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

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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	01/30/2018	
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, and January 12, 2018.

On January 14-15, 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. As discussed in more detail below, all indoor air sampling results for TCE were below the MDEQ action level of 26 µg/m^3.

2.0 Indoor Air Monitoring – January 14-15, 2018

2.1 Instrumentation

On January 14-15, 2018, 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 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 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.

It should be noted that the indoor air samples were collected after First Environment sealed the void spaces in the block wall between the sump and the Maintenance Room, as reported in the January 8, 2018 SSDS Progress Report. On January 15, 2018, the sump adjacent to the Maintenance Room was decommissioned. On January 18, 2018, First Environment installed two SSDS extraction points in the block wall between the sump and the Maintenance Room and one SSDS extraction point in the block wall between the sump and the Training Room.

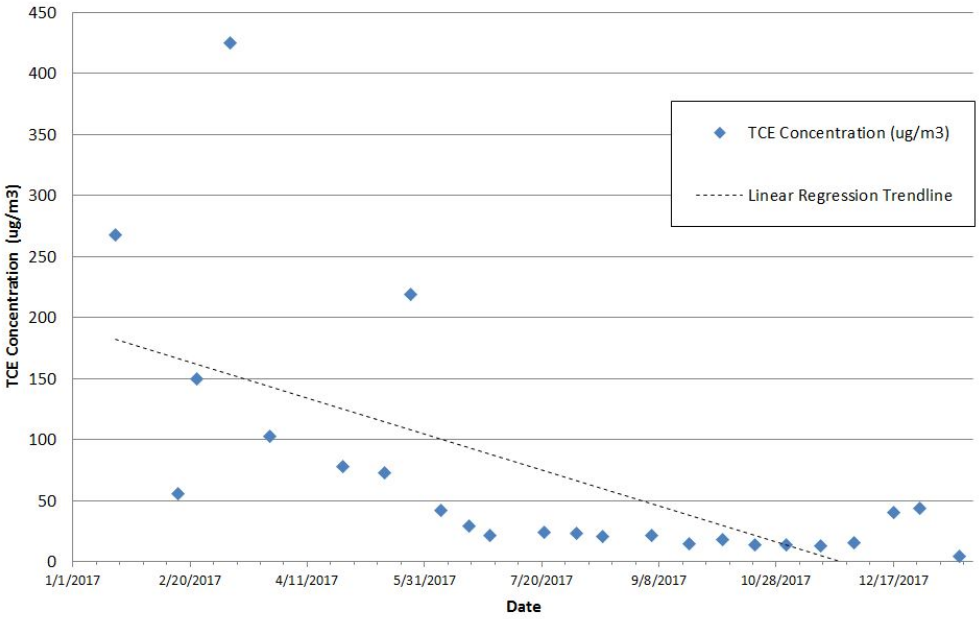
2.3 Results

Table 1 presents the ambient and indoor air sampling results for all TO-15 analytes. Table 2 presents the results of TCE, cis-DCE, and VC in comparison to all previous rounds of sampling. A copy of the laboratory report, including the chain-of-custody forms, is attached in Appendix A.

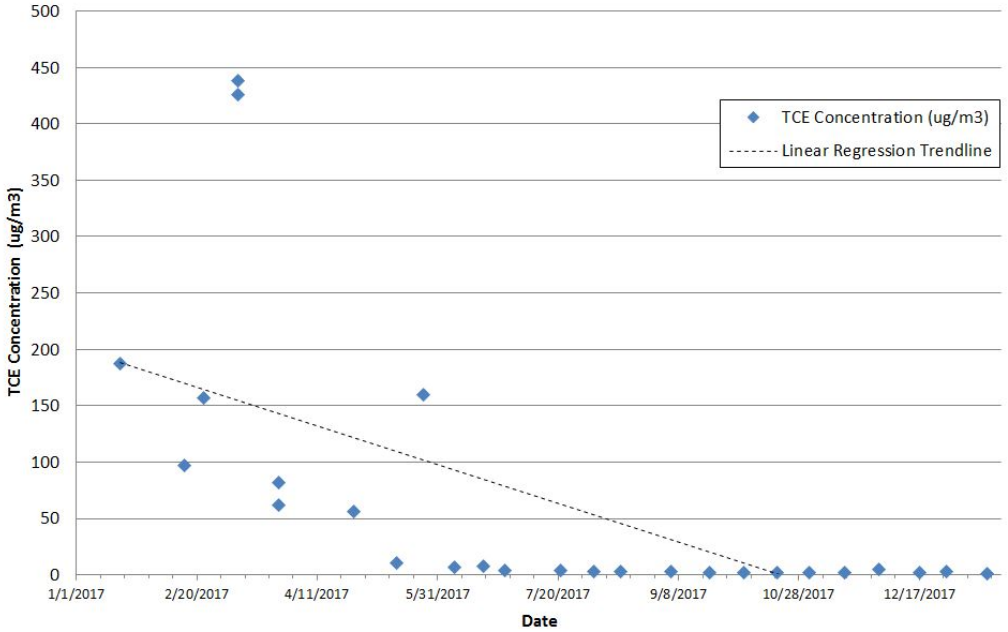
The sample results in the ATS Room and Cafeteria were below USEPA's Vapor Intrusion Screening Level ("VISL") for TCE of 3 µg/m^3. The sample results in the Training Room (8.95 µg/m^3) and Maintenance Room (4.5 µg/m^3) were above USEPA's VISL but below the MDEQ action level of 26 µg/m^3. The Maintenance Room concentration was the lowest concentration at IA-1 since sampling began.

The following figures show the linear regression trendline for the interior rooms.

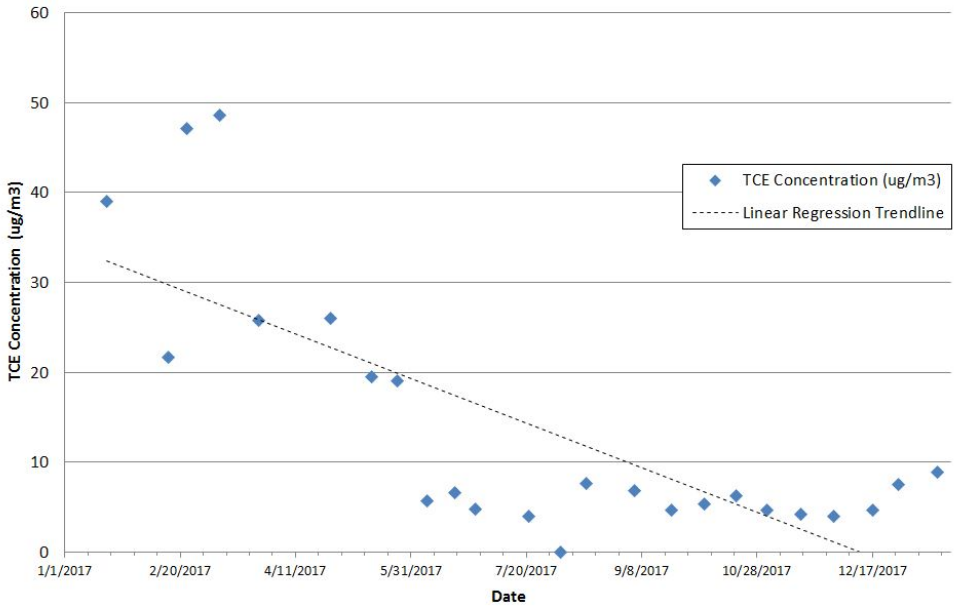
TCE Concentration History at IA-1 (Maintenance Room)



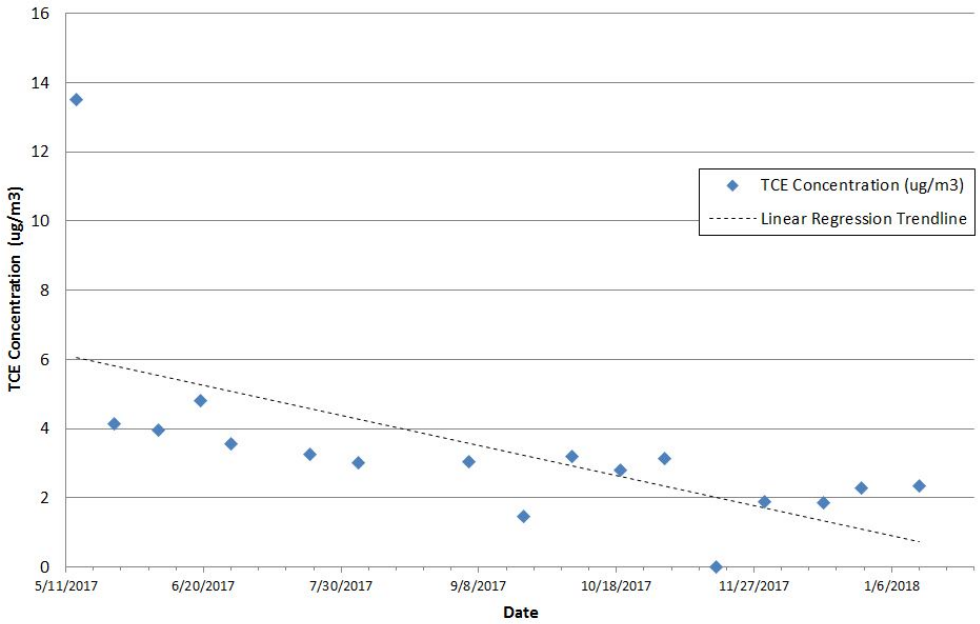
TCE Concentration History at IA-2 (ATS Room)



TCE Concentration History at IA-6 (Training Room)



TCE Concentration History at IA-17 (Cafeteria)



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. The January 14 concentration of TCE in the Maintenance Room (IA-1) was 4.5 µg/m^3—the lowest concentration at IA-1 to date.

On September 20, 2017, First Environment, on behalf of EnPro, submitted a letter request to the 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 be sampled on a quarterly basis. Accordingly, IA-C16, IA-K13, and IA-G4 will be sampled quarterly. Subsequent indoor air sampling results under the approved sampling schedule will be provided to the MDEQ on an ongoing basis.

4.0 Air Permit Evaluation

On December 13, 2017, First Environment reported the results of the final round of samples from the influent and effluent of the SSDS taken on December 1, 2017. Based on six (6) rounds of effluent sampling results (June 13, July 17, October 20, November 2, November 17, and December 1), First Environment recommended that an air permit for the SSDS emissions is not needed. On December 22, 2017, the MDEQ accepted First Environment's "recommendation in Section 4.0 of the Report [dated December 13, 2017] that an air permit is not needed for the SSDS emissions".

In its December 22, 2017 letter, the MDEQ also concurred "with the conclusion that the ultra-violet processing unit is no longer needed and authorizes the control device to be taken off-line." On December 27, 2017, First Environment disconnected the ultra-violet processing unit. The SSDS with the ultra-violet processing unit removed is depicted below.


SSDS – 6" Trunkline and
blower (UV unit removed)

TABLES

TABLE 1
INDOOR AIR SAMPLING RESULTS
JANUARY 14, 2018
FORMER HOLLEY AUTOMOTIVE/COLTEC INDUSTRIES FACILITY
WATER VALLEY, MS

SAMPLE LOCATION:	IA-1	IA-2	IA-6	IA-17	AA-2
SAMPING DATE:	01/14/2018	01/14/2018	01/14/2018	01/14/2018	01/14/2018
LABORATORY ID:	L963421-01	L963421-02	L963421-03	L963421-04	L963421-05
Analyte	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³
ACETONE	116	103	166	186	<2.97
ALLYL CHLORIDE	<0.626	<0.626	<0.626	<0.626	<0.626
BENZENE	1.15 (B)	0.834 (B)	0.844 (B)	1.1 (B)	<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	1.06	0.971	1.02	1.09	1.03
2-CHLOROTOLUENE	<1.03	<1.03	<1.03	<1.03	<1.03
CYCLOHEXANE	<0.689	<0.689	<0.689	<0.689	<0.689
CHLORODIBROMOMETHANE	<1.7	<1.7	<1.7	<1.7	<1.7
1,2-DIBROMOETHANE	<1.54	<1.54	<1.54	<1.54	<1.54
1,2-DICHLOROBENZENE	<1.2	<1.2	<1.2	<1.2	<1.2
1,3-DICHLOROBENZENE	<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-DICHLOROETHANE	<0.81	<0.81	<0.81	<0.81	<0.81
1,1-DICHLOROETHANE	<0.802	<0.802	<0.802	<0.802	<0.802
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	<0.793	<0.793	<0.793	<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	<0.721	<0.721	<0.721	<0.721	<0.721
ETHANOL	3,700 (E)	4,420 (E)	5,550 (E)	6,760 (E)	37.6
ETHYLBENZENE	1.86	1.51	1.68	1.68	<0.867
4-ETHYLTOLUENE	0.996	<0.982	<0.982	<0.982	<0.982

TABLE 1
INDOOR AIR SAMPLING RESULTS
JANUARY 14, 2018
FORMER HOLLEY AUTOMOTIVE/COLTEC INDUSTRIES FACILITY
WATER VALLEY, MS

SAMPLE LOCATION:	IA-1	IA-2	IA-6	IA-17	AA-2
SAMPING DATE:	01/14/2018	01/14/2018	01/14/2018	01/14/2018	01/14/2018
LABORATORY ID:	L963421-01	L963421-02	L963421-03	L963421-04	L963421-05
Analyte	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³
TRICHLOROFLUOROMETHANE	1.38	1.27	1.38	1.37	1.35
DICHLORODIFLUOROMETHANE	<0.989	<0.989	<0.989	<0.989	1.44
1,1,2-TRICHLOROTRIFLUOROETHANE	<1.53	<1.53	<1.53	<1.53	<1.53
1,2-DICHLOROTETRAFLUOROETHANE	<1.4	<1.4	<1.4	<1.4	<1.4
HEPTANE	11	10	21.9	18.8	<0.818
HEXACHLORO-1,3-BUTADIENE	<6.73	<6.73	<6.73	<6.73	<6.73
N-HEXANE	1.43	1.17	1.99	2.03	<0.705
ISOPROPYLBENZENE	<0.983	<0.983	<0.983	<0.983	<0.983
METHYLENE CHLORIDE	<0.694	<0.694	<0.694	<0.694	<0.694
METHYL BUTYL KETONE	<5.11	<5.11	<5.11	<5.11	<5.11
2-BUTANONE (MEK)	324	370	507	639	<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	<3.3	<3.3	<3.3	<3.3	<3.3
2-PROPANOL	2780	3,260 (E)	3,170 (E)	3060	3.97
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	5.63	3.1	3.64	2.5	<0.59
TOLUENE	2.73	4.38	2.09	2.01	<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	4.5	1.21	8.95	2.34	<1.07
1,2,4-TRIMETHYLBENZENE	4.98	3.35	4.01	10.4	<0.982
1,3,5-TRIMETHYLBENZENE	1.74	1.16	1.33	2.46	<0.982
2,2,4-TRIMETHYLPENTANE	1.33	<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	7.19	5.33	6.08	6.12	<1.73
O-XYLENE	2.7	2.14	2.28	2.44	<0.867
1,4-BROMOFLUOROBENZENE	94.2 103	104 94.5	102 94.2	94.3 104	95.5

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 2017 THROUGH JANUARY 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
IA-1	14-Jan-18	L963421-01	4.5	<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
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

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

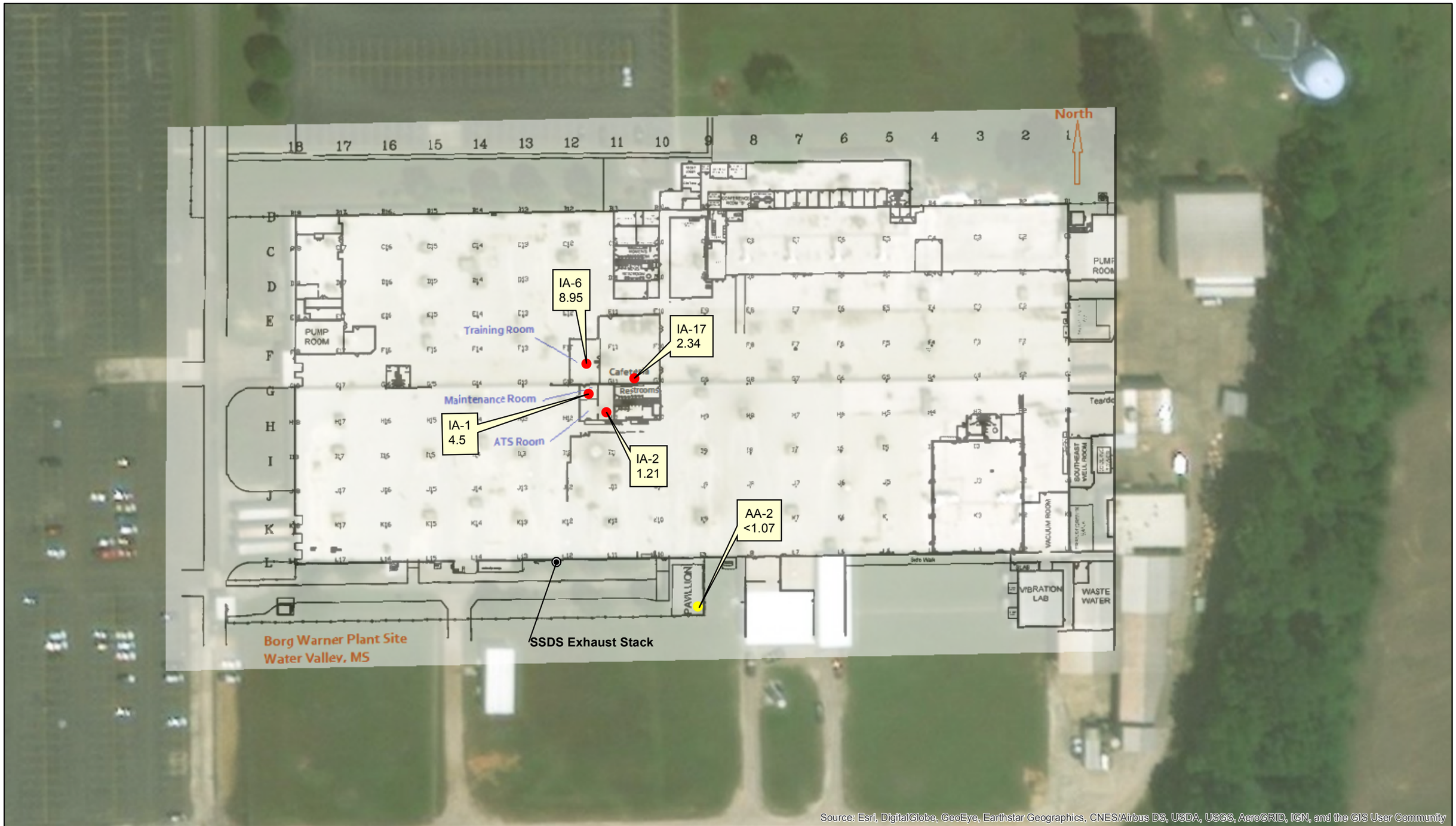
SAMPLE ID	SAMPLING DATE	LABORATORY ID	CoC Concentrations (µg/m³)		
			Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride
USEPA Vapor Intrusion Screening Level (VISL):			**3**	NA	**2.8**
IA-14	19-Jan-17	L1702183-14	3.07	0.928	<0.051
	23-Feb-17	L892423-04	3.32	<0.793	<0.511
IA-17	14-May-17	L909544-05	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
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
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
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

TABLE 2
INDOOR AIR SAMPLING RESULTS COMPARISON
JANUARY 2017 THROUGH JANUARY 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-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
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
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

FIRST ENVIRONMENT

91 Fulton Street
Boonton, New Jersey 07005

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

FIGURE 1
INDOOR AIR SAMPLING RESULTS
JANUARY 14, 2018

Revised	Drawn	Checked	Approved	Date
LS	NMT	NMT	NMT	1/23/2018

APPENDIX A

ANALYTICAL REPORT

January 22, 2018

First Environment, Inc.

Sample Delivery Group:	L963421
Samples Received:	01/16/2018
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:

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.

TABLE OF CONTENTS

IA-1 L963421-01 Air

Collected by: Michael T. Slack | Collected date/time: 01/14/18 10:20 | Received date/time: 01/16/18 12:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1063193	1	01/17/18 00:37	01/17/18 00:37	MBF
Volatile Organic Compounds (MS) by Method TO-15	WG1063478	25	01/17/18 23:31	01/17/18 23:31	AMC

IA-2 L963421-02 Air

Collected by: Michael T. Slack | Collected date/time: 01/14/18 10:21 | Received date/time: 01/16/18 12:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1063193	1	01/17/18 01:27	01/17/18 01:27	MBF
Volatile Organic Compounds (MS) by Method TO-15	WG1063478	25	01/18/18 00:15	01/18/18 00:15	AMC

IA-6 L963421-03 Air

Collected by: Michael T. Slack | Collected date/time: 01/14/18 10:23 | Received date/time: 01/16/18 12:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1063193	1	01/17/18 02:18	01/17/18 02:18	MBF
Volatile Organic Compounds (MS) by Method TO-15	WG1063478	25	01/18/18 00:59	01/18/18 00:59	AMC

IA-17 L963421-04 Air

Collected by: Michael T. Slack | Collected date/time: 01/14/18 10:24 | Received date/time: 01/16/18 12:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1063193	1	01/17/18 03:09	01/17/18 03:09	MBF
Volatile Organic Compounds (MS) by Method TO-15	WG1063478	25	01/18/18 01:43	01/18/18 01:43	AMC

AA-2 L963421-05 Air

Collected by: Michael T. Slack | Collected date/time: 01/14/18 10:26 | Received date/time: 01/16/18 12:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1063193	1	01/17/18 03:59	01/17/18 03:59	MBF

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.

John Hawkins
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	1.25	2.97	48.8	116		1	WG1063193
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1063193
Benzene	71-43-2	78.10	0.200	0.639	0.361	1.15	B	1	WG1063193
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1063193
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1063193
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1063193
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1063193
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1063193
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1063193
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1063193
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1063193
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1063193
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1063193
Chloromethane	74-87-3	50.50	0.200	0.413	0.515	1.06		1	WG1063193
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1063193
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1063193
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1063193
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1063193
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1063193
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1063193
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1063193
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1063193
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1063193
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1063193
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1063193
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1063193
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1063193
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1063193
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1063193
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1063193
Ethanol	64-17-5	46.10	15.8	29.8	1960	3700	E	25	WG1063478
Ethylbenzene	100-41-4	106	0.200	0.867	0.429	1.86		1	WG1063193
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.203	0.996		1	WG1063193
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.246	1.38		1	WG1063193
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG1063193
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1063193
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1063193
Heptane	142-82-5	100	0.200	0.818	2.69	11.0		1	WG1063193
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1063193
n-Hexane	110-54-3	86.20	0.200	0.705	0.405	1.43		1	WG1063193
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1063193
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1063193
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1063193
2-Butanone (MEK)	78-93-3	72.10	31.2	92.0	110	324		25	WG1063478
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1063193
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1063193
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1063193
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1063193
2-Propanol	67-63-0	60.10	31.2	76.7	1130	2780		25	WG1063478
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1063193
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1063193
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1063193
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1063193
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	1.91	5.63		1	WG1063193
Toluene	108-88-3	92.10	0.200	0.753	0.725	2.73		1	WG1063193
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1063193

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	WG1063193
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1063193
Trichloroethylene	79-01-6	131	0.200	1.07	0.840	4.50		1	WG1063193
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	1.01	4.98		1	WG1063193
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	0.356	1.74		1	WG1063193
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	0.286	1.33		1	WG1063193
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1063193
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1063193
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1063193
m&p-Xylene	1330-20-7	106	0.400	1.73	1.66	7.19		1	WG1063193
o-Xylene	95-47-6	106	0.200	0.867	0.623	2.70		1	WG1063193
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*103*				WG1063193
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*94.2*				WG1063478

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	43.3	103		1	WG1063193
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1063193
Benzene	71-43-2	78.10	0.200	0.639	0.261	0.834	B	1	WG1063193
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1063193
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1063193
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1063193
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1063193
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1063193
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1063193
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1063193
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1063193
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1063193
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1063193
Chloromethane	74-87-3	50.50	0.200	0.413	0.470	0.971		1	WG1063193
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1063193
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1063193
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1063193
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1063193
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1063193
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1063193
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1063193
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1063193
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1063193
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1063193
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1063193
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1063193
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1063193
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1063193
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1063193
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1063193
Ethanol	64-17-5	46.10	15.8	29.8	2340	4420	E	25	WG1063478
Ethylbenzene	100-41-4	106	0.200	0.867	0.349	1.51		1	WG1063193
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1063193
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.226	1.27		1	WG1063193
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG1063193
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1063193
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1063193
Heptane	142-82-5	100	0.200	0.818	2.44	10.0		1	WG1063193
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1063193
n-Hexane	110-54-3	86.20	0.200	0.705	0.331	1.17		1	WG1063193
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1063193
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1063193
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1063193
2-Butanone (MEK)	78-93-3	72.10	31.2	92.0	125	370		25	WG1063478
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1063193
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1063193
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1063193
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1063193
2-Propanol	67-63-0	60.10	31.2	76.7	1330	3260	E	25	WG1063478
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1063193
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1063193
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1063193
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1063193
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	1.05	3.10		1	WG1063193
Toluene	108-88-3	92.10	0.200	0.753	1.16	4.38		1	WG1063193
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1063193

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	WG1063193
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1063193
Trichloroethylene	79-01-6	131	0.200	1.07	0.226	1.21		1	WG1063193
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.683	3.35		1	WG1063193
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	0.237	1.16		1	WG1063193
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1063193
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1063193
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1063193
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1063193
m&p-Xylene	1330-20-7	106	0.400	1.73	1.23	5.33		1	WG1063193
o-Xylene	95-47-6	106	0.200	0.867	0.493	2.14		1	WG1063193
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*104*				WG1063193
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*94.5*				WG1063478

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	69.9	166		25	WG1063478
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1063193
Benzene	71-43-2	78.10	0.200	0.639	0.264	0.844	B	1	WG1063193
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1063193
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1063193
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1063193
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1063193
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1063193
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1063193
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1063193
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1063193
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1063193
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1063193
Chloromethane	74-87-3	50.50	0.200	0.413	0.495	1.02		1	WG1063193
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1063193
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1063193
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1063193
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1063193
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1063193
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1063193
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1063193
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1063193
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1063193
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1063193
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1063193
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1063193
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1063193
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1063193
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1063193
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1063193
Ethanol	64-17-5	46.10	15.8	29.8	2950	5550	E	25	WG1063478
Ethylbenzene	100-41-4	106	0.200	0.867	0.387	1.68		1	WG1063193
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1063193
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.245	1.38		1	WG1063193
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG1063193
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1063193
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1063193
Heptane	142-82-5	100	0.200	0.818	5.35	21.9		1	WG1063193
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1063193
n-Hexane	110-54-3	86.20	0.200	0.705	0.565	1.99		1	WG1063193
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1063193
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1063193
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1063193
2-Butanone (MEK)	78-93-3	72.10	31.2	92.0	172	507		25	WG1063478
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1063193
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1063193
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1063193
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1063193
2-Propanol	67-63-0	60.10	31.2	76.7	1290	3170	E	25	WG1063478
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1063193
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1063193
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1063193
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1063193
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	1.23	3.64		1	WG1063193
Toluene	108-88-3	92.10	0.200	0.753	0.555	2.09		1	WG1063193
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1063193

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	WG1063193
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1063193
Trichloroethylene	79-01-6	131	0.200	1.07	1.67	8.95		1	WG1063193
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.818	4.01		1	WG1063193
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	0.271	1.33		1	WG1063193
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1063193
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1063193
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1063193
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1063193
m&p-Xylene	1330-20-7	106	0.400	1.73	1.40	6.08		1	WG1063193
o-Xylene	95-47-6	106	0.200	0.867	0.526	2.28		1	WG1063193
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*94.2*				WG1063478
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*102*				WG1063193

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	78.3	186		25	WG1063478
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1063193
Benzene	71-43-2	78.10	0.200	0.639	0.345	1.10	B	1	WG1063193
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1063193
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1063193
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1063193
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1063193
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1063193
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1063193
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1063193
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1063193
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1063193
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1063193
Chloromethane	74-87-3	50.50	0.200	0.413	0.527	1.09		1	WG1063193
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1063193
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1063193
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1063193
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1063193
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1063193
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1063193
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1063193
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1063193
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1063193
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1063193
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1063193
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1063193
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1063193
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1063193
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1063193
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1063193
Ethanol	64-17-5	46.10	15.8	29.8	3590	6760	E	25	WG1063478
Ethylbenzene	100-41-4	106	0.200	0.867	0.387	1.68		1	WG1063193
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1063193
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.243	1.37		1	WG1063193
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG1063193
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1063193
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1063193
Heptane	142-82-5	100	0.200	0.818	4.61	18.8		1	WG1063193
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1063193
n-Hexane	110-54-3	86.20	0.200	0.705	0.576	2.03		1	WG1063193
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1063193
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1063193
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1063193
2-Butanone (MEK)	78-93-3	72.10	31.2	92.0	217	639		25	WG1063478
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1063193
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1063193
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1063193
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1063193
2-Propanol	67-63-0	60.10	31.2	76.7	1250	3060		25	WG1063478
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1063193
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1063193
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1063193
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1063193
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	0.847	2.50		1	WG1063193
Toluene	108-88-3	92.10	0.200	0.753	0.534	2.01		1	WG1063193
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1063193

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	WG1063193
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1063193
Trichloroethylene	79-01-6	131	0.200	1.07	0.437	2.34		1	WG1063193
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	2.12	10.4		1	WG1063193
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	0.502	2.46		1	WG1063193
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1063193
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1063193
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1063193
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1063193
m&p-Xylene	1330-20-7	106	0.400	1.73	1.41	6.12		1	WG1063193
o-Xylene	95-47-6	106	0.200	0.867	0.562	2.44		1	WG1063193
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*104*				WG1063193
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*94.3*				WG1063478

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	ND	ND		1	WG1063193
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1063193
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1063193
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1063193
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1063193
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1063193
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1063193
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1063193
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1063193
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1063193
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1063193
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1063193
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1063193
Chloromethane	74-87-3	50.50	0.200	0.413	0.497	1.03		1	WG1063193
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1063193
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1063193
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1063193
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1063193
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1063193
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1063193
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1063193
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1063193
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1063193
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1063193
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1063193
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1063193
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1063193
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1063193
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1063193
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1063193
Ethanol	64-17-5	46.10	0.630	1.19	20.0	37.6		1	WG1063193
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1063193
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1063193
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.240	1.35		1	WG1063193
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.291	1.44		1	WG1063193
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1063193
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1063193
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1063193
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1063193
n-Hexane	110-54-3	86.20	0.200	0.705	ND	ND		1	WG1063193
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1063193
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1063193
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1063193
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1063193
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1063193
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1063193
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1063193
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1063193
2-Propanol	67-63-0	60.10	1.25	3.07	1.62	3.97		1	WG1063193
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1063193
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1063193
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1063193
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1063193
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1063193
Toluene	108-88-3	92.10	0.200	0.753	ND	ND		1	WG1063193
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1063193

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	WG1063193
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1063193
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1063193
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1063193
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1063193
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1063193
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1063193
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1063193
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1063193
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1063193
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1063193
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*95.5*				WG1063193

Method Blank (MB)

(MB) R3279707-3 01/16/18 11:45

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	0.0933	J	0.0569	1.25
Allyl Chloride	U		0.0546	0.200
Benzene	0.0741	J	0.0460	0.200
Benzyl Chloride	0.108	J	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	0.0860	J	0.0603	0.200
1,3-Dichlorobenzene	0.0682	J	0.0597	0.200
1,4-Dichlorobenzene	0.0910	J	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	0.0703	J	0.0656	0.630
n-Hexane	U		0.0457	0.200
Isopropylbenzene	U		0.0563	0.200

Method Blank (MB)

(MB) R3279707-3 01/16/18 11:45

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Methylene Chloride	0.0692	J	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	0.301	J	0.154	0.630
2-Propanol	0.0931	J	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	0.217	J	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	0.120	J	0.0946	0.400
o-Xylene	U		0.0633	0.200
Ethanol	U		0.0832	0.630
(S) 1,4-Bromofluorobenzene	*93.1*			*60.0-140*

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

(LCS) R3279707-1 01/16/18 10:08 • (LCSD) R3279707-2 01/16/18 10:56

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	3.99	4.03	106	107	52.0-158			1.14	25
Propene	3.75	4.38	4.43	117	118	54.0-155			1.20	25
Dichlorodifluoromethane	3.75	3.94	4.00	105	107	69.0-143			1.55	25
1,2-Dichlorotetrafluoroethane	3.75	4.44	4.59	118	122	70.0-130			3.17	25
Chloromethane	3.75	4.33	4.37	115	117	70.0-130			1.03	25

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

(LCS) R3279707-1 01/16/18 10:08 • (LCSD) R3279707-2 01/16/18 10:56

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	4.25	4.38	113	117	70.0-130			2.91	25
1,3-Butadiene	3.75	4.14	4.26	110	114	70.0-130			2.83	25
Bromomethane	3.75	4.34	4.28	116	114	70.0-130			1.47	25
Chloroethane	3.75	4.34	4.30	116	115	70.0-130			0.862	25
Trichlorofluoromethane	3.75	4.27	4.24	114	113	70.0-130			0.540	25
1,1,2-Trichlorotrifluoroethane	3.75	4.33	4.29	115	114	70.0-130			0.776	25
1,1-Dichloroethene	3.75	4.26	4.27	114	114	70.0-130			0.205	25
1,1-Dichloroethane	3.75	4.32	4.35	115	116	70.0-130			0.690	25
Acetone	3.75	4.37	4.40	117	117	70.0-130			0.613	25
2-Propanol	3.75	4.35	4.37	116	117	66.0-150			0.408	25
Carbon disulfide	3.75	4.38	4.34	117	116	70.0-130			1.00	25
Methylene Chloride	3.75	4.14	4.14	110	110	70.0-130			0.0365	25
MTBE	3.75	4.37	4.36	117	116	70.0-130			0.391	25
trans-1,2-Dichloroethene	3.75	4.29	4.29	114	114	70.0-130			0.0473	25
n-Hexane	3.75	4.36	4.37	116	117	70.0-130			0.260	25
Vinyl acetate	3.75	4.60	4.63	123	123	70.0-130			0.694	25
Methyl Ethyl Ketone	3.75	4.44	4.48	118	119	70.0-130			0.778	25
cis-1,2-Dichloroethene	3.75	4.44	4.43	118	118	70.0-130			0.0721	25
Chloroform	3.75	4.25	4.26	113	113	70.0-130			0.183	25
Cyclohexane	3.75	4.32	4.39	115	117	70.0-130			1.61	25
1,1,1-Trichloroethane	3.75	4.27	4.26	114	114	70.0-130			0.164	25
Carbon tetrachloride	3.75	4.25	4.25	113	113	70.0-130			0.0866	25
Benzene	3.75	4.29	4.36	114	116	70.0-130			1.67	25
1,2-Dichloroethane	3.75	4.15	4.25	111	113	70.0-130			2.41	25
Heptane	3.75	4.34	4.47	116	119	70.0-130			2.93	25
Trichloroethylene	3.75	4.26	4.29	114	114	70.0-130			0.631	25
1,2-Dichloropropane	3.75	4.35	4.39	116	117	70.0-130			0.793	25
1,4-Dioxane	3.75	4.08	4.20	109	112	70.0-152			2.88	25
Bromodichloromethane	3.75	4.26	4.34	114	116	70.0-130			1.89	25
cis-1,3-Dichloropropene	3.75	4.37	4.47	116	119	70.0-130			2.28	25
4-Methyl-2-pentanone (MIBK)	3.75	4.35	4.45	116	119	70.0-142			2.40	25
Toluene	3.75	4.41	4.46	118	119	70.0-130			1.06	25
trans-1,3-Dichloropropene	3.75	4.36	4.47	116	119	70.0-130			2.54	25
1,1,2-Trichloroethane	3.75	4.36	4.37	116	117	70.0-130			0.306	25
Tetrachloroethylene	3.75	4.31	4.32	115	115	70.0-130			0.379	25
Methyl Butyl Ketone	3.75	4.38	4.53	117	121	70.0-150			3.34	25
Dibromochloromethane	3.75	4.37	4.40	117	117	70.0-130			0.645	25
1,2-Dibromoethane	3.75	4.35	4.37	116	116	70.0-130			0.317	25
Chlorobenzene	3.75	4.40	4.42	117	118	70.0-130			0.503	25
Ethylbenzene	3.75	4.44	4.51	118	120	70.0-130			1.46	25

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

(LCS) R3279707-1 01/16/18 10:08 • (LCSD) R3279707-2 01/16/18 10:56

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	8.81	8.87	117	118	70.0-130			0.692	25
o-Xylene	3.75	4.40	4.47	117	119	70.0-130			1.62	25
Styrene	3.75	4.49	4.50	120	120	70.0-130			0.110	25
Bromoform	3.75	4.35	4.40	116	117	70.0-130			1.02	25
1,1,2,2-Tetrachloroethane	3.75	4.27	4.27	114	114	70.0-130			0.0655	25
4-Ethyltoluene	3.75	4.31	4.29	115	114	70.0-130			0.398	25
1,3,5-Trimethylbenzene	3.75	4.19	4.17	112	111	70.0-130			0.427	25
1,2,4-Trimethylbenzene	3.75	4.17	4.17	111	111	70.0-130			0.0154	25
1,3-Dichlorobenzene	3.75	4.13	4.15	110	111	70.0-130			0.472	25
1,4-Dichlorobenzene	3.75	4.06	4.05	108	108	70.0-130			0.139	25
Benzyl Chloride	3.75	4.08	4.05	109	108	70.0-144			0.771	25
1,2-Dichlorobenzene	3.75	4.00	3.97	107	106	70.0-130			0.788	25
1,2,4-Trichlorobenzene	3.75	3.58	3.58	95.4	95.4	70.0-155			0.0497	25
Hexachloro-1,3-butadiene	3.75	3.70	3.74	98.8	99.8	70.0-145			0.994	25
Naphthalene	3.75	3.70	3.62	98.8	96.5	70.0-155			2.36	25
Allyl Chloride	3.75	4.36	4.40	116	117	70.0-130			0.858	25
2-Chlorotoluene	3.75	4.29	4.29	114	114	70.0-130			0.00250	25
Methyl Methacrylate	3.75	4.38	4.51	117	120	70.0-130			2.97	25
Tetrahydrofuran	3.75	4.41	4.47	118	119	70.0-140			1.36	25
2,2,4-Trimethylpentane	3.75	4.48	4.48	120	119	70.0-130			0.116	25
Vinyl Bromide	3.75	4.42	4.33	118	116	70.0-130			1.99	25
Isopropylbenzene	3.75	4.34	4.34	116	116	70.0-130			0.0414	25
(S) 1,4-Bromofluorobenzene				*100*	*100*	*60.0-140*				

Method Blank (MB)

(MB) R3279937-3 01/17/18 11:11

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	0.0790	J	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	*94.6*			*60.0-140*

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

(LCS) R3279937-1 01/17/18 09:26 • (LCSD) R3279937-2 01/17/18 10:24

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	4.38	4.50	117	120	52.0-158			2.63	25
Acetone	3.75	4.66	4.71	124	126	70.0-130			1.14	25
2-Propanol	3.75	4.71	4.72	126	126	66.0-150			0.208	25
Methyl Ethyl Ketone	3.75	4.61	4.63	123	124	70.0-130			0.441	25
(S) 1,4-Bromofluorobenzene				*97.6*	*97.4*	*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.

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.

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 [1 4]	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		

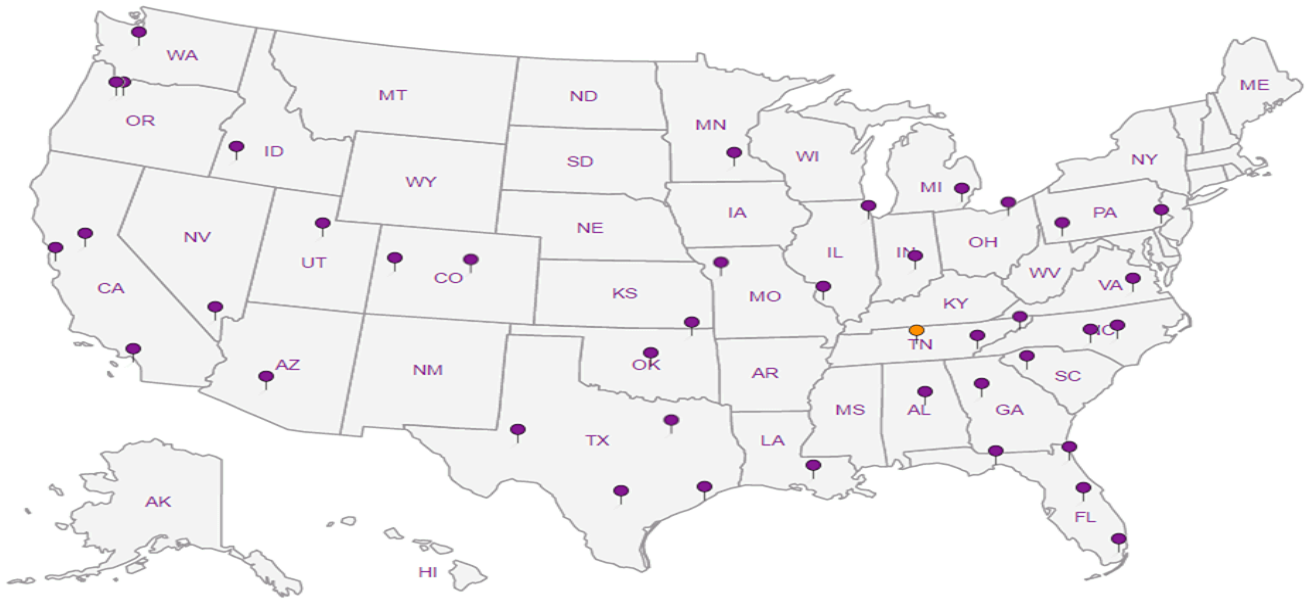
Third Party Federal Accreditations

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.



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 (FE)

Email To: MSlack@firstenvironment.com

Project Description: EnPro-Coltec-Water Valley (24-hr Indoor Air-BW)

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): Mich T. Slack

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# L963121
M157

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	7312	1/14/18	10:20 START	29	5		-01
IA-2	ATS Room	8563	1/14/18	10:21	30	2		02
IA-6	Training Room	7238	1/14/18	10:23	30	5		03
IA-17	Cafeteria	8586	1/14/18	10:24	30	5		04
AA-2	Ambient Air - Pavilion	5664 ~~6367~~ SITE 1/8/18	1/14/18	10:26	30	1		05

BI-WEEKLY - 24HR - INDOOR AIR SAMPLING ⇒ JAN. 14-15, 2018

Remarks: **Additional Information is depicted in Sample Collection Table** 4/96 3257 5459

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	1/15/18	15:00	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)
			860

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ____
Temp: AMB °C Bottles Received: 5
Date: 1/16/18 Time: 1200

Condition: (lab use only)
COC Seal Intact: ✓Y ___N ___NA
pH Checked: NCF:

Indoor Air Monitoring (Bi-Weekly Sampling)
Borg Warner Facility
Water Valley, Yalobusha Co., MS
January 14-15, 2018
Indoor Air (IA), Ambient Air (AA), Air Permit Evaluation (SSD) - 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	7761	7312	6	1/14/18 10:20	29	1/15/18 10:20	5	M. Slack
IA-2	ATS Room	6002	8563	6	1/14/18 10:21	30	1/15/18 10:22	2	M. Slack
IA-6	Training Room	6046	7238	6	1/14/18 10:23	30	1/15/18 10:23	5	M. Slack
IA-17	Cafeteria	5888	8586	6	1/14/18 10:24	30	1/15/18 10:24	5	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	6367	5664	6	1/14/18 10:26	30	1/15/17 09:30	1	M. Slack

Weather Conditions (@ time of canister placement): SUNNY - COLD - 30°F - WINDS CALM-LIGHT - 5mph NW (WIND)

Michael T. Slack (First Environment) 1/15/17

Weather Conditions during 24-hr sampling period: SUNNY - COLD - MID-20S TO LOW-30S F
WINDS - LIGHT - NW WIND < 5 mph

NS – Not Sampled

Invo: FIRENVBNJ-OXFOR Date : 27Dec17
Customer : P632785 Weight : 10 LBS
Phone : (615)758-5858 COD :
SAT Del : N DV : 0.00
Svcs: STANDARD OVERNIGHT
TRCK: 4196 3257 5460
Shipping : 0.00
Special : 0.00
Handling : 0.00
Total : 0.00

Invo: FIRENVBNJ-OXFOR Date : 27Dec17
Customer : P632785 Weight : 10 LBS
Phone : (615)758-5858 COD :
SAT Del : N DV : 0.00
Svcs: STANDARD OVERNIGHT
TRCK: 4196 3257 5459
Shipping : 0.00
Special : 0.00
Handling : 0.00
Total : 0.00

ESC LAB SCIENCES
Cooler Receipt Form

Client: FRENBNJ	SDG#	L963121	
Cooler Received/Opened On: 01/16/18	Temperature:	AMB	°C
Received by : Christian Kacar			
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?			