



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

## Cover Page

**Order ID :** Q1013

**Project ID :** Transfer Station-SPDES

**Client :** Tully Environmental, Inc

**Lab Sample Number**

Q1013-01  
Q1013-02

**Client Sample Number**

001 WILLETS PT BLVD (JAN)  
002 35TH AVE (JAN)

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: 1/10/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012



## **CASE NARRATIVE**

**Tully Environmental, Inc**  
**Project Name: Transfer Station-SPDES**  
**Project # N/A**  
**Chemtech Project # Q1013**  
**Test Name: VOC-BTEX**

### **A. Number of Samples and Date of Receipt:**

2 Water samples were received on 01/06/2025.

### **B. Parameters**

According to the Chain of Custody document, the following analyses were requested: Ammonia, BOD5, Metals Group 10, Oil and Grease, TSS and VOC-BTEX. This data package contains results for VOC-BTEX.

### **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 VOC-BTEX was based on method 624.1.

### **D. QA/ QC Samples:**

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

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.”

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



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

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 \_\_\_\_\_

## 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
<b>U</b>	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.
<b>ND</b>	Indicates the analyte was analyzed for, but not detected
<b>J</b>	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>B</b>	Indicates the analyte was found in the blank as well as the sample report as “12 B”.
<b>E</b>	Indicates the analyte ‘s concentration exceeds the calibrated range of the instrument for that specific analysis.
<b>D</b>	This flag identifies all compounds identified in an analysis at a secondary dilution factor.
<b>P</b>	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”.
<b>N</b>	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.
<b>A</b>	This flag indicates that a Tentatively Identified Compound is a suspected aldol-condensation product.
<b>Q</b>	Indicates the LCS did not meet the control limits requirements

**APPENDIX A**

**QA REVIEW GENERAL DOCUMENTATION**

Project #: Q1013

Completed

For thorough review, the report must have the following:

**GENERAL:**

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

✓

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

✓

Is the chain of custody signed and complete

✓

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

✓

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

✓

**COVER PAGE:**

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

✓

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

✓

**CHAIN OF CUSTODY:**

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

✓

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

✓

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

✓

Were the samples received within hold time

✓

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

✓

**ANALYTICAL:**

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

QA Review Signature: PRIYANKA DAVE

Date: 01/10/2025



### LAB CHRONICLE

<b>OrderID:</b> Q1013	<b>OrderDate:</b> 1/6/2025 7:50:00 AM
<b>Client:</b> Tully Environmental, Inc	<b>Project:</b> Transfer Station-SPDES
<b>Contact:</b> Dean Devoe	<b>Location:</b> M11,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1013-01	001 WILLETS PT BLVD (JAN)	Water			01/03/25			01/06/25
			VOC-BTEX	624.1			01/07/25	
Q1013-02	002 35TH AVE (JAN)	Water			01/03/25			01/06/25
			VOC-BTEX	624.1			01/07/25	



**Hit Summary Sheet**  
SW-846

SDG No.: Q1013

Client: Tully Environmental, Inc

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
<b>Client ID:</b> Q1013-01	<b>001 WILLETS PT BLVD (JAN)</b> 001 WILLETS PT F Water		Toluene	60.8		0.72	5.00	ug/L
			<b>Total Voc :</b>	60.8				
			<b>Total Concentration:</b>	60.8				
<b>Client ID:</b> Q1013-02	<b>002 35TH AVE (JAN)</b> 002 35TH AVE (JA) Water		Toluene	79.7		0.72	5.00	ug/L
			<b>Total Voc :</b>	79.7				
			<b>Total Concentration:</b>	79.7				



# QC SUMMARY

### Surrogate Summary

SDG No.: Q1013

Client: Tully Environmental, Inc

Analytical Method: SW624.1

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits	
						Low	High
Q1013-01	001 WILLETS PT BLVD (JAN)	1,2-Dichloroethane-d4	30	29.9	100	91	110
		Toluene-d8	30	27.4	91	91	112
		4-Bromofluorobenzene	30	25.8	86	63	112
Q1013-02	002 35TH AVE (JAN)	1,2-Dichloroethane-d4	30	29.8	99	91	110
		Toluene-d8	30	27.4	91	91	112
		4-Bromofluorobenzene	30	25.5	85	63	112
VN0107WBL01	VN0107WBL01	1,2-Dichloroethane-d4	30	30.1	100	91	110
		Toluene-d8	30	29.3	98	91	112
		4-Bromofluorobenzene	30	23.2	77	63	112
VN0107WBS01	VN0107WBS01	1,2-Dichloroethane-d4	30	29.2	97	91	110
		Toluene-d8	30	30.7	102	91	112
		4-Bromofluorobenzene	30	29.6	99	63	112
VN0107WBSD01	VN0107WBSD01	1,2-Dichloroethane-d4	30	28.8	96	91	110
		Toluene-d8	30	29.8	99	91	112
		4-Bromofluorobenzene	30	29.8	99	63	112



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

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1013

Client: Tully Environmental, Inc

Analytical Method: SW624.1

Datafile : VN085391.D

---

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VN0107WBS01	Benzene	20	18.3	ug/L	92			65	135	
	Toluene	20	18.4	ug/L	92			70	130	
	Ethyl Benzene	20	17.4	ug/L	87			60	140	
	m/p-Xylenes	40	36.7	ug/L	92			87	111	
	o-Xylene	20	17.5	ug/L	88			87	111	



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

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1013

Client: Tully Environmental, Inc

Analytical Method: SW624.1

Datafile : VN085392.D

---

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits	
									High	RPD
VN0107WBSD01	Benzene	20	20.7	ug/L	104	12		65	135	20
	Toluene	20	20.7	ug/L	104	12		70	130	20
	Ethyl Benzene	20	19.8	ug/L	99	13		60	140	20
	m/p-Xylenes	40	41.9	ug/L	105	13		87	111	20
	o-Xylene	20	20.0	ug/L	100	13		87	111	20

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VN0107WBL01

Lab Name: CHEMTECH

Contract: TULL01

Lab Code: CHEM Case No.: Q1013

SAS No.: Q1013 SDG NO.: Q1013

Lab File ID: VN085393.D

Lab Sample ID: VN0107WBL01

Date Analyzed: 01/07/2025

Time Analyzed: 12:06

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
VN0107WBS01	VN0107WBS01	VN085391.D	01/07/2025
VN0107WBSD01	VN0107WBSD01	VN085392.D	01/07/2025
002 35TH AVE (JAN)	Q1013-02	VN085397.D	01/07/2025
001 WILLETS PT BLVD (JAN)	Q1013-01	VN085398.D	01/07/2025

COMMENTS: \_\_\_\_\_



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

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: TULL01  
 Lab Code: CHEM Case No.: Q1013 SAS No.: Q1013 SDG NO.: Q1013  
 Lab File ID: VN085271.D BFB Injection Date: 12/20/2024  
 Instrument ID: MSVOA\_N BFB Injection Time: 09:21  
 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	24
75	30.0 - 60.0% of mass 95	59.8
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.1
173	Less than 2.0% of mass 174	1.1 ( 1.5 ) 1
174	50.0 - 100.0% of mass 95	73.2
175	5.0 - 9.0% of mass 174	5.9 ( 8 ) 1
176	95.0 - 101.0% of mass 174	71 ( 97 ) 1
177	5.0 - 9.0% of mass 176	4.5 ( 6.4 ) 2

1-Value is % mass 174

2-Value is % mass 176

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDICC005	VSTDICC005	VN085272.D	12/20/2024	10:05
VSTDICCC020	VSTDICCC020	VN085273.D	12/20/2024	10:29
VSTDICC050	VSTDICC050	VN085274.D	12/20/2024	10:53
VSTDICC100	VSTDICC100	VN085275.D	12/20/2024	11:17
VSTDICC150	VSTDICC150	VN085276.D	12/20/2024	11:42



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

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: TULL01  
 Lab Code: CHEM Case No.: Q1013 SAS No.: Q1013 SDG NO.: Q1013  
 Lab File ID: VN085389.D BFB Injection Date: 01/07/2025  
 Instrument ID: MSVOA\_N BFB Injection Time: 09:43  
 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	23.7
75	30.0 - 60.0% of mass 95	57.2
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.8 ( 1.1 ) 1
174	50.0 - 100.0% of mass 95	75.3
175	5.0 - 9.0% of mass 174	6.1 ( 8.1 ) 1
176	95.0 - 101.0% of mass 174	73.4 ( 97.5 ) 1
177	5.0 - 9.0% of mass 176	4.2 ( 5.7 ) 2

1-Value is % mass 174

2-Value is % mass 176

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC020	VSTDCCC020	VN085390.D	01/07/2025	10:30
VN0107WBS01	VN0107WBS01	VN085391.D	01/07/2025	11:07
VN0107WBSD01	VN0107WBSD01	VN085392.D	01/07/2025	11:42
VN0107WBL01	VN0107WBL01	VN085393.D	01/07/2025	12:06
002 35TH AVE (JAN)	Q1013-02	VN085397.D	01/07/2025	13:52
001 WILLETS PT BLVD (JAN)	Q1013-01	VN085398.D	01/07/2025	14:44

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: TULL01  
 Lab Code: CHEM Case No.: Q1013 SAS No.: Q1013 SDG NO.: Q1013  
 Lab File ID: VN085390.D Date Analyzed: 01/07/2025  
 Instrument ID: MSVOA\_N Time Analyzed: 10:30  
 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	28915	7.81	149310	9.09	139056	11.86
UPPER LIMIT	57830	8.306	298620	9.594	278112	12.359
LOWER LIMIT	14457.5	7.306	74655	8.594	69528	11.359
EPA SAMPLE NO.						
001 WILLETS PT BLVD (JAN)	27140	7.81	135904	9.09	130942	11.86
002 35TH AVE (JAN)	26801	7.81	128547	9.09	125648	11.86
VN0107WBL01	26828	7.81	128912	9.09	114923	11.86
VN0107WBS01	29795	7.81	157585	9.09	144288	11.86
VN0107WBSD01	31547	7.81	161684	9.09	151196	11.86

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN010725\  
 Data File : VN085398.D  
 Acq On : 07 Jan 2025 14:44  
 Operator : JC\MD  
 Sample : Q1013-01  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 11 Sample Multiplier: 1

**Instrument :**  
 MSVOA\_N  
**ClientSampleId :**  
 001 WILLETS PT BLVD (JAN)

**Manual Integrations**  
**APPROVED**

Reviewed By : John Carlone 01/08/2025  
 Supervised By : Mahesh Dadoda 01/08/2025

Quant Time: Jan 08 04:18:48 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N122024W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Dec 21 02:03:07 2024  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) Bromochloromethane	7.806	128	27140	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.094	114	135904	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.859	117	130942	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.571	65	71377	29.896	ug/l	0.00
Spiked Amount	30.000	Range 91 - 110	Recovery	=	99.667%	
60) 4-Bromofluorobenzene	12.847	95	54737	25.807	ug/l	0.00
Spiked Amount	30.000	Range 63 - 112	Recovery	=	86.033%	
63) Toluene-d8	10.565	98	174984	27.367	ug/l	0.00
Spiked Amount	30.000	Range 91 - 112	Recovery	=	91.233%	
Target Compounds						
						Qvalue
15) Acetone	4.418	58	12425m	50.862	ug/l	
30) 2-Butanone	7.483	43	10364	8.321	ug/l #	85
58) 4-Methyl-2-Pentanone	10.441	43	7956	2.997	ug/l	96
62) Toluene	10.624	91	488888	60.773	ug/l	99
67) m/p-Xylenes	12.059	106	1147	0.361	ug/l #	69
80) 1,2,4-Trimethylbenzene	13.476	105	4139	0.642	ug/l	90
82) p-Isopropyltoluene	13.729	119	5798	0.920	ug/l	88
91) Naphthalene	15.635	128	3322	0.656	ug/l #	86

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

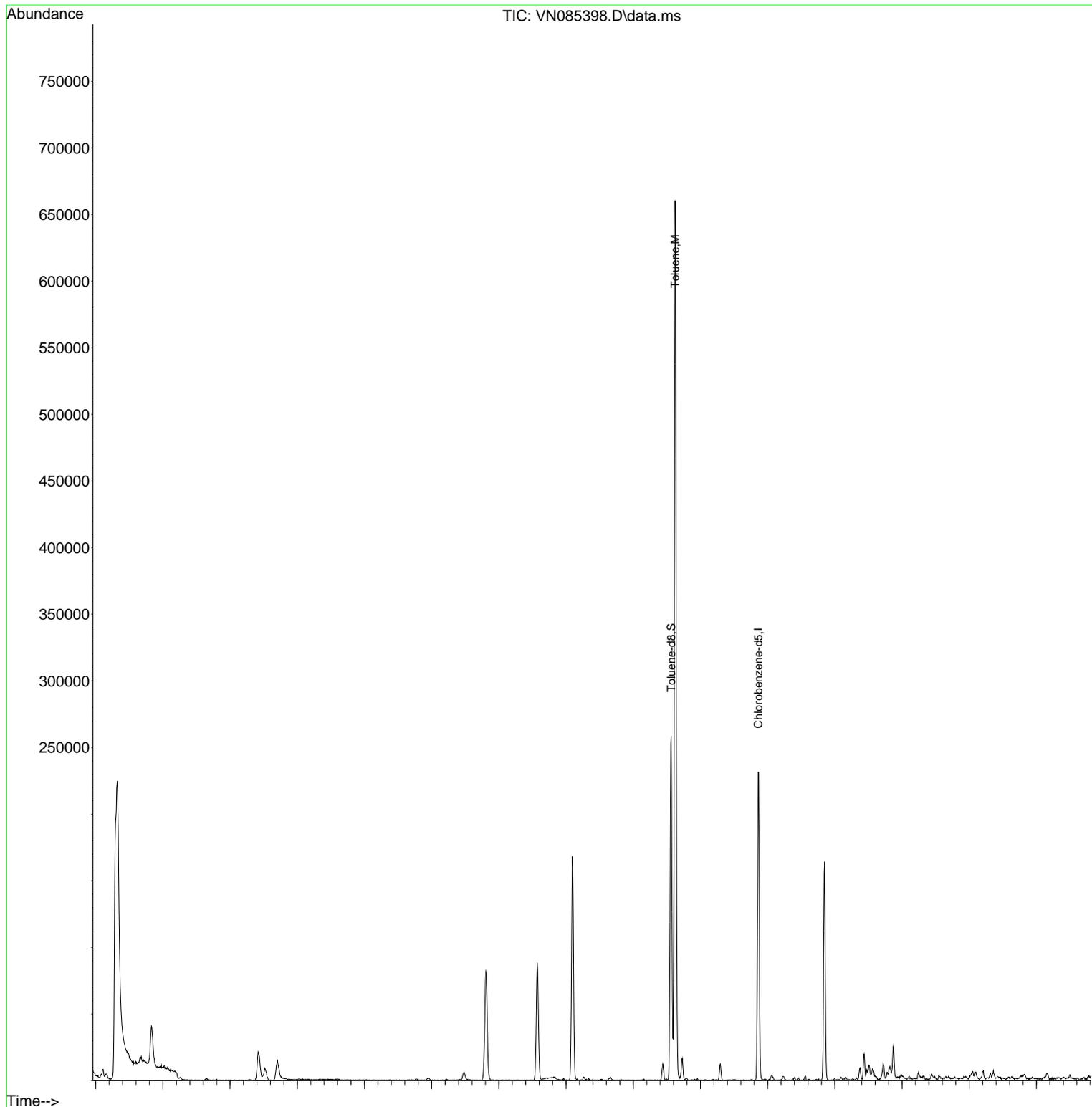
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN010725\  
Data File : VN085398.D  
Acq On : 07 Jan 2025 14:44  
Operator : JC\MD  
Sample : Q1013-01  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 11 Sample Multiplier: 1

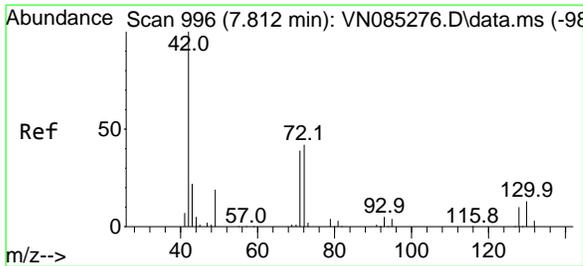
Instrument :  
MSVOA\_N  
ClientSampleId :  
001 WILLETS PT BLVD (JAN)

Manual Integrations  
APPROVED

Reviewed By : John Carlone 01/08/2025  
Supervised By : Mahesh Dadoda 01/08/2025

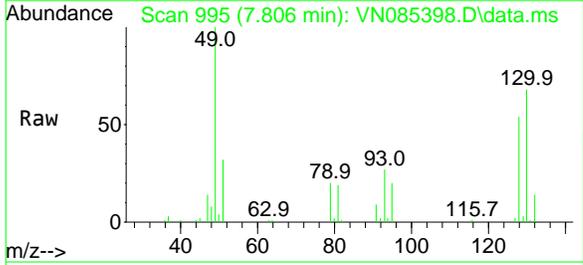
Quant Time: Jan 08 04:18:48 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N122024W.M  
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
QLast Update : Sat Dec 21 02:03:07 2024  
Response via : Initial Calibration





#1  
 Bromochloromethane  
 Concen: 30.000 ug/l  
 RT: 7.806 min Scan# 99  
 Delta R.T. -0.006 min  
 Lab File: VN085398.D  
 Acq: 07 Jan 2025 14:44

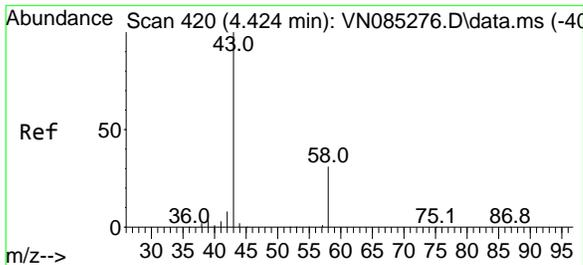
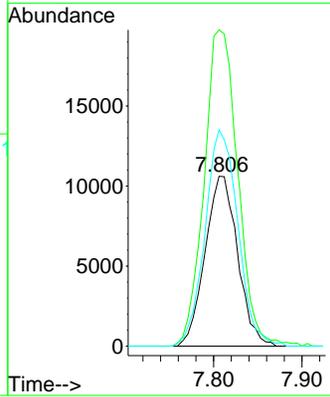
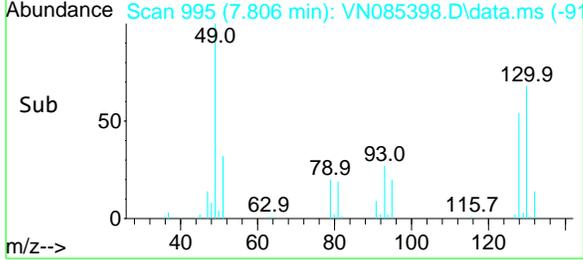
Instrument : MSVOA\_N  
 ClientSampleId : 001 WILLETS PT BLVD (JAN)



Tgt Ion	Ratio	Lower	Upper
128	100		
49	192.5	0.0	497.8
130	128.9	0.0	328.5

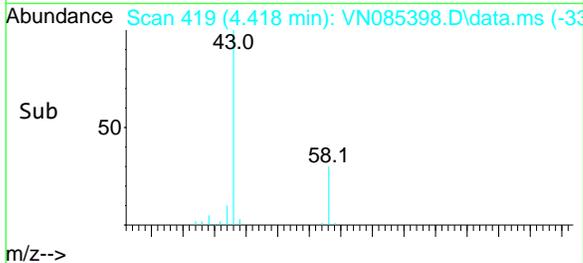
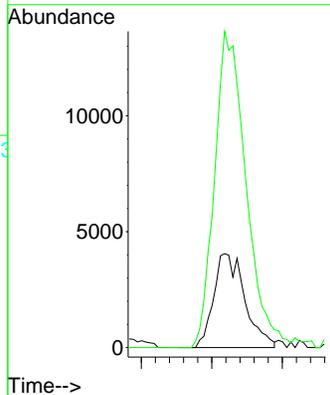
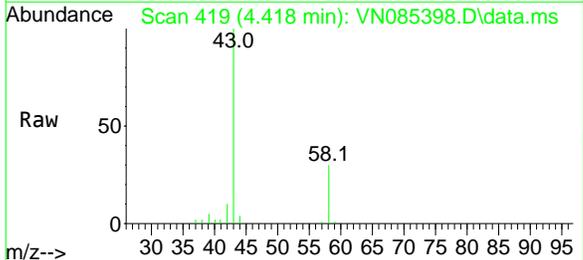
Manual Integrations  
**APPROVED**

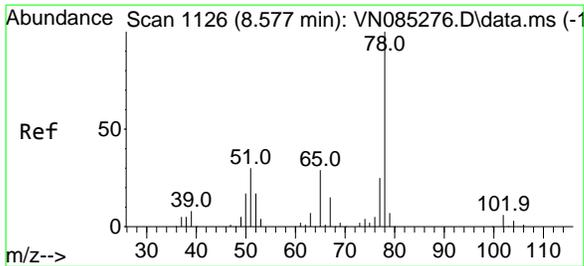
Reviewed By :John Carlone 01/08/2025  
 Supervised By :Mahesh Dadoda 01/08/2025



#15  
 Acetone  
 Concen: 50.862 ug/l m  
 RT: 4.418 min Scan# 419  
 Delta R.T. -0.012 min  
 Lab File: VN085398.D  
 Acq: 07 Jan 2025 14:44

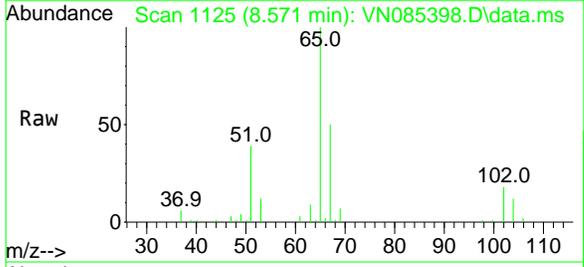
Tgt Ion	Ratio	Lower	Upper
58	100		
43	336.9	258.8	388.2





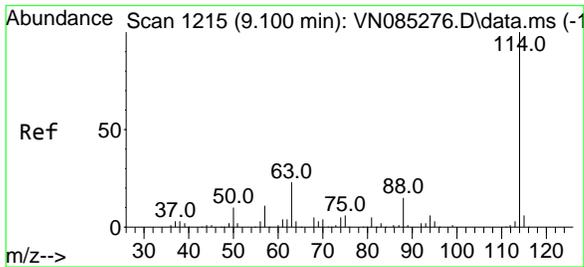
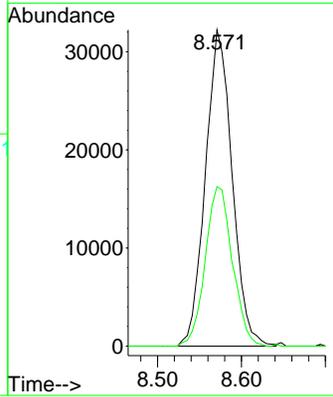
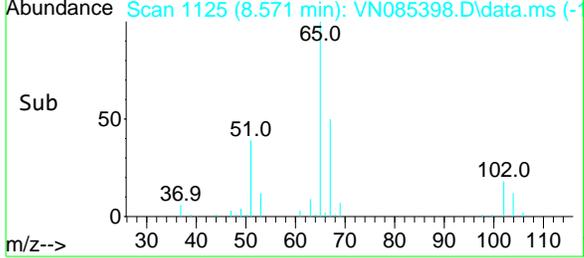
#27  
 1,2-Dichloroethane-d4  
 Concen: 29.896 ug/l  
 RT: 8.571 min Scan# 1125  
 Delta R.T. -0.006 min  
 Lab File: VN085398.D  
 Acq: 07 Jan 2025 14:44

Instrument : MSVOA\_N  
 ClientSampleId : 001 WILLETS PT BLVD (JAN)

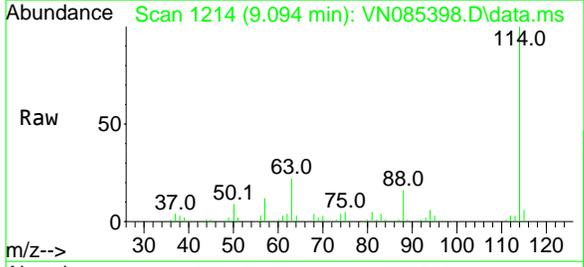


Tgt Ion: 65 Resp: 71377  
 Ion Ratio Lower Upper  
 65 100  
 67 51.2 42.0 63.0

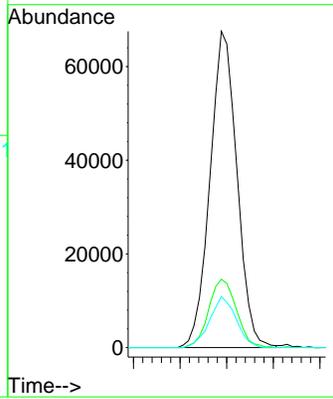
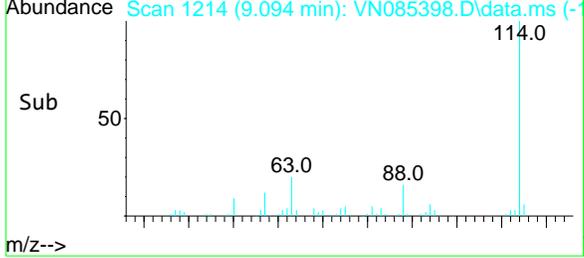
Manual Integrations  
**APPROVED**  
 Reviewed By :John Carlone 01/08/2025  
 Supervised By :Mahesh Dadoda 01/08/2025

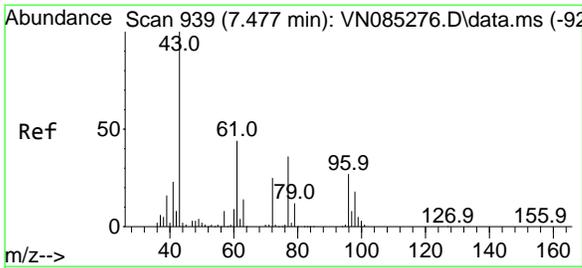


#28  
 1,4-Difluorobenzene  
 Concen: 30.000 ug/l  
 RT: 9.094 min Scan# 1214  
 Delta R.T. -0.006 min  
 Lab File: VN085398.D  
 Acq: 07 Jan 2025 14:44



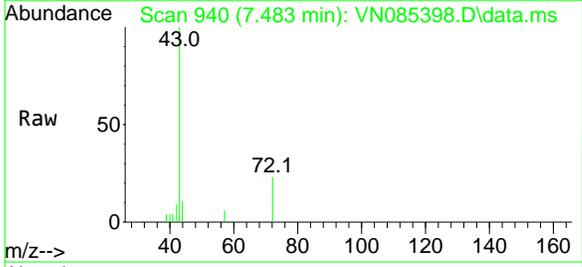
Tgt Ion:114 Resp: 135904  
 Ion Ratio Lower Upper  
 114 100  
 63 22.2 18.0 27.0  
 88 15.8 12.9 19.3





#30  
 2-Butanone  
 Concen: 8.321 ug/l  
 RT: 7.483 min Scan# 94  
 Delta R.T. 0.006 min  
 Lab File: VN085398.D  
 Acq: 07 Jan 2025 14:44

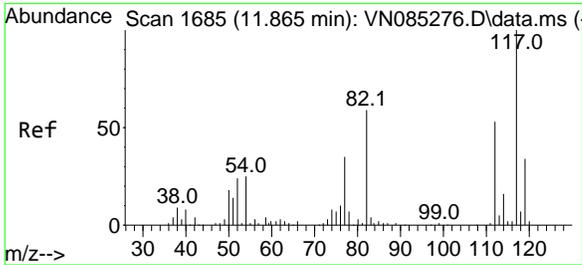
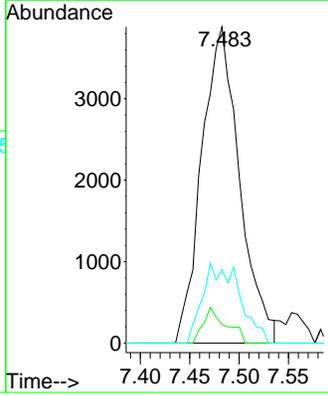
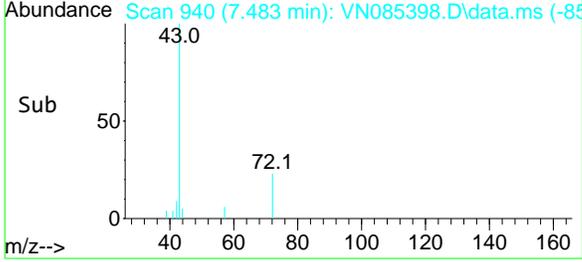
Instrument : MSVOA\_N  
 ClientSampleId : 001 WILLETS PT BLVD (JAN)



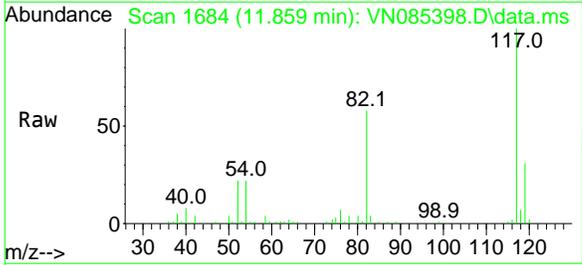
Tgt Ion: 43 Resp: 10364  
 Ion Ratio Lower Upper  
 43 100  
 57 6.1 6.2 9.2#  
 72 16.0 19.9 29.9#

Manual Integrations  
**APPROVED**

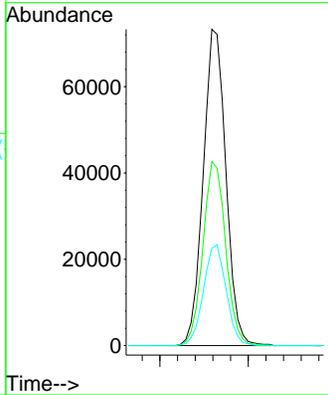
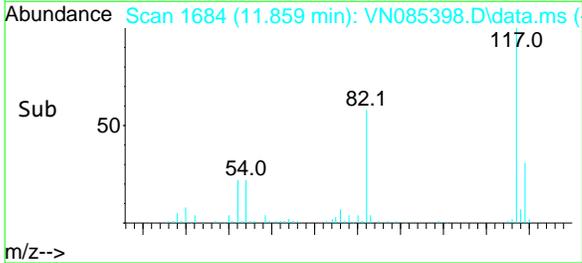
Reviewed By :John Carlone 01/08/2025  
 Supervised By :Mahesh Dadoda 01/08/2025

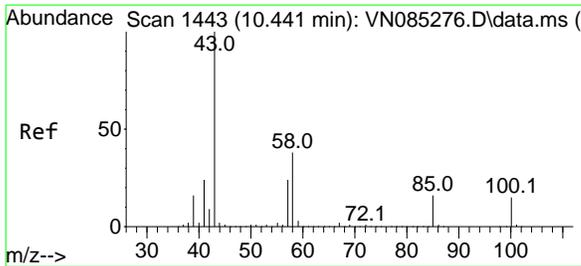


#57  
 Chlorobenzene-d5  
 Concen: 30.000 ug/l  
 RT: 11.859 min Scan# 1684  
 Delta R.T. -0.006 min  
 Lab File: VN085398.D  
 Acq: 07 Jan 2025 14:44



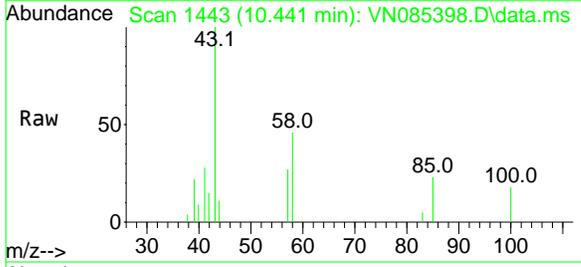
Tgt Ion:117 Resp: 130942  
 Ion Ratio Lower Upper  
 117 100  
 82 58.2 47.4 71.0  
 119 31.9 25.3 37.9





#58  
 4-Methyl-2-Pentanone  
 Concen: 2.997 ug/l  
 RT: 10.441 min Scan# 1443  
 Delta R.T. 0.000 min  
 Lab File: VN085398.D  
 Acq: 07 Jan 2025 14:44

Instrument : MSVOA\_N  
 ClientSampleId : 001 WILLETS PT BLVD (JAN)

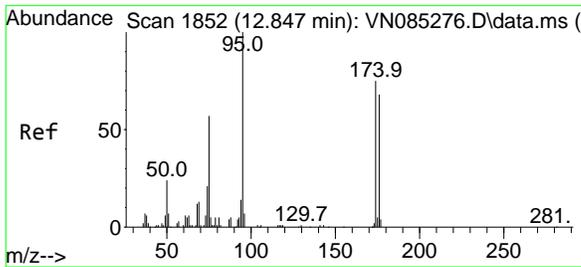
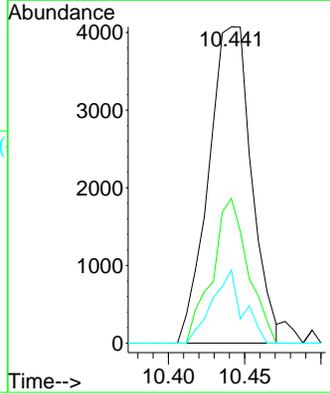
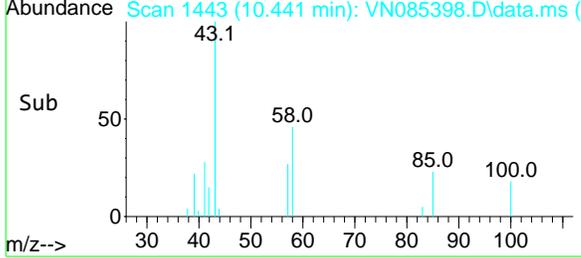


Tgt Ion: 43 Resp: 7956

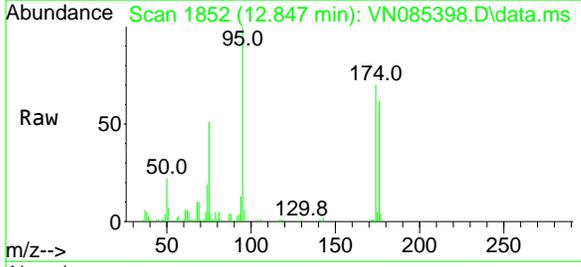
Ion	Ratio	Lower	Upper
43	100		
58	38.1	29.2	43.8
85	13.6	12.8	19.2

Manual Integrations  
**APPROVED**

Reviewed By :John Carlone 01/08/2025  
 Supervised By :Mahesh Dadoda 01/08/2025

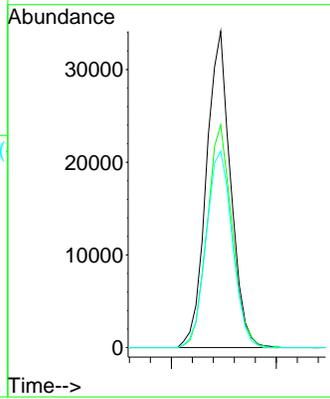
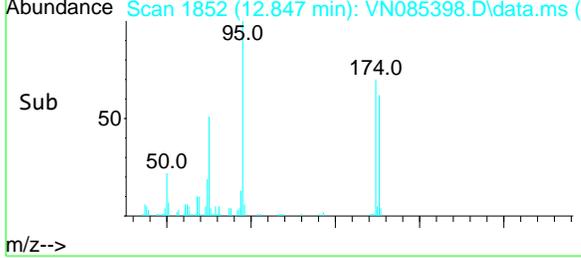


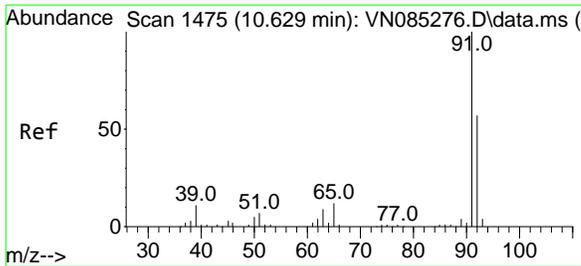
#60  
 4-Bromofluorobenzene  
 Concen: 25.807 ug/l  
 RT: 12.847 min Scan# 1852  
 Delta R.T. 0.000 min  
 Lab File: VN085398.D  
 Acq: 07 Jan 2025 14:44



Tgt Ion: 95 Resp: 54737

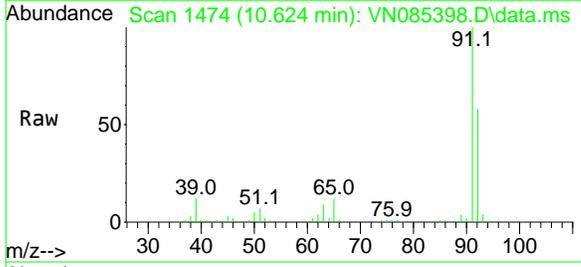
Ion	Ratio	Lower	Upper
95	100		
174	72.4	57.8	86.8
176	67.2	57.1	85.7





#62  
 Toluene  
 Concen: 60.773 ug/l  
 RT: 10.624 min Scan# 1474  
 Delta R.T. -0.006 min  
 Lab File: VN085398.D  
 Acq: 07 Jan 2025 14:44

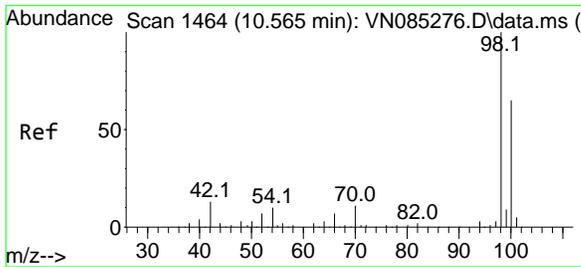
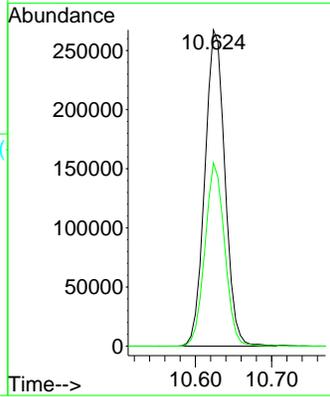
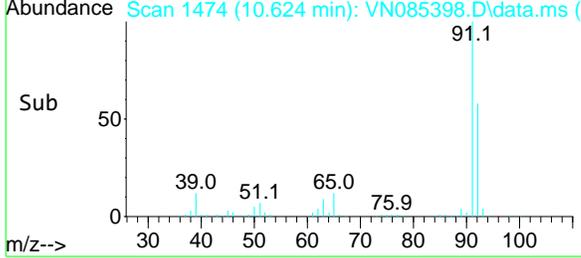
Instrument : MSVOA\_N  
 ClientSampleId : 001 WILLETS PT BLVD (JAN)



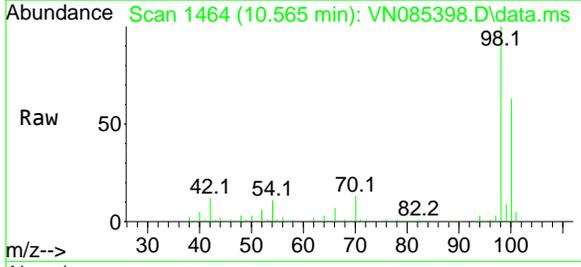
Tgt Ion: 91 Resp: 488888  
 Ion Ratio Lower Upper  
 91 100  
 92 56.7 45.9 68.9

Manual Integrations  
**APPROVED**

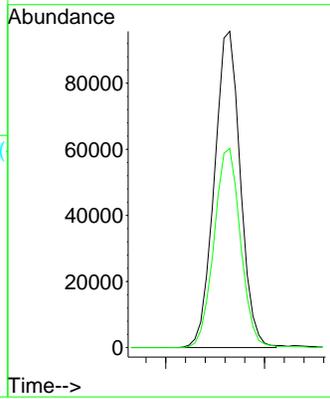
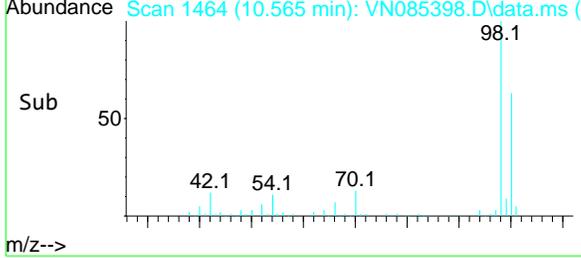
Reviewed By :John Carlone 01/08/2025  
 Supervised By :Mahesh Dadoda 01/08/2025

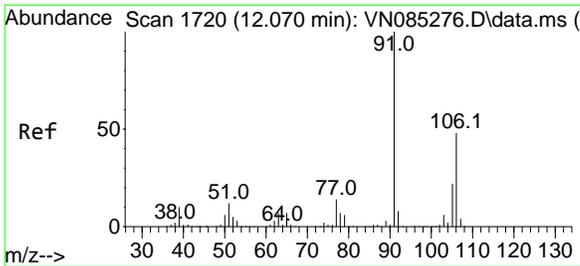


#63  
 Toluene-d8  
 Concen: 27.367 ug/l  
 RT: 10.565 min Scan# 1464  
 Delta R.T. 0.000 min  
 Lab File: VN085398.D  
 Acq: 07 Jan 2025 14:44



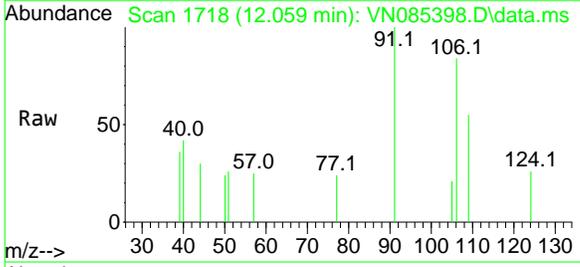
Tgt Ion: 98 Resp: 174984  
 Ion Ratio Lower Upper  
 98 100  
 100 64.0 50.8 76.2





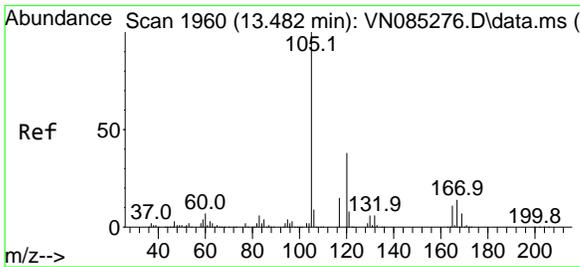
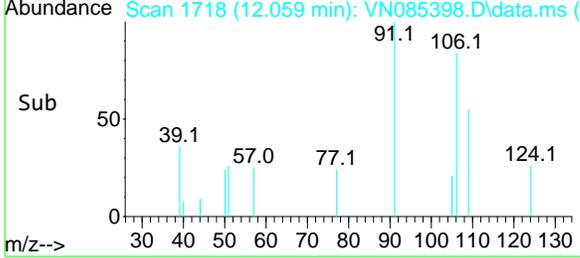
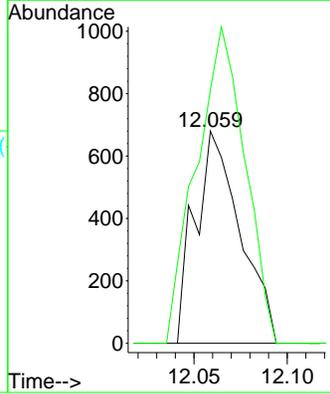
#67  
 m/p-Xylenes  
 Concen: 0.361 ug/l  
 RT: 12.059 min Scan# 1718  
 Delta R.T. -0.012 min  
 Lab File: VN085398.D  
 Acq: 07 Jan 2025 14:44

Instrument : MSVOA\_N  
 ClientSampleId : 001 WILLETS PT BLVD (JAN)



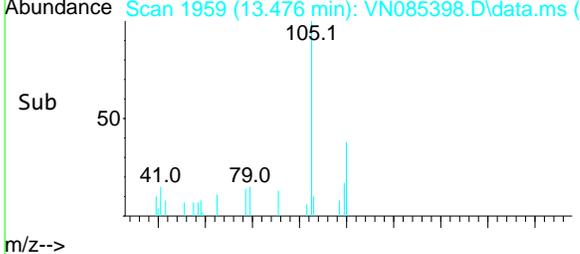
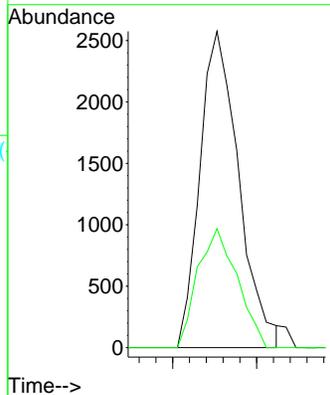
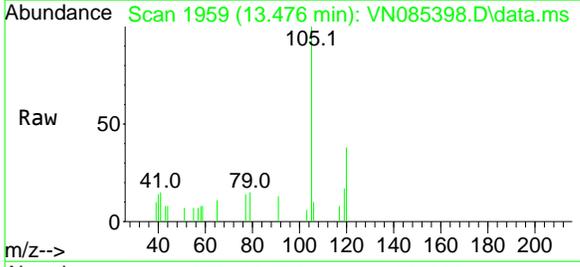
Tgt Ion:106 Resp: 1147  
 Ion Ratio Lower Upper  
 106 100  
 91 160.5 167.0 250.4#

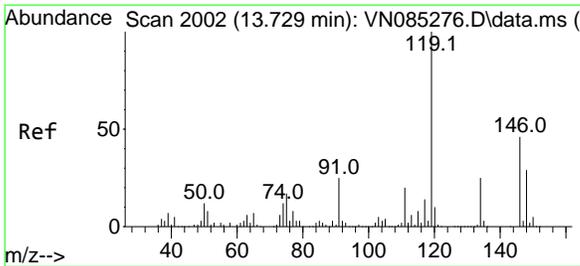
Manual Integrations  
**APPROVED**  
 Reviewed By :John Carlone 01/08/2025  
 Supervised By :Mahesh Dadoda 01/08/2025



#80  
 1,2,4-Trimethylbenzene  
 Concen: 0.642 ug/l  
 RT: 13.476 min Scan# 1959  
 Delta R.T. -0.006 min  
 Lab File: VN085398.D  
 Acq: 07 Jan 2025 14:44

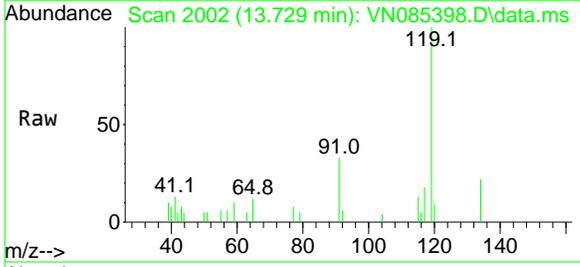
Tgt Ion:105 Resp: 4139  
 Ion Ratio Lower Upper  
 105 100  
 120 38.2 0.0 89.8





#82  
 p-Isopropyltoluene  
 Concen: 0.920 ug/l  
 RT: 13.729 min Scan# 2002  
 Delta R.T. 0.000 min  
 Lab File: VN085398.D  
 Acq: 07 Jan 2025 14:44

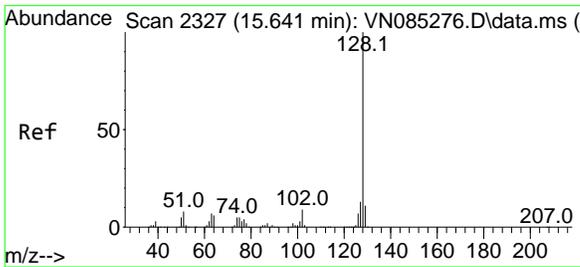
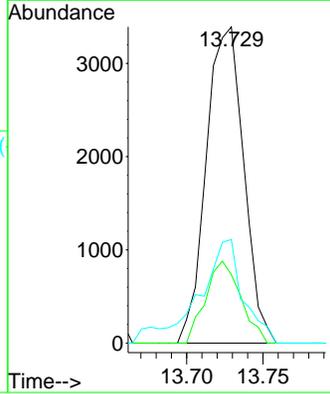
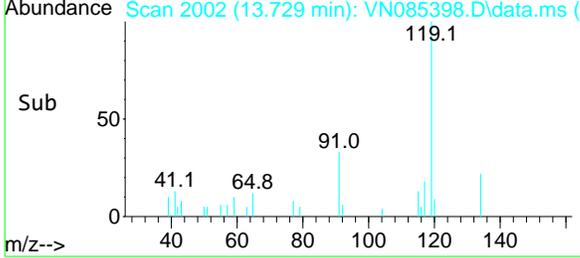
Instrument : MSVOA\_N  
 ClientSampleId : 001 WILLETS PT BLVD (JAN)



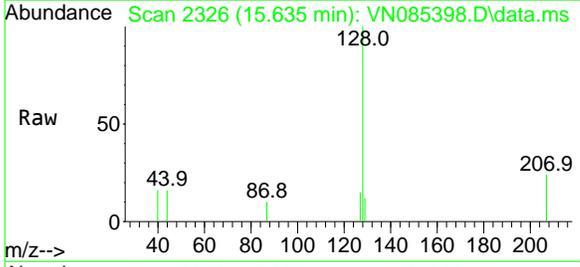
Tgt Ion	Ratio	Lower	Upper
119	100		
134	24.2	0.0	51.4
91	36.4	0.0	51.4

Manual Integrations  
**APPROVED**

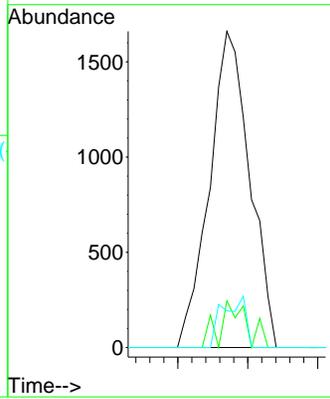
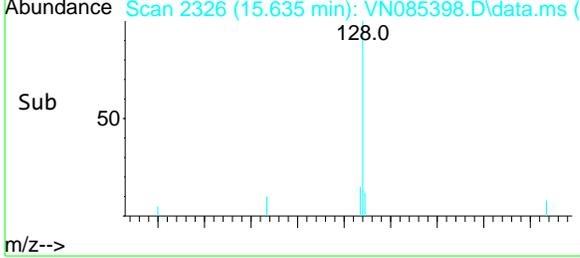
Reviewed By :John Carlone 01/08/2025  
 Supervised By :Mahesh Dadoda 01/08/2025



#91  
 Naphthalene  
 Concen: 0.656 ug/l  
 RT: 15.635 min Scan# 2326  
 Delta R.T. -0.006 min  
 Lab File: VN085398.D  
 Acq: 07 Jan 2025 14:44



Tgt Ion	Ratio	Lower	Upper
128	100		
127	6.6	10.6	16.0#
129	6.4	8.6	13.0#





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

## Report of Analysis

Client:	Tully Environmental, Inc		Date Collected:	01/03/25	
Project:	Transfer Station-SPDES		Date Received:	01/06/25	
Client Sample ID:	002 35TH AVE (JAN)		SDG No.:	Q1013	
Lab Sample ID:	Q1013-02		Matrix:	Water	
Analytical Method:	E624.1		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOC-BTEX	
GC Column:	RXI-624	ID : 0.25	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085397.D	1		01/07/25 13:52	VN010725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
71-43-2	Benzene	0.69	U	0.69	5.00	ug/L
108-88-3	Toluene	79.7		0.72	5.00	ug/L
100-41-4	Ethyl Benzene	0.73	U	0.73	5.00	ug/L
179601-23-1	m/p-Xylenes	1.70	U	1.70	10.0	ug/L
95-47-6	o-Xylene	0.82	U	0.82	5.00	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	29.8		91 - 110	99%	SPK: 30
2037-26-5	Toluene-d8	27.4		91 - 112	91%	SPK: 30
460-00-4	4-Bromofluorobenzene	25.5		63 - 112	85%	SPK: 30
<b>INTERNAL STANDARDS</b>						
74-97-5	Bromochloromethane	26800	7.806			
540-36-3	1,4-Difluorobenzene	129000	9.094			
3114-55-4	Chlorobenzene-d5	126000	11.859			

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\VN010725\  
 Data File : VN085397.D  
 Acq On : 07 Jan 2025 13:52  
 Operator : JC\MD  
 Sample : Q1013-02  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 002 35TH AVE (JAN)

Manual Integrations  
 APPROVED

Reviewed By :John Carlone 01/08/2025  
 Supervised By :Mahesh Dadoda 01/08/2025

Quant Time: Jan 08 04:18:21 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N122024W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Dec 21 02:03:07 2024  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) Bromochloromethane	7.806	128	26801	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.094	114	128547	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.859	117	125648	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.571	65	70254	29.798	ug/l	0.00
Spiked Amount	30.000	Range	91 - 110	Recovery	=	99.333%
60) 4-Bromofluorobenzene	12.847	95	51828	25.465	ug/l	0.00
Spiked Amount	30.000	Range	63 - 112	Recovery	=	84.867%
63) Toluene-d8	10.559	98	168191	27.413	ug/l	0.00
Spiked Amount	30.000	Range	91 - 112	Recovery	=	91.367%
Target Compounds						
						Qvalue
15) Acetone	4.430	58	14064	58.299	ug/l	74
16) Carbon Disulfide	4.718	76	9524m	1.892	ug/l	
30) 2-Butanone	7.483	43	11509	9.769	ug/l	96
58) 4-Methyl-2-Pentanone	10.441	43	9431	3.703	ug/l #	89
62) Toluene	10.624	91	615594	79.747	ug/l	99
67) m/p-Xylenes	12.059	106	1260	0.413	ug/l	86
68) o-Xylene	12.388	106	635	0.219	ug/l	92
80) 1,2,4-Trimethylbenzene	13.476	105	5252	0.848	ug/l	95
82) p-Isopropyltoluene	13.723	119	6766	1.119	ug/l	90
91) Naphthalene	15.635	128	3610	0.743	ug/l #	86

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

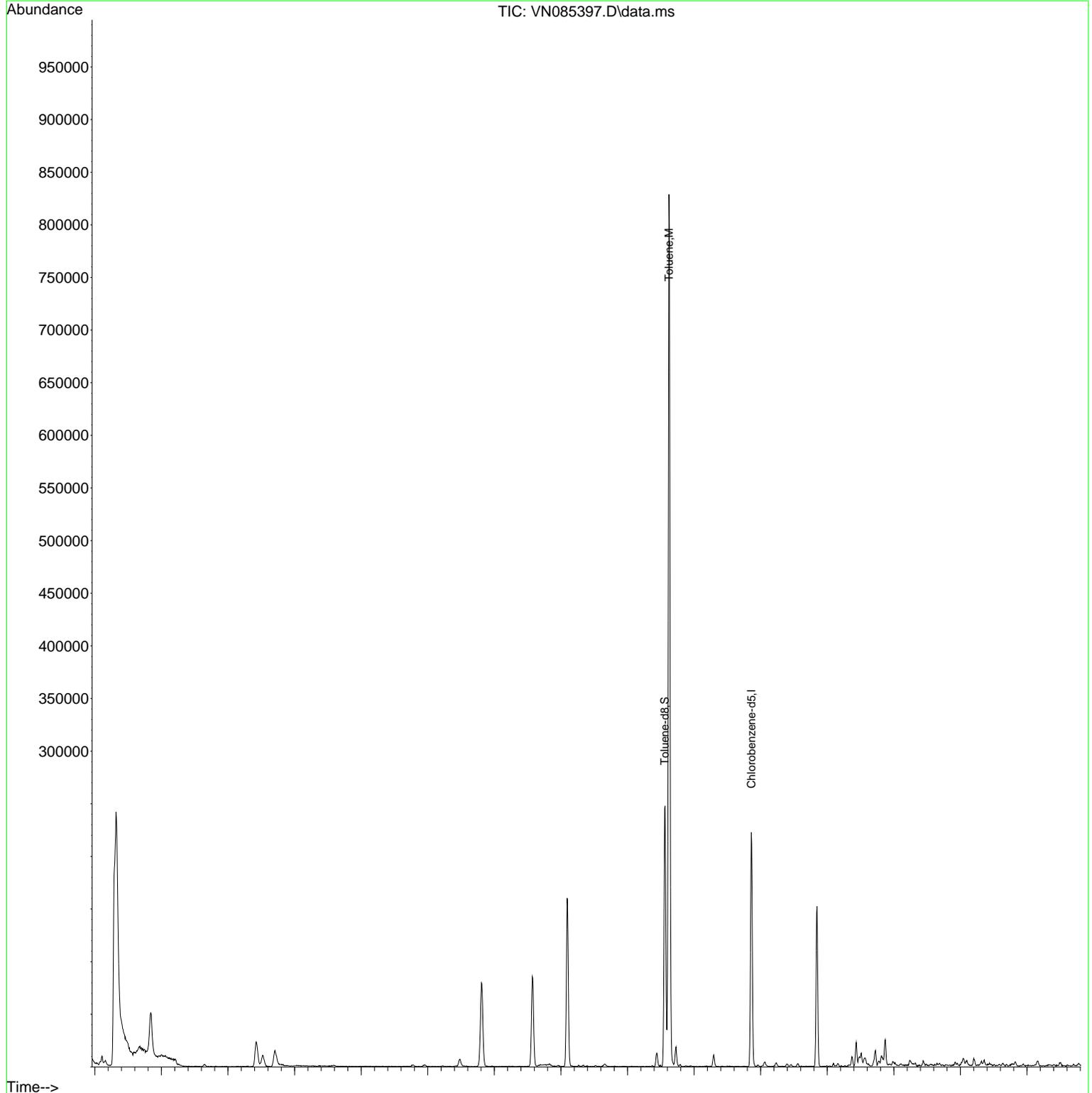
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN010725\  
Data File : VN085397.D  
Acq On : 07 Jan 2025 13:52  
Operator : JC\MD  
Sample : Q1013-02  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 10 Sample Multiplier: 1

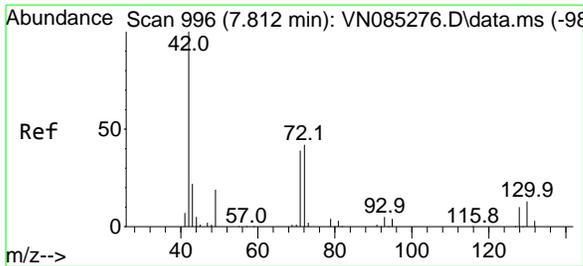
Instrument :  
MSVOA\_N  
ClientSampleId :  
002 35TH AVE (JAN)

Quant Time: Jan 08 04:18:21 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N122024W.M  
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
QLast Update : Sat Dec 21 02:03:07 2024  
Response via : Initial Calibration

Manual Integrations  
APPROVED

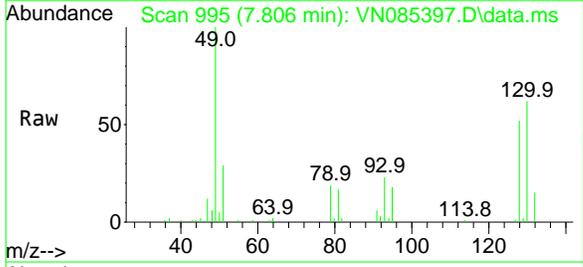
Reviewed By : John Carlone 01/08/2025  
Supervised By : Mahesh Dadoda 01/08/2025





#1  
 Bromochloromethane  
 Concen: 30.000 ug/l  
 RT: 7.806 min Scan# 996  
 Delta R.T. -0.006 min  
 Lab File: VN085397.D  
 Acq: 07 Jan 2025 13:52

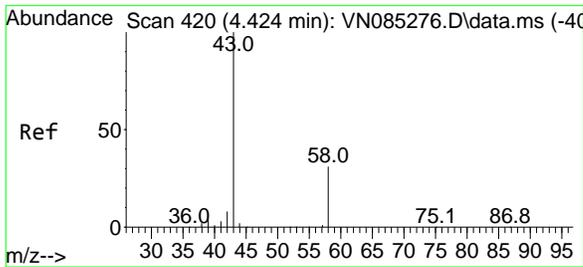
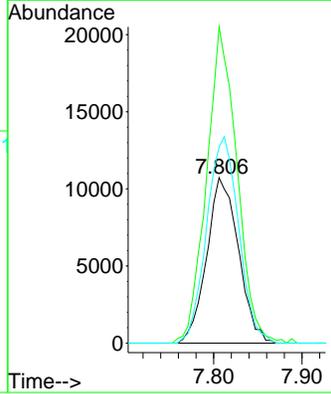
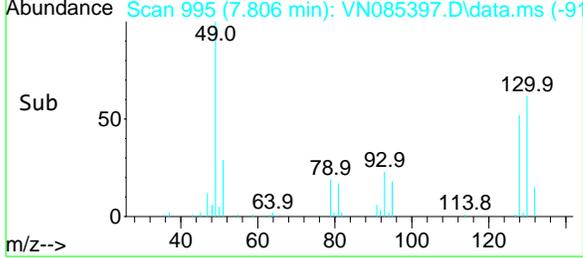
Instrument : MSVOA\_N  
 ClientSampleId : 002 35TH AVE (JAN)



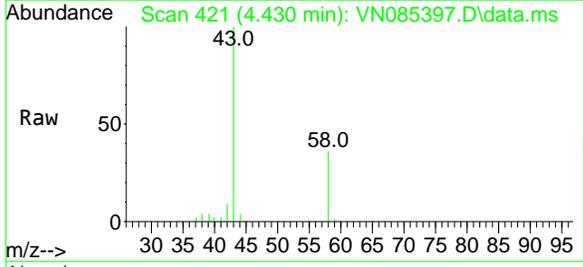
Tgt Ion	Ratio	Lower	Upper
128	100		
49	182.9	0.0	497.8
130	125.9	0.0	328.5

Manual Integrations  
**APPROVED**

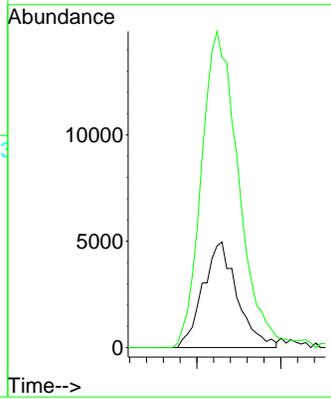
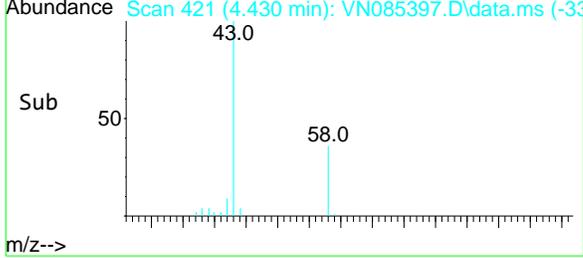
Reviewed By :John Carlone 01/08/2025  
 Supervised By :Mahesh Dadoda 01/08/2025

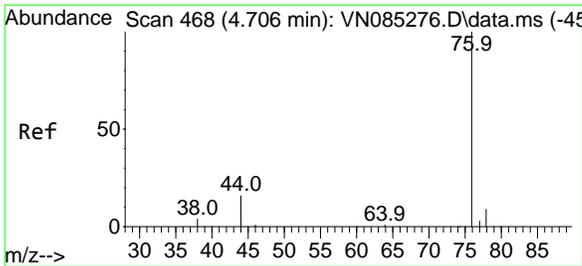


#15  
 Acetone  
 Concen: 58.299 ug/l  
 RT: 4.430 min Scan# 421  
 Delta R.T. 0.000 min  
 Lab File: VN085397.D  
 Acq: 07 Jan 2025 13:52



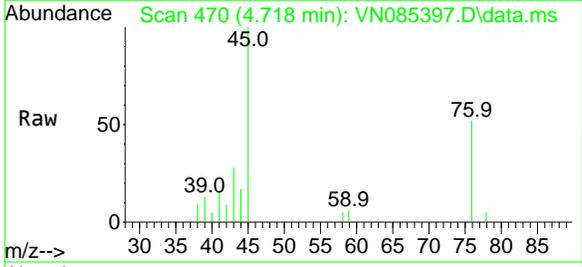
Tgt Ion	Ratio	Lower	Upper
58	100		
43	270.6	258.8	388.2





#16  
 Carbon Disulfide  
 Concen: 1.892 ug/l m  
 RT: 4.718 min Scan# 471  
 Delta R.T. 0.006 min  
 Lab File: VN085397.D  
 Acq: 07 Jan 2025 13:52

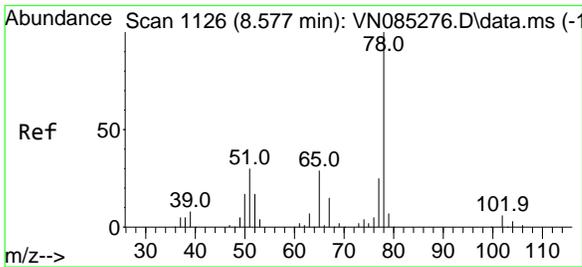
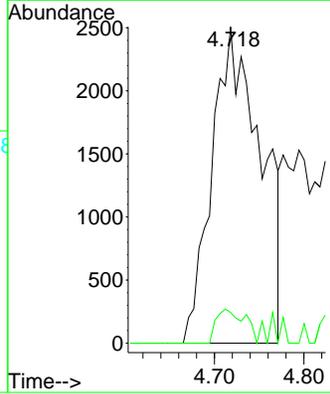
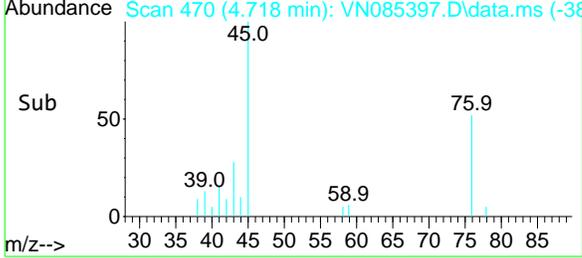
Instrument : MSVOA\_N  
 ClientSampleId : 002 35TH AVE (JAN)



Tgt Ion: 76 Resp: 9524  
 Ion Ratio Lower Upper  
 76 100  
 78 9.7 6.6 9.8

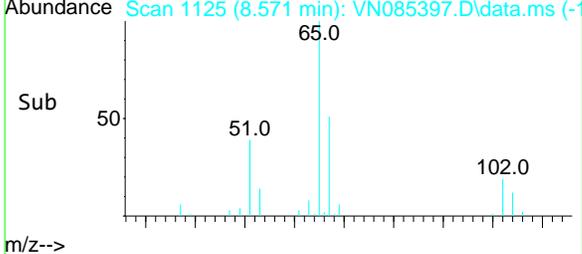
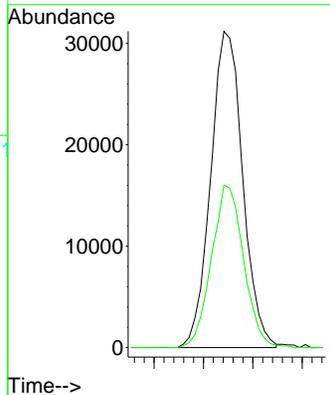
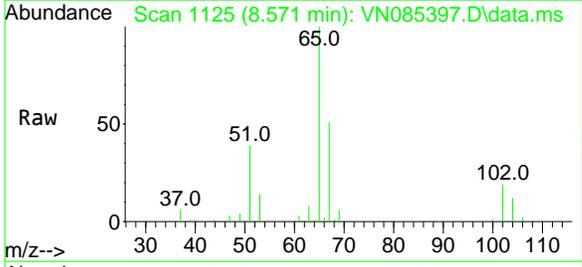
Manual Integrations  
**APPROVED**

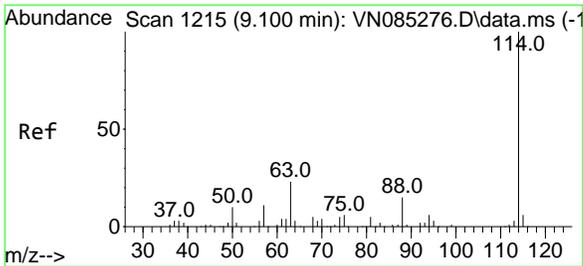
Reviewed By :John Carlone 01/08/2025  
 Supervised By :Mahesh Dadoda 01/08/2025



#27  
 1,2-Dichloroethane-d4  
 Concen: 29.798 ug/l  
 RT: 8.571 min Scan# 1125  
 Delta R.T. -0.006 min  
 Lab File: VN085397.D  
 Acq: 07 Jan 2025 13:52

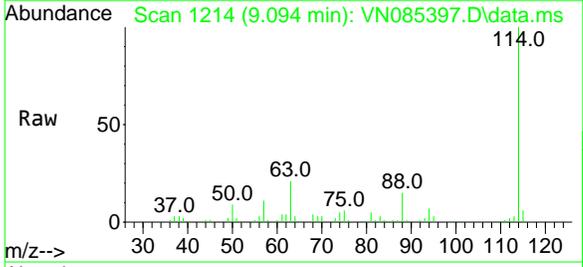
Tgt Ion: 65 Resp: 70254  
 Ion Ratio Lower Upper  
 65 100  
 67 51.6 42.0 63.0





#28  
 1,4-Difluorobenzene  
 Concen: 30.000 ug/l  
 RT: 9.094 min Scan# 1215  
 Delta R.T. -0.006 min  
 Lab File: VN085397.D  
 Acq: 07 Jan 2025 13:52

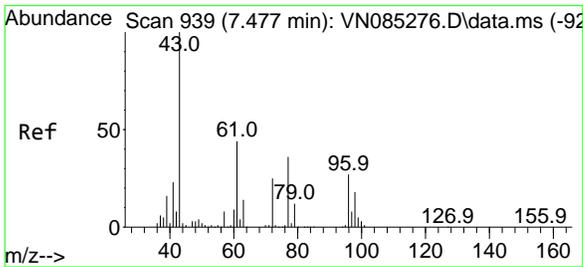
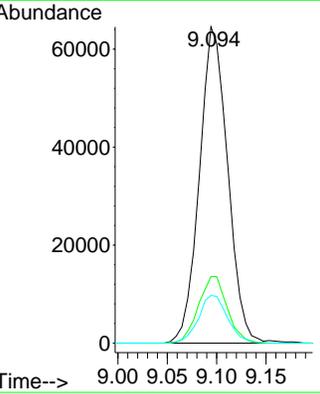
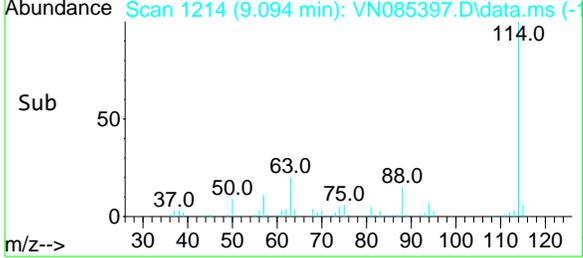
Instrument : MSVOA\_N  
 Client Sample Id : 002 35TH AVE (JAN)



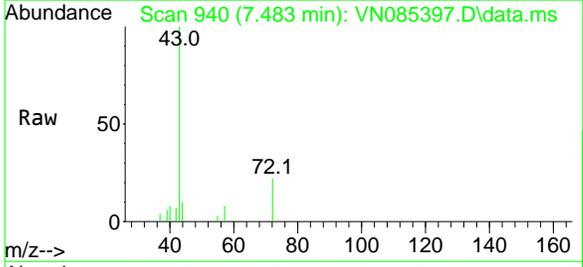
Tgt Ion: 114 Resp: 128547

Ion	Ratio	Lower	Upper
114	100		
63	21.4	18.0	27.0
88	15.5	12.9	19.3

Manual Integrations  
**APPROVED**  
 Reviewed By : John Carlone 01/08/2025  
 Supervised By : Mahesh Dadoda 01/08/2025

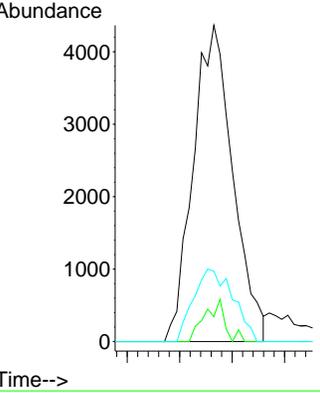
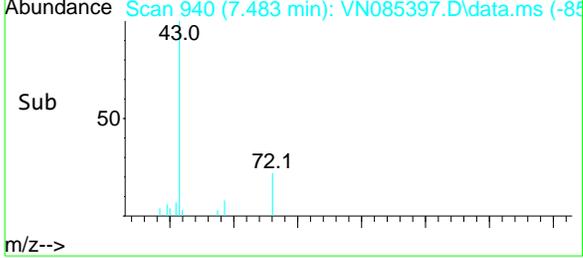


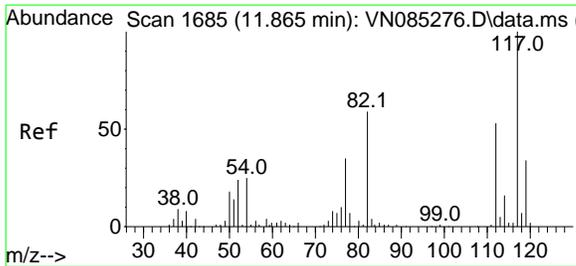
#30  
 2-Butanone  
 Concen: 9.769 ug/l  
 RT: 7.483 min Scan# 940  
 Delta R.T. 0.006 min  
 Lab File: VN085397.D  
 Acq: 07 Jan 2025 13:52



Tgt Ion: 43 Resp: 11509

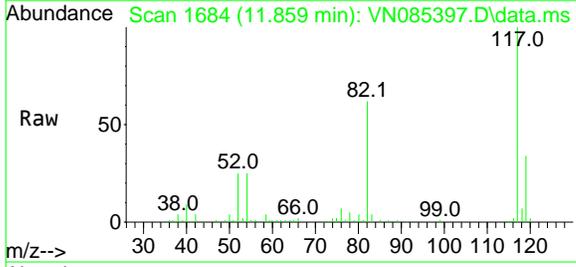
Ion	Ratio	Lower	Upper
43	100		
57	6.3	6.2	9.2
72	22.8	19.9	29.9





#57  
 Chlorobenzene-d5  
 Concen: 30.000 ug/l  
 RT: 11.859 min Scan# 1685  
 Delta R.T. -0.006 min  
 Lab File: VN085397.D  
 Acq: 07 Jan 2025 13:52

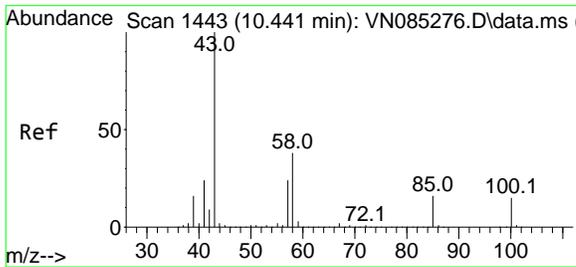
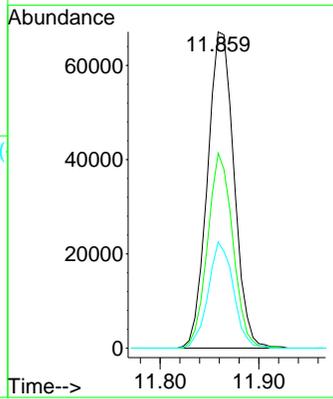
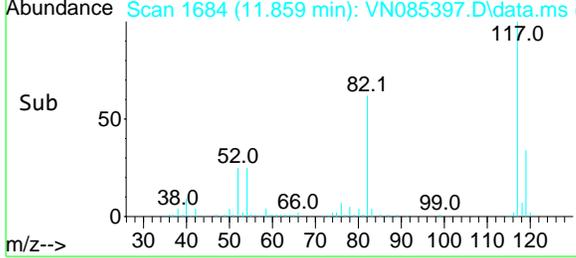
Instrument : MSVOA\_N  
 ClientSampleId : 002 35TH AVE (JAN)



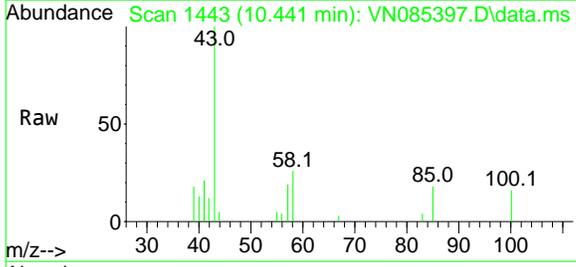
Tgt Ion: 117 Resp: 125648

Ion	Ratio	Lower	Upper
117	100		
82	58.6	47.4	71.0
119	31.9	25.3	37.9

Manual Integrations  
**APPROVED**  
 Reviewed By :John Carlone 01/08/2025  
 Supervised By :Mahesh Dadoda 01/08/2025

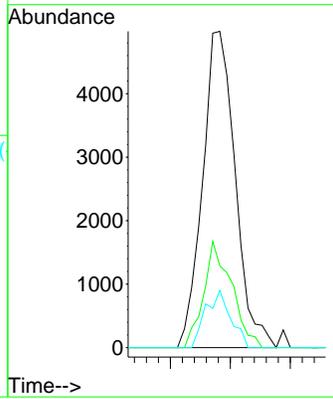
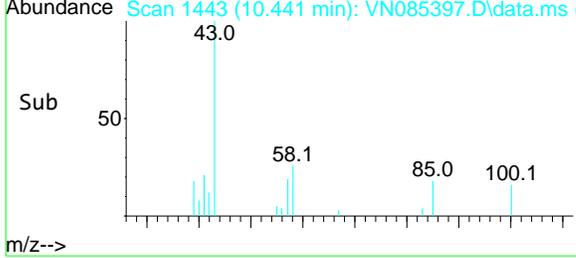


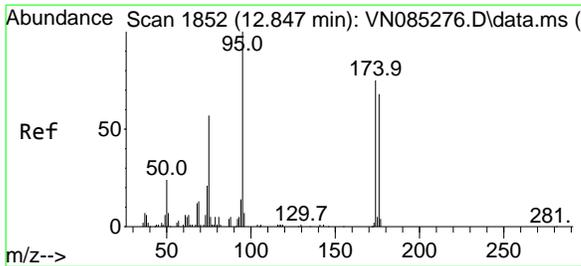
#58  
 4-Methyl-2-Pentanone  
 Concen: 3.703 ug/l  
 RT: 10.441 min Scan# 1443  
 Delta R.T. 0.000 min  
 Lab File: VN085397.D  
 Acq: 07 Jan 2025 13:52



Tgt Ion: 43 Resp: 9431

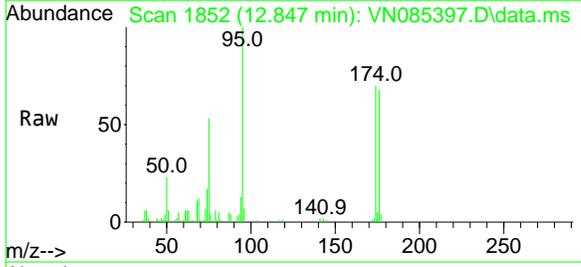
Ion	Ratio	Lower	Upper
43	100		
58	28.7	29.2	43.8#
85	13.9	12.8	19.2





#60  
 4-Bromofluorobenzene  
 Concen: 25.465 ug/l  
 RT: 12.847 min Scan# 1852  
 Delta R.T. 0.000 min  
 Lab File: VN085397.D  
 Acq: 07 Jan 2025 13:52

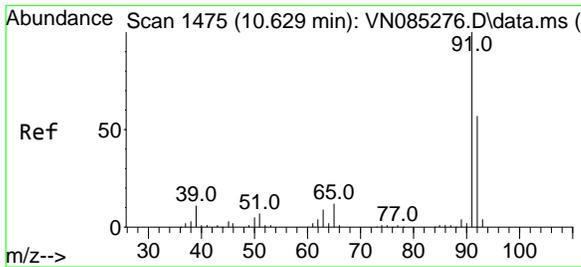
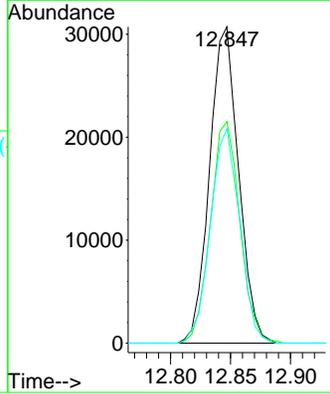
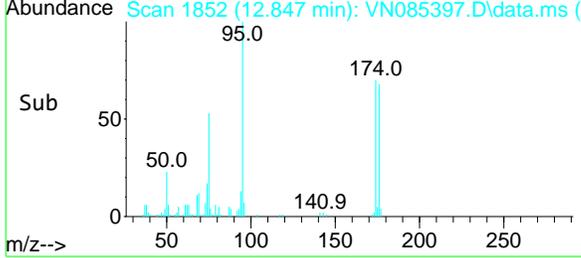
Instrument : MSVOA\_N  
 Client Sample Id : 002 35TH AVE (JAN)



Tgt Ion: 95 Resp: 51828  
 Ion Ratio Lower Upper  
 95 100  
 174 70.9 57.8 86.8  
 176 68.5 57.1 85.7

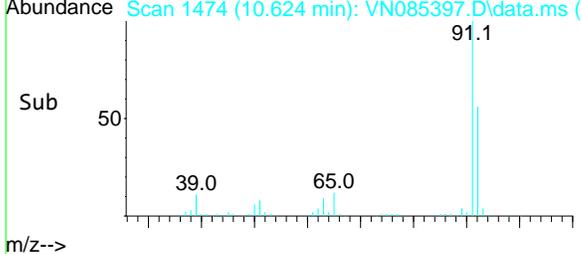
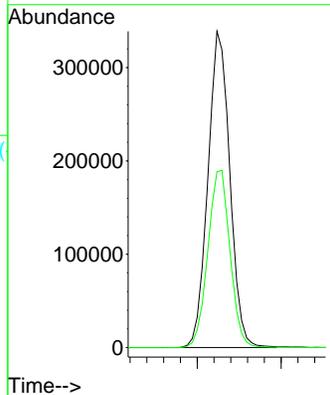
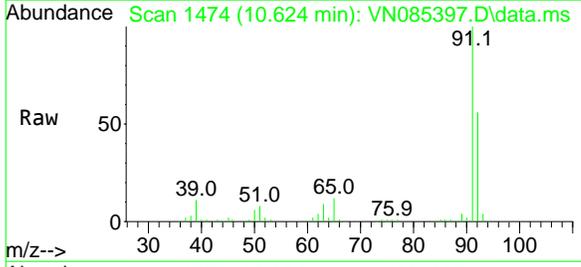
Manual Integrations  
**APPROVED**

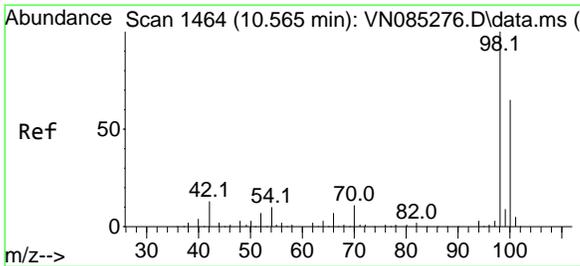
Reviewed By :John Carlone 01/08/2025  
 Supervised By :Mahesh Dadoda 01/08/2025



#62  
 ToLuene  
 Concen: 79.747 ug/l  
 RT: 10.624 min Scan# 1474  
 Delta R.T. -0.006 min  
 Lab File: VN085397.D  
 Acq: 07 Jan 2025 13:52

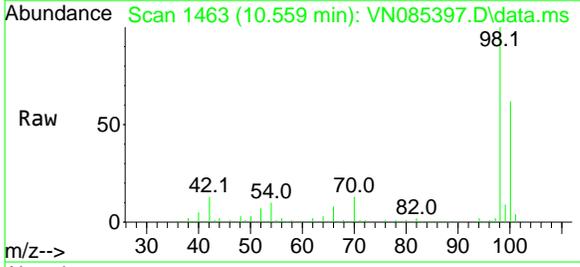
Tgt Ion: 91 Resp: 615594  
 Ion Ratio Lower Upper  
 91 100  
 92 56.7 45.9 68.9





#63  
 Toluene-d8  
 Concen: 27.413 ug/l  
 RT: 10.559 min Scan# 1463  
 Delta R.T. -0.006 min  
 Lab File: VN085397.D  
 Acq: 07 Jan 2025 13:52

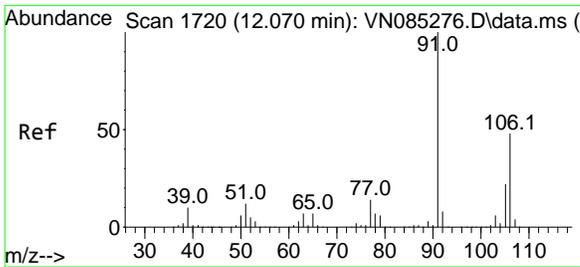
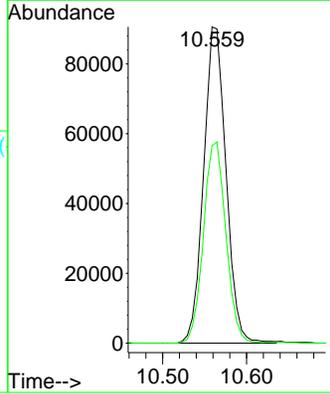
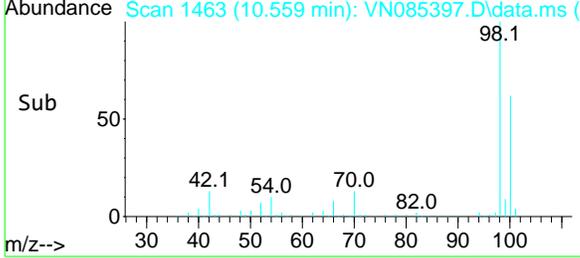
Instrument : MSVOA\_N  
 ClientSampleId : 002 35TH AVE (JAN)



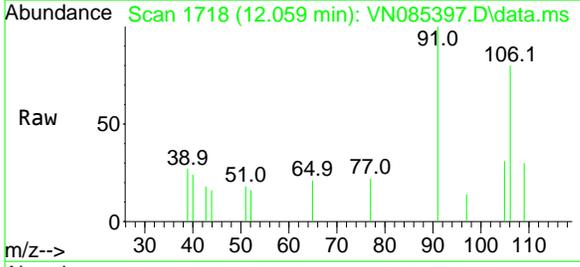
Tgt Ion: 98 Resp: 168191  
 Ion Ratio Lower Upper  
 98 100  
 100 63.5 50.8 76.2

Manual Integrations  
**APPROVED**

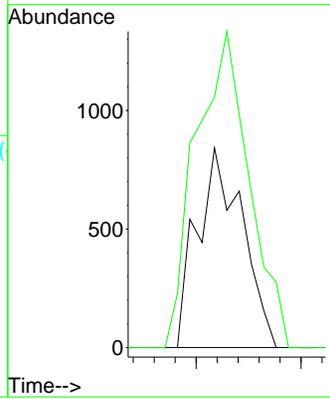
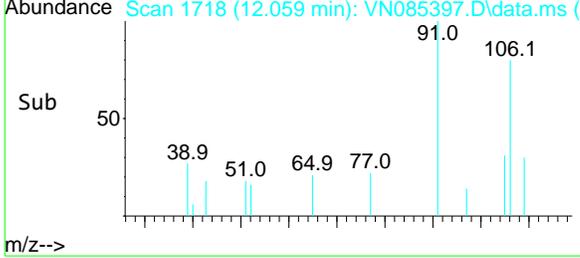
Reviewed By :John Carlone 01/08/2025  
 Supervised By :Mahesh Dadoda 01/08/2025

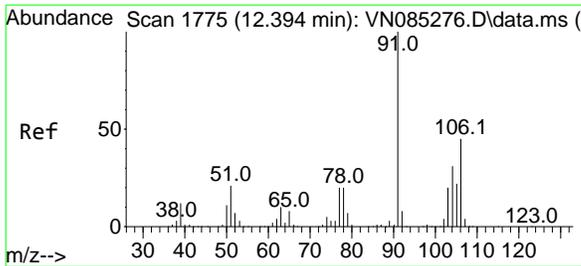


#67  
 m/p-Xylenes  
 Concen: 0.413 ug/l  
 RT: 12.059 min Scan# 1718  
 Delta R.T. -0.012 min  
 Lab File: VN085397.D  
 Acq: 07 Jan 2025 13:52



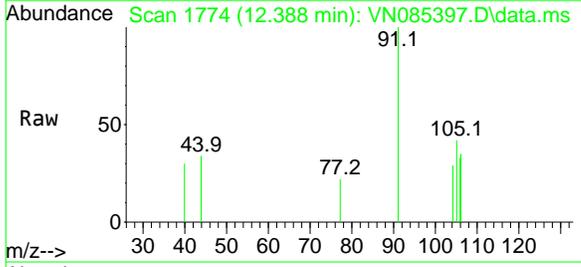
Tgt Ion:106 Resp: 1260  
 Ion Ratio Lower Upper  
 106 100  
 91 187.4 167.0 250.4





#68  
 o-Xylene  
 Concen: 0.219 ug/l  
 RT: 12.388 min Scan# 1774  
 Delta R.T. -0.006 min  
 Lab File: VN085397.D  
 Acq: 07 Jan 2025 13:52

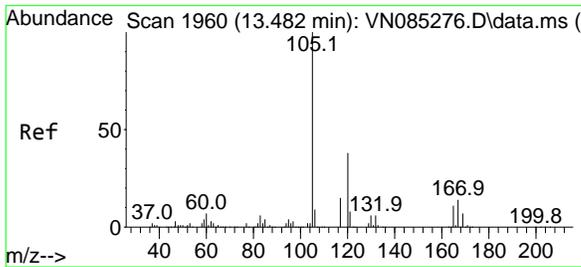
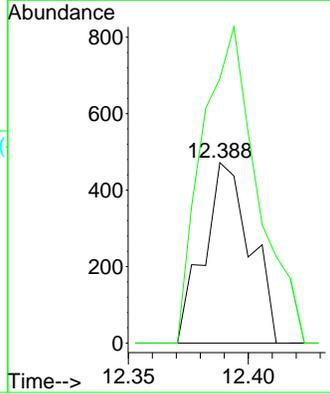
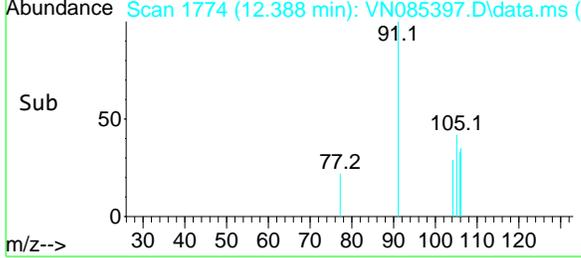
Instrument : MSVOA\_N  
 Client Sample Id : 002 35TH AVE (JAN)



Tgt Ion: 106 Resp: 635  
 Ion Ratio Lower Upper  
 106 100  
 91 208.2 110.6 331.8

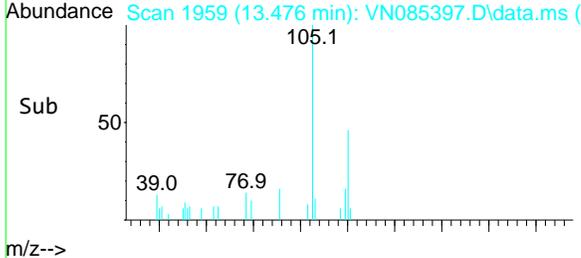
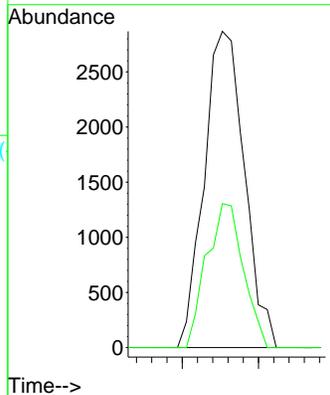
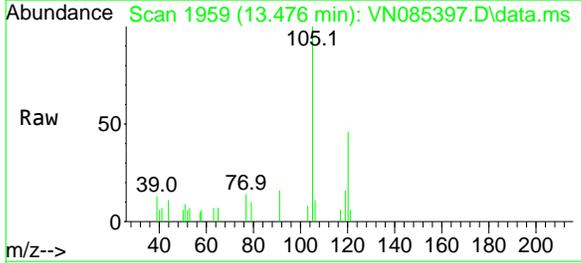
Manual Integrations  
**APPROVED**

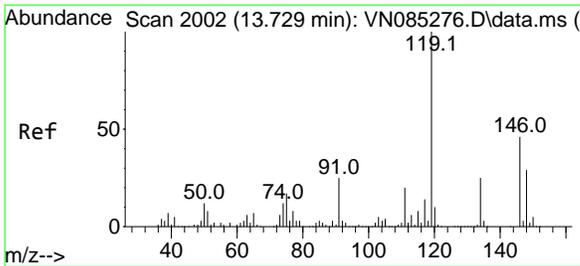
Reviewed By : John Carlone 01/08/2025  
 Supervised By : Mahesh Dadoda 01/08/2025



#80  
 1,2,4-Trimethylbenzene  
 Concen: 0.848 ug/l  
 RT: 13.476 min Scan# 1959  
 Delta R.T. -0.006 min  
 Lab File: VN085397.D  
 Acq: 07 Jan 2025 13:52

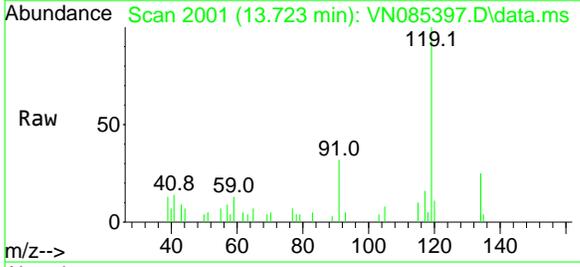
Tgt Ion: 105 Resp: 5252  
 Ion Ratio Lower Upper  
 105 100  
 120 41.5 0.0 89.8





#82  
 p-Isopropyltoluene  
 Concen: 1.119 ug/l  
 RT: 13.723 min Scan# 2002  
 Delta R.T. -0.006 min  
 Lab File: VN085397.D  
 Acq: 07 Jan 2025 13:52

Instrument : MSVOA\_N  
 ClientSampleId : 002 35TH AVE (JAN)

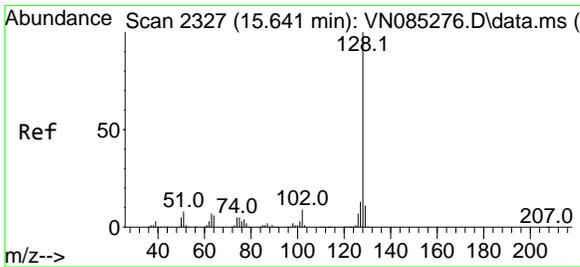
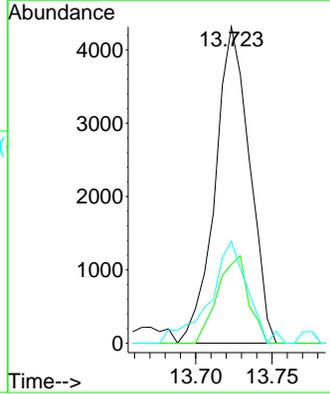
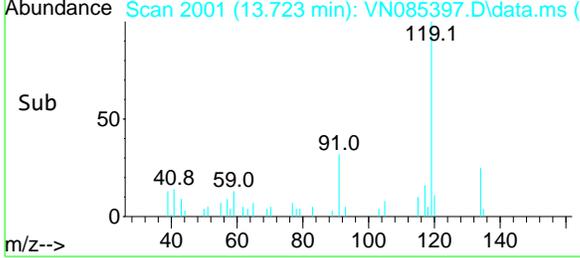


Tgt Ion: 119 Resp: 6766

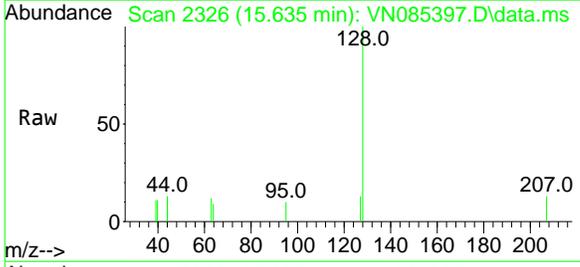
Ion	Ratio	Lower	Upper
119	100		
134	24.8	0.0	51.4
91	34.4	0.0	51.4

Manual Integrations  
**APPROVED**

Reviewed By : John Carlone 01/08/2025  
 Supervised By : Mahesh Dadoda 01/08/2025

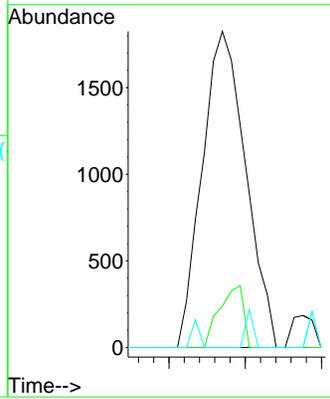
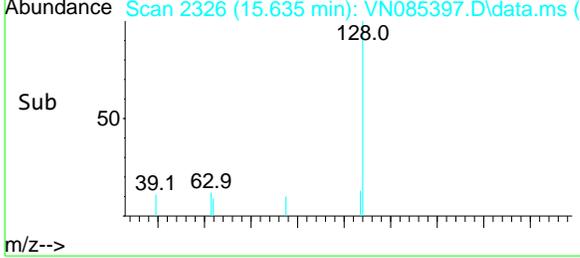


#91  
 Naphthalene  
 Concen: 0.743 ug/l  
 RT: 15.635 min Scan# 2326  
 Delta R.T. -0.006 min  
 Lab File: VN085397.D  
 Acq: 07 Jan 2025 13:52



Tgt Ion: 128 Resp: 3610

Ion	Ratio	Lower	Upper
128	100		
127	10.8	10.6	16.0
129	2.1	8.6	13.0#





# CALIBRATION SUMMARY



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

### VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: TULL01  
 Lab Code: CHEM Case No.: Q1013 SAS No.: Q1013 SDG No.: Q1013  
 Instrument ID: MSVOA\_N Calibration Date(s): 12/20/2024 12/20/2024  
 Heated Purge: (Y/N) N Calibration Time(s): 10:05 11:42  
 GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID:	RRF005 = VN085272.D	RRF020 = VN085273.D	RRF050 = VN085274.D	RRF100 = VN085275.D	RRF150 = VN085276.D	RRF =	RRF	% RSD
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF150	RRF	RRF	% RSD
Benzene	1.746	1.700	1.610	1.606	1.570		1.646	4.5
Toluene	1.976	1.904	1.792	1.773	1.770		1.843	5
Ethyl Benzene	1.810	1.922	1.957	2.001	2.007		1.939	4.1
m/p-Xylenes	0.658	0.752	0.748	0.743	0.737		0.728	5.4
o-Xylene	0.645	0.695	0.705	0.714	0.706		0.693	4
1,2-Dichloroethane-d4	2.636	2.656	2.614	2.597	2.692		2.639	1.4
Toluene-d8	1.528	1.510	1.446	1.411	1.430		1.465	3.5
4-Bromofluorobenzene	0.468	0.488	0.484	0.489	0.501		0.486	2.5

\* 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.

Method Path : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\  
 Method File : 624N122024W.M  
 Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 Last Update : Sat Dec 21 02:03:07 2024  
 Response Via : Initial Calibration

## Calibration Files

5 =VN085272.D 20 =VN085273.D 50 =VN085274.D 100 =VN085275.D 150 =VN085276.D

Compound	5	20	50	100	150	Avg	%RSD
-----ISTD-----							
1) I Bromochloromethane							
2) M Dichlorodifluoro...	2.400	2.651	2.538	2.398	2.555	2.508	4.33
3) M Chloromethane	2.717	2.623	2.537	2.356	2.430	2.533	5.72
4) M Vinyl Chloride	2.739	2.617	2.511	2.443	2.548	2.572	4.38
5) M Bromomethane	1.684	1.486	1.447	1.406	1.495	1.503	7.12
6) M Chloroethane	1.819	1.683	1.574	1.486	1.555	1.623	8.01
7) M Trichlorofluorom...	3.660	3.639	3.515	3.359	3.492	3.533	3.45
8) T Diethyl Ether	1.187	1.178	1.211	1.214	1.293	1.217	3.75
9) 1,1,2-Trichlorot...	2.102	2.090	1.976	1.943	2.033	2.029	3.42
10) M 1,1-Dichloroethene	1.861	1.828	1.825	1.812	1.940	1.853	2.80
11) Methyl Iodide	1.796	2.134	2.294	2.348	2.534	2.221	12.47
12) Methyl Acetate	2.533	2.813	2.754	2.736	3.003	2.768	6.09
13) M Acrolein	0.327	0.221	0.221	0.212	0.255	0.247	19.38
14) M Acrylonitrile	0.962	1.074	1.078	1.080	1.158	1.070	6.53
15) M Acetone	0.271	0.275	0.263	0.262	0.279	0.270	2.80
16) M Carbon Disulfide	5.982	5.697	5.501	5.326	5.663	5.634	4.34
17) Allyl chloride	2.801	2.937	3.000	2.997	3.255	2.998	5.49
18) M Methylene Chloride	2.390	2.246	2.145	2.069	2.193	2.208	5.45
19) M trans-1,2-Dichlo...	1.886	1.924	1.933	1.885	2.011	1.928	2.66
20) T Diisopropyl ether	6.232	7.037	6.941	6.842	7.302	6.871	5.76
21) M 1,1-Dichloroethane	4.112	4.091	3.945	3.848	4.088	4.017	2.88
22) M cis-1,2-Dichloro...	2.237	2.285	2.270	2.289	2.396	2.295	2.61
23) M tert-Butyl Alcohol	0.310	0.337	0.354	0.368	0.396	0.353	9.20
24) M Methyl tert-Buty...	5.238	6.026	6.157	6.242	6.753	6.083	8.99
25) M Chloroform	4.294	4.193	3.985	3.831	4.055	4.072	4.43
26) Cyclohexane	2.588	3.018	3.154	3.187	3.367	3.063	9.57
27) s 1,2-Dichloroetha...	2.636	2.656	2.614	2.597	2.692	2.639	1.41
-----ISTD-----							
28) I 1,4-Difluorobenzene							
29) 1,1-Dichloropropene	0.512	0.528	0.518	0.529	0.518	0.521	1.41
30) M 2-Butanone	0.258	0.280	0.275	0.282	0.279	0.275	3.51
31) 2,2-Dichloropropane	0.688	0.678	0.647	0.648	0.639	0.660	3.31
32) M 1,1,1-Trichloroe...	0.743	0.695	0.657	0.649	0.641	0.677	6.25
33) M Carbon Tetrachlo...	0.643	0.605	0.581	0.573	0.561	0.593	5.47
34) M Benzene	1.746	1.700	1.610	1.606	1.570	1.646	4.47
35) Methacrylonitrile	0.296	0.307	0.300	0.307	0.311	0.304	1.94
36) M 1,2-Dichloroethane	0.669	0.610	0.577	0.568	0.553	0.595	7.73
37) M Trichloroethene	0.383	0.368	0.354	0.353	0.352	0.362	3.72
38) Methylcyclohexane	0.495	0.500	0.547	0.582	0.571	0.539	7.46
39) M 1,2-Dichloropropane	0.441	0.431	0.413	0.405	0.404	0.419	3.94
40) Dibromomethane	0.318	0.299	0.287	0.281	0.276	0.292	5.76
41) M Bromodichloromet...	0.645	0.633	0.595	0.592	0.587	0.610	4.38
42) M Vinyl Acetate	0.845	0.964	0.995	1.025	1.025	0.971	7.69
43) Ethyl Acetate	0.564	0.558	0.567	0.581	0.573	0.569	1.59
44) Isopropyl Acetate	0.920	0.950	0.929	0.966	0.958	0.945	2.08
45) T 1,4-Dioxane	0.007	0.007	0.008	0.008	0.007	0.007	5.72
46) Methyl methacrylate	0.385	0.441	0.449	0.460	0.457	0.438	7.00
47) n-amyl Acetate	0.647	0.787	0.819	0.877	0.893	0.805	12.18
48) M t-1,3-Dichloropr...	0.583	0.595	0.604	0.614	0.619	0.603	2.39
49) T cis-1,3-Dichloro...	0.647	0.645	0.644	0.655	0.650	0.648	0.74
50) M 1,1,2-Trichloroe...	0.421	0.402	0.367	0.365	0.355	0.382	7.39
51) Ethyl methacrylate	0.464	0.555	0.596	0.631	0.641	0.578	12.43
52) 1,3-Dichloropropane	0.678	0.694	0.659	0.662	0.641	0.667	3.01
53) M Dibromochloromet...	0.475	0.466	0.437	0.431	0.429	0.448	4.81
54) M 1,2-Dibromoethane	0.375	0.376	0.364	0.369	0.364	0.370	1.56
55) M 2-Chloroethyl vi...	0.283	0.293	0.300	0.297	0.315	0.298	3.96
56) M Bromoform	0.304	0.294	0.284	0.291	0.288	0.292	2.56

Method Path : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\  
 Method File : 624N122024W.M

		-----ISTD-----							
57) I	Chlorobenzene-d5								
58) M	4-Methyl-2-Penta...	0.568	0.637	0.612	0.608	0.616	0.608		4.11
59) M	2-Hexanone	0.392	0.459	0.451	0.452	0.455	0.442		6.29
60) S	4-Bromofluoroben...	0.468	0.488	0.484	0.489	0.501	0.486		2.49
61) M	Tetrachloroethene	0.387	0.344	0.324	0.310	0.310	0.335		9.63
62) M	Toluene	1.976	1.904	1.792	1.773	1.770	1.843		5.02
63) S	Toluene-d8	1.528	1.510	1.446	1.411	1.430	1.465		3.51
64) M	Chlorobenzene	1.163	1.131	1.095	1.080	1.089	1.112		3.13
65)	1,1,1,2-Tetrachl...	0.434	0.420	0.393	0.385	0.384	0.403		5.59
66) M	Ethyl Benzene	1.810	1.922	1.957	2.001	2.007	1.939		4.12
67) M	m/p-Xylenes	0.658	0.752	0.748	0.743	0.737	0.728		5.40
68) M	o-Xylene	0.645	0.695	0.705	0.714	0.706	0.693		4.03
69) M	Styrene	0.978	1.193	1.232	1.227	1.225	1.171		9.31
70)	Isopropylbenzene	1.500	1.731	1.802	1.822	1.846	1.740		8.11
71) M	1,1,2,2-Tetrachl...	0.698	0.626	0.594	0.586	0.583	0.617		7.84
72)	1,2,3-Trichlorop...	0.611	0.505	0.558	0.480	0.473	0.525		11.11
73)	Bromobenzene	0.422	0.444	0.432	0.426	0.425	0.430		2.04
74)	n-propylbenzene	1.954	2.178	2.211	2.249	2.248	2.168		5.68
75)	2-Chlorotoluene	1.208	1.315	1.329	1.346	1.333	1.306		4.30
76)	1,3,5-Trimethylb...	1.270	1.515	1.555	1.556	1.529	1.485		8.18
77)	t-1,4-Dichloro-2...	0.189	0.201	0.216	0.228	0.240	0.215		9.39
78)	4-Chlorotoluene	1.236	1.330	1.355	1.362	1.356	1.328		3.98
79)	tert-butylbenzene	1.058	1.174	1.266	1.288	1.285	1.214		8.15
80)	1,2,4-Trimethylb...	1.223	1.494	1.555	1.569	1.549	1.478		9.84
81)	sec-Butylbenzene	1.509	1.713	1.826	1.858	1.858	1.753		8.48
82)	p-Isopropyltoluene	1.196	1.376	1.521	1.561	1.565	1.444		10.96
83) M	1,3-Dichlorobenzene	0.775	0.818	0.808	0.810	0.798	0.802		2.08
84) M	1,4-Dichlorobenzene	0.741	0.754	0.794	0.791	0.798	0.776		3.36
85)	n-Butylbenzene	0.997	1.149	1.290	1.387	1.410	1.247		13.90
86) T	Hexachloroethane	0.313	0.318	0.305	0.306	0.308	0.310		1.76
87) M	1,2-Dichlorobenzene	0.730	0.768	0.784	0.766	0.760	0.762		2.61
88)	1,2-Dibromo-3-Ch...	0.101	0.112	0.115	0.116	0.120	0.113		6.08
89)	1,2,4-Trichlorob...	0.303	0.344	0.373	0.383	0.402	0.361		10.66
90)	Hexachlorobutadiene	0.202	0.179	0.174	0.174	0.172	0.180		6.87
91) M	Naphthalene	0.790	1.044	1.199	1.333	1.431	1.159		21.79
92)	1,2,3-Trichlorob...	0.303	0.344	0.373	0.383	0.402	0.361		10.66

(#) = Out of Range

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN122024\  
 Data File : VN085272.D  
 Acq On : 20 Dec 2024 10:05  
 Operator : JC\MD  
 Sample : VSTDIC005  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC005

Quant Time: Dec 21 01:40:56 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N122024W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Dec 21 01:29:00 2024  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) Bromochloromethane	7.818	128	29925	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.100	114	147950	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.865	117	134950	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.571	65	78890	29.968	ug/l	0.00
Spiked Amount	30.000	Range 91 - 110	Recovery	=	99.900%	
60) 4-Bromofluorobenzene	12.847	95	63148	28.888	ug/l	0.00
Spiked Amount	30.000	Range 63 - 112	Recovery	=	96.300%	
63) Toluene-d8	10.565	98	206247	31.299	ug/l	0.00
Spiked Amount	30.000	Range 91 - 112	Recovery	=	104.333%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	2.124	85	11972	4.785	ug/l	93
3) Chloromethane	2.360	50	13552	5.364	ug/l	96
4) Vinyl Chloride	2.513	62	13662	5.326	ug/l	92
5) Bromomethane	2.954	94	8400	5.602	ug/l	99
6) Chloroethane	3.118	64	9071	5.602	ug/l	97
7) Trichlorofluoromethane	3.501	101	18255	5.180	ug/l	93
8) Diethyl Ether	3.960	74	5921	4.878	ug/l	98
9) 1,1,2-Trichlorotrifluo...	4.365	101	10482	5.180	ug/l	91
10) 1,1-Dichloroethene	4.336	96	9284m	5.022	ug/l	
11) Methyl Iodide	4.589	142	8960	4.044	ug/l	90
12) Methyl Acetate	5.012	43	12634m	4.580	ug/l	
13) Acrolein	4.177	56	8162	33.117	ug/l #	63
14) Acrylonitrile	5.724	53	23999	22.475	ug/l	99
15) Acetone	4.436	58	6761m	25.100	ug/l	
16) Carbon Disulfide	4.707	76	29834	5.309	ug/l	96
17) Allyl chloride	5.024	41	13971	4.672	ug/l	89
18) Methylene Chloride	5.277	84	11918	5.410	ug/l	89
19) trans-1,2-Dichloroethene	5.789	96	9407	4.892	ug/l #	76
20) Diisopropyl ether	6.665	45	31084	4.535	ug/l #	93
21) 1,1-Dichloroethane	6.571	63	20511	5.119	ug/l #	89
22) cis-1,2-Dichloroethene	7.483	96	11156	4.872	ug/l	100
23) tert-Butyl Alcohol	5.518	59	7725m	21.952	ug/l	
24) Methyl tert-Butyl Ether	5.795	73	26125	4.305	ug/l #	66
25) Chloroform	7.965	83	21418	5.273	ug/l	98
26) Cyclohexane	8.253	56	12906	4.225	ug/l #	97
29) 1,1-Dichloropropene	8.365	75	12620	4.913	ug/l #	62
30) 2-Butanone	7.477	43	31835	23.479	ug/l #	63
31) 2,2-Dichloropropane	7.489	77	16976	5.215	ug/l	99
32) 1,1,1-Trichloroethane	8.165	97	18325	5.488	ug/l	99
33) Carbon Tetrachloride	8.359	117	15855	5.424	ug/l	84
34) Benzene	8.606	78	43060	5.303	ug/l	93
35) Methacrylonitrile	7.783	41	7309m	4.869	ug/l	
36) 1,2-Dichloroethane	8.665	62	16492	5.617	ug/l	98
37) Trichloroethene	9.347	130	9449	5.289	ug/l	99
38) Methylcyclohexane	9.600	83	12207	4.592	ug/l	99
39) 1,2-Dichloropropane	9.624	63	10877	5.265	ug/l	94
40) Dibromomethane	9.706	93	7832	5.438	ug/l	99
41) Bromodichloromethane	9.883	83	15902	5.283	ug/l	99
42) Vinyl Acetate	6.601	43	104153	21.761	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN122024\  
 Data File : VN085272.D  
 Acq On : 20 Dec 2024 10:05  
 Operator : JC\MD  
 Sample : VSTDIC005  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC005

Quant Time: Dec 21 01:40:56 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N122024W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Dec 21 01:29:00 2024  
 Response via : Initial Calibration

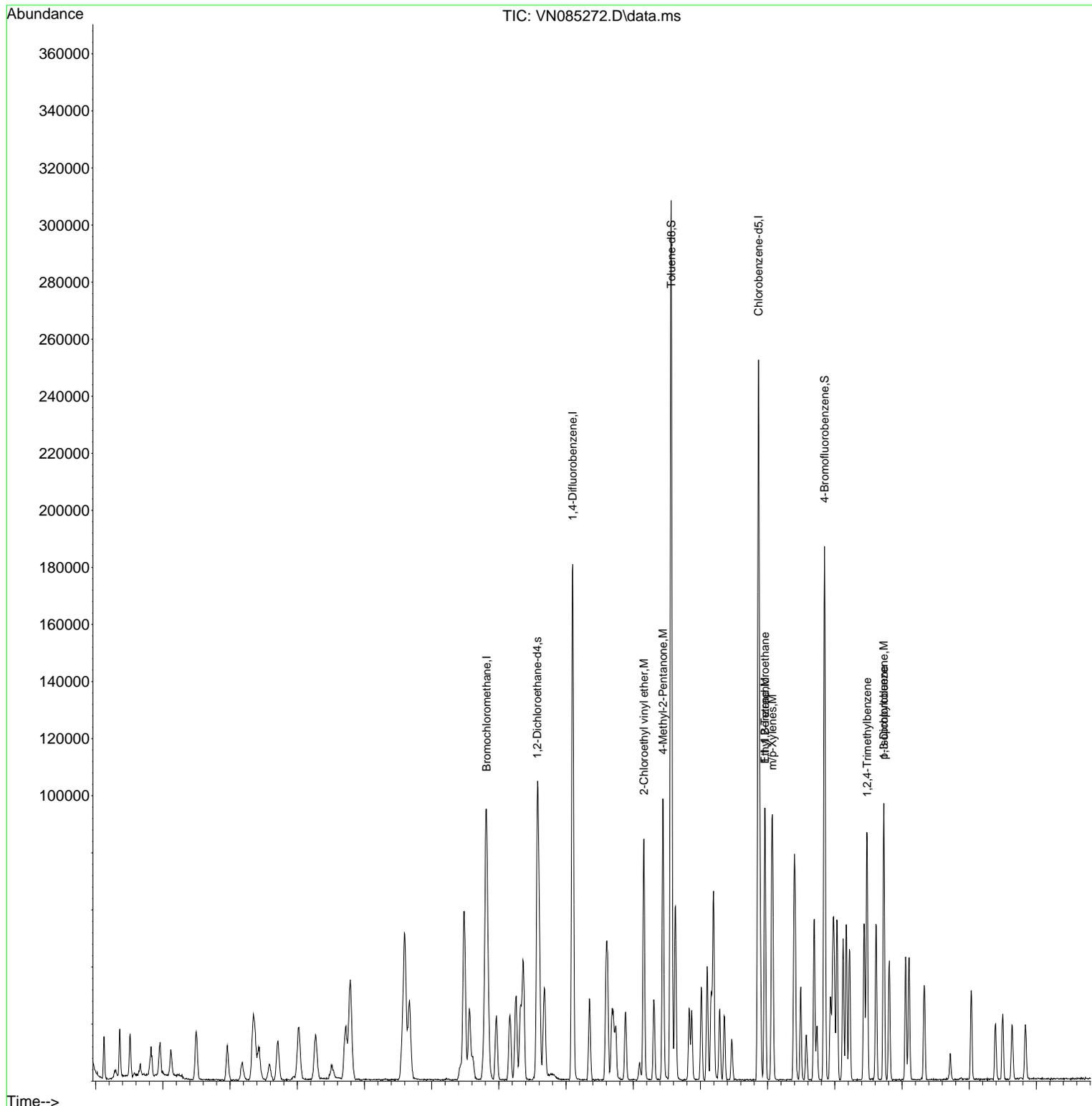
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	7.559	43	13903	4.958	ug/l	98
44) Isopropyl Acetate	8.683	43	22675	4.868	ug/l	95
45) 1,4-Dioxane	9.700	88	3355	92.601	ug/l #	83
46) Methyl methacrylate	9.677	41	9500	4.394	ug/l	91
47) n-amyl Acetate	12.494	43	15955	4.021	ug/l	95
48) t-1,3-Dichloropropene	10.830	75	14385	4.838	ug/l	95
49) cis-1,3-Dichloropropene	10.306	75	15948	4.989	ug/l	93
50) 1,1,2-Trichloroethane	11.012	97	10385	5.513	ug/l	89
51) Ethyl methacrylate	10.871	69	11450	4.019	ug/l	87
52) 1,3-Dichloropropane	11.159	76	16708	5.081	ug/l	97
53) Dibromochloromethane	11.359	129	11724	5.312	ug/l	98
54) 1,2-Dibromoethane	11.465	107	9241	5.069	ug/l	98
55) 2-Chloroethyl vinyl ether	10.159	63	34874	23.763	ug/l	99
56) Bromoform	12.577	173	7486	5.199	ug/l #	92
58) 4-Methyl-2-Pentanone	10.442	43	63871	23.347	ug/l	99
59) 2-Hexanone	11.194	43	44133	22.206	ug/l	95
61) Tetrachloroethene	11.106	164	8697	5.773	ug/l	86
62) Toluene	10.624	91	44448	5.361	ug/l	99
64) Chlorobenzene	11.888	112	26160	5.232	ug/l	98
65) 1,1,1,2-Tetrachloroethane	11.959	131	9761	5.383	ug/l	96
66) Ethyl Benzene	11.959	91	40717	4.667	ug/l	97
67) m/p-Xylenes	12.071	106	29599	9.044	ug/l	99
68) o-Xylene	12.394	106	14496	4.650	ug/l	96
69) Styrene	12.412	104	21997	4.175	ug/l	95
70) Isopropylbenzene	12.694	105	33727	4.309	ug/l	99
71) 1,1,2,2-Tetrachloroethane	12.935	83	15703	5.656	ug/l	94
72) 1,2,3-Trichloropropane	12.994	75	13741m	5.523	ug/l	
73) Bromobenzene	12.977	156	9490	4.907	ug/l	93
74) n-propylbenzene	13.035	91	43948	4.507	ug/l	98
75) 2-Chlorotoluene	13.124	91	27159	4.623	ug/l	99
76) 1,3,5-Trimethylbenzene	13.171	105	28562	4.276	ug/l	99
77) t-1,4-Dichloro-2-butene	12.730	75	4250	4.401	ug/l	93
78) 4-Chlorotoluene	13.218	91	27799	4.654	ug/l	100
79) tert-butylbenzene	13.435	119	23802	4.357	ug/l	98
80) 1,2,4-Trimethylbenzene	13.482	105	27501	4.138	ug/l	95
81) sec-Butylbenzene	13.612	105	33950	4.305	ug/l	98
82) p-Isopropyltoluene	13.730	119	26904	4.142	ug/l	98
83) 1,3-Dichlorobenzene	13.730	146	17432	4.833	ug/l	98
84) 1,4-Dichlorobenzene	13.812	146	16668	4.777	ug/l	98
85) n-Butylbenzene	14.053	91	22425	3.999	ug/l	97
86) Hexachloroethane	14.329	117	7051	5.057	ug/l	99
87) 1,2-Dichlorobenzene	14.106	146	16417	4.791	ug/l	99
88) 1,2-Dibromo-3-Chloropr...	14.724	75	2281m	4.501	ug/l	
89) 1,2,4-Trichlorobenzene	15.841	180	6811	4.196	ug/l	96
90) Hexachlorobutadiene	15.500	225	4533	5.602	ug/l	97
91) Naphthalene	15.641	128	17764	3.406	ug/l	98
92) 1,2,3-Trichlorobenzene	15.841	180	6811	4.196	ug/l	96

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN122024\  
 Data File : VN085272.D  
 Acq On : 20 Dec 2024 10:05  
 Operator : JC\MD  
 Sample : VSTDIC005  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 2 Sample Multiplier: 1

**Instrument :**  
 MSVOA\_N  
**ClientSampleId :**  
 VSTDIC005

Quant Time: Dec 21 01:40:56 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N122024W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Dec 21 01:29:00 2024  
 Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN122024\  
 Data File : VN085273.D  
 Acq On : 20 Dec 2024 10:29  
 Operator : JC\MD  
 Sample : VSTDICCC020  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICCC020

Quant Time: Dec 21 01:54:49 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N122024W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Dec 21 01:51:00 2024  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) Bromochloromethane	7.812	128	29576	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.100	114	153203	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.865	117	143051	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.577	65	78544	30.189	ug/l	0.00
Spiked Amount	30.000	Range 91 - 110	Recovery	=	100.633%	
60) 4-Bromofluorobenzene	12.847	95	69746	30.099	ug/l	0.00
Spiked Amount	30.000	Range 63 - 112	Recovery	=	100.333%	
63) Toluene-d8	10.565	98	215956	30.916	ug/l	0.00
Spiked Amount	30.000	Range 91 - 112	Recovery	=	103.067%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	2.124	85	52267	21.135	ug/l	100
3) Chloromethane	2.359	50	51713	20.711	ug/l	100
4) Vinyl Chloride	2.512	62	51594	20.351	ug/l	100
5) Bromomethane	2.959	94	29293	19.765	ug/l	100
6) Chloroethane	3.118	64	33189	20.738	ug/l	100
7) Trichlorofluoromethane	3.500	101	71742	20.598	ug/l	100
8) Diethyl Ether	3.959	74	23223	19.360	ug/l	100
9) 1,1,2-Trichlorotrifluo...	4.371	101	41211	20.605	ug/l	100
10) 1,1-Dichloroethene	4.342	96	36049	19.730	ug/l	100
11) Methyl Iodide	4.589	142	42072	19.213	ug/l	100
12) Methyl Acetate	5.024	43	55461	20.341	ug/l	100
13) Acrolein	4.183	56	21739	89.245	ug/l	100
14) Acrylonitrile	5.718	53	105856	100.305	ug/l	100
15) Acetone	4.430	58	27144	101.962	ug/l	100
16) Carbon Disulfide	4.712	76	112335	20.226	ug/l	100
17) Allyl chloride	5.024	41	57914	19.594	ug/l	100
18) Methylene Chloride	5.271	84	44276	20.336	ug/l	100
19) trans-1,2-Dichloroethene	5.783	96	37932	19.960	ug/l	100
20) Diisopropyl ether	6.671	45	138751	20.483	ug/l	100
21) 1,1-Dichloroethane	6.565	63	80659	20.368	ug/l	100
22) cis-1,2-Dichloroethene	7.482	96	45052	19.908	ug/l	100
23) tert-Butyl Alcohol	5.518	59	33206	95.473	ug/l #	100
24) Methyl tert-Butyl Ether	5.800	73	118809	19.811	ug/l	100
25) Chloroform	7.965	83	82672	20.595	ug/l	100
26) Cyclohexane	8.253	56	59501	19.707	ug/l #	100
29) 1,1-Dichloropropene	8.371	75	53883	20.257	ug/l	100
30) 2-Butanone	7.477	43	143077	101.902	ug/l	100
31) 2,2-Dichloropropane	7.488	77	69250	20.546	ug/l	100
32) 1,1,1-Trichloroethane	8.165	97	71008	20.535	ug/l	100
33) Carbon Tetrachloride	8.359	117	61840	20.430	ug/l	100
34) Benzene	8.606	78	173626	20.650	ug/l	100
35) Methacrylonitrile	7.771	41	31344	20.166	ug/l	100
36) 1,2-Dichloroethane	8.665	62	62275	20.482	ug/l	100
37) Trichloroethene	9.347	130	37633	20.343	ug/l	100
38) Methylcyclohexane	9.600	83	51030	18.539	ug/l	100
39) 1,2-Dichloropropane	9.618	63	44023	20.579	ug/l	100
40) Dibromomethane	9.706	93	30578	20.502	ug/l	100
41) Bromodichloromethane	9.882	83	64696	20.756	ug/l	100
42) Vinyl Acetate	6.600	43	492149	99.300	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN122024\  
 Data File : VN085273.D  
 Acq On : 20 Dec 2024 10:29  
 Operator : JC\MD  
 Sample : VSTDICCC020  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICCC020

Quant Time: Dec 21 01:54:49 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N122024W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Dec 21 01:51:00 2024  
 Response via : Initial Calibration

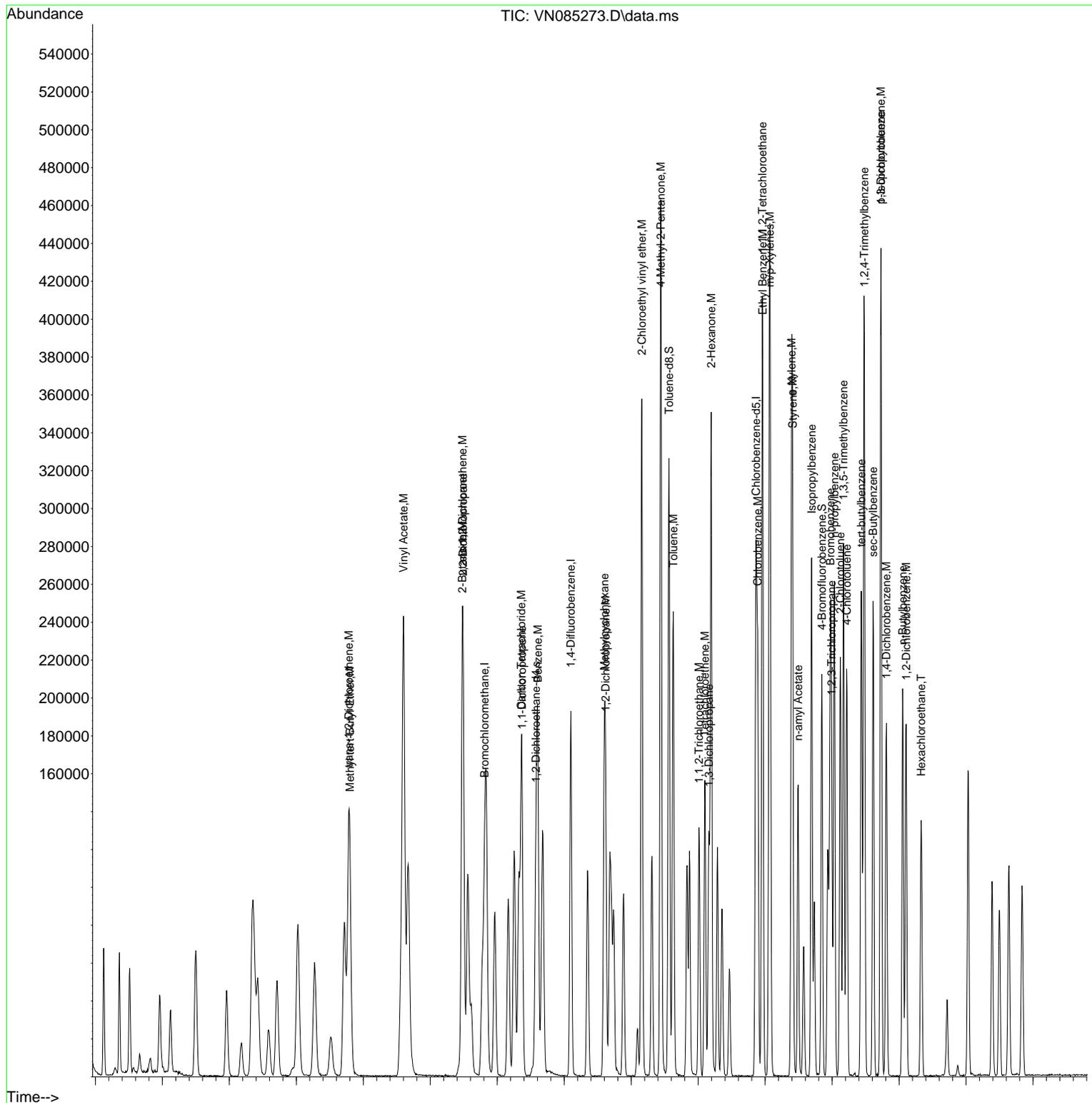
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	7.553	43	56967	19.619	ug/l	100
44) Isopropyl Acetate	8.688	43	97067	20.124	ug/l	100
45) 1,4-Dioxane	9.688	88	15163	404.160	ug/l	100
46) Methyl methacrylate	9.682	41	44997	20.097	ug/l	100
47) n-amyl Acetate	12.494	43	80353	19.555	ug/l	100
48) t-1,3-Dichloropropene	10.829	75	60723	19.723	ug/l	100
49) cis-1,3-Dichloropropene	10.312	75	65832	19.889	ug/l	100
50) 1,1,2-Trichloroethane	11.012	97	41047	21.044	ug/l	100
51) Ethyl methacrylate	10.871	69	56707	19.221	ug/l	100
52) 1,3-Dichloropropane	11.159	76	70899	20.823	ug/l	100
53) Dibromochloromethane	11.359	129	47574	20.815	ug/l	100
54) 1,2-Dibromoethane	11.465	107	38439	20.363	ug/l	100
55) 2-Chloroethyl vinyl ether	10.159	63	149446	98.342	ug/l	100
56) Bromoform	12.576	173	30002	20.122	ug/l	100
58) 4-Methyl-2-Pentanone	10.441	43	303556	104.675	ug/l	100
59) 2-Hexanone	11.194	43	219043	103.973	ug/l	100
61) Tetrachloroethene	11.100	164	32838	20.563	ug/l	100
62) Toluene	10.629	91	181570	20.660	ug/l	100
64) Chlorobenzene	11.888	112	107869	20.351	ug/l	100
65) 1,1,1,2-Tetrachloroethane	11.959	131	40031	20.825	ug/l	100
66) Ethyl Benzene	11.965	91	183288	19.821	ug/l	100
67) m/p-Xylenes	12.070	106	143364	41.324	ug/l	100
68) o-Xylene	12.394	106	66310	20.067	ug/l	100
69) Styrene	12.412	104	113798	20.377	ug/l	100
70) Isopropylbenzene	12.694	105	165058	19.892	ug/l	100
71) 1,1,2,2-Tetrachloroethane	12.935	83	59675	20.277	ug/l	100
72) 1,2,3-Trichloropropane	12.994	75	48125m	19.213	ug/l	
73) Bromobenzene	12.976	156	42355	20.662	ug/l	100
74) n-propylbenzene	13.035	91	207704	20.092	ug/l	100
75) 2-Chlorotoluene	13.123	91	125363	20.131	ug/l	100
76) 1,3,5-Trimethylbenzene	13.170	105	144488	20.407	ug/l	100
77) t-1,4-Dichloro-2-butene	12.735	75	19212	18.768	ug/l	100
78) 4-Chlorotoluene	13.217	91	126859	20.036	ug/l	100
79) tert-butylbenzene	13.435	119	111921	19.329	ug/l	100
80) 1,2,4-Trimethylbenzene	13.482	105	142514	20.230	ug/l	100
81) sec-Butylbenzene	13.611	105	163388	19.545	ug/l	100
82) p-Isopropyltoluene	13.729	119	131247	19.064	ug/l	100
83) 1,3-Dichlorobenzene	13.729	146	78045	20.415	ug/l	100
84) 1,4-Dichlorobenzene	13.811	146	71930	19.448	ug/l	100
85) n-Butylbenzene	14.053	91	109530	18.428	ug/l	100
86) Hexachloroethane	14.329	117	30284	20.490	ug/l	100
87) 1,2-Dichlorobenzene	14.106	146	73249	20.167	ug/l	100
88) 1,2-Dibromo-3-Chloropr...	14.717	75	10690	19.898	ug/l	100
89) 1,2,4-Trichlorobenzene	15.835	180	32846	19.089	ug/l	100
90) Hexachlorobutadiene	15.500	225	17028	19.853	ug/l	100
91) Naphthalene	15.641	128	99596	18.015	ug/l	100
92) 1,2,3-Trichlorobenzene	15.835	180	32846	19.089	ug/l	100

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN122024\  
 Data File : VN085273.D  
 Acq On : 20 Dec 2024 10:29  
 Operator : JC\MD  
 Sample : VSTDICCC020  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 3 Sample Multiplier: 1

**Instrument :**  
 MSVOA\_N  
**ClientSampleId :**  
 VSTDICCC020

Quant Time: Dec 21 01:54:49 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N122024W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Dec 21 01:51:00 2024  
 Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN122024\  
 Data File : VN085274.D  
 Acq On : 20 Dec 2024 10:53  
 Operator : JC\MD  
 Sample : VSTDIC050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC050

Quant Time: Dec 21 01:42:40 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N122024W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Dec 21 01:29:00 2024  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) Bromochloromethane	7.812	128	29588	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.100	114	155749	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.865	117	147286	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.577	65	77354	29.719	ug/l	0.00
Spiked Amount	30.000	Range 91 - 110	Recovery	=	99.067%	
60) 4-Bromofluorobenzene	12.847	95	71225	29.854	ug/l	0.00
Spiked Amount	30.000	Range 63 - 112	Recovery	=	99.500%	
63) Toluene-d8	10.565	98	212997	29.616	ug/l	0.00
Spiked Amount	30.000	Range 91 - 112	Recovery	=	98.733%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	2.124	85	125152	50.588	ug/l	100
3) Chloromethane	2.359	50	125132	50.096	ug/l	100
4) Vinyl Chloride	2.512	62	123837	48.826	ug/l	97
5) Bromomethane	2.948	94	71335	48.112	ug/l	100
6) Chloroethane	3.112	64	77595	48.464	ug/l	92
7) Trichlorofluoromethane	3.495	101	173348	49.749	ug/l	97
8) Diethyl Ether	3.959	74	59743	49.784	ug/l	96
9) 1,1,2-Trichlorotrifluo...	4.371	101	97445	48.701	ug/l	98
10) 1,1-Dichloroethene	4.336	96	89996	49.235	ug/l	90
11) Methyl Iodide	4.583	142	113125	51.640	ug/l	97
12) Methyl Acetate	5.024	43	135823	49.796	ug/l	97
13) Acrolein	4.177	56	54376	223.139	ug/l	100
14) Acrylonitrile	5.712	53	265775	251.737	ug/l	99
15) Acetone	4.430	58	64795	243.294	ug/l	98
16) Carbon Disulfide	4.706	76	271267	48.822	ug/l	98
17) Allyl chloride	5.018	41	147944	50.034	ug/l	95
18) Methylene Chloride	5.271	84	105769	48.560	ug/l	95
19) trans-1,2-Dichloroethene	5.783	96	95330	50.143	ug/l	96
20) Diisopropyl ether	6.671	45	342293	50.511	ug/l	98
21) 1,1-Dichloroethane	6.565	63	194526	49.102	ug/l	96
22) cis-1,2-Dichloroethene	7.483	96	111942	49.447	ug/l	98
23) tert-Butyl Alcohol	5.524	59	87172	250.534	ug/l #	100
24) Methyl tert-Butyl Ether	5.789	73	303617	50.607	ug/l	98
25) Chloroform	7.965	83	196531	48.939	ug/l	100
26) Cyclohexane	8.253	56	155515	51.487	ug/l #	100
29) 1,1-Dichloropropene	8.371	75	134525	49.747	ug/l	99
30) 2-Butanone	7.483	43	357311	250.324	ug/l	100
31) 2,2-Dichloropropane	7.489	77	167877	48.993	ug/l	99
32) 1,1,1-Trichloroethane	8.165	97	170514	48.506	ug/l	99
33) Carbon Tetrachloride	8.359	117	150812	49.008	ug/l	96
34) Benzene	8.600	78	417957	48.897	ug/l	97
35) Methacrylonitrile	7.777	41	77907	49.305	ug/l	97
36) 1,2-Dichloroethane	8.671	62	149871	48.487	ug/l	100
37) Trichloroethene	9.347	130	91953	48.894	ug/l	96
38) Methylcyclohexane	9.600	83	141960	50.730	ug/l	96
39) 1,2-Dichloropropane	9.618	63	107319	49.348	ug/l	98
40) Dibromomethane	9.706	93	74458	49.107	ug/l	99
41) Bromodichloromethane	9.882	83	154374	48.718	ug/l	98
42) Vinyl Acetate	6.600	43	1291146	256.254	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN122024\  
 Data File : VN085274.D  
 Acq On : 20 Dec 2024 10:53  
 Operator : JC\MD  
 Sample : VSTDIC050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC050

Quant Time: Dec 21 01:42:40 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N122024W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Dec 21 01:29:00 2024  
 Response via : Initial Calibration

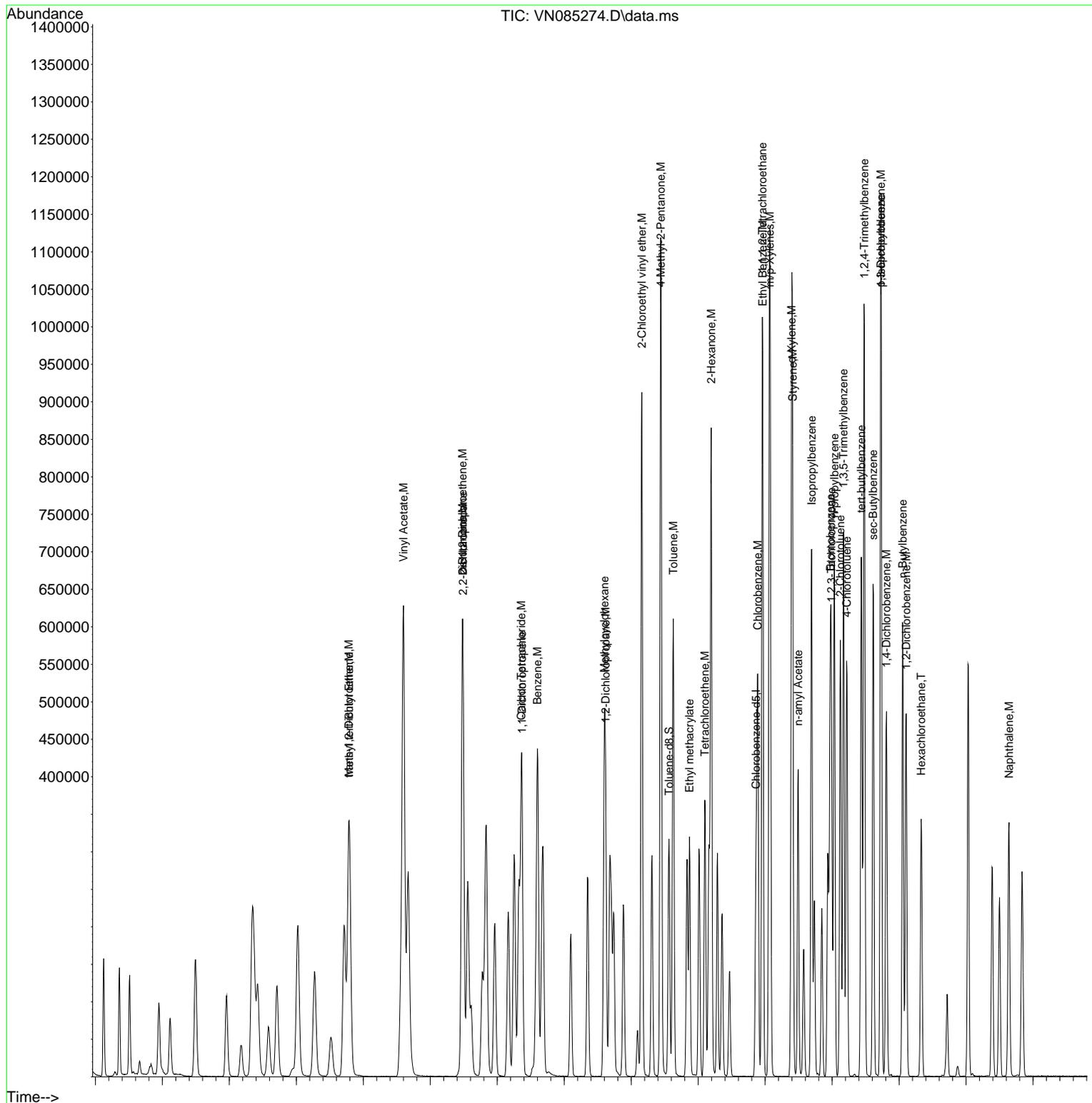
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	7.559	43	147156	49.852	ug/l	95
44) Isopropyl Acetate	8.688	43	241079	49.163	ug/l	98
45) 1,4-Dioxane	9.694	88	39688	1040.566	ug/l	96
46) Methyl methacrylate	9.677	41	116559	51.209	ug/l	98
47) n-amyl Acetate	12.494	43	212696	50.916	ug/l	98
48) t-1,3-Dichloropropene	10.835	75	156703	50.066	ug/l	99
49) cis-1,3-Dichloropropene	10.312	75	167067	49.650	ug/l	97
50) 1,1,2-Trichloroethane	11.018	97	95304	48.061	ug/l	94
51) Ethyl methacrylate	10.871	69	154832	51.624	ug/l	93
52) 1,3-Dichloropropane	11.159	76	171106	49.432	ug/l	100
53) Dibromochloromethane	11.359	129	113404	48.807	ug/l	99
54) 1,2-Dibromoethane	11.471	107	94603	49.297	ug/l	99
55) 2-Chloroethyl vinyl ether	10.159	63	389749	252.280	ug/l	99
56) Bromoform	12.576	173	73622	48.571	ug/l	99
58) 4-Methyl-2-Pentanone	10.441	43	750694	251.417	ug/l	99
59) 2-Hexanone	11.194	43	553103	254.992	ug/l	99
61) Tetrachloroethene	11.100	164	79591	48.406	ug/l	95
62) Toluene	10.630	91	439961	48.622	ug/l	99
64) Chlorobenzene	11.888	112	268859	49.265	ug/l	97
65) 1,1,1,2-Tetrachloroethane	11.959	131	96474	48.745	ug/l	99
66) Ethyl Benzene	11.965	91	480323	50.448	ug/l	97
67) m/p-Xylenes	12.071	106	367404	102.858	ug/l	99
68) o-Xylene	12.394	106	173012	50.851	ug/l	100
69) Styrene	12.412	104	302535	52.615	ug/l	99
70) Isopropylbenzene	12.694	105	442423	51.786	ug/l	99
71) 1,1,2,2-Tetrachloroethane	12.935	83	145707	48.087	ug/l	98
72) 1,2,3-Trichloropropane	12.988	75	136966m	50.442	ug/l	
73) Bromobenzene	12.976	156	106099	50.270	ug/l	99
74) n-propylbenzene	13.035	91	542722	50.991	ug/l	98
75) 2-Chlorotoluene	13.123	91	326274	50.887	ug/l	100
76) 1,3,5-Trimethylbenzene	13.171	105	381614	52.349	ug/l	100
77) t-1,4-Dichloro-2-butene	12.735	75	52968	50.256	ug/l	98
78) 4-Chlorotoluene	13.218	91	332540	51.010	ug/l	100
79) tert-butylbenzene	13.435	119	310813	52.136	ug/l	99
80) 1,2,4-Trimethylbenzene	13.482	105	381672	52.620	ug/l	99
81) sec-Butylbenzene	13.612	105	448352	52.091	ug/l	99
82) p-Isopropyltoluene	13.729	119	373378	52.675	ug/l	99
83) 1,3-Dichlorobenzene	13.729	146	198317	50.383	ug/l	99
84) 1,4-Dichlorobenzene	13.812	146	194944	51.191	ug/l	97
85) n-Butylbenzene	14.053	91	316703	51.751	ug/l	99
86) Hexachloroethane	14.329	117	74758	49.126	ug/l	98
87) 1,2-Dichlorobenzene	14.106	146	192508	51.479	ug/l	99
88) 1,2-Dibromo-3-Chloropr...	14.717	75	28112	50.822	ug/l	96
89) 1,2,4-Trichlorobenzene	15.835	180	91492	51.642	ug/l	99
90) Hexachlorobutadiene	15.500	225	42618	48.259	ug/l	94
91) Naphthalene	15.641	128	294265	51.695	ug/l	100
92) 1,2,3-Trichlorobenzene	15.835	180	91492	51.642	ug/l	99

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN122024\  
 Data File : VN085274.D  
 Acq On : 20 Dec 2024 10:53  
 Operator : JC\MD  
 Sample : VSTDIC050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 4 Sample Multiplier: 1

**Instrument :**  
 MSVOA\_N  
**ClientSampleId :**  
 VSTDIC050

Quant Time: Dec 21 01:42:40 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N122024W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Dec 21 01:29:00 2024  
 Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN122024\  
 Data File : VN085275.D  
 Acq On : 20 Dec 2024 11:17  
 Operator : JC\MD  
 Sample : VSTDICC100  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC100

Quant Time: Dec 21 01:43:35 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N122024W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Dec 21 01:29:00 2024  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) Bromochloromethane	7.812	128	30847	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.100	114	160498	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.865	117	153405	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.571	65	80099	29.518	ug/l	0.00
Spiked Amount	30.000	Range 91 - 110	Recovery	=	98.400%	
60) 4-Bromofluorobenzene	12.847	95	75053	30.203	ug/l	0.00
Spiked Amount	30.000	Range 63 - 112	Recovery	=	100.667%	
63) Toluene-d8	10.565	98	216384	28.887	ug/l	0.00
Spiked Amount	30.000	Range 91 - 112	Recovery	=	96.300%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	2.124	85	246556	95.593	ug/l	99
3) Chloromethane	2.359	50	242223	93.014	ug/l	98
4) Vinyl Chloride	2.506	62	251220	95.008	ug/l	98
5) Bromomethane	2.936	94	144535	93.503	ug/l	100
6) Chloroethane	3.106	64	152824	91.555	ug/l	90
7) Trichlorofluoromethane	3.489	101	345388	95.078	ug/l	98
8) Diethyl Ether	3.959	74	124805	99.756	ug/l	96
9) 1,1,2-Trichlorotrifluo...	4.365	101	199737	95.751	ug/l	98
10) 1,1-Dichloroethene	4.336	96	186282	97.752	ug/l	98
11) Methyl Iodide	4.583	142	241406	105.701	ug/l	98
12) Methyl Acetate	5.018	43	281279	98.914	ug/l	97
13) Acrolein	4.177	56	108832	428.379	ug/l	99
14) Acrylonitrile	5.712	53	555218	504.428	ug/l	99
15) Acetone	4.424	58	134644	484.930	ug/l	95
16) Carbon Disulfide	4.706	76	547597	94.533	ug/l	96
17) Allyl chloride	5.018	41	308150	99.962	ug/l	97
18) Methylene Chloride	5.277	84	212750	93.689	ug/l	96
19) trans-1,2-Dichloroethene	5.783	96	193775	97.765	ug/l	99
20) Diisopropyl ether	6.665	45	703508	99.577	ug/l	96
21) 1,1-Dichloroethane	6.565	63	395631	95.790	ug/l #	96
22) cis-1,2-Dichloroethene	7.482	96	235386	99.731	ug/l	98
23) tert-Butyl Alcohol	5.512	59	188938	520.848	ug/l #	100
24) Methyl tert-Butyl Ether	5.794	73	641818	102.611	ug/l	97
25) Chloroform	7.965	83	393899	94.083	ug/l	99
26) Cyclohexane	8.253	56	327709	104.067	ug/l #	98
29) 1,1-Dichloropropene	8.371	75	283121	101.600	ug/l	100
30) 2-Butanone	7.477	43	753754	512.438	ug/l	99
31) 2,2-Dichloropropane	7.488	77	346752	98.201	ug/l	99
32) 1,1,1-Trichloroethane	8.165	97	347150	95.831	ug/l	98
33) Carbon Tetrachloride	8.359	117	306524	96.662	ug/l	95
34) Benzene	8.606	78	859140	97.537	ug/l	98
35) Methacrylonitrile	7.777	41	164485	101.017	ug/l	96
36) 1,2-Dichloroethane	8.671	62	304004	95.442	ug/l	99
37) Trichloroethene	9.353	130	189053	97.550	ug/l	97
38) Methylcyclohexane	9.600	83	311600	108.056	ug/l	93
39) 1,2-Dichloropropane	9.618	63	216881	96.777	ug/l	95
40) Dibromomethane	9.706	93	150157	96.103	ug/l	99
41) Bromodichloromethane	9.888	83	316593	96.956	ug/l	99
42) Vinyl Acetate	6.600	43	2741189	527.947	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN122024\  
 Data File : VN085275.D  
 Acq On : 20 Dec 2024 11:17  
 Operator : JC\MD  
 Sample : VSTDICC100  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC100

Quant Time: Dec 21 01:43:35 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N122024W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Dec 21 01:29:00 2024  
 Response via : Initial Calibration

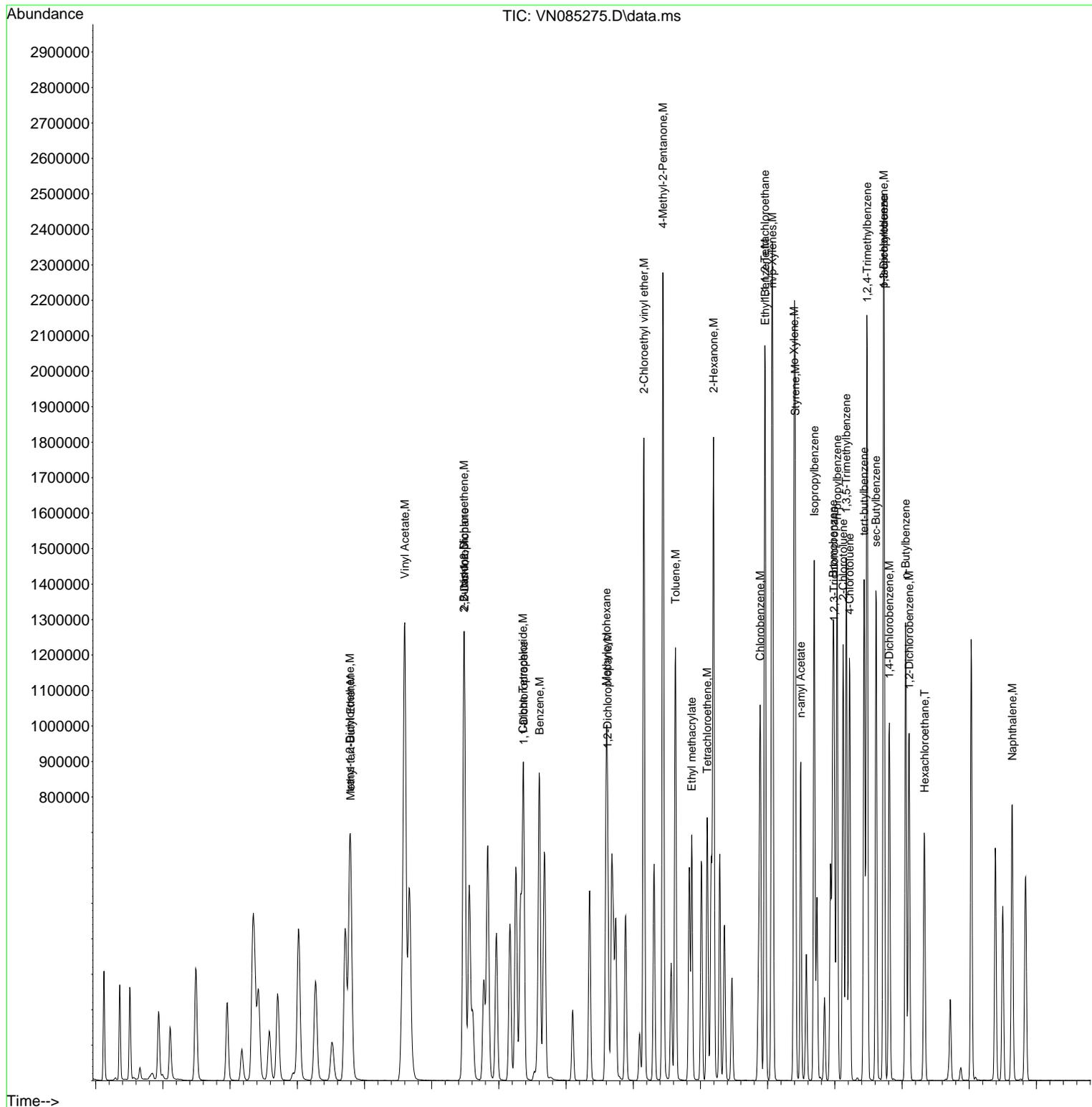
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	7.559	43	311058	102.259	ug/l	94
44) Isopropyl Acetate	8.688	43	516730	102.257	ug/l	99
45) 1,4-Dioxane	9.688	88	83662	2128.602	ug/l	97
46) Methyl methacrylate	9.676	41	246088	104.916	ug/l	98
47) n-amyl Acetate	12.494	43	469368	109.035	ug/l	95
48) t-1,3-Dichloropropene	10.835	75	328441	101.831	ug/l	97
49) cis-1,3-Dichloropropene	10.312	75	350611	101.113	ug/l	99
50) 1,1,2-Trichloroethane	11.012	97	195079	95.466	ug/l	98
51) Ethyl methacrylate	10.871	69	337682	109.258	ug/l	94
52) 1,3-Dichloropropane	11.159	76	354047	99.257	ug/l	98
53) Dibromochloromethane	11.359	129	230512	96.273	ug/l	98
54) 1,2-Dibromoethane	11.470	107	197287	99.764	ug/l	99
55) 2-Chloroethyl vinyl ether	10.159	63	794467	499.033	ug/l	100
56) Bromoform	12.576	173	155445	99.517	ug/l	98
58) 4-Methyl-2-Pentanone	10.441	43	1555548	500.192	ug/l	98
59) 2-Hexanone	11.194	43	1155911	511.643	ug/l	97
61) Tetrachloroethene	11.100	164	158376	92.479	ug/l	95
62) Toluene	10.629	91	906601	96.195	ug/l	99
64) Chlorobenzene	11.888	112	552038	97.120	ug/l	98
65) 1,1,1,2-Tetrachloroethane	11.959	131	196883	95.511	ug/l	99
66) Ethyl Benzene	11.965	91	1023076	103.167	ug/l	98
67) m/p-Xylenes	12.070	106	759711	204.205	ug/l	99
68) o-Xylene	12.394	106	365116	103.033	ug/l	99
69) Styrene	12.412	104	627310	104.745	ug/l	99
70) Isopropylbenzene	12.694	105	931902	104.729	ug/l	100
71) 1,1,2,2-Tetrachloroethane	12.935	83	299530	94.909	ug/l	99
72) 1,2,3-Trichloropropane	12.988	75	245228m	86.710	ug/l	
73) Bromobenzene	12.976	156	217768	99.063	ug/l	97
74) n-propylbenzene	13.035	91	1150009	103.738	ug/l	98
75) 2-Chlorotoluene	13.123	91	688133	103.043	ug/l	99
76) 1,3,5-Trimethylbenzene	13.170	105	795513	104.774	ug/l	100
77) t-1,4-Dichloro-2-butene	12.735	75	116397	106.032	ug/l	90
78) 4-Chlorotoluene	13.217	91	696441	102.569	ug/l	99
79) tert-butylbenzene	13.435	119	658635	106.072	ug/l	99
80) 1,2,4-Trimethylbenzene	13.482	105	802332	106.203	ug/l	99
81) sec-Butylbenzene	13.612	105	950101	105.983	ug/l	99
82) p-Isopropyltoluene	13.729	119	797992	108.087	ug/l	99
83) 1,3-Dichlorobenzene	13.729	146	414079	101.002	ug/l	99
84) 1,4-Dichlorobenzene	13.812	146	404547	101.995	ug/l	97
85) n-Butylbenzene	14.053	91	709360	111.289	ug/l	98
86) Hexachloroethane	14.335	117	156383	98.666	ug/l	99
87) 1,2-Dichlorobenzene	14.106	146	391699	100.567	ug/l	98
88) 1,2-Dibromo-3-Chloropr...	14.717	75	59160	102.685	ug/l	95
89) 1,2,4-Trichlorobenzene	15.841	180	195643	106.025	ug/l	100
90) Hexachlorobutadiene	15.500	225	88782	96.524	ug/l	94
91) Naphthalene	15.641	128	681808	114.999	ug/l	100
92) 1,2,3-Trichlorobenzene	15.841	180	195643	106.025	ug/l	100

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN122024\  
 Data File : VN085275.D  
 Acq On : 20 Dec 2024 11:17  
 Operator : JC\MD  
 Sample : VSTDIC100  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 5 Sample Multiplier: 1

**Instrument :**  
 MSVOA\_N  
**ClientSampleId :**  
 VSTDIC100

Quant Time: Dec 21 01:43:35 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N122024W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Dec 21 01:29:00 2024  
 Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN122024\  
 Data File : VN085276.D  
 Acq On : 20 Dec 2024 11:42  
 Operator : JC\MD  
 Sample : VSTDIC150  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC150

Quant Time: Dec 21 01:44:28 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N122024W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Dec 21 01:29:00 2024  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) Bromochloromethane	7.812	128	29871	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.100	114	167650	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.865	117	157508	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.577	65	80425	30.606	ug/l	0.00
Spiked Amount	30.000	Range 91 - 110	Recovery	=	102.033%	
60) 4-Bromofluorobenzene	12.847	95	78980	30.956	ug/l	0.00
Spiked Amount	30.000	Range 63 - 112	Recovery	=	103.200%	
63) Toluene-d8	10.565	98	225212	29.282	ug/l	0.00
Spiked Amount	30.000	Range 91 - 112	Recovery	=	97.600%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	2.124	85	381612	152.790	ug/l	97
3) Chloromethane	2.353	50	362946	143.926	ug/l	98
4) Vinyl Chloride	2.506	62	380504	148.603	ug/l	100
5) Bromomethane	2.924	94	223224	149.127	ug/l	96
6) Chloroethane	3.100	64	232256	143.688	ug/l	91
7) Trichlorofluoromethane	3.489	101	521516	148.252	ug/l	98
8) Diethyl Ether	3.953	74	193189	159.461	ug/l	96
9) 1,1,2-Trichlorotrifluo...	4.365	101	303693	150.342	ug/l	97
10) 1,1-Dichloroethene	4.330	96	289766	157.023	ug/l	96
11) Methyl Iodide	4.583	142	378427	171.110	ug/l	99
12) Methyl Acetate	5.018	43	448482	162.865	ug/l	92
13) Acrolein	4.171	56	190706	775.174	ug/l	99
14) Acrylonitrile	5.712	53	865051	811.596	ug/l	100
15) Acetone	4.424	58	208374	774.994	ug/l	99
16) Carbon Disulfide	4.706	76	845730	150.770	ug/l	97
17) Allyl chloride	5.018	41	486116	162.845	ug/l	96
18) Methylene Chloride	5.271	84	327575	148.968	ug/l	97
19) trans-1,2-Dichloroethene	5.777	96	300282	156.451	ug/l	94
20) Diisopropyl ether	6.671	45	1090650	159.418	ug/l	95
21) 1,1-Dichloroethane	6.565	63	610620	152.673	ug/l	97
22) cis-1,2-Dichloroethene	7.483	96	357862	156.578	ug/l	98
23) tert-Butyl Alcohol	5.524	59	295956	842.524	ug/l #	100
24) Methyl tert-Butyl Ether	5.789	73	1008587	166.517	ug/l	98
25) Chloroform	7.965	83	605692	149.397	ug/l	100
26) Cyclohexane	8.253	56	502835	164.897	ug/l #	98
29) 1,1-Dichloropropene	8.371	75	433829	149.042	ug/l	100
30) 2-Butanone	7.477	43	1170394	761.746	ug/l	99
31) 2,2-Dichloropropane	7.488	77	535416	145.163	ug/l	100
32) 1,1,1-Trichloroethane	8.165	97	537681	142.095	ug/l	98
33) Carbon Tetrachloride	8.359	117	470504	142.043	ug/l	95
34) Benzene	8.606	78	1316056	143.036	ug/l	99
35) Methacrylonitrile	7.777	41	260625	153.232	ug/l	97
36) 1,2-Dichloroethane	8.665	62	463319	139.254	ug/l	100
37) Trichloroethene	9.347	130	295039	145.744	ug/l	96
38) Methylcyclohexane	9.600	83	478702	158.922	ug/l	93
39) 1,2-Dichloropropane	9.618	63	338235	144.489	ug/l	99
40) Dibromomethane	9.706	93	231145	141.625	ug/l	99
41) Bromodichloromethane	9.888	83	492008	144.248	ug/l	99
42) Vinyl Acetate	6.600	43	4294003	791.735	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN122024\  
 Data File : VN085276.D  
 Acq On : 20 Dec 2024 11:42  
 Operator : JC\MD  
 Sample : VSTDIC150  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC150

Quant Time: Dec 21 01:44:28 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N122024W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Dec 21 01:29:00 2024  
 Response via : Initial Calibration

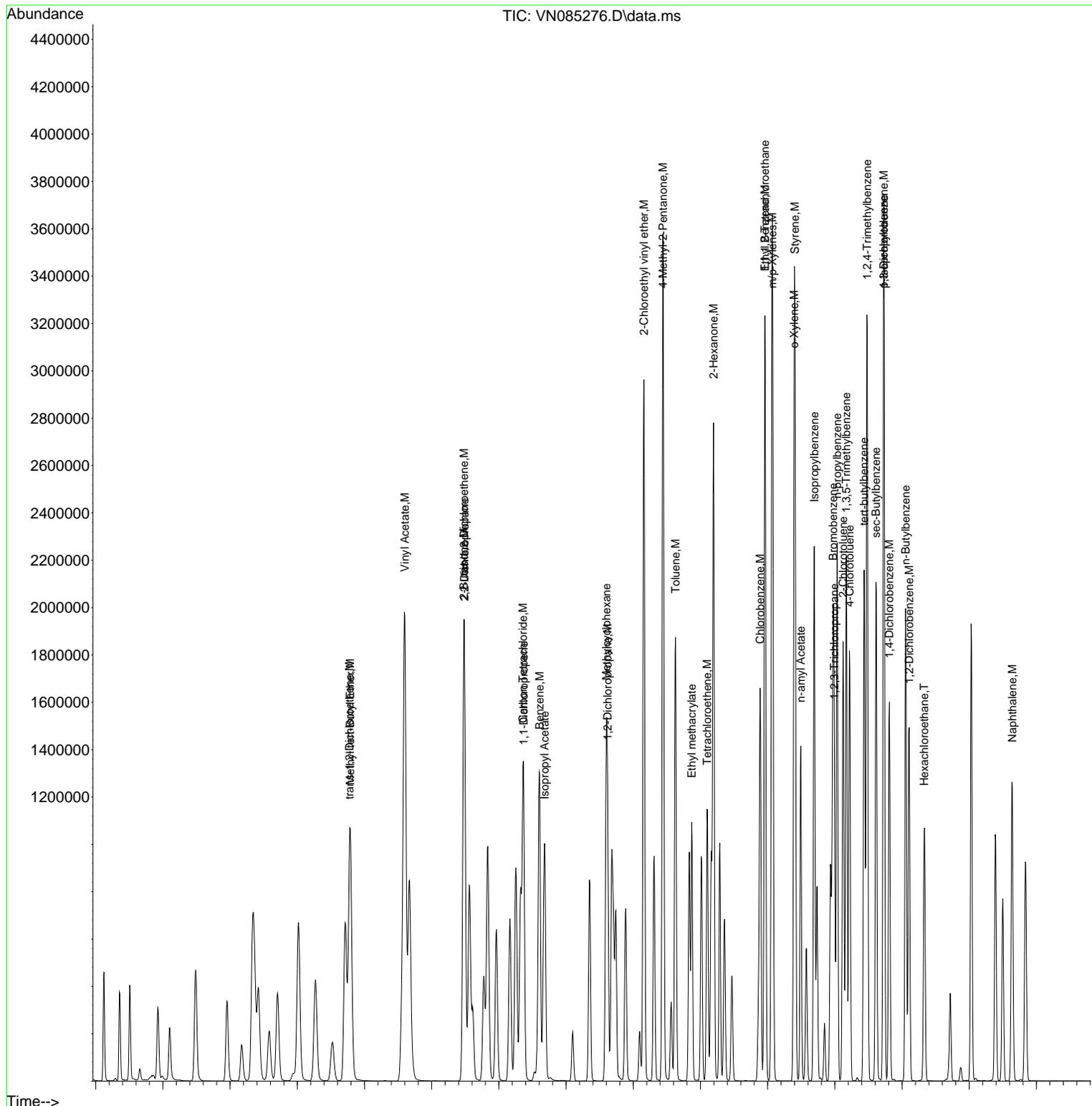
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	7.559	43	480322	151.167	ug/l	100
44) Isopropyl Acetate	8.682	43	803196	152.166	ug/l	99
45) 1,4-Dioxane	9.694	88	118082	2876.180	ug/l	98
46) Methyl methacrylate	9.677	41	383334	156.458	ug/l	97
47) n-amyl Acetate	12.494	43	748297	166.415	ug/l	92
48) t-1,3-Dichloropropene	10.835	75	518772	153.981	ug/l	95
49) cis-1,3-Dichloropropene	10.312	75	545222	150.530	ug/l	99
50) 1,1,2-Trichloroethane	11.012	97	297532	139.393	ug/l	97
51) Ethyl methacrylate	10.871	69	537584	166.516	ug/l	93
52) 1,3-Dichloropropane	11.159	76	537291	144.204	ug/l	99
53) Dibromochloromethane	11.359	129	359410	143.703	ug/l	98
54) 1,2-Dibromoethane	11.465	107	305011	147.658	ug/l	99
55) 2-Chloroethyl vinyl ether	10.159	63	1320616	794.138	ug/l	99
56) Bromoform	12.576	173	241680	148.125	ug/l	98
58) 4-Methyl-2-Pentanone	10.441	43	2426748	760.003	ug/l	98
59) 2-Hexanone	11.194	43	1789778	771.576	ug/l	97
61) Tetrachloroethene	11.100	164	243812	138.658	ug/l	94
62) Toluene	10.629	91	1393988	144.057	ug/l	100
64) Chlorobenzene	11.888	112	857578	146.943	ug/l	100
65) 1,1,1,2-Tetrachloroethane	11.959	131	302293	142.827	ug/l	99
66) Ethyl Benzene	11.959	91	1580537	155.229	ug/l	99
67) m/p-Xylenes	12.070	106	1160717	303.865	ug/l	100
68) o-Xylene	12.394	106	556306	152.896	ug/l	98
69) Styrene	12.406	104	965130	156.955	ug/l	99
70) Isopropylbenzene	12.694	105	1453567	159.099	ug/l	99
71) 1,1,2,2-Tetrachloroethane	12.935	83	458872	141.611	ug/l	97
72) 1,2,3-Trichloropropane	12.994	75	372774m	128.375	ug/l	
73) Bromobenzene	12.976	156	334967	148.408	ug/l	97
74) n-propylbenzene	13.035	91	1770285	155.531	ug/l	98
75) 2-Chlorotoluene	13.123	91	1049767	153.101	ug/l	99
76) 1,3,5-Trimethylbenzene	13.170	105	1204028	154.448	ug/l	100
77) t-1,4-Dichloro-2-butene	12.735	75	188674	167.396	ug/l	90
78) 4-Chlorotoluene	13.217	91	1068236	153.228	ug/l	99
79) tert-butylbenzene	13.435	119	1012350	158.790	ug/l	99
80) 1,2,4-Trimethylbenzene	13.482	105	1219847	157.263	ug/l	100
81) sec-Butylbenzene	13.612	105	1463612	159.012	ug/l	98
82) p-Isopropyltoluene	13.729	119	1232499	162.592	ug/l	98
83) 1,3-Dichlorobenzene	13.729	146	628188	149.235	ug/l	98
84) 1,4-Dichlorobenzene	13.812	146	628233	154.265	ug/l	97
85) n-Butylbenzene	14.053	91	1110120	169.627	ug/l	98
86) Hexachloroethane	14.329	117	242863	149.237	ug/l	99
87) 1,2-Dichlorobenzene	14.106	146	598727	149.716	ug/l	99
88) 1,2-Dibromo-3-Chloropr...	14.717	75	94207	159.257	ug/l	93
89) 1,2,4-Trichlorobenzene	15.841	180	316396	166.998	ug/l	99
90) Hexachlorobutadiene	15.500	225	135495	143.473	ug/l	92
91) Naphthalene	15.641	128	1126942	185.128	ug/l	100
92) 1,2,3-Trichlorobenzene	15.841	180	316396	166.998	ug/l	99

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN122024\  
 Data File : VN085276.D  
 Acq On : 20 Dec 2024 11:42  
 Operator : JC\MD  
 Sample : VSTDIC150  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 6 Sample Multiplier: 1

**Instrument :**  
 MSVOA\_N  
**ClientSampleId :**  
 VSTDIC150

Quant Time: Dec 21 01:44:28 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N122024W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Dec 21 01:29:00 2024  
 Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN122024\  
 Data File : VN085278.D  
 Acq On : 20 Dec 2024 12:32  
 Operator : JC\MD  
 Sample : VSTDICV020  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICVVN122024

Quant Time: Dec 21 02:21:47 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N122024W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Dec 21 02:03:07 2024  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) Bromochloromethane	7.812	128	30734	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.100	114	166208	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.865	117	149394	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.577	65	82112	30.371	ug/l	0.00
Spiked Amount	30.000	Range 91 - 110	Recovery	=	101.233%	
60) 4-Bromofluorobenzene	12.847	95	72466	29.945	ug/l	0.00
Spiked Amount	30.000	Range 63 - 112	Recovery	=	99.833%	
63) Toluene-d8	10.565	98	223219	30.599	ug/l	0.00
Spiked Amount	30.000	Range 91 - 112	Recovery	=	102.000%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	2.124	85	50158	19.518	ug/l	99
3) Chloromethane	2.359	50	49349	19.020	ug/l	99
4) Vinyl Chloride	2.512	62	48734	18.498	ug/l	97
5) Bromomethane	2.959	94	31015	20.138	ug/l	93
6) Chloroethane	3.118	64	32060	19.277	ug/l	96
7) Trichlorofluoromethane	3.495	101	70938	19.599	ug/l	93
8) Diethyl Ether	3.959	74	24315	19.506	ug/l	90
9) 1,1,2-Trichlorotrifluo...	4.365	101	39991	19.242	ug/l	98
10) 1,1-Dichloroethene	4.342	96	36767	19.365	ug/l	83
11) Methyl Iodide	4.589	142	41974	18.446	ug/l	99
12) Methyl Acetate	5.024	43	55895	19.713	ug/l	98
13) Acrolein	4.183	56	23101	91.263	ug/l	96
14) Acrylonitrile	5.718	53	105493	96.195	ug/l	99
15) Acetone	4.424	58	26887	97.191	ug/l	96
16) Carbon Disulfide	4.706	76	110681	19.177	ug/l	98
17) Allyl chloride	5.018	41	58719	19.118	ug/l	94
18) Methylene Chloride	5.271	84	42309	18.700	ug/l	96
19) trans-1,2-Dichloroethene	5.789	96	38628	19.561	ug/l	89
20) Diisopropyl ether	6.671	45	137464	19.529	ug/l	97
21) 1,1-Dichloroethane	6.565	63	78482	19.072	ug/l	97
22) cis-1,2-Dichloroethene	7.483	96	45475	19.338	ug/l	96
23) tert-Butyl Alcohol	5.518	59	38641	106.914	ug/l #	100
24) Methyl tert-Butyl Ether	5.794	73	121633	19.518	ug/l	98
25) Chloroform	7.965	83	80282	19.246	ug/l	100
26) Cyclohexane	8.259	56	59091	18.834	ug/l #	98
29) 1,1-Dichloropropene	8.371	75	53477	18.531	ug/l	99
30) 2-Butanone	7.483	43	144903	95.128	ug/l	99
31) 2,2-Dichloropropane	7.488	77	70358	19.241	ug/l	99
32) 1,1,1-Trichloroethane	8.165	97	69300	18.473	ug/l	98
33) Carbon Tetrachloride	8.359	117	60749	18.499	ug/l	99
34) Benzene	8.600	78	168630	18.487	ug/l	96
35) Methacrylonitrile	7.777	41	32208	19.101	ug/l	96
36) 1,2-Dichloroethane	8.671	62	60133	18.230	ug/l	99
37) Trichloroethene	9.353	130	36391	18.132	ug/l	97
38) Methylcyclohexane	9.600	83	52332	17.524	ug/l	96
39) 1,2-Dichloropropane	9.618	63	42670	18.386	ug/l	99
40) Dibromomethane	9.712	93	29338	18.132	ug/l	99
41) Bromodichloromethane	9.882	83	63230	18.699	ug/l	99
42) Vinyl Acetate	6.600	43	501206	93.215	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN122024\  
 Data File : VN085278.D  
 Acq On : 20 Dec 2024 12:32  
 Operator : JC\MD  
 Sample : VSTDICV020  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICVVN122024

Quant Time: Dec 21 02:21:47 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N122024W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Dec 21 02:03:07 2024  
 Response via : Initial Calibration

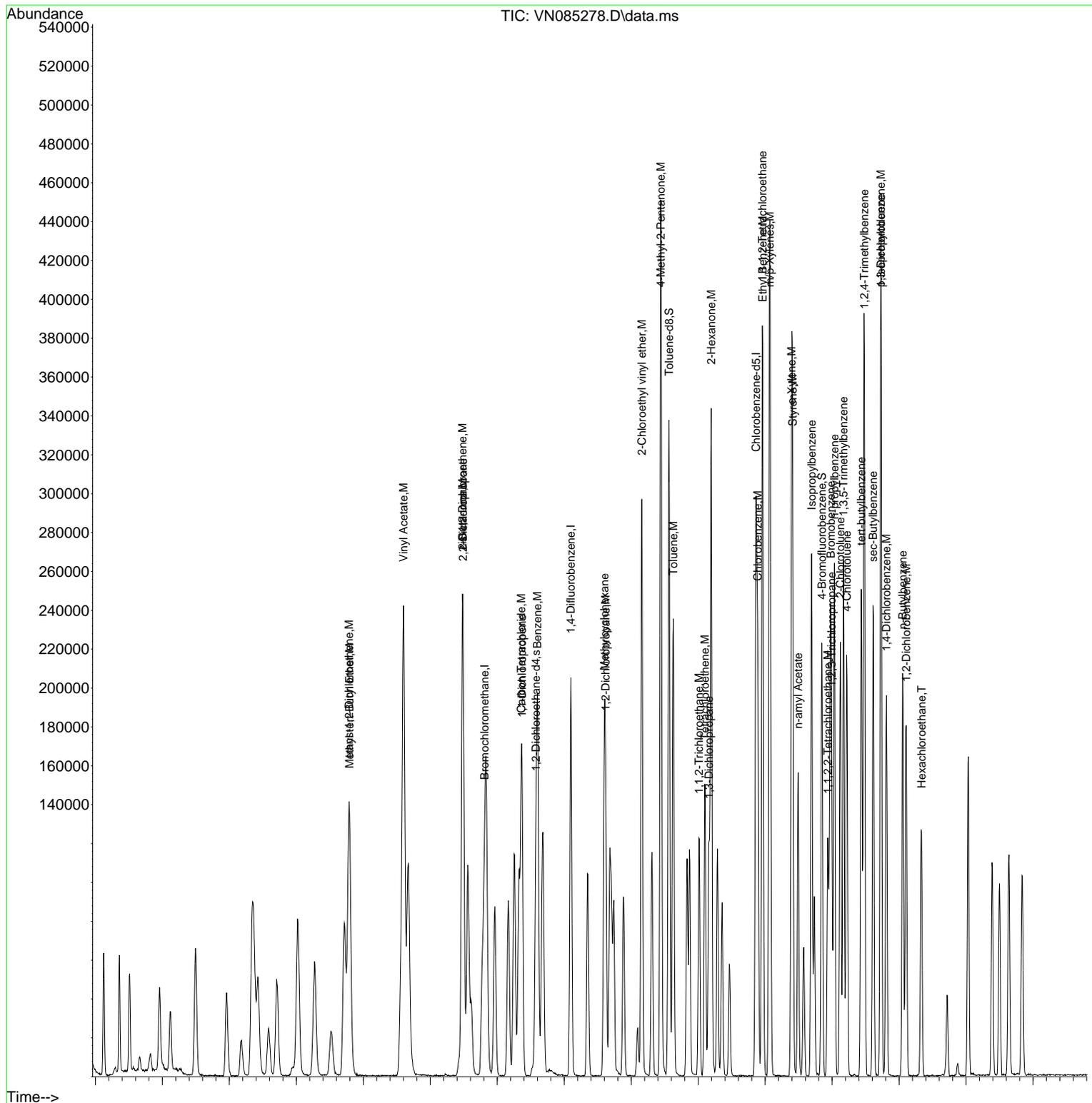
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	7.559	43	62834	19.947	ug/l	93
44) Isopropyl Acetate	8.688	43	96175	18.379	ug/l	99
45) 1,4-Dioxane	9.694	88	16365	402.068	ug/l	95
46) Methyl methacrylate	9.677	41	44473	18.309	ug/l	97
47) n-amyl Acetate	12.494	43	81622	18.310	ug/l	98
48) t-1,3-Dichloropropene	10.835	75	61560	18.431	ug/l	97
49) cis-1,3-Dichloropropene	10.312	75	66312	18.467	ug/l	97
50) 1,1,2-Trichloroethane	11.012	97	38883	18.375	ug/l	95
51) Ethyl methacrylate	10.871	69	58393	18.244	ug/l	94
52) 1,3-Dichloropropane	11.159	76	67544	18.285	ug/l	97
53) Dibromochloromethane	11.359	129	43527	17.554	ug/l	96
54) 1,2-Dibromoethane	11.465	107	38245	18.675	ug/l	98
55) 2-Chloroethyl vinyl ether	10.159	63	125619	76.195	ug/l	99
56) Bromoform	12.576	173	28323	17.510	ug/l	98
58) 4-Methyl-2-Pentanone	10.441	43	301712	99.621	ug/l	99
59) 2-Hexanone	11.194	43	219768	99.888	ug/l	98
61) Tetrachloroethene	11.100	164	32545	19.514	ug/l	88
62) Toluene	10.629	91	174303	18.991	ug/l	100
64) Chlorobenzene	11.888	112	105816	19.116	ug/l	99
65) 1,1,1,2-Tetrachloroethane	11.959	131	38072	18.965	ug/l	98
66) Ethyl Benzene	11.965	91	182223	18.869	ug/l	98
67) m/p-Xylenes	12.070	106	140385	38.748	ug/l	99
68) o-Xylene	12.394	106	64760	18.765	ug/l	97
69) Styrene	12.412	104	110048	18.869	ug/l	99
70) Isopropylbenzene	12.694	105	165430	19.090	ug/l	99
71) 1,1,2,2-Tetrachloroethane	12.935	83	57570	18.731	ug/l	99
72) 1,2,3-Trichloropropane	12.994	75	47827m	18.284	ug/l	
73) Bromobenzene	12.982	156	40507	18.921	ug/l	98
74) n-propylbenzene	13.035	91	202117	18.722	ug/l	98
75) 2-Chlorotoluene	13.123	91	125070	19.231	ug/l	100
76) 1,3,5-Trimethylbenzene	13.170	105	139164	18.821	ug/l	99
77) t-1,4-Dichloro-2-butene	12.735	75	19274	18.029	ug/l	90
78) 4-Chlorotoluene	13.217	91	124745	18.865	ug/l	98
79) tert-butylbenzene	13.435	119	111942	18.512	ug/l	99
80) 1,2,4-Trimethylbenzene	13.482	105	141891	19.279	ug/l	99
81) sec-Butylbenzene	13.612	105	163364	18.712	ug/l	99
82) p-Isopropyltoluene	13.729	119	134436	18.698	ug/l	99
83) 1,3-Dichlorobenzene	13.729	146	76679	19.206	ug/l	99
84) 1,4-Dichlorobenzene	13.812	146	74097	19.183	ug/l	97
85) n-Butylbenzene	14.053	91	114050	18.373	ug/l	99
86) Hexachloroethane	14.335	117	28626	18.546	ug/l	97
87) 1,2-Dichlorobenzene	14.106	146	72156	19.023	ug/l	99
88) 1,2-Dibromo-3-Chloropr...	14.717	75	11313	20.163	ug/l	97
89) 1,2,4-Trichlorobenzene	15.841	180	34849	19.393	ug/l	99
90) Hexachlorobutadiene	15.494	225	18190	20.307	ug/l	94
91) Naphthalene	15.641	128	103789	17.976	ug/l	99
92) 1,2,3-Trichlorobenzene	15.841	180	34849	19.393	ug/l	99

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN122024\  
 Data File : VN085278.D  
 Acq On : 20 Dec 2024 12:32  
 Operator : JC\MD  
 Sample : VSTDICV020  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 8 Sample Multiplier: 1

**Instrument :**  
 MSVOA\_N  
**ClientSampleId :**  
 ICVVN122024

Quant Time: Dec 21 02:21:47 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N122024W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Dec 21 02:03:07 2024  
 Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN122024\  
 Data File : VN085278.D  
 Acq On : 20 Dec 2024 12:32  
 Operator : JC\MD  
 Sample : VSTDICV020  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICVVN122024

Quant Time: Dec 21 02:21:47 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N122024W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Dec 21 02:03:07 2024  
 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	104	0.00
2 M	Dichlorodifluoromethane	2.508	2.448	2.4	96	0.00
3 M	Chloromethane	2.533	2.409	4.9	95	0.00
4 M	Vinyl Chloride	2.572	2.379	7.5	94	0.00
5 M	Bromomethane	1.503	1.514	-0.7	106	0.00
6 M	Chloroethane	1.623	1.565	3.6	97	0.00
7 M	Trichlorofluoromethane	3.533	3.462	2.0	99	0.00
8 T	Diethyl Ether	1.217	1.187	2.5	105	0.00
9	1,1,2-Trichlorotrifluoroeth	2.029	1.952	3.8	97	0.00
10 M	1,1-Dichloroethene	1.853	1.794	3.2	102	0.00
11	Methyl Iodide	2.221	2.049	7.7	100	0.00
12	Methyl Acetate	2.768	2.728	1.4	101	0.00
13 M	Acrolein	0.247	0.225	8.9	106	0.00
14 M	Acrylonitrile	1.070	1.030	3.7	100	0.00
15 M	Acetone	0.270	0.262	3.0	99	0.00
16 M	Carbon Disulfide	5.634	5.402	4.1	99	0.00
17	Allyl chloride	2.998	2.866	4.4	101	0.00
18 M	Methylene Chloride	2.208	2.065	6.5	96	0.00
19 M	trans-1,2-Dichloroethene	1.928	1.885	2.2	102	0.00
20 T	Diisopropyl ether	6.871	6.709	2.4	99	0.00
21 M	1,1-Dichloroethane	4.017	3.830	4.7	97	0.00
22 M	cis-1,2-Dichloroethene	2.295	2.219	3.3	101	0.00
23 M	tert-Butyl Alcohol	0.353	0.377	-6.8	116	0.00
24 M	Methyl tert-Butyl Ether	6.083	5.936	2.4	102	0.00
25 M	Chloroform	4.072	3.918	3.8	97	0.00
26	Cyclohexane	3.063	2.884	5.8	99	0.00
27 s	1,2-Dichloroethane-d4	2.639	2.672	-1.3	105	0.00
28 I	1,4-Difluorobenzene	1.000	1.000	0.0	108	0.00
29	1,1-Dichloropropene	0.521	0.483	7.3	99	0.00
30 M	2-Butanone	0.275	0.262	4.7	101	0.00
31	2,2-Dichloropropane	0.660	0.635	3.8	102	0.00
32 M	1,1,1-Trichloroethane	0.677	0.625	7.7	98	0.00
33 M	Carbon Tetrachloride	0.593	0.548	7.6	98	0.00
34 M	Benzene	1.646	1.522	7.5	97	0.00
35	Methacrylonitrile	0.304	0.291	4.3	103	0.00
36 M	1,2-Dichloroethane	0.595	0.543	8.7	97	0.00
37 M	Trichloroethene	0.362	0.328	9.4	97	0.00
38	Methylcyclohexane	0.539	0.472	12.4	103	0.00
39 M	1,2-Dichloropropane	0.419	0.385	8.1	97	0.00
40	Dibromomethane	0.292	0.265	9.2	96	0.00
41 M	Bromodichloromethane	0.610	0.571	6.4	98	0.00
42 M	Vinyl Acetate	0.971	0.905	6.8	102	0.00
43	Ethyl Acetate	0.569	0.567	0.4	110	0.00
44	Isopropyl Acetate	0.945	0.868	8.1	99	0.00
45 T	1,4-Dioxane	0.007	0.007	0.0	108	0.00
46	Methyl methacrylate	0.438	0.401	8.4	99	0.00
47	n-amyl Acetate	0.805	0.737	8.4	102	0.00
48 M	t-1,3-Dichloropropene	0.603	0.556	7.8	101	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN122024\  
 Data File : VN085278.D  
 Acq On : 20 Dec 2024 12:32  
 Operator : JC\MD  
 Sample : VSTDICV020  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICVVN122024

Quant Time: Dec 21 02:21:47 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N122024W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Dec 21 02:03:07 2024  
 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	0.648	0.598	7.7	101	0.00
50 M	1,1,2-Trichloroethane	0.382	0.351	8.1	95	0.00
51	Ethyl methacrylate	0.578	0.527	8.8	103	0.00
52	1,3-Dichloropropane	0.667	0.610	8.5	95	0.00
53 M	Dibromochloromethane	0.448	0.393	12.3	91	0.00
54 M	1,2-Dibromoethane	0.370	0.345	6.8	99	0.00
55 M	2-Chloroethyl vinyl ether	0.298	0.227	23.8	84	0.00
56 M	Bromoform	0.292	0.256	12.3	94	0.00
57 I	Chlorobenzene-d5	1.000	1.000	0.0	104	0.00
58 M	4-Methyl-2-Pentanone	0.608	0.606	0.3	99	0.00
59 M	2-Hexanone	0.442	0.441	0.2	100	0.00
60 S	4-Bromofluorobenzene	0.486	0.485	0.2	104	0.00
61 M	Tetrachloroethene	0.335	0.327	2.4	99	0.00
62 M	Toluene	1.843	1.750	5.0	96	0.00
63 S	Toluene-d8	1.465	1.494	-2.0	103	0.00
64 M	Chlorobenzene	1.112	1.062	4.5	98	0.00
65	1,1,1,2-Tetrachloroethane	0.403	0.382	5.2	95	0.00
66 M	Ethyl Benzene	1.939	1.830	5.6	99	0.00
67 M	m/p-Xylenes	0.728	0.705	3.2	98	0.00
68 M	o-Xylene	0.693	0.650	6.2	98	0.00
69 M	Styrene	1.171	1.105	5.6	97	0.00
70	Isopropylbenzene	1.740	1.661	4.5	100	0.00
71 M	1,1,2,2-Tetrachloroethane	0.617	0.578	6.3	96	0.00
72	1,2,3-Trichloropropane	0.525	0.480	8.6	99	0.00
73	Bromobenzene	0.430	0.407	5.3	96	0.00
74	n-propylbenzene	2.168	2.029	6.4	97	0.00
75	2-Chlorotoluene	1.306	1.256	3.8	100	0.00
76	1,3,5-Trimethylbenzene	1.485	1.397	5.9	96	0.00
77	t-1,4-Dichloro-2-butene	0.215	0.194	9.8	100	0.00
78	4-Chlorotoluene	1.328	1.253	5.6	98	0.00
79	tert-butylbenzene	1.214	1.124	7.4	100	0.00
80	1,2,4-Trimethylbenzene	1.478	1.425	3.6	100	0.00
81	sec-Butylbenzene	1.753	1.640	6.4	100	0.00
82	p-Isopropyltoluene	1.444	1.350	6.5	102	0.00
83 M	1,3-Dichlorobenzene	0.802	0.770	4.0	98	0.00
84 M	1,4-Dichlorobenzene	0.776	0.744	4.1	103	0.00
85	n-Butylbenzene	1.247	1.145	8.2	104	0.00
86 T	Hexachloroethane	0.310	0.287	7.4	95	0.00
87 M	1,2-Dichlorobenzene	0.762	0.724	5.0	99	0.00
88	1,2-Dibromo-3-Chloropropane	0.113	0.114	-0.9	106	0.00
89	1,2,4-Trichlorobenzene	0.361	0.350	3.0	106	0.00
90	Hexachlorobutadiene	0.180	0.183	-1.7	107	0.00
91 M	Naphthalene	1.159	1.042	10.1	104	0.00
92	1,2,3-Trichlorobenzene	0.361	0.350	3.0	106	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN122024\  
 Data File : VN085278.D  
 Acq On : 20 Dec 2024 12:32  
 Operator : JC\MD  
 Sample : VSTDICV020  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICVVN122024

Quant Time: Dec 21 02:21:47 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N122024W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Dec 21 02:03:07 2024  
 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	104	0.00
2 M	Dichlorodifluoromethane	20.000	19.518	2.4	96	0.00
3 M	Chloromethane	20.000	19.020	4.9	95	0.00
4 M	Vinyl Chloride	20.000	18.498	7.5	94	0.00
5 M	Bromomethane	20.000	20.138	-0.7	106	0.00
6 M	Chloroethane	20.000	19.277	3.6	97	0.00
7 M	Trichlorofluoromethane	20.000	19.599	2.0	99	0.00
8 T	Diethyl Ether	20.000	19.506	2.5	105	0.00
9	1,1,2-Trichlorotrifluoroeth	20.000	19.242	3.8	97	0.00
10 M	1,1-Dichloroethene	20.000	19.365	3.2	102	0.00
11	Methyl Iodide	20.000	18.446	7.8	100	0.00
12	Methyl Acetate	20.000	19.713	1.4	101	0.00
13 M	Acrolein	100.000	91.263	8.7	106	0.00
14 M	Acrylonitrile	100.000	96.195	3.8	100	0.00
15 M	Acetone	100.000	97.191	2.8	99	0.00
16 M	Carbon Disulfide	20.000	19.177	4.1	99	0.00
17	Allyl chloride	20.000	19.118	4.4	101	0.00
18 M	Methylene Chloride	20.000	18.700	6.5	96	0.00
19 M	trans-1,2-Dichloroethene	20.000	19.561	2.2	102	0.00
20 T	Diisopropyl ether	20.000	19.529	2.4	99	0.00
21 M	1,1-Dichloroethane	20.000	19.072	4.6	97	0.00
22 M	cis-1,2-Dichloroethene	20.000	19.338	3.3	101	0.00
23 M	tert-Butyl Alcohol	100.000	106.914	-6.9	116	0.00
24 M	Methyl tert-Butyl Ether	20.000	19.518	2.4	102	0.00
25 M	Chloroform	20.000	19.246	3.8	97	0.00
26	Cyclohexane	20.000	18.834	5.8	99	0.00
27 s	1,2-Dichloroethane-d4	30.000	30.371	-1.2	105	0.00
28 I	1,4-Difluorobenzene	30.000	30.000	0.0	108	0.00
29	1,1-Dichloropropene	20.000	18.531	7.3	99	0.00
30 M	2-Butanone	100.000	95.128	4.9	101	0.00
31	2,2-Dichloropropane	20.000	19.241	3.8	102	0.00
32 M	1,1,1-Trichloroethane	20.000	18.473	7.6	98	0.00
33 M	Carbon Tetrachloride	20.000	18.499	7.5	98	0.00
34 M	Benzene	20.000	18.487	7.6	97	0.00
35	Methacrylonitrile	20.000	19.101	4.5	103	0.00
36 M	1,2-Dichloroethane	20.000	18.230	8.8	97	0.00
37 M	Trichloroethene	20.000	18.132	9.3	97	0.00
38	Methylcyclohexane	20.000	17.524	12.4	103	0.00
39 M	1,2-Dichloropropane	20.000	18.386	8.1	97	0.00
40	Dibromomethane	20.000	18.132	9.3	96	0.00
41 M	Bromodichloromethane	20.000	18.699	6.5	98	0.00
42 M	Vinyl Acetate	100.000	93.215	6.8	102	0.00
43	Ethyl Acetate	20.000	19.947	0.3	110	0.00
44	Isopropyl Acetate	20.000	18.379	8.1	99	0.00
45 T	1,4-Dioxane	400.000	402.068	-0.5	108	0.00
46	Methyl methacrylate	20.000	18.309	8.5	99	0.00
47	n-amyl Acetate	20.000	18.310	8.5	102	0.00
48 M	t-1,3-Dichloropropene	20.000	18.431	7.8	101	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN122024\  
 Data File : VN085278.D  
 Acq On : 20 Dec 2024 12:32  
 Operator : JC\MD  
 Sample : VSTDICV020  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICVVN122024

Quant Time: Dec 21 02:21:47 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N122024W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Dec 21 02:03:07 2024  
 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	18.467	7.7	101	0.00
50 M	1,1,2-Trichloroethane	20.000	18.375	8.1	95	0.00
51	Ethyl methacrylate	20.000	18.244	8.8	103	0.00
52	1,3-Dichloropropane	20.000	18.285	8.6	95	0.00
53 M	Dibromochloromethane	20.000	17.554	12.2	91	0.00
54 M	1,2-Dibromoethane	20.000	18.675	6.6	99	0.00
55 M	2-Chloroethyl vinyl ether	100.000	76.195	23.8	84	0.00
56 M	Bromoform	20.000	17.510	12.4	94	0.00
57 I	Chlorobenzene-d5	30.000	30.000	0.0	104	0.00
58 M	4-Methyl-2-Pentanone	100.000	99.621	0.4	99	0.00
59 M	2-Hexanone	100.000	99.888	0.1	100	0.00
60 S	4-Bromofluorobenzene	30.000	29.945	0.2	104	0.00
61 M	Tetrachloroethene	20.000	19.514	2.4	99	0.00
62 M	Toluene	20.000	18.991	5.0	96	0.00
63 S	Toluene-d8	30.000	30.599	-2.0	103	0.00
64 M	Chlorobenzene	20.000	19.116	4.4	98	0.00
65	1,1,1,2-Tetrachloroethane	20.000	18.965	5.2	95	0.00
66 M	Ethyl Benzene	20.000	18.869	5.7	99	0.00
67 M	m/p-Xylenes	40.000	38.748	3.1	98	0.00
68 M	o-Xylene	20.000	18.765	6.2	98	0.00
69 M	Styrene	20.000	18.869	5.7	97	0.00
70	Isopropylbenzene	20.000	19.090	4.6	100	0.00
71 M	1,1,2,2-Tetrachloroethane	20.000	18.731	6.3	96	0.00
72	1,2,3-Trichloropropane	20.000	18.284	8.6	99	0.00
73	Bromobenzene	20.000	18.921	5.4	96	0.00
74	n-propylbenzene	20.000	18.722	6.4	97	0.00
75	2-Chlorotoluene	20.000	19.231	3.8	100	0.00
76	1,3,5-Trimethylbenzene	20.000	18.821	5.9	96	0.00
77	t-1,4-Dichloro-2-butene	20.000	18.029	9.9	100	0.00
78	4-Chlorotoluene	20.000	18.865	5.7	98	0.00
79	tert-butylbenzene	20.000	18.512	7.4	100	0.00
80	1,2,4-Trimethylbenzene	20.000	19.279	3.6	100	0.00
81	sec-Butylbenzene	20.000	18.712	6.4	100	0.00
82	p-Isopropyltoluene	20.000	18.698	6.5	102	0.00
83 M	1,3-Dichlorobenzene	20.000	19.206	4.0	98	0.00
84 M	1,4-Dichlorobenzene	20.000	19.183	4.1	103	0.00
85	n-Butylbenzene	20.000	18.373	8.1	104	0.00
86 T	Hexachloroethane	20.000	18.546	7.3	95	0.00
87 M	1,2-Dichlorobenzene	20.000	19.023	4.9	99	0.00
88	1,2-Dibromo-3-Chloropropane	20.000	20.163	-0.8	106	0.00
89	1,2,4-Trichlorobenzene	20.000	19.393	3.0	106	0.00
90	Hexachlorobutadiene	20.000	20.307	-1.5	107	0.00
91 M	Naphthalene	20.000	17.976	10.1	104	0.00
92	1,2,3-Trichlorobenzene	20.000	19.393	3.0	106	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: CHEMTECH Contract: TULL01  
 Lab Code: CHEM Case No.: Q1013 SAS No.: Q1013 SDG No.: Q1013  
 Instrument ID: MSVOA\_N Calibration Date/Time: 01/07/2025 10:30  
 Lab File ID: VN085390.D Init. Calib. Date(s): 12/20/2024 12/20/2024  
 Heated Purge: (Y/N) N Init. Calib. Time(s): 10:05 11:42  
 GC Column: RXI-624 ID: 0.25 (mm)

COMPOUND	RRF	RRF020	MIN RRF	%D	MAX%D
Benzene	1.646	1.717	0.5	4.31	
Toluene	1.843	1.936	0.4	5.05	
Ethyl Benzene	1.939	1.912	0.1	-1.39	
m/p-Xylenes	0.728	0.769	0.3	5.63	
o-Xylene	0.693	0.714	0.3	3.03	
1,2-Dichloroethane-d4	2.639	2.621	0.01	-0.68	
Toluene-d8	1.465	1.505	0.01	2.73	
4-Bromofluorobenzene	0.486	0.490	0.2	0.82	

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\VN010725\  
 Data File : VN085390.D  
 Acq On : 07 Jan 2025 10:30  
 Operator : JC\MD  
 Sample : VSTDCCC020  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC020

Manual Integrations  
 APPROVED

Reviewed By : John Carlone 01/08/2025  
 Supervised By : Mahesh Dadoda 01/08/2025

Quant Time: Jan 08 04:14:32 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N122024W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Dec 21 02:03:07 2024  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) Bromochloromethane	7.806	128	28915	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.094	114	149310	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.859	117	139056	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.571	65	75780	29.792	ug/l	0.00
Spiked Amount	30.000	Range 91 - 110	Recovery	=	99.300%	
60) 4-Bromofluorobenzene	12.847	95	68164	30.262	ug/l	0.00
Spiked Amount	30.000	Range 63 - 112	Recovery	=	100.867%	
63) Toluene-d8	10.559	98	209330	30.829	ug/l	0.00
Spiked Amount	30.000	Range 91 - 112	Recovery	=	102.767%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	2.124	85	50713	20.976	ug/l	97
3) Chloromethane	2.359	50	47297	19.376	ug/l	97
4) Vinyl Chloride	2.518	62	50133	20.226	ug/l	97
5) Bromomethane	2.971	94	28948	19.978	ug/l	97
6) Chloroethane	3.130	64	31954	20.422	ug/l #	88
7) Trichlorofluoromethane	3.506	101	73081	21.462	ug/l	98
8) Diethyl Ether	3.959	74	21658	18.468	ug/l	99
9) 1,1,2-Trichlorotrifluo...	4.377	101	43048	22.015	ug/l	70
10) 1,1-Dichloroethene	4.341	96	35521	19.886	ug/l	92
11) Methyl Iodide	4.589	142	41778	19.515	ug/l	95
12) Methyl Acetate	5.024	43	50308	18.859	ug/l #	86
13) Acrolein	4.171	56	19111	80.250	ug/l	98
14) Acrylonitrile	5.712	53	84706	82.099	ug/l	97
15) Acetone	4.424	58	21806m	83.783	ug/l	
16) Carbon Disulfide	4.712	76	105201	19.375	ug/l	97
17) Allyl chloride	5.024	41	52928	18.317	ug/l	94
18) Methylene Chloride	5.271	84	42803	20.109	ug/l	95
19) trans-1,2-Dichloroethene	5.783	96	38717	20.839	ug/l	93
20) Diisopropyl ether	6.665	45	134691	20.338	ug/l	100
21) 1,1-Dichloroethane	6.565	63	80673	20.838	ug/l #	95
22) cis-1,2-Dichloroethene	7.482	96	45435	20.537	ug/l	94
23) tert-Butyl Alcohol	5.506	59	21430	63.024	ug/l #	100
24) Methyl tert-Butyl Ether	5.788	73	113019	19.276	ug/l #	76
25) Chloroform	7.965	83	82740	21.083	ug/l	97
26) Cyclohexane	8.253	56	55631	18.846	ug/l #	94
29) 1,1-Dichloropropene	8.365	75	54586	21.056	ug/l	99
30) 2-Butanone	7.477	43	110032	80.410	ug/l	100
31) 2,2-Dichloropropane	7.488	77	69072	21.027	ug/l	100
32) 1,1,1-Trichloroethane	8.159	97	71816	21.310	ug/l	98
33) Carbon Tetrachloride	8.353	117	63272	21.448	ug/l	90
34) Benzene	8.600	78	170861	20.851	ug/l	100
35) Methacrylonitrile	7.771	41	25603	16.902	ug/l	95
36) 1,2-Dichloroethane	8.665	62	60409	20.387	ug/l	100
37) Trichloroethene	9.347	130	37201	20.634	ug/l	98
38) Methylcyclohexane	9.594	83	51887	19.342	ug/l	97
39) 1,2-Dichloropropane	9.612	63	42613	20.440	ug/l	100
40) Dibromomethane	9.706	93	29667	20.410	ug/l	97
41) Bromodichloromethane	9.882	83	63085	20.767	ug/l	96
42) Vinyl Acetate	6.594	43	431274	89.286	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN010725\  
 Data File : VN085390.D  
 Acq On : 07 Jan 2025 10:30  
 Operator : JC\MD  
 Sample : VSTDCCC020  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC020

Manual Integrations  
 APPROVED

Reviewed By : John Carlone 01/08/2025  
 Supervised By : Mahesh Dadoda 01/08/2025

Quant Time: Jan 08 04:14:32 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N122024W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Dec 21 02:03:07 2024  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	7.553	43	50602	17.882	ug/l	94
44) Isopropyl Acetate	8.682	43	83519	17.766	ug/l	98
45) 1,4-Dioxane	9.688	88	10868	297.233	ug/l	97
46) Methyl methacrylate	9.671	41	36890	16.906	ug/l	92
47) n-amyl Acetate	12.488	43	66733	16.664	ug/l	96
48) t-1,3-Dichloropropene	10.829	75	58855	19.615	ug/l	99
49) cis-1,3-Dichloropropene	10.306	75	63493	19.683	ug/l	97
50) 1,1,2-Trichloroethane	11.012	97	38701	20.358	ug/l	97
51) Ethyl methacrylate	10.870	69	51817	18.022	ug/l	92
52) 1,3-Dichloropropane	11.159	76	67300	20.281	ug/l	99
53) Dibromochloromethane	11.353	129	45829	20.575	ug/l	99
54) 1,2-Dibromoethane	11.465	107	36440	19.808	ug/l	100
55) 2-Chloroethyl vinyl ether	10.153	63	125727	84.891	ug/l	100
56) Bromoform	12.576	173	27455	18.894	ug/l	97
58) 4-Methyl-2-Pentanone	10.435	43	241460	85.654	ug/l	99
59) 2-Hexanone	11.188	43	168242	82.154	ug/l	100
61) Tetrachloroethene	11.094	164	34715	22.363	ug/l	87
62) Toluene	10.623	91	179455	21.006	ug/l	99
64) Chlorobenzene	11.882	112	108011	20.963	ug/l	96
65) 1,1,1,2-Tetrachloroethane	11.959	131	40694	21.778	ug/l	96
66) Ethyl Benzene	11.959	91	177225	19.715	ug/l	93
67) m/p-Xylenes	12.065	106	142605	42.287	ug/l	98
68) o-Xylene	12.394	106	66170	20.599	ug/l	93
69) Styrene	12.406	104	110527	20.360	ug/l	99
70) Isopropylbenzene	12.694	105	163324	20.249	ug/l	99
71) 1,1,2,2-Tetrachloroethane	12.935	83	52570	18.376	ug/l	99
72) 1,2,3-Trichloropropane	12.988	75	46562m	19.123	ug/l	
73) Bromobenzene	12.976	156	40951	20.551	ug/l	94
74) n-propylbenzene	13.029	91	202400	20.142	ug/l	98
75) 2-Chlorotoluene	13.117	91	125738	20.771	ug/l	100
76) 1,3,5-Trimethylbenzene	13.164	105	141887	20.616	ug/l	98
77) t-1,4-Dichloro-2-butene	12.729	75	16202	16.282	ug/l	96
78) 4-Chlorotoluene	13.217	91	125206	20.343	ug/l	98
79) tert-butylbenzene	13.435	119	114419	20.328	ug/l	97
80) 1,2,4-Trimethylbenzene	13.476	105	142245	20.764	ug/l	99
81) sec-Butylbenzene	13.611	105	164820	20.283	ug/l	98
82) p-Isopropyltoluene	13.723	119	135302	20.218	ug/l	99
83) 1,3-Dichlorobenzene	13.729	146	76742	20.650	ug/l	98
84) 1,4-Dichlorobenzene	13.806	146	73497	20.442	ug/l	98
85) n-Butylbenzene	14.053	91	112353	19.446	ug/l	100
86) Hexachloroethane	14.329	117	28739	20.003	ug/l	99
87) 1,2-Dichlorobenzene	14.100	146	71413	20.227	ug/l	99
88) 1,2-Dibromo-3-Chloropr...	14.711	75	8499	16.274	ug/l	93
89) 1,2,4-Trichlorobenzene	15.829	180	31236	18.674	ug/l	98
90) Hexachlorobutadiene	15.494	225	16924	20.298	ug/l	95
91) Naphthalene	15.635	128	81355	15.138	ug/l	99
92) 1,2,3-Trichlorobenzene	15.829	180	31236	18.674	ug/l	98

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

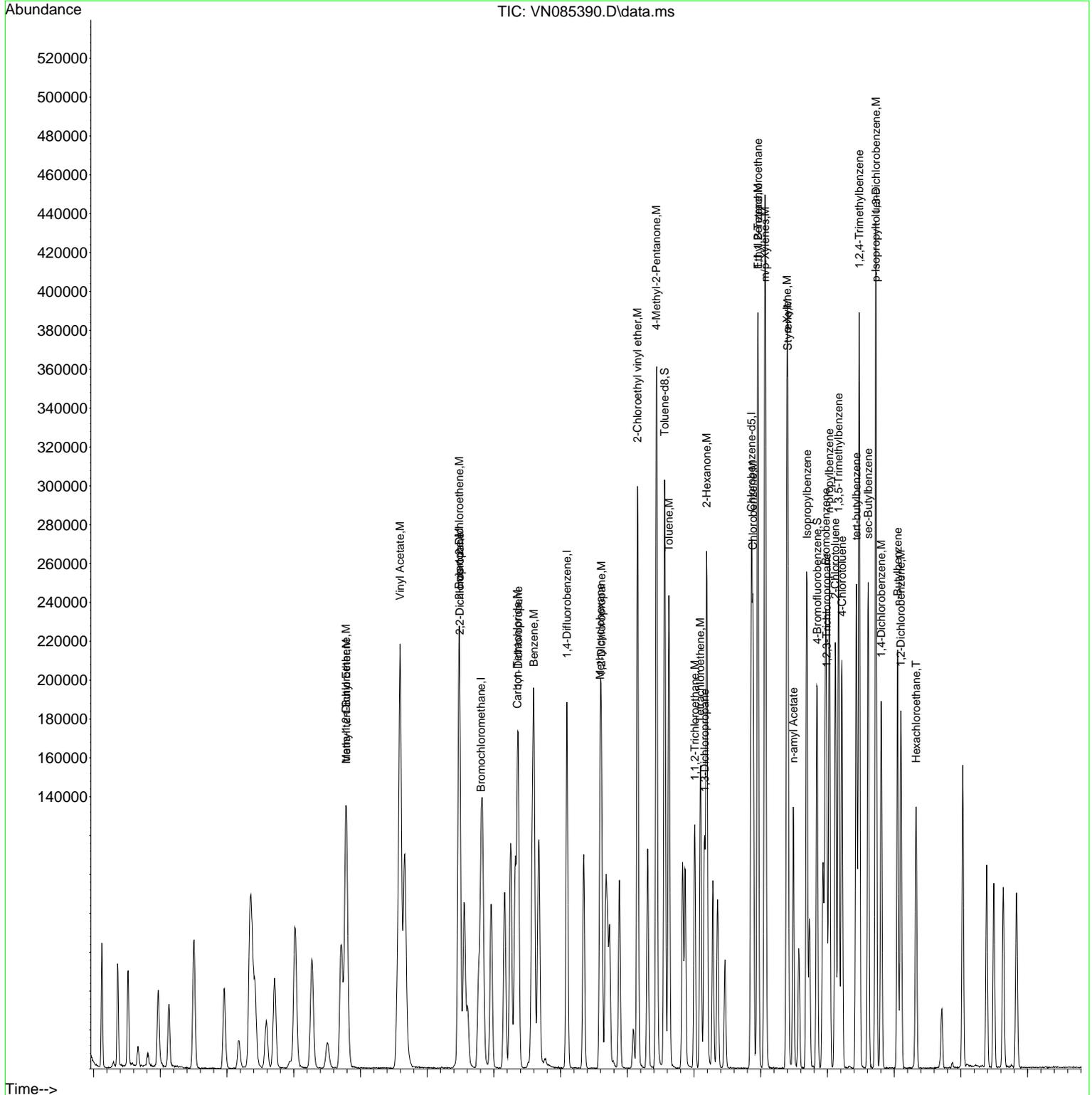
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN010725\  
 Data File : VN085390.D  
 Acq On : 07 Jan 2025 10:30  
 Operator : JC\MD  
 Sample : VSTDCCC020  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 3 Sample Multiplier: 1

**Instrument :**  
 MSVOA\_N  
**ClientSampleId :**  
 VSTDCCC020

**Manual Integrations**  
**APPROVED**

Reviewed By : John Carlone 01/08/2025  
 Supervised By : Mahesh Dadoda 01/08/2025

Quant Time: Jan 08 04:14:32 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N122024W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Dec 21 02:03:07 2024  
 Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN010725\  
 Data File : VN085390.D  
 Acq On : 07 Jan 2025 10:30  
 Operator : JC\MD  
 Sample : VSTDCCC020  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleID :  
 VSTDCCC020

Quant Time: Jan 08 04:14:32 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N122024W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Dec 21 02:03:07 2024  
 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	98	0.00
2 M	Dichlorodifluoromethane	2.508	2.631	-4.9	97	0.00
3 M	Chloromethane	2.533	2.454	3.1	91	0.00
4 M	Vinyl Chloride	2.572	2.601	-1.1	97	0.00
5 M	Bromomethane	1.503	1.502	0.1	99	0.01
6 M	Chloroethane	1.623	1.658	-2.2	96	0.01
7 M	Trichlorofluoromethane	3.533	3.791	-7.3	102	0.00
8 T	Diethyl Ether	1.217	1.124	7.6	93	0.00
9	1,1,2-Trichlorotrifluoroeth	2.029	2.233	-10.1	104	0.00
10 M	1,1-Dichloroethene	1.853	1.843	0.5	99	0.00
11	Methyl Iodide	2.221	2.167	2.4	99	0.00
12	Methyl Acetate	2.768	2.610	5.7	91	0.00
13 M	Acrolein	0.247	0.198	19.8	88	-0.01
14 M	Acrylonitrile	1.070	0.879	17.9	80	0.00
15 M	Acetone	0.270	0.226	16.3	80	0.00
16 M	Carbon Disulfide	5.634	5.457	3.1	94	0.00
17	Allyl chloride	2.998	2.746	8.4	91	0.00
18 M	Methylene Chloride	2.208	2.220	-0.5	97	0.00
19 M	trans-1,2-Dichloroethene	1.928	2.008	-4.1	102	0.00
20 T	Diisopropyl ether	6.871	6.987	-1.7	97	0.00
21 M	1,1-Dichloroethane	4.017	4.185	-4.2	100	0.00
22 M	cis-1,2-Dichloroethene	2.295	2.357	-2.7	101	0.00
23 M	tert-Butyl Alcohol	0.353	0.222	37.1#	65	-0.01
24 M	Methyl tert-Butyl Ether	6.083	5.863	3.6	95	-0.01
25 M	Chloroform	4.072	4.292	-5.4	100	0.00
26	Cyclohexane	3.063	2.886	5.8	93	0.00
27 s	1,2-Dichloroethane-d4	2.639	2.621	0.7	96	0.00
28 I	1,4-Difluorobenzene	1.000	1.000	0.0	97	0.00
29	1,1-Dichloropropene	0.521	0.548	-5.2	101	0.00
30 M	2-Butanone	0.275	0.221	19.6	77	0.00
31	2,2-Dichloropropane	0.660	0.694	-5.2	100	0.00
32 M	1,1,1-Trichloroethane	0.677	0.721	-6.5	101	0.00
33 M	Carbon Tetrachloride	0.593	0.636	-7.3	102	0.00
34 M	Benzene	1.646	1.717	-4.3	98	0.00
35	Methacrylonitrile	0.304	0.257	15.5	82	0.00
36 M	1,2-Dichloroethane	0.595	0.607	-2.0	97	0.00
37 M	Trichloroethene	0.362	0.374	-3.3	99	0.00
38	Methylcyclohexane	0.539	0.521	3.3	102	0.00
39 M	1,2-Dichloropropane	0.419	0.428	-2.1	97	0.00
40	Dibromomethane	0.292	0.298	-2.1	97	0.00
41 M	Bromodichloromethane	0.610	0.634	-3.9	98	0.00
42 M	Vinyl Acetate	0.971	0.867	10.7	88	0.00
43	Ethyl Acetate	0.569	0.508	10.7	89	0.00
44	Isopropyl Acetate	0.945	0.839	11.2	86	0.00
45 T	1,4-Dioxane	0.007	0.005	28.6#	72	0.00
46	Methyl methacrylate	0.438	0.371	15.3	82	-0.01
47	n-amyl Acetate	0.805	0.670	16.8	83	0.00
48 M	t-1,3-Dichloropropene	0.603	0.591	2.0	97	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN010725\  
 Data File : VN085390.D  
 Acq On : 07 Jan 2025 10:30  
 Operator : JC\MD  
 Sample : VSTDCCC020  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleID :  
 VSTDCCC020

Quant Time: Jan 08 04:14:32 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N122024W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Dec 21 02:03:07 2024  
 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	0.648	0.638	1.5	96	0.00
50 M	1,1,2-Trichloroethane	0.382	0.389	-1.8	94	0.00
51	Ethyl methacrylate	0.578	0.521	9.9	91	0.00
52	1,3-Dichloropropane	0.667	0.676	-1.3	95	0.00
53 M	Dibromochloromethane	0.448	0.460	-2.7	96	0.00
54 M	1,2-Dibromoethane	0.370	0.366	1.1	95	0.00
55 M	2-Chloroethyl vinyl ether	0.298	0.253	15.1	84	0.00
56 M	Bromoform	0.292	0.276	5.5	92	0.00
57 I	Chlorobenzene-d5	1.000	1.000	0.0	97	0.00
58 M	4-Methyl-2-Pentanone	0.608	0.521	14.3	80	0.00
59 M	2-Hexanone	0.442	0.363	17.9	77	0.00
60 S	4-Bromofluorobenzene	0.486	0.490	-0.8	98	0.00
61 M	Tetrachloroethene	0.335	0.374	-11.6	106	0.00
62 M	Toluene	1.843	1.936	-5.0	99	0.00
63 S	Toluene-d8	1.465	1.505	-2.7	97	0.00
64 M	Chlorobenzene	1.112	1.165	-4.8	100	0.00
65	1,1,1,2-Tetrachloroethane	0.403	0.439	-8.9	102	0.00
66 M	Ethyl Benzene	1.939	1.912	1.4	97	0.00
67 M	m/p-Xylenes	0.728	0.769	-5.6	99	0.00
68 M	o-Xylene	0.693	0.714	-3.0	100	0.00
69 M	Styrene	1.171	1.192	-1.8	97	0.00
70	Isopropylbenzene	1.740	1.762	-1.3	99	0.00
71 M	1,1,2,2-Tetrachloroethane	0.617	0.567	8.1	88	0.00
72	1,2,3-Trichloropropane	0.525	0.502	4.4	97	0.00
73	Bromobenzene	0.430	0.442	-2.8	97	0.00
74	n-propylbenzene	2.168	2.183	-0.7	97	0.00
75	2-Chlorotoluene	1.306	1.356	-3.8	100	0.00
76	1,3,5-Trimethylbenzene	1.485	1.531	-3.1	98	0.00
77	t-1,4-Dichloro-2-butene	0.215	0.175	18.6	84	0.00
78	4-Chlorotoluene	1.328	1.351	-1.7	99	0.00
79	tert-butylbenzene	1.214	1.234	-1.6	102	0.00
80	1,2,4-Trimethylbenzene	1.478	1.534	-3.8	100	0.00
81	sec-Butylbenzene	1.753	1.778	-1.4	101	0.00
82	p-Isopropyltoluene	1.444	1.460	-1.1	103	0.00
83 M	1,3-Dichlorobenzene	0.802	0.828	-3.2	98	0.00
84 M	1,4-Dichlorobenzene	0.776	0.793	-2.2	102	0.00
85	n-Butylbenzene	1.247	1.212	2.8	103	0.00
86 T	Hexachloroethane	0.310	0.310	0.0	95	0.00
87 M	1,2-Dichlorobenzene	0.762	0.770	-1.0	97	0.00
88	1,2-Dibromo-3-Chloropropane	0.113	0.092	18.6	80	0.00
89	1,2,4-Trichlorobenzene	0.361	0.337	6.6	95	0.00
90	Hexachlorobutadiene	0.180	0.183	-1.7	99	0.00
91 M	Naphthalene	1.159	0.878	24.2	82	0.00
92	1,2,3-Trichlorobenzene	0.361	0.337	6.6	95	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN010725\  
 Data File : VN085390.D  
 Acq On : 07 Jan 2025 10:30  
 Operator : JC\MD  
 Sample : VSTDCCC020  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleID :  
 VSTDCCC020

Quant Time: Jan 08 04:14:32 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N122024W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Dec 21 02:03:07 2024  
 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	98	0.00
2 M	Dichlorodifluoromethane	20.000	20.976	-4.9	97	0.00
3 M	Chloromethane	20.000	19.376	3.1	91	0.00
4 M	Vinyl Chloride	20.000	20.226	-1.1	97	0.00
5 M	Bromomethane	20.000	19.978	0.1	99	0.01
6 M	Chloroethane	20.000	20.422	-2.1	96	0.01
7 M	Trichlorofluoromethane	20.000	21.462	-7.3	102	0.00
8 T	Diethyl Ether	20.000	18.468	7.7	93	0.00
9	1,1,2-Trichlorotrifluoroeth	20.000	22.015	-10.1	104	0.00
10 M	1,1-Dichloroethene	20.000	19.886	0.6	99	0.00
11	Methyl Iodide	20.000	19.515	2.4	99	0.00
12	Methyl Acetate	20.000	18.859	5.7	91	0.00
13 M	Acrolein	100.000	80.250	19.8	88	-0.01
14 M	Acrylonitrile	100.000	82.099	17.9	80	0.00
15 M	Acetone	100.000	83.783	16.2	80	0.00
16 M	Carbon Disulfide	20.000	19.375	3.1	94	0.00
17	Allyl chloride	20.000	18.317	8.4	91	0.00
18 M	Methylene Chloride	20.000	20.109	-0.5	97	0.00
19 M	trans-1,2-Dichloroethene	20.000	20.839	-4.2	102	0.00
20 T	Diisopropyl ether	20.000	20.338	-1.7	97	0.00
21 M	1,1-Dichloroethane	20.000	20.838	-4.2	100	0.00
22 M	cis-1,2-Dichloroethene	20.000	20.537	-2.7	101	0.00
23 M	tert-Butyl Alcohol	100.000	63.024	37.0#	65	-0.01
24 M	Methyl tert-Butyl Ether	20.000	19.276	3.6	95	-0.01
25 M	Chloroform	20.000	21.083	-5.4	100	0.00
26	Cyclohexane	20.000	18.846	5.8	93	0.00
27 s	1,2-Dichloroethane-d4	30.000	29.792	0.7	96	0.00
28 I	1,4-Difluorobenzene	30.000	30.000	0.0	97	0.00
29	1,1-Dichloropropene	20.000	21.056	-5.3	101	0.00
30 M	2-Butanone	100.000	80.410	19.6	77	0.00
31	2,2-Dichloropropane	20.000	21.027	-5.1	100	0.00
32 M	1,1,1-Trichloroethane	20.000	21.310	-6.5	101	0.00
33 M	Carbon Tetrachloride	20.000	21.448	-7.2	102	0.00
34 M	Benzene	20.000	20.851	-4.3	98	0.00
35	Methacrylonitrile	20.000	16.902	15.5	82	0.00
36 M	1,2-Dichloroethane	20.000	20.387	-1.9	97	0.00
37 M	Trichloroethene	20.000	20.634	-3.2	99	0.00
38	Methylcyclohexane	20.000	19.342	3.3	102	0.00
39 M	1,2-Dichloropropane	20.000	20.440	-2.2	97	0.00
40	Dibromomethane	20.000	20.410	-2.1	97	0.00
41 M	Bromodichloromethane	20.000	20.767	-3.8	98	0.00
42 M	Vinyl Acetate	100.000	89.286	10.7	88	0.00
43	Ethyl Acetate	20.000	17.882	10.6	89	0.00
44	Isopropyl Acetate	20.000	17.766	11.2	86	0.00
45 T	1,4-Dioxane	400.000	297.233	25.7#	72	0.00
46	Methyl methacrylate	20.000	16.906	15.5	82	-0.01
47	n-amyl Acetate	20.000	16.664	16.7	83	0.00
48 M	t-1,3-Dichloropropene	20.000	19.615	1.9	97	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN010725\  
 Data File : VN085390.D  
 Acq On : 07 Jan 2025 10:30  
 Operator : JC\MD  
 Sample : VSTDCCC020  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC020

Quant Time: Jan 08 04:14:32 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N122024W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Dec 21 02:03:07 2024  
 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	19.683	1.6	96	0.00
50 M	1,1,2-Trichloroethane	20.000	20.358	-1.8	94	0.00
51	Ethyl methacrylate	20.000	18.022	9.9	91	0.00
52	1,3-Dichloropropane	20.000	20.281	-1.4	95	0.00
53 M	Dibromochloromethane	20.000	20.575	-2.9	96	0.00
54 M	1,2-Dibromoethane	20.000	19.808	1.0	95	0.00
55 M	2-Chloroethyl vinyl ether	100.000	84.891	15.1	84	0.00
56 M	Bromoform	20.000	18.894	5.5	92	0.00
57 I	Chlorobenzene-d5	30.000	30.000	0.0	97	0.00
58 M	4-Methyl-2-Pentanone	100.000	85.654	14.3	80	0.00
59 M	2-Hexanone	100.000	82.154	17.8	77	0.00
60 S	4-Bromofluorobenzene	30.000	30.262	-0.9	98	0.00
61 M	Tetrachloroethene	20.000	22.363	-11.8	106	0.00
62 M	Toluene	20.000	21.006	-5.0	99	0.00
63 S	Toluene-d8	30.000	30.829	-2.8	97	0.00
64 M	Chlorobenzene	20.000	20.963	-4.8	100	0.00
65	1,1,1,2-Tetrachloroethane	20.000	21.778	-8.9	102	0.00
66 M	Ethyl Benzene	20.000	19.715	1.4	97	0.00
67 M	m/p-Xylenes	40.000	42.287	-5.7	99	0.00
68 M	o-Xylene	20.000	20.599	-3.0	100	0.00
69 M	Styrene	20.000	20.360	-1.8	97	0.00
70	Isopropylbenzene	20.000	20.249	-1.2	99	0.00
71 M	1,1,2,2-Tetrachloroethane	20.000	18.376	8.1	88	0.00
72	1,2,3-Trichloropropane	20.000	19.123	4.4	97	0.00
73	Bromobenzene	20.000	20.551	-2.8	97	0.00
74	n-propylbenzene	20.000	20.142	-0.7	97	0.00
75	2-Chlorotoluene	20.000	20.771	-3.9	100	0.00
76	1,3,5-Trimethylbenzene	20.000	20.616	-3.1	98	0.00
77	t-1,4-Dichloro-2-butene	20.000	16.282	18.6	84	0.00
78	4-Chlorotoluene	20.000	20.343	-1.7	99	0.00
79	tert-butylbenzene	20.000	20.328	-1.6	102	0.00
80	1,2,4-Trimethylbenzene	20.000	20.764	-3.8	100	0.00
81	sec-Butylbenzene	20.000	20.283	-1.4	101	0.00
82	p-Isopropyltoluene	20.000	20.218	-1.1	103	0.00
83 M	1,3-Dichlorobenzene	20.000	20.650	-3.2	98	0.00
84 M	1,4-Dichlorobenzene	20.000	20.442	-2.2	102	0.00
85	n-Butylbenzene	20.000	19.446	2.8	103	0.00
86 T	Hexachloroethane	20.000	20.003	-0.0	95	0.00
87 M	1,2-Dichlorobenzene	20.000	20.227	-1.1	97	0.00
88	1,2-Dibromo-3-Chloropropane	20.000	16.274	18.6	80	0.00
89	1,2,4-Trichlorobenzene	20.000	18.674	6.6	95	0.00
90	Hexachlorobutadiene	20.000	20.298	-1.5	99	0.00
91 M	Naphthalene	20.000	15.138	24.3	82	0.00
92	1,2,3-Trichlorobenzene	20.000	18.674	6.6	95	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 0



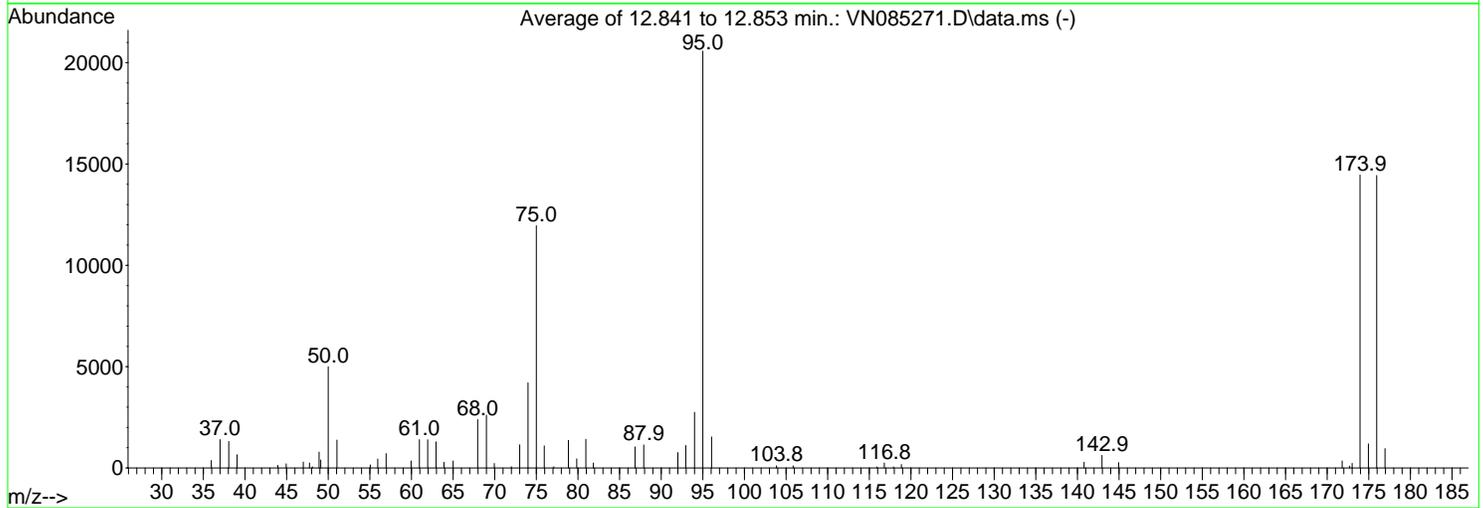
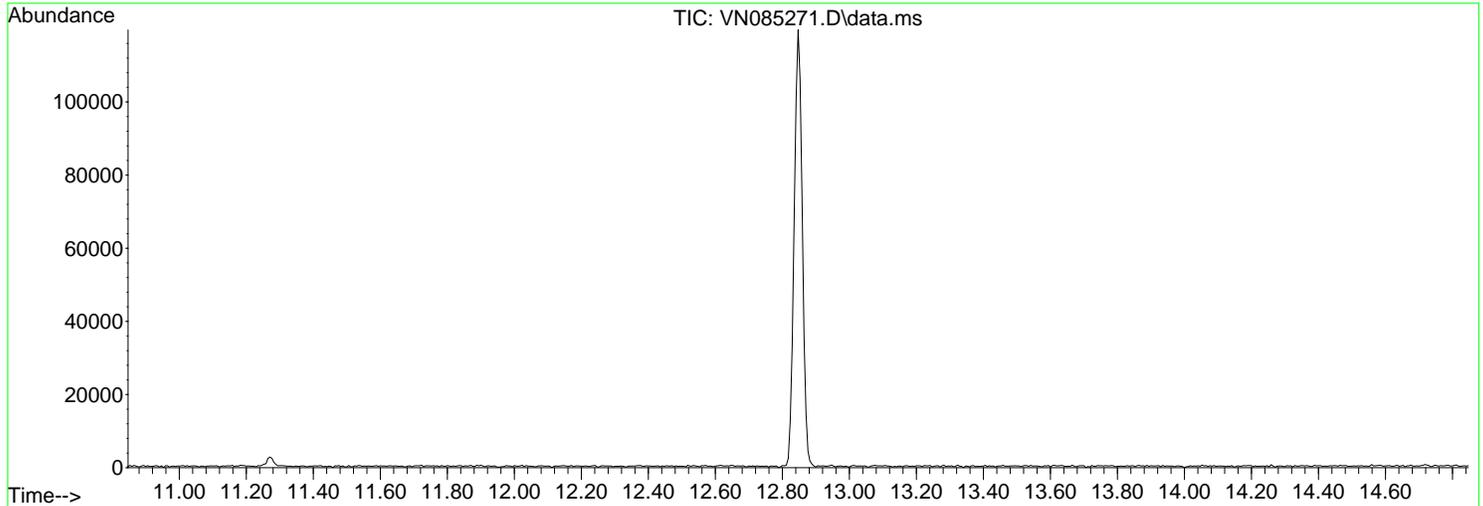
# QC SAMPLE DATA

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN122024\  
 Data File : VN085271.D  
 Acq On : 20 Dec 2024 09:21  
 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\624N122024W.M  
 Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 Last Update : Sat Dec 21 02:03:07 2024



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

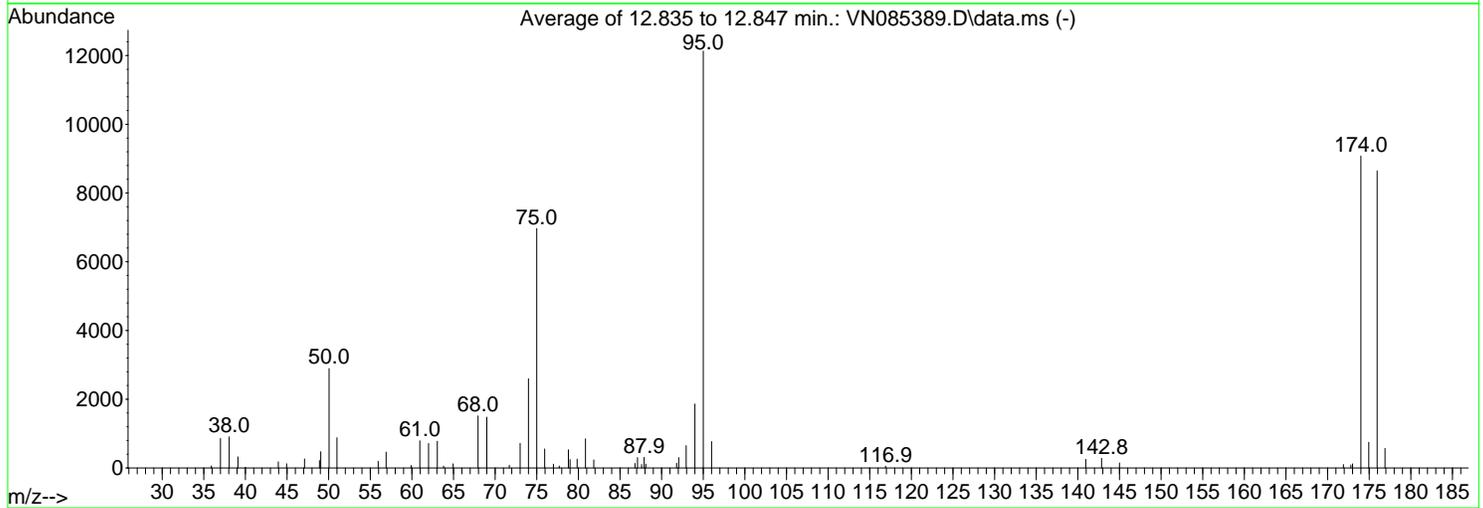
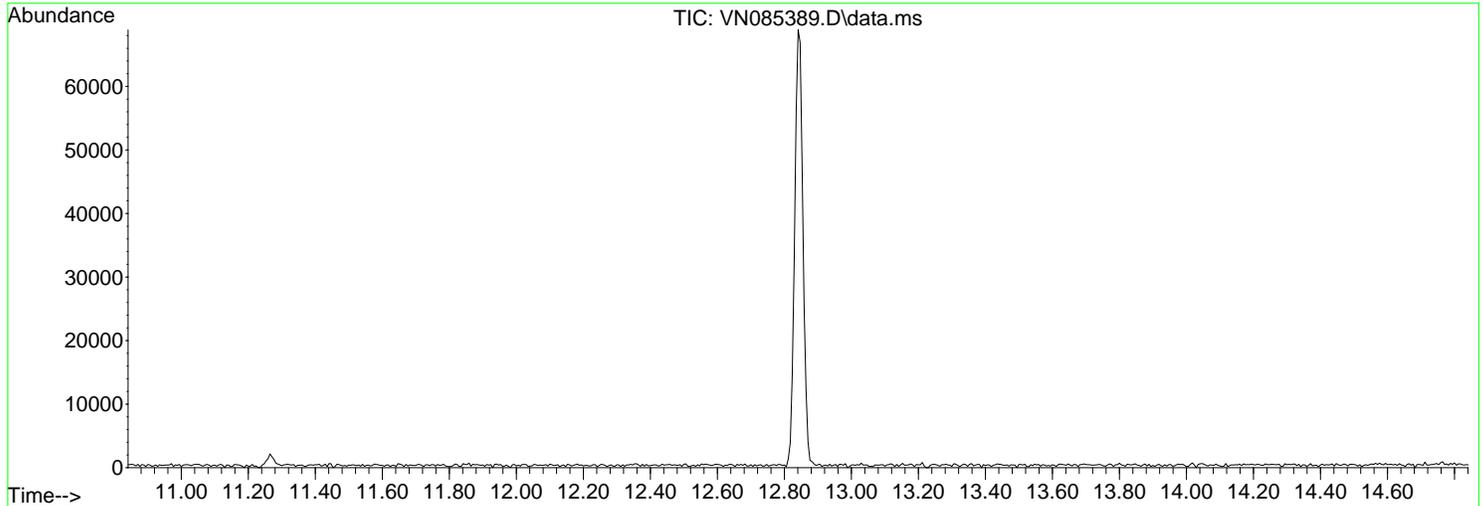
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	24.3	5003	PASS
75	95	30	60	58.1	11958	PASS
95	95	100	100	100.0	20576	PASS
96	95	5	9	7.5	1534	PASS
173	174	0.00	2	1.6	229	PASS
174	95	50	100	70.3	14462	PASS
175	174	5	9	8.2	1190	PASS
176	174	95	101	99.8	14434	PASS
177	176	5	9	6.6	957	PASS

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN010725\  
 Data File : VN085389.D  
 Acq On : 07 Jan 2025 09:43  
 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\624N122024W.M  
 Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 Last Update : Sat Dec 21 02:03:07 2024



AutoFind: Scans 1850, 1851, 1852; 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	23.9	2894	PASS
75	95	30	60	57.4	6965	PASS
95	95	100	100	100.0	12131	PASS
96	95	5	9	6.3	768	PASS
173	174	0.00	2	1.3	120	PASS
174	95	50	100	74.8	9076	PASS
175	174	5	9	8.3	749	PASS
176	174	95	101	95.2	8644	PASS
177	176	5	9	6.6	571	PASS



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

## Report of Analysis

Client:	Tully Environmental, Inc		Date Collected:		
Project:	Transfer Station-SPDES		Date Received:		
Client Sample ID:	VN0107WBL01		SDG No.:	Q1013	
Lab Sample ID:	VN0107WBL01		Matrix:	Water	
Analytical Method:	E624.1		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:			Test:	VOC-BTEX	
GC Column:	RXI-624	ID : 0.25	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085393.D	1		01/07/25 12:06	VN010725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
71-43-2	Benzene	0.69	U	0.69	5.00	ug/L
108-88-3	Toluene	0.72	U	0.72	5.00	ug/L
100-41-4	Ethyl Benzene	0.73	U	0.73	5.00	ug/L
179601-23-1	m/p-Xylenes	1.70	U	1.70	10.0	ug/L
95-47-6	o-Xylene	0.82	U	0.82	5.00	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	30.1		91 - 110	100%	SPK: 30
2037-26-5	Toluene-d8	29.3		91 - 112	98%	SPK: 30
460-00-4	4-Bromofluorobenzene	23.2		63 - 112	77%	SPK: 30
<b>INTERNAL STANDARDS</b>						
74-97-5	Bromochloromethane	26800	7.806			
540-36-3	1,4-Difluorobenzene	129000	9.094			
3114-55-4	Chlorobenzene-d5	115000	11.859			

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\VN010725\  
 Data File : VN085393.D  
 Acq On : 07 Jan 2025 12:06  
 Operator : JC\MD  
 Sample : VN0107WBL01  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0107WBL01

Quant Time: Jan 08 04:17:09 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N122024W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Dec 21 02:03:07 2024  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) Bromochloromethane	7.806	128	26828	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.094	114	128912	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.859	117	114923	30.000	ug/l	0.00

System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.571	65	70918	30.050	ug/l	0.00
Spiked Amount	30.000	Range	91 - 110	Recovery	=	100.167%
60) 4-Bromofluorobenzene	12.847	95	43260	23.238	ug/l	0.00
Spiked Amount	30.000	Range	63 - 112	Recovery	=	77.467%
63) Toluene-d8	10.565	98	164326	29.283	ug/l	0.00
Spiked Amount	30.000	Range	91 - 112	Recovery	=	97.600%

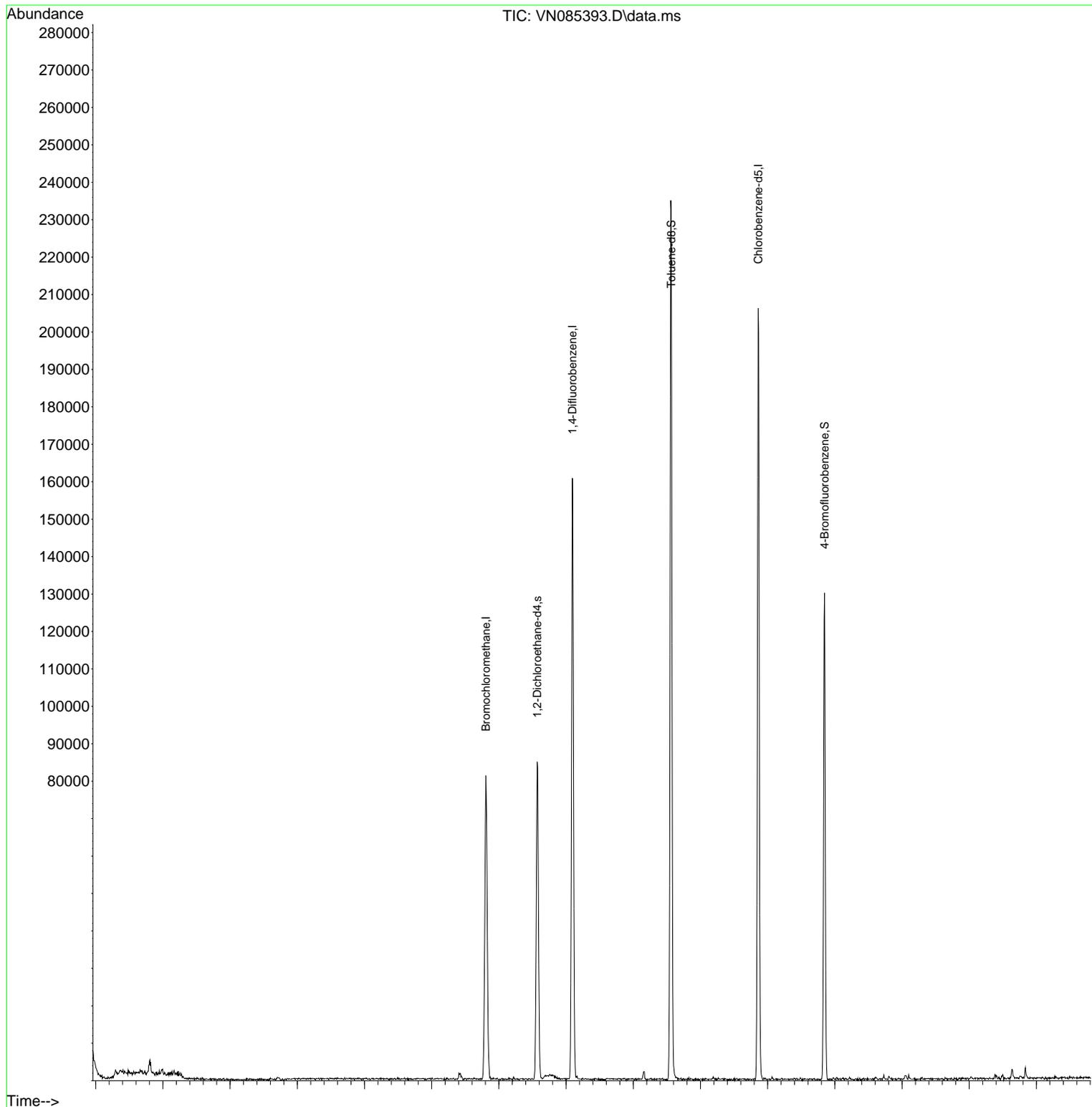
Target Compounds	Qvalue
-----	

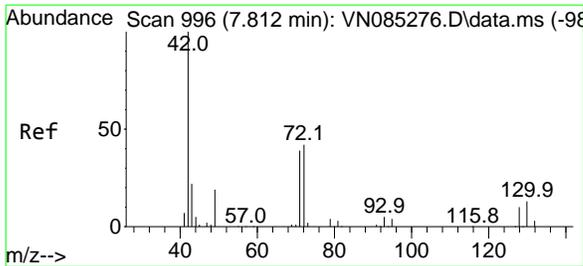
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN010725\  
Data File : VN085393.D  
Acq On : 07 Jan 2025 12:06  
Operator : JC\MD  
Sample : VN0107WBL01  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0107WBL01

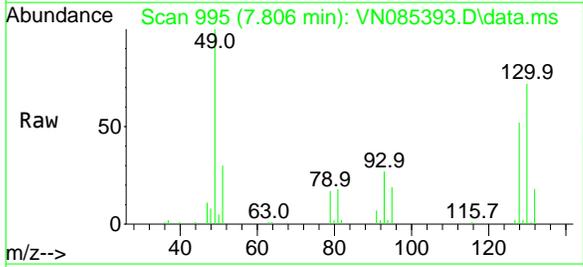
Quant Time: Jan 08 04:17:09 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N122024W.M  
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
QLast Update : Sat Dec 21 02:03:07 2024  
Response via : Initial Calibration



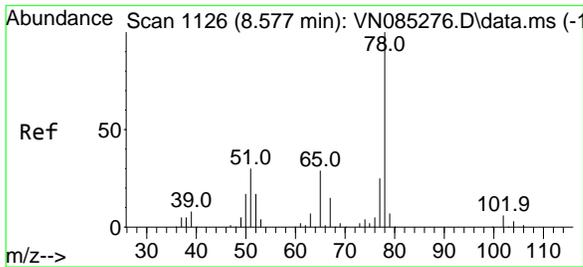
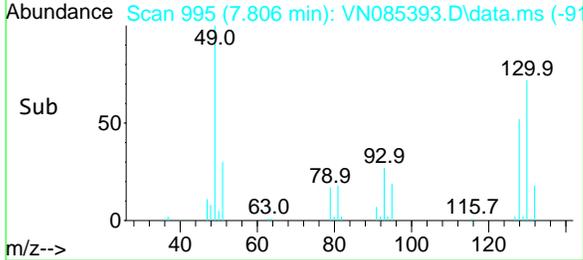
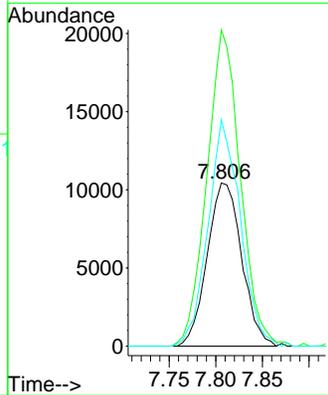


#1  
 Bromochloromethane  
 Concen: 30.000 ug/l  
 RT: 7.806 min Scan# 996  
 Delta R.T. -0.006 min  
 Lab File: VN085393.D  
 Acq: 07 Jan 2025 12:06

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0107WBL01

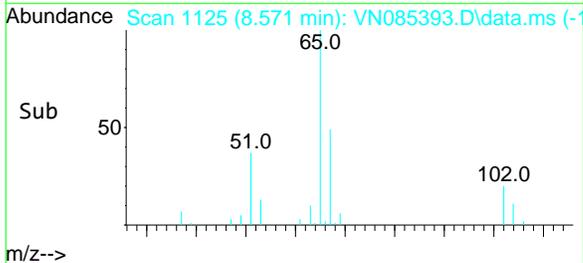
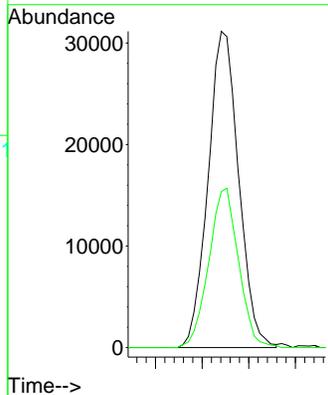
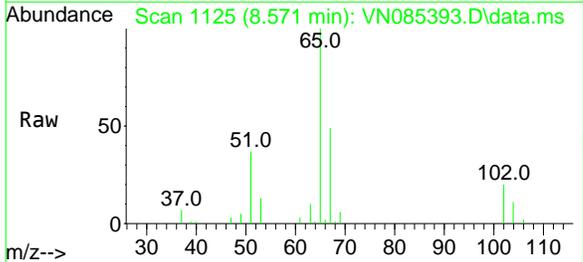


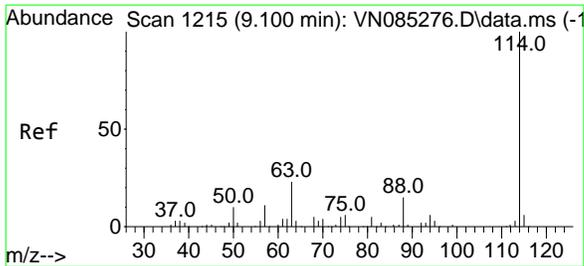
Tgt Ion	Resp	Lower	Upper
128	100		
49	187.0	0.0	497.8
130	130.3	0.0	328.5



#27  
 1,2-Dichloroethane-d4  
 Concen: 30.050 ug/l  
 RT: 8.571 min Scan# 1125  
 Delta R.T. -0.006 min  
 Lab File: VN085393.D  
 Acq: 07 Jan 2025 12:06

Tgt Ion	Resp	Lower	Upper
65	100		
67	49.0	42.0	63.0

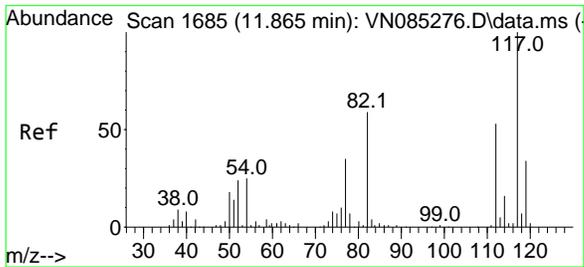
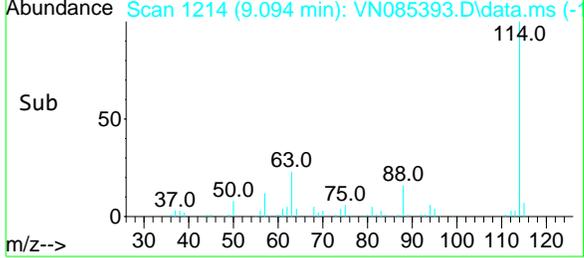
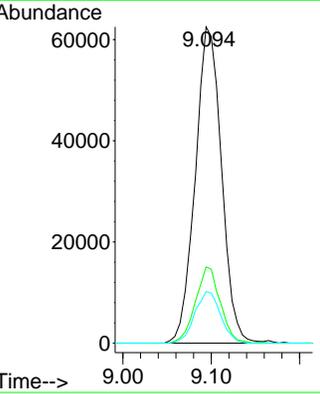
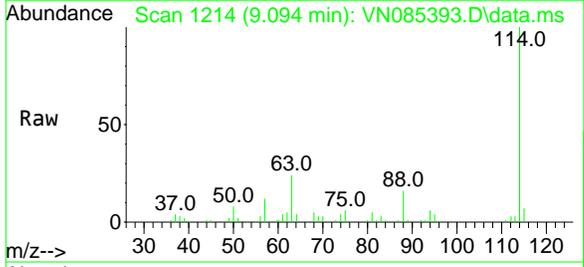




#28  
 1,4-Difluorobenzene  
 Concen: 30.000 ug/l  
 RT: 9.094 min Scan# 1214  
 Delta R.T. -0.006 min  
 Lab File: VN085393.D  
 Acq: 07 Jan 2025 12:06

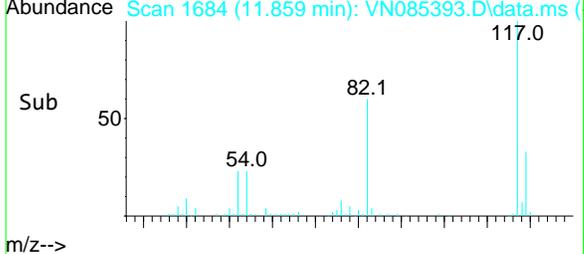
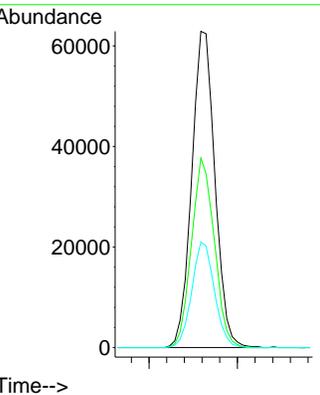
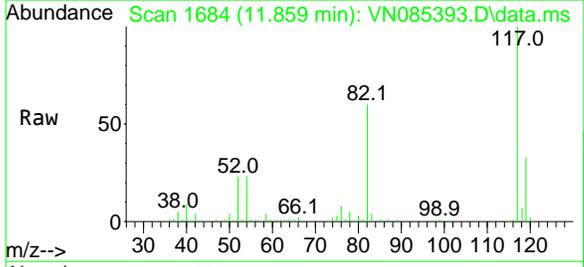
Instrument : MSVOA\_N  
 ClientSampleId : VN0107WBL01

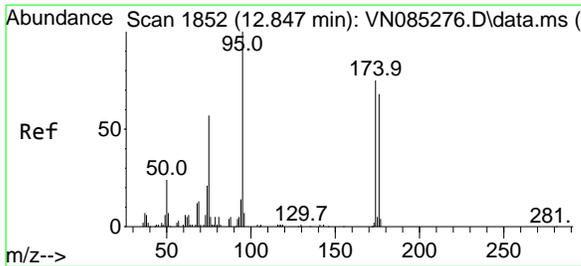
Tgt Ion	Resp	Lower	Upper
114	128912		
63	22.7	18.0	27.0
88	16.0	12.9	19.3



#57  
 Chlorobenzene-d5  
 Concen: 30.000 ug/l  
 RT: 11.859 min Scan# 1684  
 Delta R.T. -0.006 min  
 Lab File: VN085393.D  
 Acq: 07 Jan 2025 12:06

Tgt Ion	Resp	Lower	Upper
117	114923		
82	58.9	47.4	71.0
119	32.5	25.3	37.9

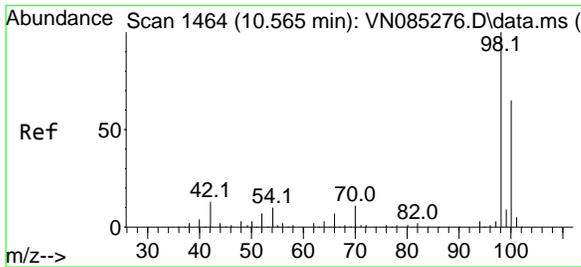
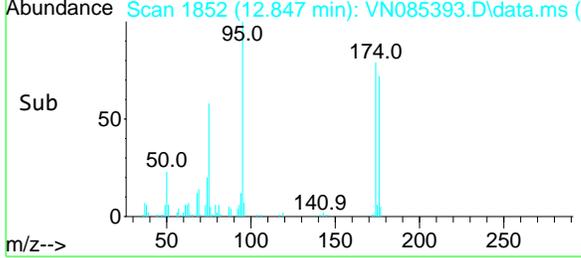
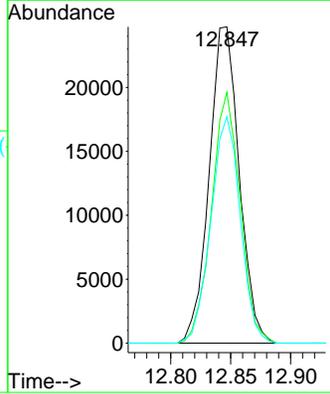
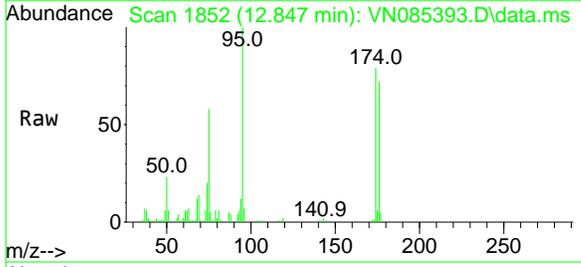




#60  
 4-Bromofluorobenzene  
 Concen: 23.238 ug/l  
 RT: 12.847 min Scan# 18  
 Delta R.T. -0.000 min  
 Lab File: VN085393.D  
 Acq: 07 Jan 2025 12:06

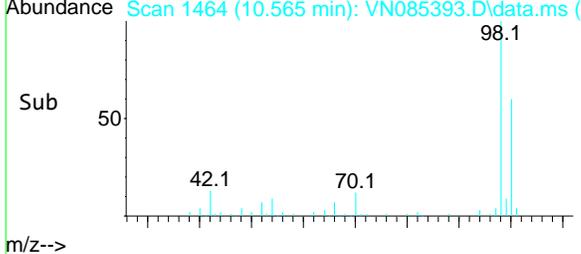
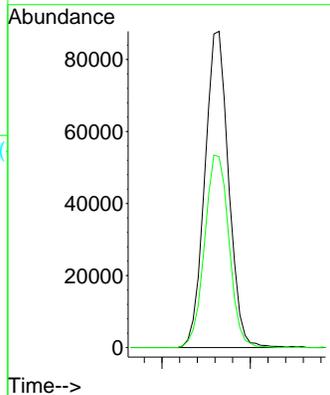
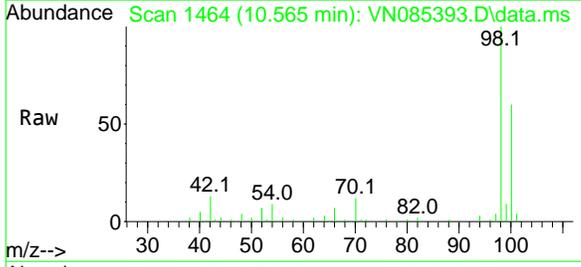
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0107WBL01

Tgt Ion	Resp	Lower	Upper
95	43260		
174	75.8	57.8	86.8
176	69.8	57.1	85.7



#63  
 ToLuene-d8  
 Concen: 29.283 ug/l  
 RT: 10.565 min Scan# 1464  
 Delta R.T. -0.000 min  
 Lab File: VN085393.D  
 Acq: 07 Jan 2025 12:06

Tgt Ion	Resp	Lower	Upper
98	164326		
100	62.3	50.8	76.2





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

## Report of Analysis

Client:	Tully Environmental, Inc		Date Collected:		
Project:	Transfer Station-SPDES		Date Received:		
Client Sample ID:	VN0107WBS01		SDG No.:	Q1013	
Lab Sample ID:	VN0107WBS01		Matrix:	Water	
Analytical Method:	E624.1		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOC-BTEX	
GC Column:	RXI-624	ID : 0.25	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085391.D	1		01/07/25 11:07	VN010725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
71-43-2	Benzene	18.3		0.69	5.00	ug/L
108-88-3	Toluene	18.4		0.72	5.00	ug/L
100-41-4	Ethyl Benzene	17.4		0.73	5.00	ug/L
179601-23-1	m/p-Xylenes	36.7		1.70	10.0	ug/L
95-47-6	o-Xylene	17.5		0.82	5.00	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	29.2		91 - 110	97%	SPK: 30
2037-26-5	Toluene-d8	30.7		91 - 112	102%	SPK: 30
460-00-4	4-Bromofluorobenzene	29.6		63 - 112	99%	SPK: 30
<b>INTERNAL STANDARDS</b>						
74-97-5	Bromochloromethane	29800	7.806			
540-36-3	1,4-Difluorobenzene	158000	9.094			
3114-55-4	Chlorobenzene-d5	144000	11.859			

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\VN010725\  
 Data File : VN085391.D  
 Acq On : 07 Jan 2025 11:07  
 Operator : JC\MD  
 Sample : VN0107WBS01  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0107WBS01

Manual Integrations  
 APPROVED

Reviewed By : John Carlone 01/08/2025  
 Supervised By : Mahesh Dadoda 01/08/2025

Quant Time: Jan 08 04:15:24 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N122024W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Dec 21 02:03:07 2024  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	7.806	128	29795	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.094	114	157585	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.859	117	144288	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.577	65	76495	29.185	ug/l	0.00
Spiked Amount	30.000	Range 91 - 110	Recovery	=	97.267%	
60) 4-Bromofluorobenzene	12.847	95	69102	29.566	ug/l	0.00
Spiked Amount	30.000	Range 63 - 112	Recovery	=	98.567%	
63) Toluene-d8	10.559	98	216343	30.706	ug/l	0.00
Spiked Amount	30.000	Range 91 - 112	Recovery	=	102.367%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	2.124	85	45244	18.161	ug/l	98
3) Chloromethane	2.359	50	43534	17.307	ug/l	99
4) Vinyl Chloride	2.518	62	44088	17.262	ug/l	99
5) Bromomethane	2.965	94	27827	18.638	ug/l	96
6) Chloroethane	3.130	64	29507	18.301	ug/l	91
7) Trichlorofluoromethane	3.506	101	64906	18.498	ug/l	99
8) Diethyl Ether	3.959	74	20112	16.643	ug/l	99
9) 1,1,2-Trichlorotrifluo...	4.371	101	38875	19.294	ug/l	96
10) 1,1-Dichloroethene	4.348	96	31913	17.338	ug/l	90
11) Methyl Iodide	4.595	142	38226	17.328	ug/l	91
12) Methyl Acetate	5.018	43	45806	16.664	ug/l	97
13) Acrolein	4.177	56	16364	66.685	ug/l	99
14) Acrylonitrile	5.712	53	79287	74.577	ug/l	98
15) Acetone	4.418	58	20921	78.009	ug/l	87
16) Carbon Disulfide	4.712	76	94969	16.974	ug/l	98
17) Allyl chloride	5.024	41	49889	16.755	ug/l	96
18) Methylene Chloride	5.271	84	38969	17.767	ug/l	99
19) trans-1,2-Dichloroethene	5.783	96	34831	18.194	ug/l	98
20) Diisopropyl ether	6.659	45	124483	18.242	ug/l	95
21) 1,1-Dichloroethane	6.565	63	74257	18.614	ug/l	96
22) cis-1,2-Dichloroethene	7.483	96	41242	18.091	ug/l	96
23) tert-Butyl Alcohol	5.506	59	19348	55.220	ug/l #	100
24) Methyl tert-Butyl Ether	5.789	73	101495	16.800	ug/l #	77
25) Chloroform	7.959	83	74666	18.464	ug/l	97
26) Cyclohexane	8.253	56	52189	17.158	ug/l #	99
29) 1,1-Dichloropropene	8.365	75	49602	18.129	ug/l	99
30) 2-Butanone	7.471	43	99126	68.636	ug/l	99
31) 2,2-Dichloropropane	7.483	77	64553	18.620	ug/l	99
32) 1,1,1-Trichloroethane	8.159	97	63889	17.963	ug/l	99
33) Carbon Tetrachloride	8.353	117	55829	17.931	ug/l	98
34) Benzene	8.600	78	158176	18.289	ug/l	99
35) Methacrylonitrile	7.771	41	24903	15.577	ug/l	99
36) 1,2-Dichloroethane	8.665	62	56130	17.948	ug/l	100
37) Trichloroethene	9.347	130	33759	17.741	ug/l	89
38) Methylcyclohexane	9.600	83	49652	17.537	ug/l	96
39) 1,2-Dichloropropane	9.612	63	39935	18.149	ug/l	99
40) Dibromomethane	9.706	93	27191	17.724	ug/l	98
41) Bromodichloromethane	9.882	83	57736	18.008	ug/l #	97
42) Vinyl Acetate	6.600	43	397042	77.883	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN010725\  
 Data File : VN085391.D  
 Acq On : 07 Jan 2025 11:07  
 Operator : JC\MD  
 Sample : VN0107WBS01  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0107WBS01

Manual Integrations  
 APPROVED

Reviewed By :John Carlone 01/08/2025  
 Supervised By :Mahesh Dadoda 01/08/2025

Quant Time: Jan 08 04:15:24 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N122024W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Dec 21 02:03:07 2024  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	7.553	43	45516m	15.240	ug/l	
44) Isopropyl Acetate	8.683	43	79009	15.924	ug/l	99
45) 1,4-Dioxane	9.682	88	9084	235.395	ug/l	94
46) Methyl methacrylate	9.671	41	33219	14.424	ug/l	98
47) n-ethyl Acetate	12.488	43	59431	14.061	ug/l	99
48) t-1,3-Dichloropropene	10.829	75	53557	16.912	ug/l	97
49) cis-1,3-Dichloropropene	10.306	75	59368	17.438	ug/l	97
50) 1,1,2-Trichloroethane	11.012	97	34107	17.000	ug/l	96
51) Ethyl methacrylate	10.871	69	45299	14.928	ug/l	94
52) 1,3-Dichloropropane	11.159	76	61058	17.434	ug/l	97
53) Dibromochloromethane	11.353	129	40698	17.312	ug/l	98
54) 1,2-Dibromoethane	11.465	107	33163	17.080	ug/l	98
55) 2-Chloroethyl vinyl ether	10.153	63	112288	71.836	ug/l	98
56) Bromoform	12.570	173	23597	15.386	ug/l	99
58) 4-Methyl-2-Pentanone	10.441	43	215425	73.648	ug/l	99
59) 2-Hexanone	11.188	43	146559	68.971	ug/l	99
61) Tetrachloroethene	11.100	164	32534	20.198	ug/l	93
62) Toluene	10.624	91	162770	18.362	ug/l	100
64) Chlorobenzene	11.882	112	97712	18.277	ug/l	96
65) 1,1,1,2-Tetrachloroethane	11.953	131	35685	18.405	ug/l	99
66) Ethyl Benzene	11.959	91	161981	17.366	ug/l	97
67) m/p-Xylenes	12.065	106	128248	36.650	ug/l	97
68) o-Xylene	12.394	106	58197	17.460	ug/l	99
69) Styrene	12.406	104	98012	17.400	ug/l	99
70) Isopropylbenzene	12.688	105	150813	18.020	ug/l	99
71) 1,1,2,2-Tetrachloroethane	12.929	83	47513	16.006	ug/l	98
72) 1,2,3-Trichloropropane	12.988	75	40990m	16.225	ug/l	
73) Bromobenzene	12.976	156	36615	17.709	ug/l	97
74) n-propylbenzene	13.029	91	181389	17.396	ug/l	98
75) 2-Chlorotoluene	13.123	91	112348	17.886	ug/l	99
76) 1,3,5-Trimethylbenzene	13.170	105	126875	17.766	ug/l	100
77) t-1,4-Dichloro-2-butene	12.729	75	14691	14.228	ug/l	94
78) 4-Chlorotoluene	13.218	91	111652	17.483	ug/l	99
79) tert-butylbenzene	13.435	119	105426	18.052	ug/l	95
80) 1,2,4-Trimethylbenzene	13.476	105	126567	17.805	ug/l	99
81) sec-Butylbenzene	13.612	105	152272	18.059	ug/l	98
82) p-Isopropyltoluene	13.723	119	124141	17.877	ug/l	98
83) 1,3-Dichlorobenzene	13.729	146	68916	17.872	ug/l	98
84) 1,4-Dichlorobenzene	13.806	146	67016	17.964	ug/l	96
85) n-Butylbenzene	14.053	91	105033	17.520	ug/l	100
86) Hexachloroethane	14.329	117	25430	17.058	ug/l	98
87) 1,2-Dichlorobenzene	14.100	146	66123	18.049	ug/l	98
88) 1,2-Dibromo-3-Chloropr...	14.712	75	7707	14.222	ug/l	92
89) 1,2,4-Trichlorobenzene	15.835	180	28198	16.247	ug/l	98
90) Hexachlorobutadiene	15.500	225	16287	18.826	ug/l	94
91) Naphthalene	15.635	128	77301	13.862	ug/l	99
92) 1,2,3-Trichlorobenzene	15.835	180	28198	16.247	ug/l	98

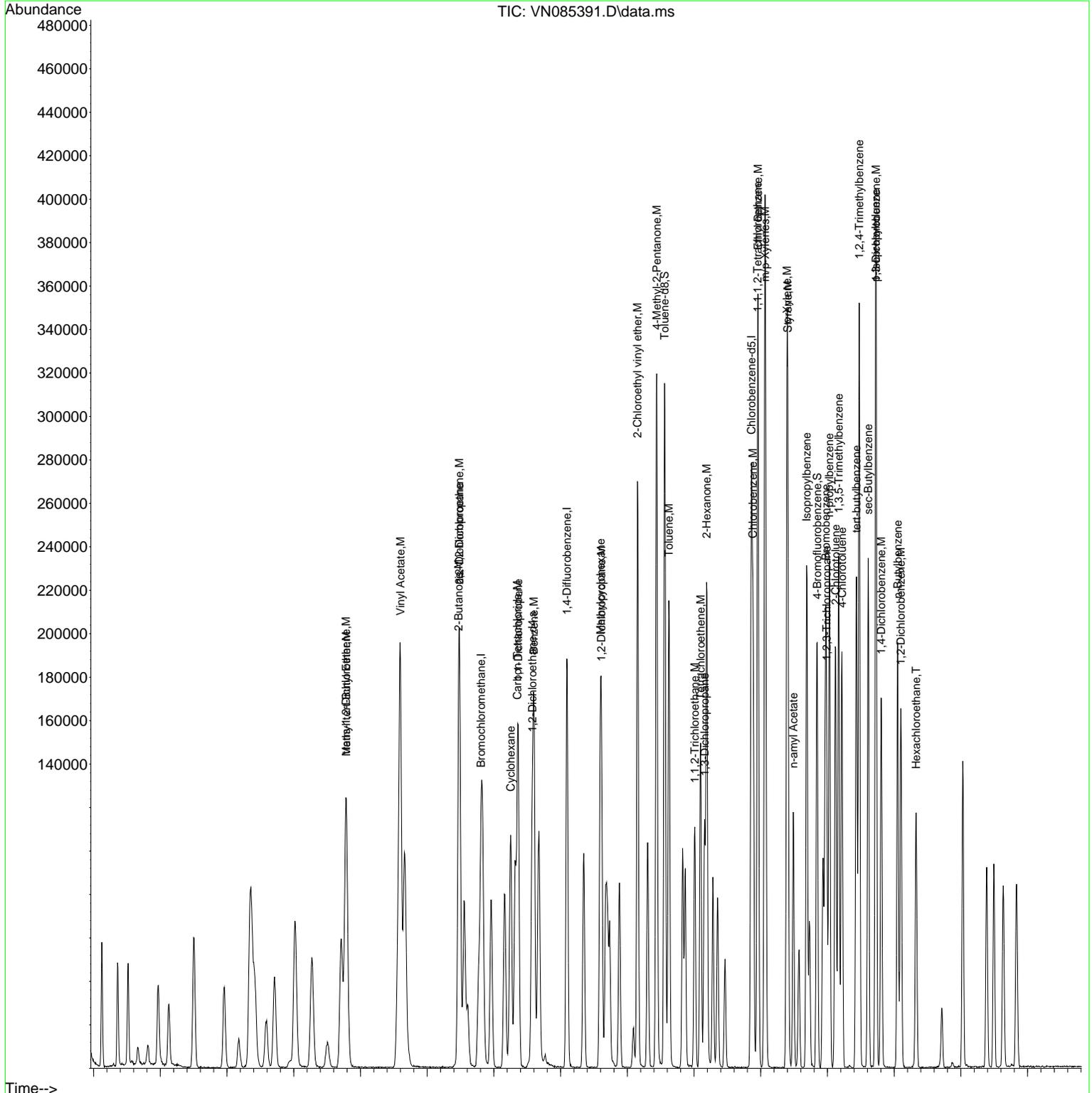
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN010725\  
 Data File : VN085391.D  
 Acq On : 07 Jan 2025 11:07  
 Operator : JC\MD  
 Sample : VN0107WBS01  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 4 Sample Multiplier: 1

**Instrument :**  
 MSVOA\_N  
**ClientSampleId :**  
 VN0107WBS01

Quant Time: Jan 08 04:15:24 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N122024W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Dec 21 02:03:07 2024  
 Response via : Initial Calibration

**Manual Integrations**  
**APPROVED**  
 Reviewed By :John Carlone 01/08/2025  
 Supervised By :Mahesh Dadoda 01/08/2025





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

## Report of Analysis

Client:	Tully Environmental, Inc		Date Collected:		
Project:	Transfer Station-SPDES		Date Received:		
Client Sample ID:	VN0107WBSD01		SDG No.:	Q1013	
Lab Sample ID:	VN0107WBSD01		Matrix:	Water	
Analytical Method:	E624.1		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:			Test:	VOC-BTEX	
GC Column:	RXI-624	ID : 0.25	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085392.D	1		01/07/25 11:42	VN010725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
71-43-2	Benzene	20.7		0.69	5.00	ug/L
108-88-3	Toluene	20.7		0.72	5.00	ug/L
100-41-4	Ethyl Benzene	19.8		0.73	5.00	ug/L
179601-23-1	m/p-Xylenes	41.9		1.70	10.0	ug/L
95-47-6	o-Xylene	20.0		0.82	5.00	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	28.8		91 - 110	96%	SPK: 30
2037-26-5	Toluene-d8	29.7		91 - 112	99%	SPK: 30
460-00-4	4-Bromofluorobenzene	29.8		63 - 112	99%	SPK: 30
<b>INTERNAL STANDARDS</b>						
74-97-5	Bromochloromethane	31500	7.806			
540-36-3	1,4-Difluorobenzene	162000	9.094			
3114-55-4	Chlorobenzene-d5	151000	11.859			

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\VN010725\  
 Data File : VN085392.D  
 Acq On : 07 Jan 2025 11:42  
 Operator : JC\MD  
 Sample : VN0107WBSD01  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0107WBSD01

Manual Integrations  
 APPROVED

Reviewed By : John Carlone 01/08/2025  
 Supervised By : Mahesh Dadoda 01/08/2025

Quant Time: Jan 08 04:16:15 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N122024W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Dec 21 02:03:07 2024  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	7.806	128	31547	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.094	114	161684	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.859	117	151196	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.571	65	80027	28.837	ug/l	0.00
Spiked Amount	30.000	Range 91 - 110	Recovery	=	96.133%	
60) 4-Bromofluorobenzene	12.841	95	72943	29.783	ug/l	0.00
Spiked Amount	30.000	Range 63 - 112	Recovery	=	99.267%	
63) Toluene-d8	10.559	98	219630	29.748	ug/l	0.00
Spiked Amount	30.000	Range 91 - 112	Recovery	=	99.167%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	2.124	85	52446	19.883	ug/l	97
3) Chloromethane	2.359	50	49268	18.499	ug/l	98
4) Vinyl Chloride	2.518	62	50855	18.806	ug/l	99
5) Bromomethane	2.965	94	31236	19.759	ug/l	96
6) Chloroethane	3.130	64	33928	19.875	ug/l	99
7) Trichlorofluoromethane	3.506	101	75430	20.303	ug/l	91
8) Diethyl Ether	3.959	74	25273	19.752	ug/l	96
9) 1,1,2-Trichlorotrifluo...	4.371	101	43885	20.571	ug/l	96
10) 1,1-Dichloroethene	4.342	96	38811	19.915	ug/l	92
11) Methyl Iodide	4.583	142	47895	20.506	ug/l	94
12) Methyl Acetate	5.018	43	57864	19.882	ug/l	94
13) Acrolein	4.183	56	22758	87.591	ug/l	97
14) Acrylonitrile	5.712	53	96887	86.071	ug/l	99
15) Acetone	4.412	58	23920	84.238	ug/l	98
16) Carbon Disulfide	4.712	76	110824	18.707	ug/l	96
17) Allyl chloride	5.024	41	59127	18.755	ug/l	94
18) Methylene Chloride	5.271	84	46877	20.185	ug/l	99
19) trans-1,2-Dichloroethene	5.783	96	40915	20.185	ug/l	95
20) Diisopropyl ether	6.659	45	147579	20.425	ug/l	97
21) 1,1-Dichloroethane	6.565	63	86320	20.436	ug/l	97
22) cis-1,2-Dichloroethene	7.483	96	49518	20.515	ug/l	96
23) tert-Butyl Alcohol	5.500	59	25820	69.599	ug/l #	100
24) Methyl tert-Butyl Ether	5.795	73	130316	20.372	ug/l	97
25) Chloroform	7.959	83	86727	20.255	ug/l	98
26) Cyclohexane	8.253	56	59746	18.552	ug/l #	97
29) 1,1-Dichloropropene	8.365	75	58002	20.662	ug/l	99
30) 2-Butanone	7.477	43	123398	83.277	ug/l #	83
31) 2,2-Dichloropropane	7.489	77	74616	20.977	ug/l	100
32) 1,1,1-Trichloroethane	8.159	97	74487	20.411	ug/l	99
33) Carbon Tetrachloride	8.353	117	66040	20.673	ug/l	98
34) Benzene	8.600	78	183931	20.728	ug/l	99
35) Methacrylonitrile	7.765	41	31538	19.227	ug/l	96
36) 1,2-Dichloroethane	8.665	62	66640	20.768	ug/l	99
37) Trichloroethene	9.347	130	40119	20.549	ug/l	96
38) Methylcyclohexane	9.594	83	57755	19.881	ug/l	95
39) 1,2-Dichloropropane	9.618	63	47206	20.910	ug/l	97
40) Dibromomethane	9.700	93	32214	20.466	ug/l	99
41) Bromodichloromethane	9.882	83	67806	20.613	ug/l	99
42) Vinyl Acetate	6.600	43	493489	94.348	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN010725\  
 Data File : VN085392.D  
 Acq On : 07 Jan 2025 11:42  
 Operator : JC\MD  
 Sample : VN0107WBSD01  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0107WBSD01

Manual Integrations  
 APPROVED

Reviewed By : John Carlone 01/08/2025  
 Supervised By : Mahesh Dadoda 01/08/2025

Quant Time: Jan 08 04:16:15 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N122024W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Dec 21 02:03:07 2024  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	7.553	43	54302	17.721	ug/l	99
44) Isopropyl Acetate	8.683	43	95265	18.714	ug/l	99
45) 1,4-Dioxane	9.688	88	11059	279.309	ug/l	94
46) Methyl methacrylate	9.677	41	42538	18.003	ug/l	98
47) n-amyl Acetate	12.488	43	75941	17.512	ug/l	99
48) t-1,3-Dichloropropene	10.829	75	65101	20.036	ug/l	98
49) cis-1,3-Dichloropropene	10.306	75	70549	20.196	ug/l	95
50) 1,1,2-Trichloroethane	11.012	97	42009	20.407	ug/l	98
51) Ethyl methacrylate	10.871	69	59699	19.174	ug/l	94
52) 1,3-Dichloropropane	11.159	76	74437	20.715	ug/l	98
53) Dibromochloromethane	11.353	129	49399	20.480	ug/l	99
54) 1,2-Dibromoethane	11.465	107	40450	20.305	ug/l	98
55) 2-Chloroethyl vinyl ether	10.153	63	169065	105.417	ug/l	99
56) Bromoform	12.576	173	28855	18.338	ug/l	100
58) 4-Methyl-2-Pentanone	10.441	43	272378	88.864	ug/l	98
59) 2-Hexanone	11.188	43	185567	83.338	ug/l	97
61) Tetrachloroethene	11.100	164	37432	22.177	ug/l	93
62) Toluene	10.624	91	192736	20.749	ug/l	100
64) Chlorobenzene	11.888	112	117831	21.033	ug/l	95
65) 1,1,1,2-Tetrachloroethane	11.953	131	42154	20.748	ug/l	99
66) Ethyl Benzene	11.959	91	193823	19.831	ug/l	97
67) m/p-Xylenes	12.065	106	153533	41.871	ug/l	97
68) o-Xylene	12.394	106	69882	20.008	ug/l	98
69) Styrene	12.406	104	118962	20.154	ug/l	100
70) Isopropylbenzene	12.688	105	179963	20.520	ug/l	98
71) 1,1,2,2-Tetrachloroethane	12.935	83	57731	18.560	ug/l	99
72) 1,2,3-Trichloropropane	12.988	75	51795m	19.565	ug/l	
73) Bromobenzene	12.976	156	44405	20.495	ug/l	97
74) n-propylbenzene	13.029	91	217809	19.935	ug/l	97
75) 2-Chlorotoluene	13.123	91	134134	20.379	ug/l	100
76) 1,3,5-Trimethylbenzene	13.171	105	152638	20.397	ug/l	100
77) t-1,4-Dichloro-2-butene	12.729	75	18382	16.990	ug/l	92
78) 4-Chlorotoluene	13.218	91	133143	19.895	ug/l	99
79) tert-butylbenzene	13.435	119	123344	20.155	ug/l	96
80) 1,2,4-Trimethylbenzene	13.476	105	152619	20.489	ug/l	99
81) sec-Butylbenzene	13.612	105	178519	20.205	ug/l	99
82) p-Isopropyltoluene	13.723	119	149824	20.590	ug/l	98
83) 1,3-Dichlorobenzene	13.729	146	82603	20.443	ug/l	99
84) 1,4-Dichlorobenzene	13.806	146	79807	20.415	ug/l	97
85) n-Butylbenzene	14.053	91	125572	19.988	ug/l	99
86) Hexachloroethane	14.329	117	30104	19.271	ug/l	97
87) 1,2-Dichlorobenzene	14.100	146	78682	20.496	ug/l	98
88) 1,2-Dibromo-3-Chloropr...	14.717	75	9491	16.714	ug/l	96
89) 1,2,4-Trichlorobenzene	15.829	180	34951	19.218	ug/l	99
90) Hexachlorobutadiene	15.494	225	18392	20.288	ug/l	90
91) Naphthalene	15.635	128	98807	16.909	ug/l	100
92) 1,2,3-Trichlorobenzene	15.829	180	34951	19.218	ug/l	99

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

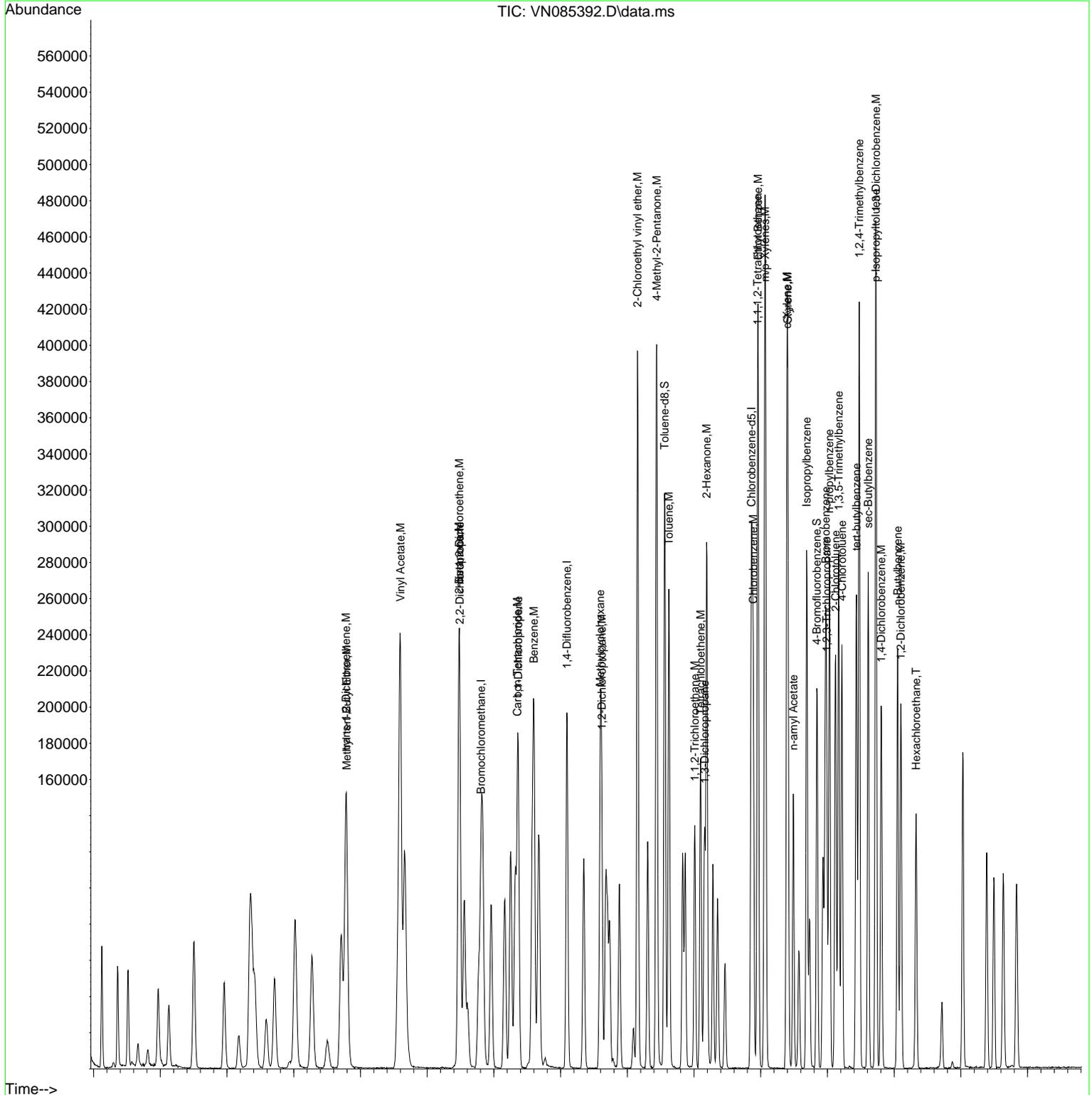
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN010725\  
 Data File : VN085392.D  
 Acq On : 07 Jan 2025 11:42  
 Operator : JC\MD  
 Sample : VN0107WBSD01  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 5 Sample Multiplier: 1

**Instrument :**  
 MSVOA\_N  
**ClientSampleId :**  
 VN0107WBSD01

**Manual Integrations**  
**APPROVED**

Reviewed By : John Carlone 01/08/2025  
 Supervised By : Mahesh Dadoda 01/08/2025

Quant Time: Jan 08 04:16:15 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N122024W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Dec 21 02:03:07 2024  
 Response via : Initial Calibration



### Manual Integration Report

Sequence:	VN122024	Instrument	MSVOA_n
-----------	----------	------------	---------

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDIC005	VN085272.D	1,1-Dichloroethene	SAM	12/23/2024 7:24:42 AM	MMDadoda	12/24/2024 12:27:52 AM	Peak Integrated by Software
VSTDIC005	VN085272.D	1,2,3-Trichloropropane	SAM	12/23/2024 7:24:42 AM	MMDadoda	12/24/2024 12:27:52 AM	Peak Integrated by Software
VSTDIC005	VN085272.D	1,2-Dibromo-3-Chloropropane	SAM	12/23/2024 7:24:42 AM	MMDadoda	12/24/2024 12:27:52 AM	Peak Integrated by Software
VSTDIC005	VN085272.D	Acetone	SAM	12/23/2024 7:24:42 AM	MMDadoda	12/24/2024 12:27:52 AM	Peak Integrated by Software
VSTDIC005	VN085272.D	Methacrylonitrile	SAM	12/23/2024 7:24:42 AM	MMDadoda	12/24/2024 12:27:52 AM	Peak Integrated by Software
VSTDIC005	VN085272.D	Methyl Acetate	SAM	12/23/2024 7:24:42 AM	MMDadoda	12/24/2024 12:27:52 AM	Peak Integrated by Software
VSTDIC005	VN085272.D	tert-Butyl Alcohol	SAM	12/23/2024 7:24:42 AM	MMDadoda	12/24/2024 12:27:52 AM	Peak Integrated by Software
VSTDICCC020	VN085273.D	1,2,3-Trichloropropane	SAM	12/23/2024 7:24:44 AM	MMDadoda	12/24/2024 12:27:54 AM	Peak Integrated by Software
VSTDIC050	VN085274.D	1,2,3-Trichloropropane	JOHN	12/23/2024 9:01:06 AM	MMDadoda	12/24/2024 12:27:55 AM	Peak Integrated by Software
VSTDIC100	VN085275.D	1,2,3-Trichloropropane	SAM	12/23/2024 7:24:45 AM	MMDadoda	12/24/2024 12:27:57 AM	Peak Integrated by Software
VSTDIC150	VN085276.D	1,2,3-Trichloropropane	SAM	12/23/2024 7:24:47 AM	MMDadoda	12/24/2024 12:27:58 AM	Peak Integrated by Software
VSTDICV020	VN085278.D	1,2,3-Trichloropropane	SAM	12/23/2024 7:24:51 AM	MMDadoda	12/24/2024 12:28:01 AM	Peak Integrated by Software
VSTDCCC020	VN085284.D	1,2,3-Trichloropropane	SAM	12/23/2024 7:24:56 AM	MMDadoda	12/24/2024 12:28:06 AM	Peak Integrated by Software



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

### Manual Integration Report

Sequence:	VN122024	Instrument	MSVOA_n
-----------	----------	------------	---------

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
-----------	---------	-----------	-----------	-----------	---------------	---------------	--------

### Manual Integration Report

Sequence:	VN010725	Instrument	MSVOA_n
-----------	----------	------------	---------

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC020	VN085390.D	1,2,3-Trichloropropane	JOHN	1/8/2025 9:35:09 AM	MMDadoda	1/8/2025 3:16:07 PM	Peak Integrated by Software
VSTDCCC020	VN085390.D	Acetone	JOHN	1/8/2025 9:35:09 AM	MMDadoda	1/8/2025 3:16:07 PM	Peak Integrated by Software
VN0107WBS01	VN085391.D	1,2,3-Trichloropropane	JOHN	1/8/2025 9:35:13 AM	MMDadoda	1/8/2025 3:16:08 PM	Peak Integrated by Software
VN0107WBS01	VN085391.D	Ethyl Acetate	JOHN	1/8/2025 9:35:13 AM	MMDadoda	1/8/2025 3:16:08 PM	Peak Integrated by Software
VN0107WBSD01	VN085392.D	1,2,3-Trichloropropane	JOHN	1/8/2025 9:35:17 AM	MMDadoda	1/8/2025 3:16:10 PM	Peak Integrated by Software
Q1013-02	VN085397.D	Carbon Disulfide	JOHN	1/8/2025 9:35:27 AM	MMDadoda	1/8/2025 3:16:15 PM	Peak Integrated by Software
Q1013-01	VN085398.D	Acetone	JOHN	1/8/2025 9:35:31 AM	MMDadoda	1/8/2025 3:16:17 PM	Peak Integrated by Software
VSTDCCC020	VN085399.D	1,2,3-Trichloropropane	JOHN	1/8/2025 9:35:35 AM	MMDadoda	1/8/2025 3:16:19 PM	Peak Integrated by Software
VSTDCCC020	VN085399.D	tert-Butyl Alcohol	JOHN	1/8/2025 9:35:35 AM	MMDadoda	1/8/2025 3:16:19 PM	Peak Integrated by Software

Instrument ID: MSVOA\_N

**Daily Analysis Runlog For Sequence/QC Batch ID # VN122024**

Review By	Semsettin Yesilyurt	Review On	12/23/2024 7:25:05 AM		
Supervise By	John Carlone	Supervise On	12/23/2024 9:01:48 AM		
SubDirectory	VN122024	HP Acquire Method	HP Processing Method	624N122024W.M	
<b>STD. NAME</b>	<b>STD REF.#</b>				
Tune/Reschk	VP132256				
Initial Calibration Stds	VP132258,VP132259,VP132260,VP132261,VP132262				
CCC	VP132257				
Internal Standard/PEM					
ICV/I.BLK	VP132262				
Surrogate Standard					
MS/MSD Standard					
LCS Standard					

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VN085271.D	20 Dec 2024 09:21	JCMD	Ok
2	VSTDIC005	VN085272.D	20 Dec 2024 10:05	JCMD	Ok,M
3	VSTDICCC020	VN085273.D	20 Dec 2024 10:29	JCMD	Ok,M
4	VSTDIC050	VN085274.D	20 Dec 2024 10:53	JCMD	Ok,M
5	VSTDIC100	VN085275.D	20 Dec 2024 11:17	JCMD	Ok,M
6	VSTDIC150	VN085276.D	20 Dec 2024 11:42	JCMD	Ok,M
7	IBLK	VN085277.D	20 Dec 2024 12:06	JCMD	Ok,M
8	VSTDICV020	VN085278.D	20 Dec 2024 12:32	JCMD	Ok,M
9	VN1220WBS01	VN085279.D	20 Dec 2024 13:08	JCMD	Ok,M
10	VN1220WBSD01	VN085280.D	20 Dec 2024 13:42	JCMD	Ok,M
11	VN1220WBL01	VN085281.D	20 Dec 2024 14:06	JCMD	Ok
12	P5328-01	VN085282.D	20 Dec 2024 14:43	JCMD	Ok
13	P5328-02	VN085283.D	20 Dec 2024 15:07	JCMD	Ok
14	VSTDCCC020	VN085284.D	20 Dec 2024 16:13	JCMD	Ok,M

M : Manual Integration

Instrument ID: MSVOA\_N

Daily Analysis Runlog For Sequence/QC Batch ID # VN010725

Review By	John Carlone	Review On	1/8/2025 9:36:21 AM		
Supervise By	Mahesh Dadoda	Supervise On	1/8/2025 3:16:29 PM		
SubDirectory	VN010725	HP Acquire Method	HP Processing Method	624N122024W.M	
<b>STD. NAME</b>	<b>STD REF.#</b>				
Tune/Reschk Initial Calibration Stds	VP132433				
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP132434,VP132435				

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VN085389.D	07 Jan 2025 09:43	JCMD	Ok
2	VSTDCCC020	VN085390.D	07 Jan 2025 10:30	JCMD	Ok,M
3	VN0107WBS01	VN085391.D	07 Jan 2025 11:07	JCMD	Ok,M
4	VN0107WBSD01	VN085392.D	07 Jan 2025 11:42	JCMD	Ok,M
5	VN0107WBL01	VN085393.D	07 Jan 2025 12:06	JCMD	Ok
6	Q1012-03	VN085394.D	07 Jan 2025 12:41	JCMD	Ok,M
7	IBLK	VN085395.D	07 Jan 2025 13:05	JCMD	Ok
8	Q1013-01	VN085396.D	07 Jan 2025 13:28	JCMD	ReRun
9	Q1013-02	VN085397.D	07 Jan 2025 13:52	JCMD	Ok,M
10	Q1013-01	VN085398.D	07 Jan 2025 14:44	JCMD	Ok,M
11	VSTDCCC020	VN085399.D	07 Jan 2025 15:58	JCMD	Ok,M

M : Manual Integration

Instrument ID: MSVOA\_N

**Daily Analysis Runlog For Sequence/QC Batch ID # VN122024**

Review By	Semsettin Yesilyurt	Review On	12/23/2024 7:25:05 AM
Supervise By	John Carlone	Supervise On	12/23/2024 9:01:48 AM
SubDirectory	VN122024	HP Acquire Method	HP Processing Method 624N122024W.M
<b>STD. NAME</b>	<b>STD REF.#</b>		
Tune/Reschk	VP132256		
Initial Calibration Stds	VP132258,VP132259,VP132260,VP132261,VP132262		
CCC	VP132257		
Internal Standard/PEM	VP132262		
ICV/I.BLK	VP132262		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VN085271.D	20 Dec 2024 09:21		JC\MD	Ok
2	VSTDIC005	VSTDIC005	VN085272.D	20 Dec 2024 10:05	V13516	JC\MD	Ok,M
3	VSTDICCC020	VSTDICCC020	VN085273.D	20 Dec 2024 10:29		JC\MD	Ok,M
4	VSTDIC050	VSTDIC050	VN085274.D	20 Dec 2024 10:53		JC\MD	Ok,M
5	VSTDIC100	VSTDIC100	VN085275.D	20 Dec 2024 11:17		JC\MD	Ok,M
6	VSTDIC150	VSTDIC150	VN085276.D	20 Dec 2024 11:42		JC\MD	Ok,M
7	IBLK	IBLK	VN085277.D	20 Dec 2024 12:06		JC\MD	Ok,M
8	VSTDICV020	ICVVN122024	VN085278.D	20 Dec 2024 12:32		JC\MD	Ok,M
9	VN1220WBS01	VN1220WBS01	VN085279.D	20 Dec 2024 13:08		JC\MD	Ok,M
10	VN1220WBSD01	VN1220WBSD01	VN085280.D	20 Dec 2024 13:42		JC\MD	Ok,M
11	VN1220WBL01	VN1220WBL01	VN085281.D	20 Dec 2024 14:06		JC\MD	Ok
12	P5328-01	001-WILLETS-PT-BLVE	VN085282.D	20 Dec 2024 14:43	vial B pH<2	JC\MD	Ok
13	P5328-02	002-35TH-AVE(DEC)	VN085283.D	20 Dec 2024 15:07	vial B pH<2	JC\MD	Ok
14	VSTDCCC020	VSTDCCC020EC	VN085284.D	20 Dec 2024 16:13		JC\MD	Ok,M

M : Manual Integration

Instrument ID: MSVOA\_N

**Daily Analysis Runlog For Sequence/QC Batch ID # VN010725**

Review By	John Carlone	Review On	1/8/2025 9:36:21 AM
Supervise By	Mahesh Dadoda	Supervise On	1/8/2025 3:16:29 PM
SubDirectory	VN010725	HP Acquire Method	HP Processing Method 624N122024W.M

STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds	VP132433
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP132434,VP132435

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VN085389.D	07 Jan 2025 09:43		JC\MD	Ok
2	VSTDCCC020	VSTDCCC020	VN085390.D	07 Jan 2025 10:30	V13516	JC\MD	Ok,M
3	VN0107WBS01	VN0107WBS01	VN085391.D	07 Jan 2025 11:07		JC\MD	Ok,M
4	VN0107WBSD01	VN0107WBSD01	VN085392.D	07 Jan 2025 11:42		JC\MD	Ok,M
5	VN0107WBL01	VN0107WBL01	VN085393.D	07 Jan 2025 12:06		JC\MD	Ok
6	Q1012-03	001 WILLETS PT BLVD	VN085394.D	07 Jan 2025 12:41	vial A pH<2	JC\MD	Ok,M
7	IBLK	IBLK	VN085395.D	07 Jan 2025 13:05		JC\MD	Ok
8	Q1013-01	001 WILLETS PT BLVD	VN085396.D	07 Jan 2025 13:28	vial A pH<2 Surrogate Fail	JC\MD	ReRun
9	Q1013-02	002 35TH AVE (JAN)	VN085397.D	07 Jan 2025 13:52	vial A pH<2	JC\MD	Ok,M
10	Q1013-01	001 WILLETS PT BLVD	VN085398.D	07 Jan 2025 14:44	vial B pH<2	JC\MD	Ok,M
11	VSTDCCC020	VSTDCCC020EC	VN085399.D	07 Jan 2025 15:58		JC\MD	Ok,M

M : Manual Integration



# SHIPPING DOCUMENTS

CLIENT INFORMATION

CLIENT PROJECT INFORMATION

CLIENT BILLING INFORMATION

REPORT TO BE SENT TO:

COMPANY: Tully Environmental Inc  
 ADDRESS: 57 Seaview Blvd  
 CITY: Pt Washington STATE: NY ZIP: 11050  
 ATTENTION: D Devoe  
 PHONE: 718 446 7000 FAX:

PROJECT NAME: Transfer Station SPDES  
 PROJECT NO.: 252113 LOCATION:  
 PROJECT MANAGER:  
 e-mail:  
 PHONE: FAX:

BILL TO: Same PO#:  
 ADDRESS:  
 CITY STATE: ZIP:  
 ATTENTION: PHONE:

ANALYSIS

DATA TURNAROUND INFORMATION

DATA DELIVERABLE INFORMATION

FAX (RUSH) 10 DAYS\*  
 HARDCOPY (DATA PACKAGE): DAYS\*  
 EDD: DAYS\*  
 \*TO BE APPROVED BY CHEMTECH  
 STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS DAYS

Level 1 (Results Only)  Level 4 (QC + Full Raw Data)  
 Level 2 (Results + QC)  NJ Reduced  US EPA CLP  
 Level 3 (Results + QC)  NYS ASP A  NYS ASP B  
 + Raw Data  Other \_\_\_\_\_  
 EDD FORMAT \_\_\_\_\_

*Cu Fe Pb  
 BOD5  
 TSS  
 Hg 1631 LL  
 BTEX  
 O&G/Ammo/Air*

PRESERVATIVES

COMMENTS

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS ← Specify Preservatives A-HCl D-NaOH B-HNO3 E-ICE C-H2SO4 F-OTHER			
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9				
1.	001 Willets Pt Blvd (Jan)	W		K	1/3	1200	8	X	X	X	X	X	X							
2.	002 35th Ave (Jan)	W		X	1/3	1200	8	X	X	X	X	X	X							
3.																				
4.																				
5.																				
6.																				
7.																				
8.																				
9.																				
10.																				

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER: 1. D Devoe	DATE/TIME: 1/3/25	RECEIVED BY: [Signature]	DATE/TIME: 1-6-2025	CONDITIONS OF BOTTLES OR COOLERS AT RECEIPT: <input type="checkbox"/> COMPLIANT <input type="checkbox"/> NON COMPLIANT <input type="checkbox"/> COOLER TEMP: 11 °C
RELINQUISHED BY SAMPLER: 2.	DATE/TIME:	RECEIVED BY:	DATE/TIME:	COMMENTS: [Signature]
RELINQUISHED BY SAMPLER: 3.	DATE/TIME:	RECEIVED BY:	DATE/TIME:	COMMENTS:



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



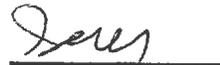
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,  
Fax : 908 789 8922

### LOGIN REPORT/SAMPLE TRANSFER

<b>Order ID :</b> Q1013	TULL01	<b>Order Date :</b> 1/6/2025 7:50:00 AM	<b>Project Mgr :</b>
<b>Client Name :</b> Tully Environmental, Inc		<b>Project Name :</b> Transfer Station-SPDES	<b>Report Type :</b> Results Only
<b>Client Contact :</b> Dean Devoe		<b>Receive DateTime :</b> 1/6/2025 11:10:00 AM	<b>EDD Type :</b> EXCEL NOCLEANUP
<b>Invoice Name :</b> Tully Environmental, Inc		<b>Purchase Order :</b>	<b>Hard Copy Date :</b>
<b>Invoice Contact :</b> Dean Devoe			<b>Date Signoff :</b>

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q1013-01	001 WILLETS PT BLVD (JAN)	Water	01/03/2025	00:00 12:00	VOC-BTEX		624.1		10 Bus. Days
Q1013-02	002 35TH AVE (JAN)	Water	01/03/2025	00:00 12:00	VOC-BTEX		624.1		10 Bus. Days

Relinquished By:   
Date / Time: 1/6/25 12:10

Received By:   
Date / Time: 1/6/25 12:10 RF# 5

Storage Area : VOA Refridgerator Room