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

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FIRST ENVIRONMENT

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	06/04/2018	
Mississippi Professional Engineer No.	Date	B. Tod Delaney, Ph.D., P.E., BCEE

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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 to 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 an 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, September 11, October 2, October 9, October 17, November 1, November 15, November 29, and December 13, 2017, and January 8, January 12, January 30, February 14, February 23, March 8, March 22, April 16, April 23, May 7, and May 17, 2018.

On May 17-18, 2018, First Environment collected a round of ambient and indoor air samples from the four interior rooms at the Plant—the Training Room, ATS Room, Maintenance Room, and Cafeteria.

2.0 Indoor Air Monitoring – May 17-18, 2018

2.1 Instrumentation

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

On May 17-18, 2018, First Environment collected four indoor air samples at the four interior rooms of the Plant 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 required the Summa® canisters to be left in place for 24 hours and they were 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.

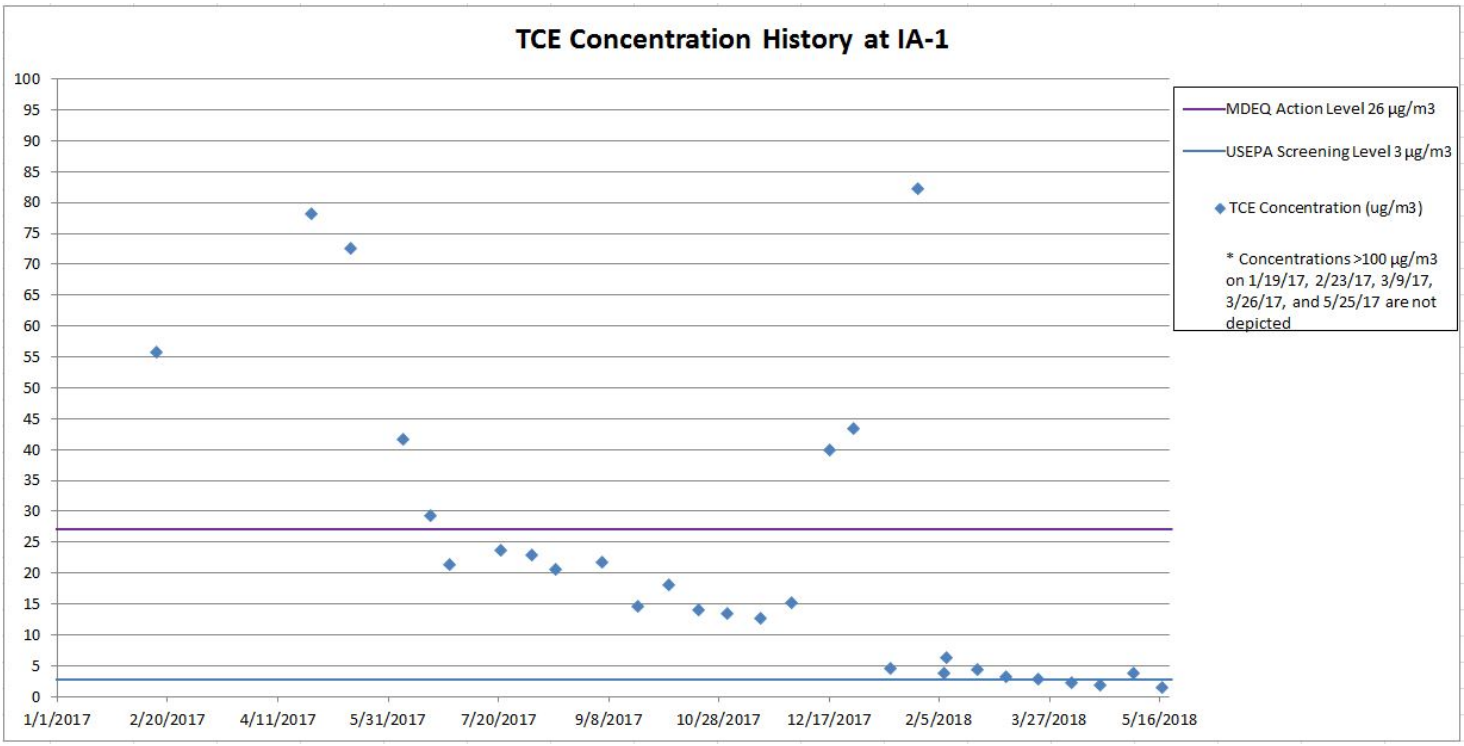
As reported in the January 8, 2018 SSDS Progress Report, First Environment sealed the void spaces in the block wall between the sump and the Maintenance Room on December 29, 2017. On January 15, 2018, the sump adjacent to the Maintenance Room was decommissioned. On January 18, 2018, First Environment installed two depressurization points in the block wall between the sump and the Maintenance Room and one depressurization point in the block wall between the sump and the Training Room.

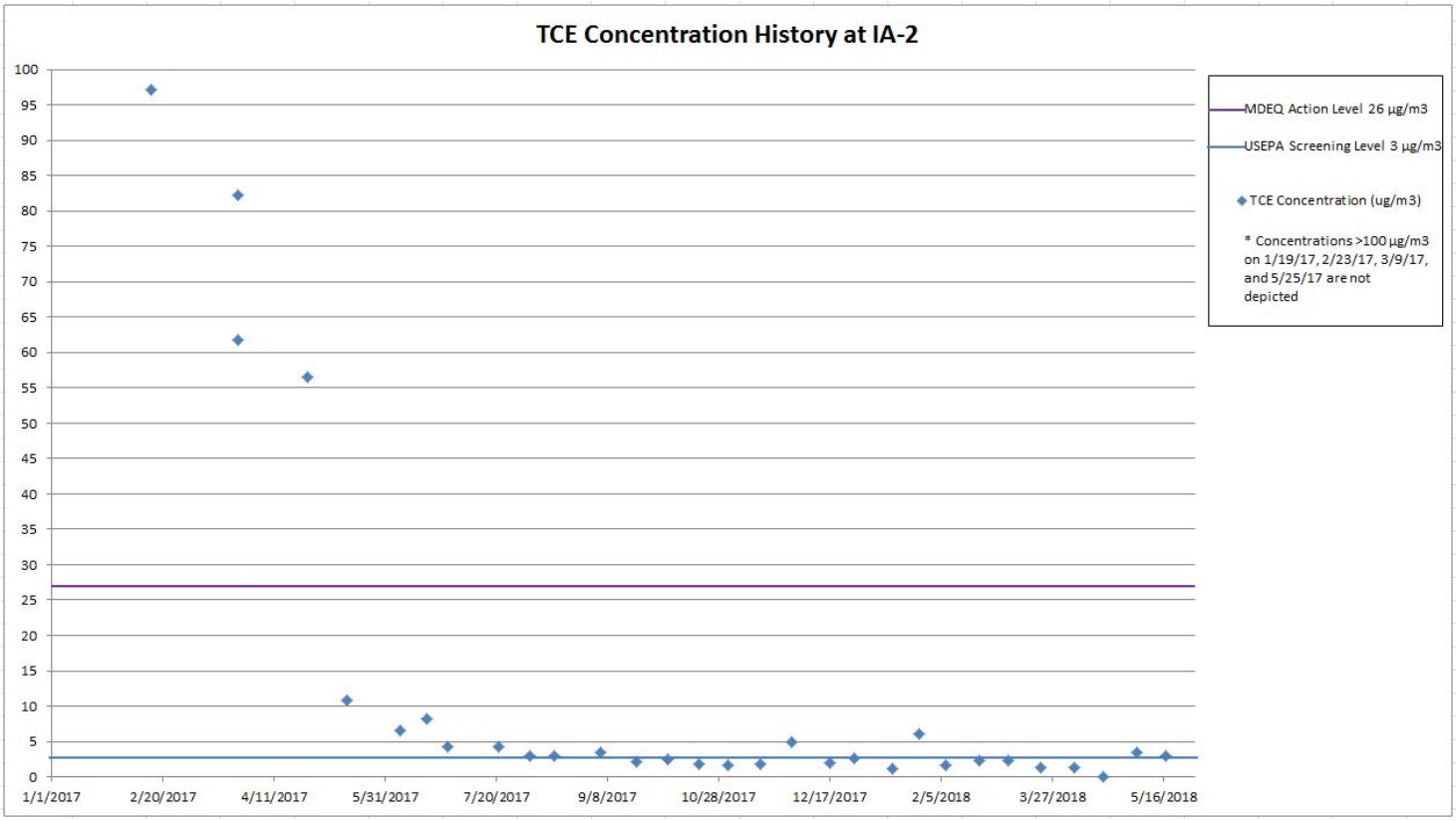
2.3 Results

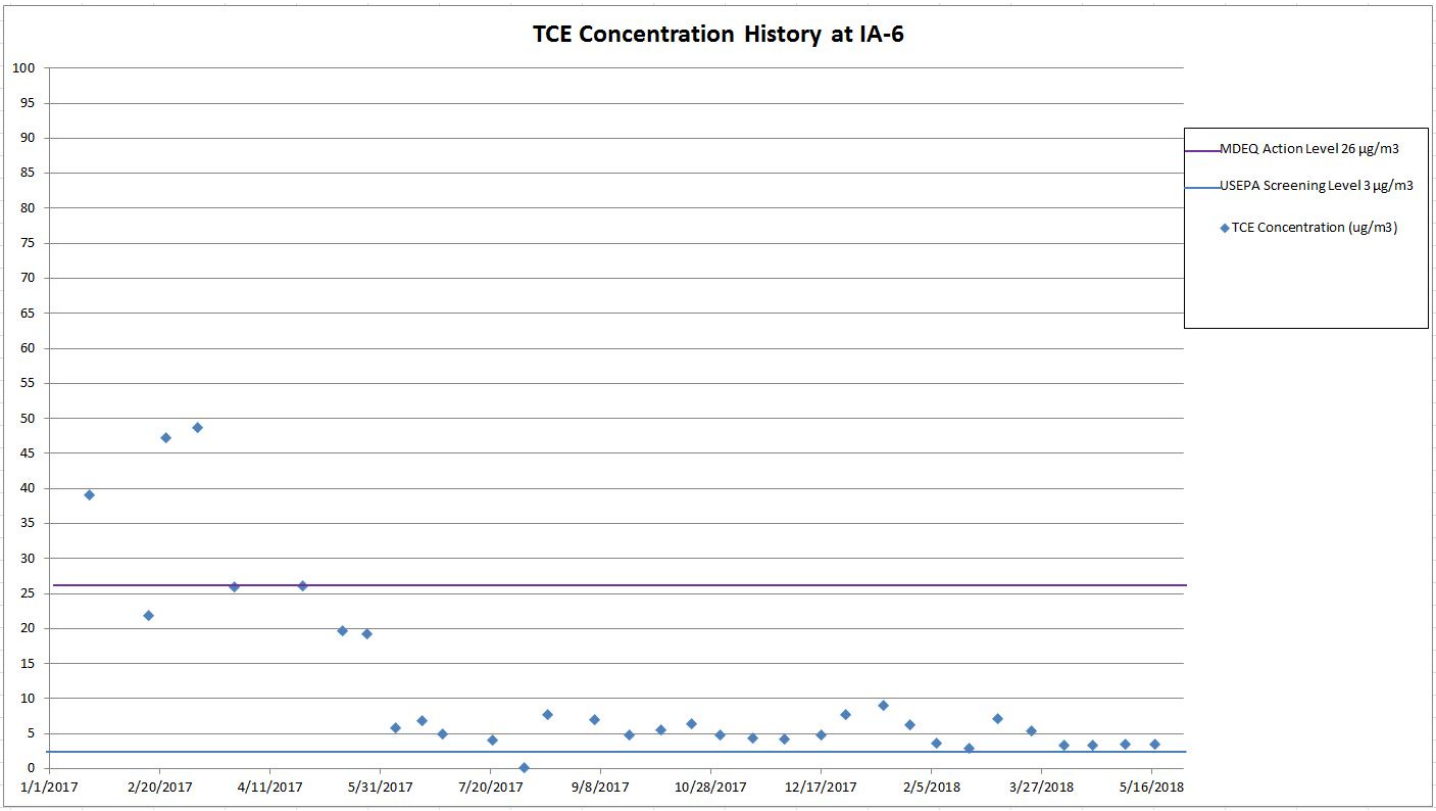
Table 1 presents the ambient and indoor air sampling results for all TO-15 analytes for the May 17-18, 2018 sampling event. Table 2 presents the results of TCE, cis-DCE, and VC in comparison to all previous rounds of sampling. A copy of the laboratory reports, including the chain-of-custody forms, is attached in Appendix A. As discussed in more detail below, all indoor air sampling results for TCE were below the MDEQ action level of 26 µg/m^3.

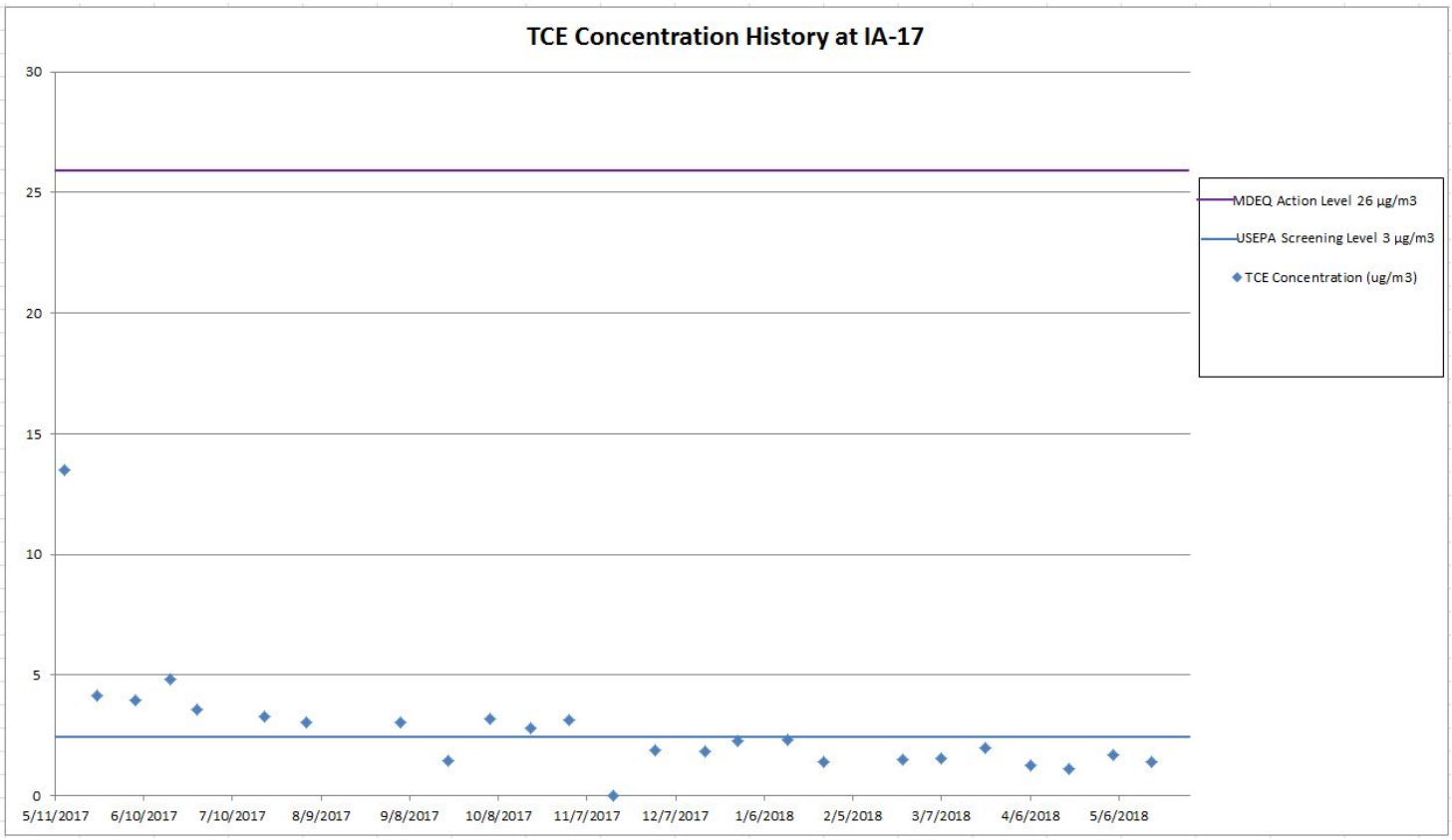
The sample results in the Cafeteria (1.38 µg/m^3), ATS Room (2.97 µg/m^3), and Maintenance Room (1.51 µg/m^3) were below USEPA’s Vapor Intrusion Screening Level (“VISL”) for TCE of 3 µg/m^3. The sample results in the Training Room (3.3 µg/m^3) were slightly above USEPA’s VISL but well below the MDEQ action level of 26 µg/m^3.

The following figures show the TCE concentration history in the interior rooms.


TCE Concentration History at IA-1
100
95
90
85
80
75
70
65
60
55
50
45
40
35
30
25
20
15
10
5
0
1/1/2017
2/20/2017
4/11/2017
5/31/2017
7/20/2017
9/8/2017
10/28/2017
12/17/2017
2/5/2018
3/27/2018
5/16/2018
MDEQ Action Level 26 µg/m3
USEPA Screening Level 3 µg/m3
TCE Concentration (ug/m3)
* Concentrations >100 µg/m3 on 1/19/17, 2/23/17, 3/9/17, 3/26/17, and 5/25/17 are not depicted


TCE Concentration History at IA-2
100
95
90
85
80
75
70
65
60
55
50
45
40
35
30
25
20
15
10
5
0
1/1/2017
2/20/2017
4/11/2017
5/31/2017
7/20/2017
9/8/2017
10/28/2017
12/17/2017
2/5/2018
3/27/2018
5/16/2018
MDEQ Action Level 26 µg/m3
USEPA Screening Level 3 µg/m3
TCE Concentration (ug/m3)
* Concentrations >100 µg/m3 on 1/19/17, 2/23/17, 3/9/17, and 5/25/17 are not depicted


TCE Concentration History at IA-6
100
95
90
85
80
75
70
65
60
55
50
45
40
35
30
25
20
15
10
5
0
1/1/2017
2/20/2017
4/11/2017
5/31/2017
7/20/2017
9/8/2017
10/28/2017
12/17/2017
2/5/2018
3/27/2018
5/16/2018
MDEQ Action Level 26 µg/m3
USEPA Screening Level 3 µg/m3
TCE Concentration (ug/m3)


TCE Concentration History at IA-17
30
25
20
15
10
5
0
5/11/2017
6/10/2017
7/10/2017
8/9/2017
9/8/2017
10/8/2017
11/7/2017
12/7/2017
1/6/2018
2/5/2018
3/7/2018
4/6/2018
5/6/2018
MDEQ Action Level 26 µg/m3
USEPA Screening Level 3 µg/m3
TCE Concentration (ug/m3)

3.0 Summary of Indoor Air Sampling

Since June 2017, the sample results in the ATS Room (IA-2), Training Room (IA-6), and Cafeteria (IA-17) have been below the MDEQ action level of 26 µg/m^3 for TCE. Since February 2018, sample results for the Maintenance Room have also been below the MDEQ action level of 26 µg/m^3.

TABLES

TABLE 1
INDOOR AIR SAMPLING RESULTS
MAY 17, 2018
FORMER HOLLEY AUTOMOTIVE/COLTEC INDUSTRIES FACILITY
WATER VALLEY, MS

SAMPLE LOCATION:	IA-1	IA-2	IA-6	IA-17	AA-2
SAMPING DATE:	05/17/2018	05/17/2018	05/17/2018	05/17/2018	05/17/2018
LABORATORY ID:	L995571-01	L995571-02	L995571-03	L995571-04	L995571-05
Analyte	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³
ACETONE	223	348	260	264	9.51
ALLYL CHLORIDE	<0.626	<0.626	<0.626	<0.626	<0.626
BENZENE	0.839	0.907	0.918	0.806	<0.639
BENZYL CHLORIDE	<1.04	<1.04	<1.04	<1.04	<1.04
BROMODICHLOROMETHANE	<1.34	<1.34	<1.34	<1.34	<1.34
BROMOFORM	<6.21	<6.21	<6.21	<6.21	<6.21
BROMOMETHANE	<0.776	<0.776	<0.776	<0.776	<0.776
1,3-BUTADIENE	<4.43	<4.43	<4.43	<4.43	<4.43
CARBON DISULFIDE	<0.622	<0.622	<0.622	<0.622	<0.622
CARBON TETRACHLORIDE	<1.26	<1.26	<1.26	<1.26	<1.26
CHLOROBENZENE	<0.924	<0.924	<0.924	<0.924	<0.924
CHLOROETHANE	<0.528	<0.528	<0.528	<0.528	<0.528
CHLOROFORM	<0.973	<0.973	<0.973	<0.973	<0.973
CHLOROMETHANE	1.23	1.25	1.23	1.31	1.15
2-CHLOROTOLUENE	<1.03	<1.03	<1.03	<1.03	<1.03
CYCLOHEXANE	14.2	7.94	16.7	16.2	<0.689
CHLORODIBROMOMETHANE	<1.70	<1.70	<1.70	<1.70	<1.70
1,2-DIBROMOETHANE	<1.54	<1.54	<1.54	<1.54	<1.54
1,2-DICHLOROBENZENE	<1.20	<1.20	<1.20	<1.20	<1.20
1,3-DICHLOROBENZENE	<1.20	<1.20	<1.20	<1.20	<1.20
1,4-DICHLOROBENZENE	<1.20	<1.20	<1.20	<1.20	<1.20
1,2-DICHLOROETHANE	<0.810	<0.810	<0.810	<0.810	<0.810
1,1-DICHLOROETHANE	<0.802	<0.802	<0.802	<0.802	<0.802

TABLE 1
INDOOR AIR SAMPLING RESULTS
MAY 17, 2018
FORMER HOLLEY AUTOMOTIVE/COLTEC INDUSTRIES FACILITY
WATER VALLEY, MS

SAMPLE LOCATION:	IA-1	IA-2	IA-6	IA-17	AA-2
SAMPING DATE:	05/17/2018	05/17/2018	05/17/2018	05/17/2018	05/17/2018
LABORATORY ID:	L995571-01	L995571-02	L995571-03	L995571-04	L995571-05
Analyte	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³
1,1-DICHLOROETHENE	<0.793	<0.793	<0.793	<0.793	<0.793
CIS-1,2-DICHLOROETHENE	<0.793	<0.793	<0.793	<0.793	<0.793
TRANS-1,2-DICHLOROETHENE	<0.793	2.95	<0.793	0.8	<0.793
1,2-DICHLOROPROPANE	<0.924	<0.924	<0.924	<0.924	<0.924
CIS-1,3-DICHLOROPROPENE	<0.908	<0.908	<0.908	<0.908	<0.908
TRANS-1,3-DICHLOROPROPENE	<0.908	<0.908	<0.908	<0.908	<0.908
1,4-DIOXANE	1.31	<0.721	<0.721	<0.721	<0.721
ETHANOL	3,340 (E)	4,590 (E)	2,960 (E)	3,480 (E)	14.2
ETHYLBENZENE	2.48	2.53	2.31	1.96	<0.867
4-ETHYLTOLUENE	1	1.08	<0.982	<0.982	<0.982
TRICHLOROFLUOROMETHANE	1.24	1.29	1.21	1.25	1.19
DICHLORODIFLUOROMETHANE	1.61	1.29	1.34	1.3	1.6
1,1,2-TRICHLOROTRIFLUOROETHANE	<1.53	<1.53	<1.53	<1.53	<1.53
1,2-DICHLOROTETRAFLUOROETHANE	<1.40	<1.40	<1.40	<1.40	<1.40
HEPTANE	7.65	6.04	9.1	8.19	<0.818
HEXACHLORO-1,3-BUTADIENE	<6.73	<6.73	<6.73	<6.73	<6.73
N-HEXANE	7.44	8.28	5.85	5.64	<0.705
ISOPROPYLBENZENE	<0.983	<0.983	<0.983	<0.983	<0.983
METHYLENE CHLORIDE	3.12	<0.694	1.24	<0.694	1.32
METHYL BUTYL KETONE	<5.11	<5.11	<5.11	<5.11	<5.11
2-BUTANONE (MEK)	510	591	473	655	<3.69
4-METHYL-2-PENTANONE (MIBK)	<5.12	<5.12	<5.12	<5.12	<5.12
METHYL METHACRYLATE	<0.819	<0.819	<0.819	<0.819	<0.819
METHYL TERT-BUTYL ETHER	<0.721	<0.721	<0.721	<0.721	<0.721
NAPHTHALENE	<3.30	<3.30	<3.30	<3.30	<3.30
2-PROPANOL	4,010 (E)	5,330 (E)	3,090 (E)	4,220 (E)	7.81

TABLE 1
INDOOR AIR SAMPLING RESULTS
MAY 17, 2018
FORMER HOLLEY AUTOMOTIVE/COLTEC INDUSTRIES FACILITY
WATER VALLEY, MS

SAMPLE LOCATION:	IA-1	IA-2	IA-6	IA-17	AA-2
SAMPING DATE:	05/17/2018	05/17/2018	05/17/2018	05/17/2018	05/17/2018
LABORATORY ID:	L995571-01	L995571-02	L995571-03	L995571-04	L995571-05
Analyte	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³
PROPENE	<0.689	<0.689	<0.689	<0.689	<0.689
STYRENE	<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
TETRACHLOROETHENE	<1.36	<1.36	<1.36	<1.36	<1.36
TETRAHYDROFURAN	<0.590	<0.590	<0.590	<0.590	<0.590
TOLUENE	6.57	4.5	43.5	3.21	<0.753
1,2,4-TRICHLOROBENZENE	<4.66	<4.66	<4.66	<4.66	<4.66
1,1,1-TRICHLOROETHANE	<1.09	<1.09	<1.09	<1.09	<1.09
1,1,2-TRICHLOROETHANE	<1.09	<1.09	<1.09	<1.09	<1.09
TRICHLOROETHENE	1.51	2.97	3.3	1.38	<1.07
1,2,4-TRIMETHYLBENZENE	3.73	4.06	3.37	3.68	<0.982
1,3,5-TRIMETHYLBENZENE	1.2	1.34	1.05	1.2	<0.982
2,2,4-TRIMETHYLPENTANE	1.32	<0.934	<0.934	<0.934	<0.934
VINYL CHLORIDE	<0.511	<0.511	<0.511	<0.511	<0.511
VINYL BROMIDE	<0.875	<0.875	<0.875	<0.875	<0.875
VINYL ACETATE	<0.704	<0.704	<0.704	<0.704	<0.704
M&P-XYLENE	9.86	9.41	8.77	7.39	<1.73
O-XYLENE	2.85	2.85	2.78	2.37	<0.867
1,4-BROMOFLUOROBENZENE	86.5 123	97.4 109	86.0 111	86.0 122	96.6

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 2017 THROUGH MAY 2018
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
	21-Sep-17	L938896-01	14.7	<0.793	<0.511
	5-Oct-17	L942068-01	18.2	<0.793	<0.511
	19-Oct-17	L945503-01	14.1	<0.793	<0.511
	1-Nov-17	L948263-01	13.5	1.83	<0.511
	16-Nov-17	L952200-01	12.7	<0.793	<0.511
	30-Nov-17	L954578-01	15.3	<0.793	<0.511
	17-Dec-17	L958416-01	40	<0.793	<0.511
	28-Dec-17	L960558-01	43.4	4.77	<0.511
	14-Jan-18	L963421-01	4.5	<0.793	<0.511
	25-Jan-18	L966088-01	82.3	<0.793	<0.511
(Door Open)	7-Feb-18	L969021-01	3.89	<0.793	<0.511
(Door Closed)	8-Feb-18	L969370-01	6.39	1.26	<0.511
	22-Feb-18	L972729-01	4.47	1.35	<0.511
	7-Mar-18	L976176-01	3.23	<0.793	<0.511
	23-Mar-18	L980227-01	2.93	<0.793	<0.511
	6-Apr-18	L984164-01	2.34	<0.793	<0.511
	19-Apr-18	L987699-01	1.95	<0.793	<0.511
	4-May-18	L991502-01	3.76	<0.793	<0.511
	17-May-18	L995571-01	1.51	<0.793	<0.511
IA-2	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
IA-2 (2ND CANISTER)	9-Mar-17	L895061-04	438	88.7	1.68
	26-Mar-17	L898762-02	61.8	<0.793	<0.511
IA-2 (DUPLICATE)	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
	21-Sep-17	L938896-02	2.22	<0.793	<0.511
	5-Oct-17	L942068-02	2.46	<0.793	<0.511
	19-Oct-17	L945503-02	1.87	<0.793	<0.511
	1-Nov-17	L948263-02	1.7	<0.793	<0.511
	16-Nov-17	L952200-02	1.82	<0.793	<0.511
	30-Nov-17	L954578-02	5.01	<0.793	<0.511
	17-Dec-17	L958416-02	1.98	<0.793	<0.511
	28-Dec-17	L960558-02	2.58	0.823	<0.511
	14-Jan-18	L963421-02	1.21	<0.793	<0.511
	25-Jan-18	L966088-02	6.09	<0.793	<0.511
	7-Feb-18	L969030-01	1.6	<0.793	<0.511
	22-Feb-18	L972729-02	2.31	<0.793	<0.511
	7-Mar-18	L976176-02	2.35	<0.793	<0.511
	23-Mar-18	L980227-02	1.39	<0.793	<0.511
	6-Apr-18	L984164-02	1.38	<0.793	<0.511
	19-Apr-18	L987699-02	<1.07	<0.793	<0.511
	4-May-18	L991502-02	3.47	<0.793	<0.511
	17-May-18	L995571-02	2.97	<0.793	<0.511

TABLE 2
INDOOR AIR SAMPLING RESULTS COMPARISON
JANUARY 2017 THROUGH MAY 2018
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-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
	21-Sep-17	L938896-03	4.65	<0.793	<0.511
	5-Oct-17	L942068-03	5.37	<0.793	<0.511
	19-Oct-17	L945503-03	6.31	<0.793	<0.511
	1-Nov-17	L948263-03	4.67	2.89	<0.511
	16-Nov-17	L952200-03	4.19	<0.793	<0.511
	30-Nov-17	L954578-03	4.06	3	<0.511
	17-Dec-17	L958416-03	4.69	<0.793	<0.511
	28-Dec-17	L960558-03	7.53	4.41	<0.511
	14-Jan-18	L963421-03	8.95	<0.793	<0.511
	25-Jan-18	L966088-03	6.12	<0.793	<0.511
	7-Feb-18	L969030-02	3.45	2.18	<0.511
	22-Feb-18	L972729-03	2.76	1.69	<0.511
	7-Mar-18	L976176-03	6.95	2.74	<0.511
	23-Mar-18	L980227-03	5.26	2.02	<0.511
	6-Apr-18	L984164-03	3.28	1.89	<0.511
	19-Apr-18	L987699-03	3.28	2.2	<0.511
	4-May-18	L991502-03	3.4	<0.793	<0.511
	17-May-18	L995571-03	3.3	<0.793	<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
	21-Sep-17	L938896-04	1.46	<0.793	<0.511
	5-Oct-17	L942068-04	3.2	<0.793	<0.511
	19-Oct-17	L945503-04	2.79	<0.793	<0.511
	1-Nov-17	L948263-04	3.15	2.33	<0.511
	16-Nov-17	L952200-04	<1.07	<0.793	<0.511
	30-Nov-17	L954578-04	1.89	<0.793	<0.511
	17-Dec-17	L958416-04	1.86	<0.793	<0.511
	28-Dec-17	L960558-04	2.28	2.57	<0.511
	14-Jan-18	L963421-04	2.34	<0.793	<0.511
	25-Jan-18	L966088-04	1.42	<0.793	<0.511
	7-Feb-18	L969030-03	<4.29	<3.17	<2.04
	22-Feb-18	L972729-04	1.5	1.68	<0.511
	7-Mar-18	L976176-04	1.57	<0.793	<0.511
	23-Mar-18	L980227-04	1.98	1.7	<0.511
	6-Apr-18	L984164-04	1.26	1.24	<0.511
	19-Apr-18	L987699-04	1.09	1.2	<0.511
	4-May-18	L991502-04	1.68	<0.793	<0.511
	17-May-18	L995571-04	1.38	<0.793	<0.511

TABLE 2
INDOOR AIR SAMPLING RESULTS COMPARISON
JANUARY 2017 THROUGH MAY 2018
FORMER HOLLEY AUTOMOTIVE/COLTEC INDUSTRIES FACILITY
WATER VALLEY, MS

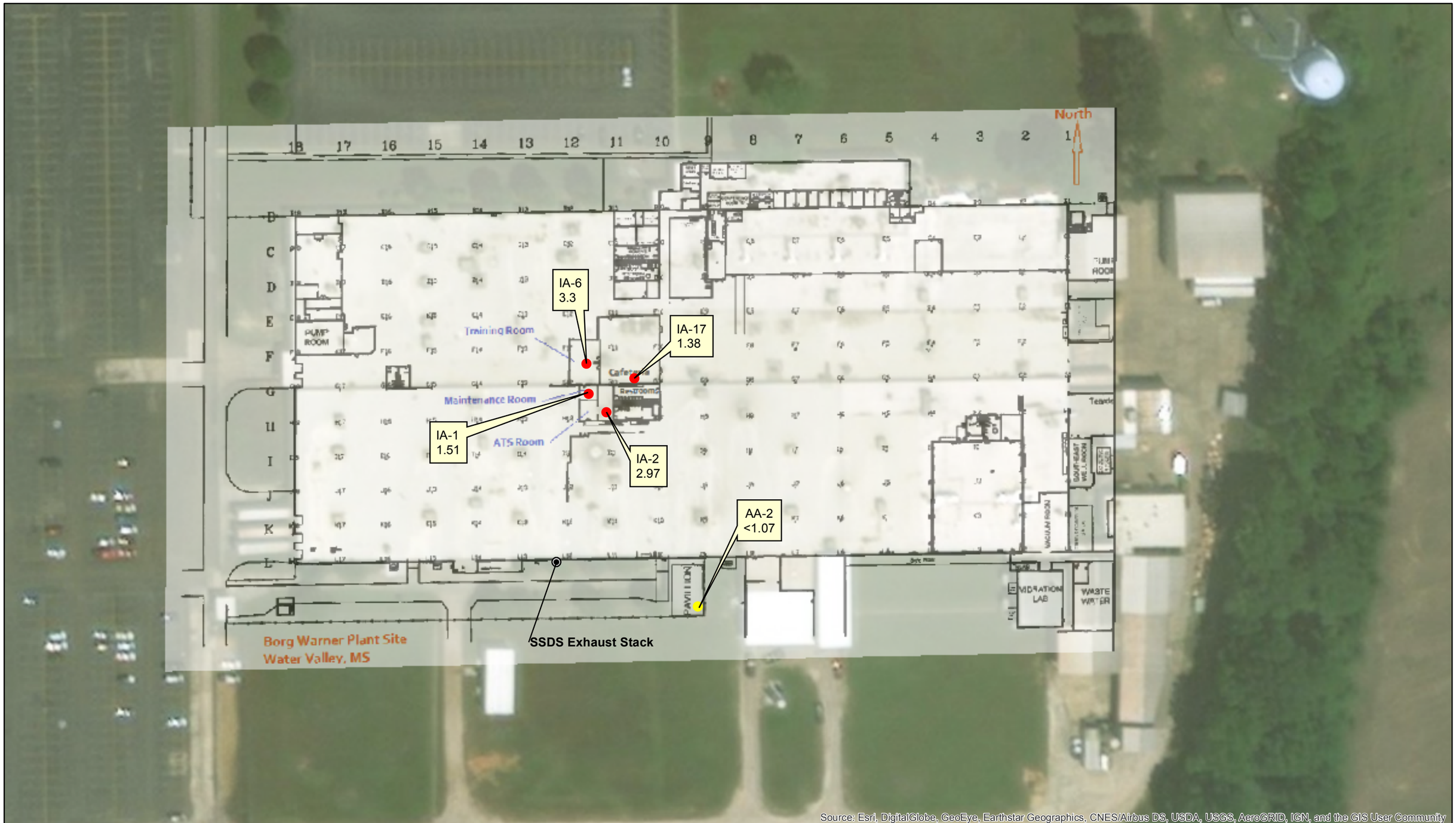
SAMPLE ID	SAMPLING DATE	LABORATORY ID	CoC Concentrations (µg/m³)		
			Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride
	USEPA Vapor Intrusion Screening Level (VISL):		3	NA	2.8
IA-B12	26-Apr-17	L905292-04	6.54	1.77	<0.511
	25-May-17	L912423-05	3.08	<0.793	<0.511
	7-Jun-17	L914832-07	1.64	<0.793	<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
	30-Nov-17	L954578-05	<1.07	<0.793	<0.511
	7-Mar-18	L976176-06	<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
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
	30-Nov-17	L954578-07	<1.07	<0.793	<0.511
	7-Mar-18	L976176-08	<1.07	<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

TABLE 2
INDOOR AIR SAMPLING RESULTS COMPARISON
JANUARY 2017 THROUGH MAY 2018
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-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
	30-Nov-17	L954578-06	<1.07	<0.793	<0.511
	7-Mar-18	L976176-07	<1.07	<0.793	<0.511
IA-L16	26-Apr-17	L905292-08	5.77	1.75	<0.511
	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	46300
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
	21-Sep-17	L938896-05	<1.07	<0.793	<0.511
	5-Oct-17	L942068-05	<1.07	<0.793	<0.511
	19-Oct-17	L945503-05	<1.07	<0.793	<0.511
	1-Nov-17	L948263-05	<1.07	<0.793	<0.511
	16-Nov-17	L952200-05	<1.07	<0.793	<0.511
	30-Nov-17	L954578-10	2.46	<0.793	<0.511
	17-Dec-17	L958416-05	<1.07	<0.793	<0.511
	28-Dec-17	L960558-05	<1.07	<0.793	<0.511
	14-Jan-18	L963421-05	<1.07	<0.793	<0.511
	25-Jan-18	L966088-05	<1.07	<0.793	<0.511
	7-Feb-18	L969030-04	<1.07	<0.793	<0.511
	22-Feb-18	L972729-05	<1.07	<0.793	<0.511
	7-Mar-18	L976176-05	<1.07	<0.793	<0.511
	23-Mar-18	L980227-05	<1.07	<0.793	<0.511
	6-Apr-18	L984164-05	<1.07	<0.793	<0.511
	19-Apr-18	L987699-05	<1.07	<0.793	<0.511
	4-May-18	L991502-05	<1.07	<0.793	<0.511
	17-May-18	L995571-05	<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



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

0 20 40 80 Feet

1 inch = 80 feet

N W E S

FIRST ENVIRONMENT

91 Fulton Street
Boonton, New Jersey 07005

BORG WARNER FACILITY
600 Highway 32E, Water Valley, MS

FIGURE 1
INDOOR AIR SAMPLING RESULTS
MAY 17, 2018

Revised	Drawn	Checked	Approved	Date
LS	NMT	NMT	NMT	5/30/2018

APPENDIX A

ANALYTICAL REPORT

May 29, 2018

First Environment, Inc.

Sample Delivery Group:	L995571
Samples Received:	05/21/2018
Project Number:	ENPRO002D-VM
Description:	Butler Snow LLP
Site:	BORG WARNER PLANT SITE
Report To:	Michael T. Slack 91 Fulton Street Boonton, NJ 07005

Entire Report Reviewed By:

Jason Romer
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.

TABLE OF CONTENTS

IA-1 L995571-01 Air

Collected by: Michael T. Slack | Collected date/time: 05/17/18 14:20 | Received date/time: 05/21/18 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1115070	1	05/23/18 17:37	05/23/18 17:37	MBF
Volatile Organic Compounds (MS) by Method TO-15	WG1115603	25	05/24/18 23:00	05/24/18 23:00	MEL

IA-2 L995571-02 Air

Collected by: Michael T. Slack | Collected date/time: 05/17/18 14:22 | Received date/time: 05/21/18 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1115070	1	05/23/18 18:23	05/23/18 18:23	MBF
Volatile Organic Compounds (MS) by Method TO-15	WG1116194	25	05/25/18 17:04	05/25/18 17:04	AMC

IA-6 L995571-03 Air

Collected by: Michael T. Slack | Collected date/time: 05/17/18 14:26 | Received date/time: 05/21/18 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1115070	1	05/23/18 19:13	05/23/18 19:13	MBF
Volatile Organic Compounds (MS) by Method TO-15	WG1115603	25	05/25/18 00:23	05/25/18 00:23	MEL

IA-17 L995571-04 Air

Collected by: Michael T. Slack | Collected date/time: 05/17/18 14:24 | Received date/time: 05/21/18 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1115070	1	05/23/18 20:00	05/23/18 20:00	MBF
Volatile Organic Compounds (MS) by Method TO-15	WG1115603	25	05/25/18 01:04	05/25/18 01:04	MEL

AA-2 L995571-05 Air

Collected by: Michael T. Slack | Collected date/time: 05/17/18 14:28 | Received date/time: 05/21/18 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1116200	1	05/25/18 11:26	05/25/18 11:26	AMC

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, 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.

Jason Romer
Technical Service Representative

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	31.2	74.1	93.7	223		25	WG1115603
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1115070
Benzene	71-43-2	78.10	0.200	0.639	0.263	0.839		1	WG1115070
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1115070
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1115070
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1115070
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1115070
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1115070
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1115070
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1115070
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1115070
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1115070
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1115070
Chloromethane	74-87-3	50.50	0.200	0.413	0.595	1.23		1	WG1115070
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1115070
Cyclohexane	110-82-7	84.20	0.200	0.689	4.13	14.2		1	WG1115070
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1115070
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1115070
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1115070
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1115070
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1115070
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1115070
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1115070
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1115070
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1115070
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1115070
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1115070
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1115070
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1115070
1,4-Dioxane	123-91-1	88.10	0.200	0.721	0.365	1.31		1	WG1115070
Ethanol	64-17-5	46.10	15.8	29.8	1770	3340	E	25	WG1115603
Ethylbenzene	100-41-4	106	0.200	0.867	0.571	2.48		1	WG1115070
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.205	1.00		1	WG1115070
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.220	1.24		1	WG1115070
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.326	1.61		1	WG1115070
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1115070
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1115070
Heptane	142-82-5	100	0.200	0.818	1.87	7.65		1	WG1115070
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1115070
n-Hexane	110-54-3	86.20	0.200	0.705	2.11	7.44		1	WG1115070
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1115070
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.898	3.12		1	WG1115070
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1115070
2-Butanone (MEK)	78-93-3	72.10	31.2	92.0	173	510		25	WG1115603
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1115070
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1115070
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1115070
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1115070
2-Propanol	67-63-0	60.10	31.2	76.7	1630	4010	E	25	WG1115603
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1115070
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1115070
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1115070
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1115070
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1115070
Toluene	108-88-3	92.10	0.200	0.753	1.74	6.57		1	WG1115070
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1115070

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	WG1115070
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1115070
Trichloroethylene	79-01-6	131	0.200	1.07	0.282	1.51		1	WG1115070
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.759	3.73		1	WG1115070
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	0.244	1.20		1	WG1115070
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	0.282	1.32		1	WG1115070
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1115070
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1115070
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1115070
m&p-Xylene	1330-20-7	106	0.400	1.73	2.27	9.86		1	WG1115070
o-Xylene	95-47-6	106	0.200	0.867	0.657	2.85		1	WG1115070
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*123*				WG1115070
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*86.5*				WG1115603

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	31.2	74.1	147	348		25	WG1116194
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1115070
Benzene	71-43-2	78.10	0.200	0.639	0.284	0.907		1	WG1115070
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1115070
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1115070
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1115070
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1115070
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1115070
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1115070
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1115070
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1115070
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1115070
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1115070
Chloromethane	74-87-3	50.50	0.200	0.413	0.606	1.25		1	WG1115070
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1115070
Cyclohexane	110-82-7	84.20	0.200	0.689	2.31	7.94		1	WG1115070
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1115070
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1115070
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1115070
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1115070
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1115070
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1115070
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1115070
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1115070
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1115070
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	0.743	2.95		1	WG1115070
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1115070
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1115070
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1115070
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1115070
Ethanol	64-17-5	46.10	15.8	29.8	2440	4590	E	25	WG1116194
Ethylbenzene	100-41-4	106	0.200	0.867	0.584	2.53		1	WG1115070
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.220	1.08		1	WG1115070
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.229	1.29		1	WG1115070
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.261	1.29		1	WG1115070
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1115070
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1115070
Heptane	142-82-5	100	0.200	0.818	1.48	6.04		1	WG1115070
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1115070
n-Hexane	110-54-3	86.20	0.200	0.705	2.35	8.28		1	WG1115070
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1115070
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1115070
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1115070
2-Butanone (MEK)	78-93-3	72.10	31.2	92.0	200	591		25	WG1116194
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1115070
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1115070
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1115070
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1115070
2-Propanol	67-63-0	60.10	31.2	76.7	2170	5330	E	25	WG1116194
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1115070
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1115070
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1115070
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1115070
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1115070
Toluene	108-88-3	92.10	0.200	0.753	1.20	4.50		1	WG1115070
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1115070

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	WG1115070
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1115070
Trichloroethylene	79-01-6	131	0.200	1.07	0.554	2.97		1	WG1115070
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.826	4.06		1	WG1115070
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	0.273	1.34		1	WG1115070
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1115070
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1115070
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1115070
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1115070
m&p-Xylene	1330-20-7	106	0.400	1.73	2.17	9.41		1	WG1115070
o-Xylene	95-47-6	106	0.200	0.867	0.657	2.85		1	WG1115070
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*109*				WG1115070
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*97.4*				WG1116194

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	31.2	74.1	109	260		25	WG1115603
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1115070
Benzene	71-43-2	78.10	0.200	0.639	0.287	0.918		1	WG1115070
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1115070
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1115070
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1115070
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1115070
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1115070
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1115070
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1115070
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1115070
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1115070
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1115070
Chloromethane	74-87-3	50.50	0.200	0.413	0.596	1.23		1	WG1115070
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1115070
Cyclohexane	110-82-7	84.20	0.200	0.689	4.86	16.7		1	WG1115070
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1115070
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1115070
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1115070
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1115070
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1115070
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1115070
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1115070
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1115070
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1115070
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1115070
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1115070
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1115070
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1115070
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1115070
Ethanol	64-17-5	46.10	15.8	29.8	1570	2960	E	25	WG1115603
Ethylbenzene	100-41-4	106	0.200	0.867	0.533	2.31		1	WG1115070
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1115070
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.216	1.21		1	WG1115070
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.270	1.34		1	WG1115070
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1115070
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1115070
Heptane	142-82-5	100	0.200	0.818	2.23	9.10		1	WG1115070
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1115070
n-Hexane	110-54-3	86.20	0.200	0.705	1.66	5.85		1	WG1115070
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1115070
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.357	1.24		1	WG1115070
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1115070
2-Butanone (MEK)	78-93-3	72.10	31.2	92.0	160	473		25	WG1115603
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1115070
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1115070
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1115070
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1115070
2-Propanol	67-63-0	60.10	31.2	76.7	1260	3090	E	25	WG1115603
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1115070
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1115070
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1115070
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1115070
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1115070
Toluene	108-88-3	92.10	0.200	0.753	11.6	43.5		1	WG1115070
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1115070

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	WG1115070
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1115070
Trichloroethylene	79-01-6	131	0.200	1.07	0.616	3.30		1	WG1115070
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.687	3.37		1	WG1115070
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	0.214	1.05		1	WG1115070
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1115070
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1115070
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1115070
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1115070
m&p-Xylene	1330-20-7	106	0.400	1.73	2.02	8.77		1	WG1115070
o-Xylene	95-47-6	106	0.200	0.867	0.641	2.78		1	WG1115070
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*111*				WG1115070
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*86.0*				WG1115603

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	31.2	74.1	111	264		25	WG1115603
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1115070
Benzene	71-43-2	78.10	0.200	0.639	0.252	0.806		1	WG1115070
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1115070
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1115070
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1115070
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1115070
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1115070
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1115070
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1115070
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1115070
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1115070
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1115070
Chloromethane	74-87-3	50.50	0.200	0.413	0.633	1.31		1	WG1115070
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1115070
Cyclohexane	110-82-7	84.20	0.200	0.689	4.70	16.2		1	WG1115070
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1115070
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1115070
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1115070
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1115070
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1115070
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1115070
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1115070
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1115070
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1115070
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	0.202	0.800		1	WG1115070
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1115070
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1115070
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1115070
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1115070
Ethanol	64-17-5	46.10	15.8	29.8	1850	3480	E	25	WG1115603
Ethylbenzene	100-41-4	106	0.200	0.867	0.453	1.96		1	WG1115070
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1115070
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.222	1.25		1	WG1115070
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.262	1.30		1	WG1115070
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1115070
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1115070
Heptane	142-82-5	100	0.200	0.818	2.00	8.19		1	WG1115070
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1115070
n-Hexane	110-54-3	86.20	0.200	0.705	1.60	5.64		1	WG1115070
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1115070
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1115070
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1115070
2-Butanone (MEK)	78-93-3	72.10	31.2	92.0	222	655		25	WG1115603
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1115070
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1115070
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1115070
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1115070
2-Propanol	67-63-0	60.10	31.2	76.7	1720	4220	E	25	WG1115603
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1115070
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1115070
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1115070
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1115070
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1115070
Toluene	108-88-3	92.10	0.200	0.753	0.851	3.21		1	WG1115070
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1115070

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	WG1115070
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1115070
Trichloroethylene	79-01-6	131	0.200	1.07	0.257	1.38		1	WG1115070
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.751	3.68		1	WG1115070
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	0.245	1.20		1	WG1115070
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1115070
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1115070
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1115070
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1115070
m&p-Xylene	1330-20-7	106	0.400	1.73	1.70	7.39		1	WG1115070
o-Xylene	95-47-6	106	0.200	0.867	0.546	2.37		1	WG1115070
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*122*				WG1115070
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*86.0*				WG1115603

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	4.00	9.51		1	WG1116200
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1116200
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1116200
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1116200
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1116200
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1116200
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1116200
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1116200
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1116200
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1116200
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1116200
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1116200
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1116200
Chloromethane	74-87-3	50.50	0.200	0.413	0.557	1.15		1	WG1116200
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1116200
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1116200
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1116200
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1116200
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1116200
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1116200
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1116200
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1116200
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1116200
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1116200
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1116200
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1116200
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1116200
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1116200
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1116200
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1116200
Ethanol	64-17-5	46.10	0.630	1.19	7.53	14.2		1	WG1116200
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1116200
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1116200
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.212	1.19		1	WG1116200
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.323	1.60		1	WG1116200
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1116200
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1116200
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1116200
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1116200
n-Hexane	110-54-3	86.20	0.200	0.705	ND	ND		1	WG1116200
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1116200
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.379	1.32		1	WG1116200
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1116200
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1116200
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1116200
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1116200
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1116200
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1116200
2-Propanol	67-63-0	60.10	1.25	3.07	3.18	7.81		1	WG1116200
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1116200
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1116200
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1116200
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1116200
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1116200
Toluene	108-88-3	92.10	0.200	0.753	ND	ND		1	WG1116200
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1116200

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	WG1116200
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1116200
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1116200
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1116200
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1116200
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1116200
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1116200
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1116200
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1116200
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1116200
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1116200
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*96.6*				WG1116200

Method Blank (MB)

(MB) R3312596-3 05/23/18 11:27

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
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	U		0.0603	0.200
1,3-Dichlorobenzene	U		0.0597	0.200
1,4-Dichlorobenzene	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
Methylene Chloride	U		0.0465	0.200

Method Blank (MB)

(MB) R3312596-3 05/23/18 11:27

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Methyl Butyl Ketone	U		0.0682	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	U		0.154	0.630
Propene	0.104	J	0.0932	0.400
Styrene	U		0.0465	0.200
1,1,2,2-Tetrachloroethane	U		0.0576	0.200
Tetrachloroethylene	U		0.0497	0.200
Tetrahydrofuran	U		0.0508	0.200
Toluene	U		0.0499	0.200
1,2,4-Trichlorobenzene	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
(S) 1,4-Bromofluorobenzene	*91.9*			*60.0-140*

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

(LCS) R3312596-1 05/23/18 09:57 • (LCSD) R3312596-2 05/23/18 10:42

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Propene	3.75	3.95	3.83	105	102	54.0-155			3.20	25
Dichlorodifluoromethane	3.75	3.56	3.49	95.0	93.0	69.0-143			2.13	25
1,2-Dichlorotetrafluoroethane	3.75	3.76	3.74	100	99.6	70.0-130			0.777	25
Chloromethane	3.75	3.80	3.63	101	96.8	70.0-130			4.44	25
Vinyl chloride	3.75	3.82	3.63	102	96.7	70.0-130			5.11	25
1,3-Butadiene	3.75	3.82	3.60	102	95.9	70.0-130			6.00	25
Bromomethane	3.75	3.78	3.55	101	94.7	70.0-130			6.25	25
Chloroethane	3.75	3.88	3.66	103	97.6	70.0-130			5.83	25
Trichlorofluoromethane	3.75	3.74	3.49	99.6	93.0	70.0-130			6.84	25

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

(LCS) R3312596-1 05/23/18 09:57 • (LCSD) R3312596-2 05/23/18 10:42

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,1,2-Trichlorotrifluoroethane	3.75	3.78	3.53	101	94.1	70.0-130			6.99	25
1,1-Dichloroethene	3.75	3.82	3.53	102	94.1	70.0-130			7.92	25
1,1-Dichloroethane	3.75	3.75	3.92	100	105	70.0-130			4.41	25
Carbon disulfide	3.75	3.87	3.57	103	95.2	70.0-130			8.04	25
Methylene Chloride	3.75	3.97	3.69	106	98.3	70.0-130			7.42	25
MTBE	3.75	3.79	3.55	101	94.6	70.0-130			6.58	25
trans-1,2-Dichloroethene	3.75	3.91	3.68	104	98.1	70.0-130			6.07	25
n-Hexane	3.75	3.91	3.65	104	97.4	70.0-130			6.89	25
Vinyl acetate	3.75	4.17	4.35	111	116	70.0-130			4.23	25
cis-1,2-Dichloroethene	3.75	3.85	4.03	103	108	70.0-130			4.62	25
Chloroform	3.75	3.69	3.85	98.3	103	70.0-130			4.41	25
Cyclohexane	3.75	3.79	3.85	101	103	70.0-130			1.57	25
1,1,1-Trichloroethane	3.75	3.65	3.84	97.3	102	70.0-130			5.09	25
Carbon tetrachloride	3.75	3.59	3.77	95.6	101	70.0-130			5.02	25
Benzene	3.75	3.83	3.85	102	103	70.0-130			0.503	25
1,2-Dichloroethane	3.75	3.79	4.06	101	108	70.0-130			6.85	25
Heptane	3.75	3.93	3.90	105	104	70.0-130			0.570	25
Trichloroethylene	3.75	3.69	3.77	98.5	101	70.0-130			2.05	25
1,2-Dichloropropane	3.75	3.81	3.98	101	106	70.0-130			4.41	25
1,4-Dioxane	3.75	3.95	4.00	105	107	70.0-152			1.11	25
Bromodichloromethane	3.75	3.79	4.00	101	107	70.0-130			5.27	25
cis-1,3-Dichloropropene	3.75	3.85	4.02	103	107	70.0-130			4.08	25
4-Methyl-2-pentanone (MIBK)	3.75	4.07	4.27	109	114	70.0-142			4.88	25
Toluene	3.75	3.64	3.86	97.0	103	70.0-130			5.88	25
trans-1,3-Dichloropropene	3.75	3.80	4.28	101	114	70.0-130			11.9	25
1,1,2-Trichloroethane	3.75	3.74	4.17	99.7	111	70.0-130			10.8	25
Tetrachloroethylene	3.75	3.70	3.81	98.6	102	70.0-130			3.08	25
Methyl Butyl Ketone	3.75	4.14	4.84	110	129	70.0-150			15.6	25
Dibromochloromethane	3.75	3.82	4.14	102	110	70.0-130			8.03	25
1,2-Dibromoethane	3.75	3.79	4.24	101	113	70.0-130			11.2	25
Chlorobenzene	3.75	3.76	4.12	100	110	70.0-130			9.15	25
Ethylbenzene	3.75	3.81	4.01	102	107	70.0-130			5.10	25
m&p-Xylene	7.50	7.68	8.08	102	108	70.0-130			5.15	25
o-Xylene	3.75	3.63	3.84	96.8	102	70.0-130			5.68	25
Styrene	3.75	3.85	3.97	103	106	70.0-130			2.99	25
Bromoform	3.75	3.82	3.75	102	100	70.0-130			1.80	25
1,1,2,2-Tetrachloroethane	3.75	3.73	4.06	99.5	108	70.0-130			8.54	25
4-Ethyltoluene	3.75	3.76	3.83	100	102	70.0-130			1.89	25
1,3,5-Trimethylbenzene	3.75	3.75	3.86	100	103	70.0-130			2.92	25
1,2,4-Trimethylbenzene	3.75	3.72	3.89	99.3	104	70.0-130			4.38	25

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

(LCS) R3312596-1 05/23/18 09:57 • (LCSD) R3312596-2 05/23/18 10:42

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,3-Dichlorobenzene	3.75	3.82	3.81	102	102	70.0-130			0.123	25
1,4-Dichlorobenzene	3.75	3.85	4.00	103	107	70.0-130			3.94	25
Benzyl Chloride	3.75	4.04	4.35	108	116	70.0-144			7.33	25
1,2-Dichlorobenzene	3.75	3.69	3.67	98.3	97.8	70.0-130			0.453	25
1,2,4-Trichlorobenzene	3.75	4.36	3.96	116	106	70.0-155			9.77	25
Hexachloro-1,3-butadiene	3.75	3.68	3.23	98.1	86.2	70.0-145			13.0	25
Naphthalene	3.75	4.28	4.12	114	110	70.0-155			3.79	25
Allyl Chloride	3.75	4.05	3.78	108	101	70.0-130			6.85	25
2-Chlorotoluene	3.75	3.73	3.77	99.4	100	70.0-130			1.03	25
Methyl Methacrylate	3.75	3.95	4.18	105	111	70.0-130			5.44	25
Tetrahydrofuran	3.75	3.95	3.95	105	105	70.0-140			0.0345	25
2,2,4-Trimethylpentane	3.75	3.84	3.80	102	101	70.0-130			0.973	25
Vinyl Bromide	3.75	3.84	3.56	102	95.1	70.0-130			7.48	25
Isopropylbenzene	3.75	3.60	3.84	96.1	102	70.0-130			6.34	25
(S) 1,4-Bromofluorobenzene				*96.8*	*104*	*60.0-140*				

Method Blank (MB)

(MB) R3312840-3 05/24/18 10:55

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL 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	*83.4*			*60.0-140*

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

(LCS) R3312840-1 05/24/18 08:33 • (LCSD) R3312840-2 05/24/18 09:17

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethanol	3.75	3.90	3.57	104	95.2	52.0-158			8.91	25
Acetone	3.75	4.13	3.47	110	92.5	70.0-130			17.3	25
2-Propanol	3.75	4.38	3.73	117	99.5	66.0-150			16.0	25
Methyl Ethyl Ketone	3.75	3.72	3.83	99.3	102	70.0-130			2.82	25
(S) 1,4-Bromofluorobenzene				*93.3*	*92.1*	*60.0-140*				

Method Blank (MB)

(MB) R3313154-3 05/25/18 10:57

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL 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	*93.5*			*60.0-140*

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

(LCS) R3313154-1 05/25/18 09:26 • (LCSD) R3313154-2 05/25/18 10:09

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethanol	3.75	4.21	4.16	112	111	52.0-158			1.23	25
Acetone	3.75	4.30	4.32	115	115	70.0-130			0.438	25
2-Propanol	3.75	4.28	4.31	114	115	66.0-150			0.564	25
Methyl Ethyl Ketone	3.75	4.48	4.56	120	122	70.0-130			1.75	25
(S) 1,4-Bromofluorobenzene				*98.7*	*99.0*	*60.0-140*				

Method Blank (MB)

(MB) R3313213-3 05/25/18 10:37

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL 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	U		0.0603	0.200
1,3-Dichlorobenzene	U		0.0597	0.200
1,4-Dichlorobenzene	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

Method Blank (MB)

(MB) R3313213-3 05/25/18 10:37

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL 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	U		0.154	0.630
2-Propanol	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	U		0.0497	0.200
Tetrahydrofuran	U		0.0508	0.200
Toluene	U		0.0499	0.200
1,2,4-Trichlorobenzene	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	*95.2*			*60.0-140*

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

(LCS) R3313213-1 05/25/18 09:03 • (LCSD) R3313213-2 05/25/18 09:50

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethanol	3.75	3.67	3.72	97.9	99.1	52.0-158			1.19	25
Propene	3.75	3.65	3.65	97.2	97.3	54.0-155			0.0695	25
Dichlorodifluoromethane	3.75	3.54	3.52	94.4	93.8	69.0-143			0.600	25
1,2-Dichlorotetrafluoroethane	3.75	3.87	3.83	103	102	70.0-130			1.24	25
Chloromethane	3.75	3.32	3.56	88.5	94.8	70.0-130			6.94	25

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

(LCS) R3313213-1 05/25/18 09:03 • (LCSD) R3313213-2 05/25/18 09:50

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	3.66	3.72	97.5	99.1	70.0-130			1.66	25
1,3-Butadiene	3.75	3.62	3.54	96.5	94.5	70.0-130			2.13	25
Bromomethane	3.75	3.88	3.57	103	95.1	70.0-130			8.27	25
Chloroethane	3.75	3.79	3.79	101	101	70.0-130			0.134	25
Trichlorofluoromethane	3.75	3.96	3.91	106	104	70.0-130			1.18	25
1,1,2-Trichlorotrifluoroethane	3.75	3.93	3.89	105	104	70.0-130			0.918	25
1,1-Dichloroethene	3.75	3.78	3.76	101	100	70.0-130			0.737	25
1,1-Dichloroethane	3.75	3.77	3.75	101	100	70.0-130			0.607	25
Acetone	3.75	3.66	3.71	97.6	99.0	70.0-130			1.40	25
2-Propanol	3.75	3.73	3.74	99.5	99.6	66.0-150			0.0914	25
Carbon disulfide	3.75	3.85	3.86	103	103	70.0-130			0.121	25
Methylene Chloride	3.75	3.59	3.59	95.9	95.8	70.0-130			0.0581	25
MTBE	3.75	3.87	3.84	103	103	70.0-130			0.658	25
trans-1,2-Dichloroethene	3.75	3.79	3.77	101	100	70.0-130			0.632	25
n-Hexane	3.75	3.77	3.73	101	99.6	70.0-130			1.01	25
Vinyl acetate	3.75	3.70	3.73	98.6	99.3	70.0-130			0.719	25
Methyl Ethyl Ketone	3.75	3.92	3.90	104	104	70.0-130			0.394	25
cis-1,2-Dichloroethene	3.75	3.80	3.77	101	101	70.0-130			0.910	25
Chloroform	3.75	3.85	3.82	103	102	70.0-130			0.843	25
Cyclohexane	3.75	3.88	3.84	103	102	70.0-130			1.13	25
1,1,1-Trichloroethane	3.75	3.92	3.88	105	103	70.0-130			1.03	25
Carbon tetrachloride	3.75	3.96	3.91	106	104	70.0-130			1.17	25
Benzene	3.75	3.88	3.86	104	103	70.0-130			0.623	25
1,2-Dichloroethane	3.75	3.81	3.79	102	101	70.0-130			0.524	25
Heptane	3.75	3.73	3.70	99.4	98.5	70.0-130			0.859	25
Trichloroethylene	3.75	3.93	3.89	105	104	70.0-130			1.01	25
1,2-Dichloropropane	3.75	3.80	3.79	101	101	70.0-130			0.312	25
1,4-Dioxane	3.75	3.70	4.04	98.6	108	70.0-152			8.78	25
Bromodichloromethane	3.75	3.93	3.89	105	104	70.0-130			1.01	25
cis-1,3-Dichloropropene	3.75	3.91	3.92	104	105	70.0-130			0.239	25
4-Methyl-2-pentanone (MIBK)	3.75	3.83	3.78	102	101	70.0-142			1.35	25
Toluene	3.75	3.96	3.93	106	105	70.0-130			0.569	25
trans-1,3-Dichloropropene	3.75	4.01	3.99	107	107	70.0-130			0.437	25
1,1,2-Trichloroethane	3.75	3.89	3.87	104	103	70.0-130			0.396	25
Tetrachloroethylene	3.75	4.08	4.05	109	108	70.0-130			0.754	25
Methyl Butyl Ketone	3.75	3.90	3.98	104	106	70.0-150			2.05	25
Dibromochloromethane	3.75	4.11	4.10	109	109	70.0-130			0.116	25
1,2-Dibromoethane	3.75	4.00	4.00	107	107	70.0-130			0.105	25
Chlorobenzene	3.75	3.96	3.97	106	106	70.0-130			0.176	25
Ethylbenzene	3.75	4.13	4.06	110	108	70.0-130			1.67	25

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

(LCS) R3313213-1 05/25/18 09:03 • (LCSD) R3313213-2 05/25/18 09:50

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
m&p-Xylene	7.50	8.19	8.07	109	108	70.0-130			1.59	25
o-Xylene	3.75	4.12	4.07	110	109	70.0-130			1.29	25
Styrene	3.75	4.30	4.25	115	113	70.0-130			1.33	25
Bromoform	3.75	4.38	4.31	117	115	70.0-130			1.66	25
1,1,2,2-Tetrachloroethane	3.75	4.06	4.00	108	107	70.0-130			1.34	25
4-Ethyltoluene	3.75	4.27	4.20	114	112	70.0-130			1.72	25
1,3,5-Trimethylbenzene	3.75	4.25	4.18	113	112	70.0-130			1.69	25
1,2,4-Trimethylbenzene	3.75	4.27	4.18	114	112	70.0-130			2.01	25
1,3-Dichlorobenzene	3.75	4.33	4.28	115	114	70.0-130			1.23	25
1,4-Dichlorobenzene	3.75	4.45	4.40	119	117	70.0-130			1.30	25
Benzyl Chloride	3.75	4.49	4.43	120	118	70.0-144			1.38	25
1,2-Dichlorobenzene	3.75	4.28	4.23	114	113	70.0-130			1.35	25
1,2,4-Trichlorobenzene	3.75	4.54	4.56	121	122	70.0-155			0.464	25
Hexachloro-1,3-butadiene	3.75	4.36	4.35	116	116	70.0-145			0.397	25
Naphthalene	3.75	4.47	4.48	119	120	70.0-155			0.342	25
Allyl Chloride	3.75	3.66	3.64	97.5	97.0	70.0-130			0.487	25
2-Chlorotoluene	3.75	4.17	4.09	111	109	70.0-130			1.91	25
Methyl Methacrylate	3.75	3.77	3.74	101	99.8	70.0-130			0.821	25
Tetrahydrofuran	3.75	3.65	3.61	97.2	96.3	70.0-140			0.984	25
2,2,4-Trimethylpentane	3.75	3.75	3.71	100	99.0	70.0-130			0.961	25
Vinyl Bromide	3.75	3.96	3.93	106	105	70.0-130			0.916	25
Isopropylbenzene	3.75	4.18	4.10	111	109	70.0-130			1.98	25
(S) 1,4-Bromofluorobenzene				*98.9*	*98.7*	*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, the sample preparation volume or weight values differ from the standard, 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.

Qualifier	Description
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.

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* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

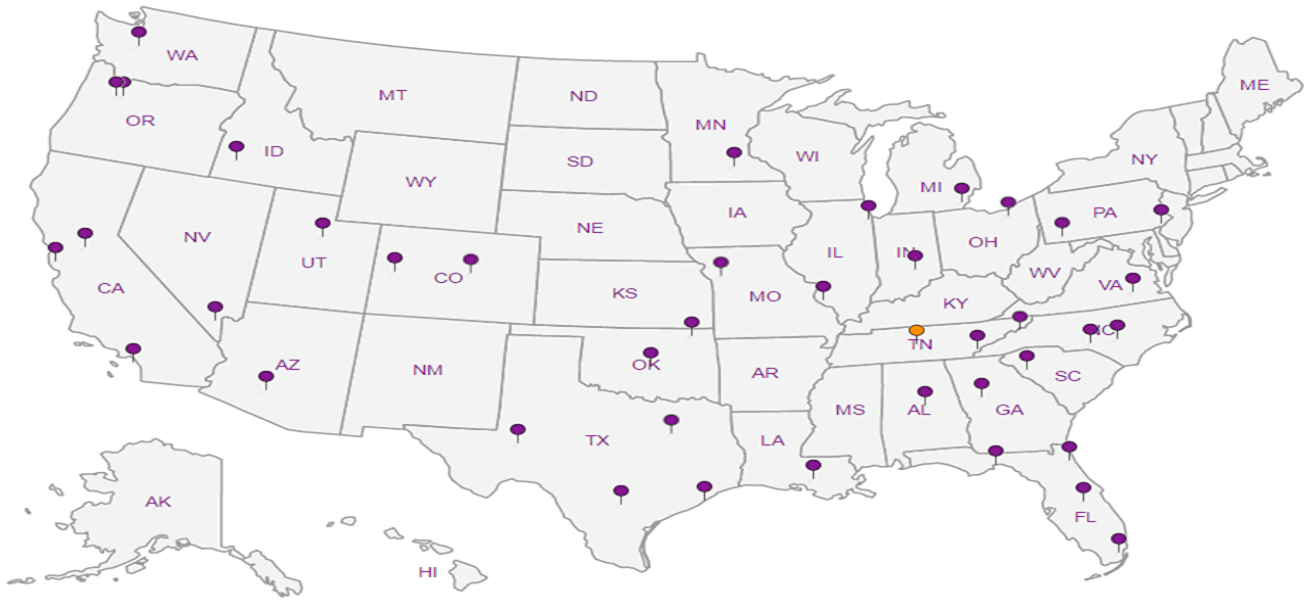
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater 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.



Company Name/Address:
First Environment, Inc.
91 Fulton St.
Boonton, NJ 07005

Billing Information:
First Environment, Inc.
91 Fulton St.
Boonton NJ 07005
Attn: Justin Picolo
JPicolo@firstenvironment.com

Report to: Michael T. Slack - First Environment

Email To: MSlack@firstenvironment.com

Project Description: EnPro: Bi-Weekly 24-hr Indoor Air Sampling

City/State Collected: Water Valley, MS (Borg Warner Plant Site)

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

Client Project #: EnPro002D-VM

Lab Project #: FIREN VBNJ-OxfordMS

Collected by (print): Michael T. Slack

Site/Facility ID #: Borg Warner Plant Site

P.O. #: ----------

Collected by (signature): M. Slack PE

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed: Standard Turnaround

Email? ___No ✓Yes
FAX? ✓No ___Yes

Canister Pressure/Vacuum

Analysis: TO-15 Summa

Chain of Custody Page ___ of ___

ESC LAB SCIENCES
a subsidiary of Pace Analytical
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L # 995571
Ta D204
Acctnum:
Template:
Prelogin:
TSR:
PB:
Shipped Via:

Sample ID	Sample Description	Can #	Date	Time	Initial	Final	Rem./Contaminant	Sample # (lab only)
IA-1	Maintenance Room	7910	5/17/2018	14:20	28	1		01
IA-2	ATS Room	5119	5/17/2018	14:22	30	5		02
IA-6	Training Room	6534	5/17/2018	14:26	30	10		03
IA-17	Cafeteria	5766	5/17/2018	14:24	30	3		04
AA-2	Ambient Air - Pavilion	5268	5/17/2018	14:28	30	2		05

40948307 0171 0182

Remarks: **Additional Information is depicted in Sample Collection Table; Dates and Times depicted on COC are "start" times**

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ____	Condition: (lab use only)
MTS	5/19/2018	11:45			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received: 5	COC Seal Intact: ___Y ___N ___NA
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 5/21/18 Time: 930	pH Checked: NCF:

AV 05/21/18

Indoor Air Monitoring (Bi-Weekly Sampling)
Borg Warner Facility
Water Valley, Yalobusha Co., MS
May 17-18, 2018
Indoor Air (IA) and Ambient Air (AA) - Sampling Event

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	6509	7910	6	5/17/18-2018 14:20	28	5/18/2018 14:05	1	M. Slack
IA-2	ATS Room	6357	5119	6	5/17/2018 14:22	30	5/18/2018 14:23	5	M. Slack
IA-6	Training Room	6721 ~~6534~~ mfc 5/10/18	6534	6	5/17/2018 14:26	30	5/18/2018 14:26	10	M. Slack
IA-17	Cafeteria	5862	5766	6	5/17/2018 14:24	30	5/18/2018 14:24	3	M. Slack
IA-C16	I-Beam C16	NS							M. Slack
IA-K13	I-Beam K13	NS							M. Slack
IA-G4	I-Beam G4	NS							M. Slack
AA-2	Pavilion	7790	5268	6	5/17/2018 14:28	30	5/18/2018 14:00	2	M. Slack

Weather Conditions (@ time of canister placement): OVERCAST; HUMID; UPPER 80°SF; NW WINDS - CALM TO 5mph Michael T. Slack (First Environment)

Weather Conditions during 24-hr sampling period: OVERCAST; HUMID - MID-70s - NW WINDS ≤ 5 mph

NS – Not Sampled

Invo: FIRENVBNJ-OXFOR Date : 10Oct17
Customer : P622449 Weight : 10 LBS
Phone : (615)758-5858 COD :
SAT Del : N DV :
Svcs: STANDARD OVERNIGHT
TRCK: 4094 8307 0182

Shipping : 0.00
Special : 0.00
Handling : 0.00
0.00 Total : 0.00

Invo: FIRENVBNJ-OXFOR Date : 10Oct17
Customer : P622449 Weight : 10 LBS
Phone : (615)758-5858 COD :
SAT Del : N DV :
Svcs: STANDARD OVERNIGHT
TRCK: 4094 8307 0171

Shipping : 0.00
Special : 0.00
Handling : 0.00
0.00 Total : 0.00

ESC LAB SCIENCES
Cooler Receipt Form

Client: FIREVENUS		SDG#	495571
Cooler Received/Opened On: 5/21/18		Temperature:	Amb
Received By: Kelsey Stephenson			
Signature:			

Receipt Check List	NP	Yes	No
COC Seal Present / Intact?	✓		
COC Signed / Accurate?		✓	
Bottles arrive intact?		✓	
Correct bottles used?		✓	
Sufficient volume sent?		✓	
If Applicable			
VOA Zero headspace?			
Preservation Correct / Checked?			