:54:33 2019

Response via : Initial Calibration

LH 3/22/19

DataAcq Meth:TO15.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS1)	11.32	130	219938	12.500	ng	-0.01
37) 1,4-Difluorobenzene (IS2)	13.43	114	928440	12.500	ng	0.00
56) Chlorobenzene-d5 (IS3)	17.72	82	372970	12.500	ng	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4(...	12.17	65	271097	12.790	ng	0.00
Spiked Amount	12.500	Range	70 - 130	Recovery	=	102.32%
57) Toluene-d8 (SS2)	15.87	98	958576	13.966	ng	0.00
Spiked Amount	12.500	Range	70 - 130	Recovery	=	111.76%
73) Bromofluorobenzene (SS3)	19.09	174	369529	13.097	ng	0.00
Spiked Amount	12.500	Range	70 - 130	Recovery	=	104.80%

Target Compounds

						Qvalue
2) Propene	4.05	42	105398	4.752	ng	100
3) Dichlorodifluoromethan...	4.22	85	224207	5.403	ng	100
4) Chloromethane	4.52	50	160713	4.689	ng	99
5) 1,2-Dichloro-1,1,2,2-t...	4.79	135	134652	5.221	ng	100
6) Vinyl Chloride	4.95	62	167030	5.130	ng	99
7) 1,3-Butadiene	5.23	54	117328	5.234	ng	100
8) Bromomethane	5.70	94	103840	5.147	ng	100
9) Chloroethane	6.04	64	75123	4.996	ng	100
10) Ethanol	6.40	45	345453	20.697	ng	100
11) Acetonitrile	6.70	41	172980	4.611	ng	98
12) Acrolein	6.90	56	66198	5.197	ng	99
13) Acetone	7.09	58	389967	24.851	ng	100
14) Trichlorofluoromethane	7.35	101	189122	5.415	ng	100
15) 2-Propanol (Isopropanol)	7.59	45	496748	9.460	ng	98
16) Acrylonitrile	7.89	53	133684	5.027	ng	100
17) 1,1-Dichloroethene	8.35	96	113483	5.418	ng	100
18) 2-Methyl-2-Propanol (t...	8.50	59	520482	10.418	ng	99
19) Methylene Chloride	8.57	84	114943	5.331	ng	100
20) 3-Chloro-1-propene (Al...	8.74	41	136614	5.122	ng	97
21) Trichlorotrifluoroethane	8.99	151	118617	5.513	ng	100
22) Carbon Disulfide	8.85	76	419605	5.109	ng	100
23) trans-1,2-Dichloroethene	9.86	61	152484	5.358	ng	99
24) 1,1-Dichloroethane	10.11	63	182423	5.108	ng	100
25) Methyl tert-Butyl Ether	10.20	73	318897	5.438	ng	100
26) Vinyl Acetate	10.37	86	126601	28.316	ng	# 89
27) 2-Butanone (MEK)	10.62	72	73805	4.849	ng	99
28) cis-1,2-Dichloroethene	11.14	61	145612	5.215	ng	99
29) Diisopropyl Ether	11.42	87	90266	5.066	ng	# 95
30) Ethyl Acetate	11.43	61	80935	10.197	ng	99
31) n-Hexane	11.41	57	169786	5.207	ng	100
32) Chloroform	11.48	83	192766	5.423	ng	100
34) Tetrahydrofuran (THF)	11.89	72	73157	4.649	ng	99
35) Ethyl tert-Butyl Ether	12.02	87	130735	5.372	ng	99
36) 1,2-Dichloroethane	12.29	62	131859	5.474	ng	99
38) 1,1,1-Trichloroethane	12.56	97	168256	5.553	ng	100
39) Isopropyl Acetate	12.98	61	137959	9.065	ng	# 99
40) 1-Butanol	13.00	56	202535	10.208	ng	98
41) Benzene	13.04	78	442754	4.837	ng	100
42) Carbon Tetrachloride	13.20	117	149042	5.394	ng	100
43) Cyclohexane	13.32	84	337944	10.234	ng	99
44) tert-Amyl Methyl Ether	13.67	73	300428	5.189	ng	99
45) 1,2-Dichloropropane	13.89	63	106379	5.065	ng	99
46) Bromodichloromethane	14.08	83	149421	5.448	ng	99
47) Trichloroethene	14.13	130	137305	5.338	ng	99
48) 1,4-Dioxane	14.11	88	91912	4.746	ng	99
49) 2,2,4-Trimethylpentane...	14.18	57	716 of 894	5.025	ng	100

Acq On : 22 Mar 2019 4:10
 Sample : 5.0ng TO-15 ICAL STD
 Misc : S31-02111911/S31-03201907 (4/18)
 ALS Vial : 4 Sample Multiplier: 1

Operator: LH

Quant Time: Mar 22 10:55:04 2019
 Quant Method : I:\MS16\METHODS\R16032219.M
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
 QLast Update : Fri Mar 22 10:54:33 2019
 Response via : Initial Calibration
 DataAcq Meth:TO15.M

$$RRF = \frac{152360}{372910} \times \frac{12.5 \text{ ng}}{5.29 \text{ ng}}$$

$$= 0.965$$

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
50) Methyl Methacrylate	14.33	100	95682	10.305	ng	98
51) n-Heptane	14.45	71	104963	5.245	ng	99
52) cis-1,3-Dichloropropene	14.99	75	204445	6.295	ng	99
53) 4-Methyl-2-pentanone	15.02	58	107852	5.206	ng	97
54) trans-1,3-Dichloropropene	15.51	75	174762	6.333	ng	100
55) 1,1,2-Trichloroethane	15.69	97	127003	5.913	ng	99
58) Toluene	15.97	91	503130	5.665	ng	99
59) 2-Hexanone	16.21	43	232153	5.243	ng	99
60) Dibromochloromethane	16.39	129	154365	6.248	ng	99
61) 1,2-Dibromoethane	16.64	107	146562	6.075	ng	99
62) n-Butyl Acetate	16.83	43	257474	5.299	ng	99
63) n-Octane	16.95	57	85253	5.150	ng	99
64) Tetrachloroethene	17.11	166	152360	5.485	ng	100
65) Chlorobenzene	17.77	112	331380	5.369	ng	100
66) Ethylbenzene	18.11	91	520830	5.210	ng	99
67) m- & p-Xylenes	18.27	91	793926	10.680	ng	99
68) Bromoform	18.35	173	133160	5.889	ng	100
69) Styrene	18.59	104	339751	5.607	ng	100
70) o-Xylene	18.69	91	407707	5.392	ng	98
71) n-Nonane	18.87	43	187557	5.238	ng	99
72) 1,1,2,2-Tetrachloroethane	18.68	83	209046	5.490	ng	99
74) Cumene	19.20	105	538840	5.326	ng	99
75) alpha-Pinene	19.54	93	272589	5.477	ng	100
76) n-Propylbenzene	19.64	91	638967	5.478	ng	99
77) 3-Ethyltoluene	19.73	105	541294	5.527	ng	100
78) 4-Ethyltoluene	19.77	105	506461	5.445	ng	100
79) 1,3,5-Trimethylbenzene	19.83	105	441690	5.364	ng	100
80) alpha-Methylstyrene	19.96	118	254569	5.903	ng	99
81) 2-Ethyltoluene	20.00	105	530149	5.407	ng	100
82) 1,2,4-Trimethylbenzene	20.19	105	449532	5.539	ng	100
83) n-Decane	20.26	57	217790	5.532	ng	99
84) Benzyl Chloride	20.31	91	333749	5.965	ng	99
85) 1,3-Dichlorobenzene	20.32	146	295764	5.765	ng	100
86) 1,4-Dichlorobenzene	20.39	146	305211	5.765	ng	100
87) sec-Butylbenzene	20.42	105	604100	5.543	ng	100
88) 4-Isopropyltoluene (p-...	20.56	119	567373	5.555	ng	100
89) 1,2,3-Trimethylbenzene	20.56	105	443124	5.517	ng	99
90) 1,2-Dichlorobenzene	20.68	146	286998	5.851	ng	99
91) d-Limonene	20.68	68	161943	5.585	ng	98
92) 1,2-Dibromo-3-Chloropr...	21.06	157	107573	5.593	ng	98
93) n-Undecane	21.34	57	239287	5.942	ng	98
94) 1,2,4-Trichlorobenzene	22.17	180	242704	6.148	ng	99
95) Naphthalene	22.28	128	702929	5.708	ng	100
96) n-Dodecane	22.24	57	242687	7.164	ng	99
97) Hexachlorobutadiene	22.58	225	157203	5.810	ng	100
98) Cyclohexanone	18.41	55	138065	4.607	ng	99
99) tert-Butylbenzene	20.19	119	444036	5.552	ng	100
100) n-Butylbenzene	20.91	91	489096	5.665	ng	99

IR
4/16/19

(#) = qualifier out of range (m) = manual integration (+) = signals summed

APPENDIX C

SAMPLING LOGS

3/14/19

LAF Building Inventory :

- In sampling area

1. Multi-Surface Cleaner
2. Paper Towels
3. Fire Extinguisher.
4. Beverages in vending machine

* In Back Room:

1. Snow salt
2. Bar Keeper's Friends
SS cleaner
3. Multi-surface cleaner
4. Patching compound

Lockheed Martin Corporation

SOP SSDS-25

Sub-Slab Vapor Sampling

SOP Owner:	Amec E&E, PC
SOP No.:	SSDS-25
Revision No.:	02
Revision Date:	1/23/2019
Revision By:	EAW
Approved By:	Lockheed / CDM

		Sub-Slab Vapor Sample Collection Log	
		Sample ID:	SS-G5
Client:	Lockheed Martin Corp.	Sampling Depth:	
Project:	Former Unisys Facility	Time and Date of Installation:	3/14/19
Location:	Lake Success, NY	Miscellaneous Equipment:	
Project #:	3617187442	Moisture Content:	
Samplers:	d. Logan + E. Vashburgh		

Instrument Readings

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
3/14/19	1113	-30	55	33	0	29.92 ↓	0
	1513	-8.0					

(a) Record canister information at a minimum at the beginning and end of sampling

Summa Canister Information:

Size (circle one):	1 L	6 L
Canister ID:	AC 02427	
Flow Controller ID:	AV 604619	
Notes:		

Leak Test Information (if applicable):

General Observations/Notes:

Lockheed Martin Corporation
SOP SSDS-25
Sub-Slab
Vapor
Sampling

SOP Owner:	Amec E&E, PC
SOP No.:	SSDS-25
Revision No.	02
Revision Date:	1/23/2019
Revision By:	EAW
Approved By:	Lockheed / CDM

		Sub-Slab Vapor Sample Collection Log	
		Sample ID:	SS-E10
Client:	Lockheed Martin Corp.	Sampling Depth:	
Project:	Former Unisys Facility	Time and Date of Installation:	3/14/19
Location:	Lake Success, NY	Miscellaneous Equipment:	
Project #:	3617187442	Moisture Content:	
Samplers:	EV and JL		

Instrument Readings

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
3/14/19	1110	-2.9	55	33	0	29.92↓	0
	1725	-7.5					

(a) Record canister information at a minimum at the beginning and end of sampling

Summa Canister Information:

Size (circle one):	1 L (6 L)
Canister ID:	AS00837
Flow Controller ID:	AVG04961
Notes:	

Leak Test Information (if applicable):

General Observations/Notes:

Lockheed Martin Corporation
SOP SSDS-25
Sub-Slab
Vapor
Sampling

SOP Owner:	Amec E&E, PC
SOP No.:	SSDS-25
Revision No.	02
Revision Date:	1/23/2019
Revision By:	EAW
Approved By:	Lockheed / CDM

		Sub-Slab Vapor Sample Collection Log	
		Sample ID:	SS-D13
Client:	Lockheed Martin Corp.	Sampling Depth:	
Project:	Former Unisys Facility	Time and Date of Installation:	3/14/19
Location:	Lake Success, NY	Miscellaneous Equipment:	
Project #:	3617187442	Moisture Content:	
Samplers:	EV and J2		

Instrument Readings

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
3/14/19	1107	-2.9	55	33	0	29.92	0
	1730	-8					

(a) Record canister information at a minimum at the beginning and end of sampling

Summa Canister Information:

Size (circle one):	1 L	(6 L)
Canister ID:	SC02198	
Flow Controller ID:	0A01874	
Notes:		

Leak Test Information (if applicable):

General Observations/Notes:

Lockheed Martin Corporation
SOP SSDS-25
Sub-Slab
Vapor
Sampling

SOP Owner:	Amec E&E, PC
SOP No.:	SSDS-25
Revision No.	02
Revision Date:	1/23/2019
Revision By:	EAW
Approved By:	Lockheed / CDM

		Sub-Slab Vapor Sample Collection Log	
		Sample ID:	SS-F13
Client:	Lockheed Martin Corp.	Sampling Depth:	
Project:	Former Unisys Facility	Time and Date of Installation:	3/14/19
Location:	Lake Success, NY	Miscellaneous Equipment:	
Project #:	3617187442	Moisture Content:	
Samplers:			

Instrument Readings

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
3/14/19	1105 1855	-30 -8.0	55	33	0	29.92	3

(a) Record canister information at a minimum at the beginning and end of sampling

Summa Canister Information:

Size (circle one):	1 L 6 L
Canister ID:	SC01785
Flow Controller ID:	0A01439
Notes:	

Leak Test Information (if applicable):

General Observations/Notes:

Lockheed Martin Corporation

SOP SSDS-25

Sub-Slab Vapor Sampling

SOP Owner:	Amec E&E, PC
SOP No.:	SSDS-25
Revision No.	02
Revision Date:	1/23/2019
Revision By:	EAW
Approved By:	Lockheed / CDM

		Sub-Slab Vapor Sample Collection Log	
		Sample ID:	SS-E16
Client:	Lockheed Martin Corp.	Sampling Depth:	
Project:	Former Unisys Facility	Time and Date of Installation:	3/14/19
Location:	Lake Success, NY	Miscellaneous Equipment:	
Project #:	3617187442	Moisture Content:	
Samplers:	EV and JL		

Instrument Readings

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
3/14/19	1058	-30	55	33	0	29.926	0
	1827	-8.0					

(a) Record canister information at a minimum at the beginning and end of sampling

Summa Canister Information:

Size (circle one):	1 L	5 L
Canister ID:	SC00963	
Flow Controller ID:	0A01035	
Notes:		

Leak Test Information (if applicable):

General Observations/Notes:

Lockheed Martin Corporation
SOP SSDS-25
Sub-Slab
Vapor
Sampling

SOP Owner:	Amec E&E, PC
SOP No.:	SSDS-25
Revision No.	02
Revision Date:	1/23/2019
Revision By:	EAW
Approved By:	Lockheed / CDM

		Sub-Slab Vapor Sample Collection Log	
		Sample ID:	SS - G18
Client:	Lockheed Martin Corp.	Sampling Depth:	
Project:	Former Unisys Facility	Time and Date of Installation:	3/14/19
Location:	Lake Success, NY	Miscellaneous Equipment:	
Project #:	3617187442	Moisture Content:	
Samplers:	EV and JL		

Instrument Readings

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
3/14/19	1101	-30	55	33	0	29.92	6
	1737	-8					

(a) Record canister information at a minimum at the beginning and end of sampling

Summa Canister Information:

Size (circle one):	1 L (6 L)
Canister ID:	SS00275
Flow Controller ID:	0400396
Notes:	

Leak Test Information (if applicable):

General Observations/Notes:

Lockheed Martin Corporation
SOP SSDS-25
Sub-Slab
Vapor
Sampling

SOP Owner:	Amec E&E, PC
SOP No.:	SSDS-25
Revision No.	02
Revision Date:	1/23/2019
Revision By:	EAW
Approved By:	Lockheed / CDM

		Sub-Slab Vapor Sample Collection Log	
		Sample ID:	SS-C20
Client:	Lockheed Martin Corp.	Sampling Depth:	
Project:	Former Unisys Facility	Time and Date of Installation:	3/14/19
Location:	Lake Success, NY	Miscellaneous Equipment:	
Project #:	3617187442	Moisture Content:	
Samplers:	JL + EV		

Instrument Readings

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
3/14/19	11:38	-3.0	55	33	0	29.92	0
	17:40	-8.0					

(a) Record canister information at a minimum at the beginning and end of sampling

Summa Canister Information:

Size (circle one):	1 L (6 L)
Canister ID:	SC02096
Flow Controller ID:	0A01477
Notes:	

Leak Test Information (if applicable):

• Helium Leak Test done at this location

Should enriched to 90.6 %

General Observations/Notes:

- Air Sample from pointed detected at 1300 ppm which is less than the 10% criteria
- Helium leak test passed

Lockheed Martin Corporation
SOP SSDS-25
Sub-Slab
Vapor
Sampling

SOP Owner:	Amec E&E, PC
SOP No.:	SSDS-25
Revision No.	02
Revision Date:	1/23/2019
Revision By:	EAW
Approved By:	Lockheed / CDM

		Sub-Slab Vapor Sample Collection Log	
		Sample ID:	SS - E21.5
Client:	Lockheed Martin Corp.	Sampling Depth:	
Project:	Former Unisys Facility	Time and Date of Installation:	3/14/19
Location:	Lake Success, NY	Miscellaneous Equipment:	
Project #:	3617187442	Moisture Content:	
Samplers:	EV and JC		

Instrument Readings

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
3/14/19	1051 1351	-29 -8	55	33	0	29.92	0

(a) Record canister information at a minimum at the beginning and end of sampling

Summa Canister Information:

Size (circle one):	1 L 6 L
Canister ID:	AC02428
Flow Controller ID:	0A00595
Notes:	

Leak Test Information (if applicable):

General Observations/Notes:

Lockheed Martin Corporation
SOP SSDS-25
Sub-Slab
Vapor
Sampling

SOP Owner:	Amec E&E, PC
SOP No.:	SSDS-25
Revision No.	02
Revision Date:	1/23/2019
Revision By:	EAW
Approved By:	Lockheed / CDM

		Sub-Slab Vapor Sample Collection Log	
		Sample ID:	SS-H21
Client:	Lockheed Martin Corp.	Sampling Depth:	
Project:	Former Unisys Facility	Time and Date of Installation:	3/14/19
Location:	Lake Success, NY	Miscellaneous Equipment:	
Project #:	3617187442	Moisture Content:	
Samplers:			

Instrument Readings

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
3/14/19	1046	-30	55	33	0	29.92	0
	1738	-8.0					

(a) Record canister information at a minimum at the beginning and end of sampling

Summa Canister Information:

Size (circle one):	1 L 6 L
Canister ID:	A501306
Flow Controller ID:	0A01470
Notes:	

Leak Test Information (if applicable):

General Observations/Notes:

Lockheed Martin Corporation
SOP SSDS-25
Sub-Slab
Vapor
Sampling

SOP Owner:	Amec E&E, PC
SOP No.:	SSDS-25
Revision No.	02
Revision Date:	1/23/2019
Revision By:	EAW
Approved By:	Lockheed / CDM

		Sub-Slab Vapor Sample Collection Log	
		Sample ID:	SS-00P
Client:	Lockheed Martin Corp.	Sampling Depth:	
Project:	Former Unisys Facility	Time and Date of Installation:	3/14/19
Location:	Lake Success, NY	Miscellaneous Equipment:	
Project #:	3617187442	Moisture Content:	
Samplers:	EV and OL		

Instrument Readings

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
3/14/19	1113	-30	55	33	10	29.92	0
	1630	-8.0					

(a) Record canister information at a minimum at the beginning and end of sampling

Summa Canister Information:

Size (circle one):	1 L 6 L
Canister ID:	AS01321
Flow Controller ID:	01A00309
Notes:	

Leak Test Information (if applicable):

General Observations/Notes:

Duplicate to SS-G5

SOP Owner:	Amec E&E, PC
SOP No.:	SSDS-26
Revision No.	02
Revision Date:	1/23/2019
Revision By:	EAW
Approved By:	Lockheed / CDM

Lockheed Martin Corporation **SOP SSDS-26 – Indoor and Ambient Air** **Sampling**

		Indoor Air/Ambient Air Sample Collection Log	
		Sample ID:	AA-01
Client:	Lockheed Martin Corp.	Sampling Depth:	
Project:	Former Unisys Facility	Time and Date of Installation:	3/14/19
Location:	Lake Success, NY	Miscellaneous Equipment:	
Project #:	3617187442	Moisture Content:	
Samplers:	EV and JC		

Instrument Readings

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
3/14/19	1032	-30	55	33	0	29.92	0
	1720	-8					

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one):	1 L 6 L
Canister ID:	A500927
Flow Controller ID:	FCS00290
Notes:	

Leak Test Information (if applicable):

General Observations/Notes:

Lockheed Martin Corporation

SOP SSDS-26 – Indoor and Ambient Air Sampling

SOP Owner:	Amec E&E, PC
SOP No.:	SSDS-26
Revision No.	02
Revision Date:	1/23/2019
Revision By:	EAW
Approved By:	Lockheed / CDM

		Indoor Air/Ambient Air Sample Collection Log	
		Sample ID:	IA-EZ
Client:	Lockheed Martin Corp.	Sampling Depth:	
Project:	Former Unisys Facility	Time and Date of Installation:	3/14/19
Location:	Lake Success, NY	Miscellaneous Equipment:	
Project #:	3617187442	Moisture Content:	
Samplers:	EV and DL		

Instrument Readings

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
3/14/19	11:15	-29	55	33	0	29.92	0
	11:46	-8.0					

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one):	1 L (6 L)
Canister ID:	SC019416
Flow Controller ID:	AVC04969
Notes:	

Leak Test Information (if applicable):

General Observations/Notes:

SOP Owner:	Amec E&E, PC
SOP No.:	SSDS-26
Revision No.	02
Revision Date:	1/23/2019
Revision By:	EAW
Approved By:	Lockheed / CDM

Lockheed Martin Corporation **SOP SSDS-26 – Indoor and Ambient Air** **Sampling**

		Indoor Air/Ambient Air Sample Collection Log	
		Sample ID:	IA-C7
Client:	Lockheed Martin Corp.	Sampling Depth:	
Project:	Former Unisys Facility	Time and Date of Installation:	3/14/19
Location:	Lake Success, NY	Miscellaneous Equipment:	
Project #:	3617187442	Moisture Content:	
Samplers:	EV and JL		

Instrument Readings

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
3/14/19	1116	-3.0	55	33	0	29.92	3
	1800	-8.0					

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one):	1 L	6 L
Canister ID:	3/14/19 SC005421	
Flow Controller ID:	FCA00791	
Notes:		

Leak Test Information (if applicable):

General Observations/Notes:

Lockheed Martin Corporation

SOP SSDS-26 – Indoor and Ambient Air Sampling

SOP Owner:	Amec E&E, PC
SOP No.:	SSDS-26
Revision No.:	02
Revision Date:	1/23/2019
Revision By:	EAW
Approved By:	Lockheed / CDM

		Indoor Air/Ambient Air Sample Collection Log	
		Sample ID:	IA-G5
Client:	Lockheed Martin Corp.	Sampling Depth:	
Project:	Former Unisys Facility	Time and Date of Installation:	3/14/19
Location:	Lake Success, NY	Miscellaneous Equipment:	
Project #:	3617187442	Moisture Content:	
Samplers:	EV and JL		

Instrument Readings

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
3/14/19	1112	-30	55	33	0	29.924	0
	1155	-8.0					

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one):	1 L	(6 L)
Canister ID:	SC00819	
Flow Controller ID:	FCA00700	
Notes:		

Leak Test Information (if applicable):

General Observations/Notes:

SOP Owner:	Amec E&E, PC
SOP No.:	SSDS-26
Revision No.:	02
Revision Date:	1/23/2019
Revision By:	EAW
Approved By:	Lockheed / CDM

Lockheed Martin Corporation **SOP SSDS-26 – Indoor and Ambient Air** **Sampling**

		Indoor Air/Ambient Air Sample Collection Log	
		Sample ID:	IVA - E10
Client:	Lockheed Martin Corp.	Sampling Depth:	
Project:	Former Unisys Facility	Time and Date of Installation:	3/14/19
Location:	Lake Success, NY	Miscellaneous Equipment:	
Project #:	3617187442	Moisture Content:	
Samplers:			

Instrument Readings

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
3/14/19	1142	-30	55	33	0	29.92	2
	1542	-8					

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one):	1 L	6 L
Canister ID:	SC01875	
Flow Controller ID:	FCS00007	
Notes:		

Leak Test Information (if applicable):

General Observations/Notes:

SOP Owner:	Amec E&E, PC
SOP No.:	SSDS-26
Revision No.	02
Revision Date:	1/23/2019
Revision By:	EAW
Approved By:	Lockheed / CDM

Lockheed Martin Corporation

SOP SSDS-26 – Indoor and Ambient Air Sampling

		Indoor Air/Ambient Air Sample Collection Log	
		Sample ID:	IA-D13
Client:	Lockheed Martin Corp.	Sampling Depth:	
Project:	Former Unisys Facility	Time and Date of Installation:	3/14/19
Location:	Lake Success, NY	Miscellaneous Equipment:	
Project #:	3617187442	Moisture Content:	
Samplers:			

Instrument Readings

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
3/14/19	1105	-30	55	33	0	29.924	0
	1752	-8.3					

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one):	1 L	6 L
Canister ID:	SC00928	
Flow Controller ID:	FCA00024	
Notes:		

Leak Test Information (if applicable):

General Observations/Notes:

Lockheed Martin Corporation

SOP SSDS-26 – Indoor and Ambient Air Sampling

SOP Owner:	Amec E&E, PC
SOP No.:	SSDS-26
Revision No.	02
Revision Date:	1/23/2019
Revision By:	EAW
Approved By:	Lockheed / CDM

		Indoor Air/Ambient Air Sample Collection Log	
		Sample ID:	IA - F13
Client:	Lockheed Martin Corp.	Sampling Depth:	
Project:	Former Unisys Facility	Time and Date of Installation:	3/14/19
Location:	Lake Success, NY	Miscellaneous Equipment:	
Project #:	3617187442	Moisture Content:	
Samplers:	EV and JL		

Instrument Readings

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
3/14/19	1104 1725	-30 -8.0	55	33	0	29.92	0

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one):	1 L 6 L
Canister ID:	AS01297
Flow Controller ID:	AVGO FC1A00965
Notes:	

Leak Test Information (if applicable):

General Observations/Notes:

Lockheed Martin Corporation

SOP SSDS-26 – Indoor and Ambient Air Sampling

SOP Owner:	Amec E&E, PC
SOP No.:	SSDS-26
Revision No.	02
Revision Date:	1/23/2019
Revision By:	EAW
Approved By:	Lockheed / CDM

		Indoor Air/Ambient Air Sample Collection Log	
		Sample ID:	IA - E16
Client:	Lockheed Martin Corp.	Sampling Depth:	
Project:	Former Unisys Facility	Time and Date of Installation:	3/14/19
Location:	Lake Success, NY	Miscellaneous Equipment:	
Project #:	3617187442	Moisture Content:	
Samplers:	EV and JL		

Instrument Readings

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
3/14/19	1059	-30	55	33	0	29.92	0
	1744	-7.5					

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one):	1 L 6 L
Canister ID:	ACO2179
Flow Controller ID:	FCA00968
Notes:	

Leak Test Information (if applicable):

General Observations/Notes:

Lockheed Martin Corporation

SOP SSDS-26 – Indoor and Ambient Air Sampling

SOP Owner:	Amec E&E, PC
SOP No.:	SSDS-26
Revision No.	02
Revision Date:	1/23/2019
Revision By:	EAW
Approved By:	Lockheed / CDM

		Indoor Air/Ambient Air Sample Collection Log	
		Sample ID:	IA-G18
Client:	Lockheed Martin Corp.	Sampling Depth:	
Project:	Former Unisys Facility	Time and Date of Installation:	3/14/19
Location:	Lake Success, NY	Miscellaneous Equipment:	
Project #:	3617187442	Moisture Content:	
Samplers:	EV and JL		

Instrument Readings

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
3/14/19	1101	-29	55	33	0	29.92	0
3/15/19	0715	-5.5					

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one):	1 L 6 L
Canister ID:	AS00720
Flow Controller ID:	FC1A 01061
Notes:	

Leak Test Information (if applicable):

General Observations/Notes:

Lockheed Martin Corporation

SOP SSDS-26 – Indoor and Ambient Air Sampling

SOP Owner:	Amec E&E, PC
SOP No.:	SSDS-26
Revision No.	02
Revision Date:	1/23/2019
Revision By:	EAW
Approved By:	Lockheed / CDM

		Indoor Air/Ambient Air Sample Collection Log	
		Sample ID:	IA-C20
Client:	Lockheed Martin Corp.	Sampling Depth:	
Project:	Former Unisys Facility	Time and Date of Installation:	3/14/19
Location:	Lake Success, NY	Miscellaneous Equipment:	
Project #:	3617187442	Moisture Content:	
Samplers:	EV and JC		

Instrument Readings

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
3/14/19	1052	-30	55	33	0	29.92	0
	1710	-7.5					

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one):	1 L 6 L
Canister ID:	SC01761
Flow Controller ID:	FC1A01115
Notes:	

Leak Test Information (if applicable):

General Observations/Notes:

Lockheed Martin Corporation

SOP SSDS-26 – Indoor and Ambient Air Sampling

SOP Owner:	Amec E&E, PC
SOP No.:	SSDS-26
Revision No.	02
Revision Date:	1/23/2019
Revision By:	EAW
Approved By:	Lockheed / CDM

		Indoor Air/Ambient Air Sample Collection Log	
		Sample ID:	IA - EZ1.5
Client:	Lockheed Martin Corp.	Sampling Depth:	
Project:	Former Unisys Facility	Time and Date of Installation:	3/14/19
Location:	Lake Success, NY	Miscellaneous Equipment:	
Project #:	3617187442	Moisture Content:	
Samplers:	EV and JL		

Instrument Readings

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
3/14/19	1050	-3.0	55	33	0	29.92	0
	1740	-8.0					

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one):	1 L 6 L
Canister ID:	AC02425
Flow Controller ID:	FCA01062
Notes:	

Leak Test Information (if applicable):

General Observations/Notes:

Lockheed Martin Corporation

SOP SSDS-26 – Indoor and Ambient Air Sampling

SOP Owner:	Amec E&E, PC
SOP No.:	SSDS-26
Revision No.	02
Revision Date:	1/23/2019
Revision By:	EAW
Approved By:	Lockheed / CDM

		Indoor Air/Ambient Air Sample Collection Log	
		Sample ID:	IA-H21
Client:	Lockheed Martin Corp.	Sampling Depth:	
Project:	Former Unisys Facility	Time and Date of Installation:	3/14/19
Location:	Lake Success, NY	Miscellaneous Equipment:	
Project #:	3617187442	Moisture Content:	
Samplers:			

Instrument Readings

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
3/14/19	1047	-3.0	55	33	0	29.926	0
	1750	-8.0					

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one):	1 L	6 L
Canister ID:	A500434	
Flow Controller ID:	FCA00486	
Notes:		

Leak Test Information (if applicable):

General Observations/Notes:

Lockheed Martin Corporation

SOP SSDS-26 – Indoor and Ambient Air Sampling

SOP Owner:	Amec E&E, PC
SOP No.:	SSDS-26
Revision No.	02
Revision Date:	1/23/2019
Revision By:	EAW
Approved By:	Lockheed / CDM

		Indoor Air/Ambient Air Sample Collection Log	
		Sample ID:	IA-12
Client:	Lockheed Martin Corp.	Sampling Depth:	
Project:	Former Unisys Facility	Time and Date of Installation:	3/14/19
Location:	Lake Success, NY	Miscellaneous Equipment:	
Project #:	3617187442	Moisture Content:	
Samplers:	EV and OL		

Instrument Readings

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
3/14/19	1042	-30	55	33	0	29.92	0
	1715	-8					

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one):	1 L 6 L
Canister ID:	AS 01223
Flow Controller ID:	FC A00854
Notes:	

Leak Test Information (if applicable):

General Observations/Notes:

SOP Owner:	Amec E&E, PC
SOP No.:	SSDS-26
Revision No.	02
Revision Date:	1/23/2019
Revision By:	EAW
Approved By:	

Lockheed Martin Corporation **SOP SSDS-26 – Indoor and Ambient Air** **Sampling**

		Indoor Air/Ambient Air Sample Collection Log	
		Sample ID:	IA-DUP
Client:	Lockheed Martin Corp.	Sampling Depth:	
Project:	Former Unisys Facility	Time and Date of Installation:	3/14/19
Location:	Lake Success, NY	Miscellaneous Equipment:	
Project #:	3617187442	Moisture Content:	
Samplers:	EV and JL		

Instrument Readings

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
3/14/19	1059	-3.0	55	33	0	29.92 ↓	0
	1820	-8.0					

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one):	1 L 6 L
Canister ID:	SC00936
Flow Controller ID:	FC1A00760
Notes:	

Leak Test Information (if applicable):

General Observations/Notes:

Duplicate to IA-E16

APPENDIX D
PROPERTY OWNER AND TENANT LETTERS



Lockheed Martin Corporation
6801 Rockledge Drive
MP CCT 246
Bethesda, MD 20817

May 28, 2019

Mr. Peter McClean
KeyPoint Partners
1111 Marcus Avenue
Lake Success, NY 11042

RE: Vapor Intrusion (VI) Sampling Test Results

Dear Mr. McClean:

Indoor air (IA) and Sub-slab (SS) vapor samples were collected from the LA Fitness building located at 1111 Marcus Avenue (Unisys Site No.130045). Samples were collected on March 14, 2019 within the heating season. This correspondence presents you with the sampling results.

The indoor air and sub-slab sample results are presented in Table 1 along with the ambient air data. All sample locations are shown on Figure 1. We have provided these results to the New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (NYSDOH). As KeyPoint Partners and Lockheed Martin have agreed, we have included an individual letter, table and figure addressed to LA Fitness for your distribution.

The primary chemicals of concern potentially related to historical activities at the former Unisys Facility are the solvents trichloroethene (TCE), tetrachloroethene (PCE), cis-1,2-dichloroethene (DCE), and Freon 113 (1,1,2-Trichloro-1,2,2-trifluoroethane), although there were other chemicals used at the site.

Lockheed Martin, in consultation with NYSDEC and NYSDOH, has reviewed the results from your leasehold per NYSDOH's October 2006 Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York (NYSDOH VI Guidance). A copy of this guidance is available on NYSDOH's website at http://www.health.state.ny.us/environmental/indoors/vapor_intrusion/. Note that certain aspects of the guidance have been updated subsequent to October 2006.

Based upon an evaluation of the results of last year's sample analysis and a comparison of that data to the current NYSDOH Soil Vapor Intrusion guidance (updated in May 2017), a sub-slab depressurization system (SSDS) was installed in the northwestern portion of the LA Fitness building. Lockheed Martin arranged for the design and installation of the NYSDEC and NYSDOH approved SSDS. Construction of the SSDS was initiated in December 2018 and completed in February 2019. The system consists of two sub slab extraction points, each with riser pipes and roof-top mounted vapor extraction blowers. The approximate radius of influence of the two points is shown on Figure 1.

The March 14th indoor air sample results collected this year indicate that all indoor air concentrations of TCE and PCE continue to be below the NYSDOH VI Guidance indoor air guidelines of 2 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) and $30 \mu\text{g}/\text{m}^3$, respectively. The sample collected inside the crawlspace had a TCE concentration of $1.2 \mu\text{g}/\text{m}^3$. Because the crawlspace is kept sealed and is not accessible, this does not represent a current exposure pathway. The sample locations and summary of analytical results are presented in Figure 1. All sample results are presented in Table 1.

The indoor air quality of your leasehold is comparable to that of buildings not affected by environmental contamination. The majority of the volatile organic chemicals detected in the indoor air are at levels typically found in most homes and businesses in an urban area and do not present a concern. However, chloroform was detected slightly above typical indoor air background levels suggesting that the results are likely associated with the chlorinated pool, pool products and/or rubber floor mats (e.g. background sources). The enclosed NYSDOH Fact Sheet provides some information on reducing exposures to volatile chemicals found in household products.

Volatile organic compounds including chloroform, PCE, toluene, TCE, and Freon 113 (1,1,2-Trichloro-1,2,2-trifluoroethane) were detected in selected sub-slab soil vapor samples underneath portions of the LA Fitness building. PCE was detected at concentration range of non-detect to $240 \mu\text{g}/\text{m}^3$, and TCE concentrations ranged from non-detect to $7.9 \mu\text{g}/\text{m}^3$ in sub-slab soil vapor samples. Figure 1 shows the location of all sub-slab points and summarizes the analytical results for each sample collected.

Please feel free to contact Renata Ockerby of the NYSDOH at 1-518-402-7860 (Renata.Ockerby@health.ny.gov) or Girish Desai of the NYSDEC at 1-631-444-0243 (girish.desai@dec.ny.gov) regarding the indoor air results. If you are interested, you can obtain a copy of the NYSDOH October 2006 Final Guidance for Soil Vapor Intrusion from their website at http://www.health.state.ny.us/environmental/investigations/soil_gas/svi_guidance/. If you have

Mr. Peter McClean
May 28, 2019
Page 3 of 3

questions about these sample results or the on-going environmental investigations and cleanup at 1111 Marcus Avenue, please contact me at 1-817-378-2573 or via e-mail at Glenda.b.clark@lmco.com.

Sincerely,

A handwritten signature in cursive script that reads "Glenda B. Clark". The signature is written in black ink and is positioned below the "Sincerely," text.

Glenda Clark

cc: Renata Ockerby/NYSDOH
Girish Desai/NYSDEC
William Weber/AMEC E&E, PC
Eric Weinstock/AMEC E&E, PC

Table 1
March 2019 - IA Fitness Sampling Results
Former Unisys Facility, Lake Success, New York

Sample ID	AA-01			IA-C20			IA-C7			IA-D13			IA-E10			IA-DUP ^a			IA-E16			IA-E21.5		
Lab Sample ID	P1901438-001			P1901438-010			P1901438-003			P1901438-006			P1901438-005			P1901438-014			P1901438-008			P1901438-011		
Sampling Date	3/14/19			3/14/19			3/14/19			3/14/19			3/14/19			3/14/19			3/14/19			3/14/19		
Matrix	Air			Air			Air			Air			Air			Air			Air			Air		
Dilution Factor	1.57			1.67			1.67			1.36			1.5			1.59			1.75					
Unit	ug/m3			ug/m3			ug/m3			ug/m3			ug/m3			ug/m3			ug/m3			ug/m3		
AIR - GC/MS VOA-TO-15-UG/M3	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL
AIR BY TO-15																								
1,1,1-Trichloroethane	0.85	U	0.1	0.9	U	0.11	0.9	U	0.11	0.9	U	0.11	0.73	U	0.09	0.81	U	0.099	0.86	U	0.1	0.95	U	0.12
1,1,2,2-Tetrachloroethane	0.83	U	0.12	0.89	U	0.12	0.89	U	0.12	0.89	U	0.12	0.72	U	0.1	0.8	U	0.11	0.84	U	0.12	0.93	U	0.13
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.48	J	0.12	0.48	J	0.13	0.51	J	0.13	0.46	J	0.13	0.45	J	0.1	0.49	J	0.11	0.49	J	0.12	0.47	J	0.13
1,1,2-Trichloroethane	0.85	U	0.085	0.9	U	0.09	0.9	U	0.09	0.9	U	0.09	0.73	U	0.073	0.81	U	0.081	0.86	U	0.086	0.95	U	0.095
1,1-Dichloroethane	0.82	U	0.12	0.87	U	0.13	0.87	U	0.13	0.87	U	0.13	0.71	U	0.11	0.78	U	0.12	0.83	U	0.12	0.91	U	0.14
1,1-Dichloroethene	0.85	U	0.12	0.9	U	0.12	0.9	U	0.12	0.9	U	0.12	0.73	U	0.1	0.81	U	0.11	0.86	U	0.12	0.95	U	0.13
1,2,4-Trichlorobenzene	0.83	U	0.2	0.89	U	0.22	0.89	U	0.22	0.89	U	0.22	0.72	U	0.18	0.8	U	0.2	0.84	U	0.21	0.93	U	0.23
1,2,4-Trimethylbenzene	0.23	J	0.12	0.16	J	0.12	0.89	U	0.12	0.19	J	0.12	1		0.1	0.36	J	0.11	0.23	J	0.12	0.23	J	0.13
1,2-Dibromo-3-chloropropane	0.82	U	0.16	0.87	U	0.17	0.87	U	0.17	0.87	U	0.17	0.71	U	0.14	0.78	U	0.15	0.83	U	0.16	0.91	U	0.18
1,2-Dibromoethane	0.85	U	0.097	0.9	U	0.1	0.9	U	0.1	0.9	U	0.1	0.73	U	0.084	0.81	U	0.093	0.86	U	0.099	0.95	U	0.11
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.8	U	0.13	0.85	U	0.14	0.85	U	0.14	0.85	U	0.14	0.69	U	0.11	0.77	U	0.13	0.81	U	0.13	0.89	U	0.15
1,2-Dichlorobenzene	0.85	U	0.12	0.9	U	0.13	0.9	U	0.13	0.9	U	0.13	0.73	U	0.11	0.81	U	0.12	0.86	U	0.13	0.95	U	0.14
1,2-Dichloroethane	0.83	U	0.093	0.89	U	0.099	0.89	U	0.099	0.72	U	0.099	0.72	U	0.08	0.8	U	0.089	0.84	U	0.094	0.93	U	0.1
1,2-Dichloroethene (total)	0.83	U	0.12	0.89	U	0.13	0.89	U	0.13	0.89	U	0.13	0.72	U	0.1	0.8	U	0.11	0.84	U	0.12	0.93	U	0.13
1,2-Dichloropropane	0.85	U	0.1	0.9	U	0.11	0.43	J	0.11	0.9	U	0.11	0.47	J	0.09	0.81	U	0.099	0.86	U	0.1	0.95	U	0.12
1,3,5-Trimethylbenzene	0.83	U	0.12	0.89	U	0.13	0.89	U	0.13	0.89	U	0.13	0.27	J	0.1	0.8	U	0.12	0.84	U	0.12	0.93	U	0.13
1,3-Butadiene	0.82	U	0.14	0.87	U	0.15	0.87	U	0.15	0.87	U	0.15	0.71	U	0.12	0.78	U	0.13	0.83	U	0.14	0.91	U	0.15
1,3-Dichlorobenzene	0.85	U	0.13	0.9	U	0.13	0.9	U	0.13	0.9	U	0.13	0.73	U	0.11	0.81	U	0.12	0.86	U	0.13	0.95	U	0.14
1,4-Dichlorobenzene	0.85	U	0.13	3.2		0.14	4.6		0.14	2.7		0.14	11		0.11	3.6		0.12	3.1		0.13	2.9		0.14
1,4-Dioxane	0.83	U	0.099	0.44	J	0.11	0.11	J	0.11	0.13	J	0.11	0.72	U	0.086	0.14	J	0.095	0.84	U	0.1	0.93	U	0.11
2-Butanone	0.82	J	0.17	2.5		0.18	4.1		0.18	5.9		0.18	1.5		0.15	2.1		0.17	1.6	J	0.17	1.1	J	0.19
2-Hexanone	0.11	J	0.1	0.33	J	0.11	0.68	J	0.11	0.3	J	0.11	0.14	J	0.09	0.29	J	0.099	0.1	J	0.1	0.95	U	0.12
2-Propanol	0.43	J	0.35	67		0.37	81		0.37	88		0.37	81		0.3	79		0.33	77		0.35	83		0.39
4-Ethyltoluene	0.83	U	0.13	0.89	U	0.14	0.89	U	0.14	0.89	U	0.14	0.16	J	0.12	0.8	U	0.13	0.84	U	0.14	0.93	U	0.15
4-Methyl-2-pentanone	0.83	U	0.11	0.17	J	0.12	0.37	J	0.12	0.27	J	0.12	0.18	J	0.099	0.18	J	0.11	0.14	J	0.12	0.93	U	0.13
Acetic acid, methyl ester	0.79	U	0.38	0.84	U	0.4	0.61	J	0.4	0.84	U	0.4	0.48	J	0.33	0.75	U	0.36	0.8	U	0.38	0.88	U	0.42
Acetone	5	J	1.9	39		2	58		2	47		2	46		1.6	39		1.8	35		1.9	34		2.1
Allyl chloride	0.83	U	0.11	0.89	U	0.12	0.89	U	0.12	0.89	U	0.12	0.72	U	0.098	0.8	U	0.11	0.84	U	0.11	0.93	U	0.13
Benzene	0.53	J	0.12	0.5	J	0.13	0.53	J	0.13	0.53	J	0.13	0.49	J	0.1	0.68	J	0.12	0.49	J	0.12	0.49	J	0.13
Bromodichloromethane	0.83	U	0.12	0.16	J	0.13	0.25	J	0.13	0.26	J	0.13	0.22	J	0.1	0.21	J	0.12	0.19	J	0.12	0.18	J	0.13
Bromoform	0.83	U	0.17	0.89	U	0.18	0.89	U	0.18	0.89	U	0.18	0.72	U	0.15	0.8	U	0.17	0.84	U	0.17	0.93	U	0.19
Bromomethane	0.79	U	0.12	0.84	U	0.12	0.84	U	0.12	0.84	U	0.12	0.68	U	0.1	0.75	U	0.11	0.8	U	0.12	0.88	U	0.13
Carbon disulfide	1.7	U	0.25	2.3		0.27	1.8	U	0.27	4.1		0.27	1.5	U	0.22	2.3	J	0.24	1.7	UJ	0.25	1.9	U	0.28
Carbon tetrachloride	0.4		0.12	0.4		0.12	0.36		0.12	0.44		0.12	0.4		0.1	0.44		0.11	0.42		0.12	0.43		0.13
Chlorobenzene	0.83	U	0.11	0.89	U	0.12	0.89	U	0.12	0.89	U	0.12	0.72	U	0.097	0.8	U	0.11	0.84	U	0.11	0.93	U	0.12
Chlorodifluoromethane	0.61	J	0.39	1.6		0.42	1.3		0.42	1.5		0.42	0.99		0.34	1.5		0.38	1.6		0.4	1.7		0.44
Chloroethane	0.8	U	0.1	0.85	U	0.11	0.12	J	0.11	0.85	U	0.11	0.69	U	0.09	0.77	U	0.099	0.81	U	0.1	0.89	U	0.12
Chloroform	0.85	U	0.11	3.6		0.12	4.7		0.12	5		0.12	4.4		0.097	4.6		0.11	4.4		0.11	4.4		0.12
Chloromethane	0.34	J	0.14	0.44	J	0.14	0.41	J	0.14	0.56	J	0.14	0.29	J	0.12	0.32	J	0.13	0.39	J	0.14	0.43	J	0.15
cis-1,2-Dichloroethene	0.83	U	0.12	0.89	U	0.13	0.89	U	0.13	0.89	U	0.13	0.72	U	0.1	0.8	U	0.11	0.84	U	0.12	0.93	U	0.13
cis-1,3-Dichloropropene	0.88	U	0.13	0.94	U	0.14	0.94	U	0.14	0.94	U	0.14	0.76	U	0.11	0.84	U	0.12	0.89	U	0.13	0.98	U	0.15
Cyclohexane	1.6	U	0.24	1.7	U	0.25	0.36	J	0.25	1.7	U	0.25	1.4	U	0.2	0.28	J	0.23	1.6	U	0.24	1.8	U	0.26
Dibromochloromethane	0.85	U	0.11	0.9	U	0.12	0.9	U	0.12	0.9	U	0.12	0.73	U	0.095	0.81	U	0.11	0.86	U	0.11	0.95	U	0.12
Dichlorodifluoromethane	2.3			2.4		0.15	2.4		0.15	2.4		0.15	2.2		0.12	2.3		0.13	2.4		0.14	2.4		0.15
Difluoroethane	0.79	U	0.41	6.3		0.43	12		0.43	11		0.43	9.5		0.35	7.9		0.39	8.1		0.41	6.8		0.46
Ethylbenzene	0.26	J	0.12	0.15	J	0.13	0.15	J	0.13	0.15	J	0.13	0.2	J	0.1	0.25	J	0.11	0.17	J	0.12	0.15	J	0.13
Freon 115	0.79	U	0.36	0.84	U	0.38	0.84	U	0.38	0.84	U	0.38	0.68	U	0.31	0.75	U	0.35	0.8	U	0.37	0.88	U	0.4
Freon 123	0.79	U	0.38	0.84	U	0.4	0.84	U	0.4	0.84	U	0.4	0.68	U	0.33	0.75	U	0.36	0.8	U	0.38	0.88	U	0.42
Hexachlorobutadiene	0.83	U	0.17	0.89	U	0.18	0.89	U	0.18	0.89	U	0.18	0.72	U	0.15	0.8	U	0.17	0.84	U	0.17	0.93	U	0.19
Hexane	0.3	J	0.17	0.3	J	0.18	0.37	J	0.18	0.27	J	0.18	0.24	J	0.15	0.45	J	0.17	0.25	J	0.17	0.25	J	0.19
Isopropylbenzene	0.83	U	0.12	0.89	U	0.13	0.89	U	0.13	0.89	U	0.13	0.72	U	0.1	0.8	U	0.12	0.84	U				

Table 1
March 2019 - LA Fitness Sampling Results
Former Unisys Facility, Lake Success, New York

Sample ID	IA-E2			IA-F13			IA-G18			IA-G5			IA-H21			IA-I12			SS-C20			SS-D13		
Lab Sample ID	P1901438-002			P1901438-007			P1901438-009			P1901438-004			P1901438-012			P1901438-013			P1901438-021			P1901438-017		
Sampling Date	3/14/19			3/14/19			3/15/19			3/14/19			3/14/19			3/14/19			3/14/19			3/14/19		
Matrix	Air			Air			Air			Air			Air			Air			Air			Air		
Dilution Factor	1.78			1.67			1.48			1.63			1.73			1.68			30			27.38		
Unit	ug/m3			ug/m3			ug/m3			ug/m3			ug/m3			ug/m3			ug/m3			ug/m3		
AIR - GC/MS VOA-TO-15-UG/M3	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL
AIR BY TO-15																								
1,1,1-Trichloroethane	0.96	U	0.12	0.9	U	0.11	0.8	U	0.098	0.88	U	0.11	0.93	U	0.11	0.91	U	0.11	16	U	2	15	U	1.8
1,1,2,2-Tetrachloroethane	0.94	U	0.13	0.89	U	0.12	0.78	U	0.11	0.86	U	0.12	0.92	U	0.13	0.89	U	0.12	16	U	2.2	15	U	2
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.46	J	0.14	0.5	J	0.13	0.49	J	0.11	0.5	J	0.12	0.49	J	0.13	0.5	J	0.13	27		2.3	15	U	2.1
1,1,2-Trichloroethane	0.96	U	0.096	0.9	U	0.09	0.8	U	0.08	0.88	U	0.088	0.93	U	0.093	0.91	U	0.091	16	U	1.6	15	U	1.5
1,1-Dichloroethane	0.93	U	0.14	0.87	U	0.13	0.77	U	0.12	0.85	U	0.13	0.9	U	0.13	0.87	U	0.13	16	U	2.3	14	U	2
1,1-Dichloroethene	0.96	U	0.13	0.9	U	0.12	0.8	U	0.11	0.88	U	0.12	0.93	U	0.13	0.91	U	0.12	16	U	2.2	15	U	2
1,2,4-Trichlorobenzene	0.94	U	0.23	0.89	U	0.22	0.78	U	0.19	0.86	U	0.21	0.92	U	0.22	0.89	U	0.22	16	U	3.9	15	U	3.6
1,2,4-Trimethylbenzene	0.29	J	0.13	0.28	J	0.12	0.28	J	0.11	0.29	J	0.12	0.26	J	0.13	1.7		0.12	2.7	J	2.2	2.5	J	2
1,2-Dibromo-3-chloropropane	0.93	U	0.18	0.87	U	0.17	0.77	U	0.15	0.85	U	0.16	0.9	U	0.17	0.87	U	0.17	16	U	3	14	U	2.7
1,2-Dibromoethane	0.96	U	0.11	0.9	U	0.1	0.8	U	0.092	0.88	U	0.1	0.93	U	0.11	0.91	U	0.1	16	U	1.9	15	U	1.7
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.91	U	0.15	0.85	U	0.14	0.75	U	0.12	0.83	U	0.14	0.88	U	0.15	0.86	U	0.14	15	U	2.5	14	U	2.3
1,2-Dichlorobenzene	0.96	U	0.14	0.9	U	0.13	0.8	U	0.12	0.88	U	0.13	0.93	U	0.14	0.91	U	0.13	16	U	2.4	15	U	2.2
1,2-Dichloroethane	0.94	U	0.11	0.89	U	0.099	0.78	U	0.087	0.86	U	0.096	0.92	U	0.1	0.89	U	0.099	16	U	1.8	15	U	1.6
1,2-Dichloroethene (total)	0.94	U	0.13	0.89	U	0.13	0.78	U	0.11	0.86	U	0.12	0.92	U	0.13	0.89	U	0.13	16	U	2.3	15	U	2.1
1,2-Dichloropropane	0.96	U	0.12	0.9	U	0.11	0.8	U	0.098	0.15	J	0.11	0.93	U	0.11	0.91	U	0.11	16	U	2	15	U	1.8
1,3,5-Trimethylbenzene	0.94	U	0.14	0.89	U	0.13	0.78	U	0.11	0.86	U	0.13	0.92	U	0.13	0.51	J	0.13	16	U	2.3	15	U	2.1
1,3-Butadiene	0.93	U	0.16	0.87	U	0.15	0.77	U	0.13	0.85	U	0.14	0.9	U	0.15	0.87	U	0.15	16	U	2.6	14	U	2.4
1,3-Dichlorobenzene	0.96	U	0.14	0.9	U	0.13	0.8	U	0.12	0.88	U	0.13	0.93	U	0.14	0.91	U	0.13	16	U	2.4	15	U	2.2
1,4-Dichlorobenzene	10		0.15	8.4		0.14	2.3		0.12	9.5		0.13	2.4		0.14	0.61	J	0.14	16	U	2.5	15	U	2.2
1,4-Dioxane	0.2	J	0.11	0.89	U	0.11	0.78	U	0.093	0.22	J	0.1	0.27	J	0.11	0.29	J	0.11	16	U	1.9	15	U	1.7
2-Butanone	3.1		0.2	1.6	J	0.18	1.4	J	0.16	4.5		0.18	1.4	J	0.19	1.7	J	0.18	30	U	3.3	27	U	3
2-Hexanone	0.51	J	0.12	0.17	J	0.11	0.11	J	0.098	0.32	J	0.11	0.14	J	0.11	0.26	J	0.11	16	U	2	15	U	1.8
2-Propanol	87		0.39	83		0.37	88		0.33	86		0.36	81		0.38	11		0.37	63	U	6.6	7.4	J	6
4-Ethyltoluene	0.94	U	0.15	0.89	U	0.14	0.78	U	0.13	0.86	U	0.14	0.92	U	0.15	0.36	J	0.14	16	U	2.6	15	U	2.3
4-Methyl-2-pentanone	0.37	J	0.13	0.18	J	0.12	0.16	J	0.11	0.27	J	0.12	0.13	J	0.13	0.14	J	0.12	16	U	2.2	15	U	2
Acetic acid, methyl ester	0.89	U	0.43	0.84	U	0.4	0.74	U	0.36	0.82	U	0.39	0.87	U	0.42	0.84	U	0.4	15	U	7.2	14	U	6.6
Acetone	58		2.1	44		2	34		1.8	55		2	34		2.1	45		2	160	U	36	150	U	33
Allyl chloride	0.94	U	0.13	0.89	U	0.12	0.78	U	0.11	0.86	U	0.12	0.92	U	0.12	0.89	U	0.12	16	U	2.2	15	U	2
Benzene	0.49	J	0.14	0.51	J	0.13	0.57	J	0.11	0.5	J	0.13	0.54	J	0.13	0.32	J	0.13	16	U	2.3	14	U	2.1
Bromodichloromethane	0.24	J	0.14	0.27	J	0.13	0.15	J	0.11	0.26	J	0.13	0.18	J	0.13	0.46	J	0.13	16	U	2.3	15	U	2.1
Bromoform	0.94	U	0.2	0.89	U	0.18	0.78	U	0.16	0.86	U	0.18	0.92	U	0.19	0.89	U	0.18	16	U	3.3	15	U	3
Bromomethane	0.89	U	0.13	0.84	U	0.12	0.74	U	0.11	0.82	U	0.12	0.87	U	0.13	0.84	U	0.12	15	U	2.2	14	U	2
Carbon disulfide	2	U	0.28	1.8	U	0.27	1.6	U	0.24	8		0.26	1.7	J	0.28	1.8	U	0.27	33	U	4.8	30	U	4.4
Carbon tetrachloride	0.38		0.13	0.44		0.12	0.42		0.11	0.45		0.12	0.44		0.13	0.42		0.12	3	U	2.2	2.7	U	2
Chlorobenzene	0.94	U	0.13	0.89	U	0.12	0.78	U	0.11	0.86	U	0.12	0.92	U	0.12	0.89	U	0.12	16	U	2.1	15	U	1.9
Chlorodifluoromethane	1.3		0.45	1.5		0.42	1.1		0.37	1.4		0.41	1.8		0.43	0.79	J	0.42	15	U	7.5	14	U	6.8
Chloroethane	0.91	U	0.12	0.85	U	0.11	0.75	U	0.098	0.83	U	0.11	0.88	U	0.11	0.86	U	0.11	15	U	2	14	U	1.8
Chloroform	4.6		0.13	5.4		0.12	3.8		0.11	4.9		0.12	5.5		0.12	15		0.12	16	U	2.1	7	J	1.9
Chloromethane	0.38	J	0.15	0.42	J	0.14	0.41	J	0.13	0.44	J	0.14	0.44	J	0.15	0.17	J	0.14	15	U	2.6	14	U	2.4
cis-1,2-Dichloroethene	0.94	U	0.13	0.89	U	0.13	0.78	U	0.11	0.86	U	0.12	0.92	U	0.13	0.89	U	0.13	16	U	2.3	15	U	2.1
cis-1,3-Dichloropropene	1	U	0.15	0.94	U	0.14	0.83	U	0.12	0.91	U	0.14	0.97	U	0.14	0.94	U	0.14	17	U	2.5	15	U	2.3
Cyclohexane	1.8	U	0.27	1.7	U	0.25	1.5	U	0.22	1.6	U	0.24	1.7	U	0.26	1.7	U	0.25	30	U	4.5	27	U	4.1
Dibromochloromethane	0.96	U	0.12	0.9	U	0.12	0.8	U	0.1	0.88	U	0.11	0.93	U	0.12	0.91	U	0.12	16	U	2.1	15	U	1.9
Dichlorodifluoromethane	2.4		0.15	2.4		0.15	2.4		0.13	2.5		0.14	2.4		0.15	2.4		0.15	16	U	2.6	14	U	2.4
Difluoroethane	12		0.46	13		0.43	7.1		0.38	13		0.42	6.8		0.45	3.4		0.44	15	U	7			

Table 1
March 2019 - LA Fitness Sampling Results
Former Unisys Facility, Lake Success, New York

Sample ID	SS-E10						SS-E16						SS-E21.5						SS-F13						SS-G18						SS-DUP*						SS-G5						SS-H21					
Lab Sample ID	P1901438-016						P1901438-019						P1901438-022						P1901438-018						P1901438-020						P1901438-024						P1901438-015						P1901438-023					
Sampling Date	3/14/19						3/14/19						3/14/19						3/14/19						3/14/19						3/14/19						3/14/19						3/14/19					
Matrix	Air						Air						Air						Air						Air						Air						Air						Air					
Dilution Factor	46.25						24.43						27.29						23.29						33.2						23.71						36						27					
Unit	ug/m3						ug/m3						ug/m3						ug/m3						ug/m3						ug/m3						ug/m3						ug/m3					
AIR - GC/MS VOA-TO-15-UG/M3	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL															
AIR BY TO-15																																																
1,1,1-Trichloroethane	25	U	3.1	13	U	1.6	15	U	1.8	13	U	1.5	18	U	2.2	13	U	1.6	19	U	2.4	15	U	1.8	15	U	2.4	15	U	2.4	15	U	1.8															
1,1,2,2-Tetrachloroethane	25	U	3.4	13	U	1.8	14	U	2	12	U	1.7	18	U	2.5	13	U	1.8	19	U	2.7	14	U	2	14	U	2.7	14	U	2	14	U	2															
1,1,2-Trichloro-1,2,2-Trifluoroethane	25	U	3.5	13	U	1.9	14	U	2.1	12	U	1.8	9.8	J	2.5	13	U	1.8	19	U	2.7	24		2.1	19	U	2.7	24		2.1	19	U	2.7															
1,1,2-Trichloroethane	25	U	2.5	13	U	1.3	15	U	1.5	13	U	1.3	18	U	1.8	13	U	1.3	19	U	1.9	15	U	1.5	15	U	1.9	15	U	1.9	15	U	1.5															
1,1-Dichloroethane	24	U	3.6	13	U	1.9	14	U	2.1	12	U	1.8	17	U	2.6	12	U	1.8	19	U	2.8	14	U	2	14	U	2.8	14	U	2	14	U	2															
1,1-Dichloroethene	25	U	3.4	13	U	1.8	15	U	2	13	U	1.7	18	U	2.5	13	U	1.8	19	U	2.7	15	U	2	15	U	2.7	15	U	2	15	U	2															
1,2,4-Trichlorobenzene	25	U	6	13	U	3.2	14	U	3.5	12	U	3	18	U	4.3	13	U	3.1	19	U	4.7	14	U	3.5	14	U	4.7	14	U	3.5	14	U	3.5															
1,2,4-Trimethylbenzene	25	U	3.4	2.8	J	1.8	14	U	2	5.6	J	1.7	2.7	J	2.5	13	U	1.8	19	U	2.7	2.3	J	2	19	U	2.7	2.3	J	2	19	U	2.7															
1,2-Dibromo-3-chloropropane	24	U	4.6	13	U	2.4	14	U	2.7	12	U	2.3	17	U	3.3	12	U	2.4	19	U	3.6	14	U	2.7	14	U	3.6	14	U	2.7	14	U	2.7															
1,2-Dibromoethane	25	U	2.9	13	U	1.5	15	U	1.7	13	U	1.4	18	U	2.1	13	U	1.5	19	U	2.2	15	U	1.7	15	U	2.2	15	U	1.7	15	U	1.7															
1,2-Dichloro-1,1,2,2-tetrafluoroethane	24	U	3.9	12	U	2.1	14	U	2.3	12	U	2	17	U	2.8	12	U	2	18	U	3	14	U	2.3	14	U	3	14	U	2.3	14	U	2.3															
1,2-Dichlorobenzene	25	U	3.7	13	U	1.9	15	U	2.2	13	U	1.8	18	U	2.6	13	U	1.9	19	U	2.8	15	U	2.1	15	U	2.8	15	U	2.1	15	U	2.1															
1,2-Dichloroethane	25	U	2.7	13	U	1.4	14	U	1.6	12	U	1.4	18	U	2	13	U	1.4	19	U	2.1	14	U	1.6	14	U	2.1	14	U	1.6	14	U	1.6															
1,2-Dichloroethene (total)	25	U	3.5	13	U	1.8	14	U	2	12	U	1.7	18	U	2.5	13	U	1.8	19	U	2.7	14	U	2	14	U	2.7	14	U	2	14	U	2															
1,2-Dichloropropane	25	U	3.1	13	U	1.6	15	U	1.8	13	U	1.5	18	U	2.2	13	U	1.6	19	U	2.4	15	U	1.8	15	U	2.4	15	U	1.8	15	U	1.8															
1,3,5-Trimethylbenzene	25	U	3.6	13	U	1.9	14	U	2.1	2.1	J	1.8	18	U	2.6	13	U	1.8	19	U	2.8	14	U	2.1	14	U	2.8	14	U	2.1	14	U	2.1															
1,3-Butadiene	24	U	4.1	13	U	2.1	14	U	2.4	12	U	2	17	U	2.9	12	U	2.1	19	U	3.2	14	U	2.4	14	U	3.2	14	U	2.4	14	U	2.4															
1,3-Dichlorobenzene	25	U	3.7	13	U	2	15	U	2.2	13	U	1.9	18	U	2.7	13	U	1.9	19	U	2.9	15	U	2.2	15	U	2.9	15	U	2.2	15	U	2.2															
1,4-Dichlorobenzene	25	U	3.8	13	U	2	15	U	2.2	13	U	1.9	18	U	2.7	13	U	1.9	19	U	3	15	U	2.2	15	U	3	15	U	2.2	15	U	2.2															
1,4-Dioxane	25	U	2.9	13	U	1.5	14	U	1.7	12	U	1.5	18	U	2.1	13	U	1.5	19	U	2.3	14	U	1.7	14	U	2.3	14	U	1.7	14	U	1.7															
2-Butanone	46	U	5.1	24	U	2.7	27	U	3	4.2	J	2.6	33	U	3.7	3.9	J	2.6	4.1	J	4	3.6	J	3	3.6	J	4	3.6	J	3	3.6	J	3															
2-Hexanone	25	U	3.1	13	U	1.6	15	U	1.8	13	U	1.5	18	U	2.2	13	U	1.6	19	U	2.4	15	U	1.8	15	U	2.4	15	U	1.8	15	U	1.8															
2-Propanol	97	U	10	51	U	5.4	120		6	7.6	J	5.1	70	U	7.3	80		5.2	93		7.9	57	U	5.9	57	U	7.9	57	U	5.9	57	U	5.9															
4-Ethyltoluene	25	U	3.9	13	U	2.1	14	U	2.3	12	U	2	18	U	2.8	13	U	2	19	U	3.1	14	U	2.3	14	U	3.1	14	U	2.3	14	U	2.3															
4-Methyl-2-pentanone	25	U	3.4	13	U	1.8	14	U	2	12	U	1.7	18	U	2.4	13	U	1.7	19	U	2.6	14	U	2	14	U	2.6	14	U	2	14	U	2															
Acetic acid, methyl ester	23	U	11	12	U	5.9	14	U	6.5	12	U	5.6	17	U	8	12	U	5.7	18	U	8.6	14	U	6.5	14	U	8.6	14	U	6.5	14	U	6.5															
Acetone	250	U	56	130	U	29	34	J	33	30	J	28	180	U	40	53	J	28	68	J	43	150	U	32	150	U	43	150	U	32	150	U	32															
Allyl chloride	25	U	3.3	13	U	1.8	14	U	2	12	U	1.7	18	U	2.4	13	U	1.7	19	U	2.6	14	U	1.9	14	U	2.6	14	U	1.9	14	U	1.9															
Benzene	24	U	3.6	13	U	1.9	14	U	2.1	12		1.8	17	U	2.6	12	U	1.8	19	U	2.8	14	U	2.1	14	U	2.8	14	U	2.1	14	U	2.1															
Bromodichloromethane	25	U	3.6	13	U	1.9	14	U	2.1	12	U	1.8	18	U	2.6	13	U	1.8	19	U	2.8	14	U	2.1	14	U	2.8	14	U	2.1	14	U	2.1															
Bromoform	25	U	5.1	13	U	2.7	14	U	3	12	U	2.6	18	U	3.7	13	U	2.6	19	U	4	14	U	3	14	U	4	14	U	3	14	U	3															
Bromomethane	23	U	3.4	12	U	1.8	14	U	2	12	U	1.7	17	U	2.5	12	U	1.8	18	U	2.7	14	U	2	14	U	2.7	14	U	2	14	U	2															
Carbon disulfide	51	U	7.4	27	U	3.9	30	U	4.4	16	J	3.7	11	J	5.3	26	U	3.8	40	U	5.8	30	U	4.3	30	U	5.8	30	U	4.3	30	U	4.3															
Carbon tetrachloride	4.6	U	3.4	2.4	U	1.8	2.7	U	2	2.3	U	1.7	3.3	U	2.5	2.4	U	1.8	3.6	U	2.7	2.7	U	2	2.7	U	2.7	2.7	U	2	2.7	U	2															
Chlorobenzene	25	U	3.3	13	U	1.7	14	U	1.9	12	U	1.7	18	U	2.4	13	U	1.7	19	U	2.6	14	U	1.9	14	U	2.6	14	U	1.9	14	U	1.9															
Chlorodifluoromethane	23	U	12	12	U	6.1	14	U	6.8	12	U	5.8	17	U	8.3	12	U	5.9																														

Analyte	Result (ug/m3)	
	IA-E2	
1,1,1-Trichloroethane	0.96 U	
1,1-Dichloroethene	0.96 U	
Carbon tetrachloride	0.38	
cis-1,2-Dichloroethene	0.94 U	
Methylene chloride	0.35 J	
Tetrachloroethene	0.32 J	
Trichloroethene	0.2 U	
Vinyl chloride	0.2 U	

Analyte	Result (ug/m3)	
	IA-C7	
1,1,1-Trichloroethane	0.9 U	
1,1-Dichloroethene	0.9 U	
Carbon tetrachloride	0.36	
cis-1,2-Dichloroethene	0.89 U	
Methylene chloride	0.52 J	
Tetrachloroethene	0.32 J	
Trichloroethene	0.18 U	
Vinyl chloride	0.18 U	

Analyte	Result (ug/m3)	
	IA-D13	SS-D13
1,1,1-Trichloroethane	0.9 U	15 U
1,1-Dichloroethene	0.9 U	15 U
Carbon tetrachloride	0.44	2.7 U
cis-1,2-Dichloroethene	0.89 U	15 U
Methylene chloride	0.38 J	15 U
Tetrachloroethene	0.3 J	120
Trichloroethene	0.18 U	7.9
Vinyl chloride	0.18 U	3 U

Analyte	Result (ug/m3)	
	IA-G18	SS-G18
1,1,1-Trichloroethane	0.8 U	18 U
1,1-Dichloroethene	0.8 U	18 U
Carbon tetrachloride	0.42	3.3 U
cis-1,2-Dichloroethene	0.78 U	18 U
Methylene chloride	0.4 J	18 U
Tetrachloroethene	0.22 J	34
Trichloroethene	0.16 U	4.1
Vinyl chloride	0.16 U	3.7 U

Analyte	Result (ug/m3)	
	IA-C20	SS-C20
1,1,1-Trichloroethane	0.9 U	16 U
1,1-Dichloroethene	0.9 U	16 U
Carbon tetrachloride	0.4	3 U
cis-1,2-Dichloroethene	0.89 U	16 U
Methylene chloride	0.38 J	16 U
Tetrachloroethene	0.29 J	240
Trichloroethene	0.18 U	3.3 U
Vinyl chloride	0.18 U	3.3 U

Analyte	Result (ug/m3)		
	IA-G5	SS-G5	SS-DUP
1,1,1-Trichloroethane	0.88 U	19 U	13 U
1,1-Dichloroethene	0.88 U	19 U	13 U
Carbon tetrachloride	0.45	3.6 U	2.4 U
cis-1,2-Dichloroethene	0.86 U	19 U	13 U
Methylene chloride	0.38 J	19 U	13 U
Tetrachloroethene	0.33 J	19 U	13 U
Trichloroethene	0.18 U	4 U	2.1 J
Vinyl chloride	0.18 U	4 U	2.6 U

Analyte	Result (ug/m3)	
	IA-E10	SS-E10
1,1,1-Trichloroethane	0.73 U	25 U
1,1-Dichloroethene	0.73 U	25 U
Carbon tetrachloride	0.4	4.6 U
cis-1,2-Dichloroethene	0.72 U	25 U
Methylene chloride	0.48 J	25 U
Tetrachloroethene	0.28 J	25 U
Trichloroethene	0.15 U	5.1 U
Vinyl chloride	0.15 U	5.1 U

Analyte	Result (ug/m3)	
	IA-12	
1,1,1-Trichloroethane	0.91 U	
1,1-Dichloroethene	0.91 U	
Carbon tetrachloride	0.42	
cis-1,2-Dichloroethene	0.89 U	
Methylene chloride	0.38 J	
Tetrachloroethene	1	
Trichloroethene	1.2	
Vinyl chloride	0.18 U	

Analyte	Result (ug/m3)	
	IA-F13	SS-F13
1,1,1-Trichloroethane	0.9 U	13 U
1,1-Dichloroethene	0.9 U	13 U
Carbon tetrachloride	0.44	2.3 U
cis-1,2-Dichloroethene	0.89 U	12 U
Methylene chloride	0.38 J	13 U
Tetrachloroethene	0.32 J	7.2 J
Trichloroethene	0.18 U	4.6
Vinyl chloride	0.18 U	2.6 U

Analyte	Result (ug/m3)	
	AA-01	
1,1,1-Trichloroethane	0.85 U	
1,1-Dichloroethene	0.85 U	
Carbon tetrachloride	0.4	
cis-1,2-Dichloroethene	0.84 U	
Methylene chloride	0.32 J	
Tetrachloroethene	0.25 J	
Trichloroethene	0.17 U	
Vinyl chloride	0.17 U	

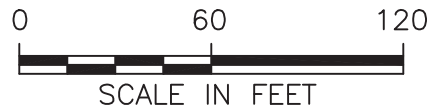
Analyte	Result (ug/m3)		
	IA-E16	IA-DUP	SS-E16
1,1,1-Trichloroethane	0.86 U	0.81 U	13 U
1,1-Dichloroethene	0.86 U	0.81 U	13 U
Carbon tetrachloride	0.42	0.44	2.4 U
cis-1,2-Dichloroethene	0.84 U	0.8 U	13 U
Methylene chloride	0.37 J	0.42 J	13 U
Tetrachloroethene	0.29 J	0.3 J	40
Trichloroethene	0.17 U	0.17 U	2.7 U
Vinyl chloride	0.17 U	0.17 U	2.7 U

Analyte	Result (ug/m3)	
	IA-H21	SS-H21
1,1,1-Trichloroethane	0.93 U	15 U
1,1-Dichloroethene	0.93 U	15 U
Carbon tetrachloride	0.44	2.7 U
cis-1,2-Dichloroethene	0.92 U	14 U
Methylene chloride	0.37 J	15 U
Tetrachloroethene	0.29 J	39
Trichloroethene	0.19 U	3 U
Vinyl chloride	0.19 U	3 U

Analyte	Result (ug/m3)	
	IA-E21.5	SS-E21.5
1,1,1-Trichloroethane	0.95 U	15 U
1,1-Dichloroethene	0.95 U	15 U
Carbon tetrachloride	0.43	2.7 U
cis-1,2-Dichloroethene	0.93 U	14 U
Methylene chloride	0.34 J	15 U
Tetrachloroethene	0.29 J	14 U
Trichloroethene	0.19 U	3 U
Vinyl chloride	0.19 U	3 U

NOTES:

- SUB-SLAB MONITORING POINTS SS-A5F AND SS-G5F-R WERE INSTALLED MARCH 8, 2019. SS-G5F-R REPLACES FORMER SS-G5F WHICH IS CLOSED. SAMPLE SS-G5 WAS COLLECTED FROM LOCATION SS-G5F-R.
- U = NOT DETECTED AT THE REPORTED DETECTION LIMIT.
J = ESTIMATED VALUE.

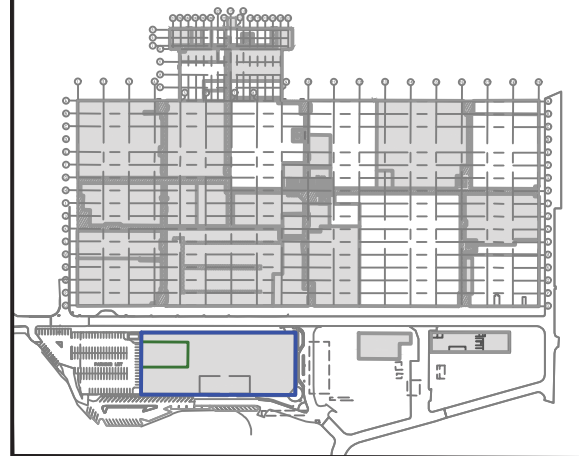


TITLE: 2019 VI SAMPLING RESULTS LA FITNESS

LOCATION: Former UNISYS Facility
Lake Success, New York

ameco

APPROVED	RTB	FIGURE 1
DRAFTED	BRT	
PROJECT#	117-0507644	
DATE	05/24/19	



LEGEND

- IA-H21F INDOOR AIR SAMPLE LOCATION
- SS-A5F SUB-SLAB MONITORING POINT
- EP-C5F ACTIVE EXTRACTION POINT
- 80 - FOOT RADIUS OF INFLUENCE
- PASSIVE VENT EXHAUST
- PASSIVE VENT INLET
- AA-01 AMBIENT AIR SAMPLE LOCATION
- DENOTES LOCATIONS SAMPLED IN 2019

Volatile Organic Compounds (VOCs) in Commonly Used Products

People spend most of their time indoors – at home, school and work. This makes the quality of the indoor air you breathe important. This fact sheet focuses on certain kinds of chemicals called *volatile organic compounds* or VOCs that are found in many products that we commonly use. It is designed to help you think about what VOCs may be present in your indoor air and steps you can take to reduce them.

What are VOCs?

VOCs are chemicals that easily enter the air as gases from some solids or liquids. They are ingredients in many commonly used products and are in the air of just about every indoor setting. The table to the right shows some examples of products that contain VOCs.

How do VOCs get into indoor air?

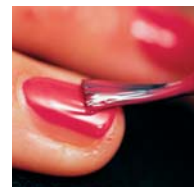
Products containing VOCs can release these chemicals when they are used and when they are stored. Many times you'll notice an odor when using these products. Product labels often list VOC ingredients and recommend that they should be used in well ventilated areas. *Ventilation* means bringing in fresh, outdoor air to mix with indoor air.

When you use a product containing VOCs indoors, the levels of these chemicals in the air increase, then decrease over time after you stop using them. The amount of time the chemical stays in the air depends on how quickly fresh air enters the room and the amount of the chemical used. Levels of VOCs will decrease faster if you open windows or doors, or use exhaust fans.

Building materials and furnishings, such as new carpets or furniture, slowly release VOCs over time. It may be necessary to ventilate areas with new carpeting or furniture for longer time periods because VOC levels can build up again after the windows are closed. If possible, unroll new carpets or store furniture outside your home (in a shed or detached garage) to minimize odors before bringing them in the home. If that's not possible, open windows, close doors and try to stay out of rooms until odors are reduced.

If VOC containing products are used outdoors near your home, you may want to close windows and nearby vents to prevent chemicals from coming inside.

Products used at home or work can release VOCs into the air when used and stored.



Examples of Household Products	Possible VOC Ingredients
Fuel containers or devices using gasoline, kerosene, fuel oil and products with petroleum distillates: paint thinner, oil-based stains and paint, aerosol or liquid insect pest products, mineral spirits, furniture polishes	BTEX (benzene, toluene, ethylbenzene, xylene), hexane, cyclohexane, 1,2,4-trimethylbenzene
Personal care products: nail polish, nail polish remover, colognes, perfumes, rubbing alcohol, hair spray	Acetone, ethyl alcohol, isopropyl alcohol, methacrylates (methyl or ethyl), ethyl acetate
Dry cleaned clothes, spot removers, fabric/leather cleaners	Tetrachloroethene (perchloroethene (PERC), trichloroethene (TCE))
Citrus (orange) oil or pine oil cleaners, solvents and some odor masking products	d-limonene (citrus odor), a-pinene (pine odor), isoprene
PVC cement and primer, various adhesives, contact cement, model cement	Tetrahydrofuran, cyclohexane, methyl ethyl ketone (MEK), toluene, acetone, hexane, 1,1,1-trichloroethane, methyl-iso-butyl ketone (MIBK)
Paint stripper, adhesive (glue) removers	Methylene chloride, toluene, older products may contain carbon tetrachloride
Degreasers, aerosol penetrating oils, brake cleaner, carburetor cleaner, commercial solvents, electronics cleaners, spray lubricants	Methylene chloride, PERC, TCE, toluene, xylenes, methyl ethyl ketone, 1,1,1-trichloroethane
Moth balls, moth flakes, deodorizers, air fresheners	1,4-dichlorobenzene, naphthalene
Refrigerant from air conditioners, freezers, refrigerators, dehumidifiers	Freons (trichlorofluoromethane, dichlorodifluoromethane)
Aerosol spray products for some paints, cosmetics, automotive products, leather treatments, pesticides	Heptane, butane, pentane
Upholstered furniture, carpets, plywood, pressed wood products	Formaldehyde

VOCs can also get into indoor air from contaminated soils and groundwater under buildings. The chemicals enter buildings through cracks and openings in basements or slabs. When nearby soil or groundwater is contaminated, you might be asked for permission to investigate indoor air at your property. More information can be found at www.nyhealth.gov/environmental/indoors/vapor_intrusion/.

Should I be surprised if VOCs are in the air I breathe?

No. Because they are commonly used, some VOCs are almost always found in indoor air. The New York State Department of Health (DOH) and other agencies have studied typical levels of VOCs that may be present in indoor and outdoor air. Sometimes these levels are called “background levels”.

The term “background levels” can be confusing because they can vary depending on where an air sample was collected and whether VOCs were used or stored. For example, a study of VOCs in urban areas might find higher levels than another study in rural areas. Some studies look at office environments, others examine residences. Please keep in mind study findings may or may not make sense for your setting.

More information about levels of VOCs collected by DOH is available in Appendix C of the guidance for evaluating vapor intrusion at www.nyhealth.gov/environmental/investigations/soil_gas/svi_guidance.

How can VOCs affect human health?

Chemicals can enter the body through three major pathways (breathing, touching or swallowing). This is referred to as *exposure*. No matter how dangerous a substance or activity is, it cannot harm you without exposure.

Whether or not a person will have health effects after breathing in VOCs depends on:

- The *toxicity* of the chemical (the amount of harm that can be caused by contact with the chemical).
- How much of the chemical is in the air.
- How long and how often the air is breathed.

Differences in age, health condition, gender and exposure to other chemicals also can affect whether or not a person will have health effects.

Short-term exposure to high levels of some VOCs can cause headaches, dizziness, light-headedness, drowsiness, nausea, and eye and respiratory irritation. These effects usually go away after the exposure stops. In laboratory animals, long-

term exposure to high levels of some VOCs has caused cancer and affected the liver, kidney and nervous system. In general, we recommend minimizing exposure to chemicals, if possible.

How can I reduce the levels of VOCs indoors?

Find out if products used or stored in your home contain VOCs. Information about the chemicals in many household products are listed on the front of this fact sheet and a larger list is on the National Institute of Health’s website at hpd.nlm.nih.gov/products.htm.

If you must store products containing VOCs, do so in tightly sealed, original containers in a secure and well-ventilated area. If possible store products in places where people do not spend much time, such as a garage or outdoor shed. Better yet, buy these products in amounts that are used quickly.

Dispose of unneeded products containing VOCs. Many of these products are considered *household hazardous wastes* and should be disposed of at special facilities or during special household hazardous waste collection programs in your area. Contact your town or visit the New York State Department of Environmental Conservation’s website at www.dec.ny.gov/chemical/8485.html for more information about disposing of these products.

Use products containing VOCs in well-ventilated areas or outdoors. Open windows and doors or use an exhaust fan to increase ventilation. Repeated or prolonged ventilation may be necessary for reducing levels from building materials (new carpeting or furniture) that release VOCs slowly over time.

Carefully read labels and follow directions for use.

Where can I find out more?

- **New York State Department of Health**
www.health.ny.gov/environmental
- **New York State Department of Environmental Conservation**
www.dec.ny.gov/chemical/8485.html
- **NYSERDA's Indoor Air Quality and Your Home**
www.nyserdera.ny.gov/-/media/Files/Publications/Research/Other-Technical-Reports/indoor-air-quality.pdf
- **USEPA information on Indoor Air Quality**
www.epa.gov/iaq/pubs/index.html
- **New York State Department of Environmental Conservation**
www.dec.ny.gov/chemical/8485.html
- **National Institute of Health**
<http://hpd.nlm.nih.gov/products.htm>



Lockheed Martin Corporation
6801 Rockledge Drive
MP CCT 246
Bethesda, MD 20817

May 28, 2019

Ms. Phyllis MacKnight
Lease Administrator LA Fitness
C/O KeyPoint Partners
1111 Marcus Avenue
Lake Success, NY 11042

RE: Vapor Intrusion (VI) Sampling Test Results

Dear Ms. MacKnight:

Thank you for your cooperation in allowing our contractor, AMEC E&E, PC to collect indoor air and sub-slab soil vapor samples from your leasehold at 1111 Marcus Avenue (Unisys Site No.130045). Indoor air (IA) and Sub-slab (SS) vapor samples were collected from the LA Fitness building on March 14, 2019 within the heating season. This correspondence presents you with the sampling results.

The primary chemicals of concern related to historical activities at the former Unisys facility are the solvents trichloroethene (TCE), tetrachloroethene (PCE), cis-1,2- dichloroethene (DCE), and Freon 113 (1,1,2-Trichloro-1,2,2-trifluoroethane), although there were other chemicals used at the site. These chemicals are present in groundwater located more than 100 feet below ground surface and may also be present in soils located under the slab at 1111 Marcus Avenue. Under certain conditions, vapors from contaminated soil and/or contaminated groundwater may move into the indoor air through a process referred to as soil vapor intrusion.

Lockheed Martin, in consultation with the New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (NYSDOH), has reviewed the results from your leaseholds per NYSDOH's October 2006 Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York. A copy of this guidance is available on NYSDOH's website at http://www.health.state.ny.us/environmental/indoors/vapor_intrusion/. Note that certain aspects of the guidance have been updated subsequent to October 2006.

Based upon an evaluation of the results of last year's sample analysis and a comparison of that data to the current NYSDOH Soil Vapor Intrusion guidance (updated in May 2017), a sub-slab depressurization system (SSDS) was installed in the northwestern portion of the LA Fitness building. Lockheed Martin arranged for the design and installation of the NYSDEC and NYSDOH approved SSDS. Construction of the SSDS was initiated in December 2018 and completed in February 2019. The system consists of two sub slab extraction points, each with riser pipes and roof-top-mounted vapor extraction blowers. The approximate radius of influence of the two points is shown in Figure 1.

The March 14th indoor air sample results collected this year indicate that all indoor air concentrations of TCE and PCE continue to be below the NYSDOH VI Guidance indoor air guidelines of 2 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) and $30 \mu\text{g}/\text{m}^3$, respectively. The sample collected inside the crawlspace had a TCE concentration of $1.2 \mu\text{g}/\text{m}^3$. Because the crawlspace is kept sealed and is not accessible, this does not represent a current exposure pathway. The sample locations and summary of analytical results are presented in Figure 1. All sample results are presented in Table 1.

The indoor air quality of your leasehold is comparable to that of buildings not affected by environmental contamination. The majority of the volatile organic chemicals detected in the indoor air are at levels typically found in most homes and businesses in an urban area and do not present a concern. However, chloroform was detected slightly above typical indoor air background levels suggesting that the results are likely associated with the chlorinated pool, pool products and/or rubber floor mats (e.g. background sources). The enclosed NYSDOH Fact Sheet provides some information on reducing exposures to volatile chemicals found in household products.

Volatile organic compounds including chloroform, PCE, toluene, TCE, and Freon 113 (1,1,2-Trichloro-1,2,2-trifluoroethane) were detected in selected sub-slab soil vapor samples underneath portions of the LA Fitness building. PCE was detected at concentration range of non-detect to $240 \mu\text{g}/\text{m}^3$, and TCE concentrations ranged from non-detect to $7.9 \mu\text{g}/\text{m}^3$ in sub-slab soil vapor samples. Figure 1 shows the location of all sub-slab points and summarizes the analytical results for each sample collected.

If you need additional details, feel free to contact Ms. Renata Ockerby of the NYSDOH at 1-518-402-7860 (Renata.Ockerby@health.ny.gov) or Mr. Girish Desai of the NYSDEC at 631-444-0243 (girish.desai@dec.ny.gov). If there are questions or need clarification on these results or the ongoing environmental investigations and cleanup at the former Unisys Facility, please contact me at 1-817-378-2573 or via e-mail at Glenda.b.clark@lmco.com.

Again, thank you for allowing us access to your leasehold to evaluate the air quality. We appreciate your assistance in our environmental investigation.

Sincerely,



Glenda Clark

cc: Renata Ockerby/NYSDOH
Girish Desai/NYSDEC
William Weber/AMEC E&E, PC
Eric Weinstock/AMEC E&E, PC

Table 1
March 2019 - IA Fitness Sampling Results
Former Unisys Facility, Lake Success, New York

Sample ID	AA-01			IA-C20			IA-C7			IA-D13			IA-E10			IA-DUP ^a			IA-E16			IA-E21.5		
Lab Sample ID	P1901438-001			P1901438-010			P1901438-003			P1901438-006			P1901438-005			P1901438-014			P1901438-008			P1901438-011		
Sampling Date	3/14/19			3/14/19			3/14/19			3/14/19			3/14/19			3/14/19			3/14/19			3/14/19		
Matrix	Air			Air			Air			Air			Air			Air			Air			Air		
Dilution Factor	1.57			1.67			1.67			1.67			1.36			1.5			1.59			1.75		
Unit	ug/m3			ug/m3			ug/m3			ug/m3			ug/m3			ug/m3			ug/m3			ug/m3		
AIR - GC/MS VOA-TO-15-UG/M3	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL
AIR BY TO-15																								
1,1,1-Trichloroethane	0.85	U	0.1	0.9	U	0.11	0.9	U	0.11	0.9	U	0.11	0.73	U	0.09	0.81	U	0.099	0.86	U	0.1	0.95	U	0.12
1,1,2,2-Tetrachloroethane	0.83	U	0.12	0.89	U	0.12	0.89	U	0.12	0.89	U	0.12	0.72	U	0.1	0.8	U	0.11	0.84	U	0.12	0.93	U	0.13
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.48	J	0.12	0.48	J	0.13	0.51	J	0.13	0.46	J	0.13	0.45	J	0.1	0.49	J	0.11	0.49	J	0.12	0.47	J	0.13
1,1,2-Trichloroethane	0.85	U	0.085	0.9	U	0.09	0.9	U	0.09	0.9	U	0.09	0.73	U	0.073	0.81	U	0.081	0.86	U	0.086	0.95	U	0.095
1,1-Dichloroethane	0.82	U	0.12	0.87	U	0.13	0.87	U	0.13	0.87	U	0.13	0.71	U	0.11	0.78	U	0.12	0.83	U	0.12	0.91	U	0.14
1,1-Dichloroethene	0.85	U	0.12	0.9	U	0.12	0.9	U	0.12	0.9	U	0.12	0.73	U	0.1	0.81	U	0.11	0.86	U	0.12	0.95	U	0.13
1,2,4-Trichlorobenzene	0.83	U	0.2	0.89	U	0.22	0.89	U	0.22	0.89	U	0.22	0.72	U	0.18	0.8	U	0.2	0.84	U	0.21	0.93	U	0.23
1,2,4-Trimethylbenzene	0.23	J	0.12	0.16	J	0.12	0.89	U	0.12	0.19	J	0.12	1		0.1	0.36	J	0.11	0.23	J	0.12	0.23	J	0.13
1,2-Dibromo-3-chloropropane	0.82	U	0.16	0.87	U	0.17	0.87	U	0.17	0.87	U	0.17	0.71	U	0.14	0.78	U	0.15	0.83	U	0.16	0.91	U	0.18
1,2-Dibromoethane	0.85	U	0.097	0.9	U	0.1	0.9	U	0.1	0.9	U	0.1	0.73	U	0.084	0.81	U	0.093	0.86	U	0.099	0.95	U	0.11
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.8	U	0.13	0.85	U	0.14	0.85	U	0.14	0.85	U	0.14	0.69	U	0.11	0.77	U	0.13	0.81	U	0.13	0.89	U	0.15
1,2-Dichlorobenzene	0.85	U	0.12	0.9	U	0.13	0.9	U	0.13	0.9	U	0.13	0.73	U	0.11	0.81	U	0.12	0.86	U	0.13	0.95	U	0.14
1,2-Dichloroethane	0.83	U	0.093	0.89	U	0.099	0.89	U	0.099	0.89	U	0.099	0.72	U	0.08	0.8	U	0.089	0.84	U	0.094	0.93	U	0.1
1,2-Dichloroethene (total)	0.83	U	0.12	0.89	U	0.13	0.89	U	0.13	0.89	U	0.13	0.72	U	0.1	0.8	U	0.11	0.84	U	0.12	0.93	U	0.13
1,2-Dichloropropane	0.85	U	0.1	0.9	U	0.11	0.43	J	0.11	0.9	U	0.11	0.47	J	0.09	0.81	U	0.099	0.86	U	0.1	0.95	U	0.12
1,3,5-Trimethylbenzene	0.83	U	0.12	0.89	U	0.13	0.89	U	0.13	0.89	U	0.13	0.27	J	0.1	0.8	U	0.12	0.84	U	0.12	0.93	U	0.13
1,3-Butadiene	0.82	U	0.14	0.87	U	0.15	0.87	U	0.15	0.87	U	0.15	0.71	U	0.12	0.78	U	0.13	0.83	U	0.14	0.91	U	0.15
1,3-Dichlorobenzene	0.85	U	0.13	0.9	U	0.13	0.9	U	0.13	0.9	U	0.13	0.73	U	0.11	0.81	U	0.12	0.86	U	0.13	0.95	U	0.14
1,4-Dichlorobenzene	0.85	U	0.13	3.2		0.14	4.6		0.14	2.7		0.14	11		0.11	3.6		0.12	3.1		0.13	2.9		0.14
1,4-Dioxane	0.83	U	0.099	0.44	J	0.11	0.11	J	0.11	0.13	J	0.11	0.72	U	0.086	0.14	J	0.095	0.84	U	0.1	0.93	U	0.11
2-Butanone	0.82	J	0.17	2.5		0.18	4.1		0.18	5.9		0.18	1.5		0.15	2.1		0.17	1.6	J	0.17	1.1	J	0.19
2-Hexanone	0.11	J	0.1	0.33	J	0.11	0.68	J	0.11	0.3	J	0.11	0.14	J	0.09	0.29	J	0.099	0.1	J	0.1	0.95	U	0.12
2-Propanol	0.43	J	0.35	67		0.37	81		0.37	88		0.37	81		0.3	79		0.33	77		0.35	83		0.39
4-Ethyltoluene	0.83	U	0.13	0.89	U	0.14	0.89	U	0.14	0.89	U	0.14	0.16	J	0.12	0.8	U	0.13	0.84	U	0.14	0.93	U	0.15
4-Methyl-2-pentanone	0.83	U	0.11	0.17	J	0.12	0.37	J	0.12	0.27	J	0.12	0.18	J	0.099	0.18	J	0.11	0.14	J	0.12	0.93	U	0.13
Acetic acid, methyl ester	0.79	U	0.38	0.84	U	0.4	0.61	J	0.4	0.84	U	0.4	0.48	J	0.33	0.75	U	0.36	0.8	U	0.38	0.88	U	0.42
Acetone	5	J	1.9	39		2	58		2	47		2	46		1.6	39		1.8	35		1.9	34		2.1
Allyl chloride	0.83	U	0.11	0.89	U	0.12	0.89	U	0.12	0.89	U	0.12	0.72	U	0.098	0.8	U	0.11	0.84	U	0.11	0.93	U	0.13
Benzene	0.53	J	0.12	0.5	J	0.13	0.53	J	0.13	0.53	J	0.13	0.49	J	0.1	0.68	J	0.12	0.49	J	0.12	0.49	J	0.13
Bromodichloromethane	0.83	U	0.12	0.16	J	0.13	0.25	J	0.13	0.26	J	0.13	0.22	J	0.1	0.21	J	0.12	0.19	J	0.12	0.18	J	0.13
Bromoform	0.83	U	0.17	0.89	U	0.18	0.89	U	0.18	0.89	U	0.18	0.72	U	0.15	0.8	U	0.17	0.84	U	0.17	0.93	U	0.19
Bromomethane	0.79	U	0.12	0.84	U	0.12	0.84	U	0.12	0.84	U	0.12	0.68	U	0.1	0.75	U	0.11	0.8	U	0.12	0.88	U	0.13
Carbon disulfide	1.7	U	0.25	2.3		0.27	1.8	U	0.27	4.1		0.27	1.5	U	0.22	2.3	J	0.24	1.7	UJ	0.25	1.9	U	0.28
Carbon tetrachloride	0.4		0.12	0.4		0.12	0.36		0.12	0.44		0.12	0.4		0.1	0.44		0.11	0.42		0.12	0.43		0.13
Chlorobenzene	0.83	U	0.11	0.89	U	0.12	0.89	U	0.12	0.89	U	0.12	0.72	U	0.097	0.8	U	0.11	0.84	U	0.11	0.93	U	0.12
Chlorodifluoromethane	0.61	J	0.39	1.6		0.42	1.3		0.42	1.5		0.42	0.99		0.34	1.5		0.38	1.6		0.4	1.7		0.44
Chloroethane	0.8	U	0.1	0.85	U	0.11	0.12	J	0.11	0.85	U	0.11	0.69	U	0.09	0.77	U	0.099	0.81	U	0.1	0.89	U	0.12
Chloroform	0.85	U	0.11	3.6		0.12	4.7		0.12	5		0.12	4.4		0.097	4.6		0.11	4.4		0.11	4.4		0.12
Chloromethane	0.34	J	0.14	0.44	J	0.14	0.41	J	0.14	0.56	J	0.14	0.29	J	0.12	0.32	J	0.13	0.39	J	0.14	0.43	J	0.15
cis-1,2-Dichloroethene	0.83	U	0.12	0.89	U	0.13	0.89	U	0.13	0.89	U	0.13	0.72	U	0.1	0.8	U	0.11	0.84	U	0.12	0.93	U	0.13
cis-1,3-Dichloropropene	0.88	U	0.13	0.94	U	0.14	0.94	U	0.14	0.94	U	0.14	0.76	U	0.11	0.84	U	0.12	0.89	U	0.13	0.98	U	0.15
Cyclohexane	1.6	U	0.24	1.7	U	0.25	0.36	J	0.25	1.7	U	0.25	1.4	U	0.2	0.28	J	0.23	1.6	U	0.24	1.8	U	0.26
Dibromochloromethane	0.85	U	0.11	0.9	U	0.12	0.9	U	0.12	0.9	U	0.12	0.73	U	0.095	0.81	U	0.11	0.86	U	0.11	0.95	U	0.12
Dichlorodifluoromethane	2.3		0.14	2.4		0.15	2.4		0.15	2.4		0.15	2.2											

Table 1
March 2019 - LA Fitness Sampling Results
Former Unisys Facility, Lake Success, New York

Sample ID	IA-E2			IA-F13			IA-G18			IA-G5			IA-H21			IA-I12			SS-C20			SS-D13		
Lab Sample ID	P1901438-002			P1901438-007			P1901438-009			P1901438-004			P1901438-012			P1901438-013			P1901438-021			P1901438-017		
Sampling Date	3/14/19			3/14/19			3/15/19			3/14/19			3/14/19			3/14/19			3/14/19			3/14/19		
Matrix	Air			Air			Air			Air			Air			Air			Air			Air		
Dilution Factor	1.78			1.67			1.48			1.63			1.73			1.68			30			27.38		
Unit	ug/m3			ug/m3			ug/m3			ug/m3			ug/m3			ug/m3			ug/m3			ug/m3		
AIR - GC/MS VOA-TO-15-UG/M3	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL
AIR BY TO-15																								
1,1,1-Trichloroethane	0.96	U	0.12	0.9	U	0.11	0.8	U	0.098	0.88	U	0.11	0.93	U	0.11	0.91	U	0.11	16	U	2	15	U	1.8
1,1,2,2-Tetrachloroethane	0.94	U	0.13	0.89	U	0.12	0.78	U	0.11	0.86	U	0.12	0.92	U	0.13	0.89	U	0.12	16	U	2.2	15	U	2
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.46	J	0.14	0.5	J	0.13	0.49	J	0.11	0.5	J	0.12	0.49	J	0.13	0.5	J	0.13	27		2.3	15	U	2.1
1,1,2-Trichloroethane	0.96	U	0.096	0.9	U	0.09	0.8	U	0.08	0.88	U	0.088	0.93	U	0.093	0.91	U	0.091	16	U	1.6	15	U	1.5
1,1-Dichloroethane	0.93	U	0.14	0.87	U	0.13	0.77	U	0.12	0.85	U	0.13	0.9	U	0.13	0.87	U	0.13	16	U	2.3	14	U	2.1
1,1-Dichloroethene	0.96	U	0.13	0.9	U	0.12	0.8	U	0.11	0.88	U	0.12	0.93	U	0.13	0.91	U	0.12	16	U	2.2	15	U	2
1,2,4-Trichlorobenzene	0.94	U	0.23	0.89	U	0.22	0.78	U	0.19	0.86	U	0.21	0.92	U	0.22	0.89	U	0.22	16	U	3.9	15	U	3.6
1,2,4-Trimethylbenzene	0.29	J	0.13	0.28	J	0.12	0.28	J	0.11	0.29	J	0.12	0.26	J	0.13	1.7		0.12	2.7	J	2.2	2.5	J	2
1,2-Dibromo-3-chloropropane	0.93	U	0.18	0.87	U	0.17	0.77	U	0.15	0.85	U	0.16	0.9	U	0.17	0.87	U	0.17	16	U	3	14	U	2.7
1,2-Dibromoethane	0.96	U	0.11	0.9	U	0.1	0.8	U	0.092	0.88	U	0.1	0.93	U	0.11	0.91	U	0.1	16	U	1.9	15	U	1.7
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.91	U	0.15	0.85	U	0.14	0.75	U	0.12	0.83	U	0.14	0.88	U	0.15	0.86	U	0.14	15	U	2.5	14	U	2.3
1,2-Dichlorobenzene	0.96	U	0.14	0.9	U	0.13	0.8	U	0.12	0.88	U	0.13	0.93	U	0.14	0.91	U	0.13	16	U	2.4	15	U	2.2
1,2-Dichloroethane	0.94	U	0.11	0.89	U	0.099	0.78	U	0.087	0.86	U	0.096	0.92	U	0.1	0.89	U	0.099	16	U	1.8	15	U	1.6
1,2-Dichloroethene (total)	0.94	U	0.13	0.89	U	0.13	0.78	U	0.11	0.86	U	0.12	0.92	U	0.13	0.89	U	0.13	16	U	2.3	15	U	2.1
1,2-Dichloropropane	0.96	U	0.12	0.9	U	0.11	0.8	U	0.098	0.15	J	0.11	0.93	U	0.11	0.91	U	0.11	16	U	2	15	U	1.8
1,3,5-Trimethylbenzene	0.94	U	0.14	0.89	U	0.13	0.78	U	0.11	0.86	U	0.13	0.92	U	0.13	0.51	J	0.13	16	U	2.3	15	U	2.1
1,3-Butadiene	0.93	U	0.16	0.87	U	0.15	0.77	U	0.13	0.85	U	0.14	0.9	U	0.15	0.87	U	0.15	16	U	2.6	14	U	2.4
1,3-Dichlorobenzene	0.96	U	0.14	0.9	U	0.13	0.8	U	0.12	0.88	U	0.13	0.93	U	0.14	0.91	U	0.13	16	U	2.4	15	U	2.2
1,4-Dichlorobenzene	10		0.15	8.4		0.14	2.3		0.12	9.5		0.13	2.4		0.14	0.61	J	0.14	16	U	2.5	15	U	2.2
1,4-Dioxane	0.2	J	0.11	0.89	U	0.11	0.78	U	0.093	0.22	J	0.11	0.27	J	0.11	0.29	J	0.11	16	U	1.9	15	U	1.7
2-Butanone	3.1		0.2	1.6	J	0.18	1.4	J	0.16	4.5		0.18	1.4	J	0.19	1.7	J	0.18	30	U	3.3	27	U	3
2-Hexanone	0.51	J	0.12	0.17	J	0.11	0.11	J	0.098	0.32	J	0.11	0.14	J	0.11	0.26	J	0.11	16	U	2	15	U	1.8
2-Propanol	87		0.39	83		0.37	88		0.33	86		0.36	81		0.38	11		0.37	63	U	6.6	7.4	J	6
4-Ethyltoluene	0.94	U	0.15	0.89	U	0.14	0.78	U	0.13	0.86	U	0.14	0.92	U	0.15	0.36	J	0.14	16	U	2.6	15	U	2.3
4-Methyl-2-pentanone	0.37	J	0.13	0.18	J	0.12	0.16	J	0.11	0.27	J	0.12	0.13	J	0.13	0.14	J	0.12	16	U	2.2	15	U	2
Acetic acid, methyl ester	0.89	U	0.43	0.84	U	0.4	0.74	U	0.36	0.82	U	0.39	0.87	U	0.42	0.84	U	0.4	15	U	7.2	14	U	6.6
Acetone	58		2.1	44		2	34		1.8	55		2	34		2.1	45		2	160	U	36	150	U	33
Allyl chloride	0.94	U	0.13	0.89	U	0.12	0.78	U	0.11	0.86	U	0.12	0.92	U	0.12	0.89	U	0.12	16	U	2.2	15	U	2
Benzene	0.49	J	0.14	0.51	J	0.13	0.57	J	0.11	0.5	J	0.13	0.54	J	0.13	0.32	J	0.13	16	U	2.3	14	U	2.1
Bromodichloromethane	0.24	J	0.14	0.27	J	0.13	0.15	J	0.11	0.26	J	0.13	0.18	J	0.13	0.46	J	0.13	16	U	2.3	15	U	2.1
Bromoform	0.94	U	0.2	0.89	U	0.18	0.78	U	0.16	0.86	U	0.18	0.92	U	0.19	0.89	U	0.18	16	U	3.3	15	U	3
Bromomethane	0.89	U	0.13	0.84	U	0.12	0.74	U	0.11	0.82	U	0.12	0.87	U	0.13	0.84	U	0.12	15	U	2.2	14	U	2
Carbon disulfide	2	U	0.28	1.8	U	0.27	1.6	U	0.24	8		0.26	1.7	J	0.28	1.8	U	0.27	33	U	4.8	30	U	4.4
Carbon tetrachloride	0.38		0.13	0.44		0.12	0.42		0.11	0.45		0.12	0.44		0.13	0.42		0.12	3	U	2.2	2.7	U	2
Chlorobenzene	0.94	U	0.13	0.89	U	0.12	0.78	U	0.11	0.86	U	0.12	0.92	U	0.12	0.89	U	0.12	16	U	2.1	15	U	1.9
Chlorodifluoromethane	1.3		0.45	1.5		0.42	1.1		0.37	1.4		0.41	1.8		0.43	0.79	J	0.42	15	U	7.5	14	U	6.8
Chloroethane	0.91	U	0.12	0.85	U	0.11	0.75	U	0.098	0.83	U	0.11	0.88	U	0.11	0.86	U	0.11	15	U	2	14	U	1.8
Chloroform	4.6		0.13	5.4		0.12	3.8		0.11	4.9		0.12	5.5		0.12	15		0.12	16	U	2.1	7	J	1.9
Chloromethane	0.38	J	0.15	0.42	J	0.14	0.41	J	0.13	0.44	J	0.14	0.44	J	0.15	0.17	J	0.14	15	U	2.6	14	U	2.4
cis-1,2-Dichloroethene	0.94	U	0.13	0.89	U	0.13	0.78	U	0.11	0.86	U	0.12	0.92	U	0.13	0.89	U	0.13	16	U	2.3	15	U	2.1
cis-1,3-Dichloropropene	1	U	0.15	0.94	U	0.14	0.83	U	0.12	0.91	U	0.14	0.97	U	0.14	0.94	U	0.14	17	U	2.5	15	U	2.3
Cyclohexane	1.8	U	0.27	1.7	U	0.25	1.5	U	0.22	1.6	U	0.24	1.7	U	0.26	1.7	U	0.25	30	U	4.5	27	U	4.1
Dibromochloromethane	0.96	U	0.12	0.9	U	0.12	0.8	U	0.1	0.88	U	0.11	0.93	U	0.12	0.91	U	0.12	16	U	2.1	15	U	1.9
Dichlorodifluoromethane	2.4		0.15	2.4		0.15	2.4		0.13	2.5		0.14	2.4		0.15	2.4		0.15	16	U	2.6	14	U	2.4
Difluoroethane	12		0.46	13		0.43	7.1		0.38	13		0.42	6.8		0.45	3.4		0.44	15	U	7.8	14	U	7.1
Ethylbenzene	0.18	J	0.13	0.18	J	0.13	0.16	J	0.11	0.18	J	0.12	0.17	J	0.13	0.45	J	0.13	16	U	2.3	14	U	2.1
Freon 115	0.89	U	0.41	0.84	U	0.38	0.74	U	0.34	0.82	U	0.37	0.87	U	0.4	0.84	U	0.39	15	U	6.9	14	U	6.3
Freon 123	0.89	U	0.43	0.84	U	0.4	0.74	U	0.36	0.82	U	0.39	0.87	U	0.42	0.84	U	0.4	15	U	7.2	14	U	6.6
Hexachlorobutadiene	0.94	U	0.2	0.89	U	0.18	0.78	U	0.16	0.86	U	0.18	0.92	U	0.19	0.89	U	0.18	16	U	3.3	15	U	3
Hexane	0.25	J	0.2	0.28	J	0.18	0.28	J	0.16	0.25	J	0.18	0.26	J	0.19	0.91	U	0.18	16	U	3.3	15	U	3
Isopropylbenzene	0.94	U	0.14	0.89	U	0.13	0.78	U	0.11	0.86	U	0.13	0.92	U	0.13	0.89	U	0.13	16	U	2.3	15	U	2.1
Methyl cyclohexane	0.89	U	0.46	0.84	U	0.43	0.74	U	0.38	0.82	U	0.42	0.87	U	0.45	0.84	U	0.44	15	U	7.8	14	U	7.1

Table 1
March 2019 - LA Fitness Sampling Results
Former Unisys Facility, Lake Success, New York

Sample ID	SS-E10						SS-E16						SS-E21.5						SS-F13						SS-G18						SS-DUP*						SS-G5						SS-H21					
Lab Sample ID	P1901438-016						P1901438-019						P1901438-022						P1901438-018						P1901438-020						P1901438-024						P1901438-015						P1901438-023					
Sampling Date	3/14/19						3/14/19						3/14/19						3/14/19						3/14/19						3/14/19						3/14/19						3/14/19					
Matrix	Air						Air						Air						Air						Air						Air						Air						Air					
Dilution Factor	46.25						24.43						27.29						23.29						33.2						23.71						36						27					
Unit	ug/m3						ug/m3						ug/m3						ug/m3						ug/m3						ug/m3						ug/m3						ug/m3					
AIR - GC/MS VOA-TO-15-UG/M3	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL															
AIR BY TO-15																																																
1,1,1-Trichloroethane	25	U	3.1	13	U	1.6	15	U	1.8	13	U	1.5	18	U	2.2	13	U	1.6	19	U	2.4	15	U	1.8	15	U	2.4	15	U	2.4	15	U	1.8															
1,1,2,2-Tetrachloroethane	25	U	3.4	13	U	1.8	14	U	2	12	U	1.7	18	U	2.5	13	U	1.8	19	U	2.7	14	U	2	14	U	2.7	14	U	2	14	U	2															
1,1,2-Trichloro-1,2,2-Trifluoroethane	25	U	3.5	13	U	1.9	14	U	2.1	12	U	1.8	9.8	J	2.5	13	U	1.8	19	U	2.7	24		2.1	19	U	2.7	24		2.1	19	U	2.7															
1,1,2-Trichloroethane	25	U	2.5	13	U	1.3	15	U	1.5	13	U	1.3	18	U	1.8	13	U	1.3	19	U	1.9	15	U	1.5	15	U	1.9	15	U	1.9	15	U	1.5															
1,1-Dichloroethane	24	U	3.6	13	U	1.9	14	U	2.1	12	U	1.8	17	U	2.6	12	U	1.8	19	U	2.8	14	U	2	14	U	2.8	14	U	2	14	U	2															
1,1-Dichloroethene	25	U	3.4	13	U	1.8	15	U	2	13	U	1.7	18	U	2.5	13	U	1.8	19	U	2.7	15	U	2	15	U	2.7	15	U	2	15	U	2															
1,2,4-Trichlorobenzene	25	U	6	13	U	3.2	14	U	3.5	12	U	3	18	U	4.3	13	U	3.1	19	U	4.7	14	U	3.5	14	U	4.7	14	U	3.5	14	U	3.5															
1,2,4-Trimethylbenzene	25	U	3.4	2.8	J	1.8	14	U	2	5.6	J	1.7	2.7	J	2.5	13	U	1.8	19	U	2.7	2.3	J	2	19	U	2.7	2.3	J	2	19	U	2.7															
1,2-Dibromo-3-chloropropane	24	U	4.6	13	U	2.4	14	U	2.7	12	U	2.3	17	U	3.3	12	U	2.4	19	U	3.6	14	U	2.7	14	U	3.6	14	U	2.7	14	U	2.7															
1,2-Dibromoethane	25	U	2.9	13	U	1.5	15	U	1.7	13	U	1.4	18	U	2.1	13	U	1.5	19	U	2.2	15	U	1.7	15	U	2.2	15	U	1.7	15	U	1.7															
1,2-Dichloro-1,1,2,2-tetrafluoroethane	24	U	3.9	12	U	2.1	14	U	2.3	12	U	2	17	U	2.8	12	U	2	18	U	3	14	U	2.3	14	U	3	14	U	2.3	14	U	2.3															
1,2-Dichlorobenzene	25	U	3.7	13	U	1.9	15	U	2.2	13	U	1.8	18	U	2.6	13	U	1.9	19	U	2.8	15	U	2.1	15	U	2.8	15	U	2.1	15	U	2.1															
1,2-Dichloroethane	25	U	2.7	13	U	1.4	14	U	1.6	12	U	1.4	18	U	2	13	U	1.4	19	U	2.1	14	U	1.6	14	U	2.1	14	U	1.6	14	U	1.6															
1,2-Dichloroethene (total)	25	U	3.5	13	U	1.8	14	U	2	12	U	1.7	18	U	2.5	13	U	1.8	19	U	2.7	14	U	2	14	U	2.7	14	U	2	14	U	2															
1,2-Dichloropropane	25	U	3.1	13	U	1.6	15	U	1.8	13	U	1.5	18	U	2.2	13	U	1.6	19	U	2.4	15	U	1.8	15	U	2.4	15	U	1.8	15	U	1.8															
1,3,5-Trimethylbenzene	25	U	3.6	13	U	1.9	14	U	2.1	2.1	J	1.8	18	U	2.6	13	U	1.8	19	U	2.8	14	U	2.1	14	U	2.8	14	U	2.1	14	U	2.1															
1,3-Butadiene	24	U	4.1	13	U	2.1	14	U	2.4	12	U	2	17	U	2.9	12	U	2.1	19	U	3.2	14	U	2.4	14	U	3.2	14</																				

Analyte	Result (ug/m3)
1,1,1-Trichloroethane	0.96 U
1,1-Dichloroethene	0.96 U
Carbon tetrachloride	0.38
cis-1,2-Dichloroethene	0.94 U
Methylene chloride	0.35 J
Tetrachloroethene	0.32 J
Trichloroethene	0.2 U
Vinyl chloride	0.2 U

Analyte	Result (ug/m3)
1,1,1-Trichloroethane	0.9 U
1,1-Dichloroethene	0.9 U
Carbon tetrachloride	0.36
cis-1,2-Dichloroethene	0.89 U
Methylene chloride	0.52 J
Tetrachloroethene	0.32 J
Trichloroethene	0.18 U
Vinyl chloride	0.18 U

Analyte	Result (ug/m3)
1,1,1-Trichloroethane	0.9 U
1,1-Dichloroethene	0.9 U
Carbon tetrachloride	0.44
cis-1,2-Dichloroethene	0.89 U
Methylene chloride	0.38 J
Tetrachloroethene	0.3 J
Trichloroethene	0.18 U
Vinyl chloride	0.18 U

Analyte	Result (ug/m3)
1,1,1-Trichloroethane	0.8 U
1,1-Dichloroethene	0.8 U
Carbon tetrachloride	0.42
cis-1,2-Dichloroethene	0.78 U
Methylene chloride	0.4 J
Tetrachloroethene	0.22 J
Trichloroethene	0.16 U
Vinyl chloride	0.16 U

Analyte	Result (ug/m3)
1,1,1-Trichloroethane	0.9 U
1,1-Dichloroethene	0.9 U
Carbon tetrachloride	0.4
cis-1,2-Dichloroethene	0.89 U
Methylene chloride	0.38 J
Tetrachloroethene	0.29 J
Trichloroethene	0.18 U
Vinyl chloride	0.18 U

Analyte	Result (ug/m3)
1,1,1-Trichloroethane	0.88 U
1,1-Dichloroethene	0.88 U
Carbon tetrachloride	0.45
cis-1,2-Dichloroethene	0.86 U
Methylene chloride	0.38 J
Tetrachloroethene	0.33 J
Trichloroethene	0.18 U
Vinyl chloride	0.18 U

Analyte	Result (ug/m3)
1,1,1-Trichloroethane	0.73 U
1,1-Dichloroethene	0.73 U
Carbon tetrachloride	0.4
cis-1,2-Dichloroethene	0.72 U
Methylene chloride	0.48 J
Tetrachloroethene	0.28 J
Trichloroethene	0.15 U
Vinyl chloride	0.15 U

Analyte	Result (ug/m3)
1,1,1-Trichloroethane	0.91 U
1,1-Dichloroethene	0.91 U
Carbon tetrachloride	0.42
cis-1,2-Dichloroethene	0.89 U
Methylene chloride	0.38 J
Tetrachloroethene	1
Trichloroethene	1.2
Vinyl chloride	0.18 U

Analyte	Result (ug/m3)
1,1,1-Trichloroethane	0.9 U
1,1-Dichloroethene	0.9 U
Carbon tetrachloride	0.44
cis-1,2-Dichloroethene	0.89 U
Methylene chloride	0.38 J
Tetrachloroethene	0.32 J
Trichloroethene	0.18 U
Vinyl chloride	0.18 U

Analyte	Result (ug/m3)
1,1,1-Trichloroethane	0.85 U
1,1-Dichloroethene	0.85 U
Carbon tetrachloride	0.4
cis-1,2-Dichloroethene	0.84 U
Methylene chloride	0.32 J
Tetrachloroethene	0.25 J
Trichloroethene	0.17 U
Vinyl chloride	0.17 U

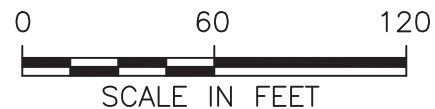
Analyte	Result (ug/m3)
1,1,1-Trichloroethane	0.86 U
1,1-Dichloroethene	0.86 U
Carbon tetrachloride	0.42
cis-1,2-Dichloroethene	0.84 U
Methylene chloride	0.37 J
Tetrachloroethene	0.29 J
Trichloroethene	0.17 U
Vinyl chloride	0.17 U

Analyte	Result (ug/m3)
1,1,1-Trichloroethane	0.93 U
1,1-Dichloroethene	0.93 U
Carbon tetrachloride	0.44
cis-1,2-Dichloroethene	0.92 U
Methylene chloride	0.37 J
Tetrachloroethene	0.29 J
Trichloroethene	0.19 U
Vinyl chloride	0.19 U

Analyte	Result (ug/m3)
1,1,1-Trichloroethane	0.95 U
1,1-Dichloroethene	0.95 U
Carbon tetrachloride	0.43
cis-1,2-Dichloroethene	0.93 U
Methylene chloride	0.34 J
Tetrachloroethene	0.29 J
Trichloroethene	0.19 U
Vinyl chloride	0.19 U

NOTES:

- SUB-SLAB MONITORING POINTS SS-A5F AND SS-G5F-R WERE INSTALLED MARCH 8, 2019. SS-G5F-R REPLACES FORMER SS-G5F WHICH IS CLOSED. SAMPLE SS-G5 WAS COLLECTED FROM LOCATION SS-G5F-R.
- U = NOT DETECTED AT THE REPORTED DETECTION LIMIT.
J = ESTIMATED VALUE.

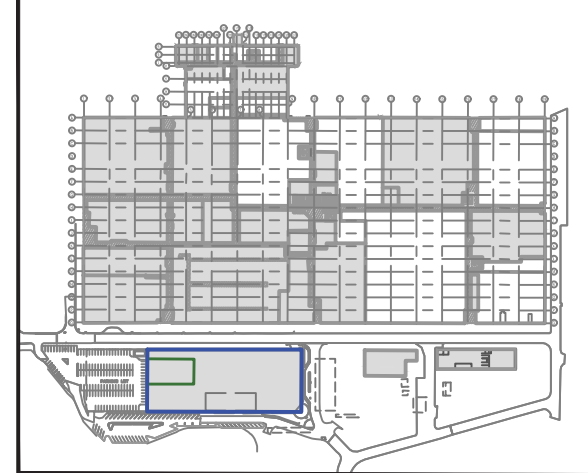


TITLE: 2019 VI SAMPLING RESULTS LA FITNESS

LOCATION: Former UNISYS Facility
Lake Success, New York

ameco

APPROVED	RTB	FIGURE
DRAFTED	BRT	1
PROJECT#	117-0507644	
DATE	05/24/19	



LEGEND

- IA-H21F INDOOR AIR SAMPLE LOCATION
- SS-A5F SUB-SLAB MONITORING POINT
- EP-C5F ACTIVE EXTRACTION POINT
- 80 - FOOT RADIUS OF INFLUENCE
- PASSIVE VENT EXHAUST
- PASSIVE VENT INLET
- AA-01 AMBIENT AIR SAMPLE LOCATION
- DENOTES LOCATIONS SAMPLED IN 2019

Volatile Organic Compounds (VOCs) in Commonly Used Products

People spend most of their time indoors – at home, school and work. This makes the quality of the indoor air you breathe important. This fact sheet focuses on certain kinds of chemicals called *volatile organic compounds* or VOCs that are found in many products that we commonly use. It is designed to help you think about what VOCs may be present in your indoor air and steps you can take to reduce them.

What are VOCs?

VOCs are chemicals that easily enter the air as gases from some solids or liquids. They are ingredients in many commonly used products and are in the air of just about every indoor setting. The table to the right shows some examples of products that contain VOCs.

How do VOCs get into indoor air?

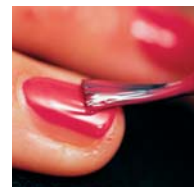
Products containing VOCs can release these chemicals when they are used and when they are stored. Many times you'll notice an odor when using these products. Product labels often list VOC ingredients and recommend that they should be used in well ventilated areas. *Ventilation* means bringing in fresh, outdoor air to mix with indoor air.

When you use a product containing VOCs indoors, the levels of these chemicals in the air increase, then decrease over time after you stop using them. The amount of time the chemical stays in the air depends on how quickly fresh air enters the room and the amount of the chemical used. Levels of VOCs will decrease faster if you open windows or doors, or use exhaust fans.

Building materials and furnishings, such as new carpets or furniture, slowly release VOCs over time. It may be necessary to ventilate areas with new carpeting or furniture for longer time periods because VOC levels can build up again after the windows are closed. If possible, unroll new carpets or store furniture outside your home (in a shed or detached garage) to minimize odors before bringing them in the home. If that's not possible, open windows, close doors and try to stay out of rooms until odors are reduced.

If VOC containing products are used outdoors near your home, you may want to close windows and nearby vents to prevent chemicals from coming inside.

Products used at home or work can release VOCs into the air when used and stored.



Examples of Household Products	Possible VOC Ingredients
Fuel containers or devices using gasoline, kerosene, fuel oil and products with petroleum distillates: paint thinner, oil-based stains and paint, aerosol or liquid insect pest products, mineral spirits, furniture polishes	BTEX (benzene, toluene, ethylbenzene, xylene), hexane, cyclohexane, 1,2,4-trimethylbenzene
Personal care products: nail polish, nail polish remover, colognes, perfumes, rubbing alcohol, hair spray	Acetone, ethyl alcohol, isopropyl alcohol, methacrylates (methyl or ethyl), ethyl acetate
Dry cleaned clothes, spot removers, fabric/leather cleaners	Tetrachloroethene (perchloroethene (PERC), trichloroethene (TCE))
Citrus (orange) oil or pine oil cleaners, solvents and some odor masking products	d-limonene (citrus odor), a-pinene (pine odor), isoprene
PVC cement and primer, various adhesives, contact cement, model cement	Tetrahydrofuran, cyclohexane, methyl ethyl ketone (MEK), toluene, acetone, hexane, 1,1,1-trichloroethane, methyl-iso-butyl ketone (MIBK)
Paint stripper, adhesive (glue) removers	Methylene chloride, toluene, older products may contain carbon tetrachloride
Degreasers, aerosol penetrating oils, brake cleaner, carburetor cleaner, commercial solvents, electronics cleaners, spray lubricants	Methylene chloride, PERC, TCE, toluene, xylenes, methyl ethyl ketone, 1,1,1-trichloroethane
Moth balls, moth flakes, deodorizers, air fresheners	1,4-dichlorobenzene, naphthalene
Refrigerant from air conditioners, freezers, refrigerators, dehumidifiers	Freons (trichlorofluoromethane, dichlorodifluoromethane)
Aerosol spray products for some paints, cosmetics, automotive products, leather treatments, pesticides	Heptane, butane, pentane
Upholstered furniture, carpets, plywood, pressed wood products	Formaldehyde

VOCs can also get into indoor air from contaminated soils and groundwater under buildings. The chemicals enter buildings through cracks and openings in basements or slabs. When nearby soil or groundwater is contaminated, you might be asked for permission to investigate indoor air at your property. More information can be found at www.nyhealth.gov/environmental/indoors/vapor_intrusion/.

Should I be surprised if VOCs are in the air I breathe?

No. Because they are commonly used, some VOCs are almost always found in indoor air. The New York State Department of Health (DOH) and other agencies have studied typical levels of VOCs that may be present in indoor and outdoor air. Sometimes these levels are called “background levels”.

The term “background levels” can be confusing because they can vary depending on where an air sample was collected and whether VOCs were used or stored. For example, a study of VOCs in urban areas might find higher levels than another study in rural areas. Some studies look at office environments, others examine residences. Please keep in mind study findings may or may not make sense for your setting.

More information about levels of VOCs collected by DOH is available in Appendix C of the guidance for evaluating vapor intrusion at www.nyhealth.gov/environmental/investigations/soil_gas/svi_guidance.

How can VOCs affect human health?

Chemicals can enter the body through three major pathways (breathing, touching or swallowing). This is referred to as *exposure*. No matter how dangerous a substance or activity is, it cannot harm you without exposure.

Whether or not a person will have health effects after breathing in VOCs depends on:

- The *toxicity* of the chemical (the amount of harm that can be caused by contact with the chemical).
- How much of the chemical is in the air.
- How long and how often the air is breathed.

Differences in age, health condition, gender and exposure to other chemicals also can affect whether or not a person will have health effects.

Short-term exposure to high levels of some VOCs can cause headaches, dizziness, light-headedness, drowsiness, nausea, and eye and respiratory irritation. These effects usually go away after the exposure stops. In laboratory animals, long-

term exposure to high levels of some VOCs has caused cancer and affected the liver, kidney and nervous system. In general, we recommend minimizing exposure to chemicals, if possible.

How can I reduce the levels of VOCs indoors?

Find out if products used or stored in your home contain VOCs. Information about the chemicals in many household products are listed on the front of this fact sheet and a larger list is on the National Institute of Health’s website at hpd.nlm.nih.gov/products.htm.

If you must store products containing VOCs, do so in tightly sealed, original containers in a secure and well-ventilated area. If possible store products in places where people do not spend much time, such as a garage or outdoor shed. Better yet, buy these products in amounts that are used quickly.

Dispose of unneeded products containing VOCs. Many of these products are considered *household hazardous wastes* and should be disposed of at special facilities or during special household hazardous waste collection programs in your area. Contact your town or visit the New York State Department of Environmental Conservation’s website at www.dec.ny.gov/chemical/8485.html for more information about disposing of these products.

Use products containing VOCs in well-ventilated areas or outdoors. Open windows and doors or use an exhaust fan to increase ventilation. Repeated or prolonged ventilation may be necessary for reducing levels from building materials (new carpeting or furniture) that release VOCs slowly over time.

Carefully read labels and follow directions for use.

Where can I find out more?

- **New York State Department of Health**
www.health.ny.gov/environmental
- **New York State Department of Environmental Conservation**
www.dec.ny.gov/chemical/8485.html
- **NYSERDA's Indoor Air Quality and Your Home**
www.nyserdera.ny.gov/-/media/Files/Publications/Research/Other-Technical-Reports/indoor-air-quality.pdf
- **USEPA information on Indoor Air Quality**
www.epa.gov/iaq/pubs/index.html
- **New York State Department of Environmental Conservation**
www.dec.ny.gov/chemical/8485.html
- **National Institute of Health**
<http://hpd.nlm.nih.gov/products.htm>