

DATA OF KNOWN QUALITY CONFORMANCE/NON-CONFORMANCE SUMMARY QUESTIONNAIRE

Laboratory Name : Alliance Technical Group LLC Client : Apex Companies, LLC.
 Project Location : NJ Project Number : _____
 Laboratory Sample ID(s) : Q3038 Sampling Date(s) : 9/05/2025
 List DKQP Methods Used (e.g., 8260,8270, et Cetra) **SMO,SOP,TO-15**

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP Data of Known Quality performance standards?	☒ Yes ☐ No
1A	Were the method specified handling, preservation, and holding time requirements met?	☒ Yes ☐ No
1B	EPH Method: Was the EPH method conducted without significant modifications (see Section 11.3 of respective DKQ methods)	☐ Yes ☐ No ☒ N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	☒ Yes ☐ No
3	Were samples received at an appropriate temperature (4±2° C)?	☐ Yes ☐ No ☒ N/A
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?	☒ Yes ☐ No
5	a)Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt? b)Were these reporting limits met?	☒ Yes ☐ No ☒ Yes ☐ No ☐ N/A
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP?	☒ Yes ☐ No
7	Are project-specific matrix spikes and/or laboratory duplicates included in this data set?	☐ Yes ☒ No

Notes: For all questions to which the response was “No” (with the exception of question #7), additional information should be provided in an attached narrative. If the answer to question #1, #1A, or #1B is “No”, the data package does not meet the requirements for “Data of Known Quality.”

Cover Page

Order ID : Q3038

Project ID : Emerson Vapor Intrusion REG006-0309010-25011690

Client : Apex Companies, LLC.

Lab Sample Number

Q3038-01

Client Sample Number

SV-1

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature : _____

Date: 9/18/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

CASE NARRATIVE

Apex Companies, LLC.

Project Name: Emerson Vapor Intrusion REG006-0309010-25011690

Project # N/A

Order ID # Q3038

Test Name: VOCMS Group2

A. Number of Samples and Date of Receipt:

1 Air sample was received on 09/05/2025.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: VOCMS Group2. This data package contains results for VOCMS Group2.

C. Analytical Techniques:

The analysis performed on instrument MSVOA_L were done using GC column RTX-1, which is 60 meters, 0.32 mm id, 1.0 um df, Restek Cat. #10157. The Trap was supplied by Entech, glass bead and Tenax , Entech 7100A Preconcentrator. The analysis of VOCMS Group2 was based on method TO-15.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries were met for all analysis.

The Internal Standards Areas were met for all analysis.

The Retention Times were met for all analysis.

The RPD were met for all analysis.

The Blank Spike met requirements for all compounds.

The Blank analysis did not indicate the presence of lab contamination.

The Initial Calibration met the requirements.

The Continuous Calibration met the requirements.

The Tuning criteria met requirements.

Due to potential high concentration of target analytes, Sample SV-1 was initially diluted.

E. Additional Comments:

The Form 6 is not included in the data package because the Initial Calibration was performed using 7 points.

The not QT review data is reported in the Miscellaneous.

The Manual Integrations are performed for the followings:

Manual Integration Report

Sequence	VL081325	Instrument	MSVOA_I
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
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VSTDICCC010	VL042842.D	m/p-Xylene	SAM	8/14/2025 7:48:06 AM	MMDadoda	8/18/2025 8:42:07 AM	Peak Integrated by Software incorrectly
VSTDICCC002	VL042843.D	1,1,2-Trichloroethane	SAM	8/14/2025 7:48:12 AM	MMDadoda	8/18/2025 8:42:11 AM	Peak Integrated by Software incorrectly
VSTDICCC002	VL042843.D	1,4-Dioxane	SAM	8/14/2025 7:48:12 AM	MMDadoda	8/18/2025 8:42:11 AM	Peak Integrated by Software incorrectly
VSTDICCC002	VL042843.D	cis-1,3-Dichloropropene	SAM	8/14/2025 7:48:12 AM	MMDadoda	8/18/2025 8:42:11 AM	Peak Integrated by Software incorrectly
VSTDICCC002	VL042843.D	Ethanol	SAM	8/14/2025 7:48:12 AM	MMDadoda	8/18/2025 8:42:11 AM	Peak Integrated by Software incorrectly
VSTDICCC002	VL042843.D	m/p-Xylene	SAM	8/14/2025 7:48:12 AM	MMDadoda	8/18/2025 8:42:11 AM	Peak Integrated by Software incorrectly
VSTDICCC002	VL042843.D	Methyl Methacrylate	SAM	8/14/2025 7:48:12 AM	MMDadoda	8/18/2025 8:42:11 AM	Peak Integrated by Software incorrectly
VSTDICCC001	VL042844.D	1,2-Dichloropropane	SAM	8/14/2025 7:48:18 AM	MMDadoda	8/18/2025 8:42:13 AM	Peak Integrated by Software incorrectly
VSTDICCC001	VL042844.D	1,4-Dioxane	SAM	8/14/2025 7:48:18 AM	MMDadoda	8/18/2025 8:42:13 AM	Peak Integrated by Software incorrectly
VSTDICCC001	VL042844.D	2,2,4-Trimethylpentane	SAM	8/14/2025 7:48:18 AM	MMDadoda	8/18/2025 8:42:13 AM	Peak Integrated by Software incorrectly
VSTDICCC001	VL042844.D	Ethanol	SAM	8/14/2025 7:48:18 AM	MMDadoda	8/18/2025 8:42:13 AM	Peak Integrated by Software incorrectly

VSTDICC001	VL042844.D	Heptane	SAM	8/14/2025 7:48:18 AM	MMDadoda	8/18/2025 8:42:13 AM	Peak Integrated by Software incorrectly
VSTDICC001	VL042844.D	m/p-Xylene	SAM	8/14/2025 7:48:18 AM	MMDadoda	8/18/2025 8:42:13 AM	Peak Integrated by Software incorrectly
VSTDICC001	VL042844.D	Methyl Methacrylate	SAM	8/14/2025 7:48:18 AM	MMDadoda	8/18/2025 8:42:13 AM	Peak Integrated by Software incorrectly
VSTDICC001	VL042844.D	t-1,3- Dichloropropene	SAM	8/14/2025 7:48:18 AM	MMDadoda	8/18/2025 8:42:13 AM	Peak Integrated by Software incorrectly
VSTDICC001	VL042844.D	trans-1,2- Dichloroethene	SAM	8/14/2025 7:48:18 AM	MMDadoda	8/18/2025 8:42:13 AM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042845.D	1,1,2- Trichloroethane	SAM	8/14/2025 7:49:25 AM	MMDadoda	8/18/2025 8:42:16 AM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042845.D	1,4-Dioxane	SAM	8/14/2025 7:49:25 AM	MMDadoda	8/18/2025 8:42:16 AM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042845.D	2,2,4- Trimethylpentane	SAM	8/14/2025 7:49:25 AM	MMDadoda	8/18/2025 8:42:16 AM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042845.D	4-Methyl-2- Pentanone	SAM	8/14/2025 7:49:25 AM	MMDadoda	8/18/2025 8:42:16 AM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042845.D	cis-1,3- Dichloropropene	SAM	8/14/2025 7:49:25 AM	MMDadoda	8/18/2025 8:42:16 AM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042845.D	m/p-Xylene	SAM	8/14/2025 7:49:25 AM	MMDadoda	8/18/2025 8:42:16 AM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042845.D	Methyl Methacrylate	SAM	8/14/2025 7:49:25 AM	MMDadoda	8/18/2025 8:42:16 AM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042845.D	t-1,3- Dichloropropene	SAM	8/14/2025 7:49:25 AM	MMDadoda	8/18/2025 8:42:16 AM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042845.D	Toluene	SAM	8/14/2025 7:49:25	MMDadoda	8/18/2025 8:42:16	Peak Integrated

				AM		AM	by Software incorrectly
VSTDICC0.1	VL042846.D	1,1,1-Trichloroethane	SAM	8/14/2025 7:48:23 AM	MMDadoda	8/18/2025 8:42:18 AM	Peak Integrated by Software incorrectly
VSTDICC0.1	VL042846.D	1,2-Dibromoethane	SAM	8/14/2025 7:48:23 AM	MMDadoda	8/18/2025 8:42:18 AM	Peak Integrated by Software incorrectly
VSTDICC0.1	VL042846.D	Naphthalene	SAM	8/14/2025 7:48:23 AM	MMDadoda	8/18/2025 8:42:18 AM	Peak Integrated by Software incorrectly
VSTDICC0.1	VL042846.D	Tetrachloroethene	SAM	8/14/2025 7:48:23 AM	MMDadoda	8/18/2025 8:42:18 AM	Peak Integrated by Software incorrectly
VSTDICC0.1	VL042846.D	Trichloroethene	SAM	8/14/2025 7:48:23 AM	MMDadoda	8/18/2025 8:42:18 AM	Peak Integrated by Software incorrectly
VSTDICC0.03	VL042847.D	1,1,1-Trichloroethane	SAM	8/14/2025 7:49:29 AM	MMDadoda	8/18/2025 8:42:20 AM	Peak Integrated by Software incorrectly
VSTDICC0.03	VL042847.D	1,1,2,2-Tetrachloroethane	SAM	8/14/2025 7:49:29 AM	MMDadoda	8/18/2025 8:42:20 AM	Peak Integrated by Software incorrectly
VSTDICC0.03	VL042847.D	Carbon Tetrachloride	SAM	8/14/2025 7:49:29 AM	MMDadoda	8/18/2025 8:42:20 AM	Peak Integrated by Software incorrectly
VSTDICC0.03	VL042847.D	Tetrachloroethene	SAM	8/14/2025 7:49:29 AM	MMDadoda	8/18/2025 8:42:20 AM	Peak Integrated by Software incorrectly
VSTDICC0.03	VL042847.D	Trichloroethene	SAM	8/14/2025 7:49:29 AM	MMDadoda	8/18/2025 8:42:20 AM	Peak Integrated by Software incorrectly
VSTDICC015	VL042848.D	m/p-Xylene	SAM	8/14/2025 7:49:35 AM	MMDadoda	8/18/2025 8:42:35 AM	Peak Integrated by Software incorrectly
VSTDICV010	VL042849.D	cis-1,3-Dichloropropene	SAM	8/14/2025 7:48:28 AM	MMDadoda	8/18/2025 8:42:37 AM	Peak Integrated by Software incorrectly
VSTDICV010	VL042849.D	m/p-Xylene	SAM	8/14/2025 7:48:28 AM	MMDadoda	8/18/2025 8:42:37 AM	Peak Integrated by Software incorrectly

Sequence	VL090825	Instrument	MSVOA_I
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC010	VL042900.D	m/p-Xylene	sam	9/9/2025 12:26:34 PM	MMDadoda	9/11/2025 5:28:20 PM	Peak Integrated by Software incorrectly
VL0908ABS01	VL042902.D	m/p-Xylene	sam	9/9/2025 12:26:38 PM	MMDadoda	9/11/2025 5:24:29 PM	Peak Integrated by Software incorrectly
VL0908ABS01	VL042902.D	Propene	sam	9/9/2025 12:26:38 PM	MMDadoda	9/11/2025 5:24:29 PM	Peak Integrated by Software incorrectly
Q3037-01DUP	VL042905.D	Benzene	sam	9/9/2025 12:31:10 PM	MMDadoda	9/11/2025 5:28:16 PM	Peak Integrated by Software incorrectly
Q3037-01DUP	VL042905.D	m/p-Xylene	sam	9/9/2025 12:31:10 PM	MMDadoda	9/11/2025 5:28:16 PM	Peak Integrated by Software incorrectly
Q3037-01DUP	VL042905.D	Methyl Methacrylate	sam	9/9/2025 12:31:10 PM	MMDadoda	9/11/2025 5:28:16 PM	Peak Integrated by Software incorrectly
Q3037-01DUP	VL042905.D	n-propylbenzene	sam	9/9/2025 12:31:10 PM	MMDadoda	9/11/2025 5:28:16 PM	Peak Integrated by Software incorrectly
Q3037-01DUP	VL042905.D	Propene	sam	9/9/2025 12:31:10 PM	MMDadoda	9/11/2025 5:28:16 PM	Peak Integrated by Software incorrectly

Q3037-01DUP	VL042905.D	Tetrahydrofuran	sam	9/9/2025 12:31:10 PM	MMDadoda	9/11/2025 5:28:16 PM	Peak Integrated by Software incorrectly
Q3037-01DUP	VL042905.D	Toluene	sam	9/9/2025 12:31:10 PM	MMDadoda	9/11/2025 5:28:16 PM	Peak Integrated by Software incorrectly
Q3037-01DUP	VL042905.D	Trichlorofluoromethane	sam	9/9/2025 12:31:10 PM	MMDadoda	9/11/2025 5:28:16 PM	Peak Integrated by Software incorrectly
Q3037-01DUP	VL042905.D	Vinyl Acetate	sam	9/9/2025 12:31:10 PM	MMDadoda	9/11/2025 5:28:16 PM	Peak Integrated by Software incorrectly
Q3038-01	VL042906.D	Trichloroethene	sam	9/9/2025 12:31:51 PM	MMDadoda	9/11/2025 5:25:29 PM	Peak Integrated by Software incorrectly

F. Manual Integration Comments:

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature_____

DATA REPORTING QUALIFIERS- ORGANIC

For reporting results, the following “ Results Qualifiers” are used:

Value	If the result is a value greater than or equal to the detection limit, report the value
U	Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, i.e. “10 U”. This is not necessarily the instrument detection limit attainable for this particular sample based on any concentration or dilution that may have been required.
ND	Indicates the analyte was analyzed for, but not detected
J	Indicates an estimated value. This flag is used: (1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.) (2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit greater than zero. If the detection limit was 10ug/L and a concentration of 3 ug/L was calculated report as 3 J. This flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others.
B	Indicates the analyte was found in the blank as well as the sample report as “12 B”.
E	Indicates the analyte ‘s concentration exceeds the calibrated range of the instrument for that specific analysis.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.
P	This flag is used for Pesticide/PCB target analyte when there is >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form 1 and flagged with a “P”.
N	This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It applies to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used.
A	This flag indicates that a Tentatively Identified Compound is a suspected aldol-condensation product.
Q	Indicates the LCS did not meet the control limits requirements

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q3038

Completed

For thorough review, the report must have the following:

GENERAL:

Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)

✓

Check chain-of-custody for proper relinquish/return of samples

✓

Is the chain of custody signed and complete

✓

Check internal chain-of-custody for proper relinquish/return of samples /sample extracts

✓

Collect information for each project id from server. Were all requirements followed

✓

COVER PAGE:

Do numbers of samples correspond to the number of samples in the Chain of Custody on login page

✓

Do lab numbers and client Ids on cover page agree with the Chain of Custody

✓

CHAIN OF CUSTODY:

Do requested analyses on Chain of Custody agree with form I results

✓

Do requested analyses on Chain of Custody agree with the log-in page

✓

Were the correct method log-in for analysis according to the Analytical Request and Chain of Custody

✓

Were the samples received within hold time

✓

Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle

✓

ANALYTICAL:

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

QA Review Signature: SOHIL JODHANI

Date: 09/18/2025



284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900, Fax : 908 789 8922

LAB CHRONICLE

OrderID:	Q3038	OrderDate:	9/8/2025 8:56:00 AM
Client:	Apex Companies, LLC.	Project:	Emerson Vapor Intrusion
Contact:	Michael Dziedzic	Location:	REC-005-0309910-25011690

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q3038-01	SV-1	Air	VOCMS Group2	TO-15	09/05/25		09/08/25	09/05/25

Hit Summary Sheet
SW-846

SDG No.: Q3038

Client: Apex Companies, LLC.

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID:	SV-1							
Q3038-01	SV-1	Air	Trichloroethene	2.15		0.54	0.64	ug/m3
Q3038-01	SV-1	Air	Tetrachloroethene	317		0.41	0.81	ug/m3
			Total Voc :		320			
			Total Concentration:		320			

Project : Emerson Vapor Intrusion REG006-0309010-25011690

Sampling Date : 09/05/25

Field Id Number : SV-1

Analysis Date : 09/08/25

Laboratory Id Number : Q3038-01

Target Analyts : Air Results

Chemical	Cas Number	Molecular Weight	Insert Results in PPBV	Qualifier	Generate Results in ug/m3	QAS Decision	Foot Notes
Vinyl Chloride	75-01-4	62.5	0.1	U	0.26		
1,2-Dichloroethane	107-06-2	98.96	0.37	U	1.5		
Trichloroethene	79-01-6	131.4	0.4		2.15		
Tetrachloroethene	127-18-4	165.8	46.8		317		

Method	Matrix	Parameter	Instrument ID	Column ID	MDL (ppbv)	RL (ppbv)	MB Data	MB Datafile	StdevVal
TO-15	Air	1,1,1,2-Tetrachloroethane	MSVOA_L	RTX-1	0.089	0.50	0		0.028115408
TO-15	Air	1,1,1-Trichloroethane	MSVOA_L	RTX-1	0.016	0.030	0		0.005089672
TO-15	Air	1,1,2,2-Tetrachloroethane	MSVOA_L	RTX-1	0.018	0.030	0		0.005472877
TO-15	Air	1,1,2-Trichloroethane	MSVOA_L	RTX-1	0.081	0.50	0		0.02572751
TO-15	Air	1,1,2-Trichlorotrifluoroethane	MSVOA_L	RTX-1	0.14	0.50	0		0.042983939
TO-15	Air	1,1-Dichloroethane	MSVOA_L	RTX-1	0.13	0.50	0		0.040178175
TO-15	Air	1,1-Dichloroethene	MSVOA_L	RTX-1	0.15	0.50	0		0.047056197
TO-15	Air	1,2,4-Trichlorobenzene	MSVOA_L	RTX-1	0.21	0.50	0		0.064291005
TO-15	Air	1,2,4-Trimethylbenzene	MSVOA_L	RTX-1	0.18	0.50	0		0.054467115
TO-15	Air	1,2-Dibromoethane	MSVOA_L	RTX-1	0.085	0.10	0		0.026726124
TO-15	Air	1,2-Dichlorobenzene	MSVOA_L	RTX-1	0.13	0.50	0		0.040999419
TO-15	Air	1,2-Dichloroethane	MSVOA_L	RTX-1	0.093	0.50	0		0.029277002
TO-15	Air	1,2-Dichloropropane	MSVOA_L	RTX-1	0.13	0.50	0		0.039880775
TO-15	Air	1,3,5-Trimethylbenzene	MSVOA_L	RTX-1	0.18	0.50	0		0.054598099
TO-15	Air	1,3-Butadiene	MSVOA_L	RTX-1	0.051	0.50	0		0.016035675
TO-15	Air	1,3-Dichlorobenzene	MSVOA_L	RTX-1	0.054	0.50	0		0.017043362
TO-15	Air	1,4-Dichlorobenzene	MSVOA_L	RTX-1	0.13	0.50	0		0.039460649
TO-15	Air	1,4-Dioxane	MSVOA_L	RTX-1	0.22	0.50	0		0.067330033
TO-15	Air	2,2,4-Trimethylpentane	MSVOA_L	RTX-1	0.14	0.50	0		0.044131837
TO-15	Air	2-Butanone	MSVOA_L	RTX-1	0.056	0.50	0		0.017728105
TO-15	Air	2-Chlorotoluene	MSVOA_L	RTX-1	0.17	0.50	0		0.052599113
TO-15	Air	2-Hexanone	MSVOA_L	RTX-1	0.11	0.50	0		0.033523268
TO-15	Air	4-Ethyltoluene	MSVOA_L	RTX-1	0.21	0.50	0		0.066332496
TO-15	Air	4-Methyl-2-Pentanone	MSVOA_L	RTX-1	0.097	0.50	0		0.030783422
TO-15	Air	Acetone	MSVOA_L	RTX-1	0.18	0.50	0		0.055592052
TO-15	Air	Allyl Chloride	MSVOA_L	RTX-1	0.11	0.50	0		0.033380918
TO-15	Air	Benzene	MSVOA_L	RTX-1	0.079	0.50	0		0.025071327
TO-15	Air	Benzyl Chloride	MSVOA_L	RTX-1	0.089	0.50	0		0.028284271
TO-15	Air	Bromodichloromethane	MSVOA_L	RTX-1	0.063	0.50	0		0.019880596
TO-15	Air	Bromoethene	MSVOA_L	RTX-1	0.2	0.50	0		0.062678317
TO-15	Air	Bromoform	MSVOA_L	RTX-1	0.048	0.50	0		0.015118579
TO-15	Air	Bromomethane	MSVOA_L	RTX-1	0.077	0.50	0		0.024494897
TO-15	Air	Carbon Disulfide	MSVOA_L	RTX-1	0.08	0.50	0		0.02544836
TO-15	Air	Carbon Tetrachloride	MSVOA_L	RTX-1	0.025	0.030	0		0.007690439
TO-15	Air	Chlorobenzene	MSVOA_L	RTX-1	0.077	0.50	0		0.024397502
TO-15	Air	Chlorodifluoromethane	MSVOA_L	RTX-1	0.12	0.50	0		0.037859389
TO-15	Air	Chloroethane	MSVOA_L	RTX-1	0.15	0.50	0		0.045250625
TO-15	Air	Chloroform	MSVOA_L	RTX-1	0.096	0.50	0		0.030394235
TO-15	Air	Chloromethane	MSVOA_L	RTX-1	0.098	0.50	0		0.03101459
TO-15	Air	cis-1,2-Dichloroethene	MSVOA_L	RTX-1	0.099	0.50	0		0.031471832
TO-15	Air	cis-1,3-Dichloropropene	MSVOA_L	RTX-1	0.11	0.50	0		0.032071349
TO-15	Air	Cyclohexane	MSVOA_L	RTX-1	0.22	0.50	0		0.06972736
TO-15	Air	Dibromochloromethane	MSVOA_L	RTX-1	0.085	0.50	0		0.026726124
TO-15	Air	Dichlorodifluoromethane	MSVOA_L	RTX-1	0.11	0.50	0		0.033380918
TO-15	Air	Dichlorotetrafluoroethane	MSVOA_L	RTX-1	0.15	0.50	0		0.045460606
TO-15	Air	Ethanol	MSVOA_L	RTX-1	0.32	0.50	0		0.098848128
TO-15	Air	Ethyl Acetate	MSVOA_L	RTX-1	0.12	0.50	0		0.036384193
TO-15	Air	Ethyl Benzene	MSVOA_L	RTX-1	0.19	0.50	0		0.058554004
TO-15	Air	Heptane	MSVOA_L	RTX-1	0.17	0.50	0		0.051130086
TO-15	Air	Hexachloro-1,3-Butadiene	MSVOA_L	RTX-1	0.13	0.50	0		0.038297084
TO-15	Air	Hexane	MSVOA_L	RTX-1	0.16	0.50	0		0.04894117
TO-15	Air	Isopropyl Alcohol	MSVOA_L	RTX-1	0.23	0.50	0		0.070676998
TO-15	Air	Isopropylbenzene	MSVOA_L	RTX-1	0.16	0.50	0		0.048205908
TO-15	Air	m/p-Xylene	MSVOA_L	RTX-1	0.41	1.00	0		0.130091543
TO-15	Air	Methyl Methacrylate	MSVOA_L	RTX-1	0.14	0.50	0		0.044131837
TO-15	Air	Methyl tert-Butyl Ether	MSVOA_L	RTX-1	0.23	0.50	0		0.07296444
TO-15	Air	Methylene Chloride	MSVOA_L	RTX-1	0.23	0.50	0		0.07204496
TO-15	Air	Naphthalene	MSVOA_L	RTX-1	0.013	0.10	0		0.004076647
TO-15	Air	Naphthalene,2-methyl-	MSVOA_L	RTX-1	0.22	0.50	0		0.069213266
TO-15	Air	n-Butylbenzene	MSVOA_L	RTX-1	0.18	0.50	0		0.055805786
TO-15	Air	n-propylbenzene	MSVOA_L	RTX-1	0.2	0.50	0		0.06164414
TO-15	Air	o-Xylene	MSVOA_L	RTX-1	0.21	0.50	0		0.06491753
TO-15	Air	p-Isopropyltoluene	MSVOA_L	RTX-1	0.19	0.50	0		0.059561893
TO-15	Air	Propene	MSVOA_L	RTX-1	0.077	0.50	0		0.024397502
TO-15	Air	sec-Butylbenzene	MSVOA_L	RTX-1	0.2	0.50	0		0.061913919
TO-15	Air	Styrene	MSVOA_L	RTX-1	0.16	0.50	0		0.05
TO-15	Air	t-1,3-Dichloropropene	MSVOA_L	RTX-1	0.15	0.50	0		0.046496288
TO-15	Air	tert-Butyl alcohol	MSVOA_L	RTX-1	0.16	0.50	0		0.048892496
TO-15	Air	tert-Butylbenzene	MSVOA_L	RTX-1	0.22	0.50	0		0.067928534
TO-15	Air	Tetrachloroethene	MSVOA_L	RTX-1	0.015	0.030	0		0.004725816
TO-15	Air	Tetrahydrofuran	MSVOA_L	RTX-1	0.08	0.50	0		0.025166115
TO-15	Air	Toluene	MSVOA_L	RTX-1	0.16	0.50	0		0.050142654
TO-15	Air	trans-1,2-Dichloroethene	MSVOA_L	RTX-1	0.12	0.50	0		0.036968455
TO-15	Air	Trichloroethene	MSVOA_L	RTX-1	0.024	0.030	0		0.007587584
TO-15	Air	Trichlorofluoromethane	MSVOA_L	RTX-1	0.17	0.50	0		0.053452248
TO-15	Air	Vinyl Acetate	MSVOA_L	RTX-1	0.26	0.50	0		0.079671946
TO-15	Air	Vinyl Chloride	MSVOA_L	RTX-1	0.025	0.030	0		0.007955232

A
B
C
D
E
F
G
H

Students	Spike_Amt_A	Datafile1	Concentration1	Adate1	Datafile2	Concentration2	Adate2
Value	dded						
3.143	0.4	VL041877.D	0.48	01092025T21:16:00	VL041878.D	0.46	01092025T21:46:00
3.143	0.03	VL041883.D	0.037	01102025T00:17:00	VL041884.D	0.04	01102025T00:47:00
3.143	0.03	VL041883.D	0.045	01102025T00:17:00	VL041884.D	0.04	01102025T00:47:00
3.143	0.4	VL041877.D	0.46	01092025T21:16:00	VL041878.D	0.52	01092025T21:46:00
3.143	0.4	VL041877.D	0.53	01092025T21:16:00	VL041878.D	0.54	01092025T21:46:00
3.143	0.4	VL041877.D	0.53	01092025T21:16:00	VL041878.D	0.51	01092025T21:46:00
3.143	0.4	VL041877.D	0.5	01092025T21:16:00	VL041878.D	0.53	01092025T21:46:00
3.143	0.4	VL041877.D	0.45	01092025T21:16:00	VL041878.D	0.47	01092025T21:46:00
3.143	0.4	VL041877.D	0.46	01092025T21:16:00	VL041878.D	0.43	01092025T21:46:00
3.143	0.4	VL041877.D	0.48	01092025T21:16:00	VL041878.D	0.45	01092025T21:46:00
3.143	0.4	VL041877.D	0.52	01092025T21:16:00	VL041878.D	0.51	01092025T21:46:00
3.143	0.4	VL041877.D	0.52	01092025T21:16:00	VL041878.D	0.54	01092025T21:46:00
3.143	0.4	VL041877.D	0.53	01092025T21:16:00	VL041878.D	0.49	01092025T21:46:00
3.143	0.4	VL041877.D	0.44	01092025T21:16:00	VL041878.D	0.44	01092025T21:46:00
3.143	0.4	VL041877.D	0.52	01092025T21:16:00	VL041878.D	0.54	01092025T21:46:00
3.143	0.4	VL041877.D	0.49	01092025T21:16:00	VL041878.D	0.46	01092025T21:46:00
3.143	0.4	VL041877.D	0.48	01092025T21:16:00	VL041878.D	0.47	01092025T21:46:00
3.143	0.4	VL041877.D	0.49	01092025T21:16:00	VL041878.D	0.45	01092025T21:46:00
3.143	0.4	VL041877.D	0.47	01092025T21:16:00	VL041878.D	0.46	01092025T21:46:00
3.143	0.4	VL041877.D	0.47	01092025T21:16:00	VL041878.D	0.46	01092025T21:46:00
3.143	0.4	VL041877.D	0.44	01092025T21:16:00	VL041878.D	0.46	01092025T21:46:00
3.143	0.4	VL041877.D	0.41	01092025T21:16:00	VL041878.D	0.38	01092025T21:46:00
3.143	0.4	VL041877.D	0.44	01092025T21:16:00	VL041878.D	0.44	01092025T21:46:00
3.143	0.4	VL041877.D	0.44	01092025T21:16:00	VL041878.D	0.43	01092025T21:46:00
3.143	0.4	VL041877.D	0.6	01092025T21:16:00	VL041878.D	0.62	01092025T21:46:00
3.143	0.4	VL041877.D	0.46	01092025T21:16:00	VL041878.D	0.51	01092025T21:46:00
3.143	0.4	VL041877.D	0.47	01092025T21:16:00	VL041878.D	0.46	01092025T21:46:00
3.143	0.4	VL041877.D	0.31	01092025T21:16:00	VL041878.D	0.29	01092025T21:46:00
3.143	0.4	VL041877.D	0.45	01092025T21:16:00	VL041878.D	0.44	01092025T21:46:00
3.143	0.4	VL041877.D	0.49	01092025T21:16:00	VL041878.D	0.53	01092025T21:46:00
3.143	0.4	VL041877.D	0.36	01092025T21:16:00	VL041878.D	0.35	01092025T21:46:00
3.143	0.4	VL041877.D	0.49	01092025T21:16:00	VL041878.D	0.52	01092025T21:46:00
3.143	0.4	VL041877.D	0.41	01092025T21:16:00	VL041878.D	0.45	01092025T21:46:00
3.143	0.03	VL041883.D	0.036	01102025T00:17:00	VL041884.D	0.038	01102025T00:47:00
3.143	0.4	VL041877.D	0.5	01092025T21:16:00	VL041878.D	0.48	01092025T21:46:00
3.143	0.4	VL041877.D	0.47	01092025T21:16:00	VL041878.D	0.47	01092025T21:46:00
3.143	0.4	VL041877.D	0.57	01092025T21:16:00	VL041878.D	0.59	01092025T21:46:00
3.143	0.4	VL041877.D	0.51	01092025T21:16:00	VL041878.D	0.5	01092025T21:46:00
3.143	0.4	VL041877.D	0.54	01092025T21:16:00	VL041878.D	0.51	01092025T21:46:00
3.143	0.4	VL041877.D	0.48	01092025T21:16:00	VL041878.D	0.45	01092025T21:46:00
3.143	0.4	VL041877.D	0.41	01092025T21:16:00	VL041878.D	0.4	01092025T21:46:00
3.143	0.4	VL041877.D	0.46	01092025T21:16:00	VL041878.D	0.47	01092025T21:46:00
3.143	0.4	VL041877.D	0.39	01092025T21:16:00	VL041878.D	0.4	01092025T21:46:00
3.143	0.4	VL041877.D	0.47	01092025T21:16:00	VL041878.D	0.51	01092025T21:46:00
3.143	0.4	VL041877.D	0.53	01092025T21:16:00	VL041878.D	0.52	01092025T21:46:00
3.143	0.4	VL042501.D	0.885	05062025T17:36:00	VL042502.D	0.76	05062025T18:07:00
3.143	0.4	VL041877.D	0.46	01092025T21:16:00	VL041878.D	0.45	01092025T21:46:00
3.143	0.4	VL041877.D	0.43	01092025T21:16:00	VL041878.D	0.44	01092025T21:46:00
3.143	0.4	VL041877.D	0.43	01092025T21:16:00	VL041878.D	0.46	01092025T21:46:00
3.143	0.4	VL041877.D	0.49	01092025T21:16:00	VL041878.D	0.5	01092025T21:46:00
3.143	0.4	VL041877.D	0.46	01092025T21:16:00	VL041878.D	0.47	01092025T21:46:00
3.143	0.4	VL041877.D	0.59	01092025T21:16:00	VL041878.D	0.6	01092025T21:46:00
3.143	0.4	VL041877.D	0.45	01092025T21:16:00	VL041878.D	0.45	01092025T21:46:00
3.143	0.4	VL041877.D	0.91	01092025T21:16:00	VL041878.D	0.91	01092025T21:46:00
3.143	0.4	VL041877.D	0.44	01092025T21:16:00	VL041878.D	0.41	01092025T21:46:00
3.143	0.4	VL041877.D	0.4	01092025T21:16:00	VL041878.D	0.47	01092025T21:46:00
3.143	0.4	VL041877.D	0.68	01092025T21:16:00	VL041878.D	0.61	01092025T21:46:00
3.143	0.04	VL042504.D	0.035	05062025T19:10:00	VL042505.D	0.04	05062025T19:42:00
3.143	0.4	VL041877.D	0.34	01092025T21:16:00	VL041878.D	0.34	01092025T21:46:00
3.143	0.4	VL041877.D	0.44	01092025T21:16:00	VL041878.D	0.43	01092025T21:46:00
3.143	0.4	VL041877.D	0.44	01092025T21:16:00	VL041878.D	0.46	01092025T21:46:00
3.143	0.4	VL041877.D	0.45	01092025T21:16:00	VL041878.D	0.45	01092025T21:46:00
3.143	0.4	VL041877.D	0.45	01092025T21:16:00	VL041878.D	0.44	01092025T21:46:00
3.143	0.4	VL041877.D	0.53	01092025T21:16:00	VL041878.D	0.46	01092025T21:46:00
3.143	0.4	VL041877.D	0.48	01092025T21:16:00	VL041878.D	0.46	01092025T21:46:00
3.143	0.4	VL041877.D	0.42	01092025T21:16:00	VL041878.D	0.4	01092025T21:46:00
3.143	0.4	VL041877.D	0.41	01092025T21:16:00	VL041878.D	0.36	01092025T21:46:00
3.143	0.4	VL041877.D	0.5	01092025T21:16:00	VL041878.D	0.45	01092025T21:46:00
3.143	0.4	VL041877.D	0.46	01092025T21:16:00	VL041878.D	0.46	01092025T21:46:00
3.143	0.03	VL041883.D	0.037	01102025T00:17:00	VL041884.D	0.04	01102025T00:47:00
3.143	0.4	VL041877.D	0.47	01092025T21:16:00	VL041878.D	0.43	01092025T21:46:00
3.143	0.4	VL041877.D	0.45	01092025T21:16:00	VL041878.D	0.43	01092025T21:46:00
3.143	0.4	VL041877.D	0.45	01092025T21:16:00	VL041878.D	0.52	01092025T21:46:00
3.143	0.03	VL041883.D	0.047	01102025T00:17:00	VL041884.D	0.047	01102025T00:47:00
3.143	0.4	VL041877.D	0.53	01092025T21:16:00	VL041878.D	0.52	01092025T21:46:00
3.143	0.4	VL041877.D	0.43	01092025T21:16:00	VL041878.D	0.47	01092025T21:46:00
3.143	0.03	VL042498.D	0.018	05062025T16:01:00	VL042500.D	0.032	05062025T17:04:00

Datafile3	Concentration3	Adate3	Datafile4	Concentration4	Adate4	Datafile5	Concentration5
VL041879.D	0.43	01092025T22:17:00	VL041909.D	0.42	01152025T00:52:00	VL041910.D	0.4
VL041885.D	0.038	01102025T01:18:00	VL041913.D	0.033	01152025T02:53:00	VL041914.D	0.037
VL041885.D	0.044	01102025T01:18:00	VL041913.D	0.033	01152025T02:53:00	VL041914.D	0.032
VL041879.D	0.48	01092025T22:17:00	VL041909.D	0.44	01152025T00:52:00	VL041910.D	0.47
VL041879.D	0.55	01092025T22:17:00	VL041909.D	0.5	01152025T00:52:00	VL041910.D	0.47
VL041879.D	0.57	01092025T22:17:00	VL041909.D	0.5	01152025T00:52:00	VL041910.D	0.48
VL041879.D	0.58	01092025T22:17:00	VL041909.D	0.49	01152025T00:52:00	VL041910.D	0.49
VL041879.D	0.48	01092025T22:17:00	VL041909.D	0.37	01152025T00:52:00	VL041910.D	0.36
VL041879.D	0.47	01092025T22:17:00	VL041909.D	0.37	01152025T00:52:00	VL041910.D	0.39
VL041879.D	0.47	01092025T22:17:00	VL041909.D	0.46	01152025T00:52:00	VL041910.D	0.43
VL041879.D	0.53	01092025T22:17:00	VL041909.D	0.44	01152025T00:52:00	VL041910.D	0.43
VL041879.D	0.5	01092025T22:17:00	VL041909.D	0.47	01152025T00:52:00	VL041910.D	0.46
VL041879.D	0.5	01092025T22:17:00	VL041909.D	0.43	01152025T00:52:00	VL041910.D	0.42
VL041879.D	0.43	01092025T22:17:00	VL041909.D	0.34	01152025T00:52:00	VL041910.D	0.34
VL041879.D	0.51	01092025T22:17:00	VL041909.D	0.5	01152025T00:52:00	VL041910.D	0.51
VL041879.D	0.48	01092025T22:17:00	VL041909.D	0.46	01152025T00:52:00	VL041910.D	0.44
VL041879.D	0.51	01092025T22:17:00	VL041909.D	0.43	01152025T00:52:00	VL041910.D	0.41
VL041879.D	0.5	01092025T22:17:00	VL041909.D	0.45	01152025T00:52:00	VL041910.D	0.47
VL041879.D	0.46	01092025T22:17:00	VL041909.D	0.37	01152025T00:52:00	VL041910.D	0.39
VL041879.D	0.49	01092025T22:17:00	VL041909.D	0.44	01152025T00:52:00	VL041910.D	0.44
VL041879.D	0.46	01092025T22:17:00	VL041909.D	0.37	01152025T00:52:00	VL041910.D	0.38
VL041879.D	0.39	01092025T22:17:00	VL041909.D	0.34	01152025T00:52:00	VL041910.D	0.36
VL041879.D	0.44	01092025T22:17:00	VL041909.D	0.33	01152025T00:52:00	VL041910.D	0.33
VL041879.D	0.43	01092025T22:17:00	VL041909.D	0.39	01152025T00:52:00	VL041910.D	0.37
VL041879.D	0.68	01092025T22:17:00	VL041909.D	0.53	01152025T00:52:00	VL041910.D	0.53
VL041879.D	0.5	01092025T22:17:00	VL041909.D	0.47	01152025T00:52:00	VL041910.D	0.5
VL041879.D	0.46	01092025T22:17:00	VL041909.D	0.42	01152025T00:52:00	VL041910.D	0.41
VL041879.D	0.28	01092025T22:17:00	VL041909.D	0.26	01152025T00:52:00	VL041910.D	0.34
VL041879.D	0.44	01092025T22:17:00	VL041909.D	0.4	01152025T00:52:00	VL041910.D	0.4
VL041879.D	0.55	01092025T22:17:00	VL041909.D	0.44	01152025T00:52:00	VL041910.D	0.52
VL041879.D	0.37	01092025T22:17:00	VL041909.D	0.33	01152025T00:52:00	VL041910.D	0.34
VL041879.D	0.53	01092025T22:17:00	VL041909.D	0.47	01152025T00:52:00	VL041910.D	0.5
VL041879.D	0.43	01092025T22:17:00	VL041909.D	0.41	01152025T00:52:00	VL041910.D	0.4
VL041885.D	0.048	01102025T01:18:00	VL041913.D	0.026	01152025T02:53:00	VL041914.D	0.033
VL041879.D	0.52	01092025T22:17:00	VL041909.D	0.45	01152025T00:52:00	VL041910.D	0.46
VL041879.D	0.51	01092025T22:17:00	VL041909.D	0.42	01152025T00:52:00	VL041910.D	0.42
VL041879.D	0.52	01092025T22:17:00	VL041909.D	0.46	01152025T00:52:00	VL041910.D	0.5
VL041879.D	0.53	01092025T22:17:00	VL041909.D	0.45	01152025T00:52:00	VL041910.D	0.46
VL041879.D	0.53	01092025T22:17:00	VL041909.D	0.52	01152025T00:52:00	VL041910.D	0.45
VL041879.D	0.49	01092025T22:17:00	VL041909.D	0.43	01152025T00:52:00	VL041910.D	0.42
VL041879.D	0.38	01092025T22:17:00	VL041909.D	0.34	01152025T00:52:00	VL041910.D	0.34
VL041879.D	0.5	01092025T22:17:00	VL041909.D	0.35	01152025T00:52:00	VL041910.D	0.35
VL041879.D	0.41	01092025T22:17:00	VL041909.D	0.33	01152025T00:52:00	VL041910.D	0.38
VL041879.D	0.56	01092025T22:17:00	VL041909.D	0.46	01152025T00:52:00	VL041910.D	0.5
VL041879.D	0.56	01092025T22:17:00	VL041909.D	0.46	01152025T00:52:00	VL041910.D	0.46
VL042503.D	0.611	05062025T18:39:00	VL042518.D	0.831	05072025T15:02:00	VL042519.D	0.842
VL041879.D	0.47	01092025T22:17:00	VL041909.D	0.41	01152025T00:52:00	VL041910.D	0.38
VL041879.D	0.44	01092025T22:17:00	VL041909.D	0.34	01152025T00:52:00	VL041910.D	0.35
VL041879.D	0.46	01092025T22:17:00	VL041909.D	0.37	01152025T00:52:00	VL041910.D	0.37
VL041879.D	0.51	01092025T22:17:00	VL041909.D	0.42	01152025T00:52:00	VL041910.D	0.43
VL041879.D	0.49	01092025T22:17:00	VL041909.D	0.42	01152025T00:52:00	VL041910.D	0.38
VL041879.D	0.63	01092025T22:17:00	VL041909.D	0.5	01152025T00:52:00	VL041910.D	0.5
VL041879.D	0.46	01092025T22:17:00	VL041909.D	0.37	01152025T00:52:00	VL041910.D	0.38
VL041879.D	0.92	01092025T22:17:00	VL041909.D	0.72	01152025T00:52:00	VL041910.D	0.69
VL041879.D	0.43	01092025T22:17:00	VL041909.D	0.36	01152025T00:52:00	VL041910.D	0.35
VL041879.D	0.42	01092025T22:17:00	VL041909.D	0.33	01152025T00:52:00	VL041910.D	0.52
VL041879.D	0.63	01092025T22:17:00	VL041909.D	0.54	01152025T00:52:00	VL041910.D	0.57
VL042506.D	0.04	05062025T20:13:00	VL042521.D	0.031	05072025T16:49:00	VL042522.D	0.032
VL041879.D	0.33	01092025T22:17:00	VL041909.D	0.28	01152025T00:52:00	VL041910.D	0.25
VL041879.D	0.42	01092025T22:17:00	VL041909.D	0.33	01152025T00:52:00	VL041910.D	0.34
VL041879.D	0.43	01092025T22:17:00	VL041909.D	0.36	01152025T00:52:00	VL041910.D	0.33
VL041879.D	0.47	01092025T22:17:00	VL041909.D	0.35	01152025T00:52:00	VL041910.D	0.35
VL041879.D	0.44	01092025T22:17:00	VL041909.D	0.34	01152025T00:52:00	VL041910.D	0.36
VL041879.D	0.52	01092025T22:17:00	VL041909.D	0.5	01152025T00:52:00	VL041910.D	0.48
VL041879.D	0.45	01092025T22:17:00	VL041909.D	0.38	01152025T00:52:00	VL041910.D	0.36
VL041879.D	0.38	01092025T22:17:00	VL041909.D	0.34	01152025T00:52:00	VL041910.D	0.31
VL041879.D	0.38	01092025T22:17:00	VL041909.D	0.36	01152025T00:52:00	VL041910.D	0.33
VL041879.D	0.52	01092025T22:17:00	VL041909.D	0.47	01152025T00:52:00	VL041910.D	0.41
VL041879.D	0.46	01092025T22:17:00	VL041909.D	0.36	01152025T00:52:00	VL041910.D	0.37
VL041885.D	0.034	01102025T01:18:00	VL041913.D	0.037	01152025T02:53:00	VL041914.D	0.034
VL041879.D	0.41	01092025T22:17:00	VL041909.D	0.41	01152025T00:52:00	VL041910.D	0.42
VL041879.D	0.44	01092025T22:17:00	VL041909.D	0.37	01152025T00:52:00	VL041910.D	0.36
VL041879.D	0.54	01092025T22:17:00	VL041909.D	0.47	01152025T00:52:00	VL041910.D	0.48
VL041885.D	0.035	01102025T01:18:00	VL041913.D	0.029	01152025T02:53:00	VL041914.D	0.033
VL041879.D	0.54	01092025T22:17:00	VL041909.D	0.45	01152025T00:52:00	VL041910.D	0.47
VL041879.D	0.56	01092025T22:17:00	VL041909.D	0.35	01152025T00:52:00	VL041910.D	0.44
VL042515.D	0.021	05072025T13:17:00	VL042516.D	0.021	05072025T13:50:00	VL042517.D	0.014

Adate5	Datafile6	Concentration6	Adate6	Datafile7	Concentration7	Adate7	Department
01152025T01:23:00	VL041932.D	0.41	01202025T22:30:00	VL041933.D	0.43	01202025T23:00:00	VOC
01152025T03:23:00	VL041936.D	0.028	01212025T00:31:00	VL041940.D	0.027	01212025T09:44:00	VOC
01152025T03:23:00	VL041936.D	0.034	01212025T00:31:00	VL041940.D	0.034	01212025T09:44:00	VOC
01152025T01:23:00	VL041932.D	0.46	01202025T22:30:00	VL041933.D	0.49	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.46	01202025T22:30:00	VL041933.D	0.44	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.45	01202025T22:30:00	VL041933.D	0.47	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.47	01202025T22:30:00	VL041933.D	0.43	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.33	01202025T22:30:00	VL041933.D	0.34	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.35	01202025T22:30:00	VL041933.D	0.33	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.45	01202025T22:30:00	VL041933.D	0.4	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.45	01202025T22:30:00	VL041933.D	0.49	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.49	01202025T22:30:00	VL041933.D	0.47	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.5	01202025T22:30:00	VL041933.D	0.47	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.33	01202025T22:30:00	VL041933.D	0.33	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.49	01202025T22:30:00	VL041933.D	0.52	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.46	01202025T22:30:00	VL041933.D	0.45	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.42	01202025T22:30:00	VL041933.D	0.41	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.42	01202025T22:30:00	VL041933.D	0.3	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.41	01202025T22:30:00	VL041933.D	0.37	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.47	01202025T22:30:00	VL041933.D	0.46	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.36	01202025T22:30:00	VL041933.D	0.33	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.35	01202025T22:30:00	VL041933.D	0.31	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.31	01202025T22:30:00	VL041933.D	0.3	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.38	01202025T22:30:00	VL041933.D	0.37	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.58	01202025T22:30:00	VL041933.D	0.54	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.43	01202025T22:30:00	VL041933.D	0.43	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.47	01202025T22:30:00	VL041933.D	0.43	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.33	01202025T22:30:00	VL041933.D	0.29	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.42	01202025T22:30:00	VL041933.D	0.42	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.39	01202025T22:30:00	VL041933.D	0.41	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.33	01202025T22:30:00	VL041933.D	0.34	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.47	01202025T22:30:00	VL041933.D	0.52	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.38	01202025T22:30:00	VL041933.D	0.38	01202025T23:00:00	VOC
01152025T03:23:00	VL041936.D	0.029	01212025T00:31:00	VL041940.D	0.027	01212025T09:44:00	VOC
01152025T01:23:00	VL041932.D	0.5	01202025T22:30:00	VL041933.D	0.48	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.51	01202025T22:30:00	VL041933.D	0.49	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.52	01202025T22:30:00	VL041933.D	0.49	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.46	01202025T22:30:00	VL041933.D	0.47	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.5	01202025T22:30:00	VL041933.D	0.48	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.42	01202025T22:30:00	VL041933.D	0.41	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.33	01202025T22:30:00	VL041933.D	0.35	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.37	01202025T22:30:00	VL041933.D	0.33	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.38	01202025T22:30:00	VL041933.D	0.36	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.48	01202025T22:30:00	VL041933.D	0.51	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.45	01202025T22:30:00	VL041933.D	0.45	01202025T23:00:00	VOC
05072025T15:37:00	VL042520.D	0.766	05072025T16:13:00	VL042569.D	0.664	05212025T16:53:00	VOC
01152025T01:23:00	VL041932.D	0.39	01202025T22:30:00	VL041933.D	0.4	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.32	01202025T22:30:00	VL041933.D	0.31	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.37	01202025T22:30:00	VL041933.D	0.33	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.44	01202025T22:30:00	VL041933.D	0.43	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.4	01202025T22:30:00	VL041933.D	0.36	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.46	01202025T22:30:00	VL041933.D	0.46	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.36	01202025T22:30:00	VL041933.D	0.35	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.64	01202025T22:30:00	VL041933.D	0.65	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.35	01202025T22:30:00	VL041933.D	0.33	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.35	01202025T22:30:00	VL041933.D	0.33	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.5	01202025T22:30:00	VL041933.D	0.48	01202025T23:00:00	VOC
05072025T17:24:00	VL042523.D	0.03	05072025T17:58:00	VL042567.D	0.034	05212025T15:49:00	VOC
01152025T01:23:00	VL041932.D	0.2	01202025T22:30:00	VL041933.D	0.17	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.33	01202025T22:30:00	VL041933.D	0.31	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.31	01202025T22:30:00	VL041933.D	0.33	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.33	01202025T22:30:00	VL041933.D	0.32	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.32	01202025T22:30:00	VL041933.D	0.32	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.5	01202025T22:30:00	VL041933.D	0.48	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.33	01202025T22:30:00	VL041933.D	0.34	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.3	01202025T22:30:00	VL041933.D	0.3	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.27	01202025T22:30:00	VL041933.D	0.31	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.44	01202025T22:30:00	VL041933.D	0.38	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.33	01202025T22:30:00	VL041933.D	0.3	01202025T23:00:00	VOC
01152025T03:23:00	VL041936.D	0.026	01212025T00:31:00	VL041940.D	0.03	01212025T09:44:00	VOC
01152025T01:23:00	VL041932.D	0.39	01202025T22:30:00	VL041933.D	0.41	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.33	01202025T22:30:00	VL041933.D	0.34	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.46	01202025T22:30:00	VL041933.D	0.44	01202025T23:00:00	VOC
01152025T03:23:00	VL041936.D	0.033	01212025T00:31:00	VL041940.D	0.03	01212025T09:44:00	VOC
01152025T01:23:00	VL041932.D	0.42	01202025T22:30:00	VL041933.D	0.41	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.33	01202025T22:30:00	VL041933.D	0.37	01202025T23:00:00	VOC
05072025T14:29:00	VL042575.D	0.034	05222025T11:27:00	VL042576.D	0.032	05222025T11:59:00	VOC

- A
- B
- C
- D
- E
- F
- G
- H

AVG Concentration	Recovery	Effective Date
0.43	108	5/22/2025
0.03	114	5/22/2025
0.04	125	5/22/2025
0.47	119	5/22/2025
0.50	125	5/22/2025
0.50	125	5/22/2025
0.50	125	5/22/2025
0.40	100	5/22/2025
0.40	100	5/22/2025
0.45	112	5/22/2025
0.48	120	5/22/2025
0.49	123	5/22/2025
0.48	119	5/22/2025
0.38	95	5/22/2025
0.51	128	5/22/2025
0.46	116	5/22/2025
0.45	112	5/22/2025
0.44	110	5/22/2025
0.42	105	5/22/2025
0.46	115	5/22/2025
0.40	100	5/22/2025
0.36	91	5/22/2025
0.37	93	5/22/2025
0.40	100	5/22/2025
0.58	146	5/22/2025
0.47	118	5/22/2025
0.45	111	5/22/2025
0.30	75	5/22/2025
0.42	106	5/22/2025
0.48	119	5/22/2025
0.35	86	5/22/2025
0.50	125	5/22/2025
0.41	102	5/22/2025
0.03	113	5/22/2025
0.48	121	5/22/2025
0.47	118	5/22/2025
0.52	130	5/22/2025
0.48	121	5/22/2025
0.50	126	5/22/2025
0.44	111	5/22/2025
0.36	91	5/22/2025
0.40	101	5/22/2025
0.38	95	5/22/2025
0.50	125	5/22/2025
0.49	123	5/22/2025
0.77	191	5/22/2025
0.42	106	5/22/2025
0.38	94	5/22/2025
0.40	100	5/22/2025
0.46	115	5/22/2025
0.43	106	5/22/2025
0.53	134	5/22/2025
0.40	101	5/22/2025
0.78	194	5/22/2025
0.38	95	5/22/2025
0.40	101	5/22/2025
0.57	143	5/22/2025
0.03	86	5/22/2025
0.27	68	5/22/2025
0.37	93	5/22/2025
0.38	95	5/22/2025
0.39	97	5/22/2025
0.38	95	5/22/2025
0.50	124	5/22/2025
0.40	100	5/22/2025
0.35	88	5/22/2025
0.35	86	5/22/2025
0.45	113	5/22/2025
0.39	98	5/22/2025
0.03	113	5/22/2025
0.42	105	5/22/2025
0.39	97	5/22/2025
0.48	120	5/22/2025
0.04	121	5/22/2025
0.48	119	5/22/2025
0.42	105	5/22/2025
0.02	82	5/22/2025



SAMPLE DATA

Report of Analysis

Client:	Apex Companies, LLC.	Date Collected:	09/05/25
Project:	Emerson Vapor Intrusion REG006-0309010-25011690	Date Received:	09/05/25
Client Sample ID:	SV-1	SDG No.:	Q3038
Lab Sample ID:	Q3038-01	Matrix:	Air
Analytical Method:	TO-15	Test:	VOCMS Group2
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042906.D	4		09/08/25 16:33	VL090825

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL ug/m3	LOQ / CRQL ug/m3
TARGETS						
75-01-4	Vinyl Chloride	0.10	0.26	U	0.26	0.31
107-06-2	1,2-Dichloroethane	0.37	1.50	U	1.50	8.09
79-01-6	Trichloroethene	0.40	2.15		0.54	0.64
127-18-4	Tetrachloroethene	46.8	317		0.41	0.81
SURROGATES						
460-00-4	1-Bromo-4-Fluorobenzene	9.80			70 (65) - 130 (135)	98% SPK: 10
INTERNAL STANDARDS						
74-97-5	Bromochloromethane	143000		2.78		
540-36-3	1,4-Difluorobenzene	358000		3.949		
3114-55-4	Chlorobenzene-d5	301000		8.872		

U = Not Detected

RL = Reporting Limit

MDL = Method Detection Limit

E = Value Exceeds Calibration Range

D = Dilution

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements



QC SUMMARY

Surrogate Summary

SDG No.: Q3038

Client: Apex Companies, LLC.

Analytical Method: SWTO-15

Lab Sample ID	Client ID	Parameter	Spike	Result	Recovery (%)	Qual	Limits (%)	
							Low	High
Q3037-01DUP	IA-2DUP	1-Bromo-4-Fluorobenzene	10	10.4	104		70 (65)	130 (135)
Q3038-01	SV-1	1-Bromo-4-Fluorobenzene	10	9.77	98		70 (65)	130 (135)
VL0908ABL01	VL0908ABL01	1-Bromo-4-Fluorobenzene	10	10.2	102		70 (65)	130 (135)
VL0908ABS01	VL0908ABS01	1-Bromo-4-Fluorobenzene	10	10.5	105		70 (65)	130 (135)

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.:	<u>Q3038</u>	Analytical Method:	<u>SWTO-15</u>
Client:	<u>Apex Companies, LLC.</u>	Datafile :	<u>VL042902.D</u>

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VL0908ABS01	Vinyl Chloride	10	9.60	ppbv	96			70 (70)	130 (130)	
	1,2-Dichloroethane	10	12.7	ppbv	127			70 (70)	130 (130)	
	Trichloroethene	10	10.4	ppbv	104			70 (70)	130 (130)	
	Tetrachloroethene	10	9.60	ppbv	96			70 (70)	130 (130)	

Duplicate Sample Summary

Lab Sample Id : Q3037-01DUP Q3037-01
Client Id : IA-2DUP IA-2
DF : 1 1
Datafile : VL042905.D VL042904.D
Anal Date & Time : 09/08/2025 15:59 09/08/2025 15:15

Parameter	Result	Result	RPD
1,2-Dichloroethane	0	0	0
Tetrachloroethene	0	0	0
Trichloroethene	0	0	0
Vinyl Chloride	0	0	0

VOLATILE METHOD BLANK SUMMARY

Client ID

VL0908ABL01

Lab Name: Alliance

Contract: APEX04

Lab Code: ACE

SDG NO.: Q3038

Lab File ID: VL042901.D

Lab Sample ID: VL0908ABL01

Date Analyzed: 09/08/2025

Time Analyzed: 11:55

GC Column: RTX-1 ID: 0.32 (mm)

Heated Purge: (Y/N) N

Instrument ID: MSVOA_L

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VL0908ABS01	VL0908ABS01	VL042902.D	09/08/2025
IA-2DUP	Q3037-01DUP	VL042905.D	09/08/2025
SV-1	Q3038-01	VL042906.D	09/08/2025

COMMENTS: _____

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alliance

Contract: APEX04

Lab Code: ACE

SDG NO.: Q3038

Lab File ID: VL042841.D

BFB Injection Date: 08/13/2025

Instrument ID: MSVOA_L

BFB Injection Time: 07:45

GC Column: RTX-1 ID: 0.32 (mm)

Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	20.8
75	30.0 - 66.0% of mass 95	53.1
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.3 (0.4) 1
174	50.0 - 120.0% of mass 95	62
175	4.0 - 9.0% of mass 174	4.5 (7.3) 1
176	93.0 - 101.0% of mass 174	60 (96.7) 1
177	5.0 - 9.0% of mass 176	3.7 (6.1) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDICCC010	VSTDICCC010	VL042842.D	08/13/2025	08:30
VSTDICCC002	VSTDICCC002	VL042843.D	08/13/2025	09:06
VSTDICCC001	VSTDICCC001	VL042844.D	08/13/2025	09:41
VSTDICCC0.5	VSTDICCC0.5	VL042845.D	08/13/2025	10:17
VSTDICCC0.1	VSTDICCC0.1	VL042846.D	08/13/2025	10:53
VSTDICCC0.03	VSTDICCC0.03	VL042847.D	08/13/2025	11:30
VSTDICCC015	VSTDICCC015	VL042848.D	08/13/2025	12:06

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alliance
Lab Code: ACE
Lab File ID: VL042899.D
Instrument ID: MSVOA_L
GC Column: RTX-1 ID: 0.32 (mm)

Contract: APEX04
SDG NO.: Q3038
BFB Injection Date: 09/08/2025
BFB Injection Time: 08:41
Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	23.4
75	30.0 - 66.0% of mass 95	58.3
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.4
173	Less than 2.0% of mass 174	0.5 (1) 1
174	50.0 - 120.0% of mass 95	55.2
175	4.0 - 9.0% of mass 174	4 (7.3) 1
176	93.0 - 101.0% of mass 174	54.2 (98.3) 1
177	5.0 - 9.0% of mass 176	3.4 (6.3) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC010	VSTDCCC010	VL042900.D	09/08/2025	11:05
VL0908ABL01	VL0908ABL01	VL042901.D	09/08/2025	11:55
VL0908ABS01	VL0908ABS01	VL042902.D	09/08/2025	13:35
IA-2DUP	Q3037-01DUP	VL042905.D	09/08/2025	15:59
SV-1	Q3038-01	VL042906.D	09/08/2025	16:33

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance Contract: APEX04
 Lab Code: ACE SDG NO.: Q3038
 Lab File ID: VL042900.D Date Analyzed: 09/08/2025
 Instrument ID: MSVOA_L Time Analyzed: 11:05
 GC Column: RTX-1 ID: 0.32 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	126678	2.78	333606	3.94	282770	8.87
UPPER LIMIT	177349	3.11	467048	4.27	395878	9.20
LOWER LIMIT	76006.8	2.45	200164	3.61	169662	8.54
EPA SAMPLE NO.						
IA-2DUP	141221	2.78	372044	3.95	303028	8.88
SV-1	142770	2.78	358223	3.95	300604	8.87
VL0908ABL01	141293	2.78	355217	3.95	298537	8.88
VL0908ABS01	139945	2.78	365857	3.95	306385	8.87

IS1 = Bromochloromethane
 IS2 = 1,4-Difluorobenzene
 IS3 = Chlorobenzene-d5

AREA UPPER LIMIT = +40% of internal standard area
 AREA LOWER LIMIT = -40% of internal standard area
 RT UPPER LIMIT = +0.33 minutes of internal standard RT
 RT LOWER LIMIT = -0.33 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
 * Values outside of QC limits.



QC SAMPLE DATA

Report of Analysis

Client:	Apex Companies, LLC.	Date Collected:	
Project:	Emerson Vapor Intrusion REG006-0309010-25011690	Date Received:	
Client Sample ID:	VL0908ABL01	SDG No.:	Q3038
Lab Sample ID:	VL0908ABL01	Matrix:	Air
Analytical Method:	TO-15	Test:	VOCMS Group2
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042901.D	1		09/08/25 11:55	VL090825

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL ug/m3	LOQ / CRQL ug/m3
TARGETS						
75-01-4	Vinyl Chloride	0.030	0.080	U	0.080	0.080
107-06-2	1,2-Dichloroethane	0.090	0.36	U	0.36	2.02
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16
127-18-4	Tetrachloroethene	0.020	0.14	U	0.14	0.20
SURROGATES						
460-00-4	1-Bromo-4-Fluorobenzene	10.2			70 (65) - 130 (135)	102% SPK: 10
INTERNAL STANDARDS						
74-97-5	Bromochloromethane	141000		2.784		
540-36-3	1,4-Difluorobenzene	355000		3.952		
3114-55-4	Chlorobenzene-d5	299000		8.875		

U = Not Detected

RL = Reporting Limit

MDL = Method Detection Limit

E = Value Exceeds Calibration Range

D = Dilution

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Report of Analysis

Client:	Apex Companies, LLC.	Date Collected:	
Project:	Emerson Vapor Intrusion REG006-0309010-25011690	Date Received:	
Client Sample ID:	VL0908ABS01	SDG No.:	Q3038
Lab Sample ID:	VL0908ABS01	Matrix:	Air
Analytical Method:	TO-15	Test:	VOCMS Group2
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042902.D	1		09/08/25 13:35	VL090825

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL ug/m3	LOQ / CRQL ug/m3
TARGETS						
75-01-4	Vinyl Chloride	9.60	24.5		0.080	0.080
107-06-2	1,2-Dichloroethane	12.7	51.4		0.36	2.02
79-01-6	Trichloroethene	10.4	55.9		0.11	0.16
127-18-4	Tetrachloroethene	9.60	65.1		0.14	0.20
SURROGATES						
460-00-4	1-Bromo-4-Fluorobenzene	10.5			70 (65) - 130 (135)	105% SPK: 10
INTERNAL STANDARDS						
74-97-5	Bromochloromethane	140000		2.781		
540-36-3	1,4-Difluorobenzene	366000		3.946		
3114-55-4	Chlorobenzene-d5	306000		8.872		

U = Not Detected

RL = Reporting Limit

MDL = Method Detection Limit

E = Value Exceeds Calibration Range

D = Dilution

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Report of Analysis

Client:	Apex Companies, LLC.	Date Collected:	
Project:	Emerson Vapor Intrusion REG006-0309010-25011690	Date Received:	
Client Sample ID:	IA-2DUP	SDG No.:	Q3038
Lab Sample ID:	Q3037-01DUP	Matrix:	Air
Analytical Method:	TO-15	Test:	VOCMS Group2
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042905.D	1		09/08/25 15:59	VL090825

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL ug/m3	LOQ / CRQL ug/m3
TARGETS						
75-01-4	Vinyl Chloride	0.030	0.080	U	0.080	0.080
107-06-2	1,2-Dichloroethane	0.090	0.36	U	0.36	2.02
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16
127-18-4	Tetrachloroethene	0.020	0.14	U	0.14	0.20
SURROGATES						
460-00-4	1-Bromo-4-Fluorobenzene	10.4			70 (65) - 130 (135)	104% SPK: 10
INTERNAL STANDARDS						
74-97-5	Bromochloromethane	141000		2.781		
540-36-3	1,4-Difluorobenzene	372000		3.949		
3114-55-4	Chlorobenzene-d5	303000		8.875		

U = Not Detected

RL = Reporting Limit

MDL = Method Detection Limit

E = Value Exceeds Calibration Range

D = Dilution

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements



CALIBRATION SUMMARY

Method Path : Z:\voasrv\HPCHEM1\MSVOA_L\methods\

Method File : VL081325AIR.M

Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022

Last Update : Thu Aug 14 02:12:54 2025

Response Via : Initial Calibration

Calibration Files

0.03=VL042847.D 0.1 =VL042846.D 0.5 =VL042845.D 1 =VL042844.D 2 =VL042843.D 10 =VL042842.D 15 =VL042848.D

Compound	0.03	0.1	0.5	1	2	10	15	Avg	%RSD

1) I Bromochloromethane	-----ISTD-----								
2) T Dichlorodifluo...			1.566	1.525	1.511	1.343	1.383	1.466	6.61
3) Chlorodifluoro...			1.752	1.621	1.714	1.509	1.504	1.620	7.05
4) Chloromethane			0.648	0.618	0.606	0.533	0.551	0.591	8.09
5) T Vinyl Chloride	0.728	0.639	0.593	0.559	0.550	0.502	0.507	0.582	13.72
6) T Bromomethane			0.248	0.268	0.239	0.203	0.206	0.233	12.06
7) Chloroethane			0.266	0.240	0.219	0.202	0.210	0.227	11.46
8) T Dichlorotetra...			1.273	1.235	1.245	1.122	1.122	1.199	6.02
9) T Propene			0.824	0.692	0.715	0.656	0.611	0.700	11.40
10) T Heptane			2.009	2.011	1.917	1.718	1.713	1.874	7.96
11) T Trichlorofluor...			1.614	1.533	1.467	1.271	1.345	1.446	9.59
12) T 1,1,2-Trichlor...			1.259	1.202	1.189	1.047	1.066	1.152	7.95
13) Ethanol			0.089	0.069	0.070	0.046	0.047	0.064	27.87
14) T Bromoethene			0.462	0.416	0.436	0.381	0.391	0.417	7.89
15) T Acetone			1.708	1.475	1.476	0.950	1.005	1.323	24.92
16) T 1,3-Butadiene			0.783	0.633	0.579	0.500	0.503	0.600	19.47
17) tert-Butyl alc...			1.920	1.660	1.557	1.371	1.335	1.569	15.14
18) T 1,1-Dichloroet...			0.552	0.509	0.532	0.469	0.472	0.507	7.21
19) T Isopropyl Alcohol			0.976	0.847	0.799	0.649	0.679	0.790	16.79
20) T Methylene Chlo...			0.792	0.596	0.544	0.414	0.425	0.554	27.79
21) T Allyl Chloride			1.122	0.902	0.945	0.850	0.854	0.935	11.98
22) T trans-1,2-Dich...			0.630	0.613	0.604	0.537	0.546	0.586	7.10
23) T Vinyl Acetate			2.161	1.733	1.849	1.663	1.689	1.819	11.22
24) T 1,1-Dichloroet...			1.317	1.223	1.185	1.040	1.088	1.171	9.38
25) T Ethyl Acetate			3.491	3.346	3.324	2.932	2.914	3.202	8.19
26) T Hexane			1.557	1.552	1.522	1.392	1.366	1.478	6.19
27) T Carbon Disulfide			1.504	1.513	1.511	1.314	1.348	1.438	6.84
28) T Methyl tert-Bu...			0.833	0.747	0.817	0.661	0.710	0.754	9.61
29) T Chloroform			2.299	2.183	2.166	1.932	1.970	2.110	7.32
30) T Cyclohexane			1.425	1.283	1.340	1.214	1.217	1.296	6.87
31) T cis-1,2-Dichlo...			1.625	1.524	1.524	1.346	1.362	1.476	8.06
32) T 1,1,1-Trichlor...	2.448	2.528	2.209	2.148	2.215	1.999	2.063	2.230	8.69

33) I 1,4-Difluorobenzene	-----ISTD-----								
34) T 2-Butanone			0.753	0.702	0.700	0.610	0.611	0.675	9.33
35) T Carbon Tetrach...	0.736	0.738	0.682	0.700	0.692	0.636	0.643	0.689	5.84
36) T Benzene			1.013	0.978	0.990	0.912	0.896	0.958	5.33
37) T 1,2-Dichloroet...			0.512	0.516	0.503	0.483	0.488	0.500	2.87
38) T Trichloroethene	0.416	0.448	0.501	0.448	0.453	0.399	0.397	0.437	8.35
39) T 1,2-Dichloropr...			0.378	0.365	0.356	0.324	0.326	0.350	6.84

Method Path : Z:\voasrv\HPCHEM1\MSVOA_L\methods\											
Method File : VL081325AIR.M											
40)	T	1,4-Dioxane			0.189	0.185	0.166	0.148	0.144	0.166	12.22
41)	T	Tetrahydrofuran			0.395	0.389	0.392	0.355	0.351	0.376	5.64
42)	T	Bromodichlorom...			0.786	0.742	0.777	0.708	0.714	0.745	4.77
43)		Methyl Methacr...			0.427	0.402	0.415	0.368	0.362	0.394	7.31
44)	T	2,2,4-Trimethy...			1.728	1.719	1.676	1.515	1.489	1.625	7.06
45)	T	t-1,3-Dichloro...			0.450	0.464	0.456	0.428	0.427	0.445	3.73
46)	T	cis-1,3-Dichlo...			0.568	0.559	0.578	0.539	0.529	0.555	3.67
47)	T	1,1,2-Trichlor...			0.395	0.382	0.386	0.341	0.348	0.371	6.52
48)	T	Dibromochlorom...			0.596	0.605	0.632	0.584	0.581	0.600	3.44
49)	T	Bromoform			0.466	0.514	0.535	0.491	0.467	0.495	6.07
50)	T	4-Methyl-2-Pen...			0.960	0.917	0.946	0.881	0.859	0.913	4.67
51)	T	2-Hexanone			0.723	0.737	0.750	0.699	0.683	0.718	3.82
52)	T	Tetrachloroethene	0.391	0.379	0.369	0.333	0.345	0.313	0.295	0.346	10.19
53)	T	Toluene			1.219	1.180	1.160	1.072	1.061	1.138	6.09
54)	T	1,2-Dibromoethane		0.599	0.549	0.532	0.552	0.506	0.512	0.542	6.24
-----ISTD-----											
55)	I	Chlorobenzene-d5									
56)		1,1,1,2-Tetrac...			0.534	0.549	0.551	0.476	0.476	0.517	7.39
57)	T	Chlorobenzene			1.026	0.990	0.994	0.878	0.866	0.951	7.68
58)	T	Ethyl Benzene			1.854	1.866	1.838	1.636	1.630	1.765	6.84
59)	T	m/p-Xylene			1.447	1.454	1.455	1.283	1.277	1.383	6.81
60)	T	o-Xylene			1.532	1.472	1.445	1.266	1.242	1.391	9.31
61)	T	Styrene			0.711	0.677	0.660	0.610	0.601	0.652	7.09
62)		Isopropylbenzene			2.149	2.194	2.133	1.852	1.838	2.033	8.53
63)	T	1,1,2,2-Tetrac...	0.881	0.774	0.795	0.784	0.772	0.674	0.677	0.765	9.39
64)		n-propylbenzene			0.570	0.528	0.549	0.475	0.472	0.519	8.47
65)		tert-Butylbenzene			1.907	1.991	1.910	1.605	1.549	1.793	11.19
66)	T	Benzyl Chloride			0.232	0.226	0.246	0.227	0.207	0.228	6.21
67)		sec-Butylbenzene			2.669	2.754	2.706	2.250	2.202	2.516	10.62
68)	S	1-Bromo-4-Fluo...	0.736	0.746	0.755	0.760	0.744	0.755	0.754	0.750	1.09
69)		p-Isopropyltol...			2.338	2.372	2.328	1.905	1.856	2.160	11.85
70)		n-Butylbenzene			2.234	2.303	2.333	1.927	1.915	2.142	9.58
71)		2-Chlorotoluene			1.709	1.719	1.641	1.418	1.408	1.579	9.77
72)	T	4-Ethyltoluene			1.738	1.806	1.784	1.563	1.543	1.687	7.39
73)	T	1,3,5-Trimethy...			1.548	1.535	1.512	1.293	1.283	1.434	9.37
74)	T	1,2,4-Trimethy...			1.710	1.706	1.698	1.394	1.365	1.574	11.33
75)	T	1,3-Dichlorobe...			0.937	0.946	0.967	0.831	0.795	0.895	8.59
76)	T	1,4-Dichlorobe...			0.966	0.946	0.978	0.833	0.803	0.905	8.93
77)	T	1,2-Dichlorobe...			0.937	0.956	0.947	0.781	0.761	0.876	11.03
78)	T	Hexachloro-1,3...			0.814	0.845	0.804	0.572	0.556	0.718	19.74
79)	T	Naphthalene		1.174	1.383	1.647	1.746	1.315	1.300	1.427	15.50
80)	T	Naphthalene,2-...			0.430	0.554	0.708	0.478	0.497	0.533	20.15
81)	T	1,2,4-Trichlor...			0.623	0.797	0.855	0.661	0.650	0.717	14.24

(#) = Out of Range

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name:	<u>Alliance</u>	Contract:	<u>APEX04</u>
Lab Code:	<u>ACE</u>	SDG No.:	<u>Q3038</u>
Instrument ID:	<u>MSVOA_L</u>	Calibration Date/Time:	<u>09/08/2025 11:05</u>
Lab File ID:	<u>VL042900.D</u>	Init. Calib. Date(s):	<u>08/13/2025 08/13/2025</u>
Heated Purge: (Y/N)	<u>N</u>	Init. Calib. Time(s):	<u>08:30 12:06</u>
GC Column:	<u>RTX-1</u>	ID:	<u>0.32</u> (mm)

COMPOUND	RRF	RRF010	MIN RRF	%D	MAX%D
Vinyl Chloride	0.582	0.560		-3.78	30
1,2-Dichloroethane	0.500	0.635		27	30
Trichloroethene	0.437	0.455		4.12	30
Tetrachloroethene	0.346	0.331		-4.34	30
1-Bromo-4-Fluorobenzene	0.750	0.786		4.8	30

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.



SHIPPING DOCUMENTS

Client Contact Information				Bottle Order ID : B2508049				Courier :				1 of 1 COCs																			
Client ID : APEX04 Project ID : Emerson Vapor Intrusion REG006-0309010-2				Sampler Name(s) :				Analysis				Matrix																			
Customer Name : Apex Companies, LLC. Address : 485 Route 1 South, Building B, Suite 130 City : Iselin State : NJ Zip Code : 08830 Country :				Project Manager : MICHAEL DZIEDZIC				AIR ANALYSIS CHAIN-OF-CUSTODY Batch Certified				ONLY report : TO-15 - PCE, TCE, vinyl chloride, 1,2-DCE Indoor/Ambient Air Soil Gas																			
				Phone Number : 973-475-5502																											
				Fax Number :																											
				Site Details:																											
Analysis Turnaround Time				Data Package Type :																											
Standard : 10 business days OR				Rush (Specify): <u>5</u> Days				EDD Type :																							
Sample Identification	Sample Date(s)	Time Start (24 hr Clock)	Time Stop (24 hr Clock)	Can Vacuum in Field ("Hg) (Start)	Can Vacuum in Field ("Hg) (Stop)**	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Out going Can Pressure ("Hg)(Lab)	In coming Can Pressure ("Hg)(Lab)	Flow Reg. ID	Can ID	Flow Controller Readout (ml/min)	Can Cert ID																		
SV-1	9/15/25	08:00	08:30	-29.00	-5.00			-30	-9.6	10545	10122	1.4 L 50	VL042090.D	X				X													
Temperature (Fahrenheit) <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td></td> <td>Ambient</td> <td>Maximum</td> <td>Minimum</td> </tr> <tr> <td>Start</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Stop</td> <td></td> <td></td> <td></td> </tr> </table>											Ambient	Maximum	Minimum	Start				Stop				GC/MS Analyst Signature (TO-15)									
	Ambient	Maximum	Minimum																												
Start																															
Stop																															
Pressure (Inches of Hg) <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td></td> <td>Ambient</td> <td>Maximum</td> <td>Minimum</td> </tr> <tr> <td>Start</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Stop</td> <td></td> <td></td> <td></td> </tr> </table>											Ambient	Maximum	Minimum	Start				Stop				** Submittal of this COC indicates approval of the analysis based on existing conditions. Please follow the instructions on the back of this COC.									
	Ambient	Maximum	Minimum																												
Start																															
Stop																															
Special Instructions/QC Requirements & Comments : <i>Please keep the SV & Indoor Air Reports separate</i>																															
Suspected Contamination: High Medium Low PID Readings: <i>0.0 ppm</i>																															
Sampling site (State): <i>New Jersey</i>																															
Quick Connector required : <i>yes</i>																															
Canisters Shipped by: <i>AL</i>					Date/Time: <i>9/13/25</i>					Canisters Received by:					Date/Time: <i>9-5-25 1620</i>																
Samples Relinquished by: <i>dois Brian</i>					Date/Time: <i>9/15/25 16:00</i>					Received by:					Date/Time:																
Relinquished by:					Date/Time:					Received by:					Date/Time:																

Laboratory Certification

Certified By	License No.
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255425
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	TX-C25-00189
Virginia	460312

Internal Chain of Custody

Instructions: Use 1 form for each 20 samples of aliquot

Laboratory Person Breaking Field Seal on Sample Shuttle & Accepting Responsibility for Sample

Laboratory: Chemtech

Location: 284 Sheffield Street, Mountainside, NJ 7092

~~QABG:~~

Title: Sample Custodian

Field Sample Seal No. Q3038

Date Broken 9/8/2025

Military Time Seal Broken: 16:20:00

Case No.: Emerson Vapor Intrusion R

Analytical Parameter/Fraction TO-15

Sample No.	Aliquot/Extract No.	Sample No.	Aliquot/Extract No.
Q3038-01	SV-1		

Date	Time	Relinquished By	Received By	Purpose of Change of Custody
9/8/25	2:50	Signature 	Signature 	
		Printed Name <u>Castro, J. C.</u>	Printed Name <u>Emmally, Judith</u>	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	

Distribution: White - Original (Sent With Report)

Yellow - Contractor Archive

Pink - Sample Custodian - Interim Copy

CHEMTECH

284 Sheffield Street, Mountainside, NJ 07092 P: (908) 789-8900 F: (908) 789-8922

Client Sample ID #: SV-1

Client Name: Aper

Project Name: EMERSON Phase II

Date: 9/5/25 Time: _____

Analysis: _____

Comments: _____

CHEMTECH

Date Received

Storage Location: Air Lab

Sample: Q3038-01

Cust #: SV-1

Disposal: _____

922-101

B2508049