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

Cover Page

Order ID : Q2554

Project ID : Waste Water 2025

Client : Garden State Laboratories, Inc.

Lab Sample Number	Client Sample Number
Q2554-01	250709071-01 VOA
Q2554-02	250709059-10 Trip blank
Q2554-03	250709104-01 VOA
Q2554-04	250709059-11 Trip blank

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: 7/18/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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CASE NARRATIVE

Garden State Laboratories, Inc.
Project Name: Waste Water 2025
Project # N/A
Order ID # Q2554
Test Name: VOCMS Group1

A. Number of Samples and Date of Receipt:
2 Water samples were received on 07/10/2025.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: VOCMS Group1 and VOCMS Group2. This data package contains results for VOCMS Group1.

C. Analytical Techniques:
The analysis performed on instrument MSVOA_N were done using GC column Rxi-624SIL MS 30m, 0.25mm, 1.4 um, Cat. #13868.The analysis of VOCMS Group1 was based on method 624.1.

D. QA/ QC Samples:
The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable requirements.

The Internal Standards Areas met the acceptable requirements.
The Retention Times were acceptable for all samples.

The RPD met criteria.
The Blank Spike met requirements for all samples.
The Blank Spike Duplicate met requirements for all samples.
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.

E. Additional Comments:
"As per method, MS/MSD is required to be performed with the sample analysis. However, Lab did not receive sufficient volume to perform the MS/MSD therefore MS/MSD were not performed for this project. However, Lab has performed LCS/LCSD instead."

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Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <35% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 35% for the Initial Calibration curve for SW-846 analysis.

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_____

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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 is 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

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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: **Q2554**

	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 Castody	✓
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:** **07/18/2025**

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LAB CHRONICLE

OrderID:	Q2554	**OrderDate:**	7/10/2025 9:19:00 AM
Client:	Garden State Laboratories, Inc.	**Project:**	Waste Water 2025
Contact:	Sharon Ercoliani	**Location:**	VOA Lab

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2554-03	**250709104-01 VOA**	**Water**			**07/09/25**			**07/10/25**
			VOCMS Group1	624.1			07/10/25	
			VOCMS Group2	8260-Low			07/10/25	
Q2554-04	**250709059-11 Trip blank**	**Water**			**07/09/25**			**07/10/25**
			VOCMS Group1	624.1			07/10/25	
			VOCMS Group2	8260-Low			07/10/25	

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Hit Summary Sheet

624.1

SDG No.: Q2554

Client: Garden State Laboratories, Inc.

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID:								
				0				

Total Voc :

Total Concentration:

QC SUMMARY

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Surrogate Summary

SDG No.: Q2554

Client: Garden State Laboratories, Inc.

Analytical Method: SW624.1

Lab Sample ID	Client ID	Parameter	Spike	Result	Recovery (%)	Qual	Limits (%) Low	High
Q2554-03	250709104-01 VOA	1,2-Dichloroethane-d4	30	29.1	97		91	110
		Toluene-d8	30	28.0	93		91	112
		4-Bromofluorobenzene	30	28.7	96		63	112
Q2554-04	250709059-11 Trip blank	1,2-Dichloroethane-d4	30	29.3	98		91	110
		Toluene-d8	30	28.5	95		91	112
		4-Bromofluorobenzene	30	26.5	88		63	112
VN0710WBL01	VN0710WBL01	1,2-Dichloroethane-d4	30	28.6	95		91	110
		Toluene-d8	30	29.2	97		91	112
		4-Bromofluorobenzene	30	27.3	91		63	112
VN0710WBS01	VN0710WBS01	1,2-Dichloroethane-d4	30	27.6	92		91	110
		Toluene-d8	30	29.5	98		91	112
		4-Bromofluorobenzene	30	30.6	102		63	112
VN0710WBSD0	VN0710WBSD01	1,2-Dichloroethane-d4	30	27.3	91		91	110
		Toluene-d8	30	28.8	96		91	112
		4-Bromofluorobenzene	30	30.2	101		63	112

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2554 **Analytical Method:** SW624.1

Client: Garden State Laboratories, Inc. **Datafile :** VN087317.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VN0710WBS01	Acrolein	100	100	ug/L	100			60	140	
	Acrylonitrile	100	67.3	ug/L	67			60	140	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2554 **Analytical Method:** SW624.1

Client: Garden State Laboratories, Inc. **Datafile :** VN087318.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VN0710WBSD01	Acrolein	100	110	ug/L	110	10		60	140	20
	Acrylonitrile	100	67.5	ug/L	68	1		60	140	20

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VOLATILE METHOD BLANK SUMMARY

Client ID: VN0710WBL01

Lab Name: Alliance Contract: GARD04

Lab Code: ACE SDG NO.: Q2554

Lab File ID: VN087319.D Lab Sample ID: VN0710WBL01

Date Analyzed: 07/10/2025 Time Analyzed: 12:26

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

Instrument ID: MSVOA_N

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VN0710WBS01	VN0710WBS01	VN087317.D	07/10/2025
VN0710WBSD01	VN0710WBSD01	VN087318.D	07/10/2025
250709059-11 Trip blank	Q2554-04	VN087321.D	07/10/2025
250709104-01 VOA	Q2554-03	VN087322.D	07/10/2025

COMMENTS:

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alliance | Contract: GARD04

Lab Code: ACE | SDG NO.: Q2554

Lab File ID: VN087161.D | BFB Injection Date: 06/25/2025

Instrument ID: MSVOA_N | BFB Injection Time: 08:25

GC Column: RXI-624 ID: 0.25 (mm) | Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.4
75	30.0 - 60.0% of mass 95	50.2
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.5 (0.7) 1
174	50.0 - 100.0% of mass 95	70.2
175	5.0 - 9.0% of mass 174	5.4 (7.7) 1
176	95.0 - 101.0% of mass 174	66.9 (95.3) 1
177	5.0 - 9.0% of mass 176	4.5 (6.8) 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
VSTDICC005	VSTDICC005	VN087162.D	06/25/2025	08:59
VSTDICCC020	VSTDICCC020	VN087163.D	06/25/2025	09:20
VSTDICC050	VSTDICC050	VN087164.D	06/25/2025	09:41
VSTDICC100	VSTDICC100	VN087165.D	06/25/2025	10:03
VSTDICC150	VSTDICC150	VN087166.D	06/25/2025	10:24

Raw Data: **VN087315.D**

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alliance
Contract: GARD04
Lab Code: ACE
SDG NO.: Q2554
Lab File ID: VN087315.D
BFB Injection Date: 07/10/2025
Instrument ID: MSVOA_N
BFB Injection Time: 08:49
GC Column: RXI-624 ID: 0.25 (mm)
Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.6
75	30.0 - 60.0% of mass 95	50.1
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.9 (1.3) 1
174	50.0 - 100.0% of mass 95	71
175	5.0 - 9.0% of mass 174	3.9 (5.5) 1
176	95.0 - 101.0% of mass 174	68.9 (97) 1
177	5.0 - 9.0% of mass 176	4.5 (6.6) 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
VSTDCCC020	VSTDCCC020	VN087316.D	07/10/2025	10:41
VN0710WBS01	VN0710WBS01	VN087317.D	07/10/2025	11:16
VN0710WBSD01	VN0710WBSD01	VN087318.D	07/10/2025	11:53
VN0710WBL01	VN0710WBL01	VN087319.D	07/10/2025	12:26
250709059-11 Trip blank	Q2554-04	VN087321.D	07/10/2025	13:27
250709104-01 VOA	Q2554-03	VN087322.D	07/10/2025	13:48

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance Contract: GARD04

Lab Code: ACE SDG NO.: Q2554

Lab File ID: VN087316.D Date Analyzed: 07/10/2025

Instrument ID: MSVOA_N Time Analyzed: 10:41

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	41639	7.82	206728	9.11	202666	11.87
UPPER LIMIT	83278	8.324	413456	9.606	405332	12.365
LOWER LIMIT	20819.5	7.324	103364	8.606	101333	11.365
EPA SAMPLE NO.						
250709104-01 VOA	39044	7.82	187799	9.11	178818	11.87
250709059-11 Trip blank	38034	7.82	189173	9.11	172316	11.87
VN0710WBL01	39626	7.82	200573	9.11	184716	11.87
VN0710WBS01	44567	7.82	228909	9.11	216531	11.87
VN0710WBSD01	43478	7.82	213327	9.11	206435	11.87

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

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

SAMPLE DATA

Alliance TECHNICAL GROUP
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Fax : 908 789 8922

Report of Analysis

Client:	Garden State Laboratories, Inc.	Date Collected:	07/09/25
Project:	Waste Water 2025	Date Received:	07/10/25
Client Sample ID:	250709104-01 VOA	SDG No.:	Q2554
Lab Sample ID:	Q2554-03	Matrix:	Water
Analytical Method:	E624.1	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VN087322.D	1	07/10/25 13:48	VN071025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
107-02-8	Acrolein	6.60	U	6.60	25.0	ug/L
107-13-1	Acrylonitrile	2.80	U	2.80	25.0	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	29.1		91 - 110	97%	SPK: 30
2037-26-5	Toluene-d8	28.0		91 - 112	93%	SPK: 30
460-00-4	4-Bromofluorobenzene	28.7		63 - 112	96%	SPK: 30
INTERNAL STANDARDS						
74-97-5	Bromochloromethane	39000	7.824			
540-36-3	1,4-Difluorobenzene	188000	9.106			
3114-55-4	Chlorobenzene-d5	179000	11.865			

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071025\
Data File : VN087322.D
Acq On : 10 Jul 2025 13:48
Operator : JC\MD
Sample : Q2554-03
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
250709104-01 VOA

Manual Integrations APPROVED

Reviewed By :John Carlone 07/11/2025
Supervised By :Mahesh Dadoda 07/14/2025

Quant Time: Jul 11 01:10:18 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:49:56 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	7.824	128	39044	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.106	114	187799	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.865	117	178818	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.582	65	85531	29.075	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery = 96.900%			
60) 4-Bromofluorobenzene	12.847	95	79207	28.705	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery = 95.667%			
63) Toluene-d8	10.565	98	224485	27.960	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery = 93.200%			
Target Compounds						Qvalue
6) Chloroethane	3.165	64	1693	1.210	ug/l #	87
8) Diethyl Ether	3.983	74	18130	11.531	ug/l	85
23) tert-Butyl Alcohol	5.542	59	137232	210.873	ug/l #	100
34) Benzene	8.612	78	18871	2.035	ug/l #	73
45) 1,4-Dioxane	9.712	88	8006m	203.794	ug/l	
62) Toluene	10.629	91	8304	0.822	ug/l	95
64) Chlorobenzene	11.894	112	134181	20.828	ug/l	100
66) Ethyl Benzene	11.965	91	37027	3.350	ug/l	97
67) m/p-Xylenes	12.070	106	15310	3.614	ug/l	86
68) o-Xylene	12.400	106	11085	2.743	ug/l	94
70) Isopropylbenzene	12.694	105	13780	1.369	ug/l	94
74) n-propylbenzene	13.035	91	8697	0.707	ug/l	93
75) 2-Chlorotoluene	13.123	91	5573	0.750	ug/l	97
80) 1,2,4-Trimethylbenzene	13.476	105	14906	1.812	ug/l	92
84) 1,4-Dichlorobenzene	13.812	146	45370	9.588	ug/l	97
87) 1,2-Dichlorobenzene	14.106	146	3635	0.820	ug/l	95
91) Naphthalene	15.635	128	127556	12.922	ug/l	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sample Results: **VN087322.D**

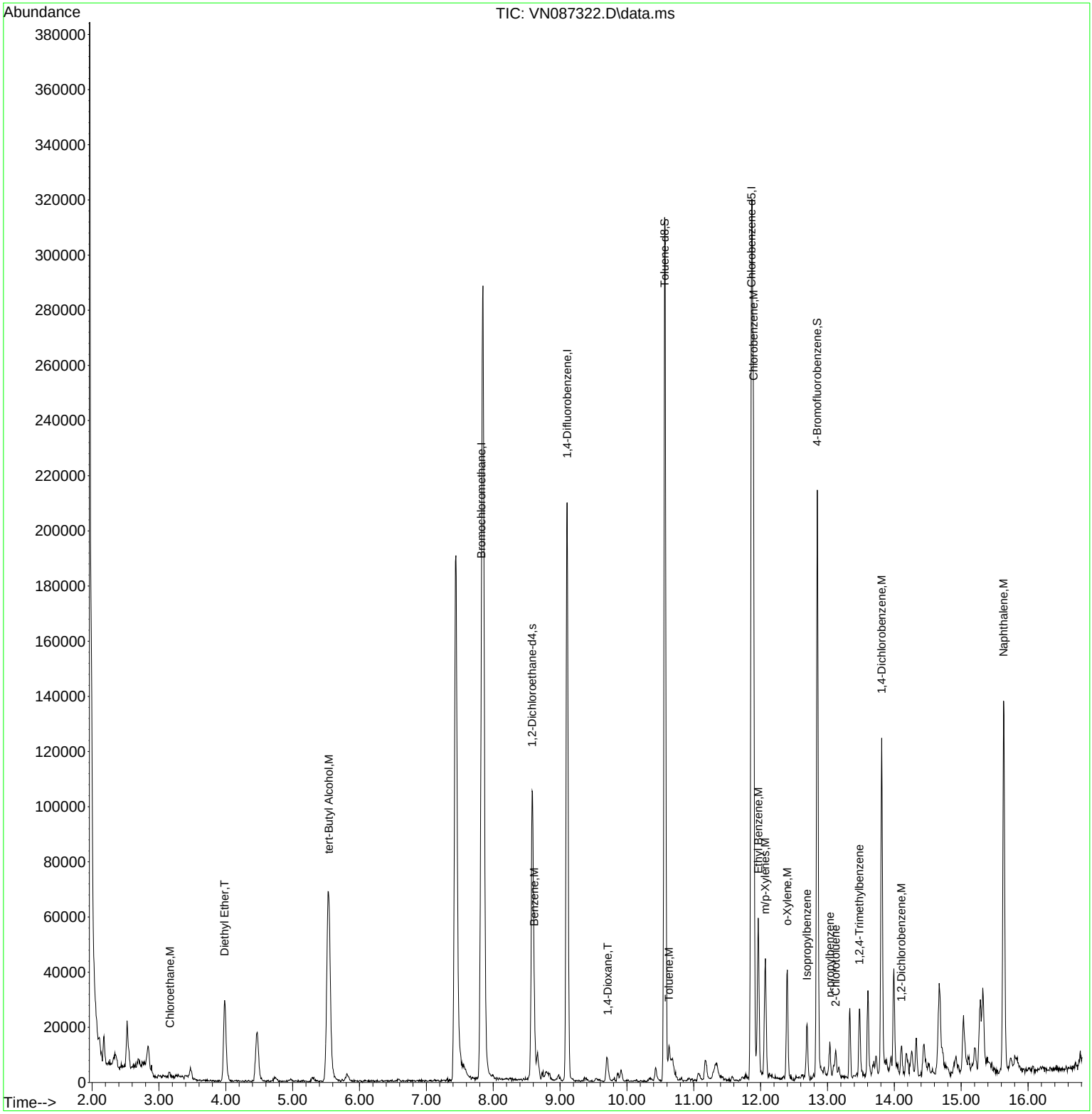
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071025\
Data File : VN087322.D
Acq On : 10 Jul 2025 13:48
Operator : JC\MD
Sample : Q2554-03
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

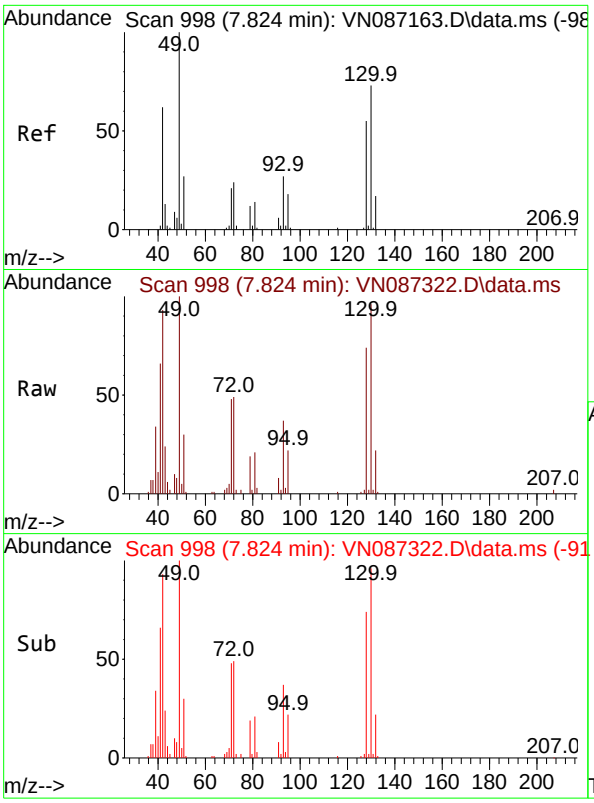
Quant Time: Jul 11 01:10:18 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:49:56 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
250709104-01 VOA

Manual Integrations APPROVED

Reviewed By :John Carlone 07/11/2025
Supervised By :Mahesh Dadoda 07/14/2025

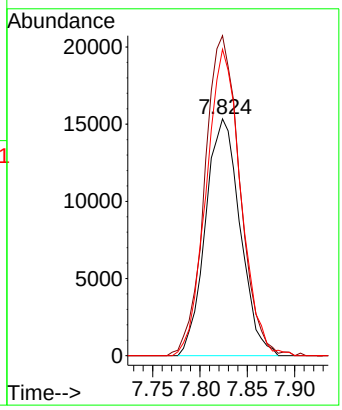




#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 7.824 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN087322.D
Acq: 10 Jul 2025 13:48

Tgt Ion:128 Resp: 3904

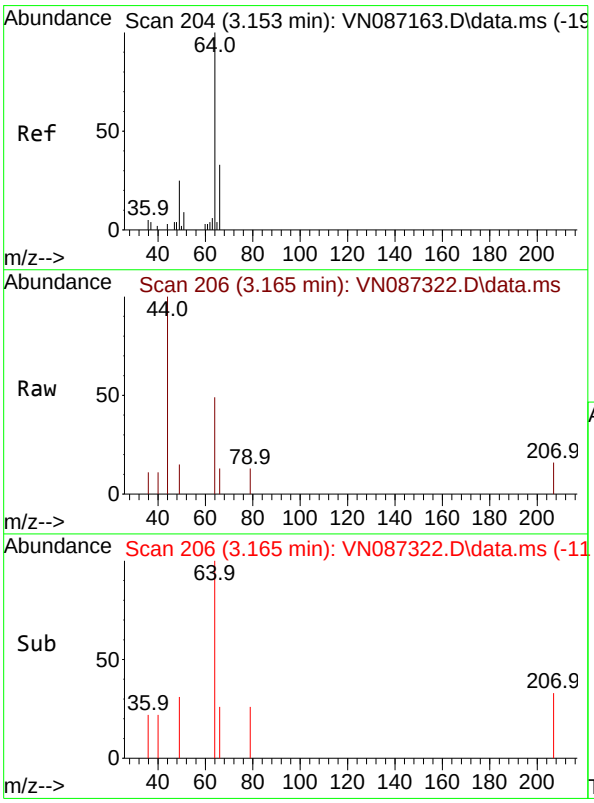
Ion	Ratio	Lower	Upper
128	100		
49	136.4	0.0	450.5
130	128.9	0.0	320.7



Instrument :
MSVOA_N
ClientSampleId :
250709104-01 VOA

Manual Integrations
APPROVED

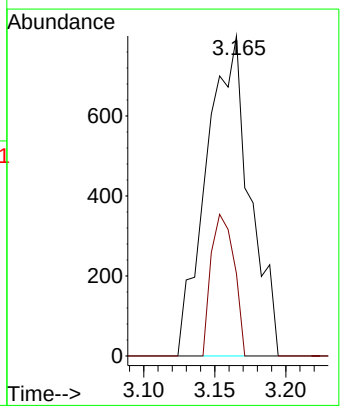
Reviewed By :John Carlone 07/11/2025
Supervised By :Mahesh Dadoda 07/14/2025

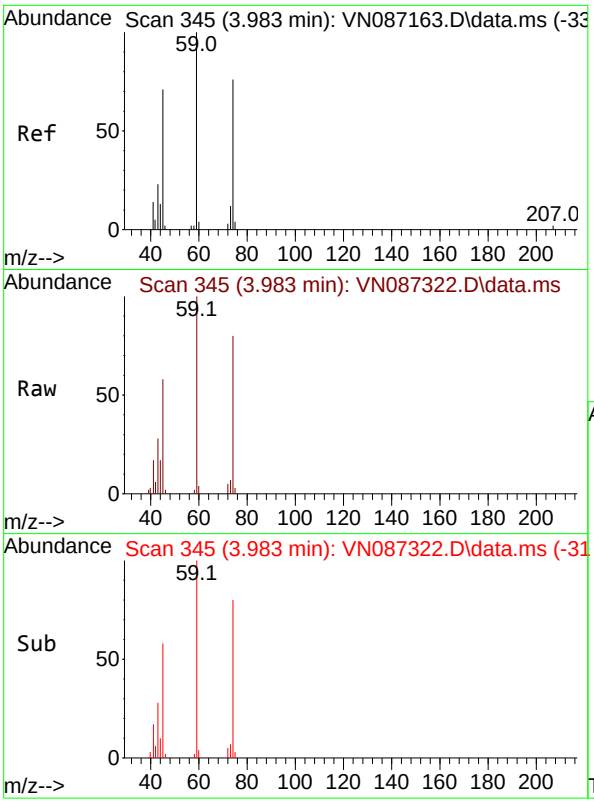


#6
Chloroethane
Concen: 1.210 ug/l
RT: 3.165 min Scan# 206
Delta R.T. 0.012 min
Lab File: VN087322.D
Acq: 10 Jul 2025 13:48

Tgt Ion: 64 Resp: 1693

Ion	Ratio	Lower	Upper
64	100		
66	25.8	26.4	39.6#

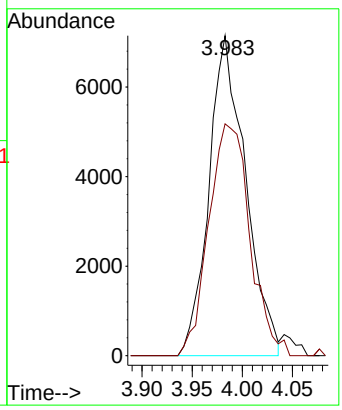




#8
Diethyl Ether
Concen: 11.531 ug/l
RT: 3.983 min Scan# 34
Delta R.T. 0.000 min
Lab File: VN087322.D
Acq: 10 Jul 2025 13:48

Tgt Ion: 74 Resp: 1813

Ion	Ratio	Lower	Upper
74	100		
45	80.6	19.0	171.0



Instrument :
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ClientSampleId :
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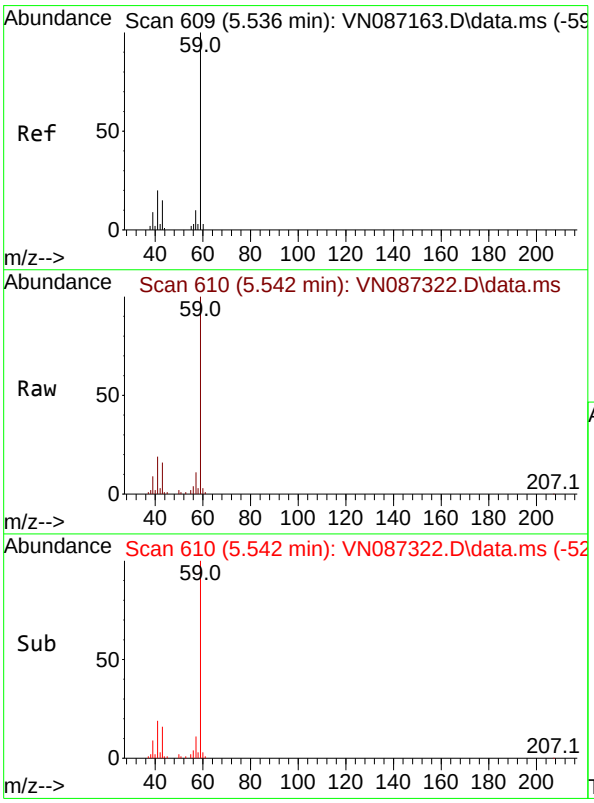
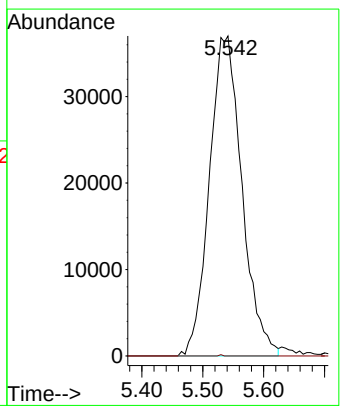
Supervised By :Mahesh Dadoda 07/14/2025

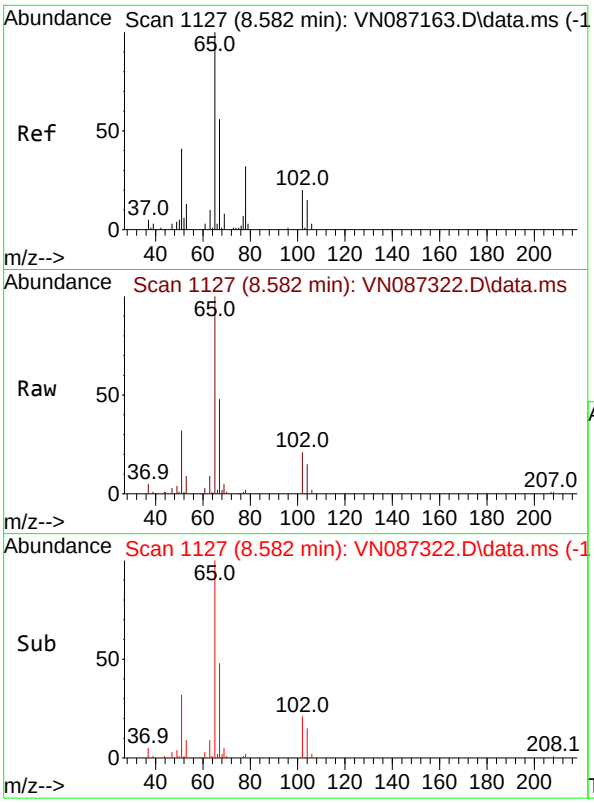


#23
tert-Butyl Alcohol
Concen: 210.873 ug/l
RT: 5.542 min Scan# 610
Delta R.T. 0.006 min
Lab File: VN087322.D
Acq: 10 Jul 2025 13:48

Tgt Ion: 59 Resp: 137232

Ion	Ratio	Lower	Upper
59	100		
52	0.0	0.0	0.0

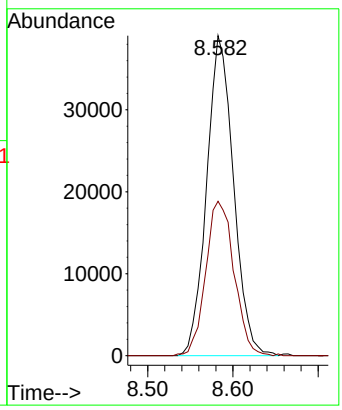




#27
1,2-Dichloroethane-d4
Concen: 29.075 ug/l
RT: 8.582 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN087322.D
Acq: 10 Jul 2025 13:48

Tgt Ion: 65 Resp: 8553

Ion	Ratio	Lower	Upper
65	100		
67	50.9	41.9	62.9



Instrument :
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ClientSampleId :
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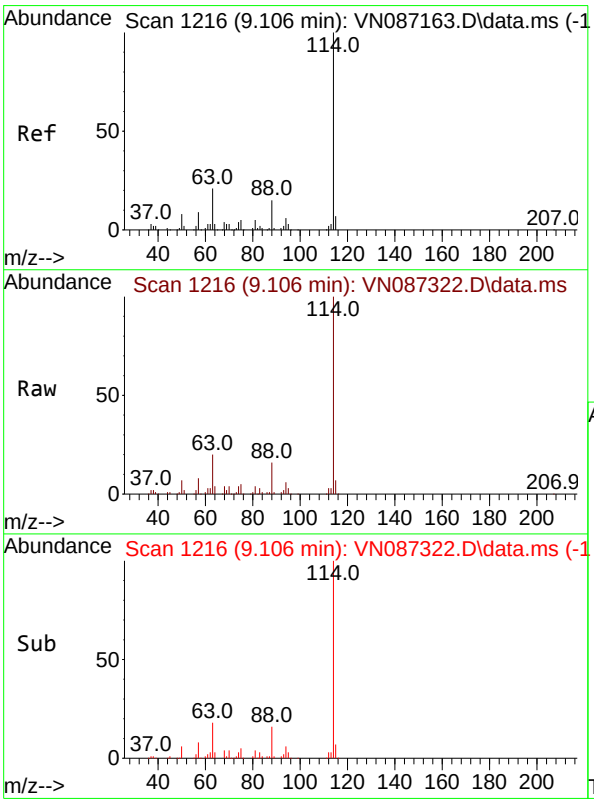
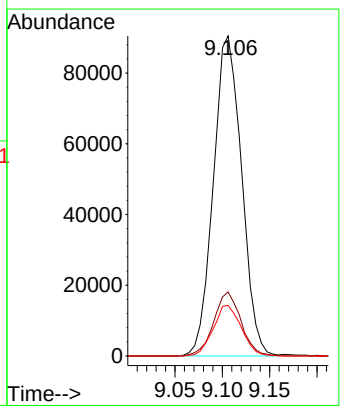
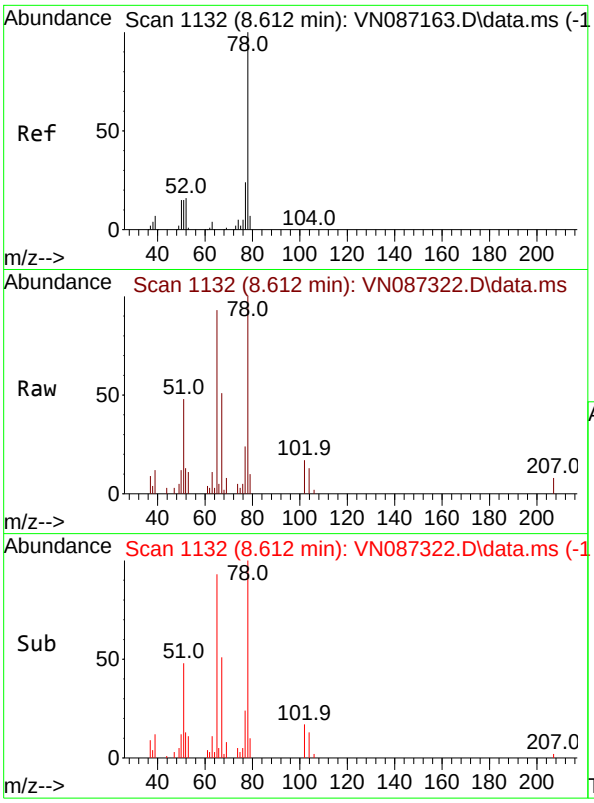


#28
1,4-Difluorobenzene
Concen: 30.000 ug/l
RT: 9.106 min Scan# 1216
Delta R.T. 0.000 min
Lab File: VN087322.D
Acq: 10 Jul 2025 13:48

Tgt Ion:114 Resp: 187799

Ion	Ratio	Lower	Upper
114	100		
63	19.3	17.0	25.4
88	15.7	12.6	19.0





#34
Benzene
Concen: 2.035 ug/l
RT: 8.612 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087322.D
Acq: 10 Jul 2025 13:48

Tgt Ion: 78 Resp: 1887

Ion	Ratio	Lower	Upper
78	100		
77	24.4	19.5	29.3
51	46.4	14.8	22.2#

Instrument :
MSVOA_N
ClientSampleId :
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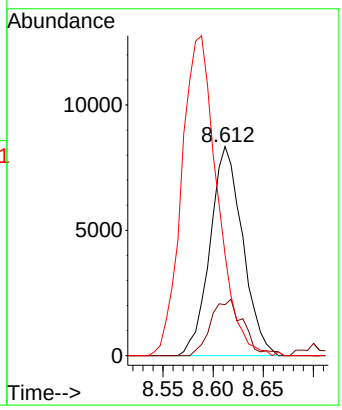
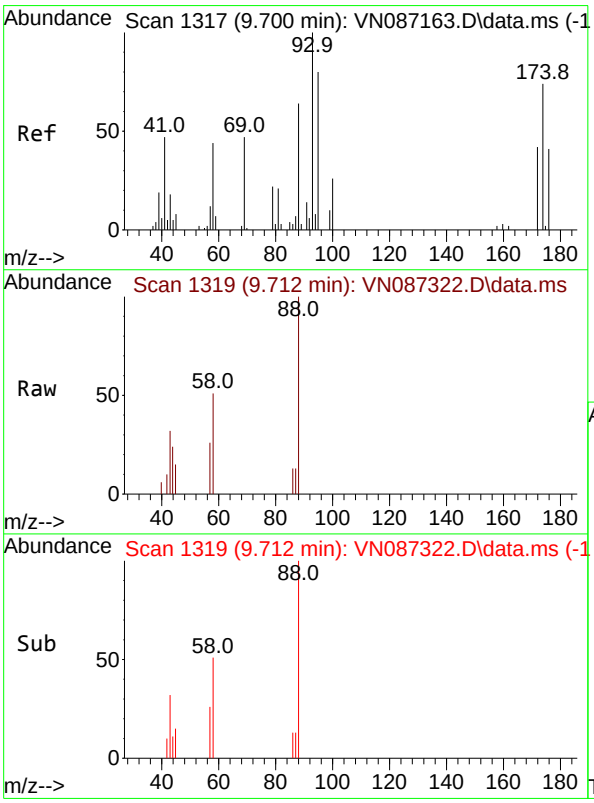
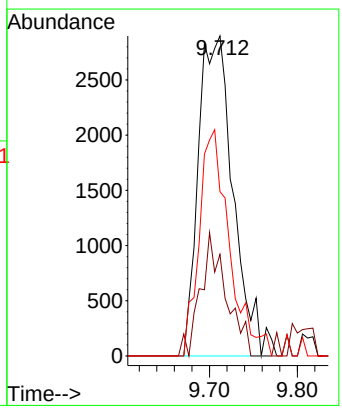


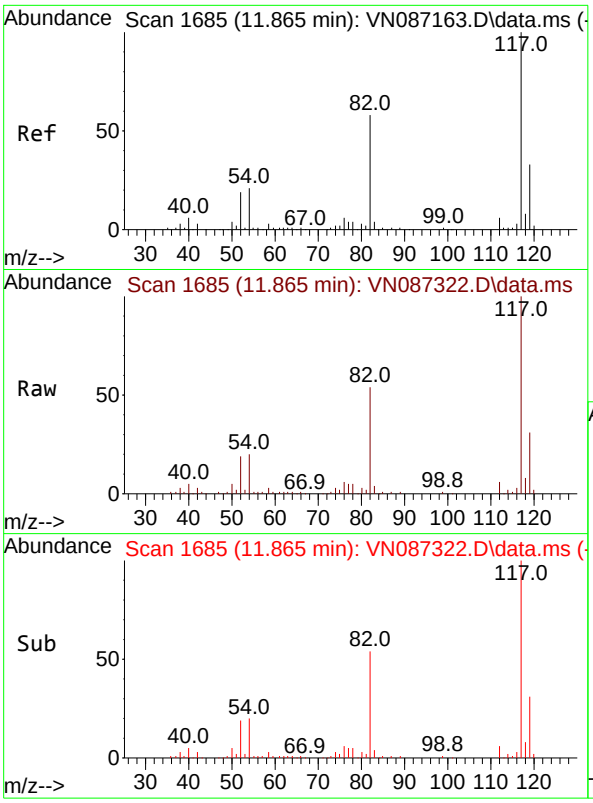


#45
1,4-Dioxane
Concen: 203.794 ug/l m
RT: 9.712 min Scan# 1319
Delta R.T. 0.012 min
Lab File: VN087322.D
Acq: 10 Jul 2025 13:48

Tgt Ion: 88 Resp: 8006

Ion	Ratio	Lower	Upper
88	100		
43	23.4	21.3	31.9
58	55.7	61.7	92.5#





#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087322.D
Acq: 10 Jul 2025 13:48

Tgt Ion:117 Resp: 178818

Ion	Ratio	Lower	Upper
117	100		
82	54.7	45.4	68.2
119	31.9	26.2	39.4

Instrument :
MSVOA_N
ClientSampleId :
250709104-01 VOA

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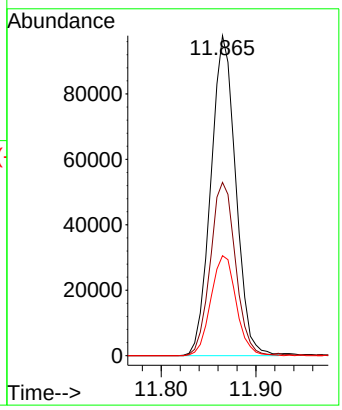
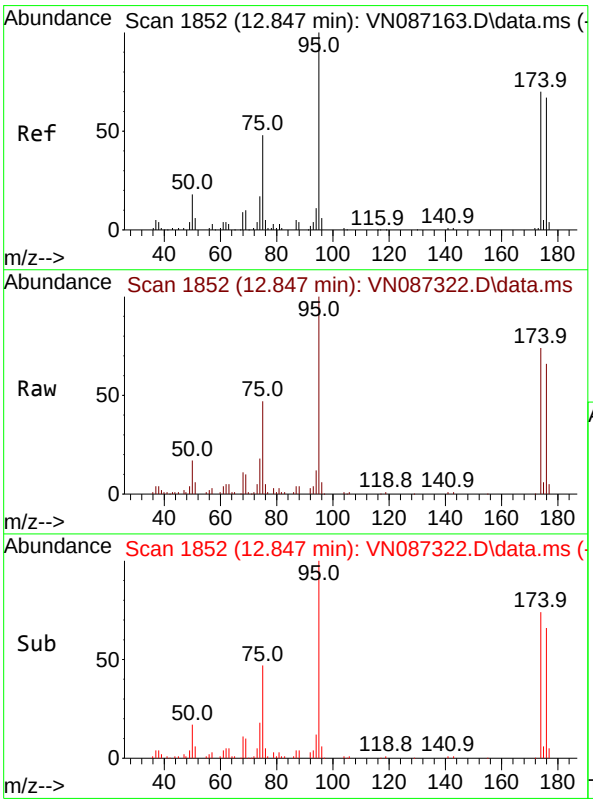
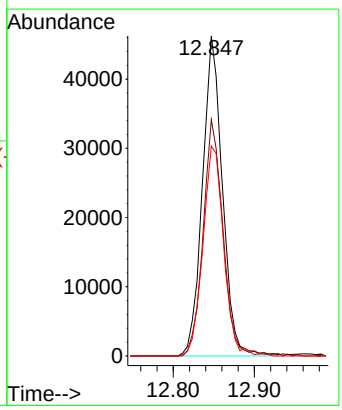


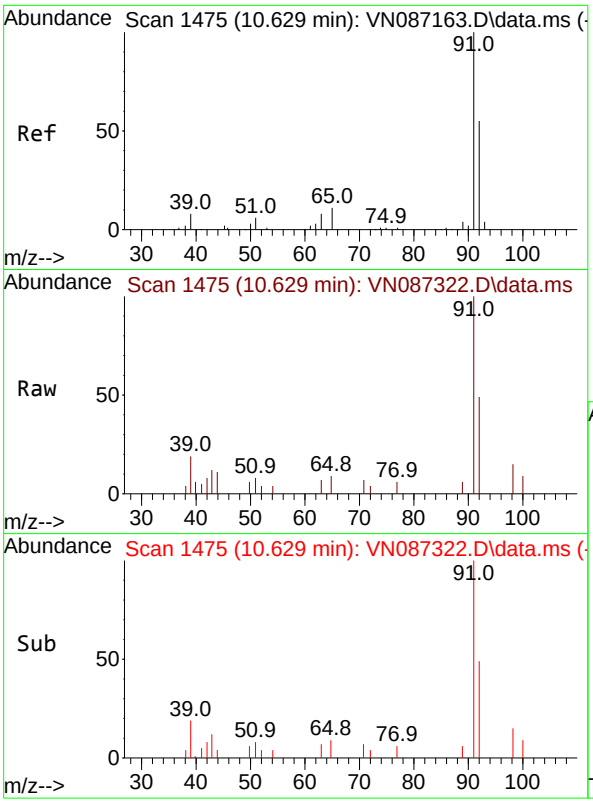


#60
4-Bromofluorobenzene
Concen: 28.705 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN087322.D
Acq: 10 Jul 2025 13:48

Tgt Ion: 95 Resp: 79207

Ion	Ratio	Lower	Upper
95	100		
174	72.1	54.5	81.7
176	66.8	51.9	77.9





#62
Toluene
Concen: 0.822 ug/l
RT: 10.629 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN087322.D
Acq: 10 Jul 2025 13:48

Tgt Ion: 91 Resp: 830

Ion	Ratio	Lower	Upper
91	100		
92	53.5	45.8	68.8

Instrument :
MSVOA_N
ClientSampleId :
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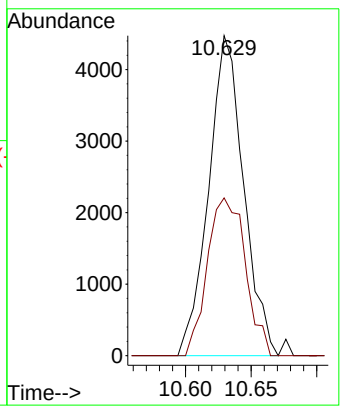
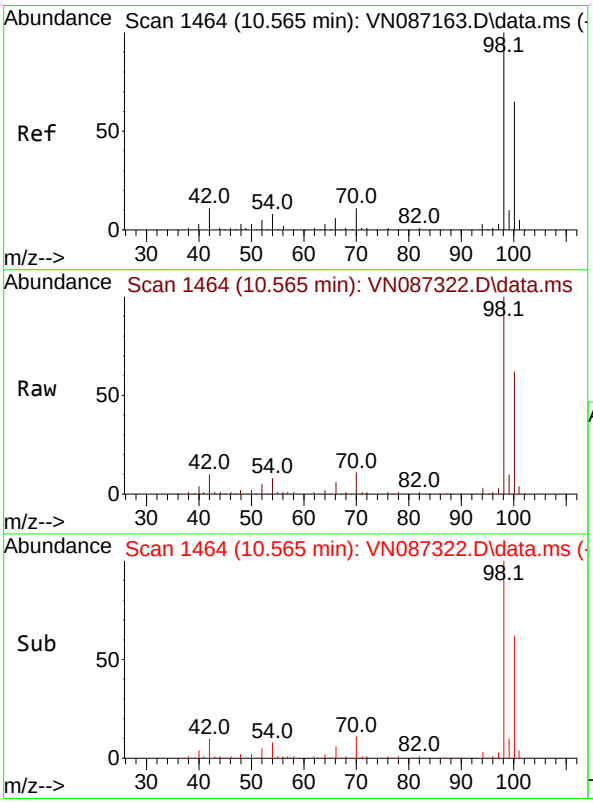
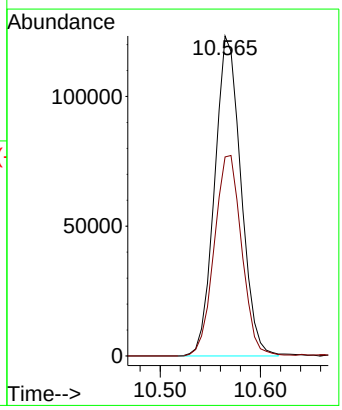


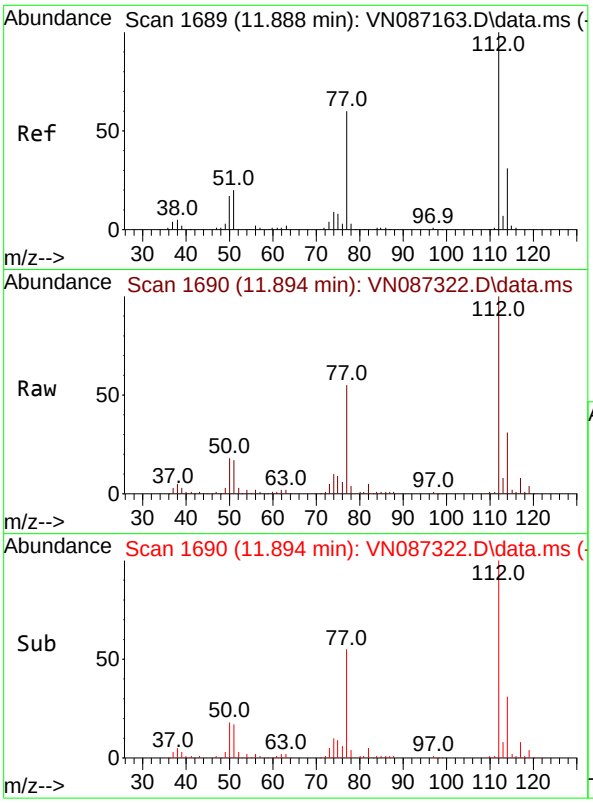


#63
Toluene-d8
Concen: 27.960 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.000 min
Lab File: VN087322.D
Acq: 10 Jul 2025 13:48

Tgt Ion: 98 Resp: 224485

Ion	Ratio	Lower	Upper
98	100		
100	65.6	52.5	78.7





#64
Chlorobenzene
Concen: 20.828 ug/l
RT: 11.894 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN087322.D
Acq: 10 Jul 2025 13:48

Tgt Ion:112 Resp: 13418

Ion	Ratio	Lower	Upper
112	100		
114	31.1	25.0	37.4

Instrument :
MSVOA_N
ClientSampleId :
250709104-01 VOA

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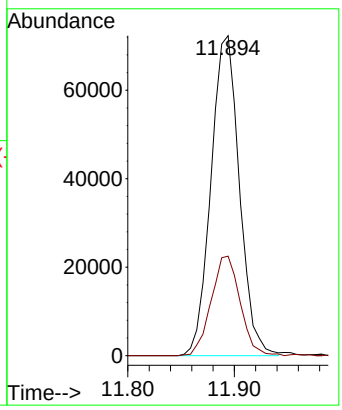
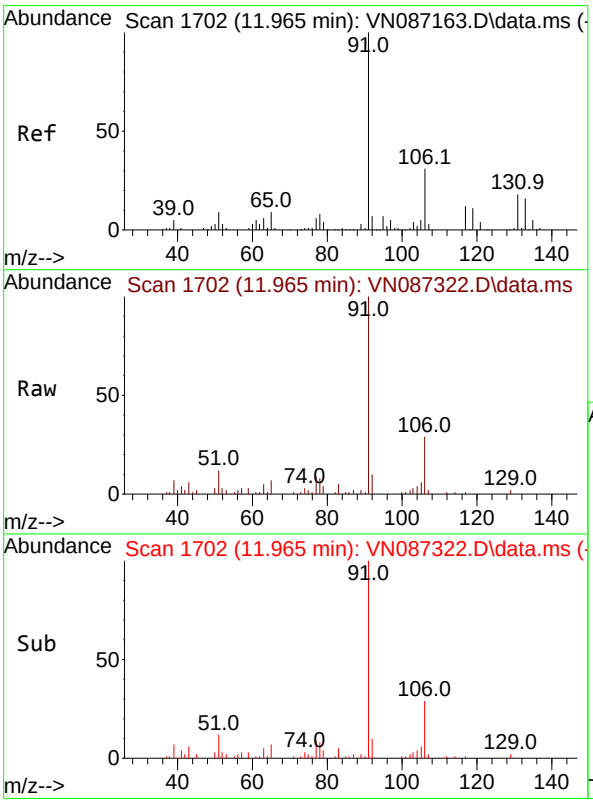
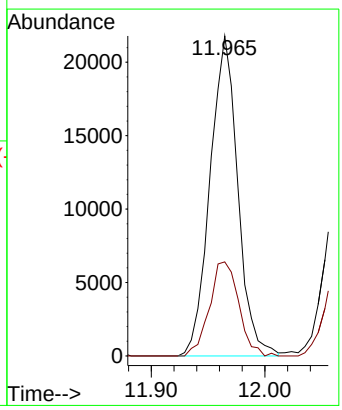


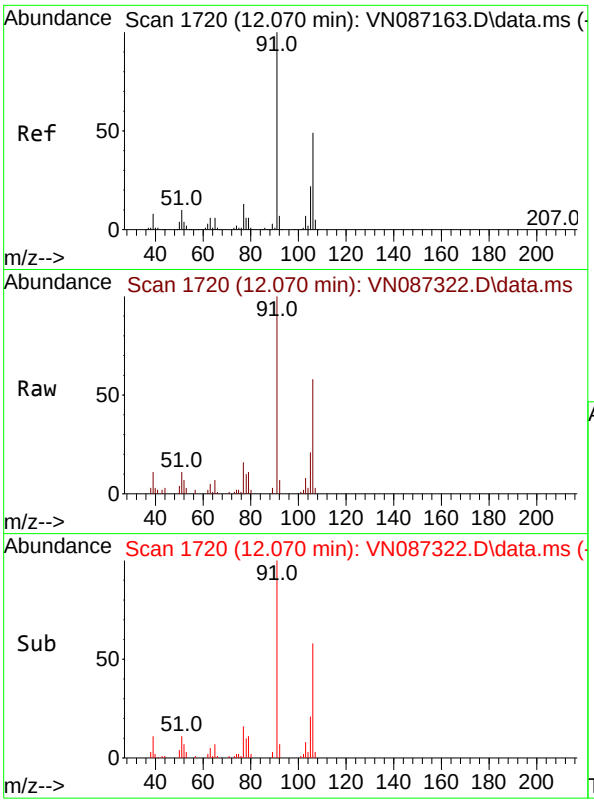


#66
Ethyl Benzene
Concen: 3.350 ug/l
RT: 11.965 min Scan# 1702
Delta R.T. 0.000 min
Lab File: VN087322.D
Acq: 10 Jul 2025 13:48

Tgt Ion: 91 Resp: 37027

Ion	Ratio	Lower	Upper
91	100		
106	29.4	24.8	37.2





#67
m/p-Xylenes
Concen: 3.614 ug/l
RT: 12.070 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087322.D
Acq: 10 Jul 2025 13:48

Tgt Ion:106 Resp: 1531

Ion	Ratio	Lower	Upper
106	100		
91	182.4	163.0	244.4

Instrument :
MSVOA_N
ClientSampleId :
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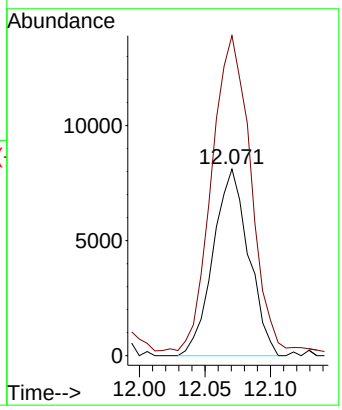
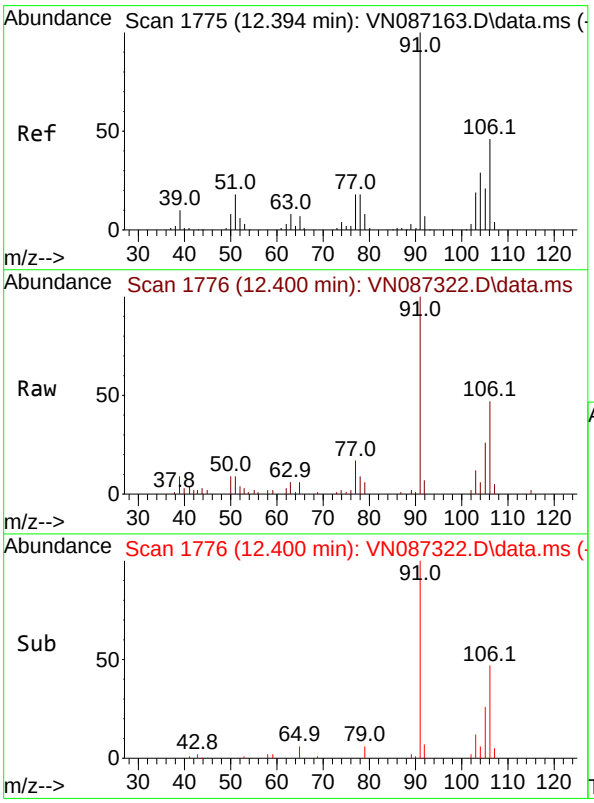
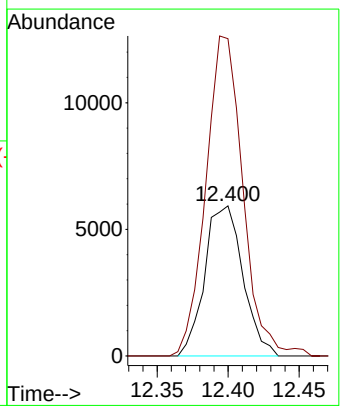


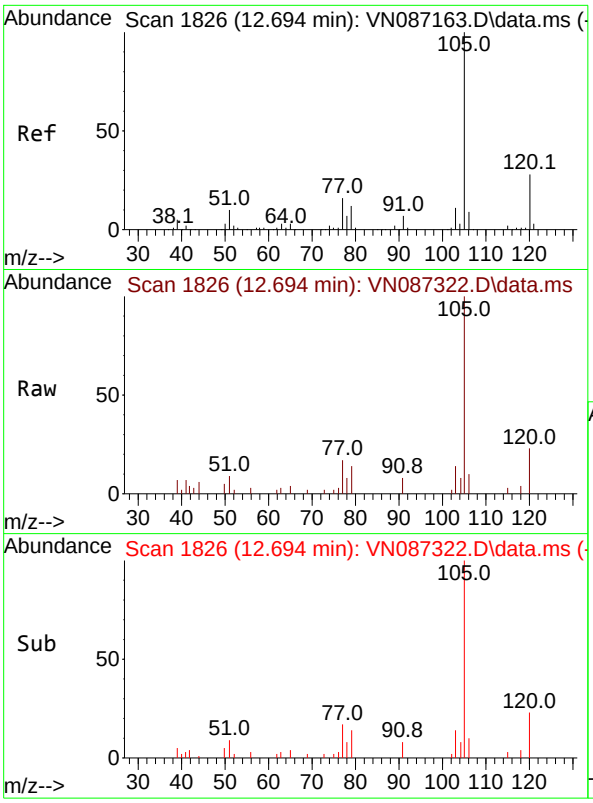


#68
o-Xylene
Concen: 2.743 ug/l
RT: 12.400 min Scan# 1776
Delta R.T. 0.006 min
Lab File: VN087322.D
Acq: 10 Jul 2025 13:48

Tgt Ion:106 Resp: 11085

Ion	Ratio	Lower	Upper
106	100		
91	205.4	107.1	321.1

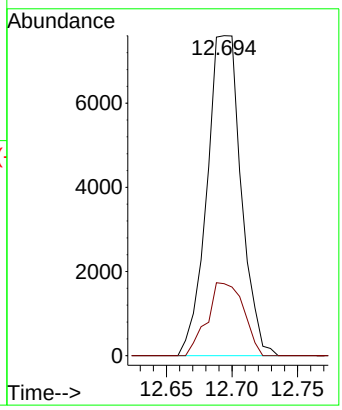




#70
Isopropylbenzene
Concen: 1.369 ug/l
RT: 12.694 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087322.D
Acq: 10 Jul 2025 13:48

Tgt Ion:105 Resp: 1378

Ion	Ratio	Lower	Upper
105	100		
120	24.2	19.0	35.2



Instrument :
MSVOA_N
ClientSampleId :
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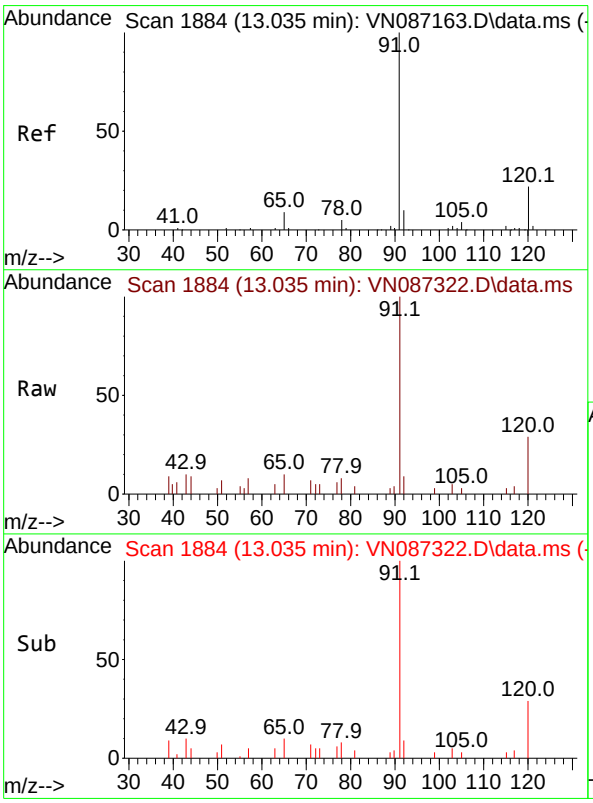
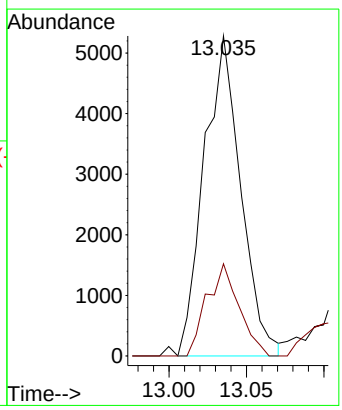
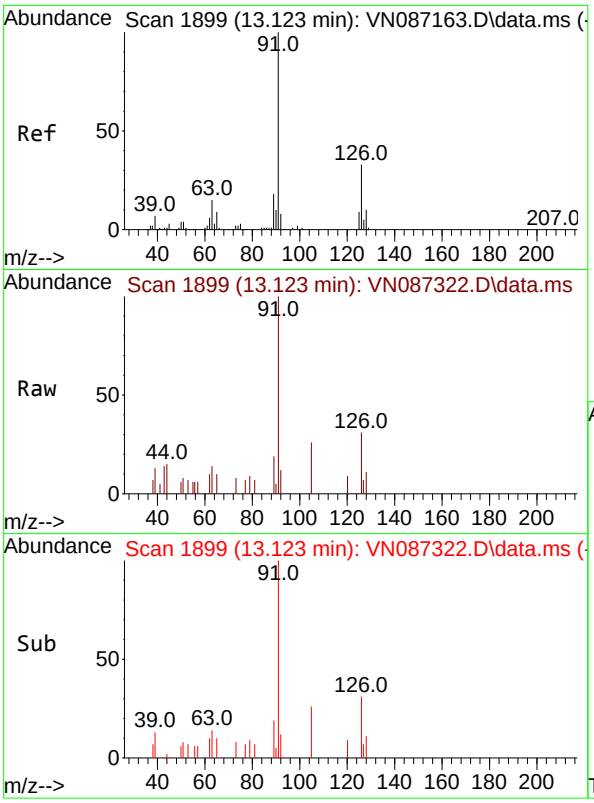


#74
n-propylbenzene
Concen: 0.707 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. 0.000 min
Lab File: VN087322.D
Acq: 10 Jul 2025 13:48

Tgt Ion: 91 Resp: 8697

Ion	Ratio	Lower	Upper
91	100		
120	25.2	0.0	43.6





#75
2-Chlorotoluene
Concen: 0.750 ug/l
RT: 13.123 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087322.D
Acq: 10 Jul 2025 13:48

Tgt Ion: 91 Resp: 557

Ion	Ratio	Lower	Upper
91	100		
126	33.3	0.0	63.8

Instrument :
MSVOA_N
ClientSampleId :
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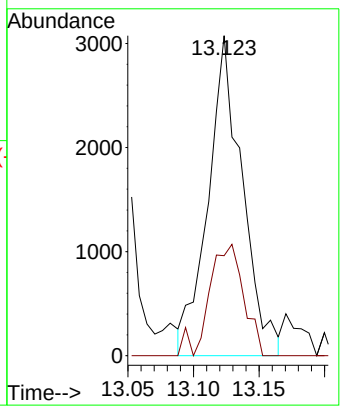
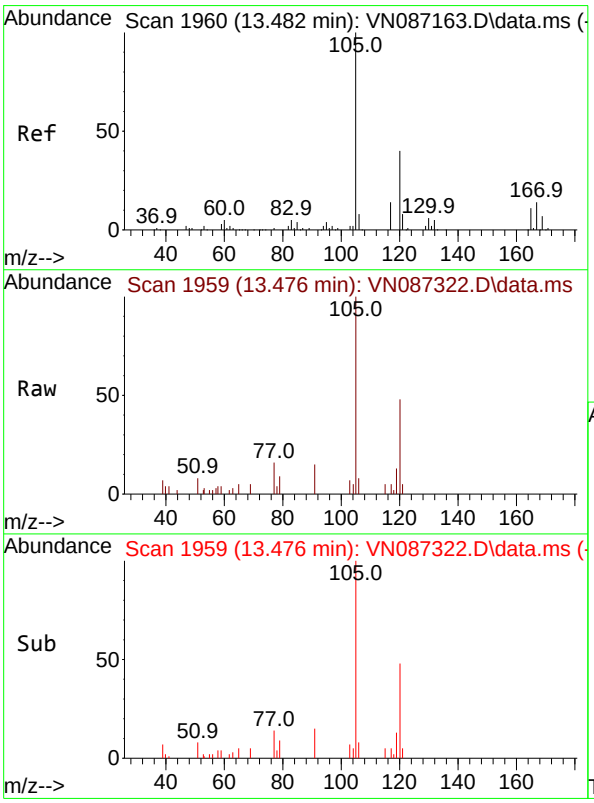
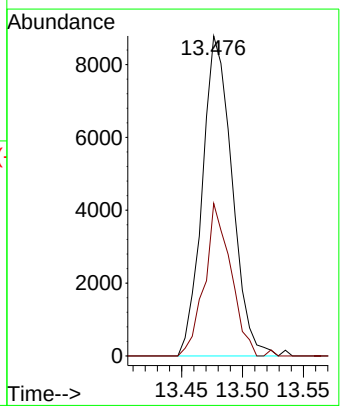


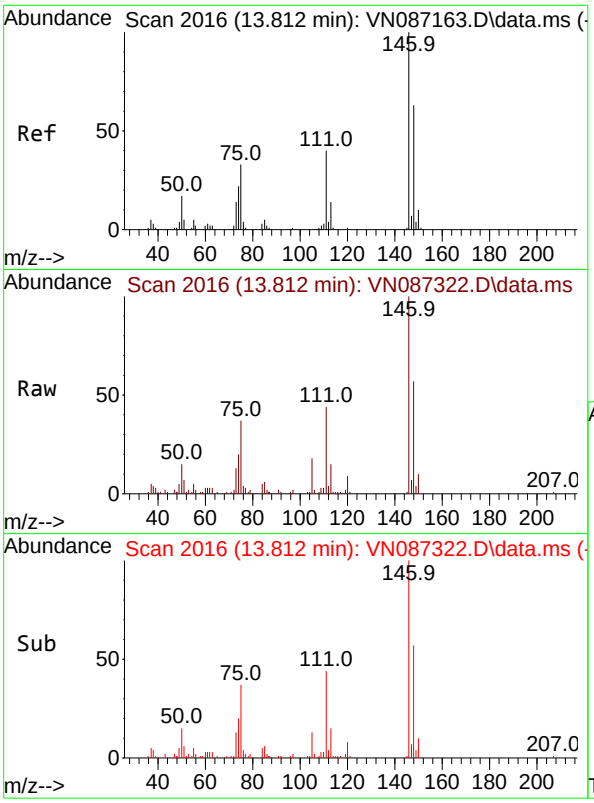


#80
1,2,4-Trimethylbenzene
Concen: 1.812 ug/l
RT: 13.476 min Scan# 1959
Delta R.T. -0.006 min
Lab File: VN087322.D
Acq: 10 Jul 2025 13:48

Tgt Ion:105 Resp: 14906

Ion	Ratio	Lower	Upper
105	100		
120	41.9	0.0	94.0

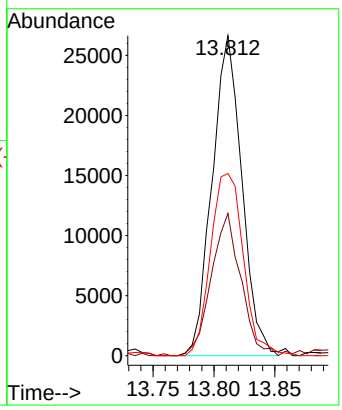




#84
1,4-Dichlorobenzene
Concen: 9.588 ug/l
RT: 13.812 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN087322.D
Acq: 10 Jul 2025 13:48

Tgt Ion:146 Resp: 4537

Ion	Ratio	Lower	Upper
146	100		
111	44.0	20.1	60.2
148	62.7	31.4	94.2



Instrument :
MSVOA_N
ClientSampleId :
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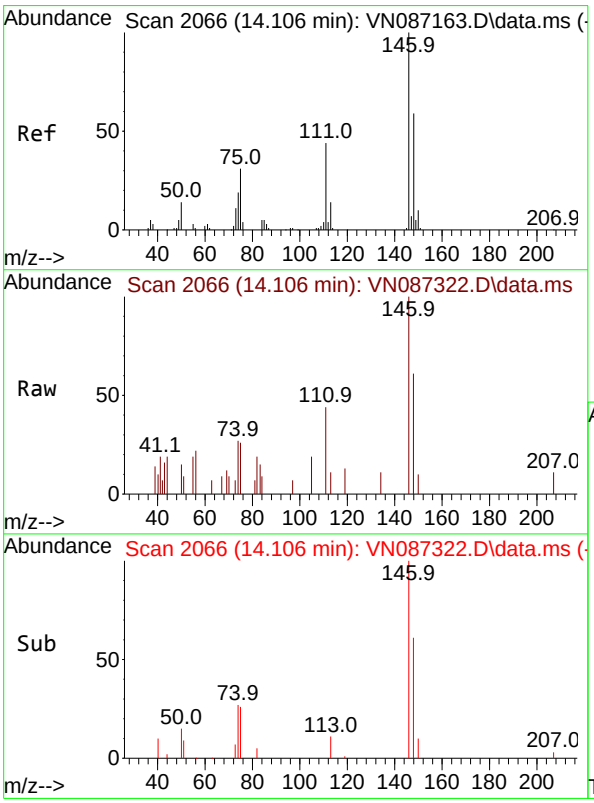
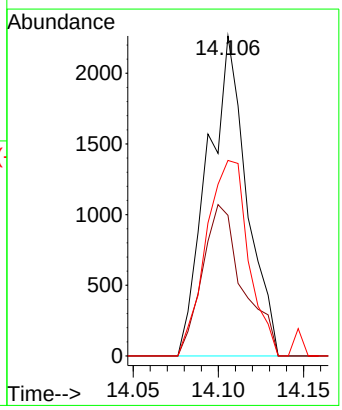
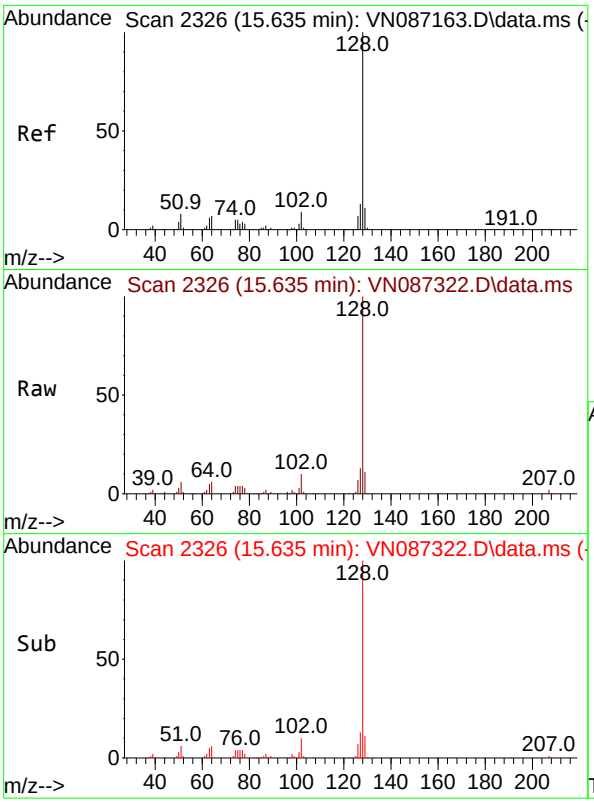


#87
1,2-Dichlorobenzene
Concen: 0.820 ug/l
RT: 14.106 min Scan# 2066
Delta R.T. -0.000 min
Lab File: VN087322.D
Acq: 10 Jul 2025 13:48

Tgt Ion:146 Resp: 3635

Ion	Ratio	Lower	Upper
146	100		
111	48.9	22.1	66.1
148	65.9	31.6	95.0

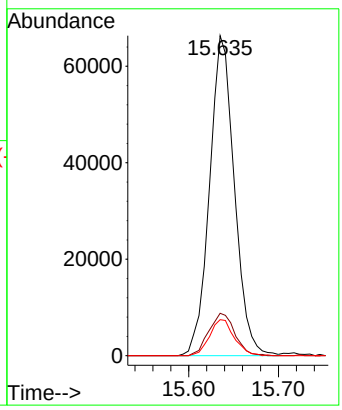




#91
Naphthalene
Concen: 12.922 ug/l
RT: 15.635 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN087322.D
Acq: 10 Jul 2025 13:48

Tgt Ion:128 Resp: 12755

Ion	Ratio	Lower	Upper
128	100		
127	13.8	10.6	15.8
129	11.2	8.8	13.2



Instrument :
MSVOA_N
ClientSampleId :
250709104-01 VOA

Manual Integrations
APPROVED

Reviewed By :John Carlone 07/11/2025
Supervised By :Mahesh Dadoda 07/14/2025

Sample Results: **VN087322.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071025\
Data File : VN087322.D
Acq On : 10 Jul 2025 13:48
Operator : JC\MD
Sample : Q2554-03
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
250709104-01 VOA

Integration Parameters: RTEINT3.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Title : METHOD 624 VOLATILE ORGANIC ANALYSIS

Signal : TIC: VN087322.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.177	34	38	44	rVB	10170	16951	1.79%	0.301%
2	2.524	92	97	106	rVB4	17352	36204	3.82%	0.642%
3	2.836	144	150	158	rVB	8717	22125	2.33%	0.393%
4	3.983	334	345	360	rBV4	29578	81618	8.61%	1.448%
5	4.471	419	428	438	rBV4	17677	55910	5.90%	0.992%
6	5.530	595	608	624	rBV3	68876	260746	27.51%	4.626%
7	7.441	921	933	949	rBV2	190631	571902	60.34%	10.147%
8	7.847	989	1002	1024	rBV2	287346	905244	95.50%	16.061%
9	8.582	1116	1127	1137	rBV2	104755	274966	29.01%	4.879%
10	8.665	1137	1141	1149	rVB4	9720	21212	2.24%	0.376%
11	9.106	1204	1216	1230	rBV	209750	437374	46.14%	7.760%
12	9.700	1309	1317	1328	rBV5	8901	23087	2.44%	0.410%
13	10.429	1436	1441	1450	rBV3	4759	9826	1.04%	0.174%
14	10.565	1456	1464	1472	rBV	313260	593519	62.62%	10.530%
15	11.171	1563	1567	1577	rBV3	6767	16634	1.75%	0.295%
16	11.335	1582	1595	1605	rVV10	5447	22603	2.38%	0.401%
17	11.871	1678	1686	1696	rBV2	319303	947876	100.00%	16.817%
18	11.965	1696	1702	1711	rVV	58113	111876	11.80%	1.985%
19	12.071	1714	1720	1727	rVB	43042	84692	8.93%	1.503%
20	12.400	1769	1776	1784	rVB	39439	69808	7.36%	1.239%
21	12.694	1817	1826	1834	rVB2	20405	39996	4.22%	0.710%
22	12.847	1845	1852	1863	rBV	212879	371366	39.18%	6.589%
23	13.035	1877	1884	1890	rVB2	12156	19039	2.01%	0.338%
24	13.123	1895	1899	1903	rVB3	7960	13052	1.38%	0.232%
25	13.335	1930	1935	1942	rBV	25324	39949	4.21%	0.709%
26	13.482	1954	1960	1968	rBV	24407	44725	4.72%	0.794%
27	13.606	1975	1981	1989	rBV4	30973	53515	5.65%	0.949%
28	13.729	1998	2002	2007	rVB4	6436	10696	1.13%	0.190%
29	13.812	2007	2016	2023	rBV2	121646	219028	23.11%	3.886%
30	13.994	2042	2047	2053	rVB2	35767	60980	6.43%	1.082%
31	14.112	2061	2067	2071	rBV4	10252	18689	1.97%	0.332%
32	14.176	2074	2078	2081	rBV4	7755	13988	1.48%	0.248%
33	14.259	2086	2092	2098	rVV7	8806	21850	2.31%	0.388%
34	14.329	2099	2104	2110	rVB3	13855	23767	2.51%	0.422%
35	14.441	2117	2123	2132	rBV9	11765	33711	3.56%	0.598%
36	14.670	2152	2162	2168	rBV3	32958	87732	9.26%	1.557%

Sample Results: **VN087322.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071025\
Data File : VN087322.D
Acq On : 10 Jul 2025 13:48
Operator : JC\MD
Sample : Q2554-03
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
250709104-01 VOA

Integration Parameters: RTEINT3.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Title : METHOD 624 VOLATILE ORGANIC ANALYSIS

Sum of corrected areas: 5636256

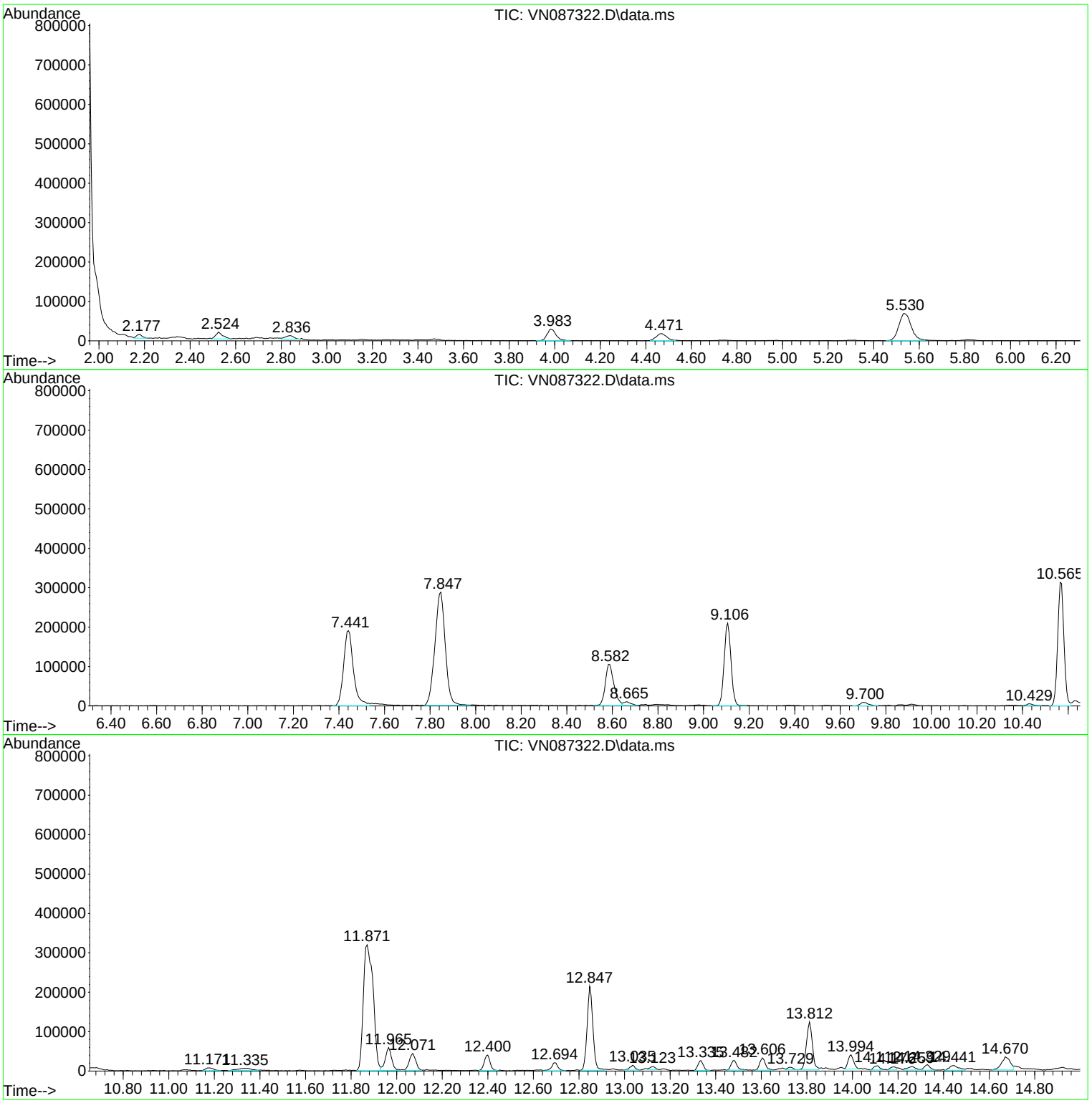
Sample Results: **VN087322.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071025\
Data File : VN087322.D
Acq On : 10 Jul 2025 13:48
Operator : JC\MD
Sample : Q2554-03
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
250709104-01 VOA

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Sample Results: **VN087322.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071025\
Data File : VN087322.D
Acq On : 10 Jul 2025 13:48
Operator : JC\MD
Sample : Q2554-03
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
250709104-01 VOA

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected
****

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071025\
Data File : VN087322.D
Acq On : 10 Jul 2025 13:48
Operator : JC\MD
Sample : Q2554-03
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
250709104-01 VOA

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

Raw Data: **VN087321.D**

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

Report of Analysis

Client:	Garden State Laboratories, Inc.	Date Collected:	07/09/25
Project:	Waste Water 2025	Date Received:	07/10/25
Client Sample ID:	250709059-11 Trip blank	SDG No.:	Q2554
Lab Sample ID:	Q2554-04	Matrix:	Water
Analytical Method:	E624.1	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VN087321.D	1	07/10/25 13:27	VN071025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
107-02-8	Acrolein	6.60	U	6.60	25.0	ug/L
107-13-1	Acrylonitrile	2.80	U	2.80	25.0	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	29.3		91 - 110	98%	SPK: 30
2037-26-5	Toluene-d8	28.5		91 - 112	95%	SPK: 30
460-00-4	4-Bromofluorobenzene	26.5		63 - 112	88%	SPK: 30
INTERNAL STANDARDS						
74-97-5	Bromochloromethane	38000	7.824			
540-36-3	1,4-Difluorobenzene	189000	9.106			
3114-55-4	Chlorobenzene-d5	172000	11.865			

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Sample Results: **VN087321.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071025\
Data File : VN087321.D
Acq On : 10 Jul 2025 13:27
Operator : JC\MD
Sample : Q2554-04
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
250709059-11 Trip blank

Quant Time: Jul 11 01:10:00 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:49:56 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	7.824	128	38034	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.106	114	189173	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.865	117	172316	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.582	65	83890	29.274	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery = 97.567%			
60) 4-Bromofluorobenzene	12.847	95	70569	26.539	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery = 88.467%			
63) Toluene-d8	10.565	98	220382	28.484	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery = 94.933%			
Target Compounds						Qvalue

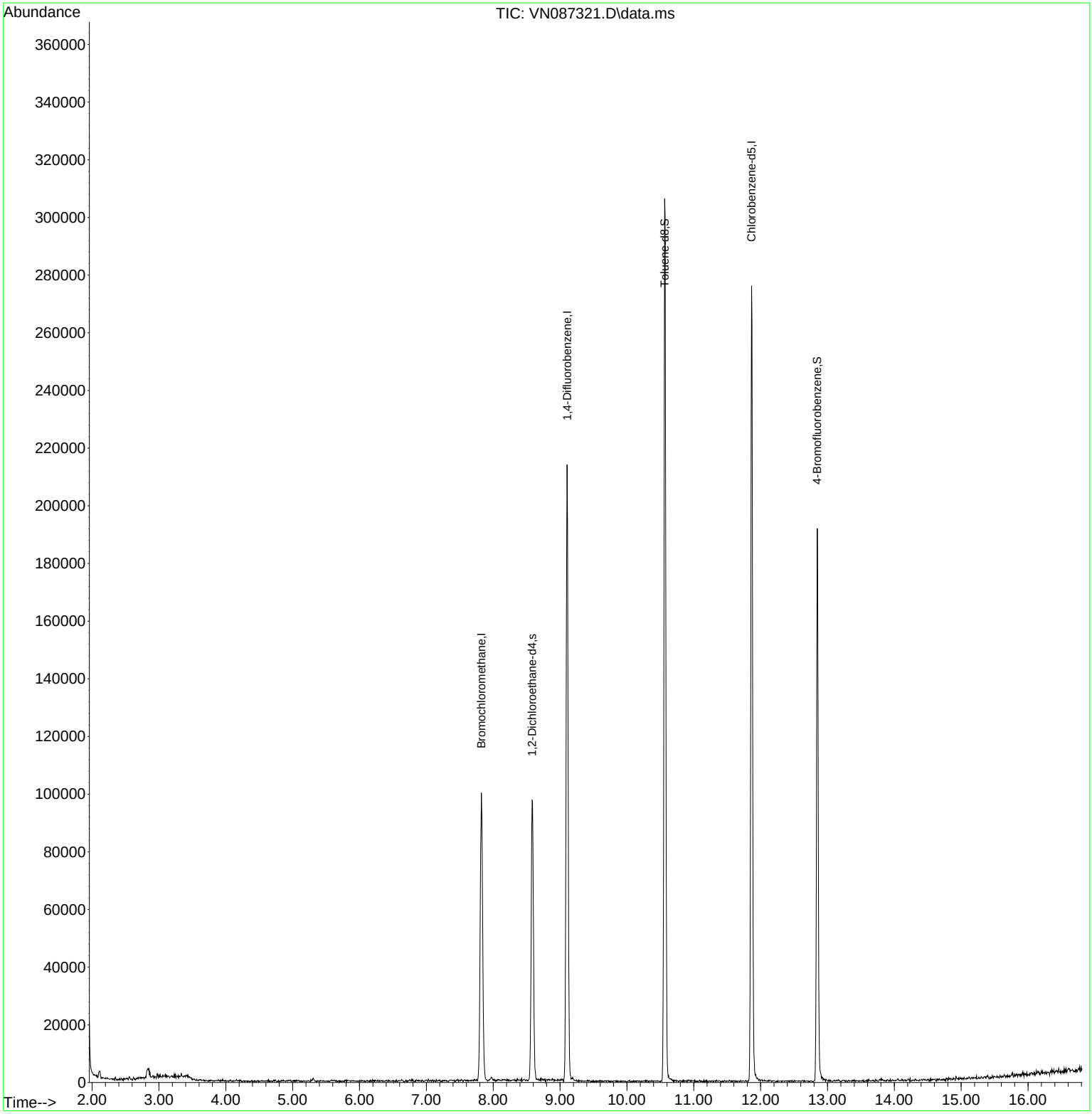
(#) = qualifier out of range (m) = manual integration (+) = signals summed

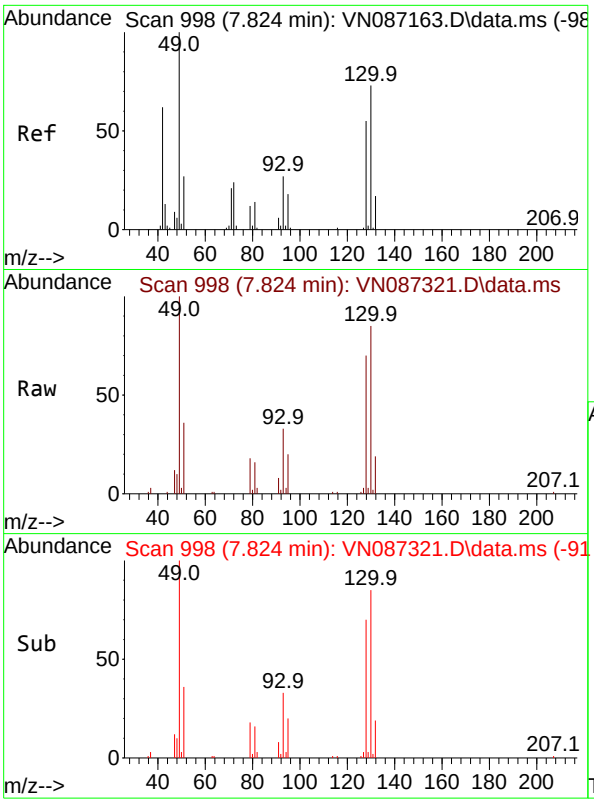
Sample Results: **VN087321.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071025\
Data File : VN087321.D
Acq On : 10 Jul 2025 13:27
Operator : JC\MD
Sample : Q2554-04
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
250709059-11 Trip blank

Quant Time: Jul 11 01:10:00 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:49:56 2025
Response via : Initial Calibration



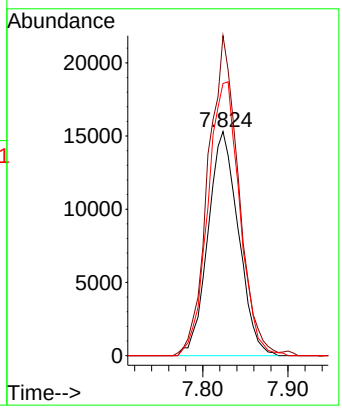


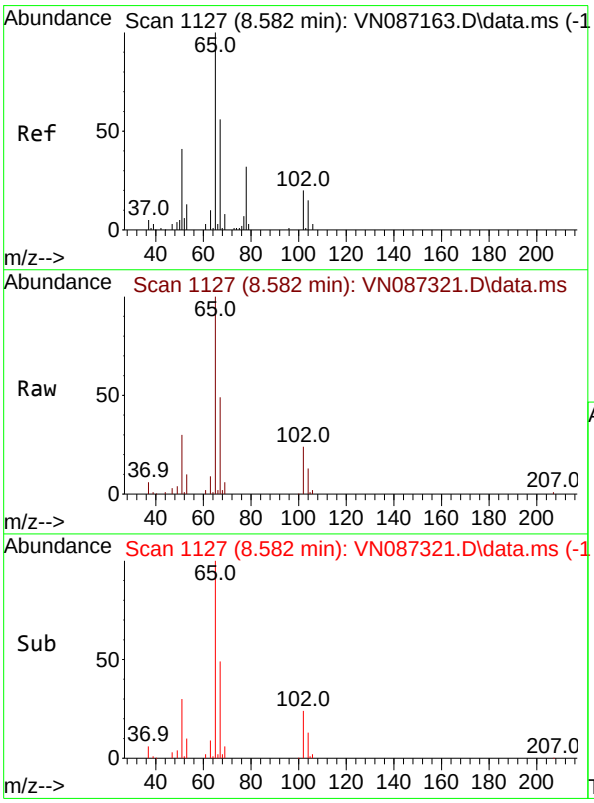
#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 7.824 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN087321.D
Acq: 10 Jul 2025 13:27

Instrument :
MSVOA_N
ClientSampleId :
250709059-11 Trip blank

Tgt Ion:128 Resp: 38034

Ion	Ratio	Lower	Upper
128	100		
49	141.9	0.0	450.5
130	127.6	0.0	320.7

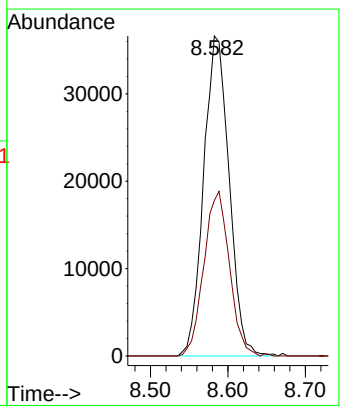


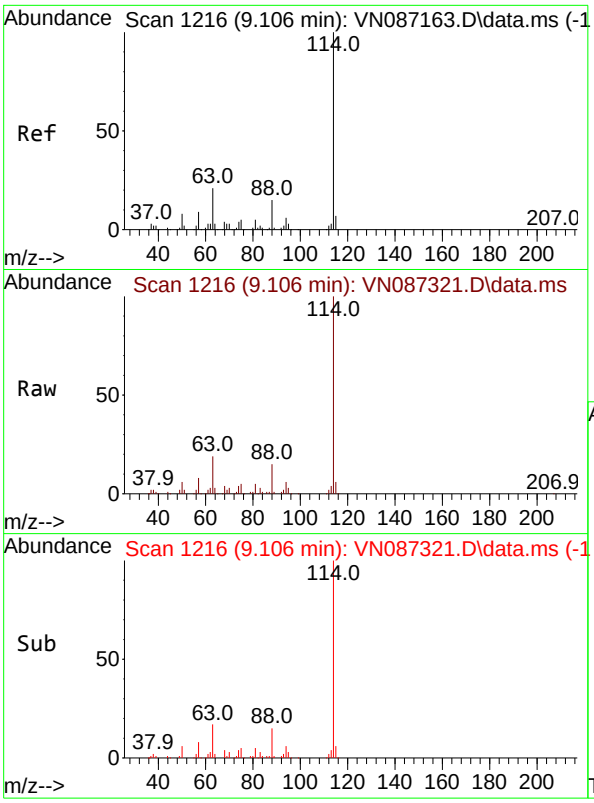


#27
1,2-Dichloroethane-d4
Concen: 29.274 ug/l
RT: 8.582 min Scan# 1127
Delta R.T. 0.000 min
Lab File: VN087321.D
Acq: 10 Jul 2025 13:27

Tgt Ion: 65 Resp: 83890

Ion	Ratio	Lower	Upper
65	100		
67	51.5	41.9	62.9



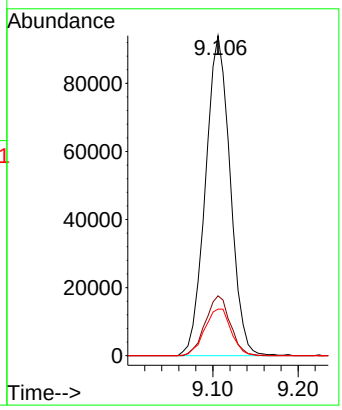


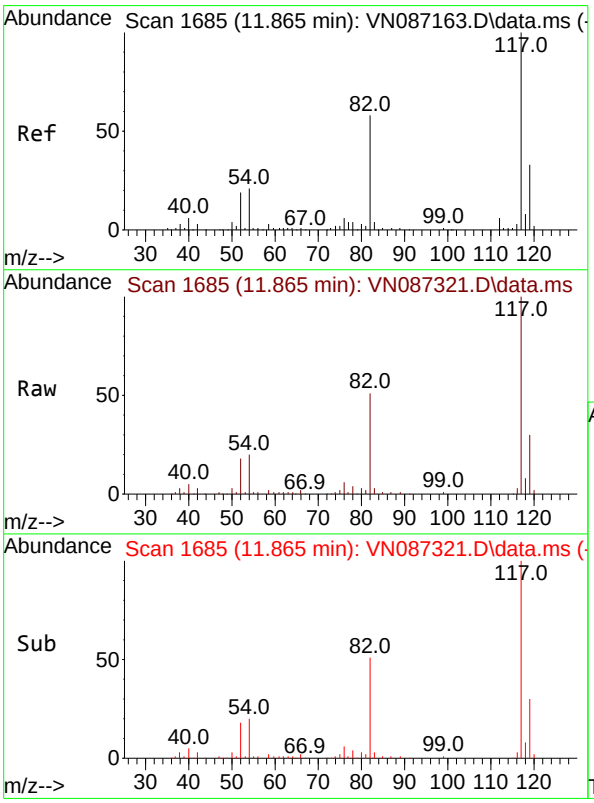
#28
1,4-Difluorobenzene
Concen: 30.000 ug/l
RT: 9.106 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087321.D
Acq: 10 Jul 2025 13:27

Instrument :
MSVOA_N
ClientSampleId :
250709059-11 Trip blank

Tgt Ion:114 Resp: 189173

Ion	Ratio	Lower	Upper
114	100		
63	18.8	17.0	25.4
88	15.6	12.6	19.0

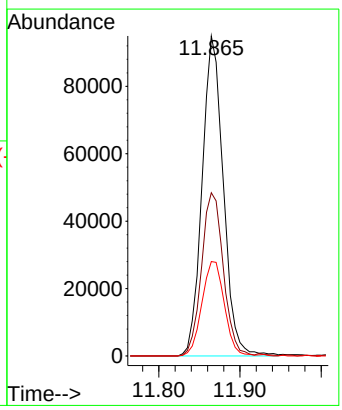


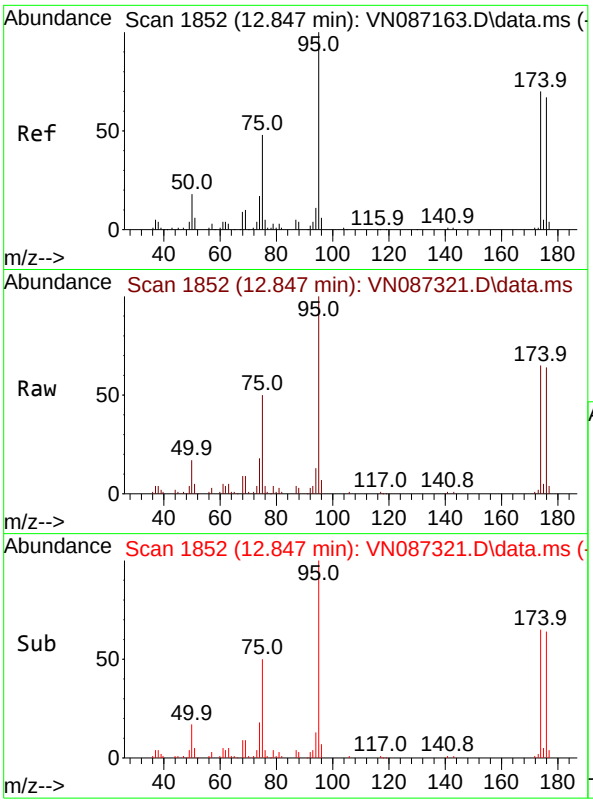


#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 11.865 min Scan# 1685
Delta R.T. 0.000 min
Lab File: VN087321.D
Acq: 10 Jul 2025 13:27

Tgt Ion:117 Resp: 172316

Ion	Ratio	Lower	Upper
117	100		
82	52.5	45.4	68.2
119	31.1	26.2	39.4



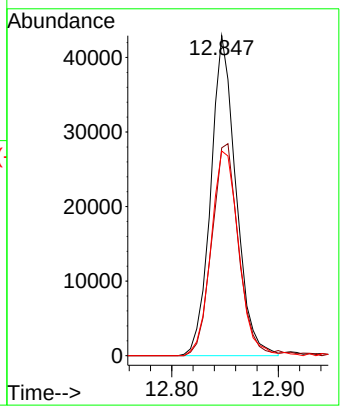


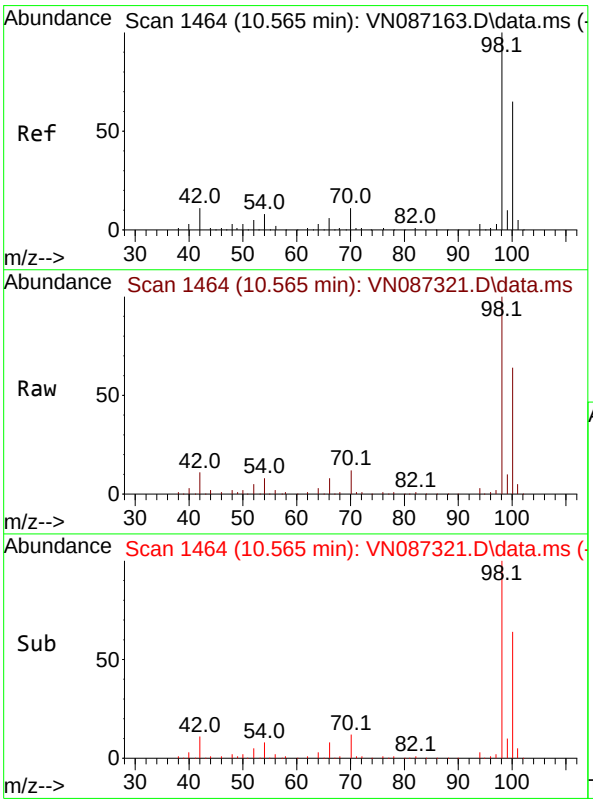
#60
4-Bromofluorobenzene
Concen: 26.539 ug/l
RT: 12.847 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN087321.D
Acq: 10 Jul 2025 13:27

Instrument :
MSVOA_N
ClientSampleId :
250709059-11 Trip blank

Tgt Ion: 95 Resp: 70569

Ion	Ratio	Lower	Upper
95	100		
174	69.7	54.5	81.7
176	70.0	51.9	77.9

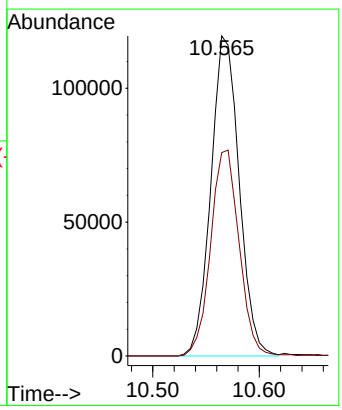




#63
Toluene-d8
Concen: 28.484 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.000 min
Lab File: VN087321.D
Acq: 10 Jul 2025 13:27

Tgt Ion: 98 Resp: 220382

Ion	Ratio	Lower	Upper
98	100		
100	64.7	52.5	78.7



Sample Results: **VN087321.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071025\
Data File : VN087321.D
Acq On : 10 Jul 2025 13:27
Operator : JC\MD
Sample : Q2554-04
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
250709059-11 Trip blank

Integration Parameters: RTEINT3.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Title : METHOD 624 VOLATILE ORGANIC ANALYSIS

Signal : TIC: VN087321.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.836	143	150	151	rBV2	3329	5884	1.03%	0.252%
2	7.824	988	998	1010	rBV3	99891	253480	44.37%	10.856%
3	8.582	1117	1127	1137	rBV	97234	228679	40.02%	9.794%
4	9.106	1207	1216	1226	rBV	213988	438176	76.69%	18.767%
5	10.565	1457	1464	1473	rBV	306076	571344	100.00%	24.470%
6	11.865	1676	1685	1694	rBV	276118	508399	88.98%	21.774%
7	12.847	1846	1852	1863	rBV	191377	328882	57.56%	14.086%

Sum of corrected areas: 2334844

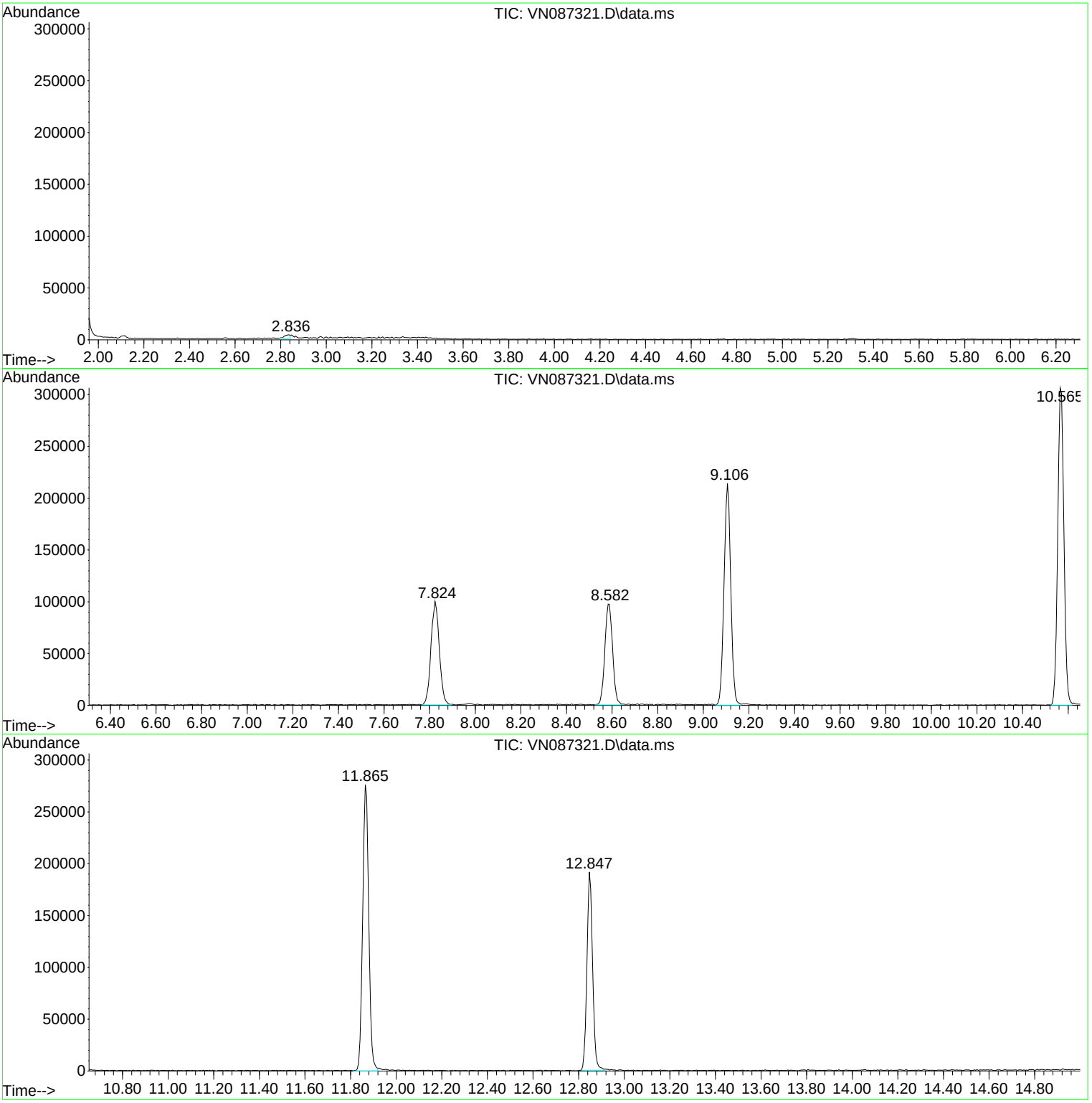
Sample Results: **VN087321.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071025\
Data File : VN087321.D
Acq On : 10 Jul 2025 13:27
Operator : JC\MD
Sample : Q2554-04
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
250709059-11 Trip blank

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Sample Results: **VN087321.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071025\
Data File : VN087321.D
Acq On : 10 Jul 2025 13:27
Operator : JC\MD
Sample : Q2554-04
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
250709059-11 Trip blank

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected
****

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071025\
Data File : VN087321.D
Acq On : 10 Jul 2025 13:27
Operator : JC\MD
Sample : Q2554-04
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
250709059-11 Trip blank

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

CALIBRATION SUMMARY

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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alliance Contract: GARD04

Lab Code: ACE SDG No.: Q2554

Instrument ID: MSVOA_N Calibration Date(s): 06/25/2025 06/25/2025

Heated Purge: (Y/N) N Calibration Time(s): 08:59 10:24

GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID: RRF005 = VN087162.D RRF020 = VN087163.D RRF050 = VN087164.D
RRF100 = VN087165.D RRF150 = VN087166.D RRF =

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF150	RRF	$\overline{RRF}$	% RSD
Acrolein	0.397	0.359	0.407	0.454	0.574		0.438	19
Acrylonitrile	1.315	1.227	1.344	1.334	1.428		1.330	5.4
1,2-Dichloroethane-d4	2.394	2.309	2.211	2.236	2.153		2.260	4.1
Toluene-d8	1.386	1.399	1.314	1.311	1.325		1.347	3.2
4-Bromofluorobenzene	0.439	0.448	0.470	0.489	0.468		0.463	4.3

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

Response Factor Report MSVOA_N_NEW

Method Path : Z:\voasrv\HPCHEM1\MSVOA_N\methods\
Method File : 624N062525W.M
Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
Last Update : Wed Jun 25 10:49:56 2025
Response Via : Initial Calibration

Calibration Files
5 =VN087162.D 20 =VN087163.D 50 =VN087164.D 100 =VN087165.D 150 =VN087166.D

		Compound	5	20	50	100	150	Avg	%RSD
1)	I	Bromochloromethane	----------ISTD----------						
2)	M	Dichlorodifluoro...	1.971	1.652	1.736	1.761	1.909	1.806	7.24
3)	M	Chloromethane	2.014	1.562	1.799	1.846	2.001	1.844	9.98
4)	M	Vinyl Chloride	2.146	1.799	1.922	1.946	2.209	2.005	8.44
5)	M	Bromomethane	1.205	0.965	0.990	1.020	1.139	1.064	9.72
6)	M	Chloroethane	1.140	0.966	1.040	1.070	1.161	1.075	7.33
7)	M	Trichlorofluorom...	2.644	2.322	2.382	2.400	2.546	2.459	5.39
8)	T	Diethyl Ether	1.247	1.074	1.171	1.220	1.328	1.208	7.77
9)		1,1,2-Trichlorot...	1.941	1.681	1.788	1.785	1.920	1.823	5.89
10)	M	1,1-Dichloroethene	1.930	1.676	1.779	1.772	1.929	1.817	6.06
11)		Methyl Iodide	1.117	1.292	1.735	1.883	2.114	1.628	25.45
12)		Methyl Acetate	2.817	2.616	2.857	2.889	3.074	2.851	5.75
13)	M	Acrolein	0.397	0.359	0.407	0.454	0.574	0.438	18.98
14)	M	Acrylonitrile	1.315	1.227	1.344	1.334	1.428	1.330	5.41
15)	M	Acetone	0.423	0.367	0.386	0.373	0.390	0.388	5.66
16)	M	Carbon Disulfide	6.114	4.847	5.126	5.051	5.429	5.313	9.29
17)		Allyl chloride	3.092	2.759	2.988	2.969	3.179	2.997	5.26
18)	M	Methylene Chloride	2.339	1.947	2.062	2.025	2.153	2.105	7.14
19)	M	trans-1,2-Dichlo...	2.191	1.821	1.955	1.916	2.054	1.987	7.11
20)	T	Diisopropyl ether	6.275	6.084	6.540	6.352	6.546	6.359	3.05
21)	M	1,1-Dichloroethane	4.181	3.580	3.726	3.650	3.867	3.801	6.26
22)	M	cis-1,2-Dichloro...	2.324	2.093	2.374	2.269	2.506	2.313	6.53
23)	M	tert-Butyl Alcohol	0.496	0.453	0.505	0.506	0.540	0.500	6.19
24)	M	Methyl tert-Buty...	6.446	5.734	6.377	6.408	6.903	6.374	6.55
25)	M	Chloroform	3.901	3.326	3.659	3.568	3.753	3.641	5.90
26)		Cyclohexane	3.125	2.822	3.197	3.208	3.445	3.159	7.09
27)	s	1,2-Dichloroetha...	2.394	2.309	2.211	2.236	2.153	2.260	4.12
28)	I	1,4-Difluorobenzene	----------ISTD----------						
29)		1,1-Dichloropropene	0.474	0.400	0.502	0.461	0.501	0.468	8.87
30)	M	2-Butanone	0.292	0.286	0.342	0.316	0.341	0.315	8.38
31)		2,2-Dichloropropane	0.584	0.518	0.597	0.538	0.585	0.564	6.13
32)	M	1,1,1-Trichloroe...	0.563	0.497	0.582	0.524	0.565	0.546	6.31
33)	M	Carbon Tetrachlo...	0.493	0.398	0.480	0.447	0.480	0.460	8.41
34)	M	Benzene	1.576	1.309	1.574	1.454	1.494	1.481	7.41
35)		Methacrylonitrile	0.314	0.284	0.342	0.314	0.335	0.318	7.03
36)	M	1,2-Dichloroethane	0.517	0.442	0.507	0.457	0.471	0.479	6.70
37)	M	Trichloroethene	0.371	0.294	0.352	0.336	0.355	0.342	8.55
38)		Methylcyclohexane	0.545	0.472	0.533	0.551	0.582	0.537	7.50
39)	M	1,2-Dichloropropane	0.397	0.348	0.369	0.363	0.382	0.372	5.07
40)		Dibromomethane	0.268	0.235	0.258	0.247	0.257	0.253	5.03
41)	M	Bromodichloromet...	0.537	0.482	0.522	0.485	0.525	0.510	4.94
42)	M	Vinyl Acetate	1.007	0.948	1.108	1.006	1.062	1.026	5.95
43)		Ethyl Acetate	0.446	0.561	0.655	0.570	0.615	0.569	13.78
44)		Isopropyl Acetate	0.937	0.835	0.997	0.918	0.951	0.928	6.42
45)	T	1,4-Dioxane	0.006	0.006	0.007	0.007	0.007	0.006	10.25
46)		Methyl methacrylate	0.420	0.396	0.447	0.432	0.462	0.431	5.84
47)		n-amyl Acetate	0.534	0.506	0.565	0.576	0.655	0.567	9.89
48)	M	t-1,3-Dichloropr...	0.553	0.512	0.613	0.554	0.612	0.569	7.62
49)	T	cis-1,3-Dichloro...	0.616	0.568	0.606	0.585	0.649	0.605	5.13
50)	M	1,1,2-Trichloroe...	0.388	0.333	0.376	0.332	0.366	0.359	7.04
51)		Ethyl methacrylate	0.420	0.470	0.614	0.578	0.651	0.547	17.88
52)		1,3-Dichloropropane	0.638	0.573	0.651	0.579	0.642	0.617	6.11
53)	M	Dibromochloromet...	0.373	0.343	0.401	0.363	0.405	0.377	6.99
54)	M	1,2-Dibromoethane	0.381	0.344	0.382	0.358	0.389	0.371	5.10
55)	M	2-Chloroethyl vi...	0.297	0.291	0.314	0.319	0.345	0.313	6.82
56)	M	Bromoform	0.258	0.234	0.271	0.258	0.276	0.259	6.27

Method Path : Z:\voasrv\HPCHEM1\MSVOA_N\methods\
Method File : 624N062525W.M

57)	I	Chlorobenzene-d5	----------ISTD----------						
58)	M	4-Methyl-2-Penta...	0.557	0.547	0.645	0.630	0.637	0.603	7.80
59)	M	2-Hexanone	0.305	0.322	0.440	0.428	0.452	0.389	17.98
60)	S	4-Bromofluoroben...	0.439	0.448	0.470	0.489	0.468	0.463	4.27
61)	M	Tetrachloroethene	0.334	0.268	0.301	0.281	0.301	0.297	8.44
62)	M	Toluene	1.839	1.550	1.720	1.643	1.720	1.694	6.31
63)	S	Toluene-d8	1.386	1.399	1.314	1.311	1.325	1.347	3.15
64)	M	Chlorobenzene	1.136	0.985	1.106	1.071	1.106	1.081	5.40
65)		1,1,1,2-Tetrachl...	0.376	0.326	0.365	0.354	0.365	0.357	5.38
66)	M	Ethyl Benzene	1.847	1.649	1.926	1.899	1.952	1.855	6.55
67)	M	m/p-Xylenes	0.694	0.636	0.742	0.734	0.747	0.711	6.52
68)	M	o-Xylene	0.650	0.604	0.709	0.706	0.720	0.678	7.29
69)	M	Styrene	1.086	1.039	1.240	1.213	1.242	1.164	8.14
70)		Isopropylbenzene	1.623	1.479	1.789	1.764	1.788	1.689	8.04
71)	M	1,1,2,2-Tetrachl...	0.624	0.566	0.635	0.606	0.608	0.608	4.37
72)		1,2,3-Trichlorop...	0.610	0.465	0.528	0.512	0.505	0.524	10.20
73)		Bromobenzene	0.416	0.361	0.427	0.417	0.427	0.410	6.80
74)		n-propylbenzene	1.920	1.807	2.222	2.185	2.181	2.063	9.08
75)		2-Chlorotoluene	1.226	1.080	1.317	1.300	1.309	1.246	8.01
76)		1,3,5-Trimethylb...	1.275	1.181	1.499	1.466	1.453	1.375	10.12
77)		t-1,4-Dichloro-2...	0.209	0.196	0.247	0.252	0.258	0.232	12.00
78)		4-Chlorotoluene	1.220	1.108	1.372	1.339	1.345	1.276	8.70
79)		tert-butylbenzene	1.025	0.987	1.271	1.250	1.244	1.156	11.89
80)		1,2,4-Trimethylb...	1.238	1.178	1.523	1.476	1.486	1.380	11.56
81)		sec-Butylbenzene	1.576	1.473	1.845	1.794	1.711	1.680	9.16
82)		p-Isopropyltoluene	1.224	1.267	1.534	1.519	1.446	1.398	10.30
83)	M	1,3-Dichlorobenzene	0.782	0.717	0.840	0.823	0.782	0.789	6.06
84)	M	1,4-Dichlorobenzene	0.791	0.714	0.852	0.823	0.788	0.794	6.53
85)		n-Butylbenzene	1.118	1.152	1.432	1.368	1.307	1.275	10.68
86)	T	Hexachloroethane	0.269	0.227	0.281	0.278	0.267	0.265	8.21
87)	M	1,2-Dichlorobenzene	0.719	0.670	0.805	0.781	0.743	0.744	7.10
88)		1,2-Dibromo-3-Ch...	0.130	0.122	0.143	0.142	0.147	0.137	7.58
89)		1,2,4-Trichlorob...	0.399	0.379	0.416	0.449	0.460	0.421	7.97
90)		Hexachlorobutadiene	0.123	0.112	0.132	0.129	0.129	0.125	6.28
91)	M	Naphthalene	1.425	1.442	1.726	1.806	1.881	1.656	12.71
92)		1,2,3-Trichlorob...	0.399	0.379	0.416	0.449	0.460	0.421	7.97

(#) = Out of Range

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN062525\
Data File : VN087162.D
Acq On : 25 Jun 2025 08:59
Operator : JC\MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 25 10:38:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:38:24 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :John Carlone
06/25/2025
Supervised By :Mahesh Dadoda
06/26/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	7.824	128	35930	30.000	ug/l		0.00
28) 1,4-Difluorobenzene	9.106	114	205072	30.000	ug/l		0.00
57) Chlorobenzene-d5	11.865	117	186292	30.000	ug/l		0.00
System Monitoring Compounds							
27) 1,2-Dichloroethane-d4	8.583	65	86000	34.837	ug/l		0.00
Spiked Amount 30.000	Range 91 - 110		Recovery = 116.133%#				
60) 4-Bromofluorobenzene	12.847	95	81752	27.951	ug/l		0.00
Spiked Amount 30.000	Range 63 - 112		Recovery = 93.167%				
63) Toluene-d8	10.565	98	258286	30.207	ug/l		0.00
Spiked Amount 30.000	Range 91 - 112		Recovery = 100.700%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.154	85	11802	4.836	ug/l		96
3) Chloromethane	2.401	50	12062	3.834	ug/l		94
4) Vinyl Chloride	2.554	62	12853	4.439	ug/l		96
5) Bromomethane	2.995	94	7218	4.705	ug/l		91
6) Chloroethane	3.153	64	6828	3.856	ug/l	#	84
7) Trichlorofluoromethane	3.524	101	15836	4.670	ug/l		96
8) Diethyl Ether	3.983	74	7465	5.277	ug/l		99
9) 1,1,2-Trichlorotrifluo...	4.395	101	11626	5.594	ug/l		97
10) 1,1-Dichloroethene	4.365	96	11558	5.455	ug/l		97
11) Methyl Iodide	4.618	142	6687	2.677	ug/l		96
12) Methyl Acetate	5.047	43	16869	7.169	ug/l		100
13) Acrolein	4.200	56	11876	48.853	ug/l		97
14) Acrylonitrile	5.742	53	39359	35.942	ug/l		98
15) Acetone	4.459	58	12676	45.718	ug/l		78
16) Carbon Disulfide	4.742	76	36612	5.919	ug/l		98
17) Allyl chloride	5.047	41	18516	5.882	ug/l		91
18) Methylene Chloride	5.295	84	14009	5.693	ug/l		95
19) trans-1,2-Dichloroethene	5.806	96	13122	5.918	ug/l		93
20) Diisopropyl ether	6.683	45	37574	5.420	ug/l		95
21) 1,1-Dichloroethane	6.583	63	25040	5.985	ug/l		99
22) cis-1,2-Dichloroethene	7.500	96	13914	5.181	ug/l		96
23) tert-Butyl Alcohol	5.542	59	14840m	42.200	ug/l		
24) Methyl tert-Butyl Ether	5.812	73	38602	5.528	ug/l		98
25) Chloroform	7.977	83	23358	5.704	ug/l		99
26) Cyclohexane	8.259	56	18712	5.167	ug/l	#	97
29) 1,1-Dichloropropene	8.377	75	16196	5.372	ug/l		99
30) 2-Butanone	7.494	43	49880	37.757	ug/l		100
31) 2,2-Dichloropropane	7.500	77	19968	5.610	ug/l		96
32) 1,1,1-Trichloroethane	8.183	97	19246	5.506	ug/l		97
33) Carbon Tetrachloride	8.365	117	16865m	5.645	ug/l		
34) Benzene	8.612	78	53867	5.491	ug/l	#	91
35) Methacrylonitrile	7.794	41	10743m	7.079	ug/l		
36) 1,2-Dichloroethane	8.677	62	17661	6.143	ug/l		99
37) Trichloroethene	9.359	130	12692	4.664	ug/l		85
38) Methylcyclohexane	9.600	83	18613	5.564	ug/l		97
39) 1,2-Dichloropropane	9.624	63	13584	5.751	ug/l		94
40) Dibromomethane	9.712	93	9171	5.937	ug/l		96
41) Bromodichloromethane	9.888	83	18357	5.677	ug/l		99
42) Vinyl Acetate	6.618	43	172005	44.667	ug/l		100

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN062525\
Data File : VN087162.D
Acq On : 25 Jun 2025 08:59
Operator : JC\MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 25 10:38:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:38:24 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :John Carlone
06/25/2025
Supervised By :Mahesh Dadoda
06/26/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
43) Ethyl Acetate	7.571	43	15251m	5.642	ug/l		
44) Isopropyl Acetate	8.694	43	32041	6.909	ug/l		98
45) 1,4-Dioxane	9.706	88	3765	91.346	ug/l		85
46) Methyl methacrylate	9.682	41	14340	6.706	ug/l		88
47) n-amyl Acetate	12.712	43	18265m	4.906	ug/l		
48) t-1,3-Dichloropropene	10.841	75	18916	5.467	ug/l		100
49) cis-1,3-Dichloropropene	10.312	75	21045	5.529	ug/l		92
50) 1,1,2-Trichloroethane	11.024	97	13266	6.097	ug/l		90
51) Ethyl methacrylate	10.888	69	14365m	4.077	ug/l		
52) 1,3-Dichloropropane	11.165	76	21815	5.650	ug/l		100
53) Dibromochloromethane	11.359	129	12745	5.184	ug/l		98
54) 1,2-Dibromoethane	11.471	107	13009	5.849	ug/l		99
55) 2-Chloroethyl vinyl ether	10.159	63	50795	30.031	ug/l		99
56) Bromoform	12.576	173	8824	5.696	ug/l	#	93
58) 4-Methyl-2-Pentanone	10.447	43	86443	31.623	ug/l		99
59) 2-Hexanone	11.224	43	47317m	24.166	ug/l		
61) Tetrachloroethene	11.100	164	10375	3.313	ug/l		91
62) Toluene	10.629	91	57093	5.442	ug/l		99
64) Chlorobenzene	11.894	112	35274	5.272	ug/l		98
65) 1,1,1,2-Tetrachloroethane	11.959	131	11689	5.318	ug/l		98
66) Ethyl Benzene	11.965	91	57341	5.053	ug/l		97
67) m/p-Xylenes	12.071	106	43110	9.681	ug/l		97
68) o-Xylene	12.394	106	20187	4.677	ug/l		97
69) Styrene	12.412	104	33711	4.688	ug/l		99
70) Isopropylbenzene	12.694	105	50380	4.908	ug/l		98
71) 1,1,2,2-Tetrachloroethane	12.935	83	19389	7.945	ug/l		98
72) 1,2,3-Trichloropropane	12.994	75	18949m	6.625	ug/l		
73) Bromobenzene	12.982	156	12917	5.063	ug/l		91
74) n-propylbenzene	13.035	91	59601	4.902	ug/l		100
75) 2-Chlorotoluene	13.123	91	38061	4.877	ug/l		100
76) 1,3,5-Trimethylbenzene	13.170	105	39593	4.636	ug/l		99
77) t-1,4-Dichloro-2-butene	12.735	75	6495	5.549	ug/l		95
78) 4-Chlorotoluene	13.223	91	37874	4.899	ug/l		99
79) tert-butylbenzene	13.435	119	31816	4.309	ug/l		99
80) 1,2,4-Trimethylbenzene	13.476	105	38448	4.486	ug/l		98
81) sec-Butylbenzene	13.612	105	48920	4.864	ug/l		99
82) p-Isopropyltoluene	13.723	119	37999	4.499	ug/l		97
83) 1,3-Dichlorobenzene	13.729	146	24271	5.185	ug/l		100
84) 1,4-Dichlorobenzene	13.812	146	24573	5.276	ug/l		99
85) n-Butylbenzene	14.053	91	34704	4.908	ug/l		98
86) Hexachloroethane	14.329	117	8365	5.811	ug/l		99
87) 1,2-Dichlorobenzene	14.106	146	22335	4.947	ug/l		99
88) 1,2-Dibromo-3-Chloropr...	14.717	75	4038	7.857	ug/l		98
89) 1,2,4-Trichlorobenzene	15.841	180	12402	6.563	ug/l		99
90) Hexachlorobutadiene	15.494	225	3815	4.711	ug/l		97
91) Naphthalene	15.635	128	44237	6.710	ug/l		98
92) 1,2,3-Trichlorobenzene	15.841	180	12402	6.563	ug/l		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN062525\
Data File : VN087162.D
Acq On : 25 Jun 2025 08:59
Operator : JC\MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 25 10:38:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:38:24 2025
Response via : Initial Calibration

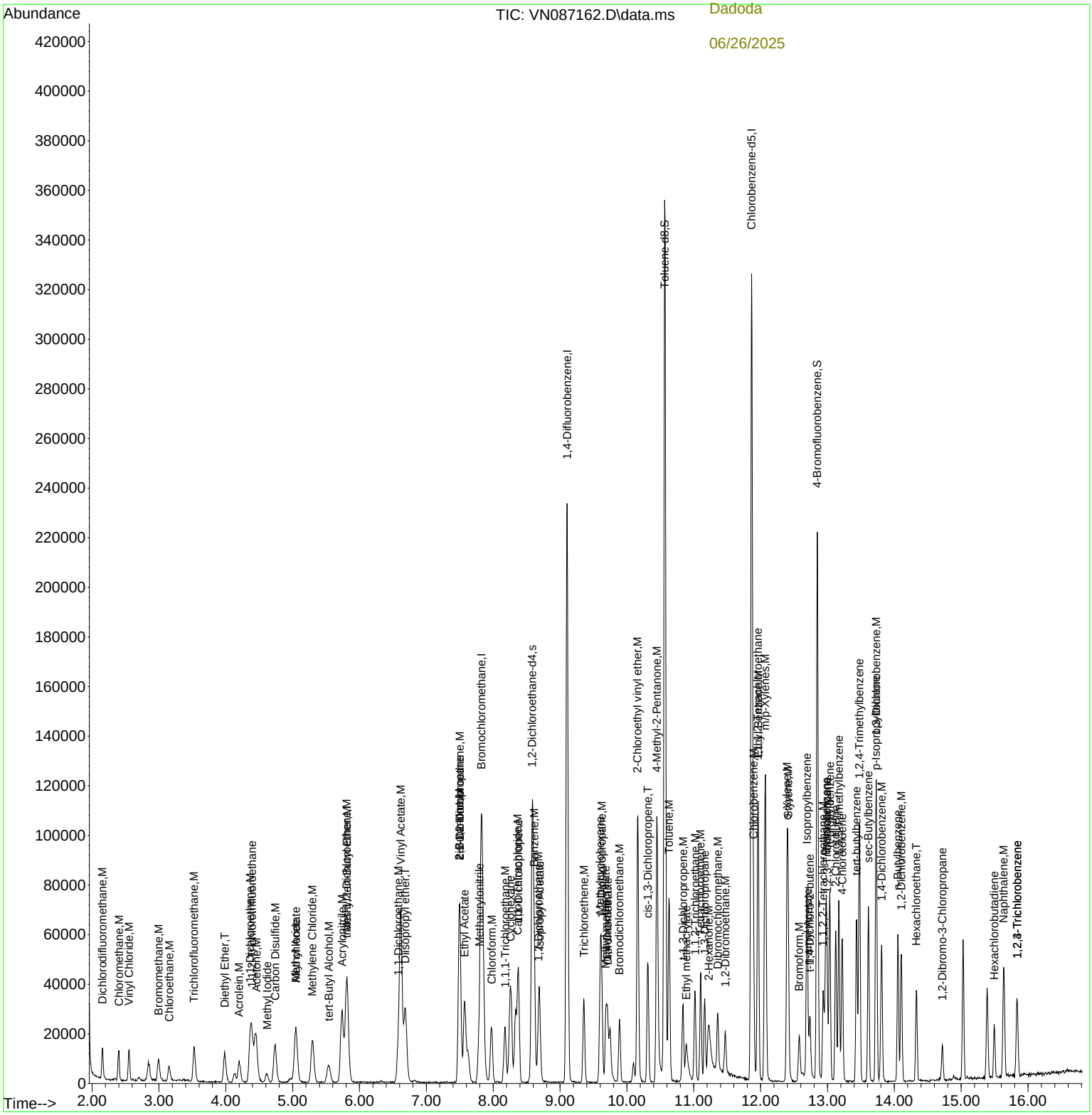
Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :John Carlone

06/25/2025
Supervised By :Mahesh Dadoda

06/26/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN062525\
Data File : VN087163.D
Acq On : 25 Jun 2025 09:20
Operator : JC\MD
Sample : VSTDICCC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

Manual Integrations APPROVED

Reviewed By :John Carlone 06/25/2025
Supervised By :Mahesh Dadoda 06/26/2025

Quant Time: Jun 25 10:35:36 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:35:17 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	7.824	128	35021	30.000	ug/l	0.01
28) 1,4-Difluorobenzene	9.106	114	196036	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.865	117	185687	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.582	65	80849	33.600	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery = 112.000%#			
60) 4-Bromofluorobenzene	12.847	95	83246	28.555	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery = 95.167%			
63) Toluene-d8	10.565	98	259828	30.486	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery = 101.633%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.154	85	38576	16.218	ug/l	97
3) Chloromethane	2.395	50	36457	11.888	ug/l	98
4) Vinyl Chloride	2.553	62	42008	14.885	ug/l	93
5) Bromomethane	3.001	94	22531	15.067	ug/l	93
6) Chloroethane	3.153	64	22548	13.062	ug/l	98
7) Trichlorofluoromethane	3.530	101	54211	16.400	ug/l	97
8) Diethyl Ether	3.983	74	25082	18.191	ug/l	94
9) 1,1,2-Trichlorotrifluo...	4.400	101	39250	19.375	ug/l	86
10) 1,1-Dichloroethene	4.371	96	39141	18.952	ug/l	99
11) Methyl Iodide	4.612	142	30168	12.391	ug/l	95
12) Methyl Acetate	5.047	43	61084	26.632	ug/l	94
13) Acrolein	4.206	56	41919	176.912	ug/l	100
14) Acrylonitrile	5.736	53	143262	134.221	ug/l	98
15) Acetone	4.453	58	42803	158.384	ug/l	88
16) Carbon Disulfide	4.736	76	113169	18.771	ug/l	100
17) Allyl chloride	5.042	41	64418	20.995	ug/l	92
18) Methylene Chloride	5.300	84	45462	18.954	ug/l	96
19) trans-1,2-Dichloroethene	5.806	96	42521	19.673	ug/l	90
20) Diisopropyl ether	6.689	45	142052	21.022	ug/l	94
21) 1,1-Dichloroethane	6.583	63	83594	20.498	ug/l	98
22) cis-1,2-Dichloroethene	7.494	96	48862	18.668	ug/l	93
23) tert-Butyl Alcohol	5.536	59	52931	154.426	ug/l #	100
24) Methyl tert-Butyl Ether	5.812	73	133867	19.667	ug/l	95
25) Chloroform	7.971	83	77659	19.456	ug/l	98
26) Cyclohexane	8.265	56	65879	18.665	ug/l #	98
29) 1,1-Dichloropropene	8.377	75	52341	18.159	ug/l	99
30) 2-Butanone	7.494	43	186786	147.905	ug/l	97
31) 2,2-Dichloropropane	7.500	77	67667	19.889	ug/l	99
32) 1,1,1-Trichloroethane	8.177	97	65006	19.456	ug/l	99
33) Carbon Tetrachloride	8.371	117	51957	18.192	ug/l	96
34) Benzene	8.612	78	171052	18.239	ug/l #	94
35) Methacrylonitrile	7.788	41	37169	25.622	ug/l	95
36) 1,2-Dichloroethane	8.671	62	57773	21.023	ug/l	96
37) Trichloroethene	9.353	130	38479	14.792	ug/l	94
38) Methylcyclohexane	9.606	83	61684	19.288	ug/l	96
39) 1,2-Dichloropropane	9.624	63	45479	20.143	ug/l	99
40) Dibromomethane	9.712	93	30677	20.774	ug/l	97
41) Bromodichloromethane	9.894	83	63009	20.384	ug/l	99
42) Vinyl Acetate	6.618	43	619269	168.226	ug/l	94

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN062525\
Data File : VN087163.D
Acq On : 25 Jun 2025 09:20
Operator : JC\MD
Sample : VSTDICCC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

Manual Integrations APPROVED

Reviewed By :John Carlone 06/25/2025
Supervised By :Mahesh Dadoda 06/26/2025

Quant Time: Jun 25 10:35:36 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:35:17 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
43) Ethyl Acetate	7.571	43	73261	28.350	ug/l		99
44) Isopropyl Acetate	8.694	43	109066	24.603	ug/l		92
45) 1,4-Dioxane	9.700	88	14898	378.114	ug/l		94
46) Methyl methacrylate	9.682	41	51785	25.335	ug/l		94
47) n-amyl Acetate	12.529	43	66120m	18.579	ug/l		
48) t-1,3-Dichloropropene	10.835	75	66870	20.216	ug/l		99
49) cis-1,3-Dichloropropene	10.312	75	74233	20.403	ug/l		95
50) 1,1,2-Trichloroethane	11.018	97	43535	20.932	ug/l		97
51) Ethyl methacrylate	10.882	69	61428	18.237	ug/l		97
52) 1,3-Dichloropropane	11.165	76	74825	20.272	ug/l		99
53) Dibromochloromethane	11.359	129	44787	19.056	ug/l		99
54) 1,2-Dibromoethane	11.471	107	44953	21.145	ug/l		98
55) 2-Chloroethyl vinyl ether	10.159	63	189897	117.448	ug/l		99
56) Bromoform	12.576	173	30532	20.618	ug/l	#	98
58) 4-Methyl-2-Pentanone	10.447	43	338778	124.338	ug/l		97
59) 2-Hexanone	11.206	43	199560	102.251	ug/l		99
61) Tetrachloroethene	11.106	164	33143	10.618	ug/l		93
62) Toluene	10.629	91	191888	18.349	ug/l		99
64) Chlorobenzene	11.888	112	121902	18.278	ug/l		100
65) 1,1,1,2-Tetrachloroethane	11.959	131	40342	18.412	ug/l		99
66) Ethyl Benzene	11.965	91	204111	18.045	ug/l		97
67) m/p-Xylenes	12.070	106	157576	35.500	ug/l		98
68) o-Xylene	12.394	106	74793	17.386	ug/l		99
69) Styrene	12.412	104	128666	17.953	ug/l		98
70) Isopropylbenzene	12.694	105	183132	17.899	ug/l		100
71) 1,1,2,2-Tetrachloroethane	12.935	83	70012	28.780	ug/l		97
72) 1,2,3-Trichloropropane	12.988	75	57564m	20.191	ug/l		
73) Bromobenzene	12.982	156	44654	17.559	ug/l		89
74) n-propylbenzene	13.035	91	223685	18.457	ug/l		98
75) 2-Chlorotoluene	13.123	91	133694	17.187	ug/l		100
76) 1,3,5-Trimethylbenzene	13.170	105	146137	17.169	ug/l		100
77) t-1,4-Dichloro-2-butene	12.735	75	24271	20.803	ug/l		93
78) 4-Chlorotoluene	13.217	91	137101	17.793	ug/l		99
79) tert-butylbenzene	13.435	119	122243	16.611	ug/l		97
80) 1,2,4-Trimethylbenzene	13.482	105	145827	17.068	ug/l		99
81) sec-Butylbenzene	13.612	105	182391	18.192	ug/l		99
82) p-Isopropyltoluene	13.729	119	156830	18.630	ug/l		99
83) 1,3-Dichlorobenzene	13.729	146	88727	19.018	ug/l		99
84) 1,4-Dichlorobenzene	13.812	146	88343	19.028	ug/l		99
85) n-Butylbenzene	14.053	91	142647	20.240	ug/l		99
86) Hexachloroethane	14.329	117	28116	19.596	ug/l		98
87) 1,2-Dichlorobenzene	14.106	146	82984	18.439	ug/l		99
88) 1,2-Dibromo-3-Chloropr...	14.711	75	15132	29.539	ug/l		94
89) 1,2,4-Trichlorobenzene	15.835	180	46967	24.937	ug/l		96
90) Hexachlorobutadiene	15.494	225	13876	17.189	ug/l		99
91) Naphthalene	15.635	128	178532	27.168	ug/l		98
92) 1,2,3-Trichlorobenzene	15.835	180	46967	24.937	ug/l		96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

ICAL Form

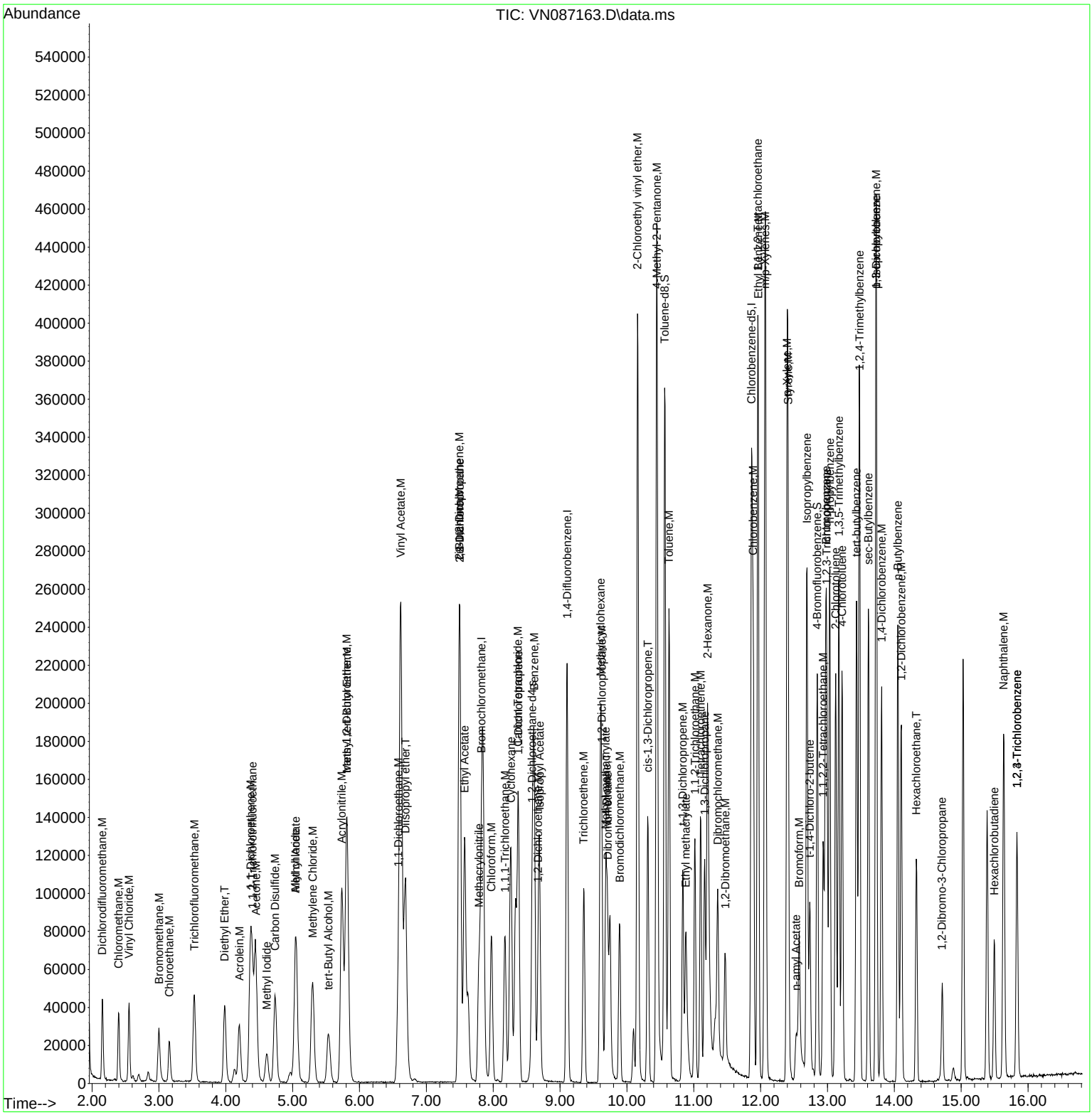
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN062525\
Data File : VN087163.D
Acq On : 25 Jun 2025 09:20
Operator : JC\MD
Sample : VSTDICCC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 25 10:35:36 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:35:17 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

Manual Integrations APPROVED

Reviewed By :John Carlone 06/25/2025
Supervised By :Mahesh Dadoda 06/26/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN062525\
Data File : VN087164.D
Acq On : 25 Jun 2025 09:41
Operator : JC\MD
Sample : VSTDICC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

Manual Integrations APPROVED

Reviewed By :John Carlone 06/25/2025
Supervised By :Mahesh Dadoda 06/26/2025

Quant Time: Jun 25 10:41:53 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:38:24 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	7.824	128	36297	30.000	ug/l		0.00
28) 1,4-Difluorobenzene	9.106	114	191792	30.000	ug/l		0.00
57) Chlorobenzene-d5	11.865	117	183711	30.000	ug/l		0.00
System Monitoring Compounds							
27) 1,2-Dichloroethane-d4	8.583	65	80238	32.174	ug/l		0.00
Spiked Amount 30.000	Range 91 - 110		Recovery = 107.233%				
60) 4-Bromofluorobenzene	12.847	95	86398	29.954	ug/l		0.00
Spiked Amount 30.000	Range 63 - 112		Recovery = 99.833%				
63) Toluene-d8	10.565	98	241406	28.629	ug/l		0.00
Spiked Amount 30.000	Range 91 - 112		Recovery = 95.433%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.154	85	105036	42.607	ug/l		97
3) Chloromethane	2.395	50	108859	34.249	ug/l		98
4) Vinyl Chloride	2.554	62	116298	39.759	ug/l		95
5) Bromomethane	2.995	94	59883	38.638	ug/l		94
6) Chloroethane	3.154	64	62900	35.158	ug/l		97
7) Trichlorofluoromethane	3.530	101	144121	42.068	ug/l		99
8) Diethyl Ether	3.983	74	70868	49.590	ug/l		98
9) 1,1,2-Trichlorotrifluo...	4.401	101	108149	51.509	ug/l	#	88
10) 1,1-Dichloroethene	4.365	96	107618	50.276	ug/l		95
11) Methyl Iodide	4.612	142	104934	41.585	ug/l		91
12) Methyl Acetate	5.042	43	172834	72.704	ug/l		97
13) Acrolein	4.201	56	122967	500.718	ug/l		100
14) Acrylonitrile	5.736	53	406413	367.380	ug/l		98
15) Acetone	4.448	58	116774	416.908	ug/l		94
16) Carbon Disulfide	4.742	76	310088	49.627	ug/l		100
17) Allyl chloride	5.048	41	180781	56.849	ug/l		97
18) Methylene Chloride	5.300	84	124740	50.180	ug/l		98
19) trans-1,2-Dichloroethene	5.812	96	118244	52.785	ug/l		94
20) Diisopropyl ether	6.689	45	395621	56.488	ug/l		95
21) 1,1-Dichloroethane	6.583	63	225376	53.322	ug/l		99
22) cis-1,2-Dichloroethene	7.500	96	143629	52.945	ug/l		97
23) tert-Butyl Alcohol	5.536	59	152814	430.162	ug/l	#	100
24) Methyl tert-Butyl Ether	5.812	73	385760	54.681	ug/l		98
25) Chloroform	7.971	83	221377	53.512	ug/l		98
26) Cyclohexane	8.265	56	193421	52.874	ug/l	#	98
29) 1,1-Dichloropropene	8.377	75	160517	56.923	ug/l		98
30) 2-Butanone	7.489	43	546757	442.524	ug/l		99
31) 2,2-Dichloropropane	7.500	77	190958	57.368	ug/l		100
32) 1,1,1-Trichloroethane	8.177	97	185977	56.894	ug/l		99
33) Carbon Tetrachloride	8.371	117	153386	54.893	ug/l		97
34) Benzene	8.612	78	503072	54.830	ug/l		98
35) Methacrylonitrile	7.789	41	109229	76.961	ug/l		95
36) 1,2-Dichloroethane	8.677	62	161947	60.234	ug/l		97
37) Trichloroethene	9.359	130	112377	44.156	ug/l		89
38) Methylcyclohexane	9.606	83	170475	54.486	ug/l		98
39) 1,2-Dichloropropane	9.624	63	117960	53.402	ug/l		96
40) Dibromomethane	9.712	93	82459	57.075	ug/l		99
41) Bromodichloromethane	9.888	83	167016	55.227	ug/l		99
42) Vinyl Acetate	6.618	43	1770137	491.503	ug/l		99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN062525\
Data File : VN087164.D
Acq On : 25 Jun 2025 09:41
Operator : JC\MD
Sample : VSTDICC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 25 10:41:53 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:38:24 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

Manual Integrations APPROVED

Reviewed By :John Carlone 06/25/2025
Supervised By :Mahesh Dadoda 06/26/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
43) Ethyl Acetate	7.571	43	209283	82.779	ug/l		98
44) Isopropyl Acetate	8.694	43	318572	73.455	ug/l		97
45) 1,4-Dioxane	9.700	88	42097	1092.072	ug/l		90
46) Methyl methacrylate	9.683	41	142798	71.407	ug/l		95
47) n-amyl Acetate	12.518	43	180529	51.850	ug/l	#	100
48) t-1,3-Dichloropropene	10.835	75	196045	60.579	ug/l		100
49) cis-1,3-Dichloropropene	10.312	75	193737	54.427	ug/l		95
50) 1,1,2-Trichloroethane	11.018	97	120146	59.045	ug/l		98
51) Ethyl methacrylate	10.882	69	196419	59.603	ug/l		98
52) 1,3-Dichloropropane	11.165	76	208157	57.643	ug/l		98
53) Dibromochloromethane	11.359	129	128273	55.785	ug/l		98
54) 1,2-Dibromoethane	11.471	107	122070	58.689	ug/l		97
55) 2-Chloroethyl vinyl ether	10.159	63	502611	317.734	ug/l		100
56) Bromoform	12.576	173	86503	59.706	ug/l		99
58) 4-Methyl-2-Pentanone	10.447	43	987570	366.357	ug/l		100
59) 2-Hexanone	11.200	43	673308	348.700	ug/l		97
61) Tetrachloroethene	11.106	164	92124	29.832	ug/l		96
62) Toluene	10.630	91	526581	50.894	ug/l		99
64) Chlorobenzene	11.894	112	338627	51.320	ug/l		98
65) 1,1,1,2-Tetrachloroethane	11.959	131	111613	51.489	ug/l		98
66) Ethyl Benzene	11.965	91	589779	52.700	ug/l		99
67) m/p-Xylenes	12.071	106	454250	103.437	ug/l		99
68) o-Xylene	12.400	106	217114	51.013	ug/l		99
69) Styrene	12.412	104	379767	53.558	ug/l		99
70) Isopropylbenzene	12.694	105	547639	54.100	ug/l		99
71) 1,1,2,2-Tetrachloroethane	12.935	83	194527	80.826	ug/l		97
72) 1,2,3-Trichloropropane	12.994	75	161650m	57.309	ug/l		
73) Bromobenzene	12.982	156	130892	52.023	ug/l		98
74) n-propylbenzene	13.035	91	680365	56.743	ug/l		99
75) 2-Chlorotoluene	13.123	91	403198	52.390	ug/l		98
76) 1,3,5-Trimethylbenzene	13.171	105	458902	54.494	ug/l		99
77) t-1,4-Dichloro-2-butene	12.735	75	75763	65.634	ug/l		98
78) 4-Chlorotoluene	13.218	91	420022	55.095	ug/l		99
79) tert-butylbenzene	13.435	119	389222	53.458	ug/l		98
80) 1,2,4-Trimethylbenzene	13.482	105	466397	55.177	ug/l		98
81) sec-Butylbenzene	13.612	105	564906	56.952	ug/l		99
82) p-Isopropyltoluene	13.729	119	469774	56.404	ug/l		99
83) 1,3-Dichlorobenzene	13.729	146	257282	55.740	ug/l		100
84) 1,4-Dichlorobenzene	13.812	146	260975	56.816	ug/l		99
85) n-Butylbenzene	14.053	91	438545	62.894	ug/l		99
86) Hexachloroethane	14.329	117	86176	60.709	ug/l		99
87) 1,2-Dichlorobenzene	14.106	146	246553	55.373	ug/l		100
88) 1,2-Dibromo-3-Chloropr...	14.717	75	43840	86.500	ug/l		92
89) 1,2,4-Trichlorobenzene	15.835	180	127450	68.396	ug/l		97
90) Hexachlorobutadiene	15.494	225	40360	50.535	ug/l		97
91) Naphthalene	15.635	128	528628	81.307	ug/l		99
92) 1,2,3-Trichlorobenzene	15.835	180	127450	68.396	ug/l		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

ICAL Form

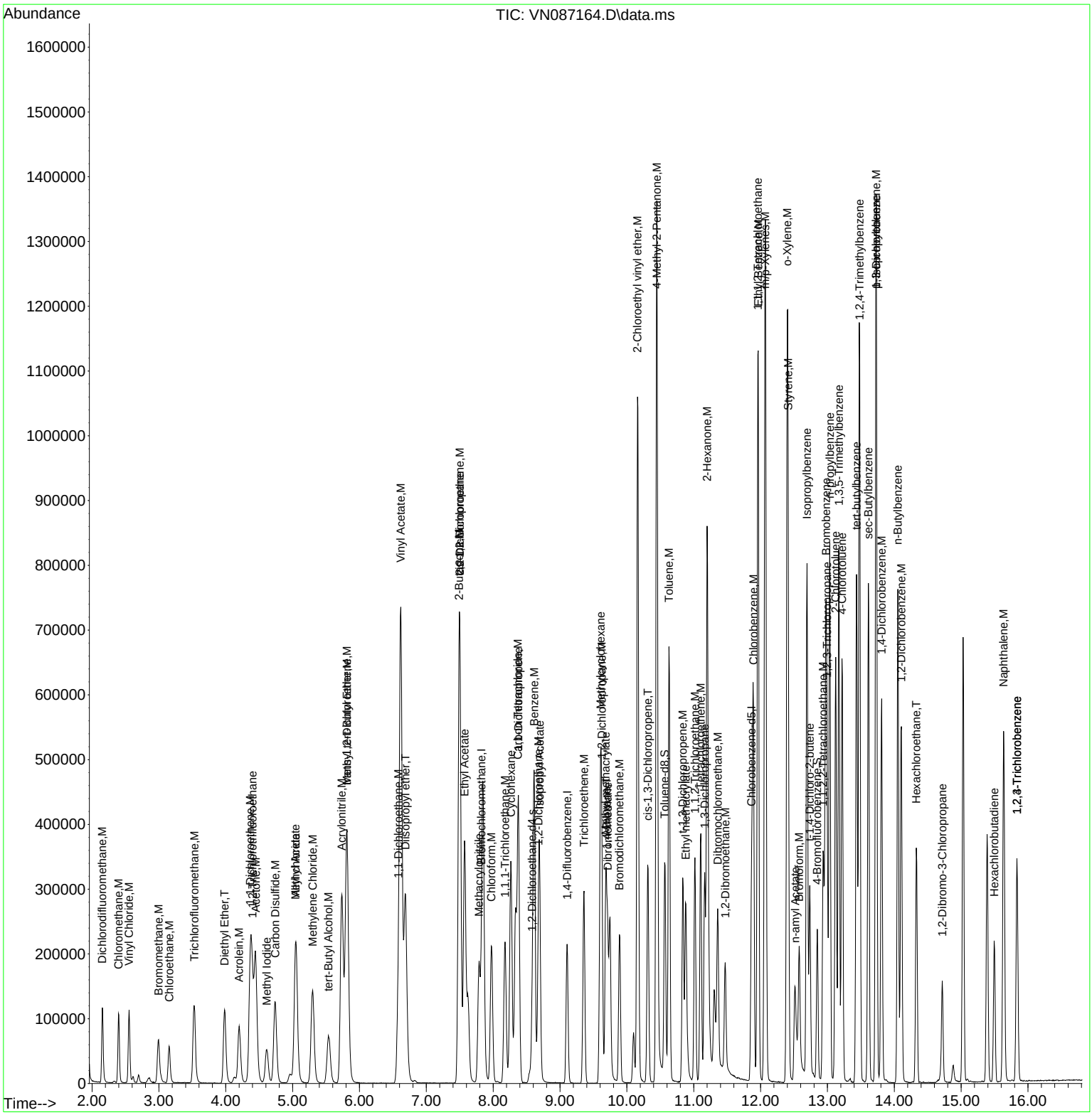
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN062525\
Data File : VN087164.D
Acq On : 25 Jun 2025 09:41
Operator : JC\MD
Sample : VSTDICC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 25 10:41:53 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:38:24 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

Manual Integrations APPROVED

Reviewed By :John Carlone 06/25/2025
Supervised By :Mahesh Dadoda 06/26/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN062525\
Data File : VN087165.D
Acq On : 25 Jun 2025 10:03
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :John Carlone 06/25/2025
Supervised By :Mahesh Dadoda 06/26/2025

Quant Time: Jun 25 10:45:11 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:38:24 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	7.824	128	35618	30.000	ug/l		0.00
28) 1,4-Difluorobenzene	9.106	114	201156	30.000	ug/l		0.00
57) Chlorobenzene-d5	11.865	117	183622	30.000	ug/l		0.00
System Monitoring Compounds							
27) 1,2-Dichloroethane-d4	8.588	65	79655	32.549	ug/l		0.00
Spiked Amount 30.000	Range 91 - 110		Recovery = 108.500%				
60) 4-Bromofluorobenzene	12.847	95	89811	31.153	ug/l		0.00
Spiked Amount 30.000	Range 63 - 112		Recovery = 103.833%				
63) Toluene-d8	10.570	98	240658	28.555	ug/l		0.00
Spiked Amount 30.000	Range 91 - 112		Recovery = 95.167%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.153	85	209048	86.416	ug/l		98
3) Chloromethane	2.395	50	219144	70.260	ug/l		99
4) Vinyl Chloride	2.553	62	231029	80.487	ug/l		96
5) Bromomethane	2.977	94	121155	79.663	ug/l		96
6) Chloroethane	3.147	64	127025	72.354	ug/l		96
7) Trichlorofluoromethane	3.524	101	284892	84.743	ug/l		99
8) Diethyl Ether	3.983	74	144856	103.296	ug/l		98
9) 1,1,2-Trichlorotrifluo...	4.394	101	211983	102.887	ug/l	#	89
10) 1,1-Dichloroethene	4.359	96	210381	100.157	ug/l		99
11) Methyl Iodide	4.612	142	223592	90.298	ug/l		94
12) Methyl Acetate	5.047	43	342955	147.018	ug/l		99
13) Acrolein	4.194	56	269423	1117.997	ug/l		98
14) Acrylonitrile	5.736	53	792103	729.677	ug/l		99
15) Acetone	4.447	58	221668	806.489	ug/l		88
16) Carbon Disulfide	4.736	76	599738	97.812	ug/l		99
17) Allyl chloride	5.047	41	352481	112.956	ug/l		96
18) Methylene Chloride	5.294	84	240448	98.570	ug/l		98
19) trans-1,2-Dichloroethene	5.806	96	227436	103.465	ug/l		98
20) Diisopropyl ether	6.688	45	754179	109.737	ug/l		96
21) 1,1-Dichloroethane	6.583	63	433300	104.470	ug/l		99
22) cis-1,2-Dichloroethene	7.500	96	269357	101.185	ug/l		98
23) tert-Butyl Alcohol	5.547	59	300461	861.903	ug/l	#	100
24) Methyl tert-Butyl Ether	5.812	73	760825	109.903	ug/l		98
25) Chloroform	7.977	83	423559	104.336	ug/l		98
26) Cyclohexane	8.265	56	380867	106.100	ug/l	#	97
29) 1,1-Dichloropropene	8.377	75	308919	104.450	ug/l		100
30) 2-Butanone	7.494	43	1060369	818.271	ug/l		99
31) 2,2-Dichloropropane	7.500	77	360566	103.280	ug/l		99
32) 1,1,1-Trichloroethane	8.177	97	351600	102.554	ug/l		99
33) Carbon Tetrachloride	8.371	117	300004	102.367	ug/l		98
34) Benzene	8.612	78	974806	101.298	ug/l		96
35) Methacrylonitrile	7.788	41	210741	141.572	ug/l		93
36) 1,2-Dichloroethane	8.677	62	306293	108.618	ug/l		98
37) Trichloroethene	9.359	130	225493	84.478	ug/l		91
38) Methylcyclohexane	9.606	83	369519	112.606	ug/l		97
39) 1,2-Dichloropropane	9.624	63	243095	104.928	ug/l		96
40) Dibromomethane	9.712	93	165326	109.106	ug/l		98
41) Bromodichloromethane	9.888	83	324962	102.452	ug/l		99
42) Vinyl Acetate	6.618	43	3371109	892.461	ug/l		98

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN062525\
Data File : VN087165.D
Acq On : 25 Jun 2025 10:03
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 25 10:45:11 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:38:24 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :John Carlone 06/25/2025
Supervised By :Mahesh Dadoda 06/26/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
43) Ethyl Acetate	7.571	43	382364	144.198	ug/l		97
44) Isopropyl Acetate	8.694	43	615849	135.389	ug/l		97
45) 1,4-Dioxane	9.706	88	88061	2178.117	ug/l	#	94
46) Methyl methacrylate	9.682	41	289659	138.103	ug/l		98
47) n-amyl Acetate	12.506	43	386267	105.776	ug/l	#	100
48) t-1,3-Dichloropropene	10.835	75	371754	109.526	ug/l		99
49) cis-1,3-Dichloropropene	10.312	75	392118	105.031	ug/l		98
50) 1,1,2-Trichloroethane	11.018	97	222928	104.457	ug/l		98
51) Ethyl methacrylate	10.876	69	387380	112.077	ug/l		99
52) 1,3-Dichloropropane	11.165	76	388131	102.479	ug/l		99
53) Dibromochloromethane	11.359	129	243297	100.883	ug/l		98
54) 1,2-Dibromoethane	11.470	107	239775	109.913	ug/l		97
55) 2-Chloroethyl vinyl ether	10.159	63	1069566	644.669	ug/l		99
56) Bromoform	12.576	173	172827	113.736	ug/l		100
58) 4-Methyl-2-Pentanone	10.447	43	1927138	715.253	ug/l		100
59) 2-Hexanone	11.200	43	1309927	678.728	ug/l		98
61) Tetrachloroethene	11.106	164	172205	55.791	ug/l		96
62) Toluene	10.629	91	1005355	97.215	ug/l		99
64) Chlorobenzene	11.894	112	655778	99.433	ug/l		98
65) 1,1,1,2-Tetrachloroethane	11.959	131	216474	99.911	ug/l		98
66) Ethyl Benzene	11.965	91	1162597	103.936	ug/l		99
67) m/p-Xylenes	12.070	106	898830	204.771	ug/l		99
68) o-Xylene	12.394	106	432376	101.641	ug/l		99
69) Styrene	12.412	104	742364	104.745	ug/l		99
70) Isopropylbenzene	12.694	105	1079915	106.734	ug/l		99
71) 1,1,2,2-Tetrachloroethane	12.935	83	370997	154.224	ug/l		97
72) 1,2,3-Trichloropropane	12.994	75	313625m	111.241	ug/l		
73) Bromobenzene	12.976	156	255120	101.447	ug/l		98
74) n-propylbenzene	13.035	91	1337231	111.580	ug/l		98
75) 2-Chlorotoluene	13.123	91	795441	103.407	ug/l		98
76) 1,3,5-Trimethylbenzene	13.170	105	897353	106.611	ug/l		100
77) t-1,4-Dichloro-2-butene	12.735	75	154353	133.783	ug/l		91
78) 4-Chlorotoluene	13.217	91	819288	107.520	ug/l		100
79) tert-butylbenzene	13.435	119	765014	105.123	ug/l		98
80) 1,2,4-Trimethylbenzene	13.482	105	903551	106.945	ug/l		99
81) sec-Butylbenzene	13.611	105	1098188	110.769	ug/l		99
82) p-Isopropyltoluene	13.729	119	929641	111.672	ug/l		99
83) 1,3-Dichlorobenzene	13.729	146	504027	109.250	ug/l		100
84) 1,4-Dichlorobenzene	13.811	146	503947	109.765	ug/l		99
85) n-Butylbenzene	14.053	91	837235	120.131	ug/l		98
86) Hexachloroethane	14.329	117	169893	119.744	ug/l		97
87) 1,2-Dichlorobenzene	14.106	146	478012	107.409	ug/l		99
88) 1,2-Dibromo-3-Chloropr...	14.717	75	86628	171.007	ug/l		92
89) 1,2,4-Trichlorobenzene	15.835	180	274932	147.614	ug/l		98
90) Hexachlorobutadiene	15.500	225	78874	98.806	ug/l		97
91) Naphthalene	15.635	128	1105491	170.116	ug/l		99
92) 1,2,3-Trichlorobenzene	15.835	180	274932	147.614	ug/l		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

ICAL Form

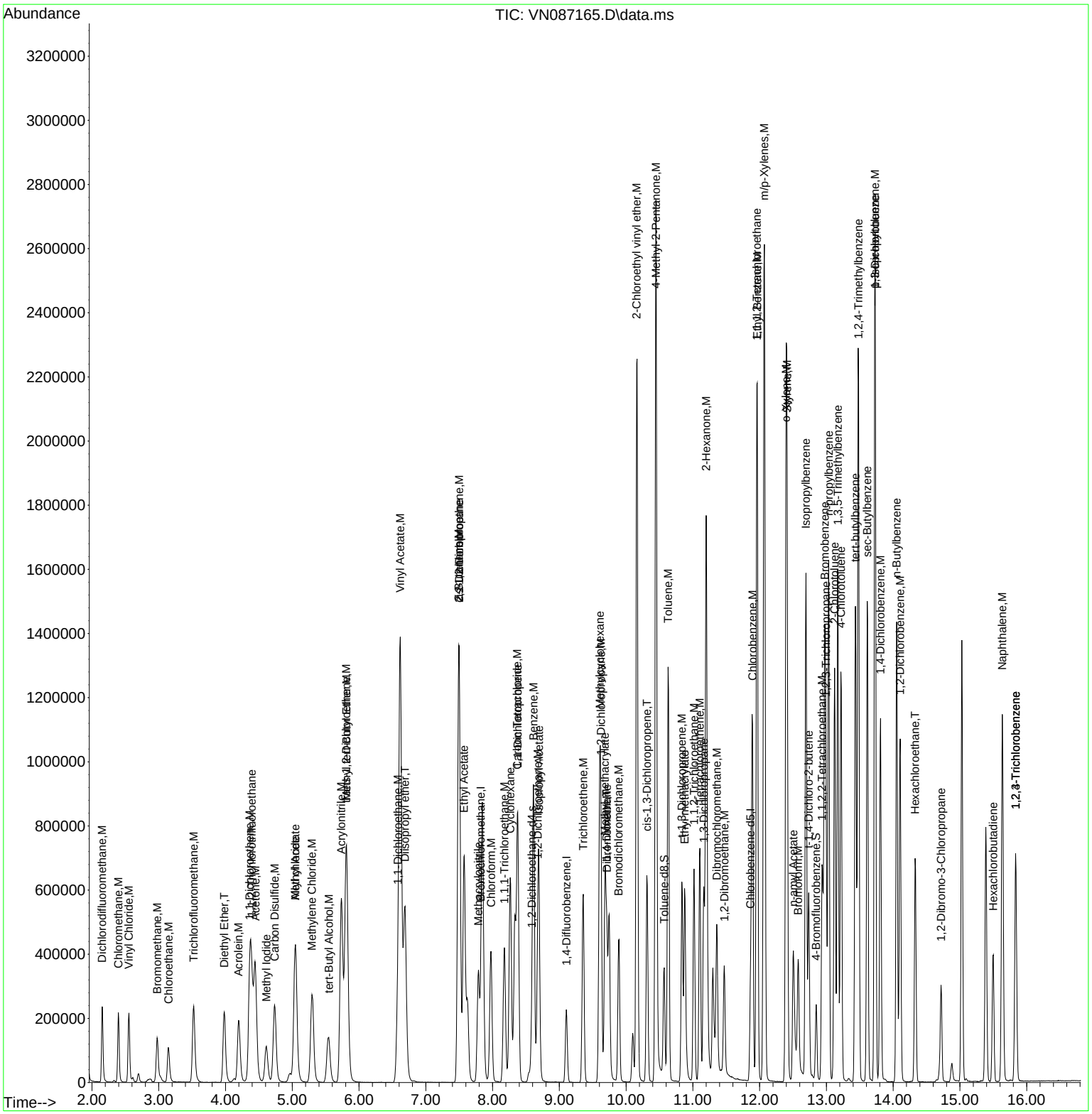
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN062525\
Data File : VN087165.D
Acq On : 25 Jun 2025 10:03
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 25 10:45:11 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:38:24 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :John Carlone 06/25/2025
Supervised By :Mahesh Dadoda 06/26/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN062525\
Data File : VN087166.D
Acq On : 25 Jun 2025 10:24
Operator : JC\MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :John Carlone 06/25/2025
Supervised By :Mahesh Dadoda 06/26/2025

Quant Time: Jun 25 10:47:00 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:38:24 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	7.824	128	34436	30.000	ug/l		0.00
28) 1,4-Difluorobenzene	9.106	114	194011	30.000	ug/l		0.00
57) Chlorobenzene-d5	11.865	117	186774	30.000	ug/l		0.00
System Monitoring Compounds							
27) 1,2-Dichloroethane-d4	8.588	65	74130	31.331	ug/l		0.00
Spiked Amount 30.000	Range 91 - 110		Recovery = 104.433%				
60) 4-Bromofluorobenzene	12.847	95	87432	29.816	ug/l		0.00
Spiked Amount 30.000	Range 63 - 112		Recovery = 99.400%				
63) Toluene-d8	10.571	98	247397	28.859	ug/l		0.00
Spiked Amount 30.000	Range 91 - 112		Recovery = 96.200%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.153	85	328743	140.560	ug/l		99
3) Chloromethane	2.395	50	344616	114.281	ug/l		100
4) Vinyl Chloride	2.553	62	380413	137.080	ug/l		96
5) Bromomethane	2.965	94	196072	133.348	ug/l		95
6) Chloroethane	3.142	64	199925	117.788	ug/l		98
7) Trichlorofluoromethane	3.518	101	438423	134.888	ug/l		99
8) Diethyl Ether	3.977	74	228664	168.656	ug/l		97
9) 1,1,2-Trichlorotrifluo...	4.394	101	330508	165.921	ug/l	#	88
10) 1,1-Dichloroethene	4.365	96	332121	163.541	ug/l		97
11) Methyl Iodide	4.612	142	363941	152.023	ug/l		96
12) Methyl Acetate	5.047	43	529248	234.665	ug/l		99
13) Acrolein	4.200	56	494100	2120.692	ug/l		100
14) Acrylonitrile	5.736	53	1229651	1171.622	ug/l		100
15) Acetone	4.447	58	335530	1262.652	ug/l		91
16) Carbon Disulfide	4.736	76	934684	157.671	ug/l		99
17) Allyl chloride	5.042	41	547297	181.407	ug/l		92
18) Methylene Chloride	5.294	84	370628	157.151	ug/l		98
19) trans-1,2-Dichloroethene	5.806	96	353679	166.418	ug/l		97
20) Diisopropyl ether	6.688	45	1127057	169.621	ug/l		96
21) 1,1-Dichloroethane	6.583	63	665820	166.042	ug/l		99
22) cis-1,2-Dichloroethene	7.500	96	431407	167.622	ug/l		96
23) tert-Butyl Alcohol	5.547	59	464693	1378.774	ug/l	#	100
24) Methyl tert-Butyl Ether	5.812	73	1188591	177.588	ug/l		97
25) Chloroform	7.977	83	646145	164.630	ug/l		99
26) Cyclohexane	8.265	56	593136	170.905	ug/l	#	97
29) 1,1-Dichloropropene	8.377	75	485720	170.277	ug/l		100
30) 2-Butanone	7.494	43	1653884	1323.281	ug/l		98
31) 2,2-Dichloropropane	7.500	77	567545	168.554	ug/l		100
32) 1,1,1-Trichloroethane	8.177	97	547772	165.656	ug/l		98
33) Carbon Tetrachloride	8.371	117	465916	164.834	ug/l		99
34) Benzene	8.612	78	1449530	156.178	ug/l		97
35) Methacrylonitrile	7.788	41	324629	226.112	ug/l		94
36) 1,2-Dichloroethane	8.677	62	456777	167.948	ug/l		98
37) Trichloroethene	9.359	130	344162	133.684	ug/l		91
38) Methylcyclohexane	9.606	83	564171	178.256	ug/l		96
39) 1,2-Dichloropropane	9.624	63	370597	165.854	ug/l		98
40) Dibromomethane	9.712	93	248835	170.265	ug/l		98
41) Bromodichloromethane	9.888	83	509473	166.539	ug/l		98
42) Vinyl Acetate	6.618	43	5152202	1414.217	ug/l		98

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN062525\
Data File : VN087166.D
Acq On : 25 Jun 2025 10:24
Operator : JC\MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :John Carlone 06/25/2025
Supervised By :Mahesh Dadoda 06/26/2025

Quant Time: Jun 25 10:47:00 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:38:24 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
43) Ethyl Acetate	7.571	43	596805	233.358	ug/l		97
44) Isopropyl Acetate	8.694	43	922972	210.380	ug/l		96
45) 1,4-Dioxane	9.706	88	136174	3492.194	ug/l	#	93
46) Methyl methacrylate	9.682	41	448002	221.464	ug/l		98
47) n-amyl Acetate	12.500	43	635191	180.347	ug/l	#	100
48) t-1,3-Dichloropropene	10.835	75	593288	181.231	ug/l		100
49) cis-1,3-Dichloropropene	10.312	75	629822	174.914	ug/l		99
50) 1,1,2-Trichloroethane	11.018	97	355131	172.532	ug/l		98
51) Ethyl methacrylate	10.876	69	631073	189.307	ug/l		97
52) 1,3-Dichloropropane	11.165	76	622735	170.477	ug/l		98
53) Dibromochloromethane	11.359	129	393072	168.990	ug/l		98
54) 1,2-Dibromoethane	11.470	107	376916	179.142	ug/l		98
55) 2-Chloroethyl vinyl ether	10.165	63	1674601	1046.520	ug/l		99
56) Bromoform	12.576	173	267364	182.430	ug/l		100
58) 4-Methyl-2-Pentanone	10.447	43	2972532	1084.631	ug/l		97
59) 2-Hexanone	11.200	43	2111404	1075.545	ug/l		98
61) Tetrachloroethene	11.106	164	281420	89.636	ug/l		97
62) Toluene	10.629	91	1606715	152.743	ug/l		98
64) Chlorobenzene	11.894	112	1032685	153.939	ug/l		100
65) 1,1,1,2-Tetrachloroethane	11.959	131	340847	154.659	ug/l		99
66) Ethyl Benzene	11.965	91	1822466	160.178	ug/l		99
67) m/p-Xylenes	12.070	106	1394481	312.329	ug/l		99
68) o-Xylene	12.394	106	672570	155.436	ug/l		99
69) Styrene	12.412	104	1159533	160.846	ug/l		98
70) Isopropylbenzene	12.694	105	1669808	162.251	ug/l		100
71) 1,1,2,2-Tetrachloroethane	12.935	83	567347	231.867	ug/l		98
72) 1,2,3-Trichloropropane	12.994	75	471614m	164.456	ug/l		
73) Bromobenzene	12.976	156	398769	155.892	ug/l		96
74) n-propylbenzene	13.035	91	2036919	167.094	ug/l		98
75) 2-Chlorotoluene	13.123	91	1222718	156.271	ug/l		98
76) 1,3,5-Trimethylbenzene	13.170	105	1356652	158.459	ug/l		99
77) t-1,4-Dichloro-2-butene	12.735	75	240560	204.982	ug/l		94
78) 4-Chlorotoluene	13.217	91	1255673	162.009	ug/l		99
79) tert-butylbenzene	13.435	119	1162060	156.987	ug/l		98
80) 1,2,4-Trimethylbenzene	13.482	105	1387864	161.497	ug/l		100
81) sec-Butylbenzene	13.612	105	1597517	158.414	ug/l		99
82) p-Isopropyltoluene	13.729	119	1349971	159.427	ug/l		99
83) 1,3-Dichlorobenzene	13.729	146	729988	155.558	ug/l		100
84) 1,4-Dichlorobenzene	13.812	146	736335	157.675	ug/l		99
85) n-Butylbenzene	14.053	91	1220446	172.161	ug/l		99
86) Hexachloroethane	14.329	117	249792	173.087	ug/l		96
87) 1,2-Dichlorobenzene	14.106	146	693617	153.225	ug/l		100
88) 1,2-Dibromo-3-Chloropr...	14.717	75	137557	266.961	ug/l		92
89) 1,2,4-Trichlorobenzene	15.835	180	429237	226.572	ug/l		97
90) Hexachlorobutadiene	15.500	225	120167	147.993	ug/l		98
91) Naphthalene	15.635	128	1756242	265.695	ug/l		99
92) 1,2,3-Trichlorobenzene	15.835	180	429237	226.572	ug/l		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

ICAL Form

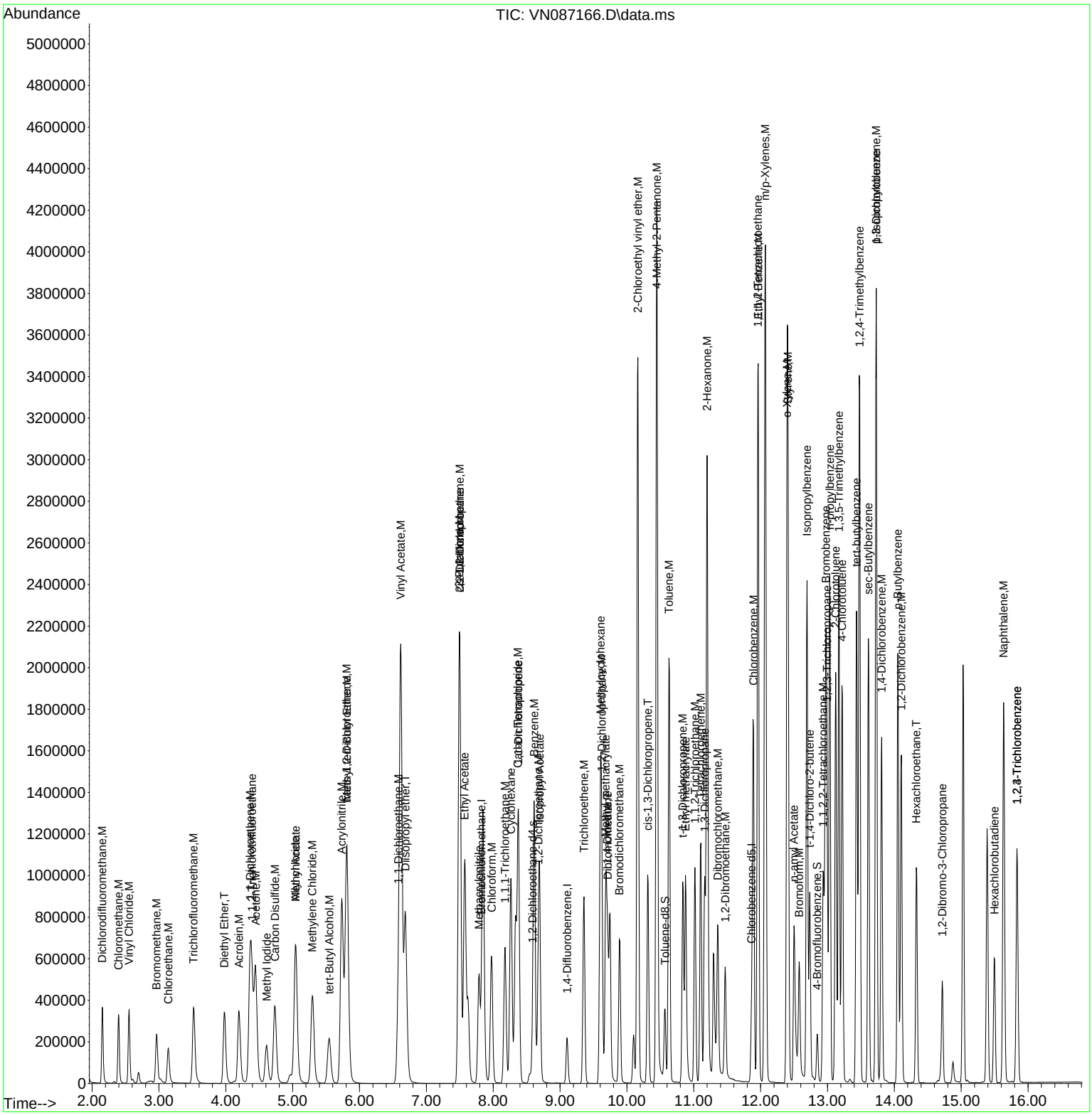
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN062525\
Data File : VN087166.D
Acq On : 25 Jun 2025 10:24
Operator : JC\MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 25 10:47:00 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:38:24 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :John Carlone 06/25/2025
Supervised By :Mahesh Dadoda 06/26/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN062525\
Data File : VN087168.D
Acq On : 25 Jun 2025 11:08
Operator : JC\MD
Sample : VSTDICV020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN062525

Manual Integrations APPROVED

Reviewed By :John Carlone

06/25/2025
Supervised By :Mahesh Dadoda

Quant Time: Jun 25 15:29:48 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:49:56 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	7.829	128	35075	30.000	ug/l		0.00
28) 1,4-Difluorobenzene	9.106	114	195745	30.000	ug/l		0.00
57) Chlorobenzene-d5	11.865	117	185221	30.000	ug/l		0.00
System Monitoring Compounds							
27) 1,2-Dichloroethane-d4	8.588	65	78569	29.730	ug/l		0.00
Spiked Amount 30.000	Range 91 - 110		Recovery = 99.100%				
60) 4-Bromofluorobenzene	12.847	95	87563	30.636	ug/l		0.00
Spiked Amount 30.000	Range 63 - 112		Recovery = 102.133%				
63) Toluene-d8	10.565	98	253524	30.485	ug/l		0.00
Spiked Amount 30.000	Range 91 - 112		Recovery = 101.600%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.153	85	39936	18.915	ug/l		89
3) Chloromethane	2.400	50	40578	18.816	ug/l		95
4) Vinyl Chloride	2.553	62	40792	17.404	ug/l		99
5) Bromomethane	3.000	94	25492	20.494	ug/l		97
6) Chloroethane	3.153	64	24041	19.122	ug/l		99
7) Trichlorofluoromethane	3.530	101	54078	18.810	ug/l		100
8) Diethyl Ether	3.989	74	27463	19.443	ug/l		95
9) 1,1,2-Trichlorotrifluo...	4.400	101	40891	19.184	ug/l	#	88
10) 1,1-Dichloroethene	4.365	96	40670	19.141	ug/l		89
11) Methyl Iodide	4.612	142	29562	15.530	ug/l		94
12) Methyl Acetate	5.047	43	65886	19.769	ug/l		96
13) Acrolein	4.206	56	54597	106.612	ug/l		100
14) Acrylonitrile	5.741	53	153387	98.671	ug/l		99
15) Acetone	4.447	58	44493	98.119	ug/l		89
16) Carbon Disulfide	4.741	76	116947	18.825	ug/l		98
17) Allyl chloride	5.053	41	64340	18.360	ug/l		93
18) Methylene Chloride	5.306	84	46095	18.727	ug/l		97
19) trans-1,2-Dichloroethene	5.812	96	44162	19.006	ug/l		97
20) Diisopropyl ether	6.688	45	142767	19.202	ug/l		99
21) 1,1-Dichloroethane	6.588	63	77314	17.398	ug/l		99
22) cis-1,2-Dichloroethene	7.494	96	51043	18.875	ug/l		97
23) tert-Butyl Alcohol	5.536	59	60387	103.292	ug/l	#	100
24) Methyl tert-Butyl Ether	5.812	73	144916	19.447	ug/l		99
25) Chloroform	7.977	83	75565	17.750	ug/l		99
26) Cyclohexane	8.271	56	64739	17.527	ug/l	#	99
29) 1,1-Dichloropropene	8.382	75	56214	18.425	ug/l		98
30) 2-Butanone	7.494	43	198883	96.637	ug/l		99
31) 2,2-Dichloropropane	7.500	77	71663	19.459	ug/l		97
32) 1,1,1-Trichloroethane	8.177	97	63831	17.908	ug/l		98
33) Carbon Tetrachloride	8.371	117	54332	18.113	ug/l		99
34) Benzene	8.612	78	167939	17.375	ug/l		99
35) Methacrylonitrile	7.782	41	36192	17.450	ug/l		96
36) 1,2-Dichloroethane	8.676	62	58192	18.634	ug/l		99
37) Trichloroethene	9.353	130	44053	19.760	ug/l		93
38) Methylcyclohexane	9.606	83	67623	19.317	ug/l		99
39) 1,2-Dichloropropane	9.623	63	47099	19.414	ug/l		99
40) Dibromomethane	9.712	93	31445	19.062	ug/l		98
41) Bromodichloromethane	9.894	83	65145	19.565	ug/l		96
42) Vinyl Acetate	6.618	43	564048	84.264	ug/l		97

06/26/2025

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN062525\
Data File : VN087168.D
Acq On : 25 Jun 2025 11:08
Operator : JC\MD
Sample : VSTDICV020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 25 15:29:48 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:49:56 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
ICVVN062525

Manual Integrations APPROVED

Reviewed By :John Carlone

06/25/2025
Supervised By :Mahesh Dadoda

06/26/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	7.571	43	76982	20.721	ug/l	98
44) Isopropyl Acetate	8.694	43	113470	18.746	ug/l	100
45) 1,4-Dioxane	9.700	88	17828	435.392	ug/l	98
46) Methyl methacrylate	9.682	41	53380	18.970	ug/l	96
47) n-amyl Acetate	12.541	43	61525m	16.625	ug/l	
48) t-1,3-Dichloropropene	10.835	75	72502	19.532	ug/l	96
49) cis-1,3-Dichloropropene	10.312	75	76780	19.457	ug/l	97
50) 1,1,2-Trichloroethane	11.018	97	44707	19.079	ug/l	96
51) Ethyl methacrylate	10.882	69	66937	18.768	ug/l	96
52) 1,3-Dichloropropane	11.165	76	76546	19.027	ug/l	99
53) Dibromochloromethane	11.359	129	47380	19.262	ug/l	97
54) 1,2-Dibromoethane	11.470	107	45103	18.656	ug/l	97
55) 2-Chloroethyl vinyl ether	10.165	63	184630	90.312	ug/l	99
56) Bromoform	12.576	173	31131	18.410	ug/l	98
58) 4-Methyl-2-Pentanone	10.447	43	364138	97.791	ug/l	99
59) 2-Hexanone	11.206	43	209381	87.081	ug/l	97
61) Tetrachloroethene	11.106	164	33844	18.451	ug/l	95
62) Toluene	10.629	91	196885	18.821	ug/l	97
64) Chlorobenzene	11.894	112	126668	18.982	ug/l	99
65) 1,1,1,2-Tetrachloroethane	11.959	131	41822	18.969	ug/l	98
66) Ethyl Benzene	11.965	91	211991	18.514	ug/l	100
67) m/p-Xylenes	12.070	106	164422	37.473	ug/l	99
68) o-Xylene	12.394	106	80694	19.277	ug/l	97
69) Styrene	12.412	104	133644	18.596	ug/l	100
70) Isopropylbenzene	12.694	105	203011	19.473	ug/l	98
71) 1,1,2,2-Tetrachloroethane	12.935	83	72297	19.266	ug/l	97
72) 1,2,3-Trichloropropane	12.988	75	63592m	19.651	ug/l	
73) Bromobenzene	12.982	156	47294	18.701	ug/l	99
74) n-propylbenzene	13.035	91	247990	19.471	ug/l	99
75) 2-Chlorotoluene	13.123	91	150115	19.509	ug/l	98
76) 1,3,5-Trimethylbenzene	13.170	105	166512	19.619	ug/l	100
77) t-1,4-Dichloro-2-butene	12.735	75	27150	18.914	ug/l	98
78) 4-Chlorotoluene	13.223	91	155736	19.761	ug/l	100
79) tert-butylbenzene	13.435	119	139520	19.556	ug/l	99
80) 1,2,4-Trimethylbenzene	13.482	105	166385	19.523	ug/l	98
81) sec-Butylbenzene	13.611	105	209004	20.153	ug/l	100
82) p-Isopropyltoluene	13.729	119	172978	20.042	ug/l	99
83) 1,3-Dichlorobenzene	13.729	146	94477	19.400	ug/l	100
84) 1,4-Dichlorobenzene	13.811	146	96182	19.624	ug/l	100
85) n-Butylbenzene	14.053	91	162667	20.658	ug/l	99
86) Hexachloroethane	14.335	117	30688	18.784	ug/l	95
87) 1,2-Dichlorobenzene	14.106	146	89313	19.450	ug/l	99
88) 1,2-Dibromo-3-Chloropr...	14.717	75	16536	19.570	ug/l	95
89) 1,2,4-Trichlorobenzene	15.841	180	50315	19.367	ug/l	97
90) Hexachlorobutadiene	15.494	225	17346	22.501	ug/l	96
91) Naphthalene	15.635	128	193989	18.973	ug/l	99
92) 1,2,3-Trichlorobenzene	15.841	180	50315	19.367	ug/l	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

ICAL Form

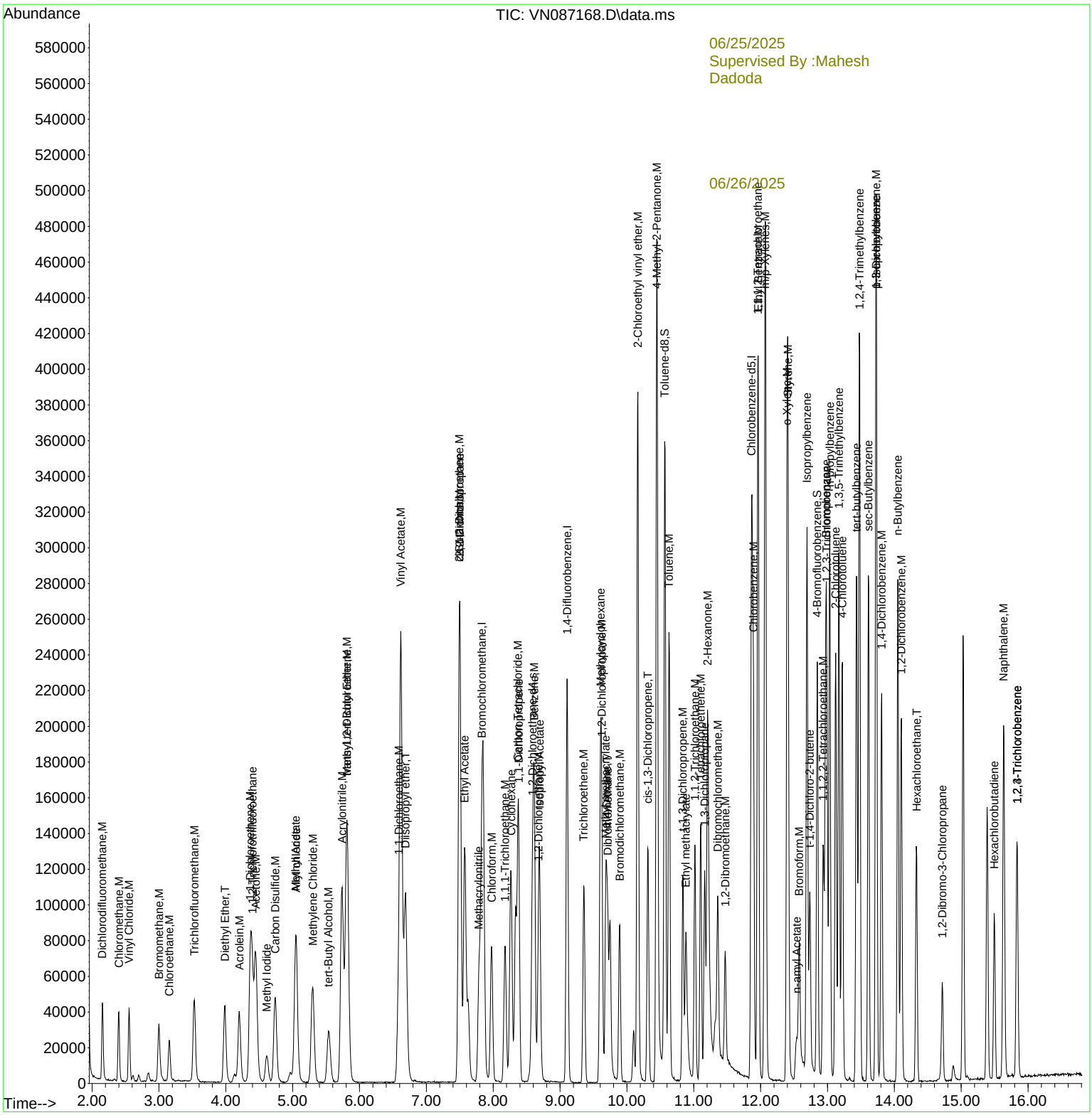
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN062525\
Data File : VN087168.D
Acq On : 25 Jun 2025 11:08
Operator : JC\MD
Sample : VSTDICV020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 25 15:29:48 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:49:56 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
ICVVN062525

Manual Integrations APPROVED

Reviewed By :John Carlone



Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN062525\
Data File : VN087168.D
Acq On : 25 Jun 2025 11:08
Operator : JC\MD
Sample : VSTDICV020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN062525

Quant Time: Jun 25 15:29:48 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:49:56 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	100	0.00
2	M	Dichlorodifluoromethane	1.806	1.708	5.4	104	0.00
3	M	Chloromethane	1.844	1.735	5.9	111	0.00
4	M	Vinyl Chloride	2.005	1.744	13.0	97	0.00
5	M	Bromomethane	1.064	1.090	-2.4	113	0.00
6	M	Chloroethane	1.075	1.028	4.4	107	0.00
7	M	Trichlorofluoromethane	2.459	2.313	5.9	100	0.00
8	T	Diethyl Ether	1.208	1.174	2.8	109	0.00
9		1,1,2-Trichlorotrifluoroeth	1.823	1.749	4.1	104	0.00
10	M	1,1-Dichloroethene	1.817	1.739	4.3	104	0.00
11		Methyl Iodide	1.628	1.264	22.4	98	0.00
12		Methyl Acetate	2.851	2.818	1.2	108	0.00
13	M	Acrolein	0.438	0.467	-6.6	130	0.00
14	M	Acrylonitrile	1.330	1.312	1.4	107	0.00
15	M	Acetone	0.388	0.381	1.8	104	0.00
16	M	Carbon Disulfide	5.313	5.001	5.9	103	0.00
17		Allyl chloride	2.997	2.752	8.2	100	0.01
18	M	Methylene Chloride	2.105	1.971	6.4	101	0.00
19	M	trans-1,2-Dichloroethene	1.987	1.889	4.9	104	0.00
20	T	Diisopropyl ether	6.359	6.106	4.0	101	0.00
21	M	1,1-Dichloroethane	3.801	3.306	13.0	92	0.00
22	M	cis-1,2-Dichloroethene	2.313	2.183	5.6	104	0.00
23	M	tert-Butyl Alcohol	0.500	0.516	-3.2	114	0.00
24	M	Methyl tert-Butyl Ether	6.374	6.197	2.8	108	0.00
25	M	Chloroform	3.641	3.232	11.2	97	0.00
26		Cyclohexane	3.159	2.769	12.3	98	0.00
27	s	1,2-Dichloroethane-d4	2.260	2.240	0.9	97	0.00
28	I	1,4-Difluorobenzene	1.000	1.000	0.0	100	0.00
29		1,1-Dichloropropene	0.468	0.431	7.9	107	0.00
30	M	2-Butanone	0.315	0.305	3.2	106	0.00
31		2,2-Dichloropropane	0.564	0.549	2.7	106	0.00
32	M	1,1,1-Trichloroethane	0.546	0.489	10.4	98	0.00
33	M	Carbon Tetrachloride	0.460	0.416	9.6	105	0.00
34	M	Benzene	1.481	1.287	13.1	98	0.00
35		Methacrylonitrile	0.318	0.277	12.9	97	0.00
36	M	1,2-Dichloroethane	0.479	0.446	6.9	101	0.00
37	M	Trichloroethene	0.342	0.338	1.2	114	0.00
38		Methylcyclohexane	0.537	0.518	3.5	110	0.00
39	M	1,2-Dichloropropane	0.372	0.361	3.0	104	0.00
40		Dibromomethane	0.253	0.241	4.7	103	0.00
41	M	Bromodichloromethane	0.510	0.499	2.2	103	0.00
42	M	Vinyl Acetate	1.026	0.864	15.8	91	0.00
43		Ethyl Acetate	0.569	0.590	-3.7	105	0.00
44		Isopropyl Acetate	0.928	0.870	6.3	104	0.00
45	T	1,4-Dioxane	0.006	0.007	-16.7	120	0.00
46		Methyl methacrylate	0.431	0.409	5.1	103	0.00
47		n-amyl Acetate	0.567	0.471	16.9	93	0.01
48	M	t-1,3-Dichloropropene	0.569	0.556	2.3	108	0.00

Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN062525\
Data File : VN087168.D
Acq On : 25 Jun 2025 11:08
Operator : JC\MD
Sample : VSTDICV020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN062525

Quant Time: Jun 25 15:29:48 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:49:56 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	T	cis-1,3-Dichloropropene	0.605	0.588	2.8	103	0.00
50	M	1,1,2-Trichloroethane	0.359	0.343	4.5	103	0.00
51		Ethyl methacrylate	0.547	0.513	6.2	109	0.00
52		1,3-Dichloropropane	0.617	0.587	4.9	102	0.00
53	M	Dibromochloromethane	0.377	0.363	3.7	106	0.00
54	M	1,2-Dibromoethane	0.371	0.346	6.7	100	0.00
55	M	2-Chloroethyl vinyl ether	0.313	0.283	9.6	97	0.00
56	M	Bromoform	0.259	0.239	7.7	102	0.00
57	I	Chlorobenzene-d5	1.000	1.000	0.0	100	0.00
58	M	4-Methyl-2-Pentanone	0.603	0.590	2.2	107	0.00
59	M	2-Hexanone	0.389	0.339	12.9	105	0.00
60	S	4-Bromofluorobenzene	0.463	0.473	-2.2	105	0.00
61	M	Tetrachloroethene	0.297	0.274	7.7	102	0.00
62	M	Toluene	1.694	1.594	5.9	103	0.00
63	S	Toluene-d8	1.347	1.369	-1.6	98	0.00
64	M	Chlorobenzene	1.081	1.026	5.1	104	0.00
65		1,1,1,2-Tetrachloroethane	0.357	0.339	5.0	104	0.00
66	M	Ethyl Benzene	1.855	1.717	7.4	104	0.00
67	M	m/p-Xylenes	0.711	0.666	6.3	104	0.00
68	M	o-Xylene	0.678	0.653	3.7	108	0.00
69	M	Styrene	1.164	1.082	7.0	104	0.00
70		Isopropylbenzene	1.689	1.644	2.7	111	0.00
71	M	1,1,2,2-Tetrachloroethane	0.608	0.585	3.8	103	0.00
72		1,2,3-Trichloropropane	0.524	0.515	1.7	110	0.00
73		Bromobenzene	0.410	0.383	6.6	106	0.00
74		n-propylbenzene	2.063	2.008	2.7	111	0.00
75		2-Chlorotoluene	1.246	1.216	2.4	112	0.00
76		1,3,5-Trimethylbenzene	1.375	1.348	2.0	114	0.00
77		t-1,4-Dichloro-2-butene	0.232	0.220	5.2	112	0.00
78		4-Chlorotoluene	1.276	1.261	1.2	114	0.00
79		tert-butylbenzene	1.156	1.130	2.2	114	0.00
80		1,2,4-Trimethylbenzene	1.380	1.347	2.4	114	0.00
81		sec-Butylbenzene	1.680	1.693	-0.8	115	0.00
82		p-Isopropyltoluene	1.398	1.401	-0.2	110	0.00
83	M	1,3-Dichlorobenzene	0.789	0.765	3.0	106	0.00
84	M	1,4-Dichlorobenzene	0.794	0.779	1.9	109	0.00
85		n-Butylbenzene	1.275	1.317	-3.3	114	0.00
86	T	Hexachloroethane	0.265	0.249	6.0	109	0.00
87	M	1,2-Dichlorobenzene	0.744	0.723	2.8	108	0.00
88		1,2-Dibromo-3-Chloropropane	0.137	0.134	2.2	109	0.00
89		1,2,4-Trichlorobenzene	0.421	0.407	3.3	107	0.00
90		Hexachlorobutadiene	0.125	0.140	-12.0	125	0.00
91	M	Naphthalene	1.656	1.571	5.1	109	0.00
92		1,2,3-Trichlorobenzene	0.421	0.407	3.3	107	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN062525\
Data File : VN087168.D
Acq On : 25 Jun 2025 11:08
Operator : JC\MD
Sample : VSTDICV020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN062525

Quant Time: Jun 25 15:29:48 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:49:56 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	30.000	30.000	0.0	100	0.00
2	M	Dichlorodifluoromethane	20.000	18.915	5.4	104	0.00
3	M	Chloromethane	20.000	18.816	5.9	111	0.00
4	M	Vinyl Chloride	20.000	17.404	13.0	97	0.00
5	M	Bromomethane	20.000	20.494	-2.5	113	0.00
6	M	Chloroethane	20.000	19.122	4.4	107	0.00
7	M	Trichlorofluoromethane	20.000	18.810	6.0	100	0.00
8	T	Diethyl Ether	20.000	19.443	2.8	109	0.00
9		1,1,2-Trichlorotrifluoroeth	20.000	19.184	4.1	104	0.00
10	M	1,1-Dichloroethene	20.000	19.141	4.3	104	0.00
11		Methyl Iodide	20.000	15.530	22.4	98	0.00
12		Methyl Acetate	20.000	19.769	1.2	108	0.00
13	M	Acrolein	100.000	106.612	-6.6	130	0.00
14	M	Acrylonitrile	100.000	98.671	1.3	107	0.00
15	M	Acetone	100.000	98.119	1.9	104	0.00
16	M	Carbon Disulfide	20.000	18.825	5.9	103	0.00
17		Allyl chloride	20.000	18.360	8.2	100	0.01
18	M	Methylene Chloride	20.000	18.727	6.4	101	0.00
19	M	trans-1,2-Dichloroethene	20.000	19.006	5.0	104	0.00
20	T	Diisopropyl ether	20.000	19.202	4.0	101	0.00
21	M	1,1-Dichloroethane	20.000	17.398	13.0	92	0.00
22	M	cis-1,2-Dichloroethene	20.000	18.875	5.6	104	0.00
23	M	tert-Butyl Alcohol	100.000	103.292	-3.3	114	0.00
24	M	Methyl tert-Butyl Ether	20.000	19.447	2.8	108	0.00
25	M	Chloroform	20.000	17.750	11.3	97	0.00
26		Cyclohexane	20.000	17.527	12.4	98	0.00
27	s	1,2-Dichloroethane-d4	30.000	29.730	0.9	97	0.00
28	I	1,4-Difluorobenzene	30.000	30.000	0.0	100	0.00
29		1,1-Dichloropropene	20.000	18.425	7.9	107	0.00
30	M	2-Butanone	100.000	96.637	3.4	106	0.00
31		2,2-Dichloropropane	20.000	19.459	2.7	106	0.00
32	M	1,1,1-Trichloroethane	20.000	17.908	10.5	98	0.00
33	M	Carbon Tetrachloride	20.000	18.113	9.4	105	0.00
34	M	Benzene	20.000	17.375	13.1	98	0.00
35		Methacrylonitrile	20.000	17.450	12.8	97	0.00
36	M	1,2-Dichloroethane	20.000	18.634	6.8	101	0.00
37	M	Trichloroethene	20.000	19.760	1.2	114	0.00
38		Methylcyclohexane	20.000	19.317	3.4	110	0.00
39	M	1,2-Dichloropropane	20.000	19.414	2.9	104	0.00
40		Dibromomethane	20.000	19.062	4.7	103	0.00
41	M	Bromodichloromethane	20.000	19.565	2.2	103	0.00
42	M	Vinyl Acetate	100.000	84.264	15.7	91	0.00
43		Ethyl Acetate	20.000	20.721	-3.6	105	0.00
44		Isopropyl Acetate	20.000	18.746	6.3	104	0.00
45	T	1,4-Dioxane	400.000	435.392	-8.8	120	0.00
46		Methyl methacrylate	20.000	18.970	5.2	103	0.00
47		n-amyl Acetate	20.000	16.625	16.9	93	0.01
48	M	t-1,3-Dichloropropene	20.000	19.532	2.3	108	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN062525\
Data File : VN087168.D
Acq On : 25 Jun 2025 11:08
Operator : JC\MD
Sample : VSTDICV020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN062525

Quant Time: Jun 25 15:29:48 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:49:56 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
49	T	cis-1,3-Dichloropropene	20.000	19.457	2.7	103	0.00
50	M	1,1,2-Trichloroethane	20.000	19.079	4.6	103	0.00
51		Ethyl methacrylate	20.000	18.768	6.2	109	0.00
52		1,3-Dichloropropane	20.000	19.027	4.9	102	0.00
53	M	Dibromochloromethane	20.000	19.262	3.7	106	0.00
54	M	1,2-Dibromoethane	20.000	18.656	6.7	100	0.00
55	M	2-Chloroethyl vinyl ether	100.000	90.312	9.7	97	0.00
56	M	Bromoform	20.000	18.410	7.9	102	0.00
57	I	Chlorobenzene-d5	30.000	30.000	0.0	100	0.00
58	M	4-Methyl-2-Pentanone	100.000	97.791	2.2	107	0.00
59	M	2-Hexanone	100.000	87.081	12.9	105	0.00
60	S	4-Bromofluorobenzene	30.000	30.636	-2.1	105	0.00
61	M	Tetrachloroethene	20.000	18.451	7.7	102	0.00
62	M	Toluene	20.000	18.821	5.9	103	0.00
63	S	Toluene-d8	30.000	30.485	-1.6	98	0.00
64	M	Chlorobenzene	20.000	18.982	5.1	104	0.00
65		1,1,1,2-Tetrachloroethane	20.000	18.969	5.2	104	0.00
66	M	Ethyl Benzene	20.000	18.514	7.4	104	0.00
67	M	m/p-Xylenes	40.000	37.473	6.3	104	0.00
68	M	o-Xylene	20.000	19.277	3.6	108	0.00
69	M	Styrene	20.000	18.596	7.0	104	0.00
70		Isopropylbenzene	20.000	19.473	2.6	111	0.00
71	M	1,1,2,2-Tetrachloroethane	20.000	19.266	3.7	103	0.00
72		1,2,3-Trichloropropane	20.000	19.651	1.7	110	0.00
73		Bromobenzene	20.000	18.701	6.5	106	0.00
74		n-propylbenzene	20.000	19.471	2.6	111	0.00
75		2-Chlorotoluene	20.000	19.509	2.5	112	0.00
76		1,3,5-Trimethylbenzene	20.000	19.619	1.9	114	0.00
77		t-1,4-Dichloro-2-butene	20.000	18.914	5.4	112	0.00
78		4-Chlorotoluene	20.000	19.761	1.2	114	0.00
79		tert-butylbenzene	20.000	19.556	2.2	114	0.00
80		1,2,4-Trimethylbenzene	20.000	19.523	2.4	114	0.00
81		sec-Butylbenzene	20.000	20.153	-0.8	115	0.00
82		p-Isopropyltoluene	20.000	20.042	-0.2	110	0.00
83	M	1,3-Dichlorobenzene	20.000	19.400	3.0	106	0.00
84	M	1,4-Dichlorobenzene	20.000	19.624	1.9	109	0.00
85		n-Butylbenzene	20.000	20.658	-3.3	114	0.00
86	T	Hexachloroethane	20.000	18.784	6.1	109	0.00
87	M	1,2-Dichlorobenzene	20.000	19.450	2.8	108	0.00
88		1,2-Dibromo-3-Chloropropane	20.000	19.570	2.1	109	0.00
89		1,2,4-Trichlorobenzene	20.000	19.367	3.2	107	0.00
90		Hexachlorobutadiene	20.000	22.501	-12.5	125	0.00
91	M	Naphthalene	20.000	18.973	5.1	109	0.00
92		1,2,3-Trichlorobenzene	20.000	19.367	3.2	107	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name:	Alliance	Contract:	GARD04
Lab Code:	ACE	SDG No.:	Q2554
Instrument ID:	MSVOA_N	Calibration Date/Time:	07/10/2025 10:41
Lab File ID:	VN087316.D	Init. Calib. Date(s):	06/25/2025 06/25/2025
Heated Purge: (Y/N)	N	Init. Calib. Time(s):	08:59 10:24

GC Column: RXI-624 ID: 0.25 (mm)

COMPOUND	RRF	RRF020	MIN RRF	%D	MAX%D
Acrolein	0.438	0.481		9.82	
Acrylonitrile	1.330	0.933		-29.85	
1,2-Dichloroethane-d4	2.260	2.112	0.01	-6.55	
Toluene-d8	1.347	1.289	0.01	-4.31	
4-Bromofluorobenzene	0.463	0.467	0.2	0.86	

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071025\
Data File : VN087316.D
Acq On : 10 Jul 2025 10:41
Operator : JC\MD
Sample : VSTDCCC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 11 01:06:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:49:56 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC020

Manual Integrations APPROVED

Reviewed By :John Carlone 07/11/2025
Supervised By :Mahesh Dadoda 07/14/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	7.824	128	41639	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.106	114	206728	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.865	117	202666	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.582	65	87959	28.037	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery = 93.467%			
60) 4-Bromofluorobenzene	12.847	95	94690	30.278	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery = 100.933%			
63) Toluene-d8	10.565	98	261291	28.714	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery = 95.700%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.153	85	38505	15.362	ug/l	95
3) Chloromethane	2.395	50	33423	13.055	ug/l	99
4) Vinyl Chloride	2.553	62	39425	14.169	ug/l	93
5) Bromomethane	3.000	94	37098	25.123	ug/l	90
6) Chloroethane	3.153	64	33021	22.124	ug/l	97
7) Trichlorofluoromethane	3.524	101	65506	19.194	ug/l	99
8) Diethyl Ether	3.989	74	24312	14.499	ug/l	90
9) 1,1,2-Trichlorotrifluo...	4.400	101	42309m	16.721	ug/l	
10) 1,1-Dichloroethene	4.365	96	38206	15.147	ug/l	98
11) Methyl Iodide	4.612	142	42303	18.721	ug/l	97
12) Methyl Acetate	5.053	43	56084	14.175	ug/l	100
13) Acrolein	4.200	56	66741	109.781	ug/l	95
14) Acrylonitrile	5.730	53	129512	70.179	ug/l	100
15) Acetone	4.442	58	48976	90.980	ug/l	90
16) Carbon Disulfide	4.742	76	101596	13.776	ug/l	98
17) Allyl chloride	5.047	41	49623	11.928	ug/l	91
18) Methylene Chloride	5.306	84	48180	16.488	ug/l	87
19) trans-1,2-Dichloroethene	5.806	96	43998	15.951	ug/l	86
20) Diisopropyl ether	6.683	45	116442	13.192	ug/l	93
21) 1,1-Dichloroethane	6.588	63	78738	14.926	ug/l	96
22) cis-1,2-Dichloroethene	7.500	96	53553	16.681	ug/l	89
23) tert-Butyl Alcohol	5.536	59	50438	72.674	ug/l #	100
24) Methyl tert-Butyl Ether	5.812	73	142236	16.078	ug/l	99
25) Chloroform	7.977	83	91456	18.096	ug/l	99
26) Cyclohexane	8.265	56	55255	12.601	ug/l #	84
29) 1,1-Dichloropropene	8.382	75	55970	17.371	ug/l	98
30) 2-Butanone	7.488	43	176767	81.328	ug/l	93
31) 2,2-Dichloropropane	7.494	77	77233	19.857	ug/l	97
32) 1,1,1-Trichloroethane	8.177	97	77788	20.665	ug/l	98
33) Carbon Tetrachloride	8.371	117	67452	21.293	ug/l	96
34) Benzene	8.612	78	178133	17.451	ug/l	98
35) Methacrylonitrile	7.788	41	34427	15.717	ug/l	85
36) 1,2-Dichloroethane	8.677	62	65356	19.816	ug/l	99
37) Trichloroethene	9.353	130	45403	19.283	ug/l	92
38) Methylcyclohexane	9.600	83	57702	15.608	ug/l	94
39) 1,2-Dichloropropane	9.624	63	43354	16.921	ug/l	97
40) Dibromomethane	9.712	93	37213	21.360	ug/l	98
41) Bromodichloromethane	9.894	83	72887	20.727	ug/l	96
42) Vinyl Acetate	6.618	43	533888	75.521	ug/l #	94

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071025\
Data File : VN087316.D
Acq On : 10 Jul 2025 10:41
Operator : JC\MD
Sample : VSTDCCC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 11 01:06:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:49:56 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC020

Manual Integrations APPROVED

Reviewed By :John Carlone 07/11/2025
Supervised By :Mahesh Dadoda 07/14/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
43) Ethyl Acetate	7.571	43	69788	17.786	ug/l		93
44) Isopropyl Acetate	8.694	43	102377	16.014	ug/l		95
45) 1,4-Dioxane	9.706	88	14911	344.807	ug/l	#	76
46) Methyl methacrylate	9.682	41	42288	14.229	ug/l		90
47) n-amyl Acetate	12.541	43	64192m	16.424	ug/l		
48) t-1,3-Dichloropropene	10.835	75	71998	18.366	ug/l		96
49) cis-1,3-Dichloropropene	10.312	75	75792	18.187	ug/l		94
50) 1,1,2-Trichloroethane	11.018	97	50405	20.367	ug/l		93
51) Ethyl methacrylate	10.882	69	60493	16.060	ug/l		88
52) 1,3-Dichloropropane	11.159	76	79354	18.677	ug/l		100
53) Dibromochloromethane	11.359	129	57446	22.113	ug/l		99
54) 1,2-Dibromoethane	11.471	107	52665	20.627	ug/l		96
55) 2-Chloroethyl vinyl ether	10.159	63	171171	79.280	ug/l		95
56) Bromoform	12.576	173	38910	21.788	ug/l	#	98
58) 4-Methyl-2-Pentanone	10.447	43	305007	74.861	ug/l		96
59) 2-Hexanone	11.206	43	178213	67.738	ug/l		97
61) Tetrachloroethene	11.106	164	37960	18.914	ug/l		94
62) Toluene	10.629	91	203216	17.754	ug/l		99
64) Chlorobenzene	11.888	112	140028	19.178	ug/l		99
65) 1,1,1,2-Tetrachloroethane	11.959	131	48833	20.242	ug/l		98
66) Ethyl Benzene	11.965	91	215595	17.208	ug/l		96
67) m/p-Xylenes	12.070	106	177781	37.030	ug/l		94
68) o-Xylene	12.394	106	83384	18.205	ug/l		95
69) Styrene	12.412	104	144274	18.348	ug/l		98
70) Isopropylbenzene	12.694	105	209510	18.366	ug/l		98
71) 1,1,2,2-Tetrachloroethane	12.935	83	77841	18.958	ug/l		97
72) 1,2,3-Trichloropropane	12.994	75	76231m	21.529	ug/l		
73) Bromobenzene	12.976	156	57119	20.642	ug/l		83
74) n-propylbenzene	13.035	91	256386	18.397	ug/l		95
75) 2-Chlorotoluene	13.123	91	155373	18.454	ug/l		95
76) 1,3,5-Trimethylbenzene	13.170	105	176246	18.979	ug/l		97
77) t-1,4-Dichloro-2-butene	12.735	75	26042	16.581	ug/l		93
78) 4-Chlorotoluene	13.217	91	163977	19.016	ug/l		96
79) tert-butylbenzene	13.435	119	151329	19.386	ug/l		99
80) 1,2,4-Trimethylbenzene	13.476	105	180227	19.327	ug/l		100
81) sec-Butylbenzene	13.612	105	217106	19.132	ug/l		98
82) p-Isopropyltoluene	13.729	119	188117	19.920	ug/l		98
83) 1,3-Dichlorobenzene	13.729	146	114011	21.396	ug/l		98
84) 1,4-Dichlorobenzene	13.812	146	108762	20.281	ug/l		98
85) n-Butylbenzene	14.053	91	160463	18.624	ug/l		96
86) Hexachloroethane	14.329	117	37803	21.148	ug/l		97
87) 1,2-Dichlorobenzene	14.100	146	107855	21.467	ug/l		98
88) 1,2-Dibromo-3-Chloropr...	14.717	75	18334	19.830	ug/l		91
89) 1,2,4-Trichlorobenzene	15.835	180	56329	19.816	ug/l		99
90) Hexachlorobutadiene	15.494	225	15826	18.762	ug/l		97
91) Naphthalene	15.635	128	205505	18.369	ug/l		99
92) 1,2,3-Trichlorobenzene	15.835	180	56329	19.816	ug/l		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

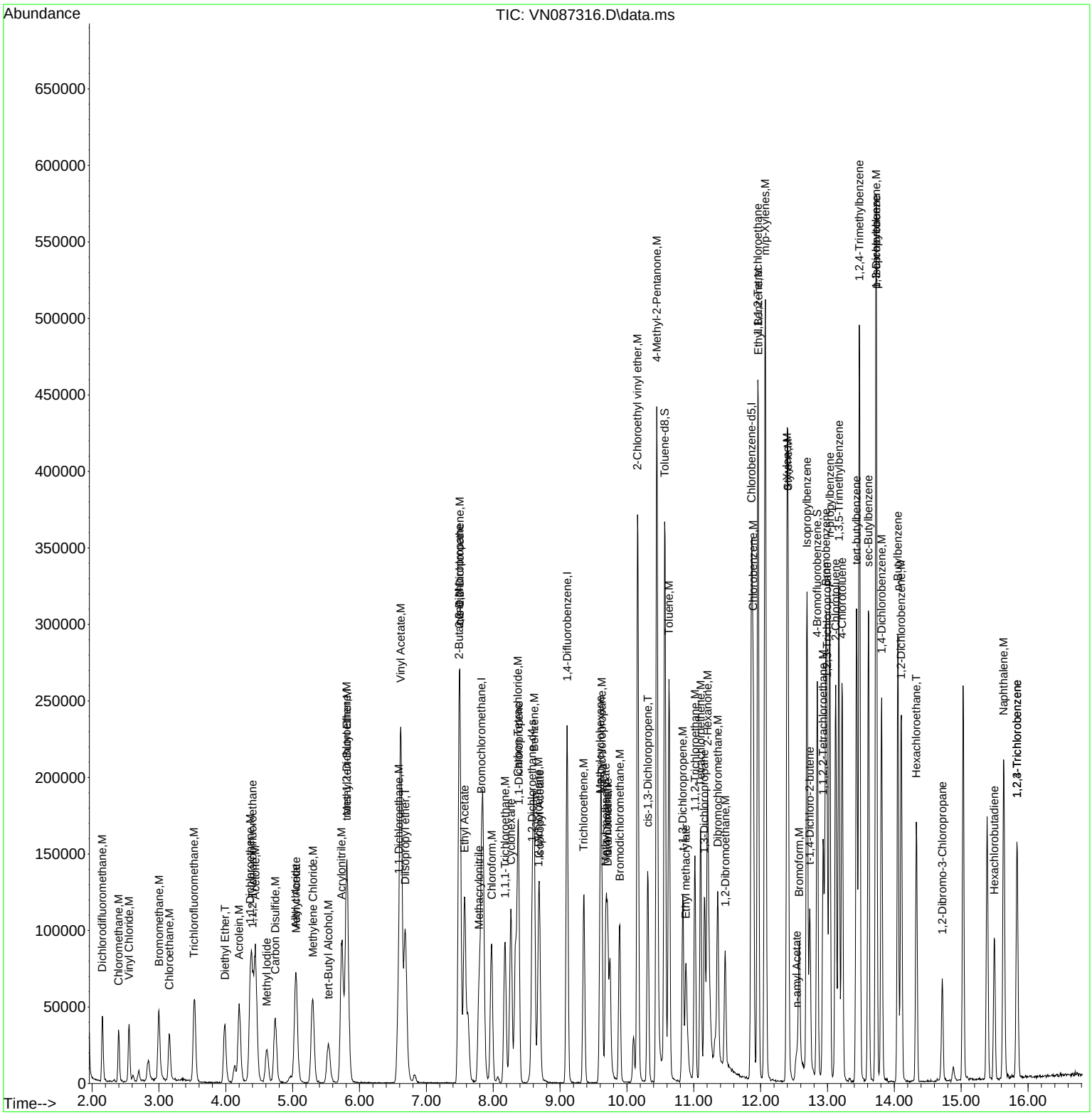
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071025\
Data File : VN087316.D
Acq On : 10 Jul 2025 10:41
Operator : JC\MD
Sample : VSTDCCC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 11 01:06:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:49:56 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC020

Manual Integrations APPROVED

Reviewed By :John Carlone 07/11/2025
Supervised By :Mahesh Dadoda 07/14/2025



Sample Results: **VN087316.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071025\
Data File : VN087316.D
Acq On : 10 Jul 2025 10:41
Operator : JC\MD
Sample : VSTDCCC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC020

Quant Time: Jul 11 01:06:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:49:56 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	119	0.00
2	M	Dichlorodifluoromethane	1.806	1.387	23.2	100	0.00
3	M	Chloromethane	1.844	1.204	34.7#	92	0.00
4	M	Vinyl Chloride	2.005	1.420	29.2#	94	0.00
5	M	Bromomethane	1.064	1.336	-25.6#	165#	0.00
6	M	Chloroethane	1.075	1.190	-10.7	146	0.00
7	M	Trichlorofluoromethane	2.459	2.360	4.0	121	0.00
8	T	Diethyl Ether	1.208	0.876	27.5#	97	0.00
9		1,1,2-Trichlorotrifluoroeth	1.823	1.524	16.4	108	0.00
10	M	1,1-Dichloroethene	1.817	1.376	24.3	98	0.00
11		Methyl Iodide	1.628	1.524	6.4	140	0.00
12		Methyl Acetate	2.851	2.020	29.1#	92	0.00
13	M	Acrolein	0.438	0.481	-9.8	159#	0.00
14	M	Acrylonitrile	1.330	0.933	29.8#	90	0.00
15	M	Acetone	0.388	0.353	9.0	114	-0.01
16	M	Carbon Disulfide	5.313	3.660	31.1#	90	0.00
17		Allyl chloride	2.997	1.788	40.3#	77	0.00
18	M	Methylene Chloride	2.105	1.736	17.5	106	0.00
19	M	trans-1,2-Dichloroethene	1.987	1.585	20.2	103	0.00
20	T	Diisopropyl ether	6.359	4.195	34.0#	82	0.00
21	M	1,1-Dichloroethane	3.801	2.836	25.4#	94	0.00
22	M	cis-1,2-Dichloroethene	2.313	1.929	16.6	110	0.00
23	M	tert-Butyl Alcohol	0.500	0.363	27.4#	95	0.00
24	M	Methyl tert-Butyl Ether	6.374	5.124	19.6	106	0.00
25	M	Chloroform	3.641	3.295	9.5	118	0.00
26		Cyclohexane	3.159	1.991	37.0#	84	0.00
27	s	1,2-Dichloroethane-d4	2.260	2.112	6.5	109	0.00
28	I	1,4-Difluorobenzene	1.000	1.000	0.0	105	0.00
29		1,1-Dichloropropene	0.468	0.406	13.2	107	0.00
30	M	2-Butanone	0.315	0.257	18.4	95	0.00
31		2,2-Dichloropropane	0.564	0.560	0.7	114	0.00
32	M	1,1,1-Trichloroethane	0.546	0.564	-3.3	120	0.00
33	M	Carbon Tetrachloride	0.460	0.489	-6.3	130	0.00
34	M	Benzene	1.481	1.293	12.7	104	0.00
35		Methacrylonitrile	0.318	0.250	21.4	93	0.00
36	M	1,2-Dichloroethane	0.479	0.474	1.0	113	0.00
37	M	Trichloroethene	0.342	0.329	3.8	118	0.00
38		Methylcyclohexane	0.537	0.419	22.0	94	0.00
39	M	1,2-Dichloropropane	0.372	0.315	15.3	95	0.00
40		Dibromomethane	0.253	0.270	-6.7	121	0.00
41	M	Bromodichloromethane	0.510	0.529	-3.7	116	0.00
42	M	Vinyl Acetate	1.026	0.775	24.5	86	0.00
43		Ethyl Acetate	0.569	0.506	11.1	95	0.00
44		Isopropyl Acetate	0.928	0.743	19.9	94	0.00
45	T	1,4-Dioxane	0.006	0.005	16.7	100	0.00
46		Methyl methacrylate	0.431	0.307	28.8#	82	0.00
47		n-amyl Acetate	0.567	0.466	17.8	97	0.01
48	M	t-1,3-Dichloropropene	0.569	0.522	8.3	108	0.00

Sample Results: **VN087316.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071025\
Data File : VN087316.D
Acq On : 10 Jul 2025 10:41
Operator : JC\MD
Sample : VSTDCCC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC020

Quant Time: Jul 11 01:06:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:49:56 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	T	cis-1,3-Dichloropropene	0.605	0.550	9.1	102	0.00
50	M	1,1,2-Trichloroethane	0.359	0.366	-1.9	116	0.00
51		Ethyl methacrylate	0.547	0.439	19.7	98	0.00
52		1,3-Dichloropropane	0.617	0.576	6.6	106	0.00
53	M	Dibromochloromethane	0.377	0.417	-10.6	128	0.00
54	M	1,2-Dibromoethane	0.371	0.382	-3.0	117	0.00
55	M	2-Chloroethyl vinyl ether	0.313	0.248	20.8	90	0.00
56	M	Bromoform	0.259	0.282	-8.9	127	0.00
57	I	Chlorobenzene-d5	1.000	1.000	0.0	109	0.00
58	M	4-Methyl-2-Pentanone	0.603	0.451	25.2#	90	0.00
59	M	2-Hexanone	0.389	0.264	32.1#	89	0.00
60	S	4-Bromofluorobenzene	0.463	0.467	-0.9	114	0.00
61	M	Tetrachloroethene	0.297	0.281	5.4	115	0.00
62	M	Toluene	1.694	1.504	11.2	106	0.00
63	S	Toluene-d8	1.347	1.289	4.3	101	0.00
64	M	Chlorobenzene	1.081	1.036	4.2	115	0.00
65		1,1,1,2-Tetrachloroethane	0.357	0.361	-1.1	121	0.00
66	M	Ethyl Benzene	1.855	1.596	14.0	106	0.00
67	M	m/p-Xylenes	0.711	0.658	7.5	113	0.00
68	M	o-Xylene	0.678	0.617	9.0	111	0.00
69	M	Styrene	1.164	1.068	8.2	112	0.00
70		Isopropylbenzene	1.689	1.551	8.2	114	0.00
71	M	1,1,2,2-Tetrachloroethane	0.608	0.576	5.3	111	0.00
72		1,2,3-Trichloropropane	0.524	0.564	-7.6	132	0.00
73		Bromobenzene	0.410	0.423	-3.2	128	0.00
74		n-propylbenzene	2.063	1.898	8.0	115	0.00
75		2-Chlorotoluene	1.246	1.150	7.7	116	0.00
76		1,3,5-Trimethylbenzene	1.375	1.304	5.2	121	0.00
77		t-1,4-Dichloro-2-butene	0.232	0.193	16.8	107	0.00
78		4-Chlorotoluene	1.276	1.214	4.9	120	0.00
79		tert-butylbenzene	1.156	1.120	3.1	124	0.00
80		1,2,4-Trimethylbenzene	1.380	1.334	3.3	124	0.00
81		sec-Butylbenzene	1.680	1.607	4.3	119	0.00
82		p-Isopropyltoluene	1.398	1.392	0.4	120	0.00
83	M	1,3-Dichlorobenzene	0.789	0.844	-7.0	128	0.00
84	M	1,4-Dichlorobenzene	0.794	0.805	-1.4	123	0.00
85		n-Butylbenzene	1.275	1.188	6.8	112	0.00
86	T	Hexachloroethane	0.265	0.280	-5.7	134	0.00
87	M	1,2-Dichlorobenzene	0.744	0.798	-7.3	130	0.00
88		1,2-Dibromo-3-Chloropropane	0.137	0.136	0.7	121	0.00
89		1,2,4-Trichlorobenzene	0.421	0.417	1.0	120	0.00
90		Hexachlorobutadiene	0.125	0.117	6.4	114	0.00
91	M	Naphthalene	1.656	1.521	8.2	115	0.00
92		1,2,3-Trichlorobenzene	0.421	0.417	1.0	120	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Sample Results: **VN087316.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071025\
Data File : VN087316.D
Acq On : 10 Jul 2025 10:41
Operator : JC\MD
Sample : VSTDCCC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC020

Quant Time: Jul 11 01:06:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:49:56 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	30.000	30.000	0.0	119	0.00
2	M	Dichlorodifluoromethane	20.000	15.362	23.2	100	0.00
3	M	Chloromethane	20.000	13.055	34.7#	92	0.00
4	M	Vinyl Chloride	20.000	14.169	29.2#	94	0.00
5	M	Bromomethane	20.000	25.123	-25.6#	165	0.00
6	M	Chloroethane	20.000	22.124	-10.6	146	0.00
7	M	Trichlorofluoromethane	20.000	19.194	4.0	121	0.00
8	T	Diethyl Ether	20.000	14.499	27.5#	97	0.00
9		1,1,2-Trichlorotrifluoroeth	20.000	16.721	16.4	108	0.00
10	M	1,1-Dichloroethene	20.000	15.147	24.3	98	0.00
11		Methyl Iodide	20.000	18.721	6.4	140	0.00
12		Methyl Acetate	20.000	14.175	29.1#	92	0.00
13	M	Acrolein	100.000	109.781	-9.8	159	0.00
14	M	Acrylonitrile	100.000	70.179	29.8#	90	0.00
15	M	Acetone	100.000	90.980	9.0	114	-0.01
16	M	Carbon Disulfide	20.000	13.776	31.1#	90	0.00
17		Allyl chloride	20.000	11.928	40.4#	77	0.00
18	M	Methylene Chloride	20.000	16.488	17.6	106	0.00
19	M	trans-1,2-Dichloroethene	20.000	15.951	20.2	103	0.00
20	T	Diisopropyl ether	20.000	13.192	34.0#	82	0.00
21	M	1,1-Dichloroethane	20.000	14.926	25.4#	94	0.00
22	M	cis-1,2-Dichloroethene	20.000	16.681	16.6	110	0.00
23	M	tert-Butyl Alcohol	100.000	72.674	27.3#	95	0.00
24	M	Methyl tert-Butyl Ether	20.000	16.078	19.6	106	0.00
25	M	Chloroform	20.000	18.096	9.5	118	0.00
26		Cyclohexane	20.000	12.601	37.0#	84	0.00
27	s	1,2-Dichloroethane-d4	30.000	28.037	6.5	109	0.00
28	I	1,4-Difluorobenzene	30.000	30.000	0.0	105	0.00
29		1,1-Dichloropropene	20.000	17.371	13.1	107	0.00
30	M	2-Butanone	100.000	81.328	18.7	95	0.00
31		2,2-Dichloropropane	20.000	19.857	0.7	114	0.00
32	M	1,1,1-Trichloroethane	20.000	20.665	-3.3	120	0.00
33	M	Carbon Tetrachloride	20.000	21.293	-6.5	130	0.00
34	M	Benzene	20.000	17.451	12.7	104	0.00
35		Methacrylonitrile	20.000	15.717	21.4	93	0.00
36	M	1,2-Dichloroethane	20.000	19.816	0.9	113	0.00
37	M	Trichloroethene	20.000	19.283	3.6	118	0.00
38		Methylcyclohexane	20.000	15.608	22.0	94	0.00
39	M	1,2-Dichloropropane	20.000	16.921	15.4	95	0.00
40		Dibromomethane	20.000	21.360	-6.8	121	0.00
41	M	Bromodichloromethane	20.000	20.727	-3.6	116	0.00
42	M	Vinyl Acetate	100.000	75.521	24.5	86	0.00
43		Ethyl Acetate	20.000	17.786	11.1	95	0.00
44		Isopropyl Acetate	20.000	16.014	19.9	94	0.00
45	T	1,4-Dioxane	400.000	344.807	13.8	100	0.00
46		Methyl methacrylate	20.000	14.229	28.9#	82	0.00
47		n-amyl Acetate	20.000	16.424	17.9	97	0.01
48	M	t-1,3-Dichloropropene	20.000	18.366	8.2	108	0.00

Sample Results: **VN087316.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071025\
Data File : VN087316.D
Acq On : 10 Jul 2025 10:41
Operator : JC\MD
Sample : VSTDCCC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC020

Quant Time: Jul 11 01:06:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:49:56 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
49	T	cis-1,3-Dichloropropene	20.000	18.187	9.1	102	0.00
50	M	1,1,2-Trichloroethane	20.000	20.367	-1.8	116	0.00
51		Ethyl methacrylate	20.000	16.060	19.7	98	0.00
52		1,3-Dichloropropane	20.000	18.677	6.6	106	0.00
53	M	Dibromochloromethane	20.000	22.113	-10.6	128	0.00
54	M	1,2-Dibromoethane	20.000	20.627	-3.1	117	0.00
55	M	2-Chloroethyl vinyl ether	100.000	79.280	20.7	90	0.00
56	M	Bromoform	20.000	21.788	-8.9	127	0.00
57	I	Chlorobenzene-d5	30.000	30.000	0.0	109	0.00
58	M	4-Methyl-2-Pentanone	100.000	74.861	25.1#	90	0.00
59	M	2-Hexanone	100.000	67.738	32.3#	89	0.00
60	S	4-Bromofluorobenzene	30.000	30.278	-0.9	114	0.00
61	M	Tetrachloroethene	20.000	18.914	5.4	115	0.00
62	M	Toluene	20.000	17.754	11.2	106	0.00
63	S	Toluene-d8	30.000	28.714	4.3	101	0.00
64	M	Chlorobenzene	20.000	19.178	4.1	115	0.00
65		1,1,1,2-Tetrachloroethane	20.000	20.242	-1.2	121	0.00
66	M	Ethyl Benzene	20.000	17.208	14.0	106	0.00
67	M	m/p-Xylenes	40.000	37.030	7.4	113	0.00
68	M	o-Xylene	20.000	18.205	9.0	111	0.00
69	M	Styrene	20.000	18.348	8.3	112	0.00
70		Isopropylbenzene	20.000	18.366	8.2	114	0.00
71	M	1,1,2,2-Tetrachloroethane	20.000	18.958	5.2	111	0.00
72		1,2,3-Trichloropropane	20.000	21.529	-7.6	132	0.00
73		Bromobenzene	20.000	20.642	-3.2	128	0.00
74		n-propylbenzene	20.000	18.397	8.0	115	0.00
75		2-Chlorotoluene	20.000	18.454	7.7	116	0.00
76		1,3,5-Trimethylbenzene	20.000	18.979	5.1	121	0.00
77		t-1,4-Dichloro-2-butene	20.000	16.581	17.1	107	0.00
78		4-Chlorotoluene	20.000	19.016	4.9	120	0.00
79		tert-butylbenzene	20.000	19.386	3.1	124	0.00
80		1,2,4-Trimethylbenzene	20.000	19.327	3.4	124	0.00
81		sec-Butylbenzene	20.000	19.132	4.3	119	0.00
82		p-Isopropyltoluene	20.000	19.920	0.4	120	0.00
83	M	1,3-Dichlorobenzene	20.000	21.396	-7.0	128	0.00
84	M	1,4-Dichlorobenzene	20.000	20.281	-1.4	123	0.00
85		n-Butylbenzene	20.000	18.624	6.9	112	0.00
86	T	Hexachloroethane	20.000	21.148	-5.7	134	0.00
87	M	1,2-Dichlorobenzene	20.000	21.467	-7.3	130	0.00
88		1,2-Dibromo-3-Chloropropane	20.000	19.830	0.9	121	0.00
89		1,2,4-Trichlorobenzene	20.000	19.816	0.9	120	0.00
90		Hexachlorobutadiene	20.000	18.762	6.2	114	0.00
91	M	Naphthalene	20.000	18.369	8.2	115	0.00
92		1,2,3-Trichlorobenzene	20.000	19.816	0.9	120	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

QC SAMPLE DATA

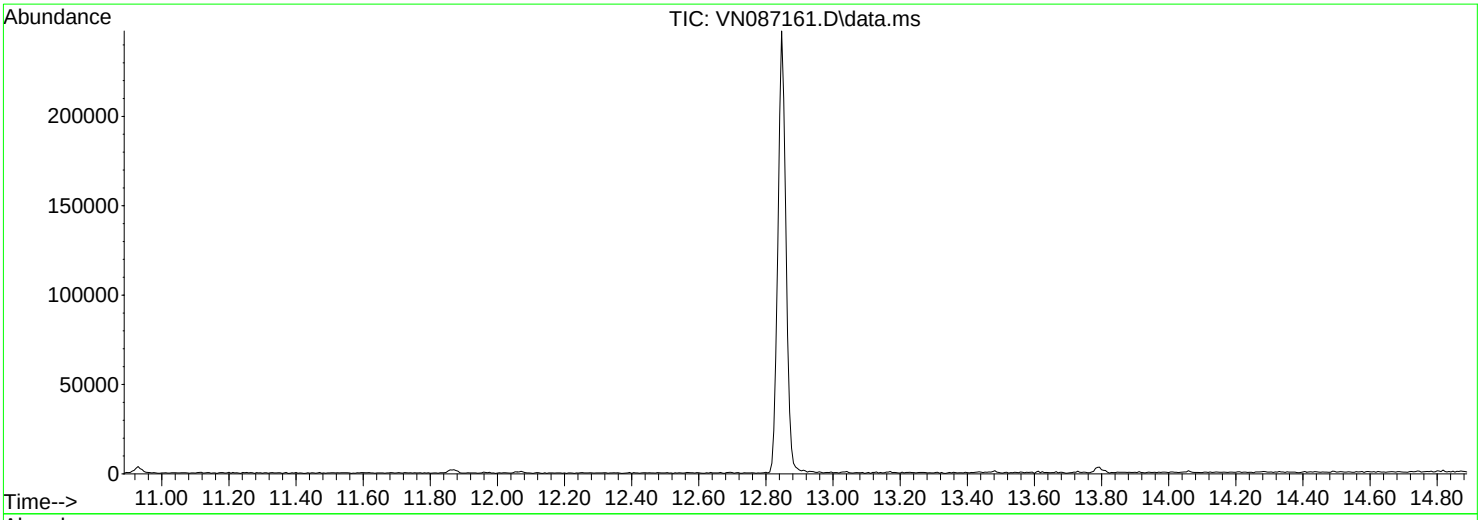
Sample Results: **VN087161.D**

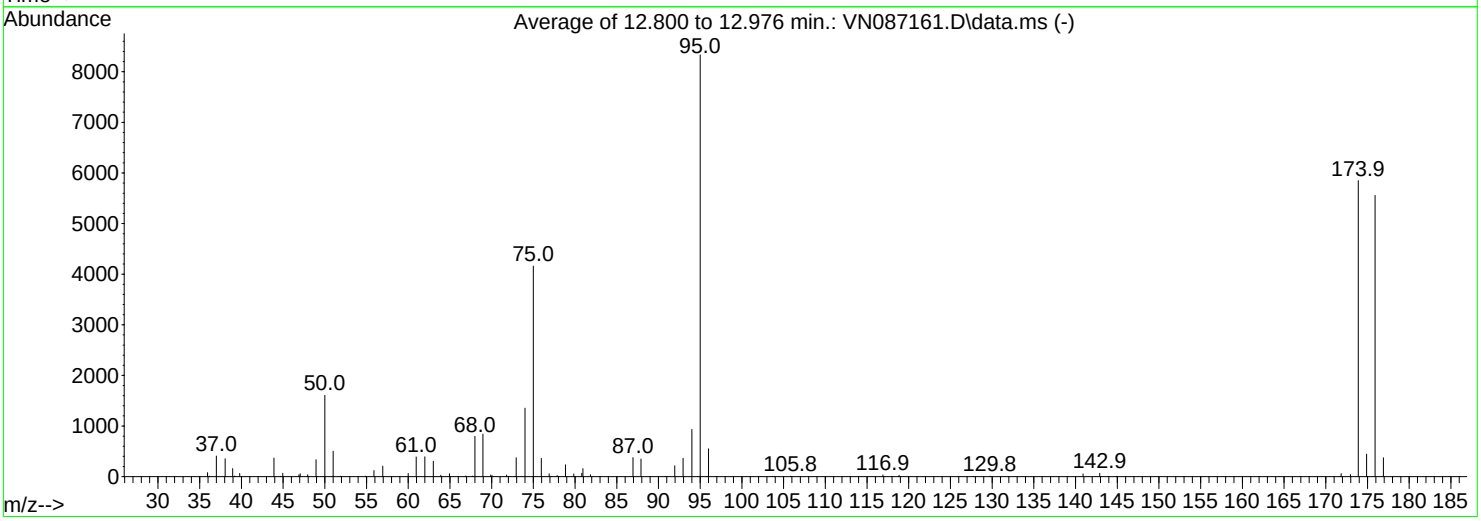
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN062525\
Data File : VN087161.D
Acq On : 25 Jun 2025 08:25
Operator : JC\MD
Sample : BFB
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\82U070825W.M
Title : SW846 8260
Last Update : Wed Jul 09 04:25:34 2025





AutoFind: Averaged scan 1844 to 1874; Bkg corrected with scan 1843

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.3	1607	PASS
75	95	30	60	49.9	4160	PASS
95	95	100	100	100.0	8333	PASS
96	95	5	9	6.6	550	PASS
173	174	0.00	2	0.7	41	PASS
174	95	50	100	70.2	5847	PASS
175	174	5	9	7.6	447	PASS
176	174	95	101	95.0	5556	PASS
177	176	5	9	6.7	373	PASS

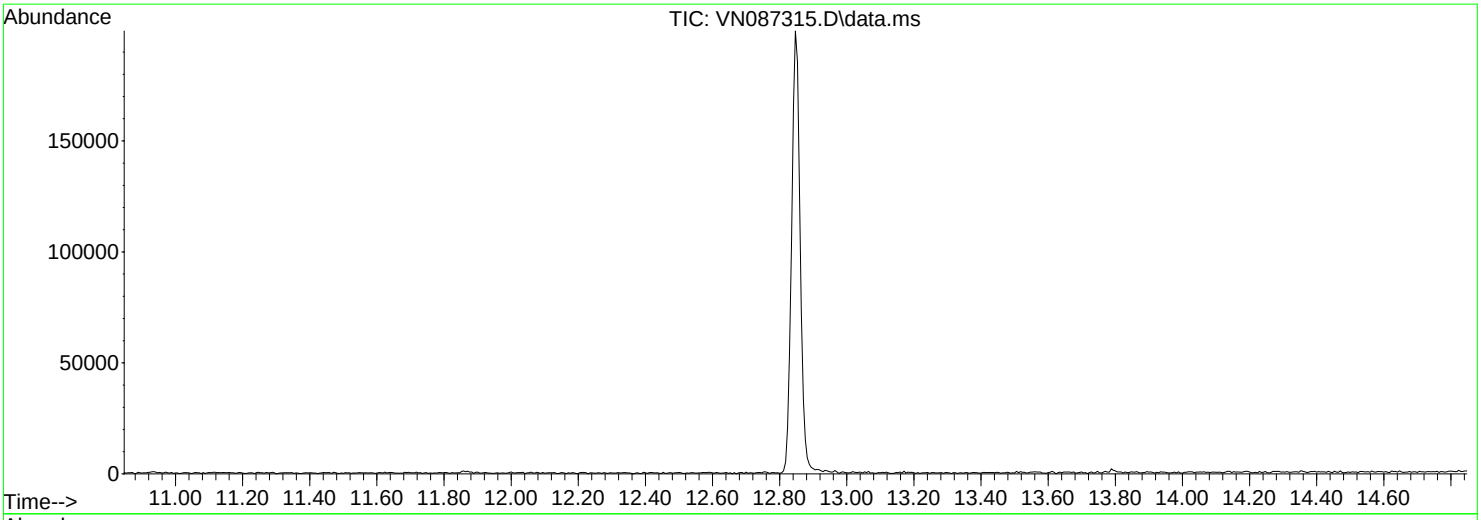
Sample Results: **VN087315.D**

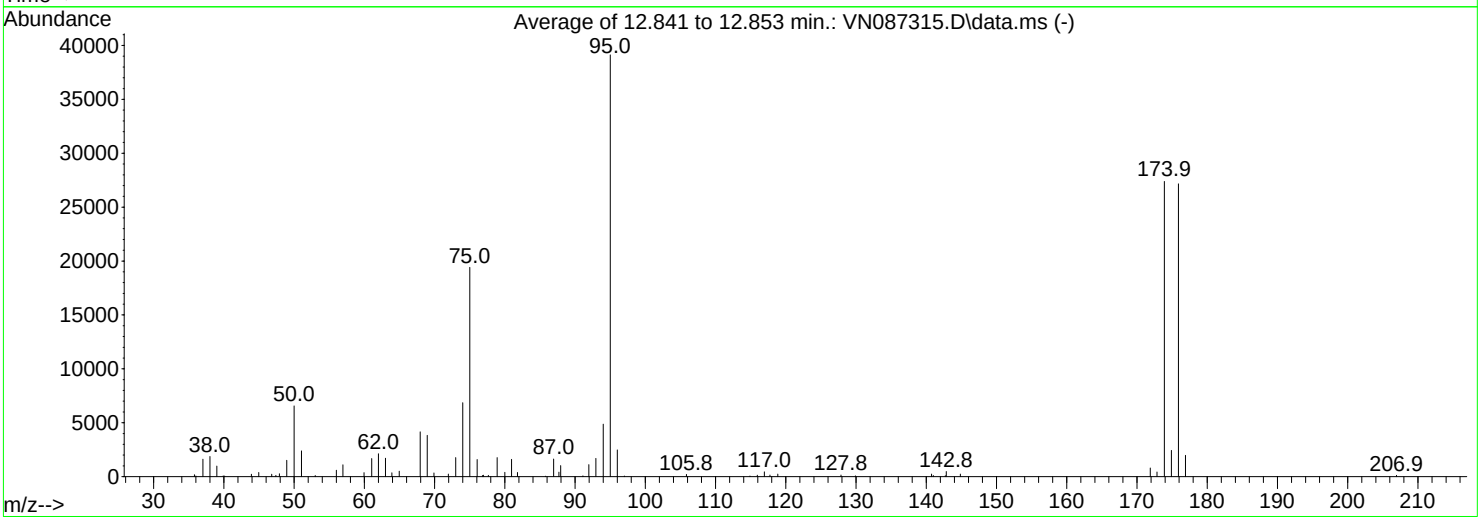
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071025\
Data File : VN087315.D
Acq On : 10 Jul 2025 08:49
Operator : JC\MD
Sample : BFB
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
BFB

Integration File: RTEINT3.P

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
Last Update : Wed Jun 25 10:49:56 2025





AutoFind: Scans 1851, 1852, 1853; Background Corrected with Scan 1844

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.8	6567	PASS
75	95	30	60	49.6	19411	PASS
95	95	100	100	100.0	39128	PASS
96	95	5	9	6.3	2482	PASS
173	174	0.00	2	1.6	439	PASS
174	95	50	100	70.0	27389	PASS
175	174	5	9	8.9	2431	PASS
176	174	95	101	99.2	27160	PASS
177	176	5	9	7.3	1974	PASS

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

Report of Analysis

Client:	Garden State Laboratories, Inc.	Date Collected:	
Project:	Waste Water 2025	Date Received:	
Client Sample ID:	VN0710WBL01	SDG No.:	Q2554
Lab Sample ID:	VN0710WBL01	Matrix:	Water
Analytical Method:	E624.1	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VN087319.D	1	07/10/25 12:26	VN071025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
107-02-8	Acrolein	6.60	U	6.60	25.0	ug/L
107-13-1	Acrylonitrile	2.80	U	2.80	25.0	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	28.6		91 - 110	95%	SPK: 30
2037-26-5	Toluene-d8	29.2		91 - 112	97%	SPK: 30
460-00-4	4-Bromofluorobenzene	27.2		63 - 112	91%	SPK: 30
INTERNAL STANDARDS						
74-97-5	Bromochloromethane	39600	7.824			
540-36-3	1,4-Difluorobenzene	201000	9.106			
3114-55-4	Chlorobenzene-d5	185000	11.865			

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071025\
Data File : VN087319.D
Acq On : 10 Jul 2025 12:26
Operator : JC\MD
Sample : VN0710WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0710WBL01

Quant Time: Jul 11 01:09:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:49:56 2025
Response via : Initial Calibration

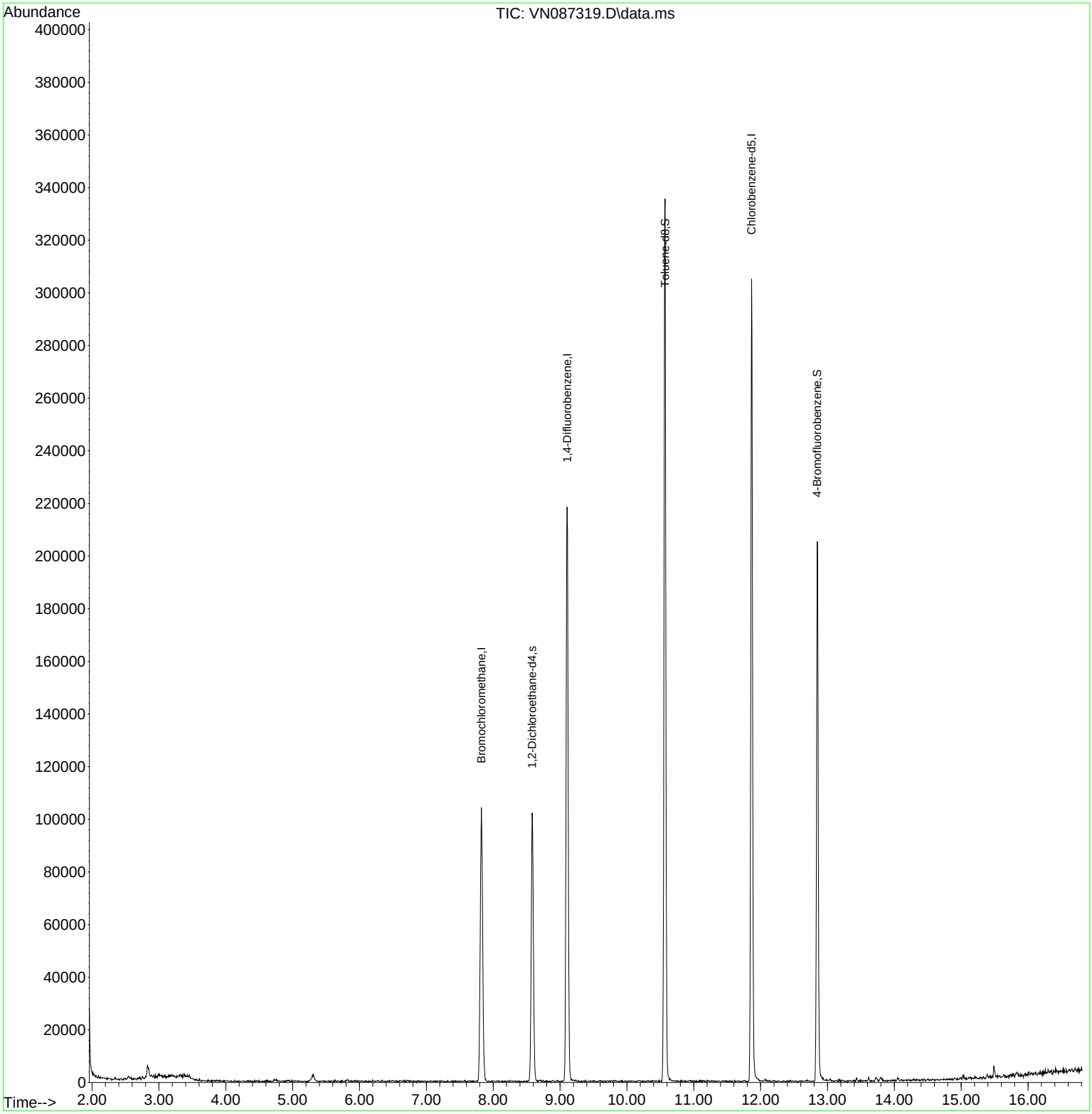
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	7.824	128	39626	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.106	114	200573	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.865	117	184716	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.582	65	85505	28.639	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery = 95.467%			
60) 4-Bromofluorobenzene	12.847	95	77663	27.247	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery = 90.833%			
63) Toluene-d8	10.571	98	242398	29.227	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery = 97.433%			
Target Compounds						Qvalue

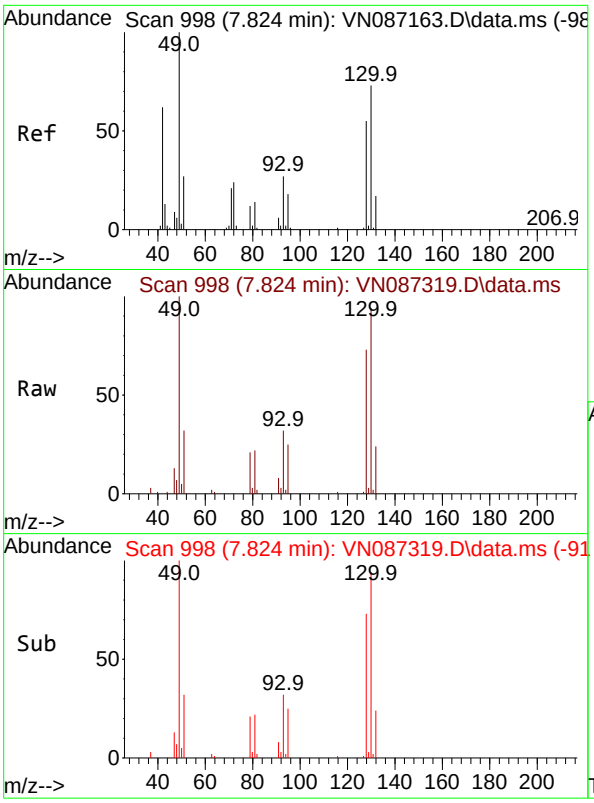
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071025\
Data File : VN087319.D
Acq On : 10 Jul 2025 12:26
Operator : JC\MD
Sample : VN0710WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0710WBL01

Quant Time: Jul 11 01:09:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:49:56 2025
Response via : Initial Calibration



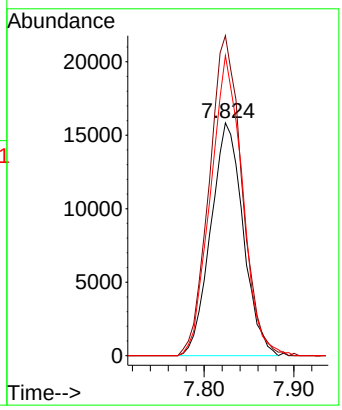


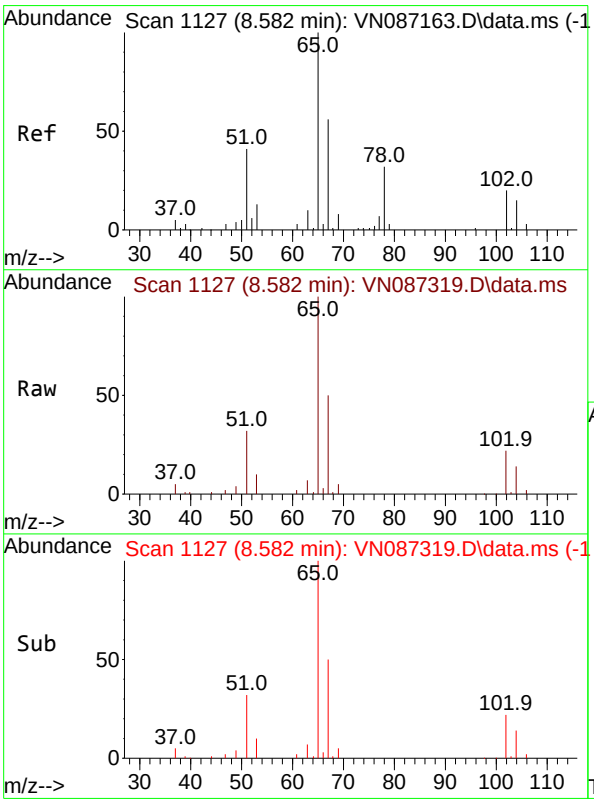
#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 7.824 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN087319.D
Acq: 10 Jul 2025 12:26

Instrument :
MSVOA_N
ClientSampleId :
VN0710WBL01

Tgt Ion:128 Resp: 39626

Ion	Ratio	Lower	Upper
128	100		
49	138.9	0.0	450.5
130	127.4	0.0	320.7

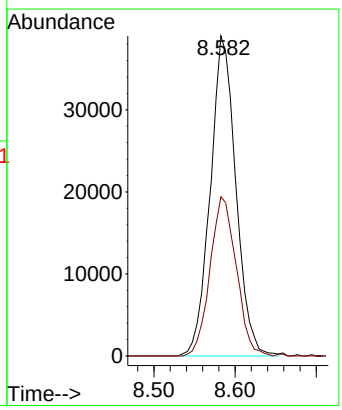


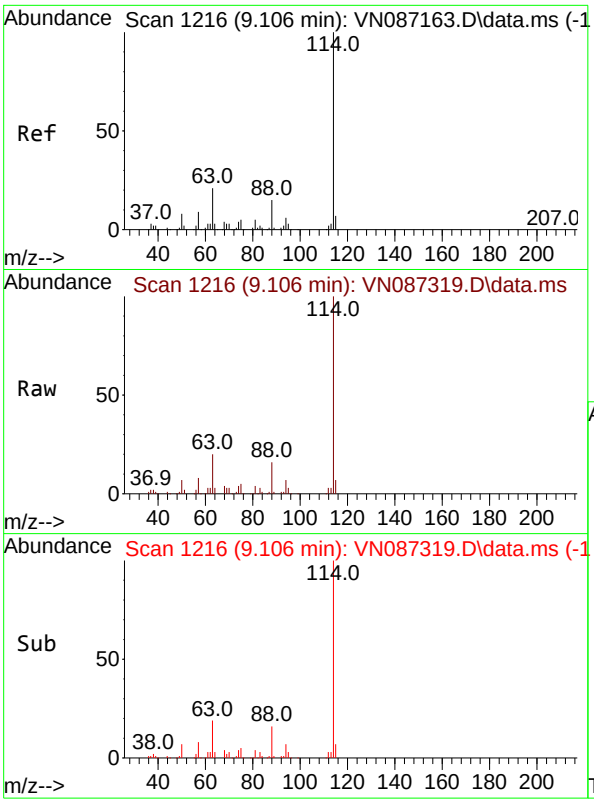


#27
1,2-Dichloroethane-d4
Concen: 28.639 ug/l
RT: 8.582 min Scan# 1127
Delta R.T. -0.000 min
Lab File: VN087319.D
Acq: 10 Jul 2025 12:26

Tgt Ion: 65 Resp: 85505

Ion	Ratio	Lower	Upper
65	100		
67	50.9	41.9	62.9



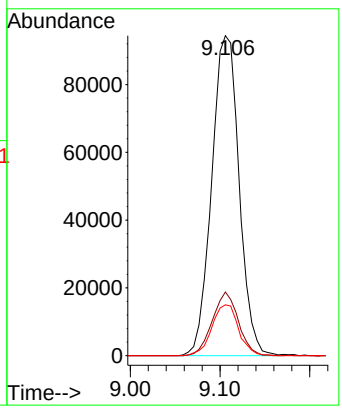


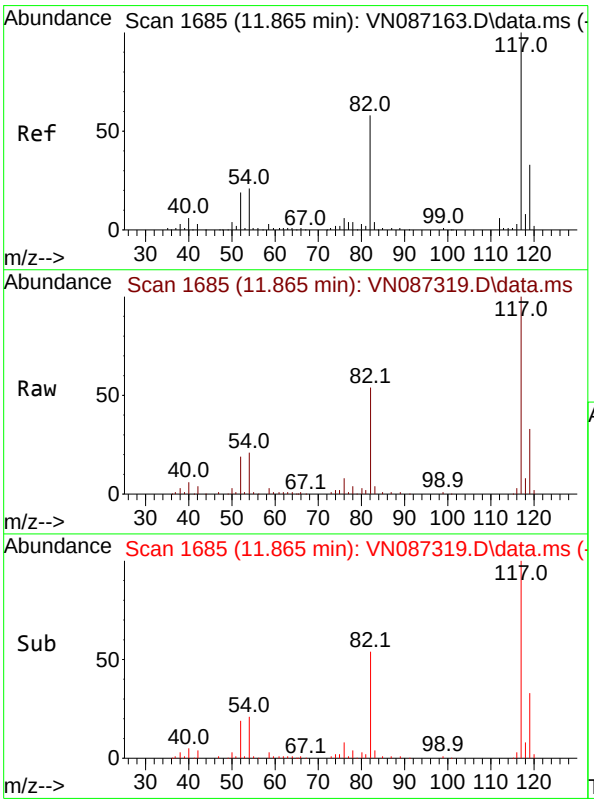
#28
1,4-Difluorobenzene
Concen: 30.000 ug/l
RT: 9.106 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087319.D
Acq: 10 Jul 2025 12:26

Instrument :
MSVOA_N
ClientSampleId :
VN0710WBL01

Tgt Ion:114 Resp: 200573

Ion	Ratio	Lower	Upper
114	100		
63	18.8	17.0	25.4
88	15.5	12.6	19.0

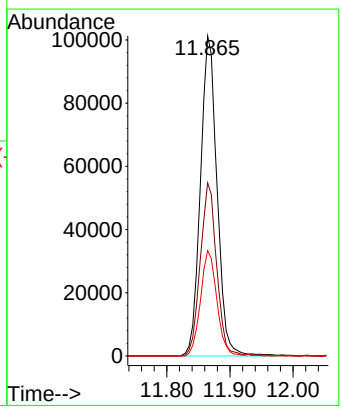


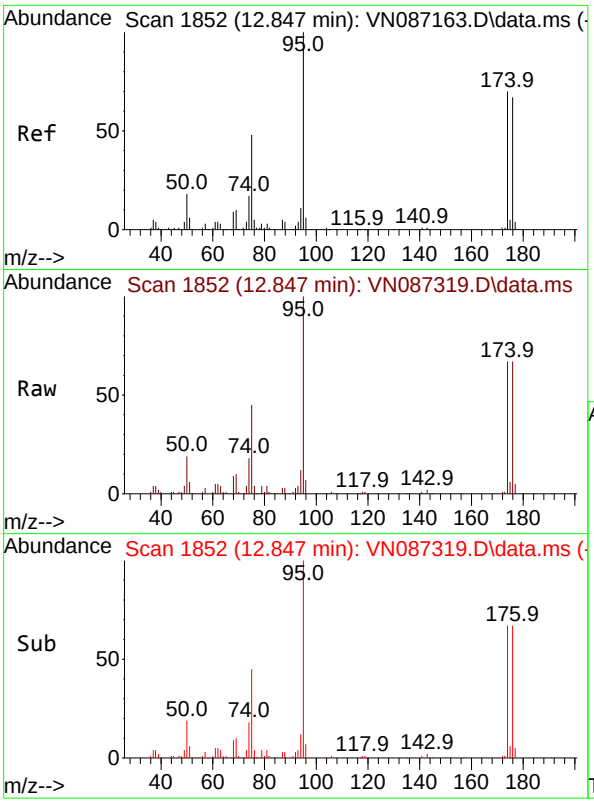


#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 11.865 min Scan# 1685
Delta R.T. -0.000 min
Lab File: VN087319.D
Acq: 10 Jul 2025 12:26

Tgt Ion:117 Resp: 184716

Ion	Ratio	Lower	Upper
117	100		
82	53.0	45.4	68.2
119	32.3	26.2	39.4



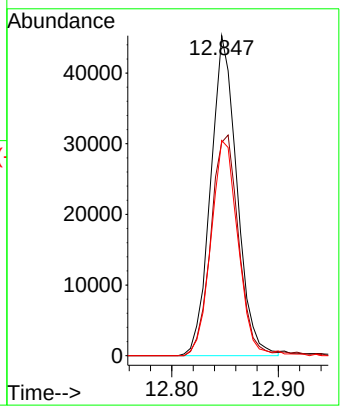


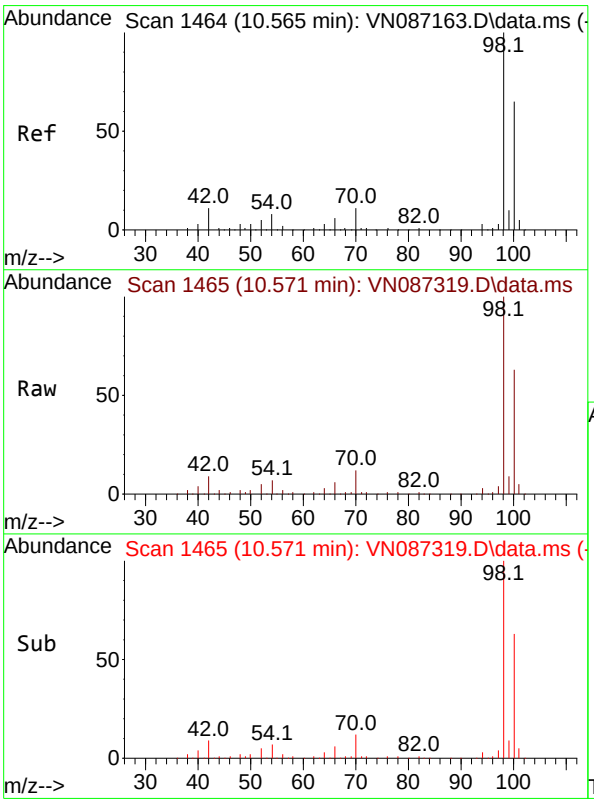
#60
4-Bromofluorobenzene
Concen: 27.247 ug/l
RT: 12.847 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN087319.D
Acq: 10 Jul 2025 12:26

Instrument :
MSVOA_N
ClientSampleId :
VN0710WBL01

Tgt Ion: 95 Resp: 77663

Ion	Ratio	Lower	Upper
95	100		
174	72.3	54.5	81.7
176	68.5	51.9	77.9

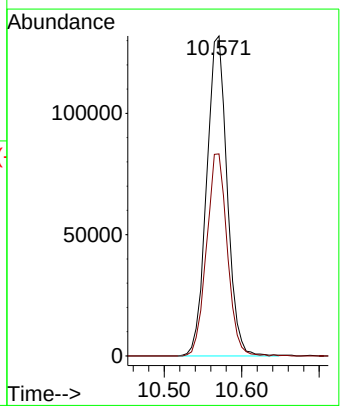




#63
Toluene-d8
Concen: 29.227 ug/l
RT: 10.571 min Scan# 1465
Delta R.T. 0.006 min
Lab File: VN087319.D
Acq: 10 Jul 2025 12:26

Tgt Ion: 98 Resp: 242398

Ion	Ratio	Lower	Upper
98	100		
100	63.8	52.5	78.7



Sample Results: **VN087319.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071025\
Data File : VN087319.D
Acq On : 10 Jul 2025 12:26
Operator : JC\MD
Sample : VN0710WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0710WBL01

Integration Parameters: RTEINT3.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 0 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Title : METHOD 624 VOLATILE ORGANIC ANALYSIS

Signal : TIC: VN087319.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.830	145	149	156	rBV3	4412	8385	1.35%	0.338%
2	7.824	988	998	1014	rVB	104203	259364	41.73%	10.441%
3	8.582	1119	1127	1139	rVB	101817	227871	36.66%	9.173%
4	9.106	1207	1216	1226	rBV	218008	460645	74.11%	18.544%
5	10.571	1456	1465	1478	rBV	335555	621578	100.00%	25.022%
6	11.865	1677	1685	1696	rBV	304943	547394	88.07%	22.036%
7	12.847	1845	1852	1860	rBV	205249	358880	57.74%	14.447%

Sum of corrected areas: 2484117

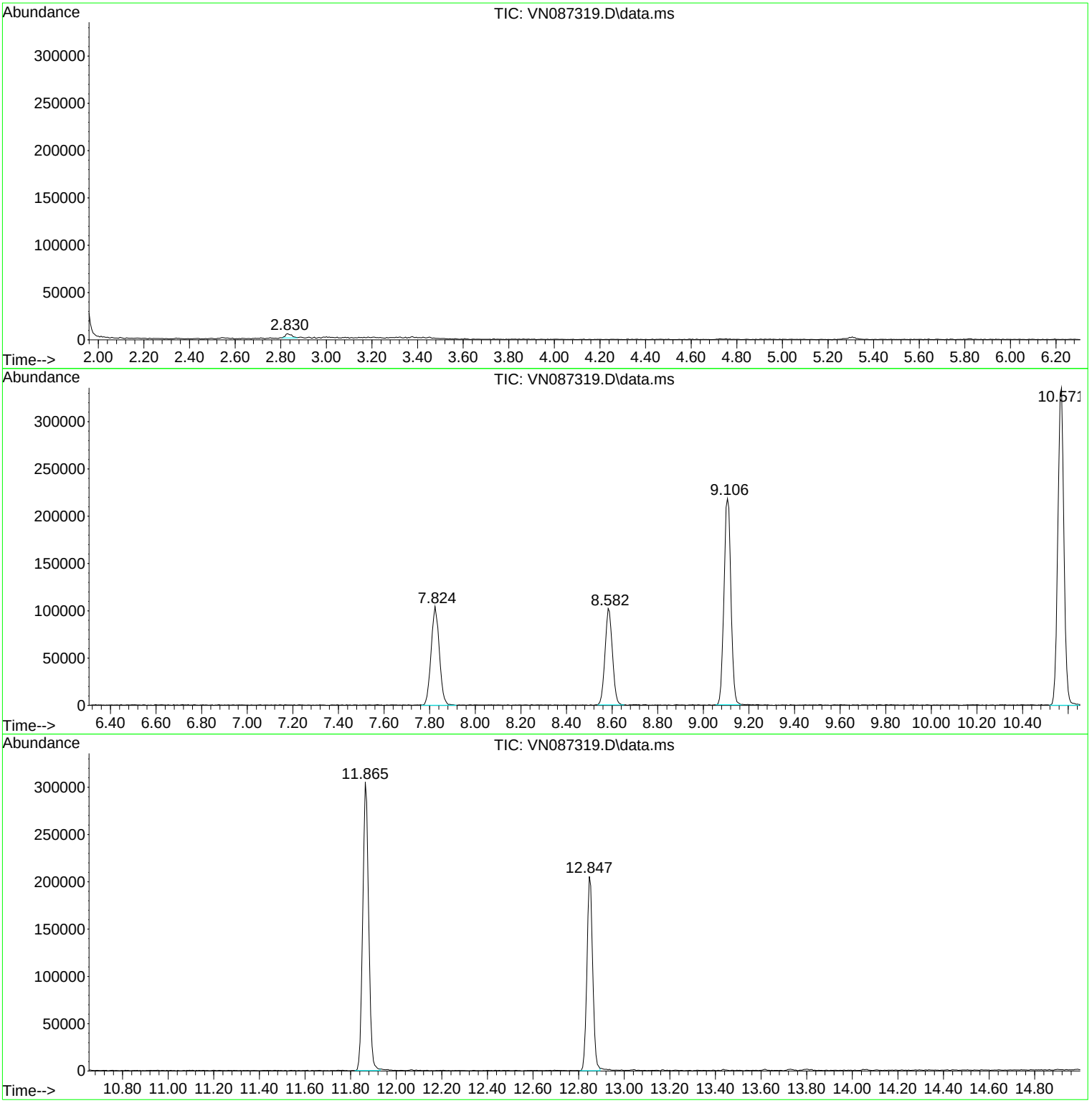
Sample Results: **VN087319.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071025\
Data File : VN087319.D
Acq On : 10 Jul 2025 12:26
Operator : JC\MD
Sample : VN0710WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0710WBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Sample Results: **VN087319.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071025\
Data File : VN087319.D
Acq On : 10 Jul 2025 12:26
Operator : JC\MD
Sample : VN0710WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0710WBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected
****

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071025\
Data File : VN087319.D
Acq On : 10 Jul 2025 12:26
Operator : JC\MD
Sample : VN0710WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0710WBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

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

Report of Analysis

Client:	Garden State Laboratories, Inc.	Date Collected:	
Project:	Waste Water 2025	Date Received:	
Client Sample ID:	VN0710WBS01	SDG No.:	Q2554
Lab Sample ID:	VN0710WBS01	Matrix:	Water
Analytical Method:	E624.1	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VN087317.D	1	07/10/25 11:16	VN071025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
107-02-8	Acrolein	100		6.60	25.0	ug/L
107-13-1	Acrylonitrile	67.3		2.80	25.0	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	27.6		91 - 110	92%	SPK: 30
2037-26-5	Toluene-d8	29.5		91 - 112	98%	SPK: 30
460-00-4	4-Bromofluorobenzene	30.6		63 - 112	102%	SPK: 30
INTERNAL STANDARDS						
74-97-5	Bromochloromethane	44600	7.824			
540-36-3	1,4-Difluorobenzene	229000	9.106			
3114-55-4	Chlorobenzene-d5	217000	11.865			

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071025\
Data File : VN087317.D
Acq On : 10 Jul 2025 11:16
Operator : JC\MD
Sample : VN0710WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 11 01:07:18 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:49:56 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0710WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 07/11/2025
Supervised By :Mahesh Dadoda 07/14/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	7.824	128	44567	30.000	ug/l		0.00
28) 1,4-Difluorobenzene	9.106	114	228909	30.000	ug/l		0.00
57) Chlorobenzene-d5	11.865	117	216531	30.000	ug/l		0.00
System Monitoring Compounds							
27) 1,2-Dichloroethane-d4	8.583	65	92633	27.587	ug/l		0.00
Spiked Amount 30.000	Range 91 - 110		Recovery = 91.967%				
60) 4-Bromofluorobenzene	12.847	95	102398	30.646	ug/l		0.00
Spiked Amount 30.000	Range 63 - 112		Recovery = 102.167%				
63) Toluene-d8	10.571	98	286529	29.472	ug/l		0.00
Spiked Amount 30.000	Range 91 - 112		Recovery = 98.233%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.154	85	43577	16.243	ug/l		96
3) Chloromethane	2.401	50	36610	13.361	ug/l		95
4) Vinyl Chloride	2.554	62	43969	14.764	ug/l		96
5) Bromomethane	2.995	94	39190	24.796	ug/l		97
6) Chloroethane	3.154	64	36026	22.551	ug/l		94
7) Trichlorofluoromethane	3.530	101	72649	19.888	ug/l		91
8) Diethyl Ether	3.983	74	26018	14.497	ug/l		89
9) 1,1,2-Trichlorotrifluo...	4.401	101	46315	17.101	ug/l	#	88
10) 1,1-Dichloroethene	4.371	96	42967	15.916	ug/l		88
11) Methyl Iodide	4.612	142	47066	19.460	ug/l		87
12) Methyl Acetate	5.036	43	59745	14.109	ug/l		94
13) Acrolein	4.201	56	67771	104.152	ug/l		98
14) Acrylonitrile	5.736	53	132992	67.330	ug/l		99
15) Acetone	4.442	58	45904	79.671	ug/l		93
16) Carbon Disulfide	4.736	76	108774	13.780	ug/l		100
17) Allyl chloride	5.054	41	54966	12.344	ug/l		93
18) Methylene Chloride	5.301	84	51589	16.495	ug/l		88
19) trans-1,2-Dichloroethene	5.806	96	48114	16.297	ug/l		92
20) Diisopropyl ether	6.689	45	125943	13.331	ug/l	#	97
21) 1,1-Dichloroethane	6.589	63	85912	15.216	ug/l		98
22) cis-1,2-Dichloroethene	7.500	96	58139	16.920	ug/l		91
23) tert-Butyl Alcohol	5.536	59	52702	70.947	ug/l	#	100
24) Methyl tert-Butyl Ether	5.812	73	151453	15.996	ug/l		99
25) Chloroform	7.971	83	97171	17.963	ug/l		95
26) Cyclohexane	8.271	56	60030	12.790	ug/l	#	88
29) 1,1-Dichloropropene	8.383	75	59144	16.577	ug/l		93
30) 2-Butanone	7.489	43	183880	76.402	ug/l		93
31) 2,2-Dichloropropane	7.500	77	84366	19.589	ug/l		100
32) 1,1,1-Trichloroethane	8.177	97	85453	20.501	ug/l		97
33) Carbon Tetrachloride	8.371	117	75644	21.565	ug/l		97
34) Benzene	8.612	78	196655	17.398	ug/l		96
35) Methacrylonitrile	7.783	41	33622	13.862	ug/l		94
36) 1,2-Dichloroethane	8.677	62	69238	18.959	ug/l		98
37) Trichloroethene	9.353	130	51472	19.743	ug/l		84
38) Methylcyclohexane	9.606	83	65722	16.054	ug/l		94
39) 1,2-Dichloropropane	9.624	63	46064	16.237	ug/l		95
40) Dibromomethane	9.712	93	39073	20.255	ug/l		97
41) Bromodichloromethane	9.888	83	76390	19.618	ug/l		97
42) Vinyl Acetate	6.618	43	559364	71.458	ug/l	#	94

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071025\
Data File : VN087317.D
Acq On : 10 Jul 2025 11:16
Operator : JC\MD
Sample : VN0710WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 11 01:07:18 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:49:56 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0710WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 07/11/2025
Supervised By :Mahesh Dadoda 07/14/2025

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
43) Ethyl Acetate	7.571	43	63729	14.668 ug/l	95
44) Isopropyl Acetate	8.694	43	106403	15.031 ug/l	93
45) 1,4-Dioxane	9.706	88	17854	372.856 ug/l	87
46) Methyl methacrylate	9.688	41	45783	13.913 ug/l	93
47) n-amyl Acetate	12.541	43	66473m	15.359 ug/l	
48) t-1,3-Dichloropropene	10.835	75	75525	17.399 ug/l	99
49) cis-1,3-Dichloropropene	10.312	75	79726	17.277 ug/l	96
50) 1,1,2-Trichloroethane	11.018	97	51568	18.818 ug/l	97
51) Ethyl methacrylate	10.883	69	64033	15.353 ug/l	89
52) 1,3-Dichloropropane	11.165	76	84603	17.983 ug/l	100
53) Dibromochloromethane	11.359	129	60422	21.005 ug/l	100
54) 1,2-Dibromoethane	11.471	107	55248	19.542 ug/l	99
55) 2-Chloroethyl vinyl ether	10.159	63	158012	66.094 ug/l	94
56) Bromoform	12.577	173	41253	20.862 ug/l #	99
58) 4-Methyl-2-Pentanone	10.447	43	314125	72.162 ug/l #	94
59) 2-Hexanone	11.206	43	190995	67.948 ug/l	97
61) Tetrachloroethene	11.106	164	42345	19.748 ug/l	98
62) Toluene	10.630	91	222388	18.185 ug/l	100
64) Chlorobenzene	11.894	112	150496	19.292 ug/l	99
65) 1,1,1,2-Tetrachloroethane	11.959	131	54599	21.183 ug/l	98
66) Ethyl Benzene	11.965	91	239575	17.898 ug/l	93
67) m/p-Xylenes	12.071	106	197128	38.431 ug/l	95
68) o-Xylene	12.400	106	90109	18.413 ug/l	97
69) Styrene	12.412	104	155538	18.513 ug/l	99
70) Isopropylbenzene	12.694	105	236446	19.400 ug/l	100
71) 1,1,2,2-Tetrachloroethane	12.935	83	81718	18.628 ug/l	97
72) 1,2,3-Trichloropropane	12.994	75	81192m	21.462 ug/l	
73) Bromobenzene	12.982	156	59653	20.177 ug/l	88
74) n-propylbenzene	13.035	91	283072	19.012 ug/l	95
75) 2-Chlorotoluene	13.124	91	170964	19.005 ug/l	91
76) 1,3,5-Trimethylbenzene	13.171	105	198006	19.957 ug/l	99
77) t-1,4-Dichloro-2-butene	12.735	75	27358	16.303 ug/l	99
78) 4-Chlorotoluene	13.218	91	178513	19.376 ug/l	93
79) tert-butylbenzene	13.435	119	172022	20.626 ug/l	97
80) 1,2,4-Trimethylbenzene	13.482	105	200752	20.149 ug/l	100
81) sec-Butylbenzene	13.612	105	244608	20.176 ug/l	98
82) p-Isopropyltoluene	13.724	119	210330	20.846 ug/l	99
83) 1,3-Dichlorobenzene	13.729	146	124627	21.891 ug/l	99
84) 1,4-Dichlorobenzene	13.812	146	122230	21.332 ug/l	98
85) n-Butylbenzene	14.053	91	177875	19.323 ug/l	97
86) Hexachloroethane	14.329	117	40482	21.196 ug/l	97
87) 1,2-Dichlorobenzene	14.106	146	116209	21.648 ug/l	98
88) 1,2-Dibromo-3-Chloropr...	14.718	75	18912	19.145 ug/l	89
89) 1,2,4-Trichlorobenzene	15.835	180	59688	19.653 ug/l	96
90) Hexachlorobutadiene	15.494	225	17215	19.102 ug/l	94
91) Naphthalene	15.635	128	223133	18.668 ug/l	100
92) 1,2,3-Trichlorobenzene	15.835	180	59688	19.653 ug/l	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

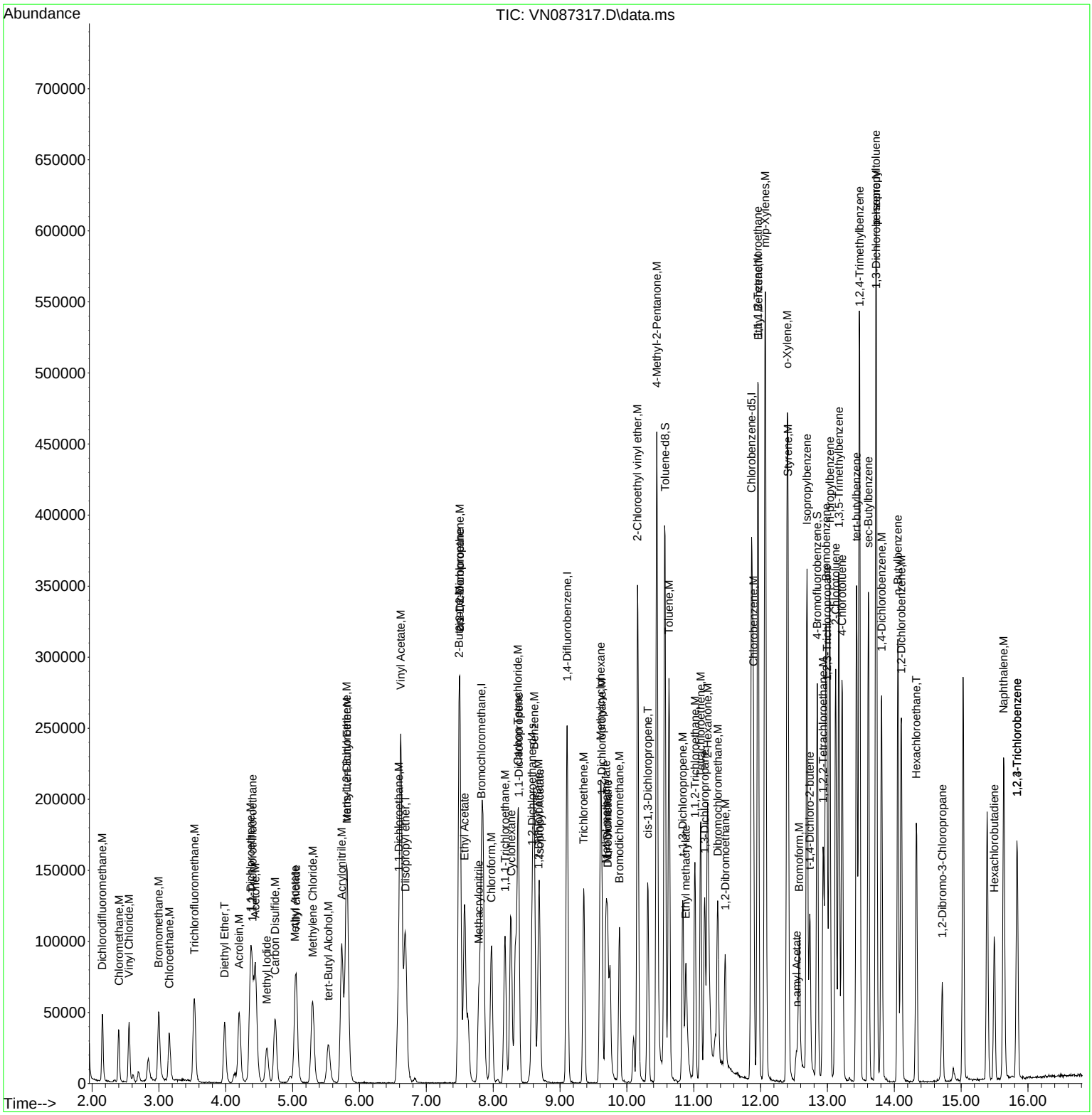
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071025\
Data File : VN087317.D
Acq On : 10 Jul 2025 11:16
Operator : JC\MD
Sample : VN0710WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 11 01:07:18 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:49:56 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0710WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 07/11/2025
Supervised By :Mahesh Dadoda 07/14/2025



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

Report of Analysis

Client:	Garden State Laboratories, Inc.	Date Collected:	
Project:	Waste Water 2025	Date Received:	
Client Sample ID:	VN0710WBSD01	SDG No.:	Q2554
Lab Sample ID:	VN0710WBSD01	Matrix:	Water
Analytical Method:	E624.1	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VN087318.D	1	07/10/25 11:53	VN071025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
107-02-8	Acrolein	110		6.60	25.0	ug/L
107-13-1	Acrylonitrile	67.5		2.80	25.0	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	27.3		91 - 110	91%	SPK: 30
2037-26-5	Toluene-d8	28.8		91 - 112	96%	SPK: 30
460-00-4	4-Bromofluorobenzene	30.2		63 - 112	101%	SPK: 30
INTERNAL STANDARDS						
74-97-5	Bromochloromethane	43500	7.824			
540-36-3	1,4-Difluorobenzene	213000	9.106			
3114-55-4	Chlorobenzene-d5	206000	11.865			

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071025\
Data File : VN087318.D
Acq On : 10 Jul 2025 11:53
Operator : JC\MD
Sample : VN0710WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 11 01:08:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:49:56 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0710WBSD01

Manual Integrations APPROVED

Reviewed By :John Carlone 07/11/2025
Supervised By :Mahesh Dadoda 07/14/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	7.824	128	43478	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.106	114	213327	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.865	117	206435	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.583	65	89417	27.296	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery = 91.000%			
60) 4-Bromofluorobenzene	12.847	95	96219	30.205	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery = 100.700%			
63) Toluene-d8	10.565	98	266713	28.775	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery = 95.933%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.154	85	38632	14.761	ug/l	99
3) Chloromethane	2.401	50	34367	12.856	ug/l	96
4) Vinyl Chloride	2.554	62	40108	13.805	ug/l	100
5) Bromomethane	3.001	94	36871	23.913	ug/l	84
6) Chloroethane	3.159	64	34534	22.159	ug/l	95
7) Trichlorofluoromethane	3.530	101	66118	18.553	ug/l	95
8) Diethyl Ether	3.989	74	25973	14.834	ug/l	85
9) 1,1,2-Trichlorotrifluo...	4.395	101	42899	16.237	ug/l	69
10) 1,1-Dichloroethene	4.365	96	39401	14.960	ug/l	95
11) Methyl Iodide	4.618	142	44964	19.056	ug/l	88
12) Methyl Acetate	5.042	43	59065	14.297	ug/l	99
13) Acrolein	4.206	56	68693	108.213	ug/l	98
14) Acrylonitrile	5.742	53	130117	67.525	ug/l	96
15) Acetone	4.448	58	41585	73.982	ug/l	88
16) Carbon Disulfide	4.742	76	102627	13.327	ug/l	97
17) Allyl chloride	5.053	41	49345	11.359	ug/l	95
18) Methylene Chloride	5.300	84	50036	16.399	ug/l	91
19) trans-1,2-Dichloroethene	5.812	96	44108	15.314	ug/l	92
20) Diisopropyl ether	6.683	45	120093	13.030	ug/l	96
21) 1,1-Dichloroethane	6.583	63	79972	14.518	ug/l	96
22) cis-1,2-Dichloroethene	7.500	96	55036	16.418	ug/l	92
23) tert-Butyl Alcohol	5.536	59	51657	71.282	ug/l #	100
24) Methyl tert-Butyl Ether	5.818	73	147683	15.988	ug/l	99
25) Chloroform	7.971	83	91627	17.363	ug/l	92
26) Cyclohexane	8.265	56	56751	12.395	ug/l #	86
29) 1,1-Dichloropropene	8.383	75	56706	17.055	ug/l	98
30) 2-Butanone	7.489	43	174754	77.914	ug/l #	91
31) 2,2-Dichloropropane	7.500	77	75667	18.852	ug/l	99
32) 1,1,1-Trichloroethane	8.177	97	80528	20.731	ug/l	96
33) Carbon Tetrachloride	8.371	117	68065	20.822	ug/l	90
34) Benzene	8.612	78	184295	17.496	ug/l	98
35) Methacrylonitrile	7.788	41	32474	14.367	ug/l #	70
36) 1,2-Dichloroethane	8.677	62	68912	20.248	ug/l	99
37) Trichloroethene	9.353	130	46707	19.224	ug/l	79
38) Methylcyclohexane	9.600	83	60079	15.748	ug/l	94
39) 1,2-Dichloropropane	9.624	63	45815	17.329	ug/l	98
40) Dibromomethane	9.706	93	39225	21.819	ug/l	95
41) Bromodichloromethane	9.888	83	71521	19.710	ug/l	98
42) Vinyl Acetate	6.618	43	557843	76.469	ug/l #	94

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071025\
Data File : VN087318.D
Acq On : 10 Jul 2025 11:53
Operator : JC\MD
Sample : VN0710WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 11 01:08:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:49:56 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0710WBSD01

Manual Integrations APPROVED

Reviewed By :John Carlone 07/11/2025
Supervised By :Mahesh Dadoda 07/14/2025

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
43) Ethyl Acetate	7.571	43	69979	17.283 ug/l	97
44) Isopropyl Acetate	8.694	43	105647	16.015 ug/l	94
45) 1,4-Dioxane	9.706	88	16279	364.796 ug/l #	82
46) Methyl methacrylate	9.688	41	46575	15.187 ug/l	89
47) n-amyl Acetate	12.535	43	59414m	14.731 ug/l	
48) t-1,3-Dichloropropene	10.835	75	74747	18.477 ug/l	95
49) cis-1,3-Dichloropropene	10.312	75	75850	17.637 ug/l	96
50) 1,1,2-Trichloroethane	11.018	97	50939	19.947 ug/l	94
51) Ethyl methacrylate	10.882	69	60712	15.620 ug/l	93
52) 1,3-Dichloropropane	11.165	76	80260	18.306 ug/l	99
53) Dibromochloromethane	11.359	129	58101	21.674 ug/l	100
54) 1,2-Dibromoethane	11.471	107	53907	20.460 ug/l	97
55) 2-Chloroethyl vinyl ether	10.165	63	159599	71.634 ug/l	94
56) Bromoform	12.576	173	40144	21.784 ug/l	98
58) 4-Methyl-2-Pentanone	10.447	43	323835	78.031 ug/l	98
59) 2-Hexanone	11.206	43	186329	69.530 ug/l	97
61) Tetrachloroethene	11.106	164	39473	19.308 ug/l	94
62) Toluene	10.629	91	209457	17.965 ug/l	99
64) Chlorobenzene	11.888	112	142509	19.162 ug/l	98
65) 1,1,1,2-Tetrachloroethane	11.959	131	51088	20.790 ug/l	95
66) Ethyl Benzene	11.965	91	223351	17.502 ug/l	94
67) m/p-Xylenes	12.071	106	180696	36.950 ug/l	95
68) o-Xylene	12.400	106	86642	18.571 ug/l	94
69) Styrene	12.412	104	147043	18.358 ug/l	98
70) Isopropylbenzene	12.694	105	215183	18.519 ug/l	99
71) 1,1,2,2-Tetrachloroethane	12.935	83	78763	18.832 ug/l	96
72) 1,2,3-Trichloropropane	12.994	75	77598m	21.515 ug/l	
73) Bromobenzene	12.982	156	57731	20.482 ug/l	85
74) n-propylbenzene	13.035	91	263560	18.567 ug/l	95
75) 2-Chlorotoluene	13.123	91	160616	18.728 ug/l	92
76) 1,3,5-Trimethylbenzene	13.170	105	185472	19.607 ug/l	99
77) t-1,4-Dichloro-2-butene	12.735	75	26867	16.794 ug/l	94
78) 4-Chlorotoluene	13.218	91	168398	19.172 ug/l	94
79) tert-butylbenzene	13.435	119	159746	20.090 ug/l	98
80) 1,2,4-Trimethylbenzene	13.482	105	188426	19.837 ug/l	100
81) sec-Butylbenzene	13.612	105	225155	19.479 ug/l	95
82) p-Isopropyltoluene	13.729	119	195037	20.276 ug/l	98
83) 1,3-Dichlorobenzene	13.735	146	115110	21.208 ug/l	99
84) 1,4-Dichlorobenzene	13.812	146	115357	21.118 ug/l	99
85) n-Butylbenzene	14.053	91	162676	18.536 ug/l	98
86) Hexachloroethane	14.335	117	37956	20.846 ug/l	99
87) 1,2-Dichlorobenzene	14.106	146	112151	21.914 ug/l	98
88) 1,2-Dibromo-3-Chloropr...	14.717	75	19078	20.258 ug/l	92
89) 1,2,4-Trichlorobenzene	15.835	180	58754	20.292 ug/l	98
90) Hexachlorobutadiene	15.500	225	16592	19.311 ug/l	93
91) Naphthalene	15.635	128	217054	19.047 ug/l	100
92) 1,2,3-Trichlorobenzene	15.835	180	58754	20.292 ug/l	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

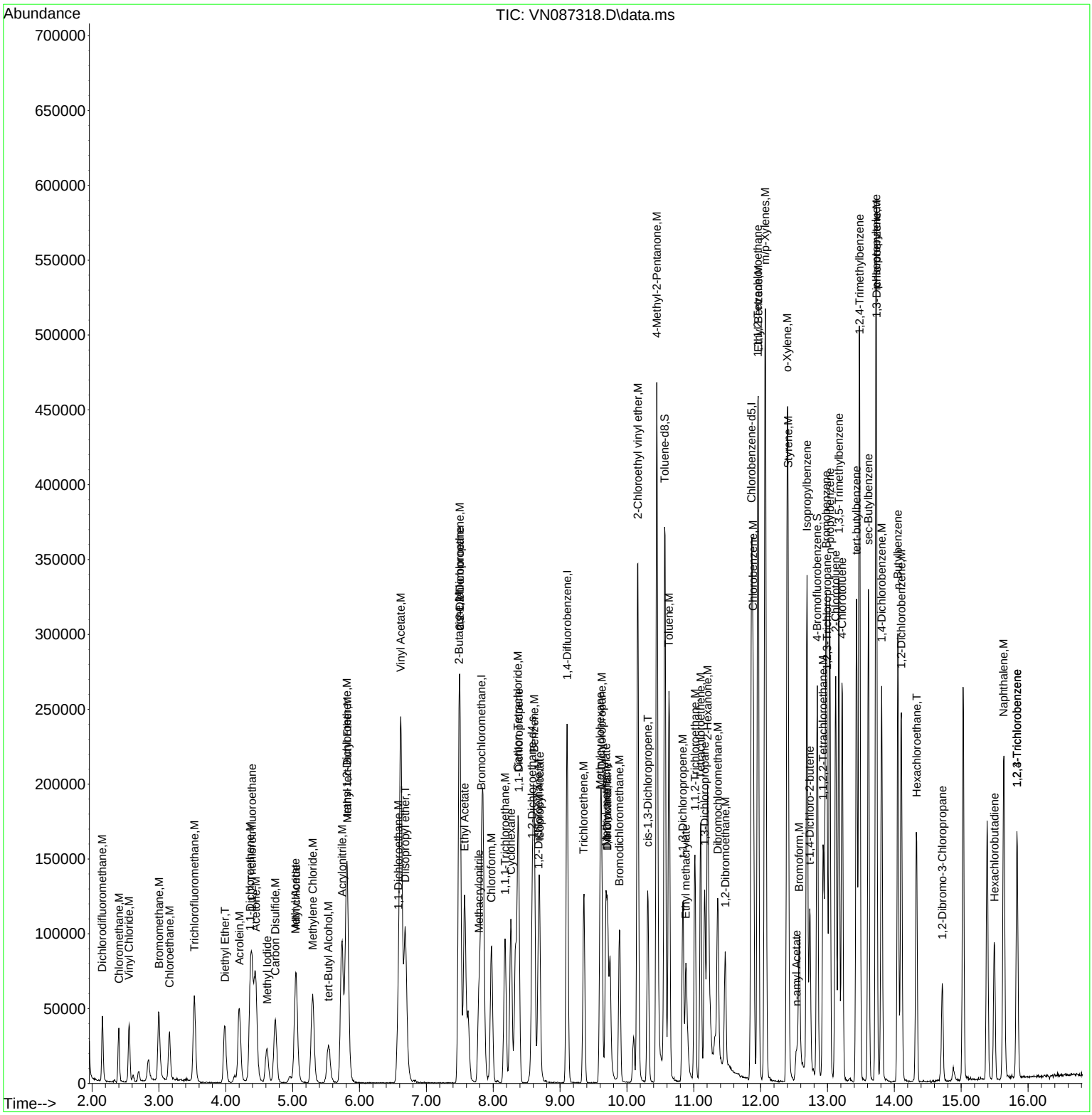
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071025\
Data File : VN087318.D
Acq On : 10 Jul 2025 11:53
Operator : JC\MD
Sample : VN0710WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 11 01:08:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:49:56 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0710WBSD01

Manual Integrations APPROVED

Reviewed By :John Carlone 07/11/2025
Supervised By :Mahesh Dadoda 07/14/2025



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

Manual Integration Report

Sequence:	VN062525	Instrument	MSVOA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC005	VN087162.D	1,2,3-Trichloropropane	JOHN	6/25/2025 3:54:52 PM	MMDadoda	6/26/2025 2:39:55 PM	Peak Integrated by Software
VSTDICC005	VN087162.D	2-Hexanone	JOHN	6/25/2025 3:54:52 PM	MMDadoda	6/26/2025 2:39:55 PM	Peak Integrated by Software
VSTDICC005	VN087162.D	Carbon Tetrachloride	JOHN	6/25/2025 3:54:52 PM	MMDadoda	6/26/2025 2:39:55 PM	Peak Integrated by Software
VSTDICC005	VN087162.D	Ethyl Acetate	JOHN	6/25/2025 3:54:52 PM	MMDadoda	6/26/2025 2:39:55 PM	Peak Integrated by Software
VSTDICC005	VN087162.D	Ethyl methacrylate	JOHN	6/25/2025 3:54:52 PM	MMDadoda	6/26/2025 2:39:55 PM	Peak Integrated by Software
VSTDICC005	VN087162.D	Methacrylonitrile	JOHN	6/25/2025 3:54:52 PM	MMDadoda	6/26/2025 2:39:55 PM	Peak Integrated by Software
VSTDICC005	VN087162.D	n-amyl Acetate	JOHN	6/25/2025 3:54:52 PM	MMDadoda	6/26/2025 2:39:55 PM	Peak Integrated by Software
VSTDICC005	VN087162.D	tert-Butyl Alcohol	JOHN	6/25/2025 3:54:52 PM	MMDadoda	6/26/2025 2:39:55 PM	Peak Integrated by Software
VSTDICCC020	VN087163.D	1,2,3-Trichloropropane	JOHN	6/25/2025 3:54:56 PM	MMDadoda	6/26/2025 2:39:57 PM	Peak Integrated by Software
VSTDICCC020	VN087163.D	n-amyl Acetate	JOHN	6/25/2025 3:54:56 PM	MMDadoda	6/26/2025 2:39:57 PM	Peak Integrated by Software
VSTDICC050	VN087164.D	1,2,3-Trichloropropane	JOHN	6/25/2025 3:55:01 PM	MMDadoda	6/26/2025 2:40:07 PM	Peak Integrated by Software
VSTDICC100	VN087165.D	1,2,3-Trichloropropane	JOHN	6/25/2025 3:55:06 PM	MMDadoda	6/26/2025 2:40:11 PM	Peak Integrated by Software
VSTDICC150	VN087166.D	1,2,3-Trichloropropane	JOHN	6/25/2025 3:55:12 PM	MMDadoda	6/26/2025 2:40:18 PM	Peak Integrated by Software

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

Manual Integration Report

Sequence:	VN062525	Instrument	MSVOA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICV020	VN087168.D	1,2,3-Trichloropropane	JOHN	6/25/2025 3:55:16 PM	MMDadoda	6/26/2025 2:40:24 PM	Peak Integrated by Software
VSTDICV020	VN087168.D	n-amyl Acetate	JOHN	6/25/2025 3:55:16 PM	MMDadoda	6/26/2025 2:40:24 PM	Peak Integrated by Software
VSTDCCC020	VN087179.D	1,2,3-Trichloropropane	JOHN	6/26/2025 8:29:10 AM	MMDadoda	6/26/2025 2:40:36 PM	Peak Integrated by Software
VSTDCCC020	VN087179.D	n-amyl Acetate	JOHN	6/26/2025 8:29:10 AM	MMDadoda	6/26/2025 2:40:36 PM	Peak Integrated by Software

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

Manual Integration Report

Sequence:	VN071025	Instrument	MSVOA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC020	VN087316.D	1,1,2-Trichlorotrifluoroethane	JOHN	7/11/2025 8:29:54 AM	MMDadoda	7/14/2025 7:39:49 AM	Peak Integrated by Software
VSTDCCC020	VN087316.D	1,2,3-Trichloropropane	JOHN	7/11/2025 8:29:54 AM	MMDadoda	7/14/2025 7:39:49 AM	Peak Integrated by Software
VSTDCCC020	VN087316.D	n-amyl Acetate	JOHN	7/11/2025 8:29:54 AM	MMDadoda	7/14/2025 7:39:49 AM	Peak Integrated by Software
VN0710WBS01	VN087317.D	1,2,3-Trichloropropane	JOHN	7/11/2025 8:30:08 AM	MMDadoda	7/14/2025 7:42:11 AM	Peak Integrated by Software
VN0710WBS01	VN087317.D	n-amyl Acetate	JOHN	7/11/2025 8:30:08 AM	MMDadoda	7/14/2025 7:42:11 AM	Peak Integrated by Software
VN0710WBSD01	VN087318.D	1,2,3-Trichloropropane	JOHN	7/11/2025 8:30:13 AM	MMDadoda	7/14/2025 7:42:15 AM	Peak Integrated by Software
VN0710WBSD01	VN087318.D	n-amyl Acetate	JOHN	7/11/2025 8:30:13 AM	MMDadoda	7/14/2025 7:42:15 AM	Peak Integrated by Software
Q2554-03	VN087322.D	1,4-Dioxane	JOHN	7/11/2025 8:30:35 AM	MMDadoda	7/14/2025 7:42:16 AM	Peak Integrated by Software
VSTDCCC020	VN087326.D	1,1,2-Trichlorotrifluoroethane	JOHN	7/11/2025 8:30:21 AM	MMDadoda	7/14/2025 7:42:21 AM	Peak Integrated by Software
VSTDCCC020	VN087326.D	1,2,3-Trichloropropane	JOHN	7/11/2025 8:30:21 AM	MMDadoda	7/14/2025 7:42:21 AM	Peak Integrated by Software
VSTDCCC020	VN087326.D	n-amyl Acetate	JOHN	7/11/2025 8:30:21 AM	MMDadoda	7/14/2025 7:42:21 AM	Peak Integrated by Software

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

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN062525

Review By	John Carlone	Review On	6/26/2025 8:30:28 AM		
Supervise By	Mahesh Dadoda	Supervise On	6/26/2025 2:41:09 PM		
SubDirectory	VN062525	HP Acquire Method		HP Processing Method	624N062525W.M

STD. NAME	STD REF.#
Tune/Reschk	VP134497
Initial Calibration Stds	VP134518,VP134519,VP134520,VP134521,VP134522
CCC	VP134498,VP134524,VP134525
Internal Standard/PEM	
ICV/I.BLK	VP134523
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VN087161.D	25 Jun 2025 08:25	JC\MD	Ok
2	VSTDICC005	VN087162.D	25 Jun 2025 08:59	JC\MD	Ok,M
3	VSTDICCC020	VN087163.D	25 Jun 2025 09:20	JC\MD	Ok,M
4	VSTDICC050	VN087164.D	25 Jun 2025 09:41	JC\MD	Ok,M
5	VSTDICC100	VN087165.D	25 Jun 2025 10:03	JC\MD	Ok,M
6	VSTDICC150	VN087166.D	25 Jun 2025 10:24	JC\MD	Ok,M
7	IBLK	VN087167.D	25 Jun 2025 10:46	JC\MD	Ok
8	VSTDICV020	VN087168.D	25 Jun 2025 11:08	JC\MD	Ok,M
9	VN0625WBS01	VN087169.D	25 Jun 2025 11:41	JC\MD	Ok,M
10	VN0625WBSD01	VN087170.D	25 Jun 2025 12:15	JC\MD	Ok,M
11	VN0625WBL01	VN087171.D	25 Jun 2025 12:36	JC\MD	Ok
12	Q2349-01	VN087172.D	25 Jun 2025 13:11	JC\MD	Dilution
13	Q2349-04	VN087173.D	25 Jun 2025 13:33	JC\MD	Dilution
14	Q2349-01DL	VN087174.D	25 Jun 2025 13:54	JC\MD	Ok
15	Q2349-04DL	VN087175.D	25 Jun 2025 14:15	JC\MD	Ok
16	IBLK	VN087176.D	25 Jun 2025 14:37	JC\MD	Ok
17	Q2126-07 2.5PPB	VN087177.D	25 Jun 2025 14:58	JC\MD	Ok,M
18	Q2126-08 5.0PPB	VN087178.D	25 Jun 2025 15:20	JC\MD	Ok,M
19	VSTDCCC020	VN087179.D	25 Jun 2025 16:12	JC\MD	Ok,M

M : Manual Integration

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

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN071025

Review By	John Carlone	Review On	7/11/2025 8:38:40 AM		
Supervise By	Mahesh Dadoda	Supervise On	7/14/2025 7:42:43 AM		
SubDirectory	VN071025	HP Acquire Method		HP Processing Method	624N062525W.M

STD. NAME	STD REF.#
Tune/Reschk	VP134719
Initial Calibration Stds	
CCC	VP134720,VP134721
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VN087315.D	10 Jul 2025 08:49	JC\MD	Ok
2	VSTDCCC020	VN087316.D	10 Jul 2025 10:41	JC\MD	Ok,M
3	VN0710WBS01	VN087317.D	10 Jul 2025 11:16	JC\MD	Ok,M
4	VN0710WBSD01	VN087318.D	10 Jul 2025 11:53	JC\MD	Ok,M
5	VN0710WBL01	VN087319.D	10 Jul 2025 12:26	JC\MD	Ok
6	Q2554-02	VN087320.D	10 Jul 2025 13:06	JC\MD	Ok
7	Q2554-04	VN087321.D	10 Jul 2025 13:27	JC\MD	Ok
8	Q2554-03	VN087322.D	10 Jul 2025 13:48	JC\MD	Ok,M
9	Q2554-01	VN087323.D	10 Jul 2025 14:10	JC\MD	ReRun
10	IBLK	VN087324.D	10 Jul 2025 14:31	JC\MD	Ok
11	Q2554-01RE	VN087325.D	10 Jul 2025 14:54	JC\MD	Confirms
12	VSTDCCC020	VN087326.D	10 Jul 2025 15:56	JC\MD	Ok,M

M : Manual Integration

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Fax : 908 789 8922

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN062525

Review By	John Carlone	Review On	6/26/2025 8:30:28 AM		
Supervise By	Mahesh Dadoda	Supervise On	6/26/2025 2:41:09 PM		
SubDirectory	VN062525	HP Acquire Method		HP Processing Method	624N062525W.M

STD. NAME	STD REF.#
Tune/Reschk	VP134497
Initial Calibration Stds	VP134518,VP134519,VP134520,VP134521,VP134522
CCC	VP134498,VP134524,VP134525
Internal Standard/PEM	
ICV/I.BLK	VP134523
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VN087161.D	25 Jun 2025 08:25		JC\MD	Ok
2	VSTDICC005	VSTDICC005	VN087162.D	25 Jun 2025 08:59		JC\MD	Ok,M
3	VSTDICCC020	VSTDICCC020	VN087163.D	25 Jun 2025 09:20		JC\MD	Ok,M
4	VSTDICC050	VSTDICC050	VN087164.D	25 Jun 2025 09:41		JC\MD	Ok,M
5	VSTDICC100	VSTDICC100	VN087165.D	25 Jun 2025 10:03		JC\MD	Ok,M
6	VSTDICC150	VSTDICC150	VN087166.D	25 Jun 2025 10:24		JC\MD	Ok,M
7	IBLK	IBLK	VN087167.D	25 Jun 2025 10:46		JC\MD	Ok
8	VSTDICV020	ICVVN062525	VN087168.D	25 Jun 2025 11:08	pH#Lot#V12668	JC\MD	Ok,M
9	VN0625WBS01	VN0625WBS01	VN087169.D	25 Jun 2025 11:41		JC\MD	Ok,M
10	VN0625WBSD01	VN0625WBSD01	VN087170.D	25 Jun 2025 12:15		JC\MD	Ok,M
11	VN0625WBL01	VN0625WBL01	VN087171.D	25 Jun 2025 12:36		JC\MD	Ok
12	Q2349-01	001-WILLETS-PT-BLVD	VN087172.D	25 Jun 2025 13:11	vial A pH<2 need 20X	JC\MD	Dilution
13	Q2349-04	002-35TH-AVE(JUNE)	VN087173.D	25 Jun 2025 13:33	vial A pH<2 need 20X	JC\MD	Dilution
14	Q2349-01DL	001-WILLETS-PT-BLVD	VN087174.D	25 Jun 2025 13:54	vial B pH<2	JC\MD	Ok
15	Q2349-04DL	002-35TH-AVE(JUNE)D	VN087175.D	25 Jun 2025 14:15	vial B pH<2	JC\MD	Ok
16	IBLK	IBLK	VN087176.D	25 Jun 2025 14:37		JC\MD	Ok
17	Q2126-07 2.5PPB	LOD-MDL-WATER-01-(	VN087177.D	25 Jun 2025 14:58		JC\MD	Ok,M
18	Q2126-08 5.0PPB	LOQ-WATER-02-QT2-2	VN087178.D	25 Jun 2025 15:20		JC\MD	Ok,M

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Fax : 908 789 8922

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN062525

Review By	John Carlone	Review On	6/26/2025 8:30:28 AM		
Supervise By	Mahesh Dadoda	Supervise On	6/26/2025 2:41:09 PM		
SubDirectory	VN062525	HP Acquire Method		HP Processing Method	624N062525W.M

STD. NAME	STD REF.#
Tune/Reschk	VP134497
Initial Calibration Stds	VP134518,VP134519,VP134520,VP134521,VP134522
CCC	VP134498,VP134524,VP134525
Internal Standard/PEM	
ICV/I.BLK	VP134523
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

19	VSTDCCC020	VSTDCCC020EC	VN087179.D	25 Jun 2025 16:12		JC\MD	Ok,M

M : Manual Integration

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

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN071025

Review By	John Carlone	Review On	7/11/2025 8:38:40 AM		
Supervise By	Mahesh Dadoda	Supervise On	7/14/2025 7:42:43 AM		
SubDirectory	VN071025	HP Acquire Method		HP Processing Method	624N062525W.M

STD. NAME	STD REF.#
Tune/Reschk	VP134719
Initial Calibration Stds	
CCC	VP134720,VP134721
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VN087315.D	10 Jul 2025 08:49		JC\MD	Ok
2	VSTDCCC020	VSTDCCC020	VN087316.D	10 Jul 2025 10:41	pH#Lot#V12668	JC\MD	Ok,M
3	VN0710WBS01	VN0710WBS01	VN087317.D	10 Jul 2025 11:16		JC\MD	Ok,M
4	VN0710WBSD01	VN0710WBSD01	VN087318.D	10 Jul 2025 11:53		JC\MD	Ok,M
5	VN0710WBL01	VN0710WBL01	VN087319.D	10 Jul 2025 12:26		JC\MD	Ok
6	Q2554-02	250709059-10 Trip blar	VN087320.D	10 Jul 2025 13:06	vial B pH#6.0 TB	JC\MD	Ok
7	Q2554-04	250709059-11 Trip blan	VN087321.D	10 Jul 2025 13:27	vial B pH#6.0 TB	JC\MD	Ok
8	Q2554-03	250709104-01 VOA	VN087322.D	10 Jul 2025 13:48	vial B pH#6.0	JC\MD	Ok,M
9	Q2554-01	250709071-01 VOA	VN087323.D	10 Jul 2025 14:10	vial B pH#6.0 Surrogate Fail	JC\MD	ReRun
10	IBLK	IBLK	VN087324.D	10 Jul 2025 14:31		JC\MD	Ok
11	Q2554-01RE	250709071-01 VOARE	VN087325.D	10 Jul 2025 14:54	vial C pH#6.0 Surrogate Fail	JC\MD	Confirms
12	VSTDCCC020	VSTDCCC020EC	VN087326.D	10 Jul 2025 15:56		JC\MD	Ok,M

M : Manual Integration

SHIPPING DOCUMENTS

2 2554

Garden State Laboratories, Inc.

Main Lab - 410 Hillside Avenue, Hillside NJ 07205 - NJDEP Lab Cert. #20044
Jersey Shore Lab - 54 Main Street, Waretown NJ 08758 - NJDEP Lab Cert. #15037

Tel. 800-273-8901/908-688-8900 Fax 908-688-8966 www.gslabs.com info@gslabs.com

Office and Drop off Locations

North Jersey Office: 225 Sparta Avenue, Sparta, NJ 07871 Tel. 973-729-1827

West Jersey Office: 2050 Route 31 North, Glen Gardner, NJ 08826 Tel. 908-537-7414

FOR SAMPLE RECEIVING USE ONLY

DATE/TIME/TEMP. REC'D AT LAB:

Page _____ of _____

GSL CLIENT #

MICRO #

CHEM. #

SAMPLE REC'D BY:

- ☐ GSL FIELD SAMPLER/PICK-UP
- ☐ PICK-UP AT DROP OFF LOCATION
- ☐ DELIVERED BY CLIENT

CHAIN OF CUSTODY RECORD - PRESS HARD AND PRINT CLEARLY - USE BALL POINT PEN

IMPORTANT: PRINTED NAMES & SIGNATURES ARE REQUIRED

CLIENT INFORMATION (REPORT TO BE SENT TO)

Name: Garden State Laboratories, Inc. Contact/Authorized by: Robert Szot

Mailing Address: 410 Hillside Ave. Phone: 908-688-8900 EXT 129

City/State/Zip: Hilside, NJ. 07205 Email: rszot@gslabs.com

SAMPLE INFORMATION

SAMPLE TYPE: WASTE WATER

SAMPLE LOCATION: ACUA SW LANDFILL LEACHATE TANKS

Grab	Comp	SAMPLE ID	SAMPLE COLLECTION Date	Time	AM	PM	ANALYSIS REQUIRED (Print Legibly) ☐ List attached Total Pages ____	CONTAINER INFORMATION No.	Type*	Size	Pres.*
		* DM 7/9/25									
X	X*	250709071-01 VOA	7/9/25	9:25			EPA 8260 TCL LIST + Acrolien & Acrylonitrile	3	V	40mL	A
X		250709059-10 Trip blank					EPA 8260 TCL LIST + Acrolien & Acrylonitrile	2	V	40mL	A
X		250709104-01 VOA	7/9/25	10:42			↓ ↓	3	V	40mL	A
X		250709059-11 Trip blank					↓ ↓	2	V	40mL	A

⇨ *Container Type: P = Plastic G = Glass A = Amber Glass T = Sterile Thio V = Vial Other/Specify: _____

⇨ *Preservation Code: A = Non Preserved B = Sulfuric Acid C = Sodium Hydroxide D = Nitric Acid E = Hydrochloric Acid F = Zinc Acetate G = Sodium Thiosulfate H = Ascorbic Acid I = Cooled Other/Specify: _____

☐ SUBCONTRACTED WORK

TURNAROUND TIME: ☒ Standard ☐ Rush (If RUSH REQUESTED) Rush Due by:

SEND TO: Chem Tech

REPORT FORMAT: ☒ Standard Report ☐ Other/Specify:

☐ Standard Report + E2 PWS ID#:

DATE/TIME:

METHOD OF SHIPMENT: Deliver

PAYMENT INFORMATION

☐ Sampling/Pick-up Fee: $ ☐ Composite Fee: $ ☐ Rush Fee: $ Amount Due: $

Payment Method: ☐ Credit Card Type: ☐ Check # ☐ Other: See Quote

Note: ATL16

VOA UNPRESERVED DUE TO EFFERVESCENSE - 3 DAY TAT PER JORDAN HEDVAT

SAMPLE CUSTODY EXCHANGES MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION
PLEASE PRINT YOUR NAME LEGIBLY, USE FULL LEGAL SIGNATURE, DATE AND TIME

Sampled by (PRINT):	Signature:	Date/Time:
Client/Client's Representative (PRINT):	Signature:	Date/Time:
1. Received/Relinquished by (PRINT): Megan Howarth	Signature: Mga Howarth	Date/Time: 7/9/25 17:00
2. Received/Relinquished by (PRINT): Matt JACKSON	Signature: Matt Jackson	Date/Time: 7/10/25 9:14AM

Jahmir Davis

7-10-25 0914

3.4 C

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

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488

QA Control Code: A2070148

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q2554 GARD04
Client Name : Garden State Laboratories, I
Client Contact : Sharon Ercoliani
Invoice Name : Garden State Laboratories, I
Invoice Contact : Sharon Ercoliani

Order Date : 7/10/2025 9:19:00 AM
Project Name : Waste Water 2025
Receive DateTime : 7/10/2025 9:14:00 AM
Purchase Order :

Project Mgr :
Report Type : Level I
EDD Type : EXCEL NOCLEANUP
Hard Copy Date :
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q2554-01	250709071-01 VOA	Water	07/09/2025	09:25					
					VOCMS Group1		624.1		10 Bus. Days
					VOCMS Group2		8260-Low		10 Bus. Days
Q2554-02	250709059-10 Trip blank	Water	07/09/2025	09:25					
					VOCMS Group1		624.1		10 Bus. Days
					VOCMS Group2		8260-Low		10 Bus. Days
Q2554-03	250709104-01 VOA	Water	07/09/2025	10:42					
					VOCMS Group1		624.1		10 Bus. Days
					VOCMS Group2		8260-Low		10 Bus. Days
Q2554-04	250709059-11 Trip blank	Water	07/09/2025	10:42					
					VOCMS Group1		624.1		10 Bus. Days
					VOCMS Group2		8260-Low		10 Bus. Days

Alliance CHNICAL GR UP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q2554 GARD04
Client Name : Garden State Laboratories, I
Client Contact : Sharon Ercoliani
Invoice Name : Garden State Laboratories, I
Invoice Contact : Sharon Ercoliani

Order Date : 7/10/2025 9:19:00 AM
Project Name : Waste Water 2025
Receive DateTime : 7/10/2025 9:14:00 AM
Purchase Order :

Project Mgr :
Report Type : Level 1
EDD Type : EXCEL NOCLEANUP
Hard Copy Date :
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES

Relinguished By :
Date / Time : 7-10-25 1000

Received By : TC
Date / Time : 7/10/25 1000
Storage Area : VOA Refridgerator Room