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

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February 14, 2018

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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	02/14/2018	
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, and January 30, 2018.

On January 25-26, 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. Because this sampling event occurred within forty-eight (48) hours of completion of field work inside the Plant building, First Environment subsequently sampled the Maintenance Room again on February 7, 2018 (with the door open), and on February 8, 2018 (with the door closed). The sampling results are discussed below.

2.0 Indoor Air Monitoring – January 25-26, 2018 and February 7-8, 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 January 25-26, 2018, First Environment collected four indoor air samples at the four interior rooms of the Plant and one ambient air sample outside the Plant. On February 7, 2018, First Environment collected one indoor air sample in the Maintenance Room with the door to the Maintenance Room open. On February 8, 2018, First Environment collected one indoor air

sample in the Maintenance Room with the door to the Maintenance Room closed. 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.

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 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.

Pursuant to the Corrective Action Work Plan (Rev. 1), First Environment began its subsurface investigation of the former sump area in the Plant building on January 16, 2018. That subsurface investigation included advancing a MiHpt probe in the sump area, collection of soil borings, and installation of pre-packed monitoring wells within the Plant building. The January 25-26, 2018 sampling event occurred within forty-eight (48) hours of the development of the monitoring wells installed days earlier in this area. As previously explained in the January 12, 2018 SSDS Progress Report, the elevated concentration of TCE in the Maintenance Room (IA-1) after First Environment performed work in the sub-slab region of the sump area confirmed that the sump area acts as a source of vapor intrusion.

2.3 Results

Table 1 presents the ambient and indoor air sampling results for all TO-15 analytes for the January 25-26, 2018 sampling event. Table 2 presents the indoor air sampling results for all TO-15 analytes for the February 7, 2018 sampling of the Maintenance Room. Table 3 presents the results for the February 8, 2018 sampling of the Maintenance Room. Table 4 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, are attached in Appendices A, B, and C.

For the January 25-26, 2018 sampling event, which occurred within forty-eight (48) hours of First Environment's subsurface investigation of the former sump area, the sample results in the Cafeteria were below USEPA's Vapor Intrusion Screening Level ("VISL") for TCE of 3 µg/m^3. The sample results in the Training Room (6.12 µg/m^3) and ATS Room (6.09 µg/m^3) were above USEPA's VISL but below the MDEQ action level of 26 µg/m^3. The sample results in the Maintenance Room were above the MDEQ action level of 26 µg/m^3 (82.3 µg/m^3).

The most recent prior sampling of the Maintenance Room on January 14-15, 2018, which occurred after First Environment sealed the void spaces in the wall on December 29, 2017, showed a TCE concentration of 4.5 µg/m^3. To determine if the elevated concentration of TCE in the Maintenance Room detected on January 25-26, 2018 resulted from the subsurface investigation of the former sump area conducted less than 48 hours before the air sampling, First Environment resampled the Maintenance Room on February 7, 2018 with the door to the Maintenance Room open, and again on February 8, 2018 with the door to the Maintenance Room closed. The concentrations of TCE in the Maintenance Room had reduced by an order of magnitude to 3.89 µg/m^3 and 6.39 µg/m^3, respectively. This provides additional confirmation that the work in the sub-slab region of the sump area caused an increase in TCE concentrations on January 25-26, 2018.

Additionally, during the placement of the canister on February 7, 2018, First Environment noticed that the SSDS had been interfered with. Specifically, as depicted on the next page, sorbent filter pads had been pushed into the intake to the SSDS in the ATS Room, which affected the air flow through the system. These pads were not visible and were only detected because they caused the SSDS to emit noises that were different than the system's normal resonance. It is not known how long the pads had been present in the intake. This tampering with the SSDS may have been a contributing factor to the January 25-26, 2018 sample results.

After discovery of the pads in the intake, First Environment installed a preventive filter plugging screen, as depicted on the next page.


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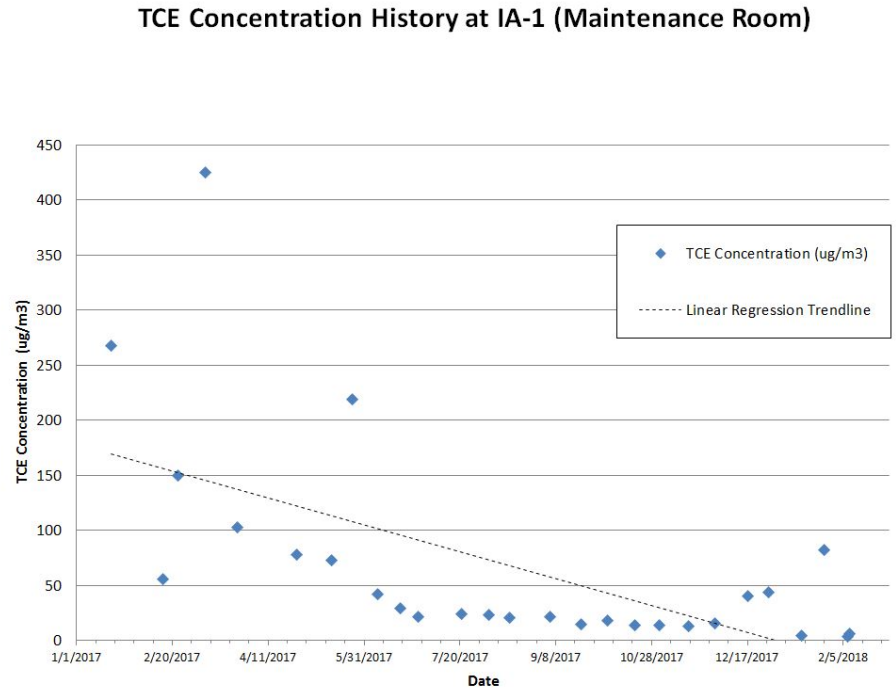
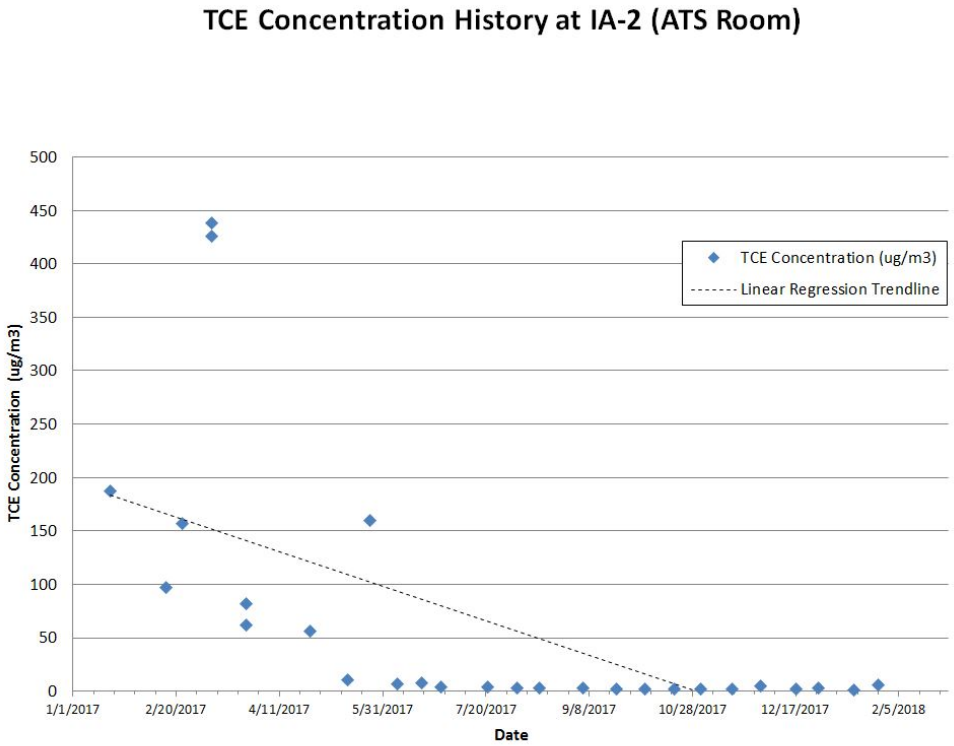
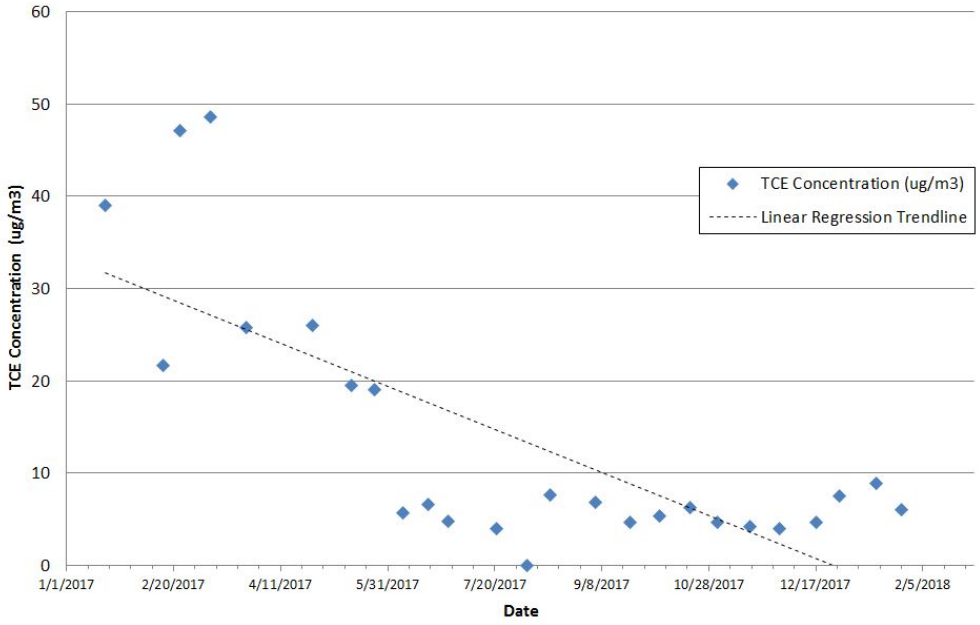
The following figures show the linear regression trendline for the interior rooms.

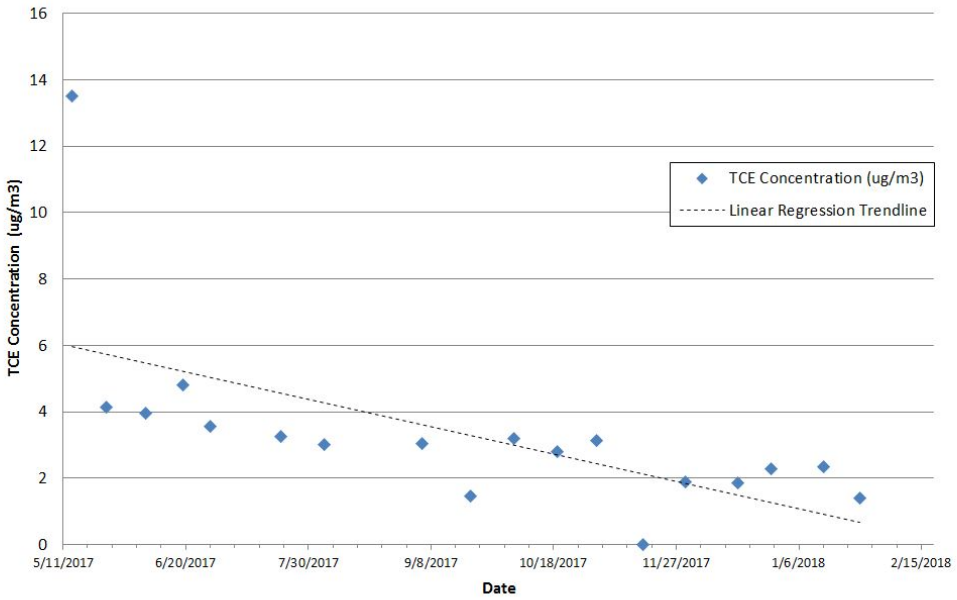




TCE Concentration History at IA-6 (Training Room)



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 elevated concentration of TCE in the Maintenance Room (IA-1) after First Environment performed additional work in the sump area was reduced to below the MDEQ action level of 26 µg/m^3 within approximately one week.

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.

TABLES

TABLE 1
INDOOR AIR SAMPLING RESULTS
JANUARY 25, 2018
FORMER HOLLEY AUTOMOTIVE/COLTEC INDUSTRIES FACILITY
WATER VALLEY, MS

SAMPLE LOCATION:	IA-1	IA-2	IA-6	IA-17	AA-2
SAMPING DATE:	01/25/2018	01/25/2018	01/25/2018	01/25/2018	01/25/2018
LABORATORY ID:	L966088-01	L966088-02	L966088-03	L966088-04	L966088-05
Analyte	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³
ACETONE	270	292	420	228 (E)	7.16
ALLYL CHLORIDE	<0.626	<0.626	<0.626	<0.626	<0.626
BENZENE	1.89	1.53	1.1	1.4	<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	1.04	1.07	1.16	1.05	0.938
2-CHLOROTOLUENE	<1.03	<1.03	<1.03	<1.03	<1.03
CYCLOHEXANE	1.19	<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	1.19	<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	2.16	<0.721	<0.721	1.07	<0.721
ETHANOL	4,140 (E)	4,440 (E)	3,830 (E)	2,240 (E)	12.9
ETHYLBENZENE	2.02	2.05	1.51	1.33	<0.867
4-ETHYLTOLUENE	0.994	<0.982	<0.982	<0.982	<0.982
TRICHLOROFLUOROMETHANE	1.38	1.32	1.37	1.18	1.15
DICHLORODIFLUOROMETHANE	1.99	1.87	1.98	1.54	1.49

TABLE 1
INDOOR AIR SAMPLING RESULTS
JANUARY 25, 2018
FORMER HOLLEY AUTOMOTIVE/COLTEC INDUSTRIES FACILITY
WATER VALLEY, MS

SAMPLE LOCATION:	IA-1	IA-2	IA-6	IA-17	AA-2
SAMPING DATE:	01/25/2018	01/25/2018	01/25/2018	01/25/2018	01/25/2018
LABORATORY ID:	L966088-01	L966088-02	L966088-03	L966088-04	L966088-05
Analyte	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³
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	15.9	14.6	<0.818	12.5	<0.818
HEXACHLORO-1,3-BUTADIENE	<6.73 (J3)	<6.73 (J3)	<6.73 (J3)	<6.73	<6.73
N-HEXANE	4.07	<0.705	<0.705	1.53	<0.705
ISOPROPYLBENZENE	<0.983	<0.983	<0.983	<0.983	<0.983
METHYLENE CHLORIDE	2.47 (B)	<0.694	<0.694	3.07	2.03
METHYL BUTYL KETONE	<5.11	<5.11	<5.11	<5.11	<5.11
2-BUTANONE (MEK)	546	606	667	459 (E)	<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 (J3)	<3.3 (J3)	<3.3 (J3)	<3.3	<3.3
2-PROPANOL	5,550 (E)	5,900 (E)	5,900 (E)	1,180 (E)	4.15 (B)
PROPENE	<0.689	<0.689	<0.689	<0.689	<0.689
STYRENE	<0.851	<0.851	<0.851	0.875	<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	7.24	<0.59	<0.59	<0.59	<0.59
TOLUENE	6.55	5.18	4.85	3.49	<0.753
1,2,4-TRICHLOROBENZENE	<4.66 (J3)	<4.66 (J3)	<4.66 (J3)	<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	**82.3**	6.09	6.12	1.42	<1.07
1,2,4-TRIMETHYLBENZENE	3.86	1.69	3.21	2.67	<0.982
1,3,5-TRIMETHYLBENZENE	1.26	<0.982	1.08	<0.982	<0.982
2,2,4-TRIMETHYLPENTANE	1.87	<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	7.8	7.46	5.7	4.61	<1.73
O-XYLENE	3.02	2.98	2.26	1.9	<0.867
1,4-BROMOFLUOROBENZENE	117 97.3	122 96.7	96.8 117	114	99

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
FEBRUARY 7, 2018
FORMER HOLLEY AUTOMOTIVE/COLTEC INDUSTRIES FACILITY
WATER VALLEY, MS

SAMPLE LOCATION:	IA-1
SAMPING DATE:	02/07/2018
LABORATORY ID:	L969021-01
Analyte	µg/m³
ACETONE	180
ALLYL CHLORIDE	<0.626
BENZENE	0.975
BENZYL CHLORIDE	<1.04
BROMODICHLOROMETHANE	<1.34
BROMOFORM	<6.21
BROMOMETHANE	<0.776
1,3-BUTADIENE	<4.43
CARBON DISULFIDE	<0.622
CARBON TETRACHLORIDE	<1.26
CHLOROBENZENE	<0.924
CHLOROETHANE	<0.528
CHLOROFORM	<0.973
CHLOROMETHANE	0.878
2-CHLOROTOLUENE	<1.03
CYCLOHEXANE	0.821
CHLORODIBROMOMETHANE	<1.7
1,2-DIBROMOETHANE	<1.54
1,2-DICHLOROBENZENE	<1.2
1,3-DICHLOROBENZENE	<1.2
1,4-DICHLOROBENZENE	<1.2
1,2-DICHLOROETHANE	<0.81
1,1-DICHLOROETHANE	<0.802
1,1-DICHLOROETHENE	<0.793
CIS-1,2-DICHLOROETHENE	<0.793
TRANS-1,2-DICHLOROETHENE	<0.793
1,2-DICHLOROPROPANE	<0.924
CIS-1,3-DICHLOROPROPENE	<0.908
TRANS-1,3-DICHLOROPROPENE	<0.908
1,4-DIOXANE	<0.721
ETHANOL	3,590 (E)
ETHYLBENZENE	1.5
4-ETHYLTOLUENE	<0.982
TRICHLOROFLUOROMETHANE	1.23

TABLE 2
INDOOR AIR SAMPLING RESULTS
FEBRUARY 7, 2018
FORMER HOLLEY AUTOMOTIVE/COLTEC INDUSTRIES FACILITY
WATER VALLEY, MS

SAMPLE LOCATION:	IA-1
SAMPING DATE:	02/07/2018
LABORATORY ID:	L969021-01
Analyte	µg/m³
DICHLORODIFLUOROMETHANE	1.33
1,1,2-TRICHLOROTRIFLUOROETHANE	<1.53
1,2-DICHLOROTETRAFLUOROETHANE	<1.4
HEPTANE	11.2
HEXACHLORO-1,3-BUTADIENE	<6.73
N-HEXANE	7.76
ISOPROPYLBENZENE	<0.983
METHYLENE CHLORIDE	<0.694
METHYL BUTYL KETONE	<5.11
2-BUTANONE (MEK)	374
4-METHYL-2-PENTANONE (MIBK)	<5.12
METHYL METHACRYLATE	<0.819
METHYL TERT-BUTYL ETHER	<0.721
NAPHTHALENE	<3.3
2-PROPANOL	3,990 (E)
PROPENE	<0.689
STYRENE	<0.851
1,1,2,2-TETRACHLOROETHANE	<1.37
TETRACHLOROETHENE	4.39
TETRAHYDROFURAN	<0.59
TOLUENE	3.13
1,2,4-TRICHLOROBENZENE	<4.66
1,1,1-TRICHLOROETHANE	<1.09
1,1,2-TRICHLOROETHANE	<1.09
TRICHLOROETHENE	**3.89**
1,2,4-TRIMETHYLBENZENE	2.9
1,3,5-TRIMETHYLBENZENE	<0.982
2,2,4-TRIMETHYLPENTANE	<0.934
VINYL CHLORIDE	<0.511
VINYL BROMIDE	<0.875
VINYL ACETATE	<0.704
M&P-XYLENE	5.8
O-XYLENE	2.16
1,4-BROMOFLUOROBENZENE	93.6 97.4

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 3
INDOOR AIR SAMPLING RESULTS
FEBRUARY 8, 2018
FORMER HOLLEY AUTOMOTIVE/COLTEC INDUSTRIES FACILITY
WATER VALLEY, MS

SAMPLE LOCATION:	IA-1
SAMPING DATE:	02/08/2018
LABORATORY ID:	L969370-01
Analyte	µg/m³
ACETONE	229
ALLYL CHLORIDE	<0.626
BENZENE	1.21
BENZYL CHLORIDE	<1.04
BROMODICHLOROMETHANE	<1.34
BROMOFORM	<6.21
BROMOMETHANE	<0.776
1,3-BUTADIENE	<4.43
CARBON DISULFIDE	<0.622
CARBON TETRACHLORIDE	<1.26
CHLOROBENZENE	<0.924
CHLOROETHANE	<0.528
CHLOROFORM	<0.973
CHLOROMETHANE	1.04
2-CHLOROTOLUENE	<1.03
CYCLOHEXANE	1.58
CHLORODIBROMOMETHANE	<1.7
1,2-DIBROMOETHANE	<1.54
1,2-DICHLOROBENZENE	<1.2
1,3-DICHLOROBENZENE	<1.2
1,4-DICHLOROBENZENE	<1.2
1,2-DICHLOROETHANE	<0.81
1,1-DICHLOROETHANE	<0.802
1,1-DICHLOROETHENE	<0.793
CIS-1,2-DICHLOROETHENE	1.26
TRANS-1,2-DICHLOROETHENE	<0.793
1,2-DICHLOROPROPANE	<0.924
CIS-1,3-DICHLOROPROPENE	<0.908
TRANS-1,3-DICHLOROPROPENE	<0.908
1,4-DIOXANE	<0.721
ETHANOL	2,870 (E)
ETHYLBENZENE	1.95
4-ETHYLTOLUENE	1.09
TRICHLOROFLUOROMETHANE	1.33
DICHLORODIFLUOROMETHANE	<0.989 (J3)

TABLE 3
INDOOR AIR SAMPLING RESULTS
FEBRUARY 8, 2018
FORMER HOLLEY AUTOMOTIVE/COLTEC INDUSTRIES FACILITY
WATER VALLEY, MS

SAMPLE LOCATION:	IA-1
SAMPING DATE:	02/08/2018
LABORATORY ID:	L969370-01
Analyte	µg/m³
1,1,2-TRICHLOROTRIFLUOROETHANE	<1.53
1,2-DICHLOROTETRAFLUOROETHANE	<1.4
HEPTANE	23.6
HEXACHLORO-1,3-BUTADIENE	<6.73
N-HEXANE	11.4
ISOPROPYLBENZENE	<0.983
METHYLENE CHLORIDE	<0.694
METHYL BUTYL KETONE	<5.11
2-BUTANONE (MEK)	389
4-METHYL-2-PENTANONE (MIBK)	<5.12
METHYL METHACRYLATE	<0.819
METHYL TERT-BUTYL ETHER	<0.721
NAPHTHALENE	<3.3
2-PROPANOL	5,070 (E)
PROPENE	<0.689
STYRENE	<0.851
1,1,2,2-TETRACHLOROETHANE	<1.37
TETRACHLOROETHENE	<1.36
TETRAHYDROFURAN	<0.59
TOLUENE	5.39
1,2,4-TRICHLOROBENZENE	<4.66
1,1,1-TRICHLOROETHANE	<1.09
1,1,2-TRICHLOROETHANE	<1.09
TRICHLOROETHENE	**6.39**
1,2,4-TRIMETHYLBENZENE	3.45
1,3,5-TRIMETHYLBENZENE	1.17
2,2,4-TRIMETHYLPENTANE	1.72
VINYL CHLORIDE	<0.511
VINYL BROMIDE	<0.875
VINYL ACETATE	<0.704
M&P-XYLENE	7.08
O-XYLENE	2.75
1,4-BROMOFLUOROBENZENE	103 95.7

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 4
INDOOR AIR SAMPLING RESULTS COMPARISON
JANUARY 2017 THROUGH FEBRUARY 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
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

TABLE 4
INDOOR AIR SAMPLING RESULTS COMPARISON
JANUARY 2017 THROUGH FEBRUARY 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
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

TABLE 4
INDOOR AIR SAMPLING RESULTS COMPARISON
JANUARY 2017 THROUGH FEBRUARY 2018
FORMER HOLLEY AUTOMOTIVE/COLTEC INDUSTRIES FACILITY
WATER VALLEY, MS

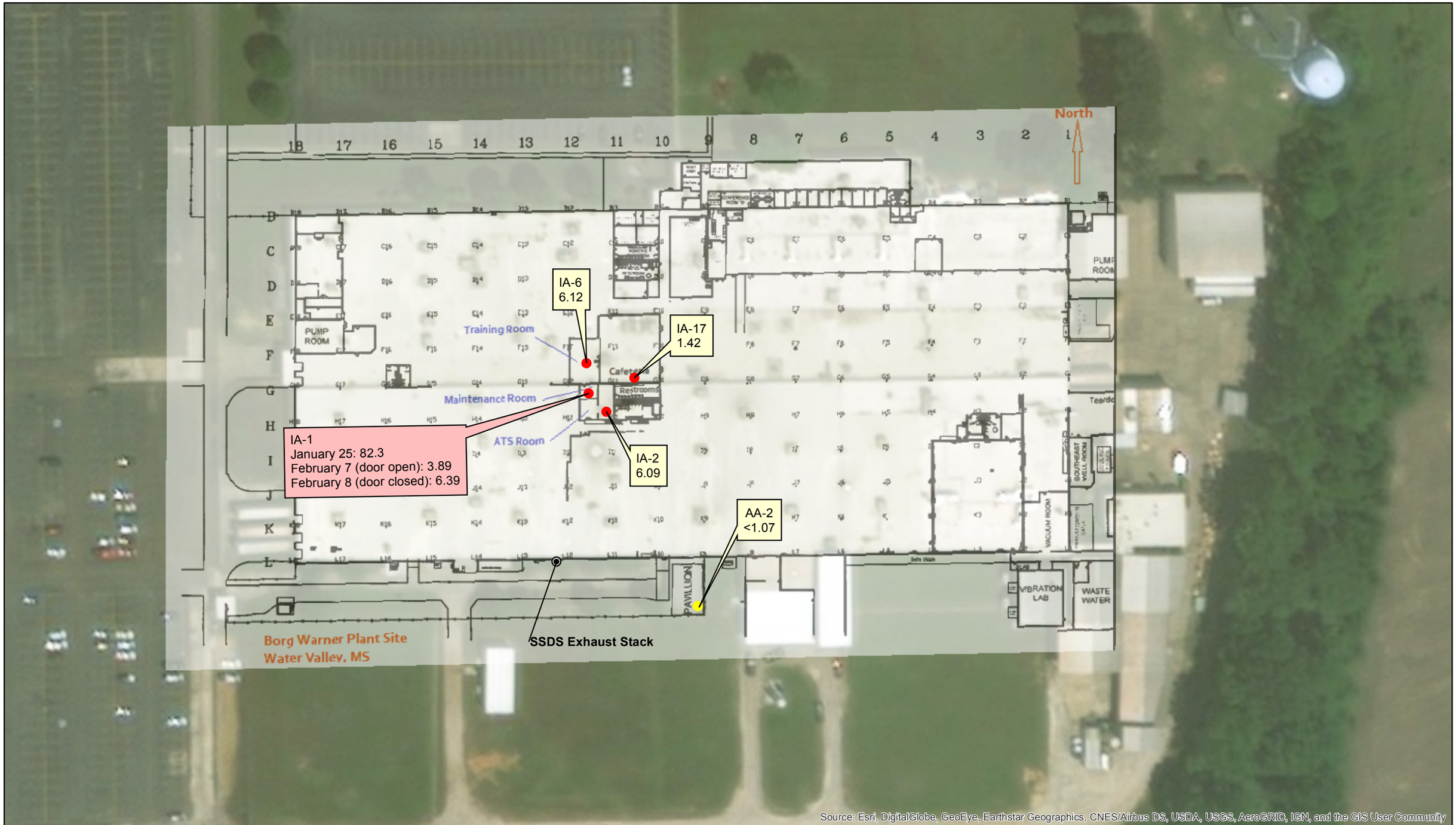
SAMPLE ID	SAMPLING DATE	LABORATORY ID	CoC Concentrations (µg/m³)		
			Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride
USEPA Vapor Intrusion Screening Level (VISL):			**3**	NA	**2.8**
IA-B12	26-Apr-17	L905292-04	6.54	1.77	<0.511
	25-May-17	L912423-05	3.08	<0.793	<0.511
	7-Jun-17	L914832-07	1.64	<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
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 4
INDOOR AIR SAMPLING RESULTS COMPARISON
JANUARY 2017 THROUGH FEBRUARY 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
	25-Jan-18	L966088-05	<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
JANUARY-FEBRUARY 2018

Revised	Drawn	Checked	Approved	Date
LS	NMT	NMT	NMT	2/12/2018

APPENDIX A

ANALYTICAL REPORT

February 05, 2018

First Environment, Inc.

Sample Delivery Group:	L966088
Samples Received:	01/27/2018
Project Number:	RNPRO002D-VM
Description:	EnPro-Coltec-Water Valley (24-hr Indoor Air-BW)
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.

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IA-1 L966088-01 Air

Collected by: Michael Slack | Collected date/time: 01/25/18 12:00 | Received date/time: 01/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1067200	1	01/27/18 22:02	01/27/18 22:02	MBF
Volatile Organic Compounds (MS) by Method TO-15	WG1067675	20	01/29/18 14:29	01/29/18 14:29	AMC

IA-2 L966088-02 Air

Collected by: Michael Slack | Collected date/time: 01/25/18 12:01 | Received date/time: 01/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1067200	1	01/27/18 22:49	01/27/18 22:49	MBF
Volatile Organic Compounds (MS) by Method TO-15	WG1067675	25	01/29/18 15:11	01/29/18 15:11	AMC

IA-6 L966088-03 Air

Collected by: Michael Slack | Collected date/time: 01/25/18 12:03 | Received date/time: 01/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1067200	1	01/27/18 23:35	01/27/18 23:35	MBF
Volatile Organic Compounds (MS) by Method TO-15	WG1067675	25	01/29/18 15:54	01/29/18 15:54	AMC

IA-17 L966088-04 Air

Collected by: Michael Slack | Collected date/time: 01/25/18 12:04 | Received date/time: 01/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1067209	1	01/27/18 19:53	01/27/18 19:53	HJF

AA-2 L966088-05 Air

Collected by: Michael Slack | Collected date/time: 01/25/18 12:08 | Received date/time: 01/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1067209	1	01/27/18 20:40	01/27/18 20:40	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	25.0	59.4	114	270		20	WG1067675
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1067200
Benzene	71-43-2	78.10	0.200	0.639	0.590	1.89		1	WG1067200
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1067200
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1067200
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1067200
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1067200
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1067200
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1067200
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1067200
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1067200
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1067200
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1067200
Chloromethane	74-87-3	50.50	0.200	0.413	0.504	1.04		1	WG1067200
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1067200
Cyclohexane	110-82-7	84.20	0.200	0.689	0.346	1.19		1	WG1067200
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1067200
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1067200
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1067200
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1067200
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1067200
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1067200
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1067200
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	0.300	1.19		1	WG1067200
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1067200
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1067200
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1067200
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1067200
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1067200
1,4-Dioxane	123-91-1	88.10	0.200	0.721	0.601	2.16		1	WG1067200
Ethanol	64-17-5	46.10	12.6	23.8	2200	4140	E	20	WG1067675
Ethylbenzene	100-41-4	106	0.200	0.867	0.466	2.02		1	WG1067200
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.203	0.994		1	WG1067200
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.246	1.38		1	WG1067200
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.403	1.99		1	WG1067200
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1067200
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1067200
Heptane	142-82-5	100	0.200	0.818	3.89	15.9		1	WG1067200
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND	J3	1	WG1067200
n-Hexane	110-54-3	86.20	0.200	0.705	1.15	4.07		1	WG1067200
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1067200
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.712	2.47	B	1	WG1067200
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1067200
2-Butanone (MEK)	78-93-3	72.10	25.0	73.7	185	546		20	WG1067675
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1067200
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1067200
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1067200
Naphthalene	91-20-3	128	0.630	3.30	ND	ND	J3	1	WG1067200
2-Propanol	67-63-0	60.10	25.0	61.5	2260	5550	E	20	WG1067675
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1067200
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1067200
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1067200
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1067200
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	2.45	7.24		1	WG1067200
Toluene	108-88-3	92.10	0.200	0.753	1.74	6.55		1	WG1067200
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND	J3	1	WG1067200

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	WG1067200
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1067200
Trichloroethylene	79-01-6	131	4.00	21.4	15.4	82.3		20	WG1067675
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.786	3.86		1	WG1067200
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	0.257	1.26		1	WG1067200
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	0.401	1.87		1	WG1067200
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1067200
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1067200
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1067200
m&p-Xylene	1330-20-7	106	0.400	1.73	1.80	7.80		1	WG1067200
o-Xylene	95-47-6	106	0.200	0.867	0.696	3.02		1	WG1067200
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*97.3*				WG1067675
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*117*				WG1067200

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	123	292		25	WG1067675
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1067200
Benzene	71-43-2	78.10	0.200	0.639	0.479	1.53		1	WG1067200
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1067200
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1067200
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1067200
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1067200
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1067200
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1067200
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1067200
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1067200
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1067200
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1067200
Chloromethane	74-87-3	50.50	0.200	0.413	0.519	1.07		1	WG1067200
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1067200
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1067200
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1067200
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1067200
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1067200
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1067200
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1067200
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1067200
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1067200
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1067200
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1067200
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1067200
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1067200
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1067200
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1067200
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1067200
Ethanol	64-17-5	46.10	15.8	29.8	2350	4440	E	25	WG1067675
Ethylbenzene	100-41-4	106	0.200	0.867	0.472	2.05		1	WG1067200
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1067200
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.236	1.32		1	WG1067200
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.378	1.87		1	WG1067200
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1067200
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1067200
Heptane	142-82-5	100	0.200	0.818	3.58	14.6		1	WG1067200
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND	J3	1	WG1067200
n-Hexane	110-54-3	86.20	0.200	0.705	ND	ND		1	WG1067200
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1067200
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1067200
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1067200
2-Butanone (MEK)	78-93-3	72.10	31.2	92.0	206	606		25	WG1067675
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1067200
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1067200
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1067200
Naphthalene	91-20-3	128	0.630	3.30	ND	ND	J3	1	WG1067200
2-Propanol	67-63-0	60.10	31.2	76.7	2400	5900	E	25	WG1067675
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1067200
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1067200
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1067200
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1067200
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1067200
Toluene	108-88-3	92.10	0.200	0.753	1.38	5.18		1	WG1067200
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND	J3	1	WG1067200

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	WG1067200
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1067200
Trichloroethylene	79-01-6	131	0.200	1.07	1.14	6.09		1	WG1067200
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.343	1.69		1	WG1067200
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1067200
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1067200
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1067200
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1067200
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1067200
m&p-Xylene	1330-20-7	106	0.400	1.73	1.72	7.46		1	WG1067200
o-Xylene	95-47-6	106	0.200	0.867	0.687	2.98		1	WG1067200
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*122*				WG1067200
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*96.7*				WG1067675

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	177	420		25	WG1067675
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1067200
Benzene	71-43-2	78.10	0.200	0.639	0.345	1.10		1	WG1067200
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1067200
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1067200
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1067200
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1067200
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1067200
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1067200
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1067200
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1067200
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1067200
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1067200
Chloromethane	74-87-3	50.50	0.200	0.413	0.560	1.16		1	WG1067200
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1067200
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1067200
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1067200
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1067200
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1067200
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1067200
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1067200
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1067200
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1067200
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1067200
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1067200
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1067200
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1067200
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1067200
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1067200
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1067200
Ethanol	64-17-5	46.10	15.8	29.8	2030	3830	E	25	WG1067675
Ethylbenzene	100-41-4	106	0.200	0.867	0.349	1.51		1	WG1067200
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1067200
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.243	1.37		1	WG1067200
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.401	1.98		1	WG1067200
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1067200
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1067200
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1067200
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND	J3	1	WG1067200
n-Hexane	110-54-3	86.20	0.200	0.705	ND	ND		1	WG1067200
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1067200
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1067200
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1067200
2-Butanone (MEK)	78-93-3	72.10	31.2	92.0	226	667		25	WG1067675
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1067200
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1067200
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1067200
Naphthalene	91-20-3	128	0.630	3.30	ND	ND	J3	1	WG1067200
2-Propanol	67-63-0	60.10	31.2	76.7	2400	5900	E	25	WG1067675
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1067200
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1067200
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1067200
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1067200
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1067200
Toluene	108-88-3	92.10	0.200	0.753	1.29	4.85		1	WG1067200
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND	J3	1	WG1067200

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	WG1067200
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1067200
Trichloroethylene	79-01-6	131	0.200	1.07	1.14	6.12		1	WG1067200
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.655	3.21		1	WG1067200
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	0.219	1.08		1	WG1067200
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1067200
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1067200
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1067200
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1067200
m&p-Xylene	1330-20-7	106	0.400	1.73	1.31	5.70		1	WG1067200
o-Xylene	95-47-6	106	0.200	0.867	0.522	2.26		1	WG1067200
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*96.8*				WG1067675
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*117*				WG1067200

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	95.8	228	E	1	WG1067209
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1067209
Benzene	71-43-2	78.10	0.200	0.639	0.439	1.40		1	WG1067209
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1067209
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1067209
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1067209
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1067209
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1067209
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1067209
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1067209
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1067209
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1067209
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1067209
Chloromethane	74-87-3	50.50	0.200	0.413	0.508	1.05		1	WG1067209
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1067209
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1067209
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1067209
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1067209
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1067209
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1067209
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1067209
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1067209
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1067209
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1067209
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1067209
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1067209
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1067209
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1067209
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1067209
1,4-Dioxane	123-91-1	88.10	0.200	0.721	0.296	1.07		1	WG1067209
Ethanol	64-17-5	46.10	0.630	1.19	1190	2240	E	1	WG1067209
Ethylbenzene	100-41-4	106	0.200	0.867	0.307	1.33		1	WG1067209
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1067209
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.210	1.18		1	WG1067209
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.310	1.54		1	WG1067209
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1067209
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1067209
Heptane	142-82-5	100	0.200	0.818	3.05	12.5		1	WG1067209
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1067209
n-Hexane	110-54-3	86.20	0.200	0.705	0.434	1.53		1	WG1067209
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1067209
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.885	3.07		1	WG1067209
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1067209
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	156	459	E	1	WG1067209
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1067209
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1067209
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1067209
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1067209
2-Propanol	67-63-0	60.10	1.25	3.07	480	1180	E	1	WG1067209
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1067209
Styrene	100-42-5	104	0.200	0.851	0.206	0.875		1	WG1067209
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1067209
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1067209
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1067209
Toluene	108-88-3	92.10	0.200	0.753	0.926	3.49		1	WG1067209
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1067209

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	WG1067209
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1067209
Trichloroethylene	79-01-6	131	0.200	1.07	0.266	1.42		1	WG1067209
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.544	2.67		1	WG1067209
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1067209
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1067209
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1067209
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1067209
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1067209
m&p-Xylene	1330-20-7	106	0.400	1.73	1.06	4.61		1	WG1067209
o-Xylene	95-47-6	106	0.200	0.867	0.438	1.90		1	WG1067209
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*114*				WG1067209

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	3.01	7.16		1	WG1067209
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1067209
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1067209
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1067209
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1067209
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1067209
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1067209
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1067209
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1067209
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1067209
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1067209
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1067209
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1067209
Chloromethane	74-87-3	50.50	0.200	0.413	0.454	0.938		1	WG1067209
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1067209
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1067209
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1067209
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1067209
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1067209
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1067209
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1067209
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1067209
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1067209
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1067209
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1067209
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1067209
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1067209
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1067209
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1067209
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1067209
Ethanol	64-17-5	46.10	0.630	1.19	6.83	12.9		1	WG1067209
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1067209
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1067209
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.204	1.15		1	WG1067209
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.300	1.49		1	WG1067209
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1067209
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1067209
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1067209
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1067209
n-Hexane	110-54-3	86.20	0.200	0.705	ND	ND		1	WG1067209
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1067209
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.585	2.03		1	WG1067209
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1067209
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1067209
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1067209
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1067209
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1067209
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1067209
2-Propanol	67-63-0	60.10	1.25	3.07	1.69	4.15	B	1	WG1067209
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1067209
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1067209
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1067209
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1067209
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1067209
Toluene	108-88-3	92.10	0.200	0.753	ND	ND		1	WG1067209
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1067209

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	WG1067209
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1067209
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1067209
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1067209
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1067209
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1067209
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1067209
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1067209
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1067209
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1067209
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1067209
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*99.0*				WG1067209

Method Blank (MB)

(MB) R3282441-3 01/27/18 10:45

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	0.0972	J	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	0.144	J	0.0656	0.630
n-Hexane	U		0.0457	0.200
Isopropylbenzene	U		0.0563	0.200
Methylene Chloride	0.156	J	0.0465	0.200

Method Blank (MB)

(MB) R3282441-3 01/27/18 10:45

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	0.197	J	0.154	0.630
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
(S) 1,4-Bromofluorobenzene	*98.8*			*60.0-140*

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

(LCS) R3282441-1 01/27/18 09:17 • (LCSD) R3282441-2 01/27/18 10:00

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	3.84	3.80	102	101	54.0-155			0.960	25
Dichlorodifluoromethane	3.75	3.98	4.09	106	109	69.0-143			2.62	25
1,2-Dichlorotetrafluoroethane	3.75	4.07	4.14	109	110	70.0-130			1.73	25
Chloromethane	3.75	4.01	3.96	107	106	70.0-130			1.19	25
Vinyl chloride	3.75	4.03	3.85	107	103	70.0-130			4.38	25
1,3-Butadiene	3.75	3.98	3.96	106	106	70.0-130			0.445	25
Bromomethane	3.75	4.07	4.04	108	108	70.0-130			0.554	25
Chloroethane	3.75	3.90	3.89	104	104	70.0-130			0.107	25
Trichlorofluoromethane	3.75	4.22	4.15	113	111	70.0-130			1.73	25

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

(LCS) R3282441-1 01/27/18 09:17 • (LCSD) R3282441-2 01/27/18 10:00

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	4.14	4.13	110	110	70.0-130			0.0597	25
1,1-Dichloroethene	3.75	4.08	4.06	109	108	70.0-130			0.332	25
1,1-Dichloroethane	3.75	4.01	4.01	107	107	70.0-130			0.0442	25
Carbon disulfide	3.75	3.81	3.82	102	102	70.0-130			0.145	25
Methylene Chloride	3.75	3.80	3.88	101	103	70.0-130			1.88	25
MTBE	3.75	4.09	4.05	109	108	70.0-130			0.806	25
trans-1,2-Dichloroethene	3.75	4.00	3.99	107	106	70.0-130			0.294	25
n-Hexane	3.75	4.00	3.93	107	105	70.0-130			1.61	25
Vinyl acetate	3.75	4.25	4.34	113	116	70.0-130			2.21	25
cis-1,2-Dichloroethene	3.75	4.04	4.10	108	109	70.0-130			1.42	25
Chloroform	3.75	4.16	4.13	111	110	70.0-130			0.954	25
Cyclohexane	3.75	4.13	4.07	110	109	70.0-130			1.34	25
1,1,1-Trichloroethane	3.75	4.25	4.23	113	113	70.0-130			0.607	25
Carbon tetrachloride	3.75	4.30	4.25	115	113	70.0-130			1.16	25
Benzene	3.75	4.11	4.11	110	110	70.0-130			0.0136	25
1,2-Dichloroethane	3.75	4.30	4.28	115	114	70.0-130			0.521	25
Heptane	3.75	4.04	4.02	108	107	70.0-130			0.590	25
Trichloroethylene	3.75	4.19	4.19	112	112	70.0-130			0.133	25
1,2-Dichloropropane	3.75	4.14	4.10	110	109	70.0-130			0.982	25
1,4-Dioxane	3.75	4.17	4.34	111	116	70.0-152			3.93	25
Bromodichloromethane	3.75	4.26	4.27	114	114	70.0-130			0.207	25
cis-1,3-Dichloropropene	3.75	4.21	4.33	112	115	70.0-130			2.72	25
4-Methyl-2-pentanone (MIBK)	3.75	4.09	4.12	109	110	70.0-142			0.642	25
Toluene	3.75	4.20	4.25	112	113	70.0-130			1.11	25
trans-1,3-Dichloropropene	3.75	4.29	4.33	114	116	70.0-130			1.00	25
1,1,2-Trichloroethane	3.75	4.23	4.30	113	115	70.0-130			1.69	25
Tetrachloroethylene	3.75	4.52	4.56	120	122	70.0-130			0.917	25
Methyl Butyl Ketone	3.75	4.09	4.13	109	110	70.0-150			1.08	25
Dibromochloromethane	3.75	4.60	4.59	123	122	70.0-130			0.113	25
1,2-Dibromoethane	3.75	4.37	4.44	116	119	70.0-130			1.74	25
Chlorobenzene	3.75	4.34	4.39	116	117	70.0-130			1.16	25
Ethylbenzene	3.75	4.19	4.22	112	113	70.0-130			0.652	25
m&p-Xylene	7.50	8.46	8.49	113	113	70.0-130			0.384	25
o-Xylene	3.75	4.17	4.16	111	111	70.0-130			0.437	25
Styrene	3.75	4.24	4.34	113	116	70.0-130			2.27	25
Bromoform	3.75	4.63	4.65	124	124	70.0-130			0.231	25
1,1,2,2-Tetrachloroethane	3.75	4.13	4.07	110	109	70.0-130			1.50	25
4-Ethyltoluene	3.75	4.25	4.25	113	113	70.0-130			0.0132	25
1,3,5-Trimethylbenzene	3.75	4.24	4.23	113	113	70.0-130			0.297	25
1,2,4-Trimethylbenzene	3.75	4.13	4.15	110	111	70.0-130			0.398	25

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

(LCS) R3282441-1 01/27/18 09:17 • (LCSD) R3282441-2 01/27/18 10:00

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	4.27	4.34	114	116	70.0-130			1.59	25
1,4-Dichlorobenzene	3.75	4.43	4.42	118	118	70.0-130			0.142	25
Benzyl Chloride	3.75	4.33	4.32	115	115	70.0-144			0.217	25
1,2-Dichlorobenzene	3.75	4.28	4.32	114	115	70.0-130			0.981	25
1,2,4-Trichlorobenzene	3.75	3.61	4.66	96.3	124	70.0-155		J3	25.2	25
Hexachloro-1,3-butadiene	3.75	3.32	4.55	88.6	121	70.0-145		J3	31.2	25
Naphthalene	3.75	3.39	4.46	90.3	119	70.0-155		J3	27.3	25
Allyl Chloride	3.75	3.90	3.85	104	103	70.0-130			1.26	25
2-Chlorotoluene	3.75	4.27	4.29	114	114	70.0-130			0.636	25
Methyl Methacrylate	3.75	4.19	4.20	112	112	70.0-130			0.310	25
Tetrahydrofuran	3.75	4.03	4.01	107	107	70.0-140			0.464	25
2,2,4-Trimethylpentane	3.75	4.04	3.99	108	107	70.0-130			1.16	25
Vinyl Bromide	3.75	4.11	4.09	110	109	70.0-130			0.550	25
Isopropylbenzene	3.75	4.18	4.25	112	113	70.0-130			1.63	25
(S) 1,4-Bromofluorobenzene				*99.6*	*100*	*60.0-140*				

Method Blank (MB)

(MB) R3282332-3 01/27/18 11:39

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) R3282332-3 01/27/18 11:39

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	0.567	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	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	*97.7*			*60.0-140*

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

(LCS) R3282332-1 01/27/18 10:07 • (LCSD) R3282332-2 01/27/18 10:52

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	3.61	3.63	96.4	96.7	52.0-158			0.374	25
Propene	3.75	4.04	4.03	108	108	54.0-155			0.156	25
Dichlorodifluoromethane	3.75	3.68	3.74	98.2	99.7	69.0-143			1.52	25
1,2-Dichlorotetrafluoroethane	3.75	3.96	3.97	106	106	70.0-130			0.308	25
Chloromethane	3.75	3.79	3.80	101	101	70.0-130			0.195	25

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

(LCS) R3282332-1 01/27/18 10:07 • (LCSD) R3282332-2 01/27/18 10:52

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	4.04	4.09	108	109	70.0-130			1.18	25
1,3-Butadiene	3.75	4.29	4.08	114	109	70.0-130			5.02	25
Bromomethane	3.75	3.90	3.93	104	105	70.0-130			0.839	25
Chloroethane	3.75	3.91	3.94	104	105	70.0-130			0.643	25
Trichlorofluoromethane	3.75	3.89	3.93	104	105	70.0-130			1.07	25
1,1,2-Trichlorotrifluoroethane	3.75	3.88	3.91	103	104	70.0-130			0.801	25
1,1-Dichloroethene	3.75	3.97	3.99	106	106	70.0-130			0.536	25
1,1-Dichloroethane	3.75	4.00	4.04	107	108	70.0-130			1.01	25
Acetone	3.75	4.04	4.05	108	108	70.0-130			0.211	25
2-Propanol	3.75	4.30	4.24	115	113	66.0-150			1.39	25
Carbon disulfide	3.75	3.89	3.93	104	105	70.0-130			1.15	25
Methylene Chloride	3.75	3.90	3.92	104	104	70.0-130			0.459	25
MTBE	3.75	3.98	3.98	106	106	70.0-130			0.183	25
trans-1,2-Dichloroethene	3.75	3.99	4.00	106	107	70.0-130			0.279	25
n-Hexane	3.75	3.99	4.01	106	107	70.0-130			0.448	25
Vinyl acetate	3.75	4.46	4.45	119	119	70.0-130			0.171	25
Methyl Ethyl Ketone	3.75	4.06	4.10	108	109	70.0-130			1.04	25
cis-1,2-Dichloroethene	3.75	4.00	4.02	107	107	70.0-130			0.612	25
Chloroform	3.75	3.92	3.95	105	105	70.0-130			0.729	25
Cyclohexane	3.75	3.91	3.95	104	105	70.0-130			0.860	25
1,1,1-Trichloroethane	3.75	3.91	3.96	104	106	70.0-130			1.23	25
Carbon tetrachloride	3.75	3.88	3.91	104	104	70.0-130			0.747	25
Benzene	3.75	3.94	3.97	105	106	70.0-130			0.581	25
1,2-Dichloroethane	3.75	4.01	4.03	107	108	70.0-130			0.522	25
Heptane	3.75	4.15	4.14	111	110	70.0-130			0.224	25
Trichloroethylene	3.75	3.89	3.91	104	104	70.0-130			0.482	25
1,2-Dichloropropane	3.75	4.03	4.09	107	109	70.0-130			1.38	25
1,4-Dioxane	3.75	4.09	4.11	109	110	70.0-152			0.473	25
Bromodichloromethane	3.75	3.99	4.00	106	107	70.0-130			0.361	25
cis-1,3-Dichloropropene	3.75	4.04	4.06	108	108	70.0-130			0.408	25
4-Methyl-2-pentanone (MIBK)	3.75	4.32	4.32	115	115	70.0-142			0.160	25
Toluene	3.75	4.01	4.00	107	107	70.0-130			0.187	25
trans-1,3-Dichloropropene	3.75	4.07	4.08	109	109	70.0-130			0.203	25
1,1,2-Trichloroethane	3.75	3.93	3.94	105	105	70.0-130			0.294	25
Tetrachloroethylene	3.75	3.89	3.91	104	104	70.0-130			0.452	25
Methyl Butyl Ketone	3.75	4.59	4.57	122	122	70.0-150			0.323	25
Dibromochloromethane	3.75	4.08	4.11	109	110	70.0-130			0.740	25
1,2-Dibromoethane	3.75	4.10	4.12	109	110	70.0-130			0.360	25
Chlorobenzene	3.75	4.05	4.08	108	109	70.0-130			0.757	25
Ethylbenzene	3.75	4.09	4.09	109	109	70.0-130			0.169	25

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

(LCS) R3282332-1 01/27/18 10:07 • (LCSD) R3282332-2 01/27/18 10:52

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	8.06	8.10	107	108	70.0-130			0.569	25
o-Xylene	3.75	4.07	4.08	109	109	70.0-130			0.176	25
Styrene	3.75	4.17	4.17	111	111	70.0-130			0.151	25
Bromoform	3.75	4.11	4.14	110	110	70.0-130			0.738	25
1,1,2,2-Tetrachloroethane	3.75	4.12	4.12	110	110	70.0-130			0.201	25
4-Ethyltoluene	3.75	4.15	4.18	111	111	70.0-130			0.683	25
1,3,5-Trimethylbenzene	3.75	4.11	4.16	110	111	70.0-130			1.15	25
1,2,4-Trimethylbenzene	3.75	4.12	4.14	110	110	70.0-130			0.506	25
1,3-Dichlorobenzene	3.75	4.11	4.16	110	111	70.0-130			1.11	25
1,4-Dichlorobenzene	3.75	4.22	4.27	113	114	70.0-130			0.955	25
Benzyl Chloride	3.75	4.49	4.51	120	120	70.0-144			0.555	25
1,2-Dichlorobenzene	3.75	4.07	4.12	109	110	70.0-130			1.23	25
1,2,4-Trichlorobenzene	3.75	4.25	4.29	113	115	70.0-155			1.07	25
Hexachloro-1,3-butadiene	3.75	3.95	3.99	105	106	70.0-145			0.798	25
Naphthalene	3.75	4.26	4.27	114	114	70.0-155			0.392	25
Allyl Chloride	3.75	4.08	4.11	109	110	70.0-130			0.742	25
2-Chlorotoluene	3.75	3.87	3.90	103	104	70.0-130			0.744	25
Methyl Methacrylate	3.75	4.21	4.20	112	112	70.0-130			0.112	25
Tetrahydrofuran	3.75	4.09	4.12	109	110	70.0-140			0.756	25
2,2,4-Trimethylpentane	3.75	4.01	4.04	107	108	70.0-130			0.730	25
Vinyl Bromide	3.75	3.83	3.87	102	103	70.0-130			1.13	25
Isopropylbenzene	3.75	4.05	4.05	108	108	70.0-130			0.0728	25
(S) 1,4-Bromofluorobenzene				*100*	*100*	*60.0-140*				

Method Blank (MB)

(MB) R3282595-3 01/29/18 12:02

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	0.159	J	0.0882	1.25
Trichloroethylene	U		0.0545	0.200
Ethanol	U		0.0832	0.630
(S) 1,4-Bromofluorobenzene	*96.4*			*60.0-140*

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

(LCS) R3282595-1 01/29/18 08:40 • (LCSD) R3282595-2 01/29/18 09:26

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	3.55	3.50	94.7	93.3	52.0-158			1.51	25
Acetone	3.75	3.95	3.96	105	106	70.0-130			0.142	25
2-Propanol	3.75	4.07	4.06	109	108	66.0-150			0.191	25
Methyl Ethyl Ketone	3.75	4.05	4.08	108	109	70.0-130			0.651	25
Trichloroethylene	3.75	3.88	3.90	103	104	70.0-130			0.660	25
(S) 1,4-Bromofluorobenzene				*99.8*	*99.9*	*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.
J3	The associated batch QC was outside the established quality control range for precision.

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		

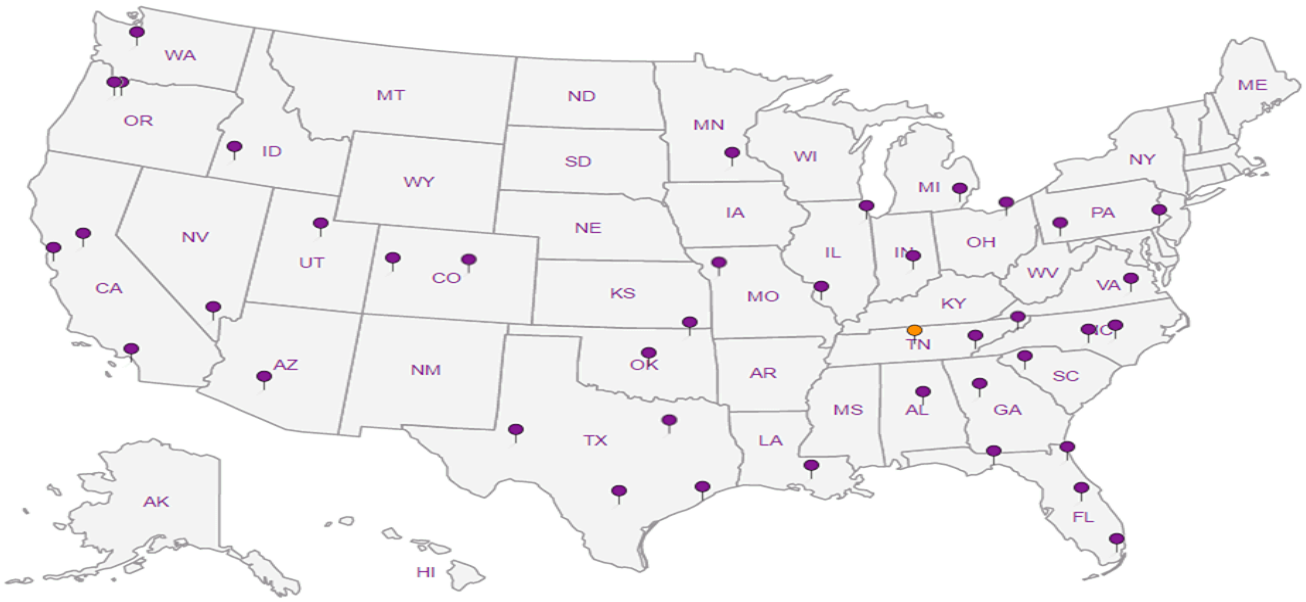
Third Party Federal Accreditations

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:	Billing Information:	Analysis
First Environment, Inc. **91 Fulton St.** **Boonton, NJ 07005**	**First Environment, Inc.** **91 Fulton St.** **Boonton NJ 07005** **Attn: Justin Picolo** **JPicolo@firstenvironment.com**	TO-15 Summa
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): MTS	***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

Chain of Custody Page ___ of ___

ESC LABORATORY 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# L966088
M227
Table #
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	6914	1/25/18	12:00	30	12		-01
IA-2	ATS Room	5709	1/25/18	12:01	30	7		02
IA-6	Training Room	6608	1/25/18	12:03	30	1		03
IA-17	Cafeteria	5551	1/25/18	12:04	30	7		04
AA-2	Ambient Air - Pavilion	5454	1/25/18	12:08	29	7		05

BI-WEEKLY INDOOR AIR SAMPLING: BW PLANT

Remarks: **Additional Information is depicted in Sample Collection Table** 4196 3260 6977

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: UPS / FedEx / Courier	Condition: (lab use only)
MTS	1/26/18	1825			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: AMB °C Bottles Received: 5	COC Seal Intact: ___Y ___N ___NA (OK)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 1/27/18 Time: 845	pH Checked: NCF:

Indoor Air Monitoring (Bi-Weekly Sampling)
Borg Warner Facility
Water Valley, Yalobusha Co., MS
January 25-26, 2018
Indoor Air (IA), Ambient Air (AA), Air Permit Evaluation (SSD) - Sampling Event

L966088

Sample ID	Sample Location	Flow Controller ID	Canister ID	Canister Size (liters)	Initial Date/time	Initial Vacuum ("Hg)	Final Date/time	Final Vacuum ("Hg)	Sampler
IA-1	Maintenance Room	7823	6914	6	1/25/18 12:00	30	1/26/18 12:00	12	M. Slack
IA-2	ATS Room	6698	5709	6	1/25/18 12:01	30	1/26/18 12:01	7	M. Slack
IA-6	Training Room	6510	6608	6	1/25/18 12:03	30	1/26/18 11:05	1	M. Slack
IA-17	Cafeteria	7550	5551	6	1/25/18 12:04	30	1/26/18 12:04	7	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	8449	5454	6	1/25/18 12:08	29	1/26/18 12:08	7	M. Slack

Invo: FIRENVBNJ-OXFOR Date : 07Jul17 Shipping : 0.00
Customer : P609357 Weight : 10 LBS Special : 0.00
Phone : (615)758-5858 COD : Handling : 0.00
SAT Del : Y DV : 0.00 Total : 0.00
Svcs: PRIORITY OVERNIGHT
TRCK: 7384 4204 1066

Invo: FIRENVBNJ-OXFOR Date : 11Jan18 Shipping : 0.00
Customer : P635013 Weight : 10 LBS Special : 0.00
Phone : (615)758-5858 COD : Handling : 0.00
SAT Del : Y DV : 0.00 Total : 0.00
Svcs: PRIORITY OVERNIGHT
TRCK: 4196 3260 6988

Invo: FIRENVBNJ-OXFOR Date : 11Jan18 Shipping : 0.00
Customer : P635013 Weight : 10 LBS Special : 0.00
Phone : (615)758-5858 COD : Handling : 0.00
SAT Del : Y DV : 0.00 Total : 0.00
Svcs: PRIORITY OVERNIGHT
TRCK: 4196 3260 6977

Weather Conditions (@ time of canister placement): SUNNY - mid 50's; WINDS - LIGHT - FROM WEST

Michael T. Slack (First Environment)

Weather Conditions during 24-hr sampling period: F - 50's - WINDS FROM WEST 3 - 10 mph
LOWS - UPPER 30'S - F

NS – Not Sampled

1/26/18

Invo: FIRENVBNJ-OXFOR Date : 11Jan18 Shipping : 0.00
Customer : P635013 Weight : 10 LBS Special : 0.00
Phone : (615)758-5858 COD : Handling : 0.00
SAT Del : Y DV : 0.00 Total : 0.00
Svcs: PRIORITY OVERNIGHT
TRCK: 4196 3260 6999

ESC LAB SCIENCES
Cooler Receipt Form

Client: FIRENVBNJ	SDG#	L966088	
Cooler Received/Opened On: 01/27/18	Temperature:	AMB	
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?			

APPENDIX B

ANALYTICAL REPORT

February 09, 2018

First Environment, Inc.

Sample Delivery Group:	L969021
Samples Received:	02/09/2018
Project Number:	ENPRO002D-VM
Description:	EnPro-Coltec-Water Valley (24-hr Indoor Air-BW)
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 L969021-01 Air

Collected by	Collected date/time	Received date/time
Michael T. Slack	02/07/18 11:35	02/09/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1071864	1	02/09/18 12:58	02/09/18 12:58	AMC
Volatile Organic Compounds (MS) by Method TO-15	WG1071864	25	02/09/18 13:40	02/09/18 13:40	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	75.8	180		25	WG1071864
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1071864
Benzene	71-43-2	78.10	0.200	0.639	0.305	0.975		1	WG1071864
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1071864
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1071864
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1071864
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1071864
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1071864
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1071864
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1071864
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1071864
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1071864
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1071864
Chloromethane	74-87-3	50.50	0.200	0.413	0.425	0.878		1	WG1071864
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1071864
Cyclohexane	110-82-7	84.20	0.200	0.689	0.238	0.821		1	WG1071864
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1071864
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1071864
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1071864
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1071864
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1071864
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1071864
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1071864
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1071864
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1071864
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1071864
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1071864
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1071864
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1071864
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1071864
Ethanol	64-17-5	46.10	15.8	29.8	1900	3590	E	25	WG1071864
Ethylbenzene	100-41-4	106	0.200	0.867	0.347	1.50		1	WG1071864
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1071864
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.219	1.23		1	WG1071864
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.269	1.33		1	WG1071864
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1071864
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1071864
Heptane	142-82-5	100	0.200	0.818	2.73	11.2		1	WG1071864
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1071864
n-Hexane	110-54-3	86.20	0.200	0.705	2.20	7.76		1	WG1071864
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1071864
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1071864
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1071864
2-Butanone (MEK)	78-93-3	72.10	31.2	92.0	127	374		25	WG1071864
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1071864
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1071864
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1071864
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1071864
2-Propanol	67-63-0	60.10	31.2	76.7	1620	3990	E	25	WG1071864
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1071864
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1071864
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1071864
Tetrachloroethylene	127-18-4	166	0.200	1.36	0.647	4.39		1	WG1071864
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1071864
Toluene	108-88-3	92.10	0.200	0.753	0.832	3.13		1	WG1071864
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1071864

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	WG1071864
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1071864
Trichloroethylene	79-01-6	131	0.200	1.07	0.726	3.89		1	WG1071864
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.590	2.90		1	WG1071864
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1071864
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1071864
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1071864
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1071864
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1071864
m&p-Xylene	1330-20-7	106	0.400	1.73	1.34	5.80		1	WG1071864
o-Xylene	95-47-6	106	0.200	0.867	0.497	2.16		1	WG1071864
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*93.6*				WG1071864
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*97.4*				WG1071864

Method Blank (MB)

(MB) R3285292-3 02/09/18 12:09

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) R3285292-3 02/09/18 12:09

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	0.181	J	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	*88.5*			*60.0-140*

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

(LCS) R3285292-1 02/09/18 10:39 • (LCSD) R3285292-2 02/09/18 11:24

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	3.15	2.78	84.1	74.2	52.0-158			12.4	25
Propene	3.75	3.04	2.99	80.9	79.8	54.0-155			1.44	25
Dichlorodifluoromethane	3.75	3.23	3.55	86.1	94.7	69.0-143			9.43	25
1,2-Dichlorotetrafluoroethane	3.75	3.32	3.64	88.5	97.0	70.0-130			9.14	25
Chloromethane	3.75	3.11	3.16	82.8	84.1	70.0-130			1.55	25

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

(LCS) R3285292-1 02/09/18 10:39 • (LCSD) R3285292-2 02/09/18 11:24

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	3.31	3.28	88.3	87.6	70.0-130			0.853	25
1,3-Butadiene	3.75	3.25	3.16	86.6	84.4	70.0-130			2.56	25
Bromomethane	3.75	3.73	3.76	99.4	100	70.0-130			0.930	25
Chloroethane	3.75	3.26	3.35	86.8	89.4	70.0-130			2.90	25
Trichlorofluoromethane	3.75	4.02	4.07	107	109	70.0-130			1.26	25
1,1,2-Trichlorotrifluoroethane	3.75	3.86	3.92	103	105	70.0-130			1.62	25
1,1-Dichloroethene	3.75	3.52	3.53	94.0	94.2	70.0-130			0.193	25
1,1-Dichloroethane	3.75	3.43	3.46	91.4	92.4	70.0-130			1.02	25
Acetone	3.75	3.40	3.41	90.5	90.9	70.0-130			0.419	25
2-Propanol	3.75	3.34	3.40	89.2	90.8	66.0-150			1.81	25
Carbon disulfide	3.75	3.36	3.41	89.6	90.8	70.0-130			1.37	25
Methylene Chloride	3.75	3.20	3.32	85.2	88.4	70.0-130			3.69	25
MTBE	3.75	3.60	3.65	95.9	97.3	70.0-130			1.41	25
trans-1,2-Dichloroethene	3.75	3.44	3.47	91.8	92.6	70.0-130			0.896	25
n-Hexane	3.75	3.19	3.22	85.0	85.9	70.0-130			1.05	25
Vinyl acetate	3.75	3.53	3.55	94.0	94.7	70.0-130			0.731	25
Methyl Ethyl Ketone	3.75	3.44	3.65	91.7	97.3	70.0-130			5.94	25
cis-1,2-Dichloroethene	3.75	3.46	3.46	92.2	92.2	70.0-130			0.0319	25
Chloroform	3.75	3.67	3.75	97.9	99.9	70.0-130			2.04	25
Cyclohexane	3.75	3.58	3.62	95.4	96.5	70.0-130			1.19	25
1,1,1-Trichloroethane	3.75	3.94	3.97	105	106	70.0-130			0.649	25
Carbon tetrachloride	3.75	4.07	4.14	109	110	70.0-130			1.63	25
Benzene	3.75	3.59	3.71	95.8	98.9	70.0-130			3.17	25
1,2-Dichloroethane	3.75	3.77	3.85	100	103	70.0-130			2.11	25
Heptane	3.75	3.17	3.25	84.6	86.6	70.0-130			2.26	25
Trichloroethylene	3.75	3.83	3.91	102	104	70.0-130			2.11	25
1,2-Dichloropropane	3.75	3.43	3.50	91.3	93.4	70.0-130			2.24	25
1,4-Dioxane	3.75	3.86	4.03	103	107	70.0-152			4.37	25
Bromodichloromethane	3.75	3.77	3.92	100	104	70.0-130			3.99	25
cis-1,3-Dichloropropene	3.75	3.67	3.79	97.9	101	70.0-130			3.07	25
4-Methyl-2-pentanone (MIBK)	3.75	3.30	3.40	88.0	90.5	70.0-142			2.82	25
Toluene	3.75	3.78	3.88	101	103	70.0-130			2.39	25
trans-1,3-Dichloropropene	3.75	3.66	3.92	97.7	105	70.0-130			6.76	25
1,1,2-Trichloroethane	3.75	3.79	3.94	101	105	70.0-130			3.72	25
Tetrachloroethylene	3.75	4.49	4.59	120	122	70.0-130			2.19	25
Methyl Butyl Ketone	3.75	3.48	3.62	92.7	96.6	70.0-150			4.14	25
Dibromochloromethane	3.75	4.23	4.42	113	118	70.0-130			4.38	25
1,2-Dibromoethane	3.75	4.09	4.27	109	114	70.0-130			4.39	25
Chlorobenzene	3.75	4.08	4.21	109	112	70.0-130			3.22	25
Ethylbenzene	3.75	3.95	4.02	105	107	70.0-130			1.80	25

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

(LCS) R3285292-1 02/09/18 10:39 • (LCSD) R3285292-2 02/09/18 11:24

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	8.14	8.33	109	111	70.0-130			2.31	25
o-Xylene	3.75	4.01	4.09	107	109	70.0-130			1.90	25
Styrene	3.75	4.19	4.25	112	113	70.0-130			1.35	25
Bromoform	3.75	4.60	4.70	123	125	70.0-130			2.19	25
1,1,2,2-Tetrachloroethane	3.75	3.77	3.88	101	104	70.0-130			2.82	25
4-Ethyltoluene	3.75	4.18	4.24	112	113	70.0-130			1.41	25
1,3,5-Trimethylbenzene	3.75	4.17	4.22	111	113	70.0-130			1.19	25
1,2,4-Trimethylbenzene	3.75	4.07	4.08	109	109	70.0-130			0.194	25
1,3-Dichlorobenzene	3.75	4.43	4.52	118	120	70.0-130			1.91	25
1,4-Dichlorobenzene	3.75	4.51	4.60	120	123	70.0-130			1.99	25
Benzyl Chloride	3.75	4.09	4.18	109	112	70.0-144			2.30	25
1,2-Dichlorobenzene	3.75	4.31	4.52	115	120	70.0-130			4.73	25
1,2,4-Trichlorobenzene	3.75	4.79	5.07	128	135	70.0-155			5.69	25
Hexachloro-1,3-butadiene	3.75	4.70	4.82	125	129	70.0-145			2.65	25
Naphthalene	3.75	4.35	4.58	116	122	70.0-155			5.03	25
Allyl Chloride	3.75	3.23	3.24	86.1	86.3	70.0-130			0.219	25
2-Chlorotoluene	3.75	4.39	4.42	117	118	70.0-130			0.660	25
Methyl Methacrylate	3.75	3.34	3.40	89.2	90.6	70.0-130			1.59	25
Tetrahydrofuran	3.75	3.10	3.09	82.7	82.5	70.0-140			0.189	25
2,2,4-Trimethylpentane	3.75	3.25	3.28	86.6	87.6	70.0-130			1.15	25
Vinyl Bromide	3.75	3.89	3.90	104	104	70.0-130			0.231	25
Isopropylbenzene	3.75	4.08	4.11	109	110	70.0-130			0.743	25
(S) 1,4-Bromofluorobenzene				*94.1*	*93.2*	*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
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		

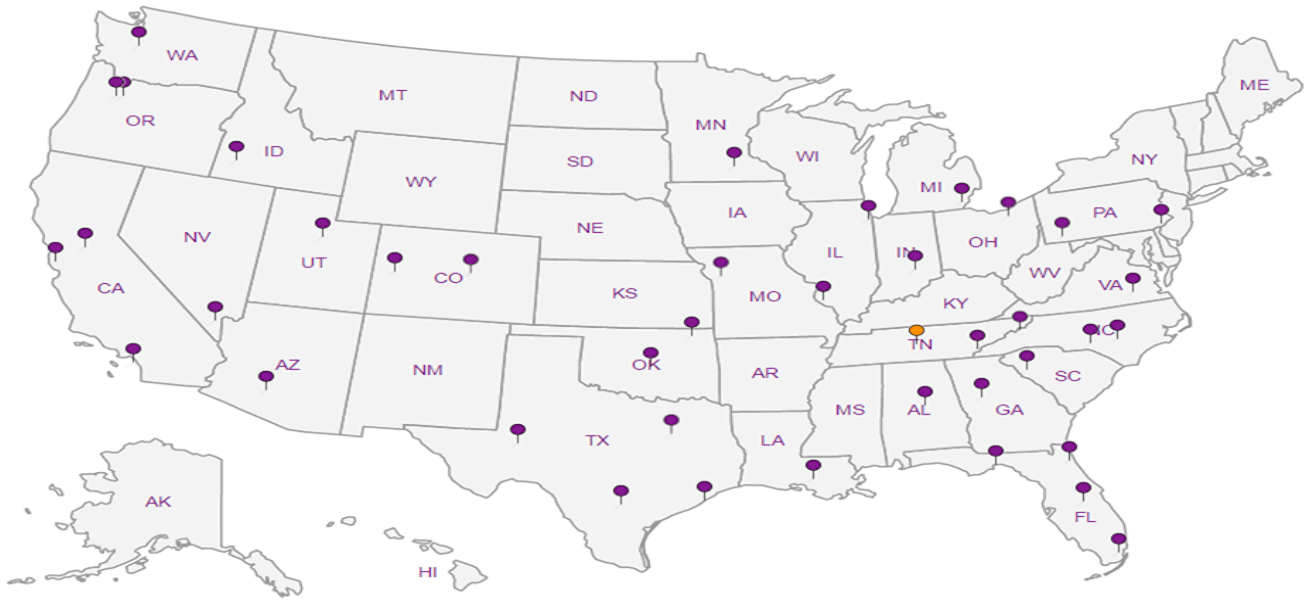
Third Party Federal Accreditations

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): MT Slack

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

Date Results Needed: **Same Day**

Email? ___No ✓Yes
FAX? ✓No ___Yes

Canister Pressure/Vacuum

Sample ID	Sample Description	Can #	Date — INITIAL	Time	Initial	Final
IA-1	Maintenance Room	6965	2/7/18	11:35	30	10

Analysis

TO-15 Summa			
X			

Chain of Custody Page ___ of ___

ESC LABORATORIES
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# L969021
M069

Acctnum:
Template:
Prelogin:
TSR:
PB:
Shipped Via:

Rem./Contaminant	Sample # (lab only)
	L-01

SEPERATE COC FOR IA-1 - RUSH-TURNAROUND REQUESTED

Remarks: **Additional Information is depicted in Sample Collection Table** 4094 8310 2527

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
MT Slack	2/8/18	12:45	
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: A.M.B °C Bottles Received: 1

Date: 2/9/18 Time: 845

Condition: (lab use only) OK

COC Seal Intact: ✓Y ___N ___NA

pH Checked: NCF:

ESC LAB SCIENCES
Cooler Receipt Form

Client: FTRENVBNJ	SDG#	L969021	
Cooler Received/Opened On: 02/9 /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?			

APPENDIX C

ANALYTICAL REPORT

February 11, 2018

First Environment, Inc.

Sample Delivery Group:	L969370
Samples Received:	02/10/2018
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 L969370-01 Air

Collected by	Collected date/time	Received date/time
Michael T. Slack	02/08/18 16:10	02/10/18 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1072238	1	02/10/18 12:23	02/10/18 12:23	AMC
Volatile Organic Compounds (MS) by Method TO-15	WG1072238	25	02/10/18 13:56	02/10/18 13:56	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.

John V Hawkins

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	31.2	74.1	96.4	229		25	WG1072238
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1072238
Benzene	71-43-2	78.10	0.200	0.639	0.379	1.21		1	WG1072238
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1072238
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1072238
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1072238
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1072238
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1072238
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1072238
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1072238
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1072238
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1072238
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1072238
Chloromethane	74-87-3	50.50	0.200	0.413	0.502	1.04		1	WG1072238
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1072238
Cyclohexane	110-82-7	84.20	0.200	0.689	0.458	1.58		1	WG1072238
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1072238
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1072238
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1072238
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1072238
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1072238
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1072238
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1072238
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1072238
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	0.318	1.26		1	WG1072238
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1072238
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1072238
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1072238
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1072238
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1072238
Ethanol	64-17-5	46.10	15.8	29.8	1520	2870	E	25	WG1072238
Ethylbenzene	100-41-4	106	0.200	0.867	0.450	1.95		1	WG1072238
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.223	1.09		1	WG1072238
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.237	1.33		1	WG1072238
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND	J3	1	WG1072238
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1072238
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1072238
Heptane	142-82-5	100	0.200	0.818	5.77	23.6		1	WG1072238
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1072238
n-Hexane	110-54-3	86.20	0.200	0.705	3.22	11.4		1	WG1072238
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1072238
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1072238
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1072238
2-Butanone (MEK)	78-93-3	72.10	31.2	92.0	132	389		25	WG1072238
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1072238
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1072238
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1072238
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1072238
2-Propanol	67-63-0	60.10	31.2	76.7	2060	5070	E	25	WG1072238
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1072238
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1072238
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1072238
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1072238
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1072238
Toluene	108-88-3	92.10	0.200	0.753	1.43	5.39		1	WG1072238
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1072238

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	WG1072238
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1072238
Trichloroethylene	79-01-6	131	0.200	1.07	1.19	6.39		1	WG1072238
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.702	3.45		1	WG1072238
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	0.239	1.17		1	WG1072238
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	0.369	1.72		1	WG1072238
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1072238
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1072238
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1072238
m&p-Xylene	1330-20-7	106	0.400	1.73	1.63	7.08		1	WG1072238
o-Xylene	95-47-6	106	0.200	0.867	0.633	2.75		1	WG1072238
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*103*				WG1072238
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*95.7*				WG1072238

Method Blank (MB)

(MB) R3285439-3 02/10/18 10:47

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	0.0823	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	0.0811	J	0.0603	0.200
1,3-Dichlorobenzene	U		0.0597	0.200
1,4-Dichlorobenzene	0.0775	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	0.0676	J	0.0656	0.630
n-Hexane	U		0.0457	0.200
Isopropylbenzene	U		0.0563	0.200

Method Blank (MB)

(MB) R3285439-3 02/10/18 10:47

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	0.320	J	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	0.218	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	U		0.0946	0.400
o-Xylene	U		0.0633	0.200
Ethanol	U		0.0832	0.630
(S) 1,4-Bromofluorobenzene	*90.9*			*60.0-140*

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

(LCS) R3285439-1 02/10/18 09:13 • (LCSD) R3285439-2 02/10/18 10:01

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	4.59	4.45	122	119	52.0-158			3.20	25
Propene	3.75	4.08	3.83	109	102	54.0-155			6.28	25
Dichlorodifluoromethane	3.75	2.64	3.69	70.4	98.5	69.0-143		J3	33.3	25
1,2-Dichlorotetrafluoroethane	3.75	3.57	4.35	95.2	116	70.0-130			19.7	25
Chloromethane	3.75	4.11	3.89	110	104	70.0-130			5.55	25

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

(LCS) R3285439-1 02/10/18 09:13 • (LCSD) R3285439-2 02/10/18 10:01

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	4.40	4.06	117	108	70.0-130			7.96	25
1,3-Butadiene	3.75	4.15	3.93	111	105	70.0-130			5.67	25
Bromomethane	3.75	4.53	4.25	121	113	70.0-130			6.22	25
Chloroethane	3.75	4.47	4.20	119	112	70.0-130			6.24	25
Trichlorofluoromethane	3.75	4.53	4.21	121	112	70.0-130			7.11	25
1,1,2-Trichlorotrifluoroethane	3.75	4.47	4.17	119	111	70.0-130			7.11	25
1,1-Dichloroethene	3.75	4.26	4.00	114	107	70.0-130			6.38	25
1,1-Dichloroethane	3.75	4.31	4.04	115	108	70.0-130			6.53	25
Acetone	3.75	4.35	4.07	116	109	70.0-130			6.53	25
2-Propanol	3.75	4.19	3.96	112	106	66.0-150			5.80	25
Carbon disulfide	3.75	4.35	4.07	116	108	70.0-130			6.77	25
Methylene Chloride	3.75	4.13	3.85	110	103	70.0-130			6.85	25
MTBE	3.75	4.39	4.12	117	110	70.0-130			6.50	25
trans-1,2-Dichloroethene	3.75	4.40	4.15	117	111	70.0-130			5.89	25
n-Hexane	3.75	4.25	4.00	113	107	70.0-130			6.09	25
Vinyl acetate	3.75	4.48	4.20	120	112	70.0-130			6.44	25
Methyl Ethyl Ketone	3.75	4.47	4.21	119	112	70.0-130			6.11	25
cis-1,2-Dichloroethene	3.75	4.50	4.21	120	112	70.0-130			6.78	25
Chloroform	3.75	4.45	4.13	119	110	70.0-130			7.52	25
Cyclohexane	3.75	4.34	4.04	116	108	70.0-130			7.31	25
1,1,1-Trichloroethane	3.75	4.44	4.15	118	111	70.0-130			6.73	25
Carbon tetrachloride	3.75	4.47	4.17	119	111	70.0-130			6.91	25
Benzene	3.75	4.38	4.08	117	109	70.0-130			7.02	25
1,2-Dichloroethane	3.75	4.47	4.12	119	110	70.0-130			8.18	25
Heptane	3.75	4.18	3.93	111	105	70.0-130			6.11	25
Trichloroethylene	3.75	4.39	4.16	117	111	70.0-130			5.36	25
1,2-Dichloropropane	3.75	4.33	4.06	115	108	70.0-130			6.49	25
1,4-Dioxane	3.75	4.42	4.33	118	115	70.0-152			2.17	25
Bromodichloromethane	3.75	4.40	4.10	117	109	70.0-130			7.00	25
cis-1,3-Dichloropropene	3.75	4.48	4.22	119	112	70.0-130			5.95	25
4-Methyl-2-pentanone (MIBK)	3.75	4.17	3.94	111	105	70.0-142			5.50	25
Toluene	3.75	4.52	4.27	121	114	70.0-130			5.77	25
trans-1,3-Dichloropropene	3.75	4.45	4.22	119	112	70.0-130			5.40	25
1,1,2-Trichloroethane	3.75	4.54	4.26	121	113	70.0-130			6.48	25
Tetrachloroethylene	3.75	4.50	4.22	120	112	70.0-130			6.65	25
Methyl Butyl Ketone	3.75	4.25	4.03	113	108	70.0-150			5.28	25
Dibromochloromethane	3.75	4.41	4.20	118	112	70.0-130			4.86	25
1,2-Dibromoethane	3.75	4.39	4.22	117	113	70.0-130			3.92	25
Chlorobenzene	3.75	4.41	4.26	118	114	70.0-130			3.48	25
Ethylbenzene	3.75	4.45	4.26	119	114	70.0-130			4.42	25

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

(LCS) R3285439-1 02/10/18 09:13 • (LCSD) R3285439-2 02/10/18 10:01

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	8.82	8.43	118	112	70.0-130			4.51	25
o-Xylene	3.75	4.31	4.23	115	113	70.0-130			1.77	25
Styrene	3.75	4.22	4.17	113	111	70.0-130			1.26	25
Bromoform	3.75	4.17	4.22	111	112	70.0-130			1.06	25
1,1,2,2-Tetrachloroethane	3.75	3.98	4.03	106	107	70.0-130			1.15	25
4-Ethyltoluene	3.75	4.09	4.18	109	112	70.0-130			2.30	25
1,3,5-Trimethylbenzene	3.75	3.97	4.13	106	110	70.0-130			3.83	25
1,2,4-Trimethylbenzene	3.75	3.81	4.06	102	108	70.0-130			6.33	25
1,3-Dichlorobenzene	3.75	3.93	4.20	105	112	70.0-130			6.53	25
1,4-Dichlorobenzene	3.75	3.91	4.14	104	110	70.0-130			5.61	25
Benzyl Chloride	3.75	3.76	4.14	100	110	70.0-144			9.44	25
1,2-Dichlorobenzene	3.75	3.65	4.03	97.2	107	70.0-130			10.0	25
1,2,4-Trichlorobenzene	3.75	3.70	4.16	98.6	111	70.0-155			11.9	25
Hexachloro-1,3-butadiene	3.75	3.72	4.00	99.2	107	70.0-145			7.38	25
Naphthalene	3.75	3.78	4.10	101	109	70.0-155			7.96	25
Allyl Chloride	3.75	4.09	3.87	109	103	70.0-130			5.60	25
2-Chlorotoluene	3.75	4.00	4.14	107	110	70.0-130			3.36	25
Methyl Methacrylate	3.75	4.39	4.12	117	110	70.0-130			6.51	25
Tetrahydrofuran	3.75	4.20	3.96	112	106	70.0-140			5.71	25
2,2,4-Trimethylpentane	3.75	4.31	4.08	115	109	70.0-130			5.31	25
Vinyl Bromide	3.75	4.55	4.26	121	114	70.0-130			6.45	25
Isopropylbenzene	3.75	4.15	4.19	111	112	70.0-130			0.856	25
(S) 1,4-Bromofluorobenzene				*94.8*	*99.3*	*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
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.
J3	The associated batch QC was outside the established quality control range for precision.

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		

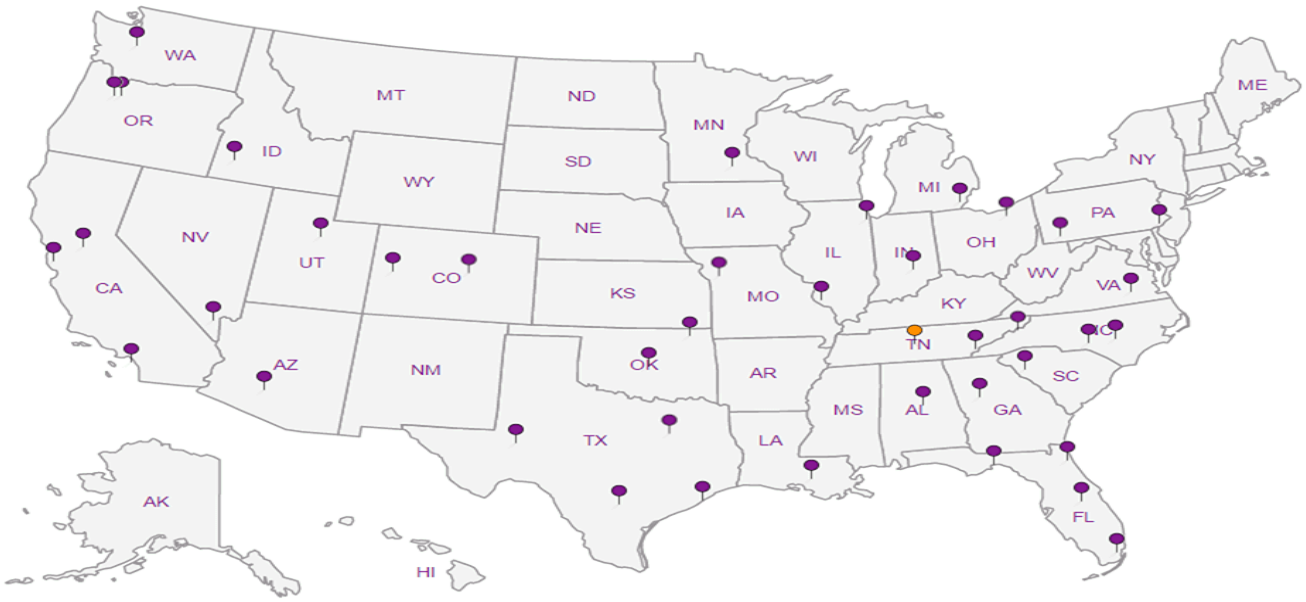
Third Party Federal Accreditations

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):

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

Date Results Needed: **Same Day**

Email? ___No ✓Yes
FAX? ✓No ___Yes

Canister Pressure/Vacuum

Analysis: TO-15 Summa

Chain of Custody Page ___ of ___

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L # L969370
Tat M092

Acctnum:
Template:
Prelogin:
TSR:
PB:
Shipped Via:

Sample ID	Sample Description	Can #	Date (INITIAL)	Time (INITIAL)	Initial	Final	TO-15 Summa	Rem./Contaminant	Sample # (lab only)
IA-1	Maintenance Room	7307	2/8/18	16:10	30	5	X		-01

DOOR CLOSED @ 11:45 (2/8/18) - MAINTENANCE ROOM

7384420b 2112

Remarks: **2nd canister placed in Maintenance after bi-weekly sampling event (Maintenance room door closed)**

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☑ FedEx ☐ Courier ☐ ____	Condition: (lab use only) OK
	2/9/18	18:15			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: A m B °C Bottles Received: 1	COC Seal Intact: ___Y ___N ✓NA
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 2/10/18 Time: 900	pH Checked: / NCF:

Indoor Air Monitoring (Bi-Weekly Sampling)
Borg Warner Facility
Water Valley, Yalobusha Co., MS
Feb. 8-9, 2018
Indoor Air (IA), Ambient Air (AA), Air Permit Evaluation (SSD) - Sampling Event

L969370

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 – Door Closed	8417	7307	6	2/8/18 16:10	30	2/9/18 16:10	5	M. Slack
AA-2	Pavilion	NS							M. Slack

Invo: FIRENVBNJ-OXFOR Date : 26Jul17
Customer : P610926 Weight : 10 LBS
Phone : (615)758-5858 COD :
SAT Del : Y DV : 0.00

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

Svcs: PRIORITY OVERNIGHT
TRCK: 7384 4206 2112

Weather Conditions (@ time of canister placement): SUNNY - MID-50s - WINDS S - 3 mph

Weather Conditions during 24-hr sampling period: CLEAR - WINDS OUT OF SOUTH < 5 mph MID-50s

NS – Not Sampled

Michael T. Slack (First Environment)
2/9/18

ESC LAB SCIENCES
Cooler Receipt Form

Client: FIRENVBNS	SDG#	L968370
Cooler Received/Opened On: 02/10/18	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?			