

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



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January 8, 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

01/08/2018

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 a SSDS Progress Report on the June 19-20, 2017 ambient and indoor air sampling results and the installation of extraction point (“EP”) No. 3. First Environment submitted SSDS Progress Reports on subsequent rounds of ambient and indoor air sampling on July 17, August 7, August 21, September 11, October 2, October 9, October 17, November 1, November 15, November 29, and December 13, 2017.

On December 17-18, 2017, First Environment collected a round of ambient and indoor air samples from the four interior rooms at the Plant—the Training Room, ATS Room, Maintenance Room, and Cafeteria.

2.0 Indoor Air Monitoring – December 17-18, 2017

2.1 Instrumentation

On December 17-18, 2017, First Environment collected ambient and indoor air samples by placing laboratory provided 6-liter capacity 24-hour Summa® canisters equipped with flow regulators calibrated to 24 hours.

2.2 Methodology

First Environment collected four indoor air samples at the four interior rooms of the Plant, and one ambient air sample outside the Plant. Standard chain-of-custody procedures were implemented for the sampling, including signing the sample lot in and out from the facility to the laboratory on a chain-of-custody sheet and dating the start and end dates/times of sample collection. First Environment also followed standard indoor air sampling techniques to collect the indoor air samples at the locations depicted in Figure 1. Wherever possible, First Environment mounted the Summa® canisters on columns or secured them in an area above the

floor at or near the “breathing space.” The vacuum measurements in Summa® canisters were noted before and after sampling to ensure that the flow regulator at each canister was working properly.

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

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

2.3 Results

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

The sample results in the ATS Room and Cafeteria were below USEPA’s Vapor Intrusion Screening Level (“VISL”) for TCE of 3 µg/m³. The sample results in the Training Room were above USEPA’s VISL but below the MDEQ action level of 26 µg/m³.

The sample results in the Maintenance Room were above the MDEQ action level of 26 µg/m³. First Environment believes that the elevated concentration of TCE in the Maintenance Room was caused, in part, by the work performed by First Environment in the Maintenance Room and sump area on December 16, 2017, the day prior to the sampling.

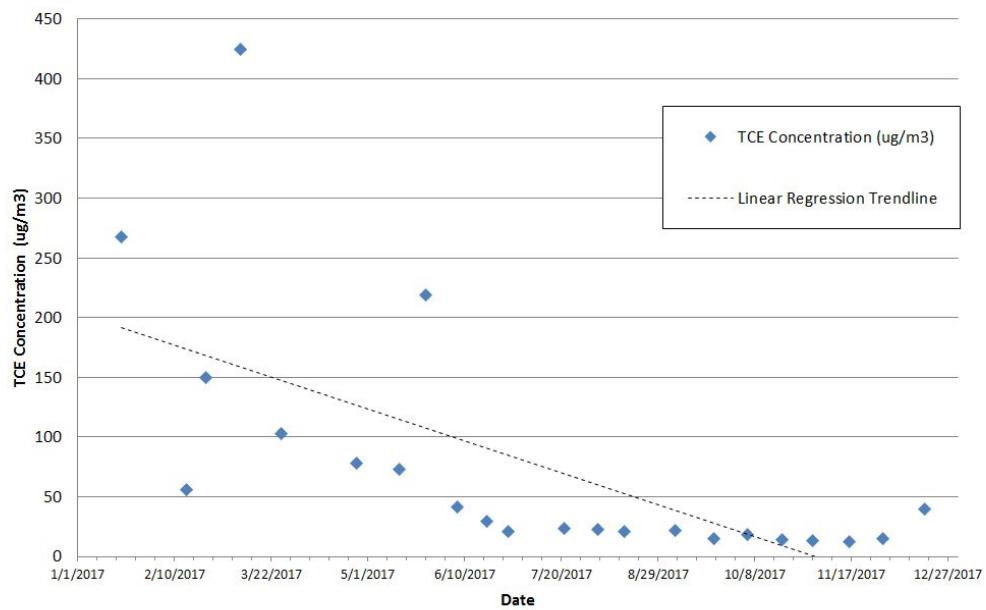
Specifically, on December 16, First Environment assessed the current (active) sump area, as outlined in the November 9, 2017 Sub-Slab Depressurization System Effectiveness Evaluation Workplan, which was approved by the MDEQ on November 13, 2017. First Environment installed six (6) temporary sampling ports - approximately one inch (1") in diameter - to a depth of approximately eight (8) inches below the six-inch (6") thick concrete slab (within the underlying aggregate/fill material) to conduct head-space analysis utilizing a calibrated PID (ppb RAE – ppbRAE3000 – PGM740) and moisture measurements (6-n-1 Psychrometer with Enthalpy – EP8711P) of the sub-surface soil directly beneath the slab. First Environment

conducted this drilling to evaluate the sub-slab soils three (3) to four (4) feet from the open door to the Maintenance Room, which created a pathway for vapors to enter the Maintenance Room; thus, resulting in elevated concentrations as compared to previous sampling events. These elevated concentrations are expected to remain during the remainder of the sump evaluation and MiHpt work occurring in January 2018.

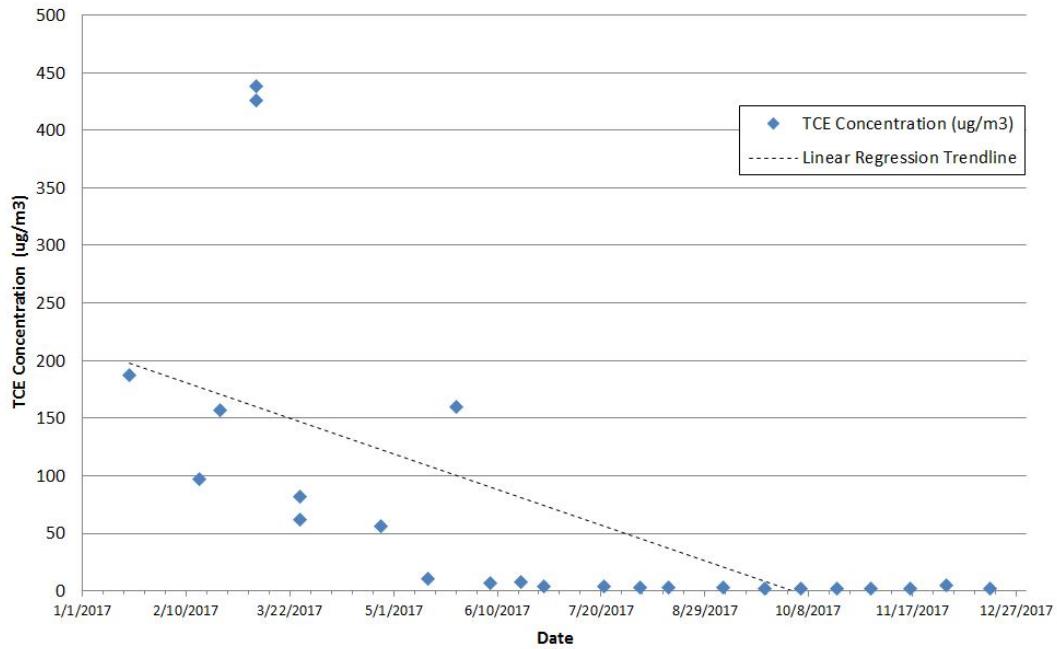
The resulting elevated concentration of TCE in the Maintenance Room also confirms that the sump area is acting as a source of indoor air impacts. The sump relocation is expected to be completed in January 2018. Additionally, on December 29, 2017, First Environment sealed the void spaces in the concrete wall between the existing sump and the Maintenance Room. First Environment drilled a total of eleven (11) holes into the void spaces of the cinderblock wall and filled the void spaces with an expanding foam (Dow's Great Stuff – Insulating Foam Sealant – Big Gap Filler) using a straw attached to each can of foam sealant. Following the completion of dispensing the foam sealant, First Environment patched the holes with a concrete patch compound. First Environment will continue to monitor the indoor air in the Maintenance Room.

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

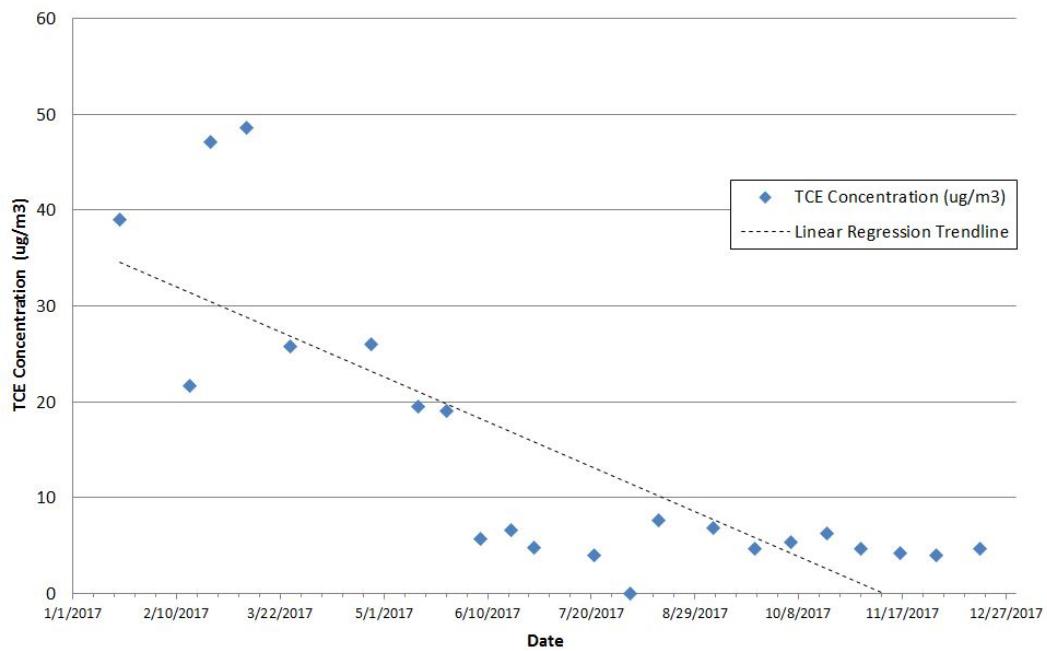
TCE Concentration History at IA-1 (Maintenance Room)



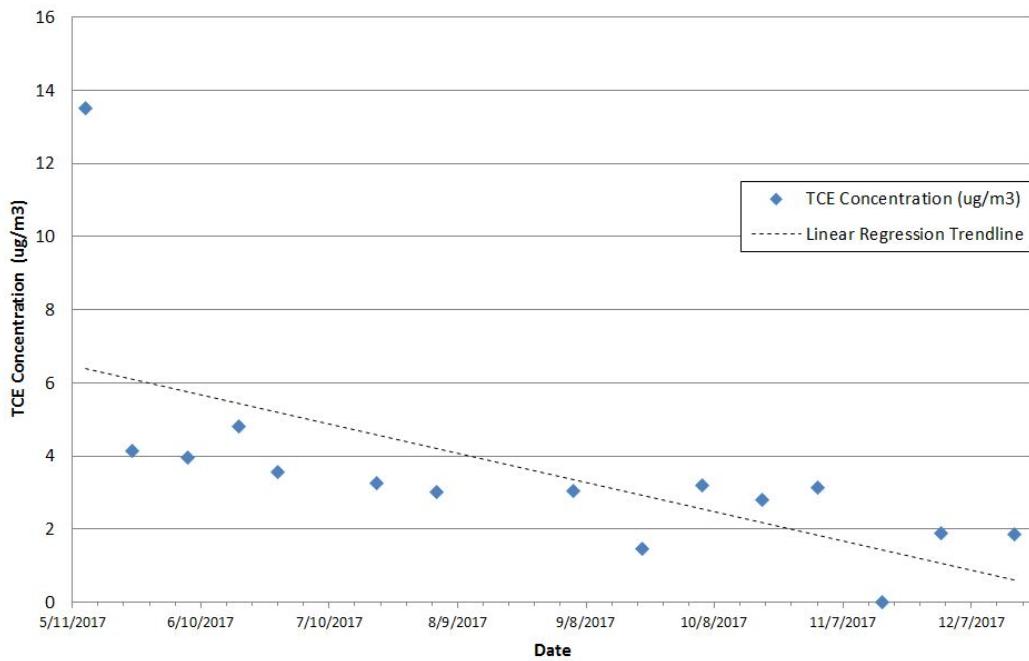
TCE Concentration History at IA-2 (ATS Room)



TCE Concentration History at IA-6 (Training Room)



TCE Concentration History at IA-17 (Cafeteria)



3.0 Summary of Indoor Air Sampling

Since June 2017, the sample results in the ATS Room (IA-2), Training Room (IA-6), and Cafeteria (IA-17) have been below the MDEQ action level of 26 µg/m³. As previously explained, the elevated concentration of TCE in the Maintenance Room (IA-1) after First Environment performed an evaluation in the sump area confirms that the sump area is acting as a source of vapor intrusion.

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

4.0 Air Permit Evaluation

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

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



TABLES

TABLE 1
INDOOR AIR SAMPLING RESULTS
DECEMBER 17, 2017
FORMER HOLLEY AUTOMOTIVE/COLTEC INDUSTRIES FACILITY
WATER VALLEY, MS

SAMPLE LOCATION: SAMPING DATE: LABORATORY ID:	IA-1 12/17/2017 L958416-01	IA-2 12/17/2017 L958416-02	IA-6 12/17/2017 L958416-03	IA-17 12/17/2017 L958416-04	AA-2 12/17/2017 L958416-05
Analyte	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³
ACETONE	219	678	194	151	10.6
ALLYL CHLORIDE	<0.626	<0.626	<0.626	<0.626	<0.626
BENZENE	1.02	1.13	0.975	1.05	0.806
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	1.14	0.995	1.02	1.01	0.989
2-CHLOROTOLUENE	<1.03	<1.03	<1.03	<1.03	<1.03
CYCLOHEXANE	<0.689	<0.689	<0.689	<0.689	<0.689
CHLORODIBROMOMETHANE	<1.7	<1.7	<1.7	<1.7	<1.7
1,2-DIBROMOETHANE	<1.54	<1.54	<1.54	<1.54	<1.54
1,2-DICHLOROBENZENE	<1.2	<1.2	<1.2	<1.2	<1.2
1,3-DICHLOROBENZENE	<1.2	<1.2	<1.2	<1.2	<1.2
1,4-DICHLOROBENZENE	<1.2	<1.2	<1.2	<1.2	<1.2
1,2-DICHLOROETHANE	<0.81	<0.81	<0.81	<0.81	<0.81
1,1-DICHLOROETHANE	<0.802	<0.802	<0.802	<0.802	<0.802

TABLE 1
INDOOR AIR SAMPLING RESULTS
DECEMBER 17, 2017
FORMER HOLLEY AUTOMOTIVE/COLTEC INDUSTRIES FACILITY
WATER VALLEY, MS

SAMPLE LOCATION: SAMPING DATE: LABORATORY ID:	IA-1 12/17/2017 L958416-01	IA-2 12/17/2017 L958416-02	IA-6 12/17/2017 L958416-03	IA-17 12/17/2017 L958416-04	AA-2 12/17/2017 L958416-05
Analyte	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³
1,1-DICHLOROETHENE	<0.793	<0.793	<0.793	<0.793	<0.793
CIS-1,2-DICHLOROETHENE	<0.793	<0.793	<0.793	<0.793	<0.793
TRANS-1,2-DICHLOROETHENE	<0.793	<0.793	<0.793	<0.793	<0.793
1,2-DICHLOROPROPANE	<0.924	<0.924	<0.924	<0.924	<0.924
CIS-1,3-DICHLOROPROPENE	<0.908	<0.908	<0.908	<0.908	<0.908
TRANS-1,3-DICHLOROPROPENE	<0.908	<0.908	<0.908	<0.908	<0.908
1,4-DIOXANE	<0.721	<0.721	<0.721	<0.721	<0.721
ETHANOL	5,180 (E)	9,370 (E)	5,290 (E)	4,090 (E)	16.6
ETHYLBENZENE	3.09	2.48	1.8	1.88	<0.867
4-ETHYLTOLEUNE	<0.982	<0.982	1.25	<0.982	<0.982
TRICHLOROFLUOROMETHANE	1.36	1.4	1.39	1.41	1.36
DICHLORODIFLUOROMETHANE	1.75	2.1	1.72	1.73	1.72
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	26	27.9	20.3	21.7	<0.818
HEXACHLORO-1,3-BUTADIENE	<6.73	<6.73	<6.73	<6.73	<6.73
N-HEXANE	1.44	0.789	0.725	0.817	<0.705
ISOPROPYLBENZENE	<0.983	<0.983	<0.983	<0.983	<0.983
METHYLENE CHLORIDE	<0.694	<0.694	<0.694	0.782 (B))	<0.694
METHYL BUTYL KETONE	<5.11	<5.11	<5.11	<5.11	<5.11
2-BUTANONE (MEK)	666	1070	765	584	<3.69
4-METHYL-2-PENTANONE (MIBK)	5.66	5.65	<5.12	<5.12	<5.12
METHYL METHACRYLATE	<0.819	<0.819	<0.819	<0.819	<0.819
METHYL TERT-BUTYL ETHER	<0.721	<0.721	<0.721	<0.721	<0.721
NAPHTHALENE	<3.3	<3.3	<3.3	<3.3	<3.3
2-PROPANOL	2310	3,330 (E)	2540	1990	18.1

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DECEMBER 17, 2017
FORMER HOLLEY AUTOMOTIVE/COLTEC INDUSTRIES FACILITY
WATER VALLEY, MS

SAMPLE LOCATION: SAMPING DATE: LABORATORY ID:	IA-1 12/17/2017 L958416-01	IA-2 12/17/2017 L958416-02	IA-6 12/17/2017 L958416-03	IA-17 12/17/2017 L958416-04	AA-2 12/17/2017 L958416-05
Analyte	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³
PROPENE	<0.689	<0.689	<0.689	<0.689	<0.689
STYRENE	<0.851	<0.851	<0.851	<0.851	<0.851
1,1,2,2-TETRACHLOROETHANE	<1.37	<1.37	<1.37	<1.37	<1.37
TETRACHLOROETHENE	<1.36	<1.36	<1.36	<1.36	<1.36
TETRAHYDROFURAN	37.9	<0.59	<0.59	<0.59	<0.59
TOLUENE	12	7.53	5.96	6.41	1.24
1,2,4-TRICHLOROBENZENE	<4.66	<4.66	<4.66	<4.66	<4.66
1,1,1-TRICHLOROETHANE	<1.09	<1.09	<1.09	<1.09	<1.09
1,1,2-TRICHLOROETHANE	<1.09	<1.09	<1.09	<1.09	<1.09
TRICHLOROETHENE	40	1.98	4.69	1.86	<1.07
1,2,4-TRIMETHYLBENZENE	4.15	4.06	2.49	2.59	<0.982
1,3,5-TRIMETHYLBENZENE	1.15	1.16	<0.982	<0.982	<0.982
2,2,4-TRIMETHYLPENTANE	1.91	1.66	1.32	1.32	<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	10.6	8.51	6.09	6.23	<1.73
O-XYLENE	3.15	2.71	1.87	1.88	<0.867
1,4-BROMOFLUOROBENZENE	134 97.7	146 96.6 (J1)	117 95.5	95.0 121	96.7

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

SAMPLE ID	SAMPLING DATE	LABORATORY ID	CoC Concentrations ($\mu\text{g}/\text{m}^3$)		
			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
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
	9-Mar-17	L895061-04	438	88.7	1.68
	26-Mar-17	L898762-02	61.8	<0.793	<0.511
	26-Mar-17	L898762-04	82.3	<0.793	<0.511
	26-Apr-17	L905292-02	56.6	10.8	<0.511
	14-May-17	L909544-02	10.8	<0.793	<0.511
	25-May-17	L912423-08	160	<0.793	<0.511
	7-Jun-17	L914832-12	6.58	<0.793	<0.511
	19-Jun-17	L917924-12	8.16	1.88	<0.511
	28-Jun-17	L920054-13	4.21	<0.793	<0.511
	21-Jul-17	L924410-02	4.3	<0.793	<0.511
	4-Aug-17	L927407-02	2.94	<0.793	<0.511
	15-Aug-17	L930026-02	2.91	<0.793	<0.511
	5-Sep-17	L934535-02	3.52	0.967	<0.511
	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
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

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

SAMPLE ID	SAMPLING DATE	LABORATORY ID	CoC Concentrations ($\mu\text{g}/\text{m}^3$)		
			Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride
		USEPA Vapor Intrusion Screening Level (VISL):	3	NA	2.8
IA-14	19-Jan-17 23-Feb-17	L1702183-14 L892423-04	3.07 3.32	0.928 <0.793	<0.051 <0.511
IA-17	14-May-17 25-May-17 7-Jun-17 19-Jun-17 28-Jun-17 21-Jul-17 4-Aug-17 15-Aug-17 5-Sep-17 21-Sep-17 5-Oct-17 19-Oct-17 1-Nov-17 16-Nov-17 30-Nov-17 17-Dec-17	L909544-05 L912423-02 L914832-10 L917924-10 L920054-10 L924410-04 L927407-04 L930026-04 L934535-04 L938896-04 L942068-04 L945503-04 L948263-04 L952200-04 L954578-04 L958416-04	13.5 4.15 3.96 4.82 3.56 3.27 3.02 <5.36 3.04 1.46 3.2 2.79 3.15 <1.07 1.89 1.86	<0.793 <0.793 <0.793 4.48 <0.793 <0.793 <0.793 <3.96 5.6 <0.793 <0.793 <0.793 2.33 <0.793 <0.793 <0.793	<0.511 <0.511 <0.511 <0.511 <0.511 <0.511 <0.511 <2.56 <0.511 <0.511 <0.511 <0.511 <0.511 <0.511 <0.511 <0.511
IA-B12	26-Apr-17 25-May-17 7-Jun-17 19-Jun-17 28-Jun-17 21-Jul-17 4-Aug-17 15-Aug-17 5-Sep-17	L905292-04 L912423-05 L914832-07 L917924-09 L920054-08 L924410-05 L927407-05 L930026-05 L934535-05	6.54 3.08 1.64 1.66 <1.07 1.08 <1.07 <1.07 <1.07	1.77 <0.793 <0.793 <0.793 <0.793 <0.793 <0.793 <0.793 <0.793	<0.511 <0.511 <0.511 <0.511 <0.511 <0.511 <0.511 <0.511 <0.511
IA-C16	26-Apr-17 25-May-17 7-Jun-17 19-Jun-17 28-Jun-17 21-Jul-17 4-Aug-17 15-Aug-17 5-Sep-17 30-Nov-17	L905292-05 L912423-06 L914832-08 L917924-07 L920054-07 L924410-06 L927407-06 L930026-06 L934535-06 L954578-05	6.48 3.88 1.55 2 1.22 1.08 1.25 <1.07 <1.07 <1.07	1.82 <0.793 <0.793 <0.793 <0.793 <0.793 <0.793 <0.793 <0.793 <0.793	<0.511 <0.511 <0.511 <0.511 <0.511 <0.511 <0.511 <0.511 <0.511 <0.511
IA-D5	25-May-17 7-Jun-17 19-Jun-17 28-Jun-17 21-Jul-17 4-Aug-17 15-Aug-17 5-Sep-17	L912423-12 L914832-03 L917924-03 L920054-03 L924410-08 L927407-10 L930026-10 L934535-10	<1.07 1.47 1.66 <1.07 <1.07 <1.07 <1.07 1.3	<0.793 <0.793 <0.793 <0.793 <0.793 <0.793 <0.793 <0.793	<0.511 <0.511 <0.511 <0.511 <0.511 <0.511 <0.511 <0.511
IA-G4	25-May-17 7-Jun-17 19-Jun-17 28-Jun-17 21-Jul-17 4-Aug-17 15-Aug-17 5-Sep-17 30-Nov-17	L912423-11 L914832-02 L917924-02 L920054-02 L924410-09 L927407-11 L930026-11 L934535-11 L954578-07	<1.07 3.31 1.35 <1.07 <1.07 <1.07 <1.07 1.17 <1.07	<0.793 <0.793 <0.793 <0.793 <0.793 <0.793 <0.793 <0.793 <0.793	<0.511 <0.511 <0.511 <0.511 <0.511 <0.511 <0.511 <0.511 <0.511
IA-G13	26-Apr-17 14-May-17 25-May-17 7-Jun-17 19-Jun-17 28-Jun-17 21-Jul-17 4-Aug-17 15-Aug-17 5-Sep-17	L905292-06 L909544-04 L912423-06 L914832-06 L917924-06 L920054-06 L924410-07 L927407-07 L930026-07 L934535-07	8.98 4.65 3.88 2.54 2.46 1.41 1.6 1.76 1.25 1.78	<0.793 <0.793 <0.793 <0.793 <0.793 <0.793 <0.793 <0.793 <0.793 <0.793	<0.511 <0.511 <0.511 <0.511 <0.511 <0.511 <0.511 <0.511 <0.511 <0.511
IA-K8	25-May-17 7-Jun-17 19-Jun-17 28-Jun-17 21-Jul-17 4-Aug-17 15-Aug-17 5-Sep-17	L912423-10 L914832-01 L917924-01 L920054-01 L924410-10 L927407-12 L930026-12 L934535-12	1.47 7.86 1.31 <1.07 <1.07 <1.07 <1.07 <1.07	<0.793 <0.793 <0.793 <0.793 <0.793 <0.793 <0.793 <0.793	<0.511 <0.511 <0.511 <0.511 <0.511 <0.511 <0.511 <0.511

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

SAMPLE ID	SAMPLING DATE	LABORATORY ID	CoC Concentrations ($\mu\text{g}/\text{m}^3$)		
			Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride
		USEPA Vapor Intrusion Screening Level (VISL):	3	NA	2.8
IA-K13	26-Apr-17 25-May-17 7-Jun-17 19-Jun-17 28-Jun-17 21-Jul-17 4-Aug-17 15-Aug-17 5-Sep-17 30-Nov-17	L905292-07 L912423-04 L914832-05 L917924-05 L920054-05 L924410-12 L927407-08 L930026-08 L934535-08 L954578-06	6.53 5.28 1.59 2.2 1.33 1.34 <1.07 <1.07 1.67 <1.07	<0.793 <0.793 <0.793 <0.793 <0.793 <0.793 <0.793 <0.793 <0.793 <0.793	<0.511 <0.511 <0.511 <0.511 <0.511 <0.511 <0.511 <0.511 <0.511 <0.511
IA-L16	26-Apr-17 7-Jun-17 25-May-17 19-Jun-17 28-Jun-17 21-Jul-17 4-Aug-17 15-Aug-17 5-Sep-17	L905292-08 L914832-04 L912423-09 L917924-04 L920054-04 L924410-11 L927407-09 L930026-09 L934535-09	5.77 2.09 1.36 2.81 1.32 1.18 <1.07 1.13 1.14	1.75 <0.793 <0.793 <0.793 <0.793 <0.793 <0.793 <0.793 <0.793	<0.511 <0.511 <0.511 <0.511 <0.511 <0.511 <0.511 <0.511 <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 28-Jun-17	L917924-14 L920054-14	5.33 3.75	1.19 <0.793	<0.511 <0.511
AA-1	19-Jan-17	L1702183-17	<0.107	<0.079	<0.051
AA-2	19-Jan-17 26-Apr-17 25-May-17 7-Jun-17 19-Jun-17 28-Jun-17 21-Jul-17 4-Aug-17 15-Aug-17 5-Sep-17 21-Sep-17 5-Oct-17 19-Oct-17 1-Nov-17 16-Nov-17 30-Nov-17 17-Dec-17	L1702183-18 L905292-09 L912423-13 L914832-09 L917924-08 L920054-09 L924410-13 L927407-13 L930026-13 L934535-13 L938896-05 L942068-05 L945503-05 L948263-05 L952200-05 L954578-10 L958416-05	0.129 <0.107 <1.07 <1.07 <1.07 16.7 <1.07 <1.07 <1.07 <1.07 <1.07 <1.07 <1.07 <1.07 <1.07 <1.07 <1.07 <1.07 <1.07 <1.07	<0.079 <0.793 <0.793 <0.793 <0.793 <0.793 <0.793 <0.793 <0.793 <0.793 <0.793 <0.793 <0.793 <0.793 <0.793 <0.793 <0.793 <0.793	<0.051 <0.511 <0.511 <0.511 <0.511 <0.511 <0.511 <0.511 <0.511 <0.511 <0.511 <0.511 <0.511 <0.511 <0.511 <0.511 <0.511
IA-ATS-2ND F	15-Aug-17	L930026-14	1.86	<0.793	<0.511
IA-OFFICE 2ND F	15-Aug-17	L930026-15	<1.07	<0.793	<0.511

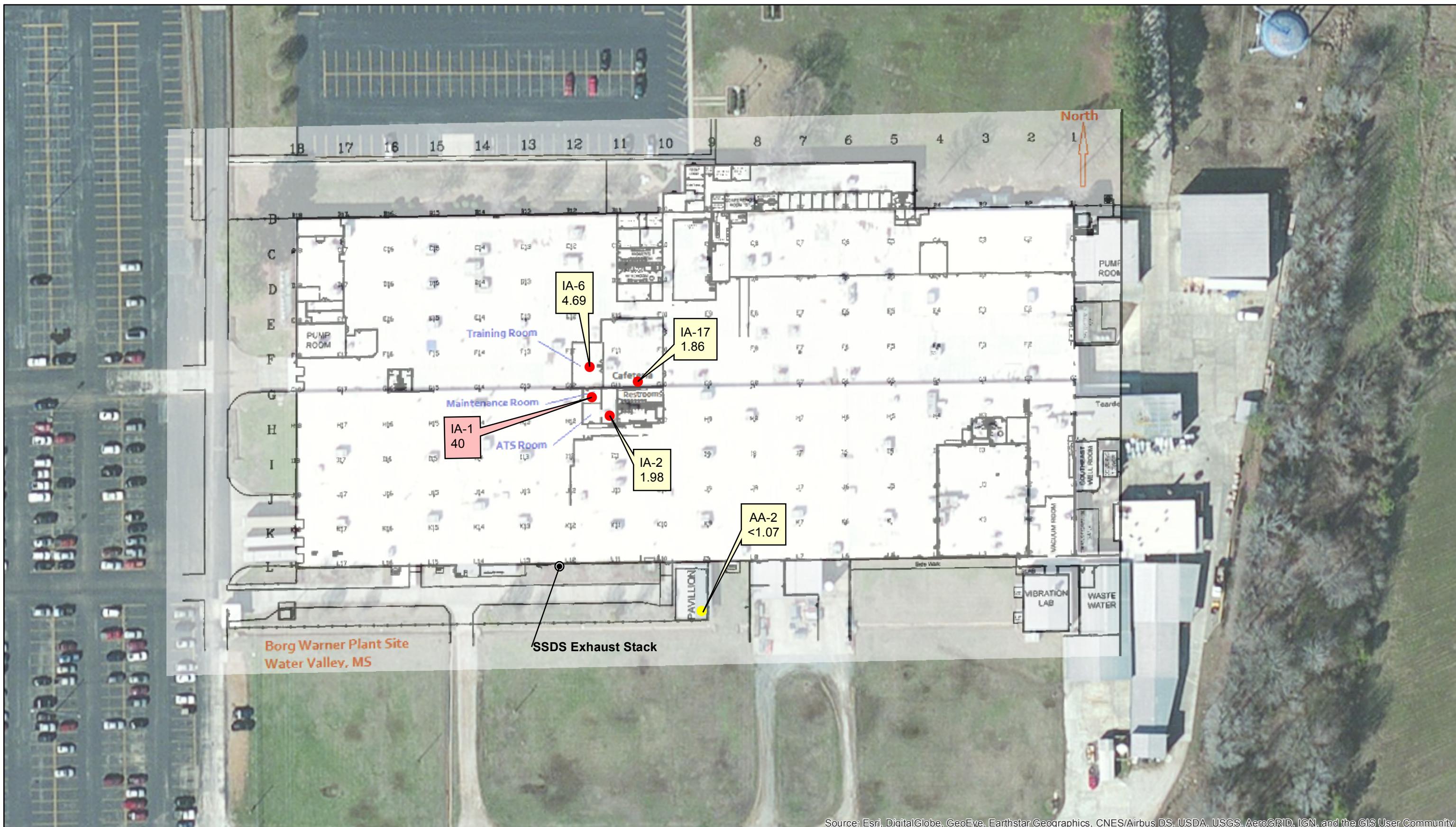
D: Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

VISL: Calculated based on USEPA's OSWER Vapor Intrusion Assessment VISL Calculator Version 3.4, November 2015 RSLs for Target Indoor Air Concentration @ TCR=1E-6 or THQ=1

TCR: Target Carcinogen Risk

THQ: Target Hazard Quotient for Non-Carcinogens

FIGURES



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

Legend

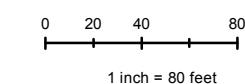
- IA-1: Indoor Air Concentrations in ug/m³
- AA-1: Ambient Air Concentrations in ug/m³
- SSDS Exhaust Stack

USEPA Screening Level for TCE: 3 ug/m³

MDEQ Action Level for TCE: 26 ug/m³

■ TCE Level Exceeding the MDEQ Action Level

ND Concentration not detected above laboratory reported limits



**FIRST
ENVIRONMENT**

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

FIGURE 1
INDOOR AIR SAMPLING RESULTS
DECEMBER 17, 2017

91 Fulton Street Boonton, New Jersey 07005	Revised LS	Drawn NMT	Checked NMT	Approved NMT	Date 12/28/17
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APPENDIX A

December 26, 2017

First Environment, Inc.

Sample Delivery Group: L958416
Samples Received: 12/19/2017
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:



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

ONE LAB. NATIONWIDE.



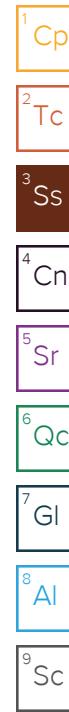
Cp: Cover Page	1	¹ Cp
Tc: Table of Contents	2	² Tc
Ss: Sample Summary	3	³ Ss
Cn: Case Narrative	4	⁴ Cn
Sr: Sample Results	5	⁵ Sr
IA-1 L958416-01	5	
IA-2 L958416-02	7	
IA-6 L958416-03	9	
IA-17 L958416-04	11	
AA-2 L958416-05	13	
Qc: Quality Control Summary	15	⁶ Qc
Volatile Organic Compounds (MS) by Method TO-15	15	⁷ GI
Gl: Glossary of Terms	20	⁸ Al
Al: Accreditations & Locations	21	
Sc: Sample Chain of Custody	22	⁹ Sc

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



			Collected by Micheal T. Slack	Collected date/time 12/17/17 12:15	Received date/time 12/19/17 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1056213	1	12/21/17 22:56	12/21/17 22:56	MBF
Volatile Organic Compounds (MS) by Method TO-15	WG1056715	25	12/22/17 15:19	12/22/17 15:19	MBF
IA-2 L958416-02 Air			Collected by Micheal T. Slack	Collected date/time 12/17/17 12:17	Received date/time 12/19/17 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1056213	1	12/21/17 23:50	12/21/17 23:50	MBF
Volatile Organic Compounds (MS) by Method TO-15	WG1056715	25	12/22/17 16:04	12/22/17 16:04	MBF
IA-6 L958416-03 Air			Collected by Micheal T. Slack	Collected date/time 12/17/17 12:18	Received date/time 12/19/17 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1056213	1	12/22/17 00:41	12/22/17 00:41	MBF
Volatile Organic Compounds (MS) by Method TO-15	WG1056715	25	12/22/17 16:49	12/22/17 16:49	MBF
IA-17 L958416-04 Air			Collected by Micheal T. Slack	Collected date/time 12/17/17 12:19	Received date/time 12/19/17 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1056213	1	12/22/17 01:29	12/22/17 01:29	MBF
Volatile Organic Compounds (MS) by Method TO-15	WG1056715	25	12/22/17 17:33	12/22/17 17:33	MBF
AA-2 L958416-05 Air			Collected by Micheal T. Slack	Collected date/time 12/17/17 12:21	Received date/time 12/19/17 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1056213	1	12/22/17 02:20	12/22/17 02:20	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. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

John Hawkins
Technical Service Representative

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ GI
- ⁸ AI
- ⁹ SC



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	31.2	74.1	92.1	219		25	WG1056715
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1056213
Benzene	71-43-2	78.10	0.200	0.639	0.319	1.02		1	WG1056213
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1056213
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1056213
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1056213
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1056213
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1056213
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1056213
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1056213
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1056213
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1056213
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1056213
Chloromethane	74-87-3	50.50	0.200	0.413	0.552	1.14		1	WG1056213
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1056213
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1056213
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1056213
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1056213
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1056213
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1056213
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1056213
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1056213
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1056213
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1056213
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1056213
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1056213
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1056213
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1056213
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1056213
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1056213
Ethanol	64-17-5	46.10	15.8	29.8	2750	5180	E	25	WG1056715
Ethylbenzene	100-41-4	106	0.200	0.867	0.712	3.09		1	WG1056213
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1056213
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.241	1.36		1	WG1056213
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.354	1.75		1	WG1056213
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1056213
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1056213
Heptane	142-82-5	100	0.200	0.818	6.36	26.0		1	WG1056213
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1056213
n-Hexane	110-54-3	86.20	0.200	0.705	0.410	1.44		1	WG1056213
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1056213
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1056213
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1056213
2-Butanone (MEK)	78-93-3	72.10	31.2	92.0	226	666		25	WG1056715
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	1.38	5.66		1	WG1056213
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1056213
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1056213
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1056213
2-Propanol	67-63-0	60.10	31.2	76.7	940	2310		25	WG1056715
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1056213
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1056213
1,1,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1056213
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1056213
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	12.9	37.9		1	WG1056213
Toluene	108-88-3	92.10	0.200	0.753	3.19	12.0		1	WG1056213
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1056213

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 GI

8 Al

9 Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1	RDL2	Result	Result	Qualifier	Dilution	Batch	
			ppbv	ug/m3	ppbv	ug/m3				
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1056213	¹ Cp
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1056213	² Tc
Trichloroethylene	79-01-6	131	0.200	1.07	7.46	40.0		1	WG1056213	³ Ss
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.847	4.15		1	WG1056213	⁴ Cn
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	0.235	1.15		1	WG1056213	⁵ Sr
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	0.410	1.91		1	WG1056213	⁶ Qc
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1056213	⁷ Gl
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1056213	⁸ Al
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1056213	
m&p-Xylene	1330-20-7	106	0.400	1.73	2.45	10.6		1	WG1056213	
o-Xylene	95-47-6	106	0.200	0.867	0.727	3.15		1	WG1056213	
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		97.7				WG1056715	
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		134				WG1056213	



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	285	678		25	WG1056715
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1056213
Benzene	71-43-2	78.10	0.200	0.639	0.355	1.13		1	WG1056213
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1056213
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1056213
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1056213
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1056213
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1056213
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1056213
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1056213
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1056213
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1056213
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1056213
Chloromethane	74-87-3	50.50	0.200	0.413	0.482	0.995		1	WG1056213
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1056213
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1056213
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1056213
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1056213
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1056213
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1056213
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1056213
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1056213
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1056213
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1056213
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1056213
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1056213
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1056213
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1056213
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1056213
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1056213
Ethanol	64-17-5	46.10	15.8	29.8	4970	9370	E	25	WG1056715
Ethylbenzene	100-41-4	106	0.200	0.867	0.571	2.48		1	WG1056213
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1056213
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.249	1.40		1	WG1056213
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.425	2.10		1	WG1056213
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1056213
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1056213
Heptane	142-82-5	100	0.200	0.818	6.81	27.9		1	WG1056213
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1056213
n-Hexane	110-54-3	86.20	0.200	0.705	0.224	0.789		1	WG1056213
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1056213
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1056213
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1056213
2-Butanone (MEK)	78-93-3	72.10	31.2	92.0	364	1070		25	WG1056715
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	1.38	5.65		1	WG1056213
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1056213
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1056213
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1056213
2-Propanol	67-63-0	60.10	31.2	76.7	1350	3330	E	25	WG1056715
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1056213
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1056213
1,1,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1056213
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1056213
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1056213
Toluene	108-88-3	92.10	0.200	0.753	2.00	7.53		1	WG1056213
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1056213

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1	RDL2	Result	Result	Qualifier	Dilution	Batch
			ppbv	ug/m3	ppbv	ug/m3			
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1056213
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1056213
Trichloroethylene	79-01-6	131	0.200	1.07	0.370	1.98		1	WG1056213
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.828	4.06		1	WG1056213
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	0.237	1.16		1	WG1056213
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	0.354	1.66		1	WG1056213
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1056213
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1056213
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1056213
m&p-Xylene	1330-20-7	106	0.400	1.73	1.96	8.51		1	WG1056213
o-Xylene	95-47-6	106	0.200	0.867	0.624	2.71		1	WG1056213
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		146		J1		WG1056213
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		96.6				WG1056715

Sample Narrative:

L958416-02 WG1056213: Surrogate failure due to matrix interference.

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	31.2	74.1	81.5	194		25	WG1056715
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1056213
Benzene	71-43-2	78.10	0.200	0.639	0.305	0.975		1	WG1056213
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1056213
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1056213
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1056213
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1056213
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1056213
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1056213
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1056213
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1056213
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1056213
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1056213
Chloromethane	74-87-3	50.50	0.200	0.413	0.496	1.02		1	WG1056213
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1056213
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1056213
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1056213
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1056213
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1056213
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1056213
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1056213
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1056213
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1056213
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1056213
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1056213
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1056213
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1056213
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1056213
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1056213
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1056213
Ethanol	64-17-5	46.10	15.8	29.8	2800	5290	E	25	WG1056715
Ethylbenzene	100-41-4	106	0.200	0.867	0.414	1.80		1	WG1056213
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.255	1.25		1	WG1056213
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.247	1.39		1	WG1056213
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.347	1.72		1	WG1056213
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1056213
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1056213
Heptane	142-82-5	100	0.200	0.818	4.97	20.3		1	WG1056213
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1056213
n-Hexane	110-54-3	86.20	0.200	0.705	0.206	0.725		1	WG1056213
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1056213
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1056213
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1056213
2-Butanone (MEK)	78-93-3	72.10	31.2	92.0	259	765		25	WG1056715
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1056213
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1056213
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1056213
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1056213
2-Propanol	67-63-0	60.10	31.2	76.7	1030	2540		25	WG1056715
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1056213
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1056213
1,1,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1056213
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1056213
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1056213
Toluene	108-88-3	92.10	0.200	0.753	1.58	5.96		1	WG1056213
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1056213

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1	RDL2	Result	Result	Qualifier	Dilution	Batch	
			ppbv	ug/m3	ppbv	ug/m3				
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1056213	¹ Cp
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1056213	² Tc
Trichloroethylene	79-01-6	131	0.200	1.07	0.876	4.69		1	WG1056213	³ Ss
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.508	2.49		1	WG1056213	⁴ Cn
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1056213	⁵ Sr
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	0.283	1.32		1	WG1056213	⁶ Qc
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1056213	⁷ Gl
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1056213	⁸ Al
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1056213	⁹ Sc
m&p-Xylene	1330-20-7	106	0.400	1.73	1.40	6.09		1	WG1056213	
o-Xylene	95-47-6	106	0.200	0.867	0.432	1.87		1	WG1056213	
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		95.5				WG1056715	
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		117				WG1056213	



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	63.6	151		25	WG1056715
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1056213
Benzene	71-43-2	78.10	0.200	0.639	0.327	1.05		1	WG1056213
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1056213
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1056213
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1056213
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1056213
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1056213
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1056213
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1056213
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1056213
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1056213
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1056213
Chloromethane	74-87-3	50.50	0.200	0.413	0.490	1.01		1	WG1056213
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1056213
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1056213
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1056213
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1056213
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1056213
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1056213
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1056213
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1056213
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1056213
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1056213
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1056213
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1056213
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1056213
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1056213
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1056213
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1056213
Ethanol	64-17-5	46.10	15.8	29.8	2170	4090	E	25	WG1056715
Ethylbenzene	100-41-4	106	0.200	0.867	0.433	1.88		1	WG1056213
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1056213
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.250	1.41		1	WG1056213
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.351	1.73		1	WG1056213
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1056213
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1056213
Heptane	142-82-5	100	0.200	0.818	5.31	21.7		1	WG1056213
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1056213
n-Hexane	110-54-3	86.20	0.200	0.705	0.232	0.817		1	WG1056213
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1056213
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.225	0.782	B	1	WG1056213
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1056213
2-Butanone (MEK)	78-93-3	72.10	31.2	92.0	198	584		25	WG1056715
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1056213
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1056213
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1056213
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1056213
2-Propanol	67-63-0	60.10	31.2	76.7	811	1990		25	WG1056715
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1056213
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1056213
1,1,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1056213
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1056213
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1056213
Toluene	108-88-3	92.10	0.200	0.753	1.70	6.41		1	WG1056213
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1056213

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 GI

8 Al

9 Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1	RDL2	Result	Result	Qualifier	Dilution	Batch	
			ppbv	ug/m3	ppbv	ug/m3				
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1056213	¹ Cp
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1056213	² Tc
Trichloroethylene	79-01-6	131	0.200	1.07	0.347	1.86		1	WG1056213	³ Ss
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.528	2.59		1	WG1056213	⁴ Cn
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1056213	⁵ Sr
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	0.283	1.32		1	WG1056213	⁶ Qc
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1056213	⁷ Gl
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1056213	⁸ Al
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1056213	⁹ Sc
m&p-Xylene	1330-20-7	106	0.400	1.73	1.44	6.23		1	WG1056213	
o-Xylene	95-47-6	106	0.200	0.867	0.435	1.88		1	WG1056213	
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		121				WG1056213	
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		95.0				WG1056715	



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	4.45	10.6		1	WG1056213
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1056213
Benzene	71-43-2	78.10	0.200	0.639	0.252	0.806		1	WG1056213
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1056213
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1056213
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1056213
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1056213
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1056213
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1056213
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1056213
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1056213
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1056213
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1056213
Chloromethane	74-87-3	50.50	0.200	0.413	0.479	0.989		1	WG1056213
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1056213
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1056213
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1056213
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1056213
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1056213
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1056213
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1056213
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1056213
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1056213
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1056213
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1056213
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1056213
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1056213
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1056213
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1056213
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1056213
Ethanol	64-17-5	46.10	0.630	1.19	8.78	16.6		1	WG1056213
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1056213
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1056213
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.242	1.36		1	WG1056213
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.348	1.72		1	WG1056213
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1056213
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1056213
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1056213
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1056213
n-Hexane	110-54-3	86.20	0.200	0.705	ND	ND		1	WG1056213
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1056213
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1056213
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1056213
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1056213
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1056213
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1056213
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1056213
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1056213
2-Propanol	67-63-0	60.10	1.25	3.07	7.37	18.1		1	WG1056213
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1056213
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1056213
1,1,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1056213
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1056213
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1056213
Toluene	108-88-3	92.10	0.200	0.753	0.329	1.24		1	WG1056213
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1056213

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 GI

8 Al

9 Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1	RDL2	Result	Result	Qualifier	Dilution	Batch	
			ppbv	ug/m3	ppbv	ug/m3				
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1056213	¹ Cp
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1056213	² Tc
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1056213	³ Ss
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1056213	⁴ Cn
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1056213	⁵ Sr
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1056213	⁶ Qc
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1056213	⁷ GI
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1056213	⁸ AI
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1056213	⁹ Sc
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1056213	
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1056213	
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		96.7				WG1056213	



L958416-01,02,03,04,05

Method Blank (MB)

(MB) R3274911-3 12/21/17 09:26

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv	
Acetone	0.121	J	0.0569	1.25	¹ Cp
Allyl Chloride	U		0.0546	0.200	² Tc
Benzene	U		0.0460	0.200	³ Ss
Benzyl Chloride	U		0.0598	0.200	⁴ Cn
Bromodichloromethane	U		0.0436	0.200	⁵ Sr
Bromoform	U		0.0786	0.600	⁶ Qc
Bromomethane	U		0.0609	0.200	⁷ Gl
1,3-Butadiene	U		0.0563	2.00	⁸ Al
Carbon disulfide	U		0.0544	0.200	⁹ Sc
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	



L958416-01,02,03,04,05

Method Blank (MB)

(MB) R3274911-3 12/21/17 09:26

Analyte	MB Result ppbv	<u>MB Qualifier</u>	MB MDL ppbv	MB RDL ppbv	¹ Cp
Methylene Chloride	0.0827	J	0.0465	0.200	² Tc
Methyl Butyl Ketone	U		0.0682	1.25	³ Ss
2-Butanone (MEK)	U		0.0493	1.25	⁴ Cn
4-Methyl-2-pentanone (MIBK)	U		0.0650	1.25	⁵ Sr
Methyl Methacrylate	U		0.0773	0.200	⁶ Qc
MTBE	U		0.0505	0.200	⁷ Gl
Naphthalene	U		0.154	0.630	⁸ Al
2-Propanol	0.195	J	0.0882	1.25	⁹ Sc
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	96.2		60.0-140		

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

(LCS) R3274911-1 12/21/17 07:52 • (LCSD) R3274911-2 12/21/17 08:38

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Ethanol	3.75	3.92	3.85	105	103	52.0-158			1.81	25
Propene	3.75	4.06	4.02	108	107	54.0-155			0.898	25
Dichlorodifluoromethane	3.75	3.63	3.60	96.9	96.1	69.0-143			0.845	25
1,2-Dichlorotetrafluoroethane	3.75	4.33	4.33	116	115	70.0-130			0.0953	25
Chloromethane	3.75	4.20	4.20	112	112	70.0-130			0.168	25



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

(LCS) R3274911-1 12/21/17 07:52 • (LCSD) R3274911-2 12/21/17 08:38

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Vinyl chloride	3.75	4.01	3.85	107	103	70.0-130			4.14	25
1,3-Butadiene	3.75	4.02	3.99	107	106	70.0-130			0.776	25
Bromomethane	3.75	3.86	4.19	103	112	70.0-130			8.13	25
Chloroethane	3.75	4.18	4.21	112	112	70.0-130			0.610	25
Trichlorofluoromethane	3.75	4.38	4.43	117	118	70.0-130			1.01	25
1,1,2-Trichlorotrifluoroethane	3.75	4.31	4.36	115	116	70.0-130			1.06	25
1,1-Dichloroethene	3.75	4.21	4.27	112	114	70.0-130			1.55	25
1,1-Dichloroethane	3.75	4.21	4.25	112	113	70.0-130			0.876	25
Acetone	3.75	4.39	4.34	117	116	70.0-130			1.10	25
2-Propanol	3.75	4.32	4.35	115	116	66.0-150			0.693	25
Carbon disulfide	3.75	4.22	4.25	113	113	70.0-130			0.776	25
Methylene Chloride	3.75	4.09	4.13	109	110	70.0-130			0.875	25
MTBE	3.75	4.23	4.28	113	114	70.0-130			1.19	25
trans-1,2-Dichloroethene	3.75	4.23	4.29	113	114	70.0-130			1.44	25
n-Hexane	3.75	4.14	4.22	110	112	70.0-130			1.81	25
Vinyl acetate	3.75	4.51	4.56	120	122	70.0-130			1.05	25
Methyl Ethyl Ketone	3.75	4.26	4.29	114	115	70.0-130			0.868	25
cis-1,2-Dichloroethene	3.75	4.21	4.25	112	113	70.0-130			0.986	25
Chloroform	3.75	4.29	4.33	114	116	70.0-130			1.05	25
Cyclohexane	3.75	4.21	4.27	112	114	70.0-130			1.51	25
1,1,1-Trichloroethane	3.75	4.31	4.37	115	116	70.0-130			1.23	25
Carbon tetrachloride	3.75	4.34	4.38	116	117	70.0-130			1.08	25
Benzene	3.75	4.26	4.26	114	114	70.0-130			0.0206	25
1,2-Dichloroethane	3.75	4.37	4.39	117	117	70.0-130			0.421	25
Heptane	3.75	4.14	4.14	110	110	70.0-130			0.0388	25
Trichloroethylene	3.75	4.30	4.31	115	115	70.0-130			0.0457	25
1,2-Dichloropropane	3.75	4.22	4.26	113	114	70.0-130			0.992	25
1,4-Dioxane	3.75	4.31	4.23	115	113	70.0-152			1.86	25
Bromodichloromethane	3.75	4.29	4.32	115	115	70.0-130			0.615	25
cis-1,3-Dichloropropene	3.75	4.27	4.32	114	115	70.0-130			1.11	25
4-Methyl-2-pentanone (MIBK)	3.75	4.28	4.29	114	114	70.0-142			0.154	25
Toluene	3.75	4.28	4.31	114	115	70.0-130			0.793	25
trans-1,3-Dichloropropene	3.75	4.31	4.33	115	115	70.0-130			0.558	25
1,1,2-Trichloroethane	3.75	4.26	4.29	114	114	70.0-130			0.656	25
Tetrachloroethylene	3.75	4.41	4.45	117	119	70.0-130			0.913	25
Methyl Butyl Ketone	3.75	4.60	4.60	123	123	70.0-150			0.00301	25
Dibromochloromethane	3.75	4.62	4.66	123	124	70.0-130			0.834	25
1,2-Dibromoethane	3.75	4.61	4.64	123	124	70.0-130			0.678	25
Chlorobenzene	3.75	4.66	4.69	124	125	70.0-130			0.470	25
Ethylbenzene	3.75	4.43	4.46	118	119	70.0-130			0.518	25

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc



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

(LCS) R3274911-1 12/21/17 07:52 • (LCSD) R3274911-2 12/21/17 08:38

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
m&p-Xylene	7.50	8.83	8.84	118	118	70.0-130			0.120	25
o-Xylene	3.75	4.39	4.41	117	117	70.0-130			0.289	25
Styrene	3.75	4.44	4.45	118	119	70.0-130			0.147	25
Bromoform	3.75	4.62	4.63	123	124	70.0-130			0.209	25
1,1,2,2-Tetrachloroethane	3.75	4.39	4.43	117	118	70.0-130			0.779	25
4-Ethyltoluene	3.75	4.58	4.59	122	122	70.0-130			0.344	25
1,3,5-Trimethylbenzene	3.75	4.56	4.56	122	122	70.0-130			0.100	25
1,2,4-Trimethylbenzene	3.75	4.56	4.56	122	122	70.0-130			0.128	25
1,3-Dichlorobenzene	3.75	4.67	4.67	124	125	70.0-130			0.178	25
1,4-Dichlorobenzene	3.75	4.82	4.78	128	127	70.0-130			0.834	25
Benzyl Chloride	3.75	4.82	4.90	129	131	70.0-144			1.51	25
1,2-Dichlorobenzene	3.75	4.64	4.65	124	124	70.0-130			0.213	25
1,2,4-Trichlorobenzene	3.75	4.76	4.80	127	128	70.0-155			0.863	25
Hexachloro-1,3-butadiene	3.75	4.50	4.47	120	119	70.0-145			0.576	25
Naphthalene	3.75	4.54	4.61	121	123	70.0-155			1.59	25
Allyl Chloride	3.75	4.07	4.11	108	110	70.0-130			1.13	25
2-Chlorotoluene	3.75	4.50	4.52	120	121	70.0-130			0.441	25
Methyl Methacrylate	3.75	4.18	4.18	112	112	70.0-130			0.0761	25
Tetrahydrofuran	3.75	4.12	4.12	110	110	70.0-140			0.193	25
2,2,4-Trimethylpentane	3.75	4.18	4.23	112	113	70.0-130			1.25	25
Vinyl Bromide	3.75	4.23	4.27	113	114	70.0-130			0.853	25
Isopropylbenzene	3.75	4.45	4.49	119	120	70.0-130			0.819	25
(S) 1,4-Bromofluorobenzene			99.1	98.8	60.0-140					

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc



L958416-01,02,03,04

Method Blank (MB)

(MB) R3275414-3 12/22/17 10:16

Analyte	MB Result ppbv	<u>MB Qualifier</u>	MB MDL ppbv	MB RDL ppbv
Acetone	0.138	J	0.0569	1.25
2-Butanone (MEK)	U		0.0493	1.25
2-Propanol	0.249	J	0.0882	1.25
Ethanol	0.283	J	0.0832	0.630
(S) 1,4-Bromofluorobenzene	95.8			60.0-140

¹Cp²Tc³Ss⁴Cn⁵Sr

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

(LCS) R3275414-1 12/22/17 08:40 • (LCSD) R3275414-2 12/22/17 09:27

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Ethanol	3.75	4.31	4.46	115	119	52.0-158			3.52	25
Acetone	3.75	4.61	4.71	123	126	70.0-130			2.19	25
2-Propanol	3.75	4.62	4.72	123	126	66.0-150			2.09	25
Methyl Ethyl Ketone	3.75	4.52	4.57	121	122	70.0-130			0.954	25
(S) 1,4-Bromofluorobenzene			99.3	98.5		60.0-140				

⁶Qc⁷Gl⁸Al⁹Sc



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.	¹ Cp
ND	Not detected at the Reporting Limit (or MDL where applicable).	² Tc
RDL	Reported Detection Limit.	³ Ss
Rec.	Recovery.	⁴ Cn
RPD	Relative Percent Difference.	⁵ Sr
SDG	Sample Delivery Group.	⁶ Qc
(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.	⁷ GI
U	Not detected at the Reporting Limit (or MDL where applicable).	⁸ AI
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.	⁹ SC
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.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE**.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

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

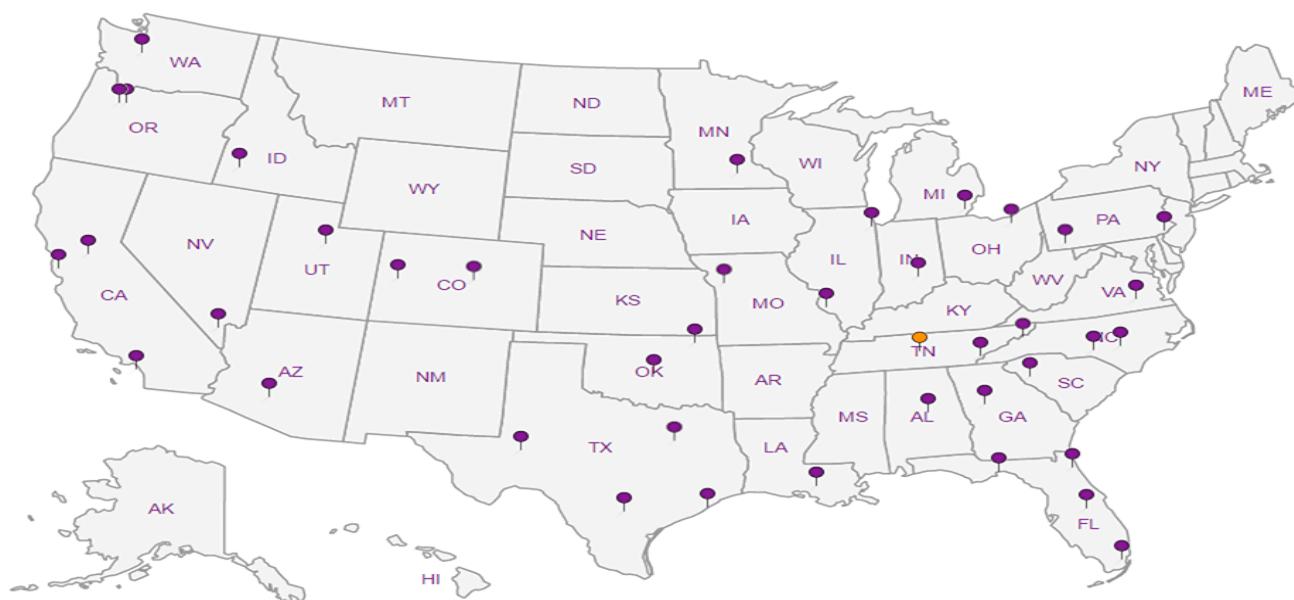
Third Party & Federal Accreditations

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

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

Our Locations

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

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

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

Analysis

Chain of Custody Page ____ of ____



12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859



L# *1958416*
M012

Ta.

Acctnum:

Template:

Prelogin:

TSR

PB:

Shipped Via:

Perm./Contaminant Sample # (lab only)

Report to:

Michael T. Slack (FE)Project: **EnPro-Coltec-Water Valley (24-hr Indoor Air-BW)**
Description:Phone: **973-334-0003**
Fax: **973-334-0928**Collected by (print):
Michael T. Slack
Site/Facility ID #: **Borg Warner Plant Site**Collected by (signature):
Michael T. Slack
Rush? (Lab MUST Be Notified)
Same Day 200%
Next Day 100%
Two Day 50%
Three Day 25%

Email To:

MSlack@firstenvironment.com

City/State:

Collected: **Water Valley, MS (Borg Warner Plant Site)**

Lab Project #

FIREN VBNJ-OxfordMS

P.O. #

Date Results Needed
Standard TurnaroundEmail? No Yes
FAX? No Yes**TO-15 Summa**

Sample ID	Sample Description	Can #	Date	Time START	Initial	Final			
IA-1	Maintenance Room	8559	12/17/17	12:15	30	8	✓		-01
IA-2	ATS Room	8791	12/17/17	12:17	29	8	✓		02
IA-6	Training Room	7241	12/17/17	12:18	26	2	✓		03
IA-17	Cafeteria	5845	12/17/17	12:19	30	5	✓		04
AA-2	Ambient Air - Pavilion	7291	12/17/17	12:21	30	6	✓		05

ADDITIONAL INFORMATION DEPICTED IN SAMPLE TABLE; 24-HR INDOOR AIR SAMPLING - 6-LITER SUMMA CANISTERS

IA - INDOOR AIR
AA - AMBIENT AIR } **BORG WARNER PLANT SITE**

Remarks:	Received by: (Signature)					Samples returned via:	Hold #	Condition: (lab use only)
Relinquished by: (Signature)	Date: <i>12/18/17</i>	Time: <i>15:30</i>				UPS		
						FedEx	Courier	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)			Temp: <i>AMBI</i>	°C	Bottles Received: <i>5</i>
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)					COC Seal Intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA

AV 12/20/17**(OK)**pH Checked: NOCP

Indoor Air Monitoring (Bi-Weekly Sampling)

Borg Warner Facility

Water Valley, Yalobusha Co., MS

December 17 - December 18, 2017

Indoor Air (iA), Ambient Air (AA), Air Permit Evaluation (SSD) - Sampling Event

Sample ID	Sample Location	Flow Controller ID	Canister ID	Canister Size (liters)	Initial Date/time	Vacuum ("Hg)	Final Date/time	Vacuum ("Hg)	Sampler
IA-1	Maintenance Room	7100	B559	6	12/17/17 12:15	30	12/18/17 12:15	B	M. Slack
IA-2	ATS Room	7431	8791	6	12/17/17 12:17	29	12/18/17 12:18	B	M. Slack
IA-6	Training Room	7428	7241	6	12/17/17 12:18	26	12/18/17 12:10	2	M. Slack
IA-17	Cafeteria	5543	5845	6	12/17/17 12:19	30	12/18/17 12:22	5	M. Slack
IA-C16	I-Beam C16	NS							M. Slack
IA-K13	I-Beam K13	NS							M. Slack
IA-G4	I-Beam G4	NS							M. Slack
SSD-EFFLU	SSDS-Effluent Stack	NS							M. Slack
SSD-INFLU	SSDS-Influent Pre-Control Unit	NS							M. Slack
AA-2	Pavilion	5680	7291	6	12/17/17 12:21	30	12/18/17 12:25	6	M. Slack

Weather Conditions (@ time of canister placement): COOL; DAMP; APPROX 50°F; OVERCAST - 96% HUMIDITY - WINDS - CALM Michael T. Slack (First Environment)

Weather Conditions during 24-hr sampling period:

NS - Not Sampled

Invo: FIREENVBNJ-OKFOR Date : 04Dec17
 Customer : P630540 Weight : 10 LBS
 Phone : (615)758-5858 COD :
 SAT Del : N DV :

Byes: STANDARD OVERNIGHT
 TRCK: 4196 3254 3681

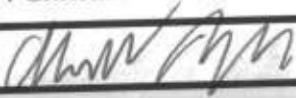
Shipping : 0.00
 Special : 0.00
 Handling : 0.00
 Total : 0.00

Invo: FIREENVBNJ-OKFOR Date : 04Dec17
 Customer : P630540 Weight : 10 LBS
 Phone : (615)758-5858 COD :
 SAT Del : N DV :

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

Svc: STANDARD OVERNIGHT
 TRCK: 4196 3254 3681

ESC LAB SCIENCES
Cooler Receipt Form

Client:	FIREN+BNJ	SDG#	L958416
Cooler Received/Opened On:	12/19 /17	Temperature:	AMBI
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?			

AV 12/20/17