

Sub-Slab Depressurization System Progress Report for the Former Holley Automotive/ Coltec Industries Facility Water Valley, Mississippi



Bernard T. Delaney, Ph.D., P.E., BCEE

October 2017

Prepared for: Butler Snow, LLP
1020 Highland Colony Parkway, Suite 1400
Ridgeland, MS 39157

Prepared by: First Environment, Inc.
91 Fulton Street
Boonton, New Jersey 07005

EnPro002-D-08072017



CERTIFICATION STATEMENT

I, Bernard T. Delaney, Ph.D., P.E., BCEE, certify that I am currently a registered professional engineer in the State of Mississippi and had primary direct responsibility for the implementation of the subject interim remedial measure activities. I certify that this Sub-Slab Depressurization System Progress Report was completed in conformance with the laws and regulations of the State of Mississippi. I certify that all information and statements in this certification form are true.

11041
Mississippi Professional
Engineer No.

10/02/2017
Date



B. Tod Delaney, Ph.D., P.E., BCEE

TABLE OF CONTENTS

1.0	Introduction.....	1
2.0	Indoor Air Monitoring – September 5-6, 2017.....	1
2.1	Instrumentation.....	1
2.2	Methodology.....	1
2.3	Results.....	2
3.0	Summary.....	4

TABLES

Table 1 – Indoor Air Sampling Results – September 5, 2017

Table 2 – Indoor Air Sampling Results Comparison – January through September 2017

FIGURES

Figure 1 – Indoor Air Sampling Results – September 5, 2017

APPENDIX

Appendix A – Analytical Report

1.0 Introduction

This Sub-Slab Depressurization System (“SSDS”) Progress Report has been prepared by First Environment, Inc. (“First Environment”) on behalf of EnPro Industries, Inc. (“EnPro”) with respect to the former Holley Automotive/Coltec Industries Facility (hereinafter referred as the Plant”). The Plant is located at 600 State Highway 32 in Water Valley, Yalobusha County, Mississippi.

On June 19, 2017, First Environment submitted a VI Investigation and Mitigation Report (the “Initial SSDS Report”), which included a description of the SSDS and indoor air sampling data through June 7, 2017. On July 3, 2017, First Environment submitted a SSDS Progress Report on the June 19-20, 2017 ambient and indoor air sampling results and the installation of extraction point (“EP”) No. 3. First Environment submitted SSDS Progress Reports on subsequent rounds of ambient and indoor air sampling on July 17, August 7, August 21, and September 11, 2017. On September 5-6, 2017, First Environment collected another round of ambient and indoor air samples. As discussed in more detail below, all sampling results for TCE were below the MDEQ action level of 26 $\mu\text{g}/\text{m}^3$.

2.0 Indoor Air Monitoring – September 5-6, 2017

2.1 Instrumentation

On September 5-6, 2017, First Environment collected ambient and indoor air samples by placing laboratory provided 6-liter capacity 24-hour Summa® canisters, equipped with flow regulators calibrated to 24 hours.

2.2 Methodology

First Environment collected 12 indoor air samples at various locations within the Plant including the Maintenance Room, the ATS Room, and the Training Room; and one ambient air sample outside the Plant. Standard chain-of-custody procedures were implemented for the sampling, including signing the sample lot in and out from the facility to the laboratory on a chain-of-custody sheet and dating the start and end dates/times of sample collection. First Environment also followed standard indoor air sampling techniques to collect the indoor air samples at the locations depicted in Figure 1. Wherever possible, First Environment mounted the Summa® canisters on columns or secured them in an area above the floor at or near the “breathing space.” The vacuum measurements in Summa® canisters were noted before and after sampling to ensure that the flow regulator at each canister was working properly.

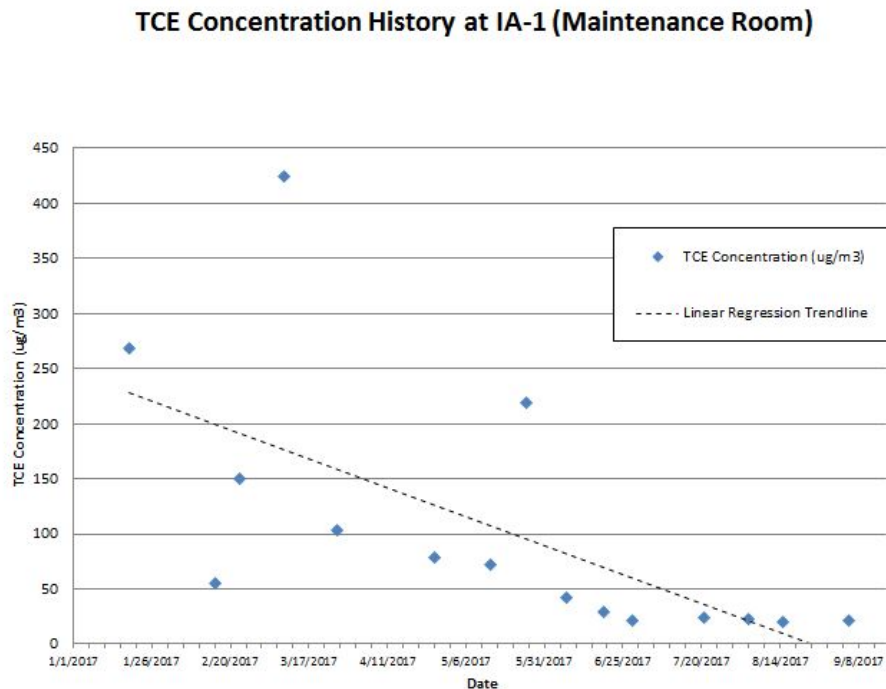
The sampling requires the Summa® canisters to be left in place for 24 hours and they are monitored by Plant security for that period of time. First Environment personnel, Borg Warner representatives, and Plant employees had access to the Summa® canisters during the 24-hour sampling period.

First Environment submitted the samples to ESC Lab Sciences for USEPA TO-15 SIM analysis. The laboratory was responsible for the decontamination of the Summa® canisters and for setting the internal vacuum and calibrating the regulators prior to sample collection.

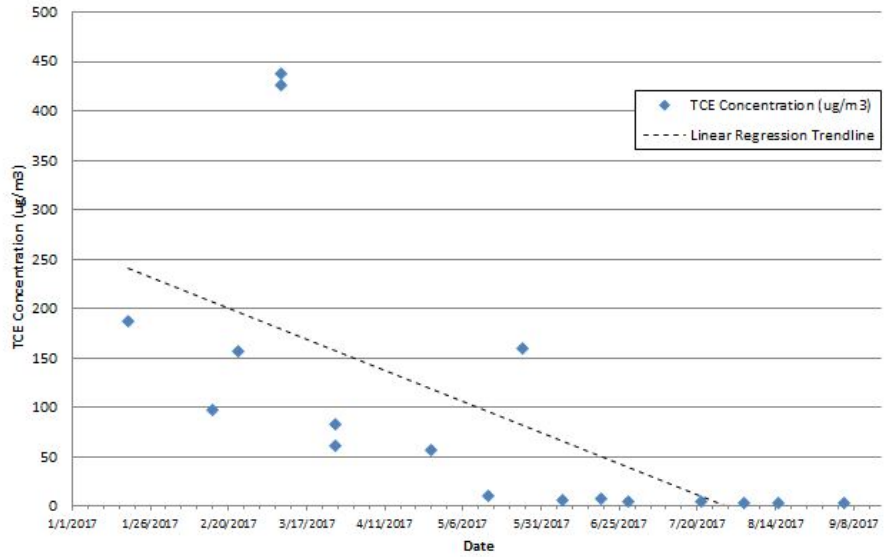
2.3 Results

Table 1 presents the ambient and indoor air sampling results for all TO-15 analytes. Table 2 presents the results of TCE, cis-DCE, and VC in comparison of all previous rounds of sampling.

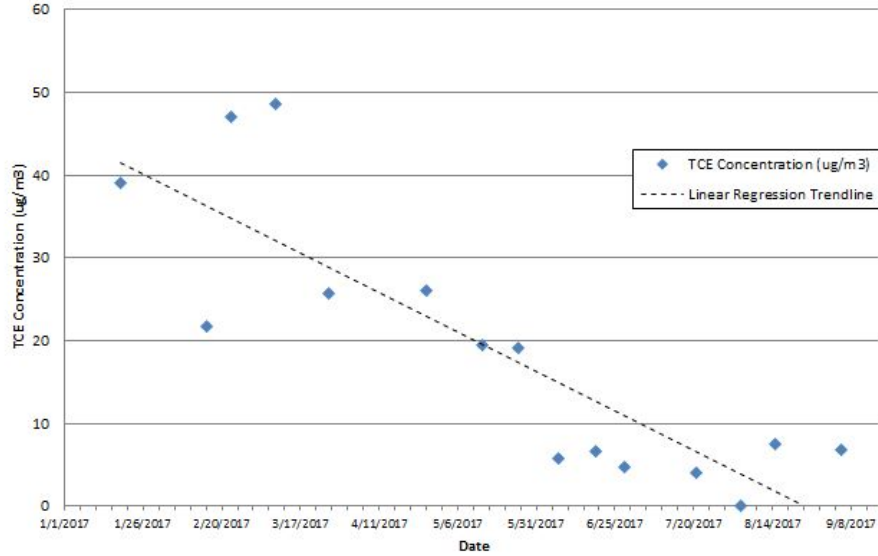
The sample results in the Training Room, ATS Room, Maintenance Room, and Cafeteria were above USEPA's Vapor Intrusion Screening Level ("VISL") for TCE of $3 \mu\text{g}/\text{m}^3$ but below the MDEQ action level of $26 \mu\text{g}/\text{m}^3$. The remaining eight (8) sample results were all below USEPA's VISL. The following figures show the linear regression trendline for the interior rooms.



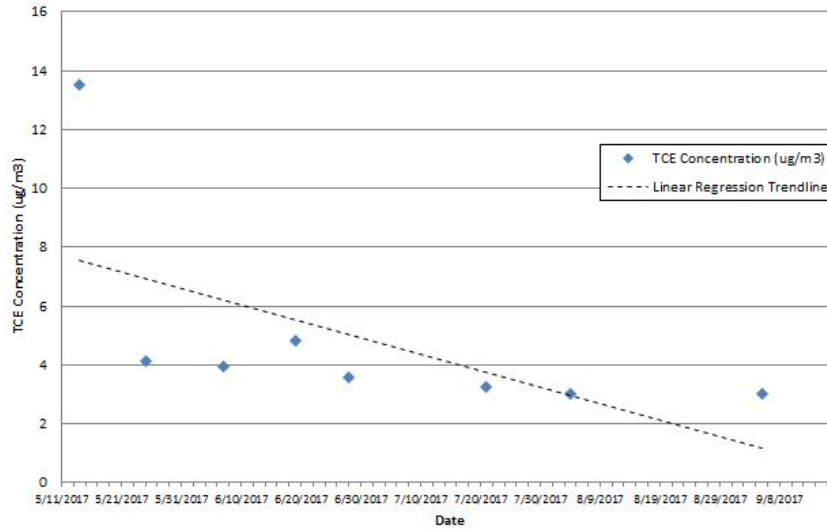
TCE Concentration History at IA-2 (ATS Room)



TCE Concentration History at IA-6 (Training Room)



TCE Concentration History at IA-17 (Cafeteria)



A copy of the laboratory report, including the chain-of-custody forms, is attached in Appendix A.

3.0 Summary

Since June 2017, the sample results in the Maintenance Room (IA-1), ATS Room (IA-2), Training Room (IA-6), and Cafeteria (IA-17) have been below the MDEQ action level of 26 $\mu\text{g}/\text{m}^3$. The sample results in these interior rooms for this round exceed the USEPA's Vapor Intrusion Screening Level ("VISL") for TCE of 3 $\mu\text{g}/\text{m}^3$, but that only requires continued monitoring. The sample results from the ambient air and the eight (8) other locations in the Plant are below USEPA's VISL.

On September 20, 2017, First Environment, on behalf of EnPro, submitted a letter request to MDEQ for modification to the indoor air sampling program pursuant to Section 3.A. of the Agreed Order. The revised indoor air sampling schedule provides for bi-weekly sampling for the four interior room indoor air sampling locations (IA-1, IA-2, IA-6, & IA-17) and semi-annual sampling of three locations at the west, center, and east areas of the Plant (IA-C16, IA-K13, and IA-G4). On September 28, 2017, the MDEQ approved the sampling schedule with a request that IA-C16, IA-K13, and IA-G4 are sampled on a quarterly basis. Subsequent sampling results under the approved sampling schedule will be provided to the MDEQ on an ongoing basis.

TABLES

TABLE 1
INDOOR AIR SAMPLING RESULTS
September 5, 2017
FORMER HOLLEY AUTOMOTIVE/COLTEC INDUSTRIES FACILITY
WATER VALLEY, MS

SAMPLE LOCATION:	IA-1	IA-2	IA-6	IA-17	IA-B12	IA-C16	IA-G13	IA-K13	IA-L16	IA-D5	IA-G4	IA-K8	AA-2
SAMPLING DATE:	09/05/2017	09/05/2017	09/05/2017	09/05/2017	09/05/2017	09/05/2017	09/05/2017	09/05/2017	09/05/2017	09/05/2017	09/05/2017	09/05/2017	09/05/2017
LABORATORY ID:	L934535-01	L934535-02	L934535-03	L934535-04	L934535-05	L934535-06	L934535-07	L934535-08	L934535-09	L934535-10	L934535-11	L934535-12	L934535-13
Analyte	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$
ACETONE	290	802	140	2830	560	224	1120	1350	231	1400	760	1340	11.7
ALLYL CHLORIDE	<0.626	<0.626	<0.626	<0.626	<0.626	<0.626	<0.626	<0.626	<0.626	<0.626	<0.626	<0.626	<0.626
BENZENE	6.79	1.6	<0.639	1.56	1.3	<0.639	1.54	2.01	1.64	1.64	1.42	1.68	<0.639
BENZYL CHLORIDE	<1.04	<1.04	<1.04	<1.04	<1.04	<1.04	<1.04	<1.04	<1.04	<1.04	<1.04	<1.04	<1.04
BROMODICHLOROMETHANE	<1.34	<1.34	<1.34	<1.34	<1.34	<1.34	<1.34	<1.34	<1.34	<1.34	<1.34	<1.34	<1.34
BROMOFORM	<6.21	<6.21	<6.21	<6.21	<6.21	<6.21	<6.21	<6.21	<6.21	<6.21	<6.21	<6.21	<6.21
BROMOMETHANE	<0.776	<0.776	<0.776	<0.776	<0.776	<0.776	<0.776	<0.776	<0.776	<0.776	<0.776	<0.776	<0.776
1,3-BUTADIENE	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	4.69	4.91	<4.43	<4.43
CARBON DISULFIDE	<0.622	<0.622	<0.622	<0.622	<0.622	<0.622	<0.622	<0.622	<0.622	<0.622	<0.622	<0.622	<0.622
CARBON TETRACHLORIDE	<1.26	<1.26	<1.26	<1.26	<1.26	<1.26	<1.26	<1.26	<1.26	<1.26	<1.26	<1.26	<1.26
CHLOROBENZENE	<0.924	<0.924	<0.924	<0.924	<0.924	<0.924	<0.924	<0.924	<0.924	<0.924	<0.924	<0.924	<0.924
CHLOROETHANE	<0.528	<0.528	<0.528	<0.528	<0.528	<0.528	<0.528	<0.528	<0.528	<0.528	<0.528	<0.528	<0.528
CHLOROFORM	<0.973	<0.973	<0.973	<0.973	<0.973	<0.973	<0.973	<0.973	<0.973	<0.973	<0.973	<0.973	<0.973
CHLOROMETHANE	1.33	1.32	1.35	1.33	1.23	1.35	1.31	1.26	1.29	1.32	1.23	1.32	1.26
2-CHLOROTOLUENE	<1.03	<1.03	<1.03	<1.03	<1.03	<1.03	<1.03	<1.03	<1.03	<1.03	<1.03	<1.03	<1.03
CYCLOHEXANE	5.08	4.72	3.38	3.26	3.87	7.74	6.98	6.22	5.18	2.6	<0.689	3.55	<0.689
CHLORODIBROMOMETHANE	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
1,2-DIBROMOETHANE	<1.54	<1.54	<1.54	<1.54	<1.54	<1.54	<1.54	<1.54	<1.54	<1.54	<1.54	<1.54	<1.54
1,2-DICHLOROBENZENE	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2
1,3-DICHLOROBENZENE	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2
1,4-DICHLOROBENZENE	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2
1,2-DICHLOROETHANE	1.1	<0.81	<0.81	<0.81	<0.81	<0.81	<0.81	<0.81	<0.81	<0.81	<0.81	<0.81	<0.81
1,1-DICHLOROETHANE	<0.802	<0.802	<0.802	<0.802	<0.802	<0.802	<0.802	<0.802	<0.802	<0.802	<0.802	<0.802	<0.802

TABLE 1
INDOOR AIR SAMPLING RESULTS
September 5, 2017
FORMER HOLLEY AUTOMOTIVE/COLTEC INDUSTRIES FACILITY
WATER VALLEY, MS

SAMPLE LOCATION:	IA-1	IA-2	IA-6	IA-17	IA-B12	IA-C16	IA-G13	IA-K13	IA-L16	IA-D5	IA-G4	IA-K8	AA-2
SAMPING DATE:	09/05/2017	09/05/2017	09/05/2017	09/05/2017	09/05/2017	09/05/2017	09/05/2017	09/05/2017	09/05/2017	09/05/2017	09/05/2017	09/05/2017	09/05/2017
LABORATORY ID:	L934535-01	L934535-02	L934535-03	L934535-04	L934535-05	L934535-06	L934535-07	L934535-08	L934535-09	L934535-10	L934535-11	L934535-12	L934535-13
Analyte	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$
1,1-DICHLOROETHENE	<0.793	<0.793	<0.793	<0.793	<0.793	<0.793	<0.793	<0.793	<0.793	<0.793	<0.793	<0.793	<0.793
CIS-1,2-DICHLOROETHENE	3.17	0.967	5.17	5.6	<0.793	<0.793	<0.793	<0.793	<0.793	<0.793	<0.793	<0.793	<0.793
TRANS-1,2-DICHLOROETHENE	<0.793	1.18	0.975	0.825	1.44	<0.793	0.991	0.91	<0.793	2.12	3.43	1.83	<0.793
1,2-DICHLOROPROPANE	<0.924	<0.924	<0.924	<0.924	<0.924	<0.924	<0.924	<0.924	<0.924	<0.924	<0.924	<0.924	<0.924
CIS-1,3-DICHLOROPROPENE	<0.908	<0.908	<0.908	<0.908	<0.908	<0.908	<0.908	<0.908	<0.908	<0.908	<0.908	<0.908	<0.908
TRANS-1,3-DICHLOROPROPENE	<0.908	<0.908	<0.908	<0.908	<0.908	<0.908	<0.908	<0.908	<0.908	<0.908	<0.908	<0.908	<0.908
1,4-DIOXANE	1.68	1.93	1.27	1.22	1.81	1.14	2.07	2.23	1.39	<0.721	<0.721	<0.721	<0.721
ETHANOL	3720	4250	1670	41,700 (E)	562	2430	3580	3080	2430	2700	3,890 (E)	5460	505 (E)
ETHYLBENZENE	9.56	2.83	1.68	1.8	1.98	2.47	2.47	2.65	1.88	2.55	1.5	2.47	<0.867
4-ETHYLTOLUENE	3.01	1.44	<0.982	<0.982	<0.982	<0.982	1.13	1.12	<0.982	1.56	1.11	1.76	<0.982
TRICHLOROFUOROMETHANE	1.68	1.66	1.71	1.71	1.81	1.87	1.7	1.66	1.6	1.99	1.71	1.68	1.45
DICHLORODIFLUOROMETHANE	4.96	1.74	1.58	1.59	1.53	1.64	1.59	1.53	1.56	1.86	1.64	1.74	1.6
1,1,2-TRICHLOROTRIFLUOROETHANE	<1.53	<1.53	<1.53	<1.53	<1.53	<1.53	<1.53	<1.53	<1.53	<1.53	<1.53	<1.53	<1.53
1,2-DICHLOROTETRAFLUROETHANE	<1.4 (J4)	<1.4 (J4)	<1.4 (J4)	<1.4 (J4)	<1.4 (J4)	<1.4 (J4)	<1.4 (J4)	<1.4 (J4)	<1.4 (J4)	<1.4 (J4)	<1.4 (J4)	<1.4 (J4)	<1.4 (J4)
HEPTANE	39.9	53.6	38.1	31.2	43.3	76.6	82.1	71.4	60.9	26	16.8	39.7	<0.818
HEXACHLORO-1,3-BUTADIENE	<6.73	<6.73	<6.73	<6.73	<6.73	<6.73	<6.73	<6.73	<6.73	<6.73	<6.73	<6.73	<6.73
N-HEXANE	12.7	1.33	0.975	2.46	1.18	3.72	1.27	1.71	1.03	1.61	<0.705	<0.705	<0.705
ISOPROPYLBENZENE	<0.983	<0.983	<0.983	<0.983	<0.983	<0.983	<0.983	<0.983	<0.983	<0.983	<0.983	<0.983	<0.983
METHYLENE CHLORIDE	1.11	<0.694	<0.694	3	<0.694	5.37	<0.694	0.959	<0.694	0.939	0.719	<0.694	<0.694
METHYL BUTYL KETONE	<5.11	<5.11	<5.11	<5.11	<5.11	<5.11	<5.11	<5.11	<5.11	<5.11	<5.11	<5.11	<5.11
2-BUTANONE (MEK)	382	415	178	4230	841	265	389	355	270	379	617	558	<3.69
4-METHYL-2-PENTANONE (MIBK)	<5.12	<5.12	<5.12	<5.12	<5.12	<5.12	<5.12	<5.12	<5.12	5.54	<5.12	<5.12	<5.12
METHYL METHACRYLATE	<0.819	<0.819	<0.819	<0.819	<0.819	<0.819	<0.819	<0.819	<0.819	<0.819	<0.819	<0.819	<0.819
METHYL TERT-BUTYL ETHER	<0.721	<0.721	<0.721	<0.721	<0.721	<0.721	<0.721	<0.721	<0.721	<0.721	<0.721	<0.721	<0.721
NAPHTHALENE	<3.3	<3.3	<3.3	<3.3	<3.3	<3.3	<3.3	<3.3	<3.3	<3.3	<3.3	<3.3	<3.3
2-PROPANOL	7,310 (E)	7080	3240	40,900 (E)	1350	5,170 (E)	8050	8140	5,560 (E)	9360	23,600 (E)	8800	45

TABLE 1
INDOOR AIR SAMPLING RESULTS
September 5, 2017
FORMER HOLLEY AUTOMOTIVE/COLTEC INDUSTRIES FACILITY
WATER VALLEY, MS

SAMPLE LOCATION:	IA-1	IA-2	IA-6	IA-17	IA-B12	IA-C16	IA-G13	IA-K13	IA-L16	IA-D5	IA-G4	IA-K8	AA-2
SAMPING DATE:	09/05/2017	09/05/2017	09/05/2017	09/05/2017	09/05/2017	09/05/2017	09/05/2017	09/05/2017	09/05/2017	09/05/2017	09/05/2017	09/05/2017	09/05/2017
LABORATORY ID:	L934535-01	L934535-02	L934535-03	L934535-04	L934535-05	L934535-06	L934535-07	L934535-08	L934535-09	L934535-10	L934535-11	L934535-12	L934535-13
Analyte	µg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³
PROPENE	<0.689	<0.689	<0.689	<0.689	<0.689	<0.689	<0.689	<0.689	<0.689	<0.689	<0.689	<0.689	<0.689
STYRENE	<0.851	<0.851	<0.851	<0.851	<0.851	<0.851	<0.851	<0.851	<0.851	<0.851	<0.851	<0.851	<0.851
1,1,2,2-TETRACHLOROETHANE	<1.37	<1.37	<1.37	<1.37	<1.37	<1.37	<1.37	<1.37	<1.37	<1.37	<1.37	<1.37	<1.37
TETRACHLOROETHENE	<1.36	<1.36	<1.36	<1.36	<1.36	<1.36	1.89	<1.36	<1.36	5.04	<1.36	<1.36	<1.36
TETRAHYDROFURAN	7.16	3.6	<0.59	<0.59	<0.59	<0.59	<0.59	<0.59	<0.59	<0.59	<0.59	<0.59	<0.59
TOLUENE	58.1	8.63	4.15	8.82	3.7	16.6	6.71	8.52	4.72	6.28	4.51	5.44	<0.753
1,2,4-TRICHLOROBENZENE	<4.66	<4.66	<4.66	<4.66	<4.66	<4.66	<4.66	<4.66	<4.66	<4.66	<4.66	<4.66	<4.66
1,1,1-TRICHLOROETHANE	<1.09	<1.09	<1.09	<1.09	<1.09	<1.09	<1.09	<1.09	<1.09	<1.09	<1.09	<1.09	<1.09
1,1,2-TRICHLOROETHANE	<1.09	<1.09	<1.09	<1.09	<1.09	<1.09	<1.09	<1.09	<1.09	<1.09	<1.09	<1.09	<1.09
TRICHLOROETHENE	21.8	3.52	6.85	3.04	<1.07	<1.07	1.78	1.67	1.14	1.3	1.17	<1.07	<1.07
1,2,4-TRIMETHYLBENZENE	8.09	6.12	3.46	3.29	4.03	3.37	4.95	4.61	3.5	7.33	5.16	8.03	<0.982
1,3,5-TRIMETHYLBENZENE	2.32	1.96	1.25	1.13	1.17	1.19	1.75	1.61	1.13	2.04	1.57	2.33	<0.982
2,2,4-TRIMETHYLPENTANE	10.8	10.3	8.51	6.82	7.57	8.92	16.9	12.8	8.94	5.56	4.18	<0.934	<0.934
VINYL CHLORIDE	<0.511	<0.511	<0.511	<0.511	<0.511	<0.511	<0.511	<0.511	<0.511	<0.511	<0.511	<0.511	<0.511
VINYL BROMIDE	<0.875	<0.875	<0.875	<0.875	<0.875	<0.875	<0.875	<0.875	<0.875	<0.875	<0.875	<0.875	<0.875
VINYL ACETATE	<0.704	<0.704	<0.704	<0.704	<0.704	<0.704	<0.704	<0.704	<0.704	<0.704	<0.704	<0.704	<0.704
M&P-XYLENE	38	10.4	5.68	6.14	6.85	8.54	8.54	9.32	6.53	9.17	5.44	8.6	<1.73
O-XYLENE	11.6	3.26	1.83	2.08	2.17	3.21	2.69	2.96	2.15	3.05	1.95	2.84	<0.867
1,4-BROMOFLUOROBENZENE	105	103	105	110	98.7	101	115	104		116	103	100	
	103	118	97.8	102	108	111	102	108	106103	104	109	112	100

B: The same analyte is found in the associated blank.

E: The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL)

**TABLE 2
INDOOR AIR SAMPLING RESULTS COMPARISON
JANUARY THROUGH SEPTEMBER 2017
FORMER HOLLEY AUTOMOTIVE/COLTEC INDUSTRIES FACILITY
WATER VALLEY, MS**

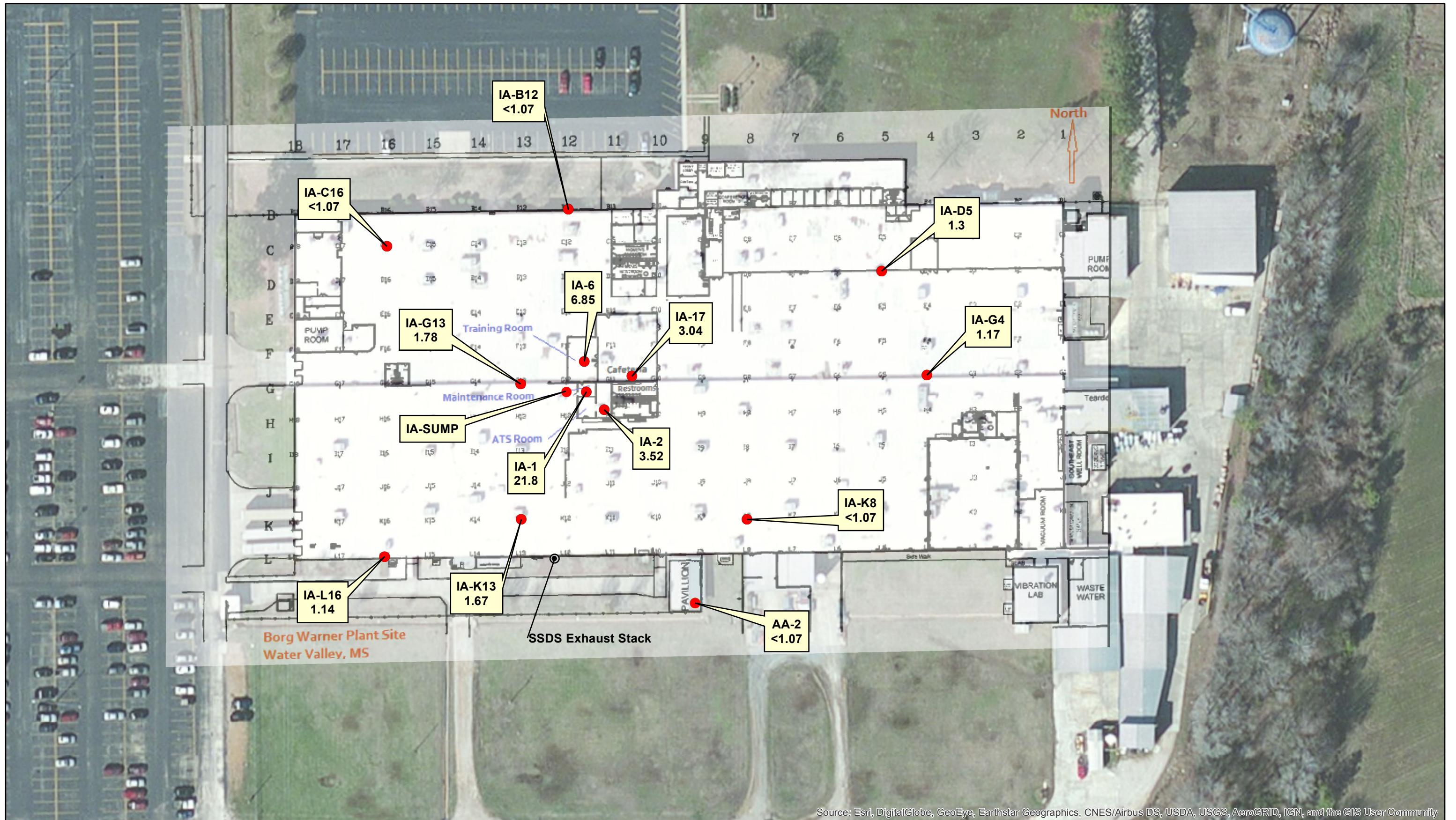
SAMPLE ID	SAMPLING DATE	LABORATORY ID	CoC Concentrations (µg/m³)		
			Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride
USEPA Vapor Intrusion Screening Level (VISL):			3	NA	2.8
IA-1	19-Jan-17	L1702183-01	268(D)	63.8	<0.051
	15-Feb-17	L890396-01	55.8	<0.793	2.51
	23-Feb-17	L892423-01	150	82.1	1.68
	9-Mar-17	L895061-01	425	97.9	2.47
	26-Mar-17	L898762-01	103	11.4	0.604
	26-Apr-17	L905292-01	78.3	<0.793	0.712
	14-May-17	L909544-01	72.7	14	<0.511
	25-May-17	L912423-03	219	<0.793	0.526
	7-Jun-17	L914832-13	41.7	<0.793	<0.511
	19-Jun-17	L917924-13	29.4	3.68	<0.511
	28-Jun-17	L920054-12	21.4	<0.793	<0.511
	21-Jul-17	L924410-01	23.8	<0.793	<0.511
	4-Aug-17	L927407-01	22.9	2.85	<0.511
	15-Aug-17	L930026-01	20.6	<0.793	<0.511
5-Sep-17	L934535-01	21.8	3.17	<0.511	
IA-2 IA-2 (2ND CANISTER) IA-2 (DUPLICATE)	19-Jan-17	L1702183-02	187	43.2	<0.051
	15-Feb-17	L890396-02	97.1	<0.793	2.27
	23-Feb-17	L892423-02	157	79.4	1.57
	9-Mar-17	L895061-02	426	86.7	1.18
	9-Mar-17	L895061-04	438	88.7	1.68
	26-Mar-17	L898762-02	61.8	<0.793	<0.511
	26-Mar-17	L898762-04	82.3	<0.793	<0.511
	26-Apr-17	L905292-02	56.6	10.8	<0.511
	14-May-17	L909544-02	10.8	<0.793	<0.511
	25-May-17	L912423-08	160	<0.793	<0.511
	7-Jun-17	L914832-12	6.58	<0.793	<0.511
	19-Jun-17	L917924-12	8.16	1.88	<0.511
	28-Jun-17	L920054-13	4.21	<0.793	<0.511
	21-Jul-17	L924410-02	4.3	<0.793	<0.511
4-Aug-17	L927407-02	2.94	<0.793	<0.511	
15-Aug-17	L930026-02	2.91	<0.793	<0.511	
5-Sep-17	L934535-02	3.52	0.967	<0.511	
IA-6	19-Jan-17	L1702183-06	39	12.8	0.585
	15-Feb-17	L890396-03	21.7	<0.793	0.57
	23-Feb-17	L892423-03	47.1	14.2	<0.511
	9-Mar-17	L895061-03	48.6	12.3	0.511
	26-Mar-17	L898762-03	25.8	<0.793	<0.511
	26-Apr-17	L905292-03	26	9.12	<0.511
	14-May-17	L909544-03	19.5	<0.793	<0.511
	25-May-17	L912423-01	19.1	<0.793	<0.511
	7-Jun-17	L914832-11	5.75	<0.793	<0.511
	19-Jun-17	L917924-11	6.67	4.14	<0.511
	28-Jun-17	L920054-11	4.84	<0.793	<0.511
	21-Jul-17	L924410-03	4	<0.793	<0.511
	4-Aug-17	L927407-03	<1.07	<0.793	<0.511
	15-Aug-17	L930026-03	7.61	<0.793	<0.511
5-Sep-17	L934535-03	6.85	5.17	<0.511	
IA-14	19-Jan-17	L1702183-14	3.07	0.928	<0.051
	23-Feb-17	L892423-04	3.32	<0.793	<0.511
IA-17	14-May-17	L909544-05	13.5	<0.793	<0.511
	25-May-17	L912423-02	4.15	<0.793	<0.511
	7-Jun-17	L914832-10	3.96	<0.793	<0.511
	19-Jun-17	L917924-10	4.82	4.48	<0.511
	28-Jun-17	L920054-10	3.56	<0.793	<0.511
	21-Jul-17	L924410-04	3.27	<0.793	<0.511
	4-Aug-17	L927407-04	3.02	<0.793	<0.511
	15-Aug-17	L930026-04	<5.36	<3.96	<2.56
5-Sep-17	L934535-04	3.04	5.6	<0.511	
IA-B12	26-Apr-17	L905292-04	6.54	1.77	<0.511
	25-May-17	L912423-05	3.08	<0.793	<0.511
	7-Jun-17	L914832-07	1.64	<0.793	<0.511
	19-Jun-17	L917924-09	1.66	<0.793	<0.511
	28-Jun-17	L920054-08	<1.07	<0.793	<0.511
	21-Jul-17	L924410-05	1.08	<0.793	<0.511
	4-Aug-17	L927407-05	<1.07	<0.793	<0.511
	15-Aug-17	L930026-05	<1.07	<0.793	<0.511
5-Sep-17	L934535-05	<1.07	<0.793	<0.511	
IA-C16	26-Apr-17	L905292-05	6.48	1.82	<0.511
	25-May-17	L912423-06	3.88	<0.793	<0.511
	7-Jun-17	L914832-08	1.55	<0.793	<0.511
	19-Jun-17	L917924-07	2	<0.793	<0.511
	28-Jun-17	L920054-07	1.22	<0.793	<0.511
	21-Jul-17	L924410-06	1.08	<0.793	<0.511
	4-Aug-17	L927407-06	1.25	<0.793	<0.511
15-Aug-17	L930026-06	<1.07	<0.793	<0.511	
5-Sep-17	L934535-06	<1.07	<0.793	<0.511	
IA-D5	25-May-17	L912423-12	<1.07	<0.793	<0.511
	7-Jun-17	L914832-03	1.47	<0.793	<0.511
	19-Jun-17	L917924-03	1.66	<0.793	<0.511
	28-Jun-17	L920054-03	<1.07	<0.793	<0.511
	21-Jul-17	L924410-08	<1.07	<0.793	<0.511
	4-Aug-17	L927407-10	<1.07	<0.793	<0.511
	15-Aug-17	L930026-10	<1.07	<0.793	<0.511
5-Sep-17	L934535-10	1.3	<0.793	<0.511	

**TABLE 2
INDOOR AIR SAMPLING RESULTS COMPARISON
JANUARY THROUGH SEPTEMBER 2017
FORMER HOLLEY AUTOMOTIVE/COLTEC INDUSTRIES FACILITY
WATER VALLEY, MS**

SAMPLE ID	SAMPLING DATE	LABORATORY ID	CoC Concentrations (µg/m³)		
			Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride
USEPA Vapor Intrusion Screening Level (VISL):			3	NA	2.8
IA-G4	25-May-17	L912423-11	<1.07	<0.793	<0.511
	7-Jun-17	L914832-02	3.31	<0.793	<0.511
	19-Jun-17	L917924-02	1.35	<0.793	<0.511
	28-Jun-17	L920054-02	<1.07	<0.793	<0.511
	21-Jul-17	L924410-09	<1.07	<0.793	<0.511
	4-Aug-17	L927407-11	<1.07	<0.793	<0.511
	15-Aug-17	L930026-11	<1.07	<0.793	<0.511
	5-Sep-17	L934535-11	1.17	<0.793	<0.511
IA-G13	26-Apr-17	L905292-06	8.98	<0.793	<0.511
	14-May-17	L909544-04	4.65	<0.793	<0.511
	25-May-17	L912423-06	3.88	<0.793	<0.511
	7-Jun-17	L914832-06	2.54	<0.793	<0.511
	19-Jun-17	L917924-06	2.46	<0.793	<0.511
	28-Jun-17	L920054-06	1.41	<0.793	<0.511
	21-Jul-17	L924410-07	1.6	<0.793	<0.511
	4-Aug-17	L927407-07	1.76	<0.793	<0.511
	15-Aug-17	L930026-07	1.25	<0.793	<0.511
	5-Sep-17	L934535-07	1.78	<0.793	<0.511
IA-K8	25-May-17	L912423-10	1.47	<0.793	<0.511
	7-Jun-17	L914832-01	7.86	<0.793	<0.511
	19-Jun-17	L917924-01	1.31	<0.793	<0.511
	28-Jun-17	L920054-01	<1.07	<0.793	<0.511
	21-Jul-17	L924410-10	<1.07	<0.793	<0.511
	4-Aug-17	L927407-12	<1.07	<0.793	<0.511
	15-Aug-17	L930026-12	<1.07	<0.793	<0.511
	5-Sep-17	L934535-12	<1.07	<0.793	<0.511
IA-K13	26-Apr-17	L905292-07	6.53	<0.793	<0.511
	25-May-17	L912423-04	5.28	<0.793	<0.511
	7-Jun-17	L914832-05	1.59	<0.793	<0.511
	19-Jun-17	L917924-05	2.2	<0.793	<0.511
	28-Jun-17	L920054-05	1.33	<0.793	<0.511
	21-Jul-17	L924410-12	1.34	<0.793	<0.511
	4-Aug-17	L927407-08	<1.07	<0.793	<0.511
	15-Aug-17	L930026-08	<1.07	<0.793	<0.511
	5-Sep-17	L934535-08	1.67	<0.793	<0.511
	IA-L16	26-Apr-17	L905292-08	5.77	1.75
7-Jun-17		L914832-04	2.09	<0.793	<0.511
25-May-17		L912423-09	1.36	<0.793	<0.511
19-Jun-17		L917924-04	2.81	<0.793	<0.511
28-Jun-17		L920054-04	1.32	<0.793	<0.511
21-Jul-17		L924410-11	1.18	<0.793	<0.511
4-Aug-17		L927407-09	<1.07	<0.793	<0.511
15-Aug-17		L930026-09	1.13	<0.793	<0.511
5-Sep-17		L934535-09	1.14	<0.793	<0.511
EP-1		14-May-17	L909544-06	1420000	361000
EP-2	14-May-17	L909544-07	2820000	560000	13200
IA-SUMP-DUP	25-May-17	L912423-15	83.1	<0.793	<0.511
IA-SUMP	19-Jun-17	L917924-14	5.33	1.19	<0.511
	28-Jun-17	L920054-14	3.75	<0.793	<0.511
AA-1	19-Jan-17	L1702183-17	<0.107	<0.079	<0.051
AA-2	19-Jan-17	L1702183-18	0.129	<0.079	<0.051
	26-Apr-17	L905292-09	<0.107	<0.793	<0.051
	25-May-17	L912423-13	<1.07	<0.793	<0.511
	7-Jun-17	L914832-09	<1.07	<0.793	<0.511
	19-Jun-17	L917924-08	<1.07	<0.793	<0.511
	28-Jun-17	L920054-09	16.7	<0.793	<0.511
	21-Jul-17	L924410-13	<1.07	<0.793	<0.511
	4-Aug-17	L927407-13	<1.07	<0.793	<0.511
	15-Aug-17	L930026-13	<1.07	<0.793	<0.511
	5-Sep-17	L934535-13	<1.07	<0.793	<0.511
IA-ATS-2ND F	15-Aug-17	L930026-14	1.86	<0.793	<0.511
IA-OFFICE 2ND F	15-Aug-17	L930026-15	<1.07	<0.793	<0.511

D: Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte
VISL: Calculated based on USEPA's OSWER Vapor Intrusion Assessment VISL Calculator Version 3.4, November 2015 RSLs for Target Indoor Air Concentration @ TCR=1E-6 or THQ=1
TCR: Target Carcinogen Risk
THQ: Target Hazard Quotient for Non-Carcinogens

FIGURES



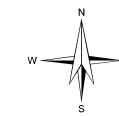
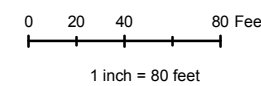
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Legend

- IA-1: Indoor Air Concentrations in ug/m3
- AA-1: Ambient Air Concentrations in ug/m3
- SSDS Exhaust Stack

USEPA Screening Level for TCE: 3 ug/m3
 MDEQ Action Level for TCE: 26 ug/m3

- TCE Level Exceeding the MDEQ Action Level
- ND Concentration not detected above laboratory reported limits



91 Fulton Street
Boonton, New Jersey 07005

BORG WARNER FACILITY 600 Highway 32E, Water Valley, MS			
FIGURE 1 INDOOR AIR SAMPLING RESULTS SEPTEMBER 5 2017			
Revised LS	Drawn NMT	Checked NMT	Approved NMT
			Date 9/14/17

APPENDIX A

September 13, 2017

First Environment, Inc.

Sample Delivery Group: L934535
Samples Received: 09/07/2017
Project Number: ENPRO 002D
Description: EnPro
Site: WATER VALLEY, MS BORG WARNER
Report To: Michael T. Slack
91 Fulton Street
Boonton, NJ 07005

Entire Report Reviewed By:



John Hawkins

Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



Cp: Cover Page	1	
Tc: Table of Contents	2	
Ss: Sample Summary	3	
Cn: Case Narrative	5	
Sr: Sample Results	6	
IA-1 L934535-01	6	
IA-2 L934535-02	8	
IA-6 L934535-03	10	
IA-17 L934535-04	12	
IA-B12 L934535-05	14	
IA-C16 L934535-06	16	
IA-G13 L934535-07	18	
IA-K13 L934535-08	20	
IA-L16 L934535-09	22	
IA-D5 L934535-10	24	
IA-G4 L934535-11	26	
IA-K8 L934535-12	28	
AA-2 L934535-13	30	
Qc: Quality Control Summary	32	
 Volatile Organic Compounds (MS) by Method TO-15	32	
Gl: Glossary of Terms	39	
Al: Accreditations & Locations	40	
Sc: Sample Chain of Custody	41	

SAMPLE SUMMARY



IA-1 L934535-01 Air

Collected by Michael T. Slack
 Collected date/time 09/05/17 13:11
 Received date/time 09/07/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1018698	1	09/10/17 11:19	09/10/17 11:19	DWR
Volatile Organic Compounds (MS) by Method TO-15	WG1018938	40	09/11/17 14:45	09/11/17 14:45	DWR

¹ Cp

² Tc

³ Ss

IA-2 L934535-02 Air

Collected by Michael T. Slack
 Collected date/time 09/05/17 13:45
 Received date/time 09/07/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1018698	1	09/10/17 12:15	09/10/17 12:15	DWR
Volatile Organic Compounds (MS) by Method TO-15	WG1018938	80	09/11/17 15:28	09/11/17 15:28	DWR

⁴ Cn

⁵ Sr

⁶ Qc

IA-6 L934535-03 Air

Collected by Michael T. Slack
 Collected date/time 09/05/17 13:05
 Received date/time 09/07/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1018698	1	09/10/17 13:07	09/10/17 13:07	DWR
Volatile Organic Compounds (MS) by Method TO-15	WG1018938	40	09/11/17 18:20	09/11/17 18:20	DWR

⁷ Gl

⁸ Al

⁹ Sc

IA-17 L934535-04 Air

Collected by Michael T. Slack
 Collected date/time 09/05/17 13:06
 Received date/time 09/07/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1018698	1	09/10/17 14:02	09/10/17 14:02	DWR
Volatile Organic Compounds (MS) by Method TO-15	WG1018938	40	09/11/17 19:04	09/11/17 19:04	DWR

IA-B12 L934535-05 Air

Collected by Michael T. Slack
 Collected date/time 09/05/17 13:15
 Received date/time 09/07/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1018698	1	09/10/17 14:55	09/10/17 14:55	DWR
Volatile Organic Compounds (MS) by Method TO-15	WG1018938	80	09/11/17 19:47	09/11/17 19:47	DWR
Volatile Organic Compounds (MS) by Method TO-15	WG1019211	16	09/12/17 14:18	09/12/17 14:18	DWR

IA-C16 L934535-06 Air

Collected by Michael T. Slack
 Collected date/time 09/05/17 13:17
 Received date/time 09/07/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1018698	1	09/10/17 15:49	09/10/17 15:49	DWR
Volatile Organic Compounds (MS) by Method TO-15	WG1018938	40	09/11/17 20:30	09/11/17 20:30	DWR

IA-G13 L934535-07 Air

Collected by Michael T. Slack
 Collected date/time 09/05/17 13:35
 Received date/time 09/07/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1018698	1	09/10/17 16:44	09/10/17 16:44	DWR
Volatile Organic Compounds (MS) by Method TO-15	WG1018938	80	09/11/17 21:13	09/11/17 21:13	DWR

SAMPLE SUMMARY



IA-K13 L934535-08 Air

Collected by Michael T. Slack
 Collected date/time 09/05/17 13:20
 Received date/time 09/07/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1018698	1	09/10/17 17:39	09/10/17 17:39	DWR
Volatile Organic Compounds (MS) by Method TO-15	WG1018938	80	09/11/17 21:56	09/11/17 21:56	DWR

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

IA-L16 L934535-09 Air

Collected by Michael T. Slack
 Collected date/time 09/05/17 13:19
 Received date/time 09/07/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1018698	1	09/10/17 18:34	09/10/17 18:34	DWR
Volatile Organic Compounds (MS) by Method TO-15	WG1018938	40	09/11/17 22:38	09/11/17 22:38	DWR

IA-D5 L934535-10 Air

Collected by Michael T. Slack
 Collected date/time 09/05/17 13:25
 Received date/time 09/07/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1018698	1	09/10/17 19:34	09/10/17 19:34	DWR
Volatile Organic Compounds (MS) by Method TO-15	WG1018938	80	09/11/17 23:21	09/11/17 23:21	DWR

IA-G4 L934535-11 Air

Collected by Michael T. Slack
 Collected date/time 09/05/17 13:24
 Received date/time 09/07/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1018698	1	09/10/17 20:25	09/10/17 20:25	DWR
Volatile Organic Compounds (MS) by Method TO-15	WG1018938	40	09/12/17 00:04	09/12/17 00:04	DWR

IA-K8 L934535-12 Air

Collected by Michael T. Slack
 Collected date/time 09/05/17 13:22
 Received date/time 09/07/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1018698	1	09/10/17 21:24	09/10/17 21:24	DWR
Volatile Organic Compounds (MS) by Method TO-15	WG1018932	100	09/11/17 23:36	09/11/17 23:36	DWR

AA-2 L934535-13 Air

Collected by Michael T. Slack
 Collected date/time 09/05/17 13:30
 Received date/time 09/07/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1018698	1	09/10/17 22:16	09/10/17 22:16	DWR



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

John Hawkins
Technical Service Representative

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ Gl
- ⁸ Al
- ⁹ Sc



Collected date/time: 09/05/17 13:11

L934535

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	50.0	119	122	290		40	WG1018938
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1018698
Benzene	71-43-2	78.10	0.200	0.639	2.13	6.79		1	WG1018698
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1018698
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1018698
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1018698
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1018698
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1018698
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1018698
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1018698
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1018698
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1018698
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1018698
Chloromethane	74-87-3	50.50	0.200	0.413	0.644	1.33		1	WG1018698
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1018698
Cyclohexane	110-82-7	84.20	0.200	0.689	1.47	5.08		1	WG1018698
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1018698
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1018698
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1018698
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1018698
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1018698
1,2-Dichloroethane	107-06-2	99	0.200	0.810	0.271	1.10		1	WG1018698
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1018698
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1018698
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	0.801	3.17		1	WG1018698
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1018698
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1018698
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1018698
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1018698
1,4-Dioxane	123-91-1	88.10	0.200	0.721	0.465	1.68		1	WG1018698
Ethanol	64-17-5	46.10	25.2	47.5	1970	3720		40	WG1018938
Ethylbenzene	100-41-4	106	0.200	0.867	2.20	9.56		1	WG1018698
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.612	3.01		1	WG1018698
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.299	1.68		1	WG1018698
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	1.00	4.96		1	WG1018698
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1018698
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND	J4	1	WG1018698
Heptane	142-82-5	100	0.200	0.818	9.74	39.9		1	WG1018698
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1018698
n-Hexane	110-54-3	86.20	0.200	0.705	3.60	12.7		1	WG1018698
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1018698
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.320	1.11		1	WG1018698
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1018698
2-Butanone (MEK)	78-93-3	72.10	50.0	147	130	382		40	WG1018938
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1018698
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1018698
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1018698
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1018698
2-Propanol	67-63-0	60.10	50.0	123	2970	7310	E	40	WG1018938
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1018698
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1018698
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1018698
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1018698
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	2.43	7.16		1	WG1018698
Toluene	108-88-3	92.10	0.200	0.753	15.4	58.1		1	WG1018698
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1018698

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/05/17 13:11

L934535

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1018698
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1018698
Trichloroethylene	79-01-6	131	0.200	1.07	4.07	21.8		1	WG1018698
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	1.65	8.09		1	WG1018698
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	0.473	2.32		1	WG1018698
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	2.30	10.8		1	WG1018698
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1018698
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1018698
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1018698
m&p-Xylene	1330-20-7	106	0.400	1.73	8.76	38.0		1	WG1018698
o-Xylene	95-47-6	106	0.200	0.867	2.67	11.6		1	WG1018698
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		105				WG1018698
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		103				WG1018938

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/05/17 13:45

L934535

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	100	238	338	802		80	WG1018938
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1018698
Benzene	71-43-2	78.10	0.200	0.639	0.499	1.60		1	WG1018698
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1018698
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1018698
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1018698
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1018698
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1018698
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1018698
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1018698
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1018698
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1018698
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1018698
Chloromethane	74-87-3	50.50	0.200	0.413	0.639	1.32		1	WG1018698
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1018698
Cyclohexane	110-82-7	84.20	0.200	0.689	1.37	4.72		1	WG1018698
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1018698
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1018698
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1018698
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1018698
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1018698
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1018698
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1018698
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1018698
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	0.244	0.967		1	WG1018698
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	0.297	1.18		1	WG1018698
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1018698
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1018698
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1018698
1,4-Dioxane	123-91-1	88.10	0.200	0.721	0.535	1.93		1	WG1018698
Ethanol	64-17-5	46.10	50.4	95.0	2260	4250		80	WG1018938
Ethylbenzene	100-41-4	106	0.200	0.867	0.654	2.83		1	WG1018698
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.293	1.44		1	WG1018698
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.295	1.66		1	WG1018698
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.352	1.74		1	WG1018698
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1018698
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND	J4	1	WG1018698
Heptane	142-82-5	100	0.200	0.818	13.1	53.6		1	WG1018698
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1018698
n-Hexane	110-54-3	86.20	0.200	0.705	0.376	1.33		1	WG1018698
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1018698
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1018698
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1018698
2-Butanone (MEK)	78-93-3	72.10	100	295	141	415		80	WG1018938
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1018698
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1018698
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1018698
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1018698
2-Propanol	67-63-0	60.10	100	246	2880	7080		80	WG1018938
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1018698
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1018698
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1018698
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1018698
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	1.22	3.60		1	WG1018698
Toluene	108-88-3	92.10	0.200	0.753	2.29	8.63		1	WG1018698
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1018698

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

ACCOUNT:

First Environment, Inc.

PROJECT:

ENPRO 002D

SDG:

L934535

DATE/TIME:

09/13/17 18:38

PAGE:

8 of 43



Collected date/time: 09/05/17 13:45

L934535

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1018698
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1018698
Trichloroethylene	79-01-6	131	0.200	1.07	0.656	3.52		1	WG1018698
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	1.25	6.12		1	WG1018698
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	0.400	1.96		1	WG1018698
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	2.22	10.3		1	WG1018698
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1018698
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1018698
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1018698
m&p-Xylene	1330-20-7	106	0.400	1.73	2.39	10.4		1	WG1018698
o-Xylene	95-47-6	106	0.200	0.867	0.751	3.26		1	WG1018698
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		103				WG1018938
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		118				WG1018698

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/05/17 13:05

L934535

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	50.0	119	59.0	140		40	WG1018938
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1018698
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1018698
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1018698
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1018698
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1018698
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1018698
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1018698
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1018698
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1018698
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1018698
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1018698
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1018698
Chloromethane	74-87-3	50.50	0.200	0.413	0.651	1.35		1	WG1018698
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1018698
Cyclohexane	110-82-7	84.20	0.200	0.689	0.982	3.38		1	WG1018698
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1018698
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1018698
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1018698
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1018698
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1018698
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1018698
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1018698
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1018698
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	1.30	5.17		1	WG1018698
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	0.246	0.975		1	WG1018698
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1018698
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1018698
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1018698
1,4-Dioxane	123-91-1	88.10	0.200	0.721	0.351	1.27		1	WG1018698
Ethanol	64-17-5	46.10	25.2	47.5	885	1670		40	WG1018938
Ethylbenzene	100-41-4	106	0.200	0.867	0.387	1.68		1	WG1018698
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1018698
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.304	1.71		1	WG1018698
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.320	1.58		1	WG1018698
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1018698
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND	J4	1	WG1018698
Heptane	142-82-5	100	0.200	0.818	9.32	38.1		1	WG1018698
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1018698
n-Hexane	110-54-3	86.20	0.200	0.705	0.277	0.975		1	WG1018698
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1018698
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1018698
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1018698
2-Butanone (MEK)	78-93-3	72.10	50.0	147	60.5	178		40	WG1018938
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1018698
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1018698
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1018698
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1018698
2-Propanol	67-63-0	60.10	50.0	123	1320	3240		40	WG1018938
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1018698
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1018698
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1018698
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1018698
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1018698
Toluene	108-88-3	92.10	0.200	0.753	1.10	4.15		1	WG1018698
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1018698

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

ACCOUNT:

First Environment, Inc.

PROJECT:

ENPRO 002D

SDG:

L934535

DATE/TIME:

09/13/17 18:38

PAGE:

10 of 43



Collected date/time: 09/05/17 13:05

L934535

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1018698
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1018698
Trichloroethylene	79-01-6	131	0.200	1.07	1.28	6.85		1	WG1018698
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.706	3.46		1	WG1018698
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	0.255	1.25		1	WG1018698
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	1.82	8.51		1	WG1018698
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1018698
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1018698
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1018698
m&p-Xylene	1330-20-7	106	0.400	1.73	1.31	5.68		1	WG1018698
o-Xylene	95-47-6	106	0.200	0.867	0.421	1.83		1	WG1018698
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		105				WG1018698
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		97.8				WG1018938

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/05/17 13:06

L934535

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	50.0	119	1190	2830		40	WG1018938
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1018698
Benzene	71-43-2	78.10	0.200	0.639	0.490	1.56		1	WG1018698
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1018698
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1018698
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1018698
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1018698
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1018698
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1018698
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1018698
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1018698
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1018698
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1018698
Chloromethane	74-87-3	50.50	0.200	0.413	0.644	1.33		1	WG1018698
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1018698
Cyclohexane	110-82-7	84.20	0.200	0.689	0.948	3.26		1	WG1018698
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1018698
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1018698
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1018698
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1018698
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1018698
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1018698
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1018698
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1018698
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	1.41	5.60		1	WG1018698
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	0.208	0.825		1	WG1018698
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1018698
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1018698
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1018698
1,4-Dioxane	123-91-1	88.10	0.200	0.721	0.337	1.22		1	WG1018698
Ethanol	64-17-5	46.10	25.2	47.5	22100	41700	E	40	WG1018938
Ethylbenzene	100-41-4	106	0.200	0.867	0.415	1.80		1	WG1018698
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1018698
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.304	1.71		1	WG1018698
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.322	1.59		1	WG1018698
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1018698
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND	J4	1	WG1018698
Heptane	142-82-5	100	0.200	0.818	7.62	31.2		1	WG1018698
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1018698
n-Hexane	110-54-3	86.20	0.200	0.705	0.697	2.46		1	WG1018698
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1018698
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.863	3.00		1	WG1018698
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1018698
2-Butanone (MEK)	78-93-3	72.10	50.0	147	1430	4230		40	WG1018938
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1018698
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1018698
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1018698
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1018698
2-Propanol	67-63-0	60.10	50.0	123	16600	40900	E	40	WG1018938
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1018698
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1018698
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1018698
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1018698
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1018698
Toluene	108-88-3	92.10	0.200	0.753	2.34	8.82		1	WG1018698
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1018698

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

ACCOUNT:

First Environment, Inc.

PROJECT:

ENPRO 002D

SDG:

L934535

DATE/TIME:

09/13/17 18:38

PAGE:

12 of 43



Collected date/time: 09/05/17 13:06

L934535

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1018698
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1018698
Trichloroethylene	79-01-6	131	0.200	1.07	0.568	3.04		1	WG1018698
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.670	3.29		1	WG1018698
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	0.231	1.13		1	WG1018698
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	1.46	6.82		1	WG1018698
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1018698
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1018698
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1018698
m&p-Xylene	1330-20-7	106	0.400	1.73	1.42	6.14		1	WG1018698
o-Xylene	95-47-6	106	0.200	0.867	0.480	2.08		1	WG1018698
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		102				WG1018938
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		110				WG1018698

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/05/17 13:15

L934535

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	20.0	47.5	236	560		16	WG1019211
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1018698
Benzene	71-43-2	78.10	0.200	0.639	0.408	1.30		1	WG1018698
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1018698
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1018698
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1018698
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1018698
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1018698
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1018698
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1018698
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1018698
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1018698
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1018698
Chloromethane	74-87-3	50.50	0.200	0.413	0.597	1.23		1	WG1018698
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1018698
Cyclohexane	110-82-7	84.20	0.200	0.689	1.12	3.87		1	WG1018698
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1018698
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1018698
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1018698
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1018698
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1018698
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1018698
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1018698
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1018698
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1018698
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	0.364	1.44		1	WG1018698
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1018698
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1018698
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1018698
1,4-Dioxane	123-91-1	88.10	0.200	0.721	0.501	1.81		1	WG1018698
Ethanol	64-17-5	46.10	50.4	95.0	298	562		80	WG1018938
Ethylbenzene	100-41-4	106	0.200	0.867	0.456	1.98		1	WG1018698
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1018698
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.322	1.81		1	WG1018698
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.310	1.53		1	WG1018698
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1018698
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND	J4	1	WG1018698
Heptane	142-82-5	100	0.200	0.818	10.6	43.3		1	WG1018698
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1018698
n-Hexane	110-54-3	86.20	0.200	0.705	0.333	1.18		1	WG1018698
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1018698
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1018698
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1018698
2-Butanone (MEK)	78-93-3	72.10	20.0	59.0	285	841		16	WG1019211
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1018698
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1018698
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1018698
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1018698
2-Propanol	67-63-0	60.10	100	246	548	1350		80	WG1018938
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1018698
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1018698
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1018698
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1018698
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1018698
Toluene	108-88-3	92.10	0.200	0.753	0.981	3.70		1	WG1018698
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1018698

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

ACCOUNT:

First Environment, Inc.

PROJECT:

ENPRO 002D

SDG:

L934535

DATE/TIME:

09/13/17 18:38

PAGE:

14 of 43



Collected date/time: 09/05/17 13:15

L934535

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1018698
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1018698
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1018698
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.822	4.03		1	WG1018698
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	0.238	1.17		1	WG1018698
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	1.62	7.57		1	WG1018698
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1018698
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1018698
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1018698
m&p-Xylene	1330-20-7	106	0.400	1.73	1.58	6.85		1	WG1018698
o-Xylene	95-47-6	106	0.200	0.867	0.500	2.17		1	WG1018698
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		108				WG1018698
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		98.7				WG1018938
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		97.1				WG1019211

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	50.0	119	94.4	224		40	WG1018938
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1018698
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1018698
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1018698
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1018698
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1018698
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1018698
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1018698
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1018698
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1018698
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1018698
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1018698
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1018698
Chloromethane	74-87-3	50.50	0.200	0.413	0.655	1.35		1	WG1018698
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1018698
Cyclohexane	110-82-7	84.20	0.200	0.689	2.25	7.74		1	WG1018698
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1018698
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1018698
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1018698
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1018698
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1018698
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1018698
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1018698
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1018698
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1018698
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1018698
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1018698
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1018698
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1018698
1,4-Dioxane	123-91-1	88.10	0.200	0.721	0.316	1.14		1	WG1018698
Ethanol	64-17-5	46.10	25.2	47.5	1290	2430		40	WG1018938
Ethylbenzene	100-41-4	106	0.200	0.867	0.570	2.47		1	WG1018698
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1018698
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.333	1.87		1	WG1018698
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.332	1.64		1	WG1018698
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1018698
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND	J4	1	WG1018698
Heptane	142-82-5	100	0.200	0.818	18.7	76.6		1	WG1018698
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1018698
n-Hexane	110-54-3	86.20	0.200	0.705	1.05	3.72		1	WG1018698
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1018698
Methylene Chloride	75-09-2	84.90	0.200	0.694	1.55	5.37		1	WG1018698
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1018698
2-Butanone (MEK)	78-93-3	72.10	50.0	147	89.8	265		40	WG1018938
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1018698
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1018698
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1018698
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1018698
2-Propanol	67-63-0	60.10	50.0	123	2100	5170	E	40	WG1018938
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1018698
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1018698
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1018698
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1018698
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1018698
Toluene	108-88-3	92.10	0.200	0.753	4.41	16.6		1	WG1018698
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1018698

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/05/17 13:17

L934535

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1018698
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1018698
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1018698
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.686	3.37		1	WG1018698
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	0.242	1.19		1	WG1018698
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	1.91	8.92		1	WG1018698
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1018698
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1018698
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1018698
m&p-Xylene	1330-20-7	106	0.400	1.73	1.97	8.54		1	WG1018698
o-Xylene	95-47-6	106	0.200	0.867	0.741	3.21		1	WG1018698
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		111				WG1018698
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		101				WG1018938

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/05/17 13:35

L934535

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	100	238	473	1120		80	WG1018938
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1018698
Benzene	71-43-2	78.10	0.200	0.639	0.482	1.54		1	WG1018698
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1018698
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1018698
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1018698
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1018698
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1018698
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1018698
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1018698
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1018698
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1018698
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1018698
Chloromethane	74-87-3	50.50	0.200	0.413	0.633	1.31		1	WG1018698
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1018698
Cyclohexane	110-82-7	84.20	0.200	0.689	2.03	6.98		1	WG1018698
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1018698
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1018698
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1018698
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1018698
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1018698
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1018698
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1018698
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1018698
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1018698
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	0.250	0.991		1	WG1018698
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1018698
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1018698
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1018698
1,4-Dioxane	123-91-1	88.10	0.200	0.721	0.573	2.07		1	WG1018698
Ethanol	64-17-5	46.10	50.4	95.0	1900	3580		80	WG1018938
Ethylbenzene	100-41-4	106	0.200	0.867	0.569	2.47		1	WG1018698
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.231	1.13		1	WG1018698
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.302	1.70		1	WG1018698
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.321	1.59		1	WG1018698
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1018698
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND	J4	1	WG1018698
Heptane	142-82-5	100	0.200	0.818	20.1	82.1		1	WG1018698
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1018698
n-Hexane	110-54-3	86.20	0.200	0.705	0.360	1.27		1	WG1018698
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1018698
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1018698
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1018698
2-Butanone (MEK)	78-93-3	72.10	100	295	132	389		80	WG1018938
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1018698
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1018698
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1018698
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1018698
2-Propanol	67-63-0	60.10	100	246	3280	8050		80	WG1018938
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1018698
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1018698
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1018698
Tetrachloroethylene	127-18-4	166	0.200	1.36	0.278	1.89	B	1	WG1018698
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1018698
Toluene	108-88-3	92.10	0.200	0.753	1.78	6.71		1	WG1018698
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1018698

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

ACCOUNT:

First Environment, Inc.

PROJECT:

ENPRO 002D

SDG:

L934535

DATE/TIME:

09/13/17 18:38

PAGE:

18 of 43



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1018698
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1018698
Trichloroethylene	79-01-6	131	0.200	1.07	0.333	1.78		1	WG1018698
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	1.01	4.95		1	WG1018698
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	0.357	1.75		1	WG1018698
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	3.62	16.9		1	WG1018698
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1018698
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1018698
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1018698
m&p-Xylene	1330-20-7	106	0.400	1.73	1.97	8.54		1	WG1018698
o-Xylene	95-47-6	106	0.200	0.867	0.621	2.69		1	WG1018698
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		102				WG1018938
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		115				WG1018698

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/05/17 13:20

L934535

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	100	238	566	1350		80	WG1018938
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1018698
Benzene	71-43-2	78.10	0.200	0.639	0.628	2.01		1	WG1018698
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1018698
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1018698
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1018698
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1018698
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1018698
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1018698
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1018698
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1018698
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1018698
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1018698
Chloromethane	74-87-3	50.50	0.200	0.413	0.611	1.26		1	WG1018698
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1018698
Cyclohexane	110-82-7	84.20	0.200	0.689	1.81	6.22		1	WG1018698
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1018698
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1018698
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1018698
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1018698
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1018698
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1018698
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1018698
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1018698
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1018698
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	0.230	0.910		1	WG1018698
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1018698
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1018698
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1018698
1,4-Dioxane	123-91-1	88.10	0.200	0.721	0.618	2.23		1	WG1018698
Ethanol	64-17-5	46.10	50.4	95.0	1630	3080		80	WG1018938
Ethylbenzene	100-41-4	106	0.200	0.867	0.612	2.65		1	WG1018698
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.229	1.12		1	WG1018698
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.295	1.66		1	WG1018698
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.309	1.53		1	WG1018698
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1018698
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND	J4	1	WG1018698
Heptane	142-82-5	100	0.200	0.818	17.5	71.4		1	WG1018698
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1018698
n-Hexane	110-54-3	86.20	0.200	0.705	0.486	1.71		1	WG1018698
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1018698
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.276	0.959		1	WG1018698
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1018698
2-Butanone (MEK)	78-93-3	72.10	100	295	120	355		80	WG1018938
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1018698
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1018698
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1018698
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1018698
2-Propanol	67-63-0	60.10	100	246	3310	8140		80	WG1018938
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1018698
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1018698
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1018698
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1018698
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1018698
Toluene	108-88-3	92.10	0.200	0.753	2.26	8.52		1	WG1018698
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1018698

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

ACCOUNT:

First Environment, Inc.

PROJECT:

ENPRO 002D

SDG:

L934535

DATE/TIME:

09/13/17 18:38

PAGE:

20 of 43



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1018698
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1018698
Trichloroethylene	79-01-6	131	0.200	1.07	0.311	1.67		1	WG1018698
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.940	4.61		1	WG1018698
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	0.328	1.61		1	WG1018698
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	2.74	12.8		1	WG1018698
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1018698
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1018698
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1018698
m&p-Xylene	1330-20-7	106	0.400	1.73	2.15	9.32		1	WG1018698
o-Xylene	95-47-6	106	0.200	0.867	0.683	2.96		1	WG1018698
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		104				WG1018938
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		108				WG1018698

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/05/17 13:19

L934535

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	50.0	119	97.2	231		40	WG1018938
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1018698
Benzene	71-43-2	78.10	0.200	0.639	0.515	1.64		1	WG1018698
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1018698
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1018698
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1018698
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1018698
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1018698
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1018698
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1018698
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1018698
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1018698
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1018698
Chloromethane	74-87-3	50.50	0.200	0.413	0.625	1.29		1	WG1018698
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1018698
Cyclohexane	110-82-7	84.20	0.200	0.689	1.50	5.18		1	WG1018698
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1018698
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1018698
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1018698
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1018698
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1018698
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1018698
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1018698
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1018698
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1018698
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1018698
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1018698
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1018698
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1018698
1,4-Dioxane	123-91-1	88.10	0.200	0.721	0.385	1.39		1	WG1018698
Ethanol	64-17-5	46.10	25.2	47.5	1290	2430		40	WG1018938
Ethylbenzene	100-41-4	106	0.200	0.867	0.435	1.88		1	WG1018698
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1018698
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.285	1.60		1	WG1018698
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.314	1.56		1	WG1018698
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1018698
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND	J4	1	WG1018698
Heptane	142-82-5	100	0.200	0.818	14.9	60.9		1	WG1018698
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1018698
n-Hexane	110-54-3	86.20	0.200	0.705	0.294	1.03		1	WG1018698
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1018698
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1018698
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1018698
2-Butanone (MEK)	78-93-3	72.10	50.0	147	91.6	270		40	WG1018938
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1018698
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1018698
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1018698
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1018698
2-Propanol	67-63-0	60.10	50.0	123	2260	5560	E	40	WG1018938
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1018698
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1018698
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1018698
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1018698
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1018698
Toluene	108-88-3	92.10	0.200	0.753	1.25	4.72		1	WG1018698
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1018698

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

ACCOUNT:

First Environment, Inc.

PROJECT:

ENPRO 002D

SDG:

L934535

DATE/TIME:

09/13/17 18:38

PAGE:

22 of 43



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1018698
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1018698
Trichloroethylene	79-01-6	131	0.200	1.07	0.212	1.14		1	WG1018698
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.713	3.50		1	WG1018698
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	0.230	1.13		1	WG1018698
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	1.91	8.94		1	WG1018698
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1018698
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1018698
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1018698
m&p-Xylene	1330-20-7	106	0.400	1.73	1.51	6.53		1	WG1018698
o-Xylene	95-47-6	106	0.200	0.867	0.496	2.15		1	WG1018698
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		106				WG1018698
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		103				WG1018938

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/05/17 13:25

L934535

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	100	238	587	1400		80	WG1018938
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1018698
Benzene	71-43-2	78.10	0.200	0.639	0.512	1.64		1	WG1018698
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1018698
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1018698
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1018698
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1018698
1,3-Butadiene	106-99-0	54.10	2.00	4.43	2.12	4.69		1	WG1018698
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1018698
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1018698
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1018698
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1018698
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1018698
Chloromethane	74-87-3	50.50	0.200	0.413	0.640	1.32		1	WG1018698
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1018698
Cyclohexane	110-82-7	84.20	0.200	0.689	0.756	2.60		1	WG1018698
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1018698
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1018698
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1018698
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1018698
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1018698
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1018698
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1018698
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1018698
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1018698
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	0.534	2.12		1	WG1018698
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1018698
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1018698
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1018698
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1018698
Ethanol	64-17-5	46.10	50.4	95.0	1430	2700		80	WG1018938
Ethylbenzene	100-41-4	106	0.200	0.867	0.587	2.55		1	WG1018698
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.317	1.56		1	WG1018698
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.355	1.99		1	WG1018698
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.376	1.86		1	WG1018698
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1018698
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND	J4	1	WG1018698
Heptane	142-82-5	100	0.200	0.818	6.36	26.0		1	WG1018698
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1018698
n-Hexane	110-54-3	86.20	0.200	0.705	0.457	1.61		1	WG1018698
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1018698
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.270	0.939		1	WG1018698
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1018698
2-Butanone (MEK)	78-93-3	72.10	100	295	129	379		80	WG1018938
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	1.35	5.54		1	WG1018698
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1018698
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1018698
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1018698
2-Propanol	67-63-0	60.10	100	246	3810	9360		80	WG1018938
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1018698
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1018698
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1018698
Tetrachloroethylene	127-18-4	166	0.200	1.36	0.742	5.04		1	WG1018698
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1018698
Toluene	108-88-3	92.10	0.200	0.753	1.67	6.28		1	WG1018698
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1018698

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/05/17 13:25

L934535

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1018698
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1018698
Trichloroethylene	79-01-6	131	0.200	1.07	0.242	1.30		1	WG1018698
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	1.49	7.33		1	WG1018698
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	0.415	2.04		1	WG1018698
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	1.19	5.56		1	WG1018698
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1018698
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1018698
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1018698
m&p-Xylene	1330-20-7	106	0.400	1.73	2.12	9.17		1	WG1018698
o-Xylene	95-47-6	106	0.200	0.867	0.704	3.05		1	WG1018698
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		104				WG1018938
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		116				WG1018698

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/05/17 13:24

L934535

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	50.0	119	320	760		40	WG1018938
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1018698
Benzene	71-43-2	78.10	0.200	0.639	0.446	1.42		1	WG1018698
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1018698
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1018698
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1018698
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1018698
1,3-Butadiene	106-99-0	54.10	2.00	4.43	2.22	4.91		1	WG1018698
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1018698
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1018698
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1018698
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1018698
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1018698
Chloromethane	74-87-3	50.50	0.200	0.413	0.595	1.23		1	WG1018698
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1018698
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1018698
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1018698
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1018698
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1018698
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1018698
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1018698
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1018698
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1018698
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1018698
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1018698
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	0.865	3.43		1	WG1018698
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1018698
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1018698
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1018698
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1018698
Ethanol	64-17-5	46.10	25.2	47.5	2070	3890	E	40	WG1018938
Ethylbenzene	100-41-4	106	0.200	0.867	0.345	1.50		1	WG1018698
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.225	1.11		1	WG1018698
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.304	1.71		1	WG1018698
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.332	1.64		1	WG1018698
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1018698
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND	J4	1	WG1018698
Heptane	142-82-5	100	0.200	0.818	4.10	16.8		1	WG1018698
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1018698
n-Hexane	110-54-3	86.20	0.200	0.705	ND	ND		1	WG1018698
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1018698
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.207	0.719		1	WG1018698
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1018698
2-Butanone (MEK)	78-93-3	72.10	50.0	147	209	617		40	WG1018938
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1018698
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1018698
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1018698
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1018698
2-Propanol	67-63-0	60.10	50.0	123	9590	23600	E	40	WG1018938
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1018698
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1018698
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1018698
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1018698
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1018698
Toluene	108-88-3	92.10	0.200	0.753	1.20	4.51		1	WG1018698
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1018698

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

ACCOUNT:

First Environment, Inc.

PROJECT:

ENPRO 002D

SDG:

L934535

DATE/TIME:

09/13/17 18:38

PAGE:

26 of 43



Collected date/time: 09/05/17 13:24

L934535

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1018698
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1018698
Trichloroethylene	79-01-6	131	0.200	1.07	0.219	1.17		1	WG1018698
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	1.05	5.16		1	WG1018698
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	0.319	1.57		1	WG1018698
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	0.895	4.18		1	WG1018698
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1018698
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1018698
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1018698
m&p-Xylene	1330-20-7	106	0.400	1.73	1.26	5.44		1	WG1018698
o-Xylene	95-47-6	106	0.200	0.867	0.449	1.95		1	WG1018698
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		103				WG1018938
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		109				WG1018698

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/05/17 13:22

L934535

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	125	297	566	1340		100	WG1018932
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1018698
Benzene	71-43-2	78.10	0.200	0.639	0.525	1.68		1	WG1018698
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1018698
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1018698
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1018698
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1018698
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1018698
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1018698
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1018698
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1018698
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1018698
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1018698
Chloromethane	74-87-3	50.50	0.200	0.413	0.641	1.32		1	WG1018698
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1018698
Cyclohexane	110-82-7	84.20	0.200	0.689	1.03	3.55		1	WG1018698
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1018698
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1018698
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1018698
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1018698
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1018698
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1018698
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1018698
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1018698
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1018698
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	0.461	1.83		1	WG1018698
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1018698
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1018698
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1018698
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1018698
Ethanol	64-17-5	46.10	63.0	119	2890	5460		100	WG1018932
Ethylbenzene	100-41-4	106	0.200	0.867	0.571	2.47		1	WG1018698
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.359	1.76		1	WG1018698
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.300	1.68		1	WG1018698
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.352	1.74		1	WG1018698
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1018698
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND	J4	1	WG1018698
Heptane	142-82-5	100	0.200	0.818	9.70	39.7		1	WG1018698
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1018698
n-Hexane	110-54-3	86.20	0.200	0.705	ND	ND		1	WG1018698
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1018698
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1018698
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1018698
2-Butanone (MEK)	78-93-3	72.10	125	369	189	558		100	WG1018932
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1018698
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1018698
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1018698
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1018698
2-Propanol	67-63-0	60.10	125	307	3580	8800		100	WG1018932
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1018698
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1018698
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1018698
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1018698
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1018698
Toluene	108-88-3	92.10	0.200	0.753	1.44	5.44		1	WG1018698
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1018698

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

ACCOUNT:

First Environment, Inc.

PROJECT:

ENPRO 002D

SDG:

L934535

DATE/TIME:

09/13/17 18:38

PAGE:

28 of 43



Collected date/time: 09/05/17 13:22

L934535

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1018698
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1018698
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1018698
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	1.64	8.03		1	WG1018698
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	0.475	2.33		1	WG1018698
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1018698
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1018698
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1018698
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1018698
m&p-Xylene	1330-20-7	106	0.400	1.73	1.98	8.60		1	WG1018698
o-Xylene	95-47-6	106	0.200	0.867	0.656	2.84		1	WG1018698
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		100				WG1018932
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		112				WG1018698

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/05/17 13:30

L934535

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	4.94	11.7		1	WG1018698
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1018698
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1018698
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1018698
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1018698
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1018698
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1018698
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1018698
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1018698
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1018698
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1018698
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1018698
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1018698
Chloromethane	74-87-3	50.50	0.200	0.413	0.609	1.26		1	WG1018698
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1018698
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1018698
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1018698
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1018698
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1018698
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1018698
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1018698
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1018698
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1018698
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1018698
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1018698
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1018698
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1018698
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1018698
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1018698
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1018698
Ethanol	64-17-5	46.10	0.630	1.19	268	505	E	1	WG1018698
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1018698
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1018698
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.259	1.45		1	WG1018698
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.323	1.60		1	WG1018698
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1018698
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND	J4	1	WG1018698
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1018698
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1018698
n-Hexane	110-54-3	86.20	0.200	0.705	ND	ND		1	WG1018698
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1018698
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1018698
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1018698
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1018698
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1018698
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1018698
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1018698
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1018698
2-Propanol	67-63-0	60.10	1.25	3.07	18.3	45.0		1	WG1018698
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1018698
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1018698
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1018698
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1018698
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1018698
Toluene	108-88-3	92.10	0.200	0.753	ND	ND		1	WG1018698
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1018698

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/05/17 13:30

L934535

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1018698
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1018698
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1018698
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1018698
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1018698
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1018698
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1018698
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1018698
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1018698
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1018698
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1018698
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		100				WG1018698

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3248206-3 09/10/17 09:42

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Acetone	U		0.0569	1.25
Allyl Chloride	U		0.0546	0.200
Benzene	U		0.0460	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0436	0.200
Bromoform	U		0.0786	0.600
Bromomethane	U		0.0609	0.200
1,3-Butadiene	U		0.0563	2.00
Carbon disulfide	U		0.0544	0.200
Carbon tetrachloride	U		0.0585	0.200
Chlorobenzene	U		0.0601	0.200
Chloroethane	U		0.0489	0.200
Chloroform	U		0.0574	0.200
Chloromethane	U		0.0544	0.200
2-Chlorotoluene	U		0.0605	0.200
Cyclohexane	U		0.0534	0.200
Dibromochloromethane	U		0.0494	0.200
1,2-Dibromoethane	U		0.0185	0.200
1,2-Dichlorobenzene	0.0724	U	0.0603	0.200
1,3-Dichlorobenzene	U		0.0597	0.200
1,4-Dichlorobenzene	0.0727	U	0.0557	0.200
1,2-Dichloroethane	U		0.0616	0.200
1,1-Dichloroethane	U		0.0514	0.200
1,1-Dichloroethene	U		0.0490	0.200
cis-1,2-Dichloroethene	U		0.0389	0.200
trans-1,2-Dichloroethene	U		0.0464	0.200
1,2-Dichloropropane	U		0.0599	0.200
cis-1,3-Dichloropropene	U		0.0588	0.200
trans-1,3-Dichloropropene	U		0.0435	0.200
1,4-Dioxane	U		0.0554	0.200
Ethylbenzene	U		0.0506	0.200
4-Ethyltoluene	U		0.0666	0.200
Trichlorofluoromethane	U		0.0673	0.200
Dichlorodifluoromethane	U		0.0601	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0687	0.200
1,2-Dichlorotetrafluoroethane	U		0.0458	0.200
Heptane	U		0.0626	0.200
Hexachloro-1,3-butadiene	U		0.0656	0.630
n-Hexane	U		0.0457	0.200
Isopropylbenzene	U		0.0563	0.200

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Method Blank (MB)

(MB) R3248206-3 09/10/17 09:42

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Methylene Chloride	U		0.0465	0.200
Methyl Butyl Ketone	U		0.0682	1.25
2-Butanone (MEK)	U		0.0493	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0650	1.25
Methyl Methacrylate	U		0.0773	0.200
MTBE	U		0.0505	0.200
Naphthalene	0.285	U	0.154	0.630
2-Propanol	0.118	U	0.0882	1.25
Propene	U		0.0932	0.400
Styrene	U		0.0465	0.200
1,1,2,2-Tetrachloroethane	U		0.0576	0.200
Tetrachloroethylene	0.0677	U	0.0497	0.200
Tetrahydrofuran	U		0.0508	0.200
Toluene	U		0.0499	0.200
1,2,4-Trichlorobenzene	0.176	U	0.148	0.630
1,1,1-Trichloroethane	U		0.0665	0.200
1,1,2-Trichloroethane	U		0.0287	0.200
Trichloroethylene	U		0.0545	0.200
1,2,4-Trimethylbenzene	U		0.0483	0.200
1,3,5-Trimethylbenzene	U		0.0631	0.200
2,2,4-Trimethylpentane	U		0.0456	0.200
Vinyl chloride	U		0.0457	0.200
Vinyl Bromide	U		0.0727	0.200
Vinyl acetate	U		0.0639	0.200
m&p-Xylene	U		0.0946	0.400
o-Xylene	U		0.0633	0.200
Ethanol	U		0.0832	0.630
(S) 1,4-Bromofluorobenzene	87.4			60.0-140

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3248206-1 09/10/17 08:05 • (LCSD) R3248206-2 09/10/17 08:53

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
Ethanol	3.75	4.94	5.01	132	133	52.0-158			1.25	25
Propene	3.75	4.66	4.58	124	122	54.0-155			1.60	25
Dichlorodifluoromethane	3.75	4.56	4.49	122	120	69.0-143			1.54	25
1,2-Dichlorotetrafluoroethane	3.75	5.03	4.99	134	133	70.0-130	J4	J4	0.940	25
Chloromethane	3.75	4.56	4.51	121	120	70.0-130			0.970	25



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3248206-1 09/10/17 08:05 • (LCSD) R3248206-2 09/10/17 08:53

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Vinyl chloride	3.75	4.57	4.53	122	121	70.0-130			1.01	25
1,3-Butadiene	3.75	4.55	4.46	121	119	70.0-130			2.04	25
Bromomethane	3.75	4.62	4.60	123	123	70.0-130			0.390	25
Chloroethane	3.75	4.55	4.49	121	120	70.0-130			1.39	25
Trichlorofluoromethane	3.75	4.53	4.56	121	122	70.0-130			0.650	25
1,1,2-Trichlorotrifluoroethane	3.75	4.56	4.52	122	121	70.0-130			0.930	25
1,1-Dichloroethene	3.75	4.52	4.46	120	119	70.0-130			1.29	25
1,1-Dichloroethane	3.75	4.52	4.52	121	121	70.0-130			0.0300	25
Acetone	3.75	4.60	4.53	123	121	70.0-130			1.50	25
2-Propanol	3.75	4.53	4.52	121	120	66.0-150			0.260	25
Carbon disulfide	3.75	4.71	4.66	125	124	70.0-130			0.960	25
Methylene Chloride	3.75	4.36	4.34	116	116	70.0-130			0.490	25
MTBE	3.75	4.59	4.53	122	121	70.0-130			1.26	25
trans-1,2-Dichloroethene	3.75	4.64	4.62	124	123	70.0-130			0.430	25
n-Hexane	3.75	4.54	4.52	121	121	70.0-130			0.510	25
Vinyl acetate	3.75	4.88	4.85	130	129	70.0-130			0.480	25
Methyl Ethyl Ketone	3.75	4.66	4.78	124	128	70.0-130			2.59	25
cis-1,2-Dichloroethene	3.75	4.69	4.73	125	126	70.0-130			0.840	25
Chloroform	3.75	4.57	4.53	122	121	70.0-130			0.920	25
Cyclohexane	3.75	4.37	4.42	117	118	70.0-130			0.950	25
1,1,1-Trichloroethane	3.75	4.37	4.41	117	118	70.0-130			0.810	25
Carbon tetrachloride	3.75	4.30	4.37	115	117	70.0-130			1.56	25
Benzene	3.75	4.50	4.48	120	119	70.0-130			0.510	25
1,2-Dichloroethane	3.75	4.47	4.41	119	118	70.0-130			1.55	25
Heptane	3.75	4.51	4.45	120	119	70.0-130			1.33	25
Trichloroethylene	3.75	4.58	4.51	122	120	70.0-130			1.48	25
1,2-Dichloropropane	3.75	4.42	4.42	118	118	70.0-130			0.130	25
1,4-Dioxane	3.75	4.84	4.93	129	131	70.0-152			1.87	25
Bromodichloromethane	3.75	4.47	4.44	119	118	70.0-130			0.860	25
cis-1,3-Dichloropropene	3.75	4.52	4.53	120	121	70.0-130			0.260	25
4-Methyl-2-pentanone (MIBK)	3.75	4.62	4.61	123	123	70.0-142			0.250	25
Toluene	3.75	4.37	4.40	117	117	70.0-130			0.770	25
trans-1,3-Dichloropropene	3.75	4.50	4.54	120	121	70.0-130			0.760	25
1,1,2-Trichloroethane	3.75	4.48	4.50	120	120	70.0-130			0.460	25
Tetrachloroethylene	3.75	4.40	4.36	117	116	70.0-130			0.910	25
Methyl Butyl Ketone	3.75	4.90	4.93	131	131	70.0-150			0.460	25
Dibromochloromethane	3.75	4.34	4.41	116	118	70.0-130			1.67	25
1,2-Dibromoethane	3.75	4.45	4.47	119	119	70.0-130			0.470	25
Chlorobenzene	3.75	4.30	4.32	115	115	70.0-130			0.540	25
Ethylbenzene	3.75	4.41	4.37	118	117	70.0-130			0.860	25

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3248206-1 09/10/17 08:05 • (LCSD) R3248206-2 09/10/17 08:53

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
m&p-Xylene	7.50	8.45	8.47	113	113	70.0-130			0.270	25
o-Xylene	3.75	4.31	4.25	115	113	70.0-130			1.46	25
Styrene	3.75	4.56	4.55	122	121	70.0-130			0.130	25
Bromoform	3.75	4.41	4.44	118	118	70.0-130			0.580	25
1,1,2,2-Tetrachloroethane	3.75	4.03	4.00	107	107	70.0-130			0.790	25
4-Ethyltoluene	3.75	4.21	4.19	112	112	70.0-130			0.580	25
1,3,5-Trimethylbenzene	3.75	4.04	4.04	108	108	70.0-130			0.160	25
1,2,4-Trimethylbenzene	3.75	3.91	3.90	104	104	70.0-130			0.210	25
1,3-Dichlorobenzene	3.75	4.19	4.21	112	112	70.0-130			0.460	25
1,4-Dichlorobenzene	3.75	4.16	4.15	111	111	70.0-130			0.100	25
Benzyl Chloride	3.75	3.92	3.99	105	107	70.0-144			1.90	25
1,2-Dichlorobenzene	3.75	3.86	3.94	103	105	70.0-130			2.16	25
1,2,4-Trichlorobenzene	3.75	4.62	4.84	123	129	70.0-155			4.51	25
Hexachloro-1,3-butadiene	3.75	4.72	4.66	126	124	70.0-145			1.27	25
Naphthalene	3.75	4.93	5.01	131	134	70.0-155			1.73	25
Allyl Chloride	3.75	4.51	4.48	120	119	70.0-130			0.610	25
2-Chlorotoluene	3.75	4.16	4.14	111	110	70.0-130			0.500	25
Methyl Methacrylate	3.75	4.42	4.44	118	118	70.0-130			0.350	25
Tetrahydrofuran	3.75	4.48	4.46	119	119	70.0-140			0.350	25
2,2,4-Trimethylpentane	3.75	4.71	4.67	126	125	70.0-130			0.810	25
Vinyl Bromide	3.75	4.75	4.64	127	124	70.0-130			2.52	25
Isopropylbenzene	3.75	4.16	4.14	111	110	70.0-130			0.610	25
<i>(S) 1,4-Bromofluorobenzene</i>				98.1	97.1	60.0-140				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3248481-3 09/11/17 10:19

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Acetone	0.0772	↓	0.0569	1.25
2-Butanone (MEK)	U		0.0493	1.25
2-Propanol	U		0.0882	1.25
Ethanol	U		0.0832	0.630
(S) 1,4-Bromofluorobenzene	94.2			60.0-140

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3248481-1 09/11/17 08:44 • (LCSD) R3248481-2 09/11/17 09:33

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
Ethanol	3.75	3.18	3.62	84.8	96.5	52.0-158			13.0	25
Acetone	3.75	3.82	3.85	102	103	70.0-130			0.640	25
2-Propanol	3.75	4.16	4.22	111	113	66.0-150			1.29	25
Methyl Ethyl Ketone	3.75	3.90	3.92	104	104	70.0-130			0.310	25
(S) 1,4-Bromofluorobenzene				95.8	97.6	60.0-140				

6 Qc

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3248491-3 09/11/17 10:29

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Acetone	U		0.0569	1.25
2-Butanone (MEK)	U		0.0493	1.25
2-Propanol	U		0.0882	1.25
Ethanol	U		0.0832	0.630
(S) 1,4-Bromofluorobenzene	99.3			60.0-140

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3248491-1 09/11/17 08:54 • (LCSD) R3248491-2 09/11/17 09:41

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
Ethanol	3.75	4.08	3.93	109	105	52.0-158			3.92	25
Acetone	3.75	4.07	3.93	109	105	70.0-130			3.57	25
2-Propanol	3.75	4.21	4.08	112	109	66.0-150			3.11	25
Methyl Ethyl Ketone	3.75	4.15	4.05	111	108	70.0-130			2.48	25
(S) 1,4-Bromofluorobenzene				105	105	60.0-140				

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Method Blank (MB)

(MB) R3248881-3 09/12/17 11:02

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Acetone	0.0830	↓	0.0569	1.25
2-Butanone (MEK)	U		0.0493	1.25
(S) 1,4-Bromofluorobenzene	96.2			60.0-140

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3248881-1 09/12/17 09:24 • (LCSD) R3248881-2 09/12/17 10:16

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
Acetone	3.75	4.14	4.30	111	115	70.0-130			3.76	25
Methyl Ethyl Ketone	3.75	4.24	4.22	113	113	70.0-130			0.370	25
(S) 1,4-Bromofluorobenzene				97.0	96.8	60.0-140				



Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 GI

8 AI

9 Sc

Qualifier	Description
B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J4	The associated batch QC was outside the established quality control range for accuracy.



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE**.
 * Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ¹⁴	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

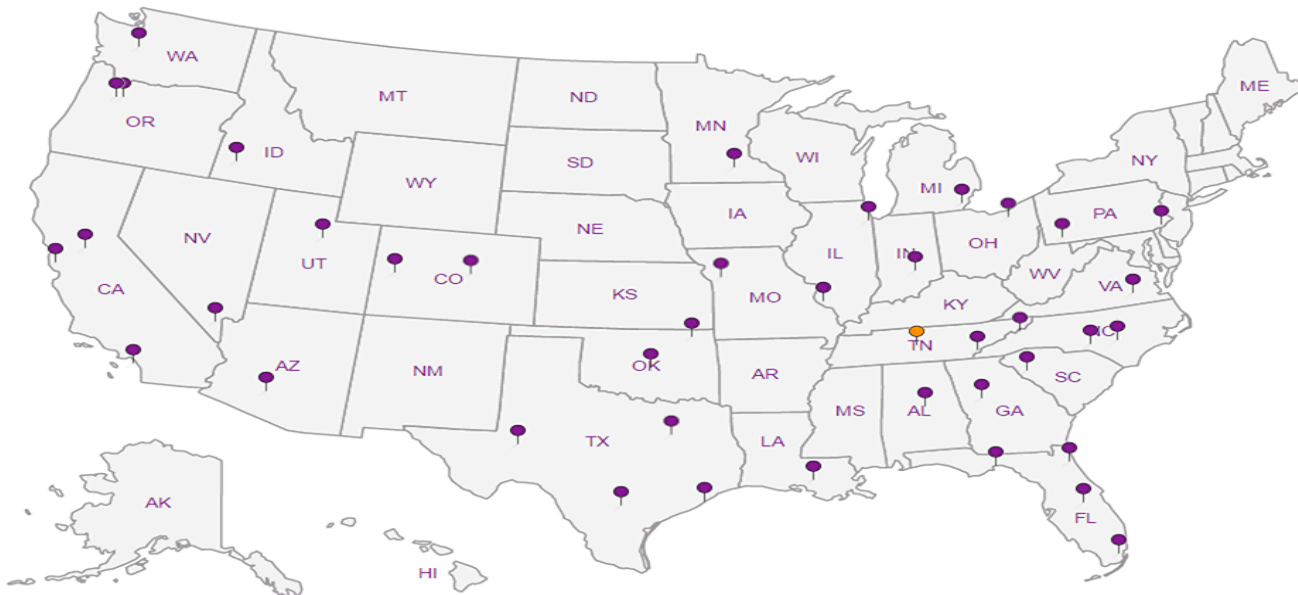
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ^{n/a} Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



1 Cp

2 Tc

3 Ss

4 Cn




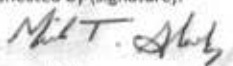
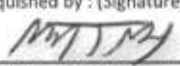
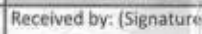
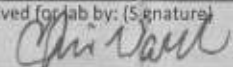
5 Sr

6 Qc

7 Gl

8 Al

9 Sc

First Environment, Inc. 91 Fulton Street Boonton, NJ 07005		Billing Information: Project: EnPro-001-002D VM 91 Fulton Street Boonton, NJ 07005 JUSTIN PICCOLO JPICCOLO@FIRSENVIRONMENT.COM		Pries Chk		Analysis / Container / Preservative										Chain of Custody Page <u> </u> of <u> </u>					
Report to: Michael T. Slack		Email To: mslack@firstenvironment.com;icaldwell@firstenvir														 L.A.B. S.C.I.E.N.C.E.S. a subsidiary of  12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859 					
Project: ENPRO Description: Butler Snow LLP		City/State: WATER VALLEY, MS Collected: BORG WARNER														L# <u>1934 535</u> G169					
Phone: 973-334-0003 Fax: 973-334-0928		Client Project # ENPRO 002B D VM		Lab Project # FIRENVBNJ-OXFORDMS												Acctnum: FIRENVBNJ Template: T120396 Prelogin: P614613 TSR: 341 - John Hawkins PB: <u>MLB 5/24/17</u>					
Collected by (print): MICHAEL T. SLACK		Site/Facility ID # BORG WARNER WATER VALLEY, MS		P.O. # <u> </u>												Shipped Via: FedEX Ground					
Collected by (signature): 		Rush? (Lab MUST Be Notified) <input type="checkbox"/> Same Day <input checked="" type="checkbox"/> Five Day <input type="checkbox"/> Next Day <input type="checkbox"/> 5 Day (Rad Only) <input type="checkbox"/> Two Day <input type="checkbox"/> 10 Day (Rad Only) <input type="checkbox"/> Three Day		Quote # <u> </u> Date Results Needed <u> </u>												No. of Cntrs					
Immediately Packed on Ice N <input checked="" type="checkbox"/> Y <input type="checkbox"/>																					
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	TO-15 Summa												Remarks	Sample # (lab only)		
IA-1	COMP	Air	-	9/5/17	13:11	1	X											MAINT.	-01		
IA-2	COMP	Air	-	9/5/17	13:45	1	X											ATS	-02		
IA-6	COMP	Air	-	9/5/17	13:05	1	X											TRAINING	-03		
IA-17	COMP	Air	-	9/5/17	13:06	1	X											CAFETERIA	-04		
IA-B12	COMP	Air	-	9/5/17	13:15	1	X											B12	-05		
IA-C16	COMP	Air	-	9/5/17	13:17	1	X											C16	-06		
IA-G13	COMP	Air	-	9/5/17	13:35	1	X											G13	-07		
IA-K13	COMP	Air	-	9/5/17	13:20	1	X											K13	-08		
IA-L16	COMP	Air	-	9/5/17	13:19	1	X											L16	-09		
IA-D5	COMP	Air	-	9/5/17	13:25	1	X											D5	-10		
* Matrix: SS - Soil <input checked="" type="checkbox"/> AIR - Air <input type="checkbox"/> F - Filter GW - Groundwater <input type="checkbox"/> B - Bioassay WW - WasteWater DW - Drinking Water OT - Other <u> </u>		Remarks: 18 6l cans, 18 24 hour flow controllers, 18 4 feet sections of teflon tubing with swagelock fittings, SEE SAMPLE TABLE FOR ADDITIONAL INFO. pH <u> </u> Temp <u> </u> 7466 1465 6025/7466 1465 6014 Flow <u> </u> Other <u> </u>										Sample Receipt Checklist: COC Seal Present/Intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N COC Signed/Accurate: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Bottles arrive intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Correct bottles used: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Sufficient volume sent: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N If Applicable VOA Zero Headspace: <input type="checkbox"/> Y <input type="checkbox"/> N Preservation Correct/Checked: <input type="checkbox"/> Y <input type="checkbox"/> N									
Samples returned via: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier <u> </u>		Tracking # <u>7466 1465 6036 / 7466 1465 6047</u>												Relinquished by: (Signature) 		Date: <u>9/6/17</u> Time: <u>16:30</u>		Received by: (Signature) 		Trip Blank Received: Yes / No <input type="checkbox"/> HCL / MeOH <input type="checkbox"/> TBR	
Relinquished by: (Signature)		Date:		Time:		Received by: (Signature)		Temp: <u>AMB</u> °C Bottles Received: <u>13</u>		If preservation required by Login: Date/Time											
Relinquished by: (Signature)		Date:		Time:		Received for lab by: (Signature) 		Date: <u>9/7/17</u> Time: <u>0845</u>		Hold:		Condition: NCF / <input checked="" type="checkbox"/> BK									

First Environment, Inc.
 91 Fulton Street
 Boonton, NJ 07005

Billing Information:
 Project: EnPro 0020 VM
 91 Fulton Street
 Boonton, NJ 07005
 JUSTIN PICCOLO
 JPICCOLO@FIRSTENVIRONMENT.COM

Analysis / Container / Preservative Chain of Custody Page 1 of 1

Report to:
 Michael T. Slack

Email To:
 mslack@firstenvironment.com; icaldwell@firstenvr

12065 Lebanon Rd
 Mount Juliet, TN 37122
 Phone: 615-758-5858
 Phone: 800-787-5859
 Fax: 615-758-5859

Project: **ENPRO**
 Description: **Butler Snow LLP**

City/State: **WATER VALLEY, MS**
 Collected: **BERG WARNER**

Phone: **973-334-0003**
 Fax: **973-334-0928**

Client Project #
ENPRO 0020 VM

Lab Project #
FIRENVBNJ-OXFORDMS

Collected by (print):
MICHAEL SLACK

Site/Facility ID #
WATER VALLEY, MS

P.O. # _____

Collected by (signature):
M.T. Slack
 Immediately Packed on Ice: **N Y**

Rush? (Lab MUST Be Notified)
 Same Day Five Day
 Next Day 5 Day (Rad Only)
 Two Day 10 Day (Rad Only)
 Three Day

Quote # _____
 Date Results Needed _____

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Analysis / Container / Preservative										Remarks	Sample # (lab only)	
							TO-15 Summa												
IA-G4	COMP	Air	—	9/5/17	13:24	1	X											G4	-11
IA-K8	COMP	Air	—	9/5/17	13:22	1	X											K8	-12
AA-2	COMP	Air	—	9/5/17	13:30	1	X											AVILLON	-13
		Air				1	X												
		Air				1	X												
		Air				1	X												
		Air				1	X												

* Matrix:
 SS - Soil **AIR - Air** F - Filter
 GW - Groundwater B - Bioassay
 WW - WasteWater
 DW - Drinking Water
 OT - Other _____

Remarks: **18 6l cans, 18 24 hour flow controllers, 18 4 feet sections of teflon tubing with swagelok fittings, SEE SAMPLE TABLE FOR ADDITIONAL INFO.**
 Samples returned via: _____
 Tracking # **Sunc**

Sample Receipt Checklist
 COC Seal Present/Intact: **Y** **N**
 COC Signed/Accurate: **Y** **N**
 Bottles arrive intact: **Y** **N**
 Correct bottles used: **Y** **N**
 Sufficient volume sent: **Y** **N**
 VOA Zero Headspace: **Y** **N**
 Preservation Correct/Checked: **Y** **N**

Relinquished by: (Signature) **M.T. Slack** Date: **9/6/17** Time: **16:30**
 Received by: (Signature) _____ Trip Blank Received: Yes/No **HCL/MeOH TBR**
 Relinquished by: (Signature) _____ Date: _____ Time: _____
 Received by: (Signature) _____ Temp: **AMB** °C **13** Bottles Received: **13** If preservation required by Login: Date/Time
 Relinquished by: (Signature) _____ Date: _____ Time: _____
 Received for lab by: (Signature) **Chris Ward** Date: **9/17/17** Time: **0845** Hold: _____ Condition: **NCF / OK**

Vapor Intrusion Investigation
 Borg Warner Facility
 Water Valley, Yalobusha Co., MS
 September 5-6, 2017
 Indoor Air (IA) and Ambient Air (AA) Sampling Event

L934535

Sample ID	Sample Location	Flow Controller ID	Canister ID	Canister Size (liters)	Initial		Final		Sampler
					Date/time	Vacuum ("Hg)	Date/time	Vacuum ("Hg)	
IA-1	Maintenance Room	7772	5105	6	9/5/17 13:11	23	9/6/17 12:30	2	M. Slack
IA-2	ATS Room	7761	5284	6	9/5/17 13:45	28	9/6/17 13:46	7	M. Slack
IA-6	Training Room	6044	6137	6	9/5/17 13:05	28	9/6/17 13:05	4	M. Slack
IA-17	Cafeteria	5889	6252	6	9/5/17 13:06	26	9/6/17 13:06	7	M. Slack
IA-B12	I-Beam B12	5567	6130	6	9/5/17 13:15	30	9/6/17 12:20	1	M. Slack
IA-C16	I-Beam C16	5862	5118	6	9/5/17 13:17	28	9/6/17 13:17	10	M. Slack
IA-G13	I-Beam G13	7551	7968	6	9/5/17 13:35	30	9/6/17 13:42	7	M. Slack
IA-K13	I-Beam K13	7436	5083	6	9/5/17 13:20	29	9/6/17 13:20	5	M. Slack
IA-L16	I-Beam L16	6049	5660	6	9/5/17 13:19	30	9/6/17 13:19	5	M. Slack
IA-D5	I-Beam D5	6639	6516	6	9/5/17 13:25	30	9/6/17 13:26	12	M. Slack
IA-G4	I-Beam G4	7774	7236	6	9/5/17 13:24	30	9/6/17 13:25	3	M. Slack
IA-K8	I-Beam K8	8432	7287	6	9/5/17 13:22	29	9/6/17 13:24	10	M. Slack
AA-2	Pavilion	8430	6900	6	9/5/17 13:30	30	9/6/17 13:40	7	M. Slack

Weather Conditions (@ time of canister placement): B⁰F - SUNNY - SE winds - 6 mph

Michael T. Slack (First Environment)

MTS 9/5/17

9/6/17 MTS 13:46