

Cover Page

Order ID : P5044

Project ID : Quarterly

Client : Tris Pharma, Inc.

Lab Sample Number

P5044-01
P5044-02

Client Sample Number

OUTFALL-DSN-001
OUTFALL-DSN-002

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: 12/4/2024

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

DATA REPORTING QUALIFIERS- ORGANIC

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

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

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: P5044

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: KETAN PATEL

Date: 12/04/2024

LAB CHRONICLE

OrderID:	P5044	OrderDate:	11/27/2024 12:16:00 PM
Client:	Tris Pharma, Inc.	Project:	Quarterly
Contact:	Nichole Nikki Ferrari	Location:	L41,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P5044-01	OUTFALL-DSN-001	Water	VOCMS Group1	624.1	11/27/24		12/06/24	11/27/24
P5044-02	OUTFALL-DSN-002	Water	VOCMS Group1	624.1	11/27/24		12/06/24	11/27/24

Hit Summary Sheet
SW-846

SDG No.: P5044

Client: Tris Pharma, Inc.

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID:	OUTFALL-DSN-001							
P5044-01	OUTFALL-DSN-00 Water	Acetone		130		4.90	25.0	ug/L
		Total Voc :		130				
		Total Concentration:		130				
Client ID:	OUTFALL-DSN-002							
P5044-02	OUTFALL-DSN-00 Water	Isopropyl Acetate		1.90	J	0.66	5.00	ug/L
P5044-02	OUTFALL-DSN-00 Water	Acetone		710		4.90	25.0	ug/L
		Total Voc :		712				
		Total Concentration:		712				



QC SUMMARY

Surrogate Summary

SDG No.: P5044

Client: Tris Pharma, Inc.

Analytical Method: SW624.1

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits	
						Low	High
P5044-01	OUTFALL-DSN-001	1,2-Dichloroethane-d4	30	30.2	101	91	110
		Toluene-d8	30	28.3	94	91	112
		4-Bromofluorobenzene	30	24.6	82	63	112
P5044-02	OUTFALL-DSN-002	1,2-Dichloroethane-d4	30	31.6	105	91	110
		Toluene-d8	30	28.3	94	91	112
		4-Bromofluorobenzene	30	24.8	83	63	112
VN1206WBL01	VN1206WBL01	1,2-Dichloroethane-d4	30	30.7	102	91	110
		Toluene-d8	30	29.0	97	91	112
		4-Bromofluorobenzene	30	24.3	81	63	112
VN1206WBS01	VN1206WBS01	1,2-Dichloroethane-d4	30	30.1	100	91	110
		Toluene-d8	30	29.7	99	91	112
		4-Bromofluorobenzene	30	30.0	100	63	112
VN1206WBSD0	VN1206WBSD01	1,2-Dichloroethane-d4	30	30.8	103	91	110
		Toluene-d8	30	29.6	99	91	112
		4-Bromofluorobenzene	30	29.6	99	63	112

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P5044

Client: Tris Pharma, Inc.

Analytical Method: SW624.1

Datafile : VN085124.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VN1206WBS01	Ethyl Acetate	20	18.7	ug/L	94			68	140	
	Isopropyl Acetate	20	18.6	ug/L	93			70	130	
	Acetone	100	110	ug/L	110			41	148	
	Methylene Chloride	20	19.6	ug/L	98			60	140	
	n-amyl Acetate	20	19.4	ug/L	97			70	130	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P5044

Client: Tris Pharma, Inc.

Analytical Method: SW624.1

Datafile : VN085125.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VN1206WBSD01	Ethyl Acetate	20	20.6	ug/L	103	9		68	140	20
	Isopropyl Acetate	20	20.0	ug/L	100	7		70	130	20
	Acetone	100	100	ug/L	100	10		41	148	20
	Methylene Chloride	20	19.6	ug/L	98	0		60	140	20
	n-amyl Acetate	20	20.2	ug/L	101	4		70	130	20

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VN1206WBL01

Lab Name: CHEMTECH

Contract: TRIS02

Lab Code: CHEM Case No.: P5044

SAS No.: P5044 SDG NO.: P5044

Lab File ID: VN085126.D

Lab Sample ID: VN1206WBL01

Date Analyzed: 12/06/2024

Time Analyzed: 14:40

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
VN1206WBS01	VN1206WBS01	VN085124.D	12/06/2024
VN1206WBSD01	VN1206WBSD01	VN085125.D	12/06/2024
OUTFALL-DSN-001	P5044-01	VN085137.D	12/06/2024
OUTFALL-DSN-002	P5044-02	VN085138.D	12/06/2024

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: TRIS02
Lab Code: CHEM Case No.: P5044 SAS No.: P5044 SDG NO.: P5044
Lab File ID: VN085116.D BFB Injection Date: 12/06/2024
Instrument ID: MSVOA_N BFB Injection Time: 08:14
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	18.1
75	30.0 - 60.0% of mass 95	51.6
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.2
173	Less than 2.0% of mass 174	0.5 (0.6) 1
174	50.0 - 100.0% of mass 95	77.9
175	5.0 - 9.0% of mass 174	5.9 (7.6) 1
176	95.0 - 101.0% of mass 174	74.3 (95.4) 1
177	5.0 - 9.0% of mass 176	4.5 (6.1) 2

1-Value is % mass 174

2-Value is % mass 176

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDIC005	VSTDIC005	VN085117.D	12/06/2024	10:02
VSTDIC020	VSTDIC020	VN085118.D	12/06/2024	10:26
VSTDIC050	VSTDIC050	VN085119.D	12/06/2024	10:49
VSTDIC100	VSTDIC100	VN085120.D	12/06/2024	11:13
VSTDIC150	VSTDIC150	VN085121.D	12/06/2024	11:37
VN1206WBS01	VN1206WBS01	VN085124.D	12/06/2024	13:42
VN1206WBSD01	VN1206WBSD01	VN085125.D	12/06/2024	14:16
VN1206WBL01	VN1206WBL01	VN085126.D	12/06/2024	14:40
OUTFALL-DSN-001	P5044-01	VN085137.D	12/06/2024	19:15
OUTFALL-DSN-002	P5044-02	VN085138.D	12/06/2024	19:39

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: TRIS02
 Lab Code: CHEM Case No.: P5044 SAS No.: P5044 SDG NO.: P5044
 Lab File ID: VN085118.D Date Analyzed: 12/06/2024
 Instrument ID: MSVOA_N Time Analyzed: 10:26
 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	31263	7.81	162398	9.10	151793	11.87
UPPER LIMIT	62526	8.312	324796	9.6	303586	12.365
LOWER LIMIT	15631.5	7.312	81199	8.6	75896.5	11.365
EPA SAMPLE NO.						
OUTFALL-DSN-001	28468	7.82	135463	9.10	125958	11.87
OUTFALL-DSN-002	25474	7.81	137106	9.10	125124	11.87
VN1206WBL01	29636	7.81	149919	9.10	136142	11.87
VN1206WBS01	33289	7.81	183983	9.10	166391	11.87
VN1206WBSD01	30215	7.81	162631	9.10	149659	11.87

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

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

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



SAMPLE DATA

Report of Analysis

Client:	Tris Pharma, Inc.	Date Collected:	11/27/24
Project:	Quarterly	Date Received:	11/27/24
Client Sample ID:	OUTFALL-DSN-001	SDG No.:	P5044
Lab Sample ID:	P5044-01	Matrix:	Water
Analytical Method:	E624.1	% Solid:	0
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:			uL
GC Column:	RXI-624	ID :	0.25
Prep Method :		Level :	LOW
		Final Vol:	5000
		Test:	VOCMS Group1

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085137.D	1		12/06/24 19:15	VN120624

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
141-78-6	Ethyl Acetate	1.50	U	1.50	5.00	ug/L
108-21-4	Isopropyl Acetate	0.66	U	0.66	5.00	ug/L
67-64-1	Acetone	130		4.90	25.0	ug/L
75-09-2	Methylene Chloride	1.20	U	1.20	5.00	ug/L
628-63-7	n-amyl Acetate	0.91	U	0.91	5.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	30.2		91 - 110	101%	SPK: 30
2037-26-5	Toluene-d8	28.3		91 - 112	94%	SPK: 30
460-00-4	4-Bromofluorobenzene	24.6		63 - 112	82%	SPK: 30
INTERNAL STANDARDS						
74-97-5	Bromochloromethane	28500	7.818			
540-36-3	1,4-Difluorobenzene	135000	9.1			
3114-55-4	Chlorobenzene-d5	126000	11.865			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120624\
 Data File : VN085137.D
 Acq On : 06 Dec 2024 19:15
 Operator : JC\MD
 Sample : P5044-01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 22 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 OUTFALL-DSN-001

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 12/09/2024
 Supervised By :Semsettin Yesilyurt 12/09/2024

Quant Time: Dec 06 23:13:12 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N120624W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Dec 06 22:50:42 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	7.818	128	28468	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.100	114	135463	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.865	117	125958	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.577	65	68242	30.211	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery = 100.700%			
60) 4-Bromofluorobenzene	12.847	95	51175	24.555	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery = 81.833%			
63) Toluene-d8	10.565	98	167117	28.284	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery = 94.267%			
Target Compounds						
15) Acetone	4.424	58	29638	128.781	ug/l	98
25) Chloroform	7.965	83	44991	12.781	ug/l	97
41) Bromodichloromethane	9.888	83	3841m	1.506	ug/l	

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

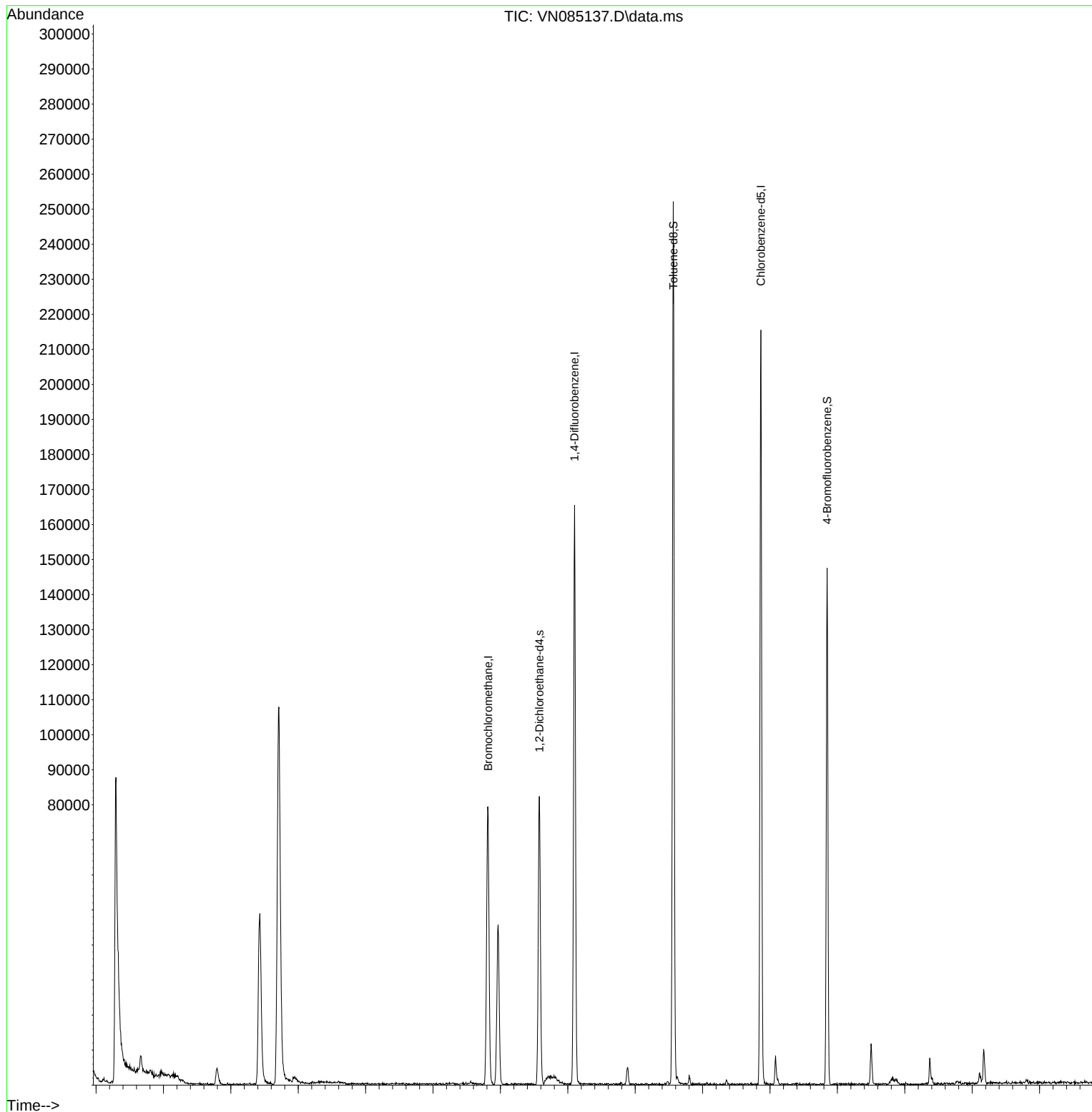
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Data File : VN085137.D
Acq On : 06 Dec 2024 19:15
Operator : JC\MD
Sample : P5044-01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 22 Sample Multiplier: 1

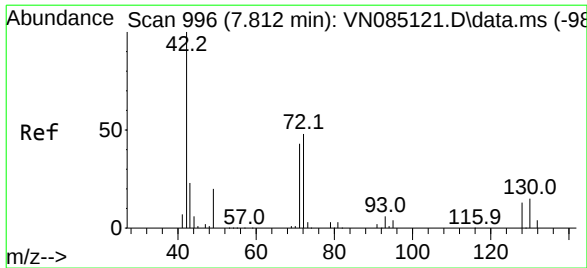
Instrument :
MSVOA_N
ClientSampleId :
OUTFALL-DSN-001

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 12/09/2024
Supervised By :Semsettin Yesilyurt 12/09/2024

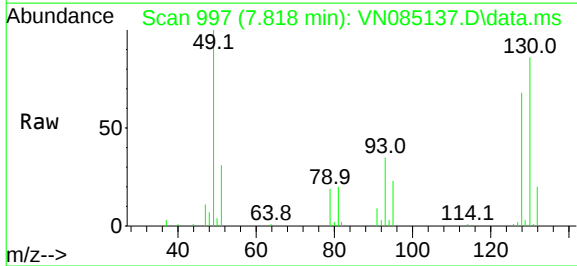
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Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N120624W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Dec 06 22:50:42 2024
Response via : Initial Calibration





#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 7.818 min Scan# 996
Delta R.T. 0.006 min
Lab File: VN085137.D
Acq: 06 Dec 2024 19:15

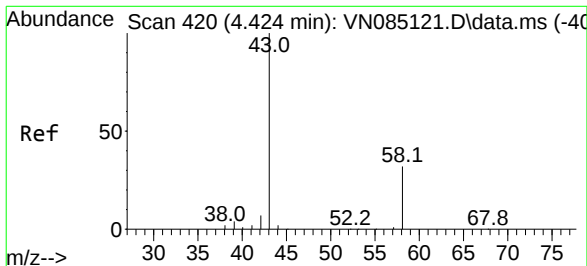
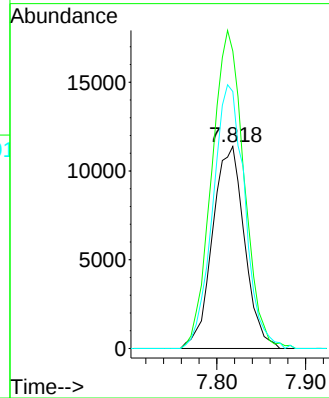
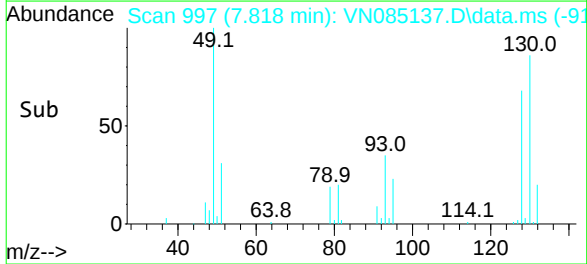
Instrument :
MSVOA_N
ClientSampleId :
OUTFALL-DSN-001



Tgt Ion:128 Resp: 28468
Ion Ratio Lower Upper
128 100
49 159.2 0.0 394.5
130 130.8 0.0 316.5

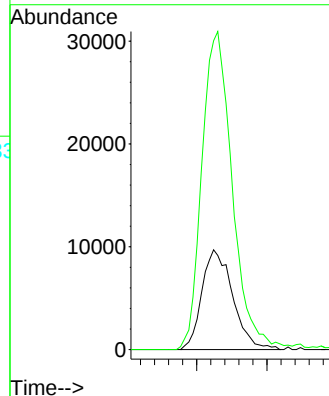
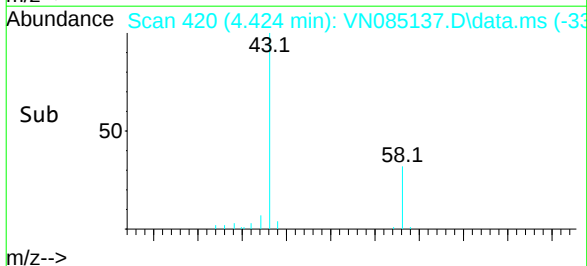
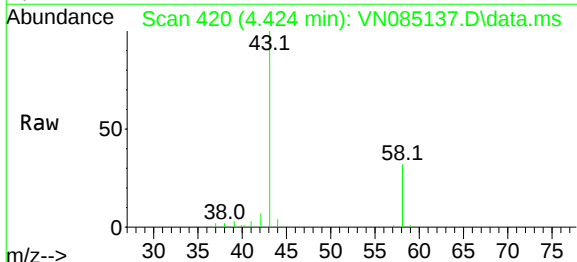
Manual Integrations
APPROVED

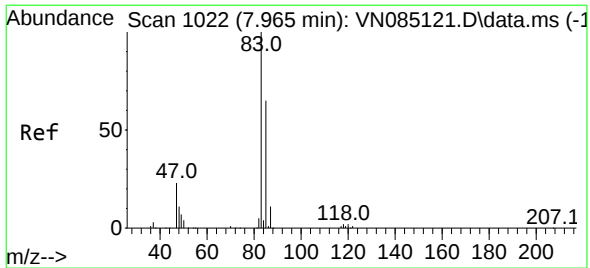
Reviewed By :Mahesh Dadoda 12/09/2024
Supervised By :Semsettin Yesilyurt 12/09/2024



#15
Acetone
Concen: 128.781 ug/l
RT: 4.424 min Scan# 420
Delta R.T. 0.000 min
Lab File: VN085137.D
Acq: 06 Dec 2024 19:15

Tgt Ion: 58 Resp: 29638
Ion Ratio Lower Upper
58 100
43 306.4 242.3 363.5





#25

Chloroform

Concen: 12.781 ug/l

RT: 7.965 min Scan# 1022

Delta R.T. 0.006 min

Lab File: VN085137.D

Acq: 06 Dec 2024 19:15

Instrument :

MSVOA_N

ClientSampleId :

OUTFALL-DSN-001

Tgt Ion: 83 Resp: 44991

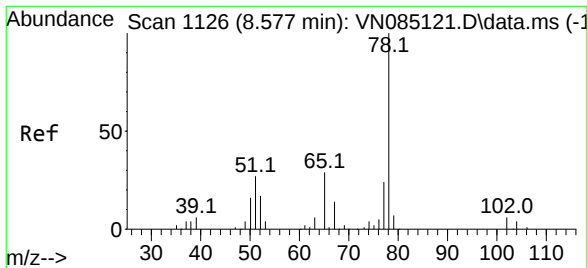
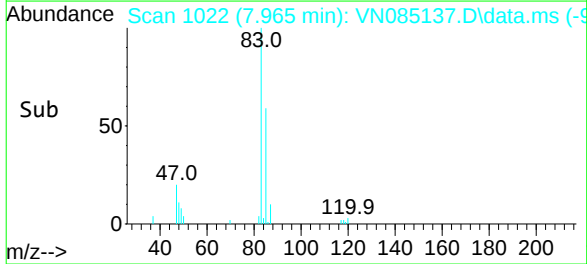
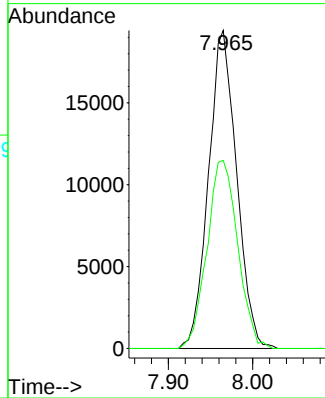
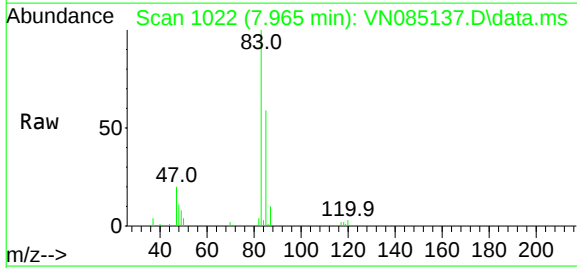
Ion Ratio Lower Upper

83 100

85 59.1 49.4 74.0

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 12/09/2024
Supervised By :Semsettin Yesilyurt 12/09/2024

#27

1,2-Dichloroethane-d4

Concen: 30.211 ug/l

RT: 8.577 min Scan# 1126

Delta R.T. 0.000 min

Lab File: VN085137.D

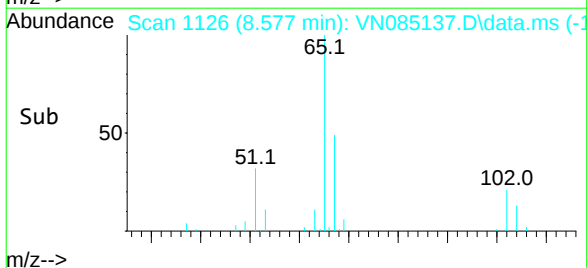
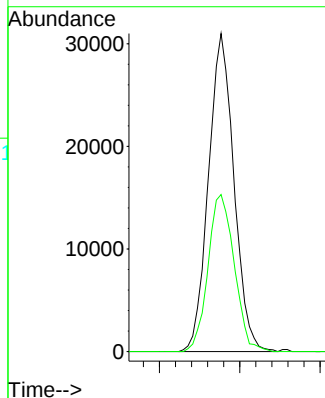
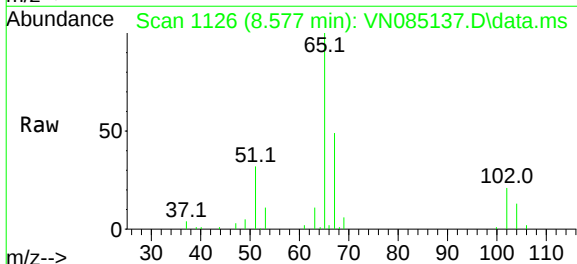
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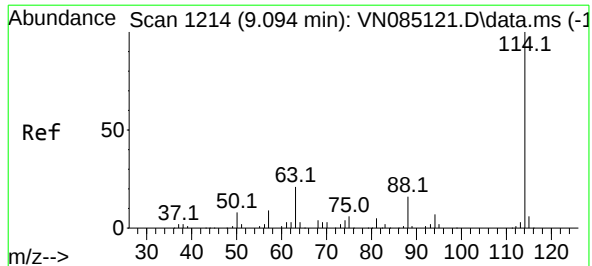
Tgt Ion: 65 Resp: 68242

Ion Ratio Lower Upper

65 100

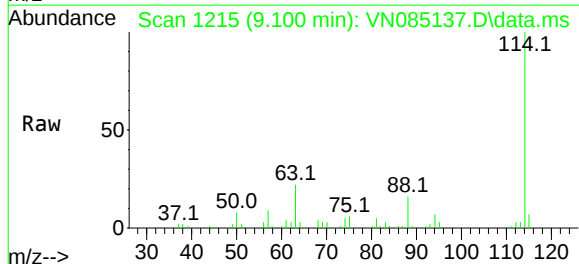
67 50.9 39.9 59.9





#28
1,4-Difluorobenzene
Concen: 30.000 ug/l
RT: 9.100 min Scan# 1214
Delta R.T. 0.000 min
Lab File: VN085137.D
Acq: 06 Dec 2024 19:15

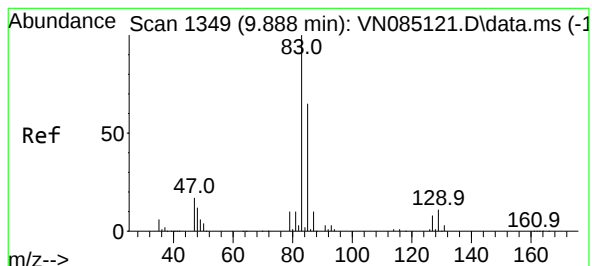
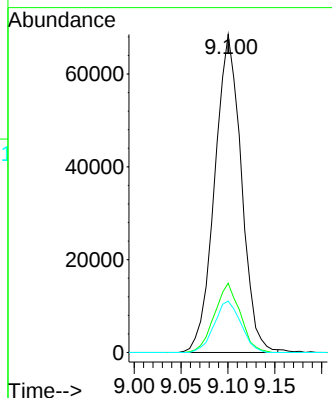
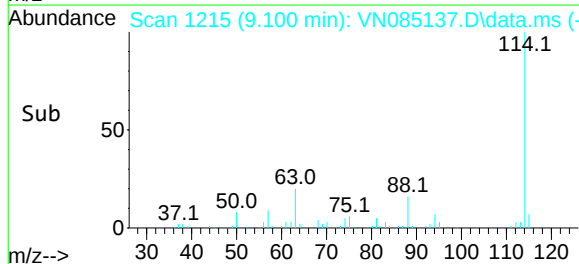
Instrument :
MSVOA_N
ClientSampleId :
OUTFALL-DSN-001



Tgt Ion: 114 Resp: 135463
Ion Ratio Lower Upper
114 100
63 21.1 16.2 24.2
88 16.2 12.5 18.7

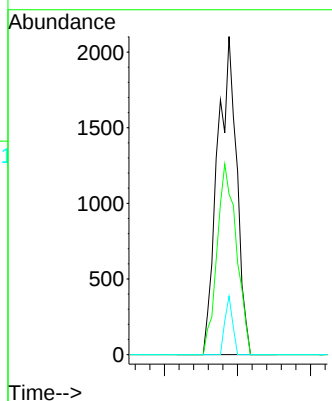
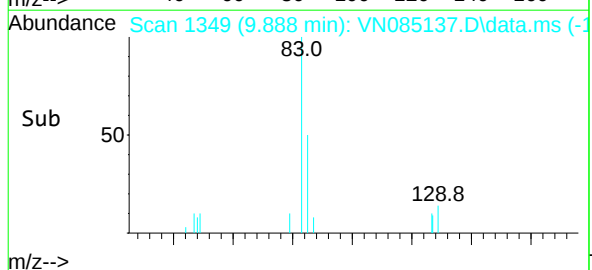
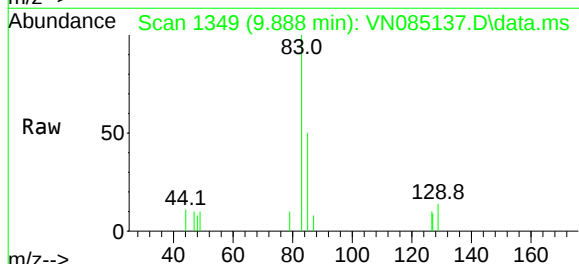
Manual Integrations
APPROVED

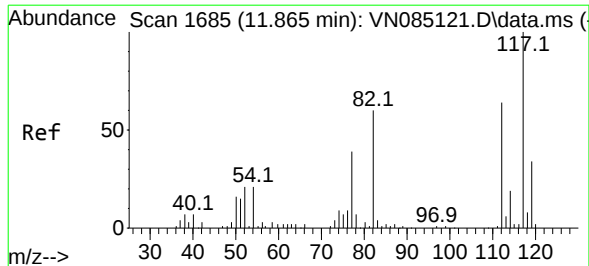
Reviewed By :Mahesh Dadoda 12/09/2024
Supervised By :Semsettin Yesilyurt 12/09/2024



#41
Bromodichloromethane
Concen: 1.506 ug/l m
RT: 9.888 min Scan# 1349
Delta R.T. 0.006 min
Lab File: VN085137.D
Acq: 06 Dec 2024 19:15

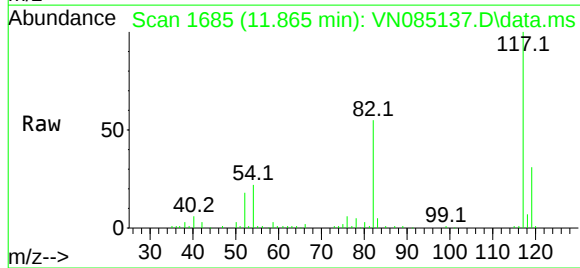
Tgt Ion: 83 Resp: 3841
Ion Ratio Lower Upper
83 100
85 50.5 54.6 81.8#
127 9.7 7.0 10.6





#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 11.865 min Scan# 1685
Delta R.T. 0.000 min
Lab File: VN085137.D
Acq: 06 Dec 2024 19:15

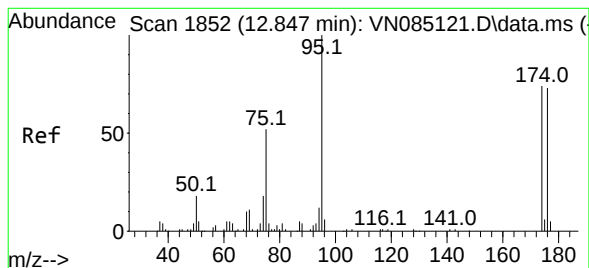
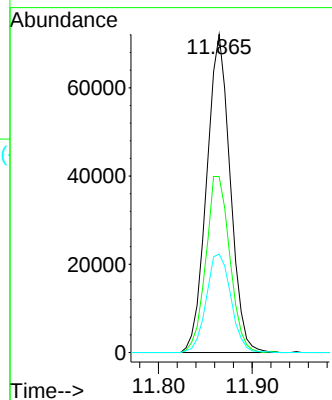
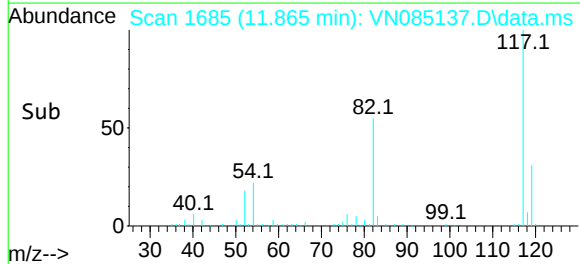
Instrument :
MSVOA_N
ClientSampleId :
OUTFALL-DSN-001



Tgt Ion: 117 Resp: 125958
Ion Ratio Lower Upper
117 100
82 56.3 44.2 66.4
119 32.4 25.4 38.2

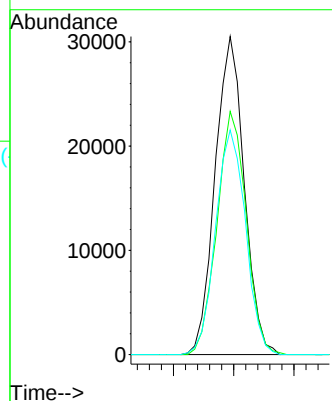
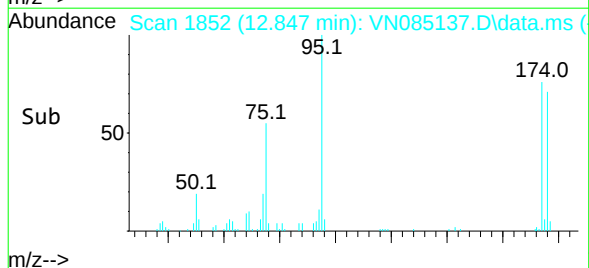
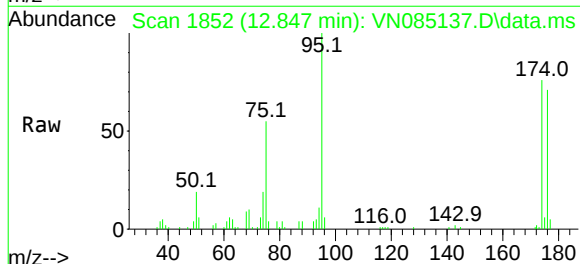
Manual Integrations
APPROVED

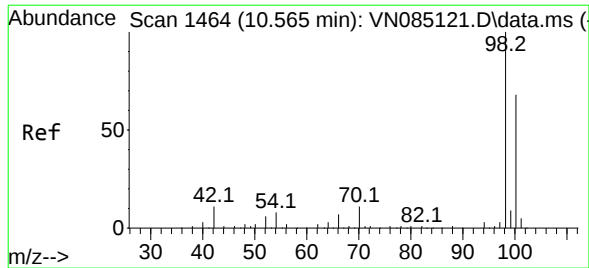
Reviewed By :Mahesh Dadoda 12/09/2024
Supervised By :Semsettin Yesilyurt 12/09/2024



#60
4-Bromofluorobenzene
Concen: 24.555 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN085137.D
Acq: 06 Dec 2024 19:15

Tgt Ion: 95 Resp: 51175
Ion Ratio Lower Upper
95 100
174 77.0 60.3 90.5
176 72.7 57.4 86.0





#63

Toluene-d8

Concen: 28.284 ug/l

RT: 10.565 min Scan# 14

Delta R.T. 0.000 min

Lab File: VN085137.D

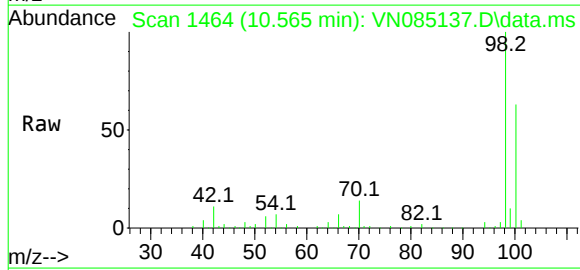
Acq: 06 Dec 2024 19:15

Instrument :

MSVOA_N

ClientSampleId :

OUTFALL-DSN-001



Tgt Ion: 98 Resp: 167117

Ion Ratio Lower Upper

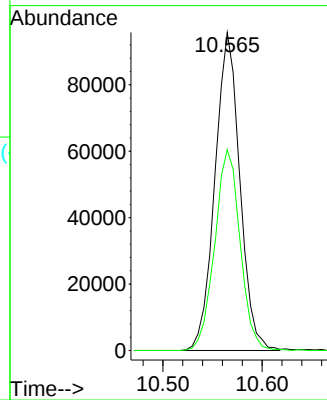
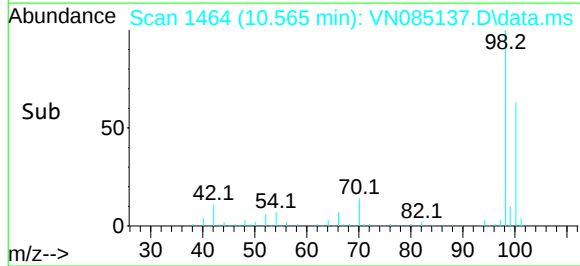
98 100

100 64.3 52.0 78.0

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 12/09/2024
Supervised By :Semsettin Yesilyurt 12/09/2024



Report of Analysis

Client:	Tris Pharma, Inc.	Date Collected:	11/27/24
Project:	Quarterly	Date Received:	11/27/24
Client Sample ID:	OUTFALL-DSN-002	SDG No.:	P5044
Lab Sample ID:	P5044-02	Matrix:	Water
Analytical Method:	E624.1	% Solid:	0
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:			uL
GC Column:	RXI-624	ID :	0.25
Prep Method :		Level :	LOW
		Final Vol:	5000
		Test:	VOCMS Group1

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085138.D	1		12/06/24 19:39	VN120624

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
141-78-6	Ethyl Acetate	1.50	U	1.50	5.00	ug/L
108-21-4	Isopropyl Acetate	1.90	J	0.66	5.00	ug/L
67-64-1	Acetone	710		4.90	25.0	ug/L
75-09-2	Methylene Chloride	1.20	U	1.20	5.00	ug/L
628-63-7	n-amyl Acetate	0.91	U	0.91	5.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	31.6		91 - 110	105%	SPK: 30
2037-26-5	Toluene-d8	28.3		91 - 112	94%	SPK: 30
460-00-4	4-Bromofluorobenzene	24.8		63 - 112	83%	SPK: 30
INTERNAL STANDARDS						
74-97-5	Bromochloromethane	25500	7.812			
540-36-3	1,4-Difluorobenzene	137000	9.1			
3114-55-4	Chlorobenzene-d5	125000	11.865			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120624\
 Data File : VN085138.D
 Acq On : 06 Dec 2024 19:39
 Operator : JC\MD
 Sample : P5044-02
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 23 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 OUTFALL-DSN-002

Quant Time: Dec 06 23:13:38 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N120624W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Dec 06 22:50:42 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

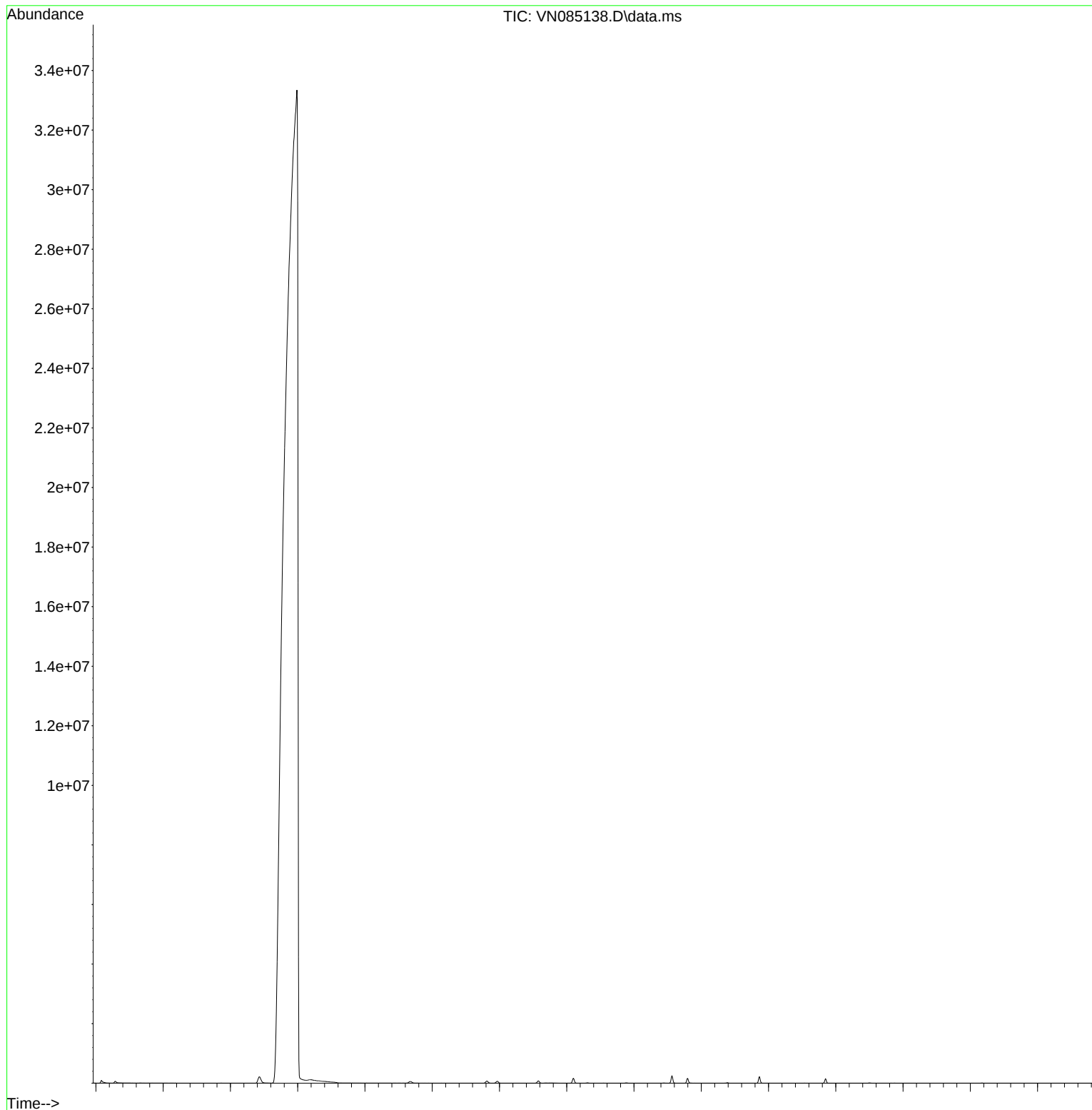
Internal Standards						
1) Bromochloromethane	7.812	128	25474	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.100	114	137106	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.865	117	125124	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.577	65	63814	31.571	ug/l	0.00
Spiked Amount	30.000	Range	91 - 110	Recovery	=	105.233%
60) 4-Bromofluorobenzene	12.847	95	51396	24.825	ug/l	0.00
Spiked Amount	30.000	Range	63 - 112	Recovery	=	82.767%
63) Toluene-d8	10.565	98	166151	28.308	ug/l	0.00
Spiked Amount	30.000	Range	91 - 112	Recovery	=	94.367%
Target Compounds						
15) Acetone	4.436	58	145694	707.463	ug/l	92
20) Diisopropyl ether	6.677	45	65527	13.451	ug/l	93
25) Chloroform	7.965	83	62683	19.899	ug/l	96
41) Bromodichloromethane	9.882	83	7340	2.843	ug/l	95
44) Isopropyl Acetate	8.694	43	6530	1.860	ug/l #	67
58) 4-Methyl-2-Pentanone	10.441	43	4952	2.425	ug/l #	70

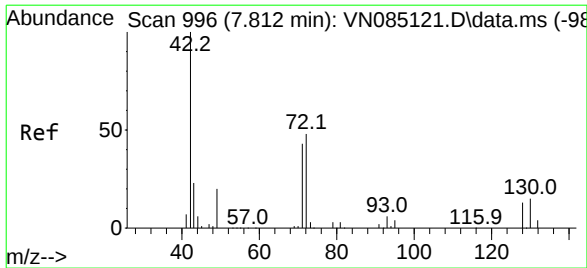
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120624\
Data File : VN085138.D
Acq On : 06 Dec 2024 19:39
Operator : JC\MD
Sample : P5044-02
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 23 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
OUTFALL-DSN-002

Quant Time: Dec 06 23:13:38 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N120624W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Dec 06 22:50:42 2024
Response via : Initial Calibration

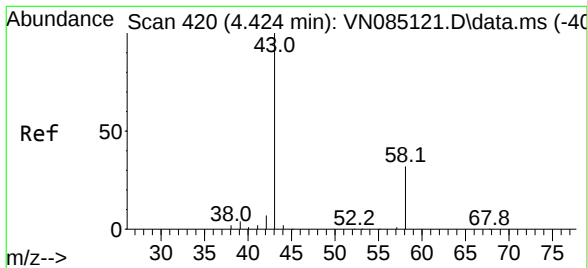
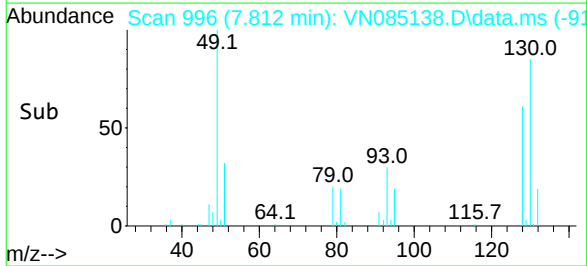
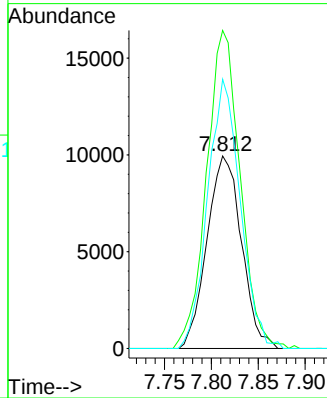
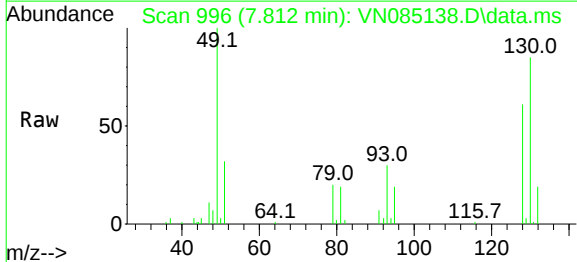




#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 7.812 min Scan# 99
Delta R.T. 0.000 min
Lab File: VN085138.D
Acq: 06 Dec 2024 19:39

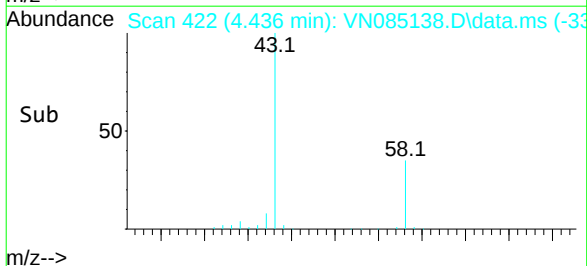
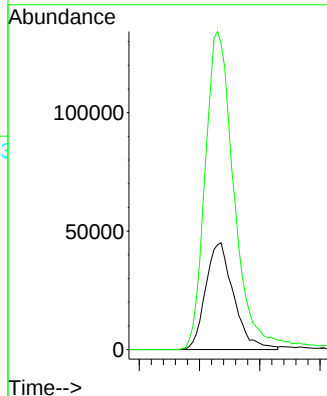
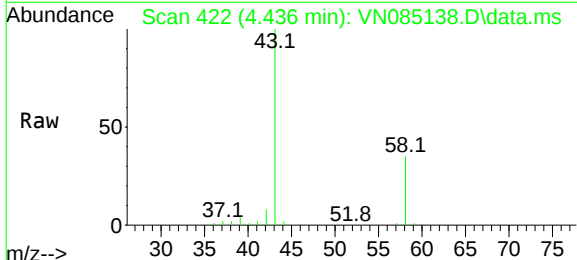
Instrument :
MSVOA_N
ClientSampleId :
OUTFALL-DSN-002

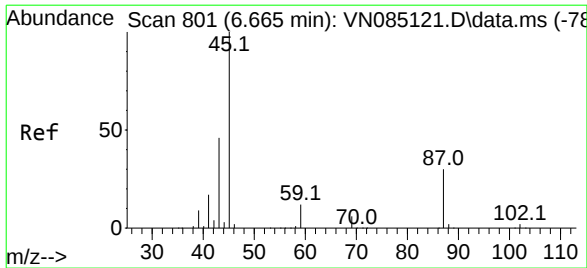
Tgt Ion	Ratio	Lower	Upper
128	100		
49	159.8	0.0	394.5
130	131.9	0.0	316.5



#15
Acetone
Concen: 707.463 ug/l
RT: 4.436 min Scan# 422
Delta R.T. 0.012 min
Lab File: VN085138.D
Acq: 06 Dec 2024 19:39

Tgt Ion	Ratio	Lower	Upper
58	100		
43	286.5	242.3	363.5





#20

Diisopropyl ether

Concen: 13.451 ug/l

RT: 6.677 min Scan# 801

Delta R.T. 0.012 min

Lab File: VN085138.D

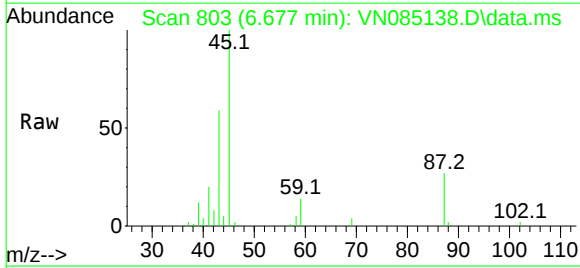
Acq: 06 Dec 2024 19:39

Instrument :

MSVOA_N

ClientSampleId :

OUTFALL-DSN-002



Tgt Ion: 45 Resp: 65527

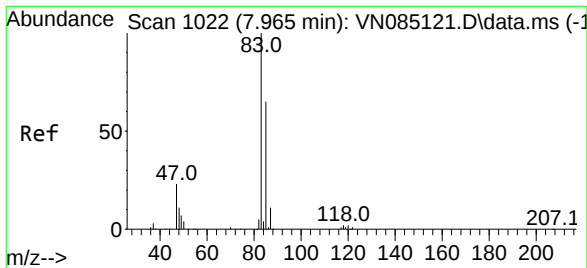
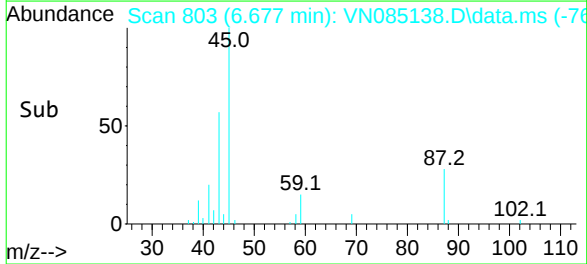
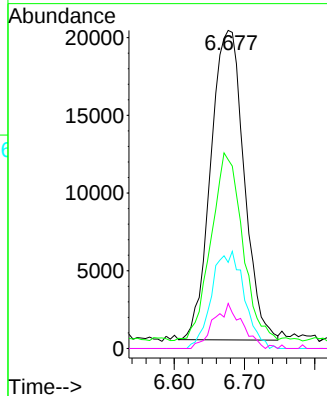
Ion Ratio Lower Upper

45 100

43 58.2 41.9 62.9

87 27.8 24.1 36.1

59 14.5 10.0 15.0



#25

Chloroform

Concen: 19.899 ug/l

RT: 7.965 min Scan# 1022

Delta R.T. 0.006 min

Lab File: VN085138.D

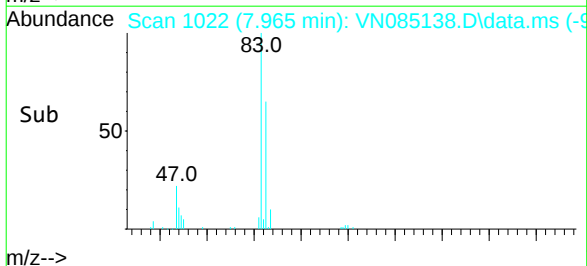
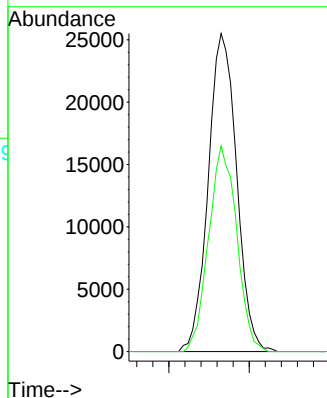
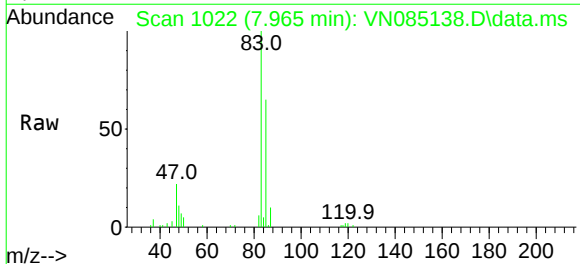
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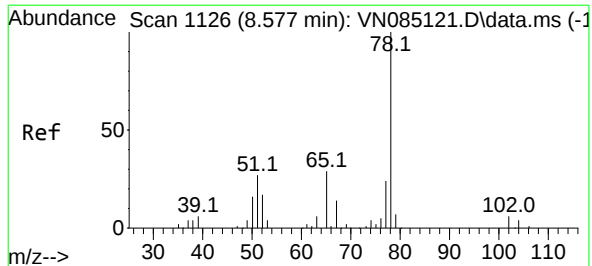
Tgt Ion: 83 Resp: 62683

Ion Ratio Lower Upper

83 100

85 64.6 49.4 74.0

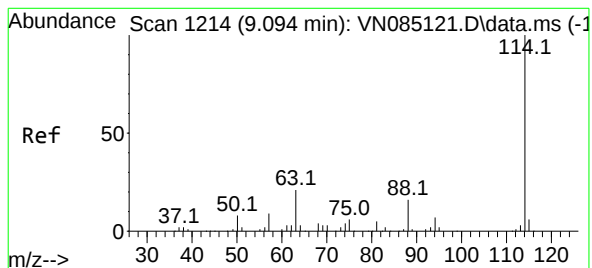
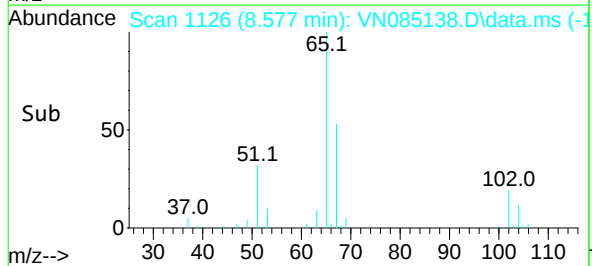
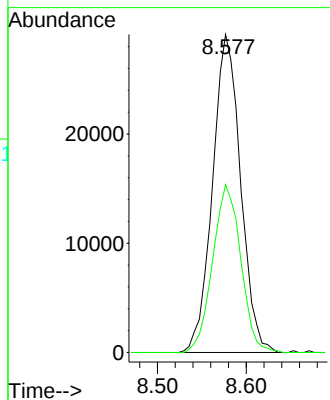
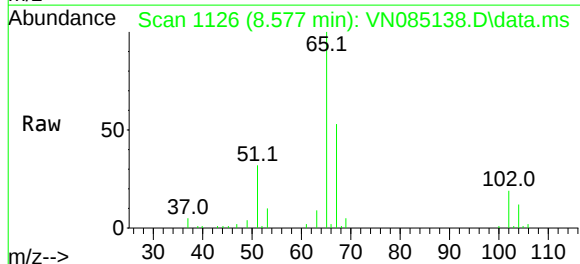




#27
1,2-Dichloroethane-d4
Concen: 31.571 ug/l
RT: 8.577 min Scan# 1126
Delta R.T. 0.000 min
Lab File: VN085138.D
Acq: 06 Dec 2024 19:39

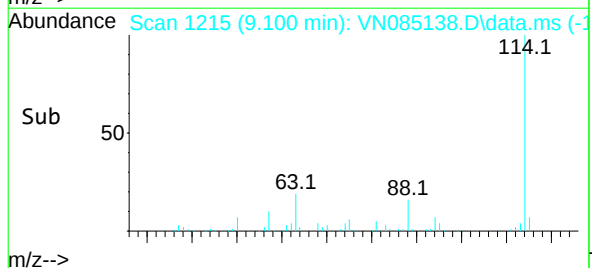
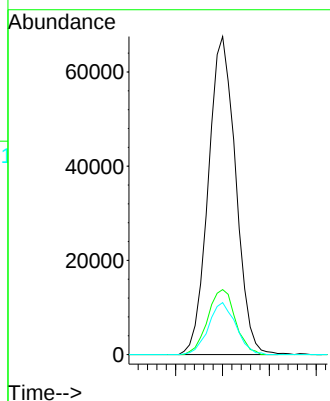
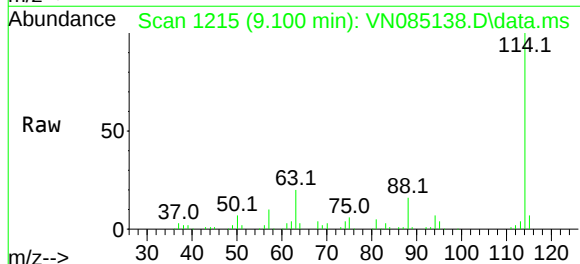
Instrument :
MSVOA_N
ClientSampleId :
OUTFALL-DSN-002

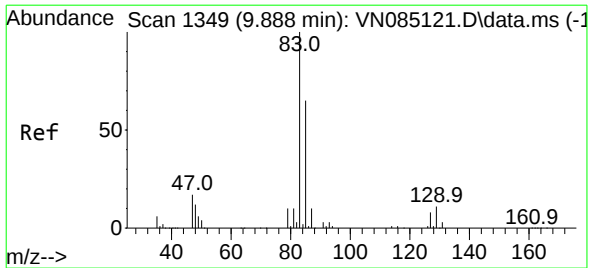
Tgt Ion: 65 Resp: 63814
Ion Ratio Lower Upper
65 100
67 53.0 39.9 59.9



#28
1,4-Difluorobenzene
Concen: 30.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. 0.000 min
Lab File: VN085138.D
Acq: 06 Dec 2024 19:39

Tgt Ion: 114 Resp: 137106
Ion Ratio Lower Upper
114 100
63 20.7 16.2 24.2
88 16.4 12.5 18.7





#41

Bromodichloromethane

Concen: 2.843 ug/l

RT: 9.882 min Scan# 1349

Delta R.T. 0.000 min

Lab File: VN085138.D

Acq: 06 Dec 2024 19:39

Instrument :

MSVOA_N

ClientSampleId :

OUTFALL-DSN-002

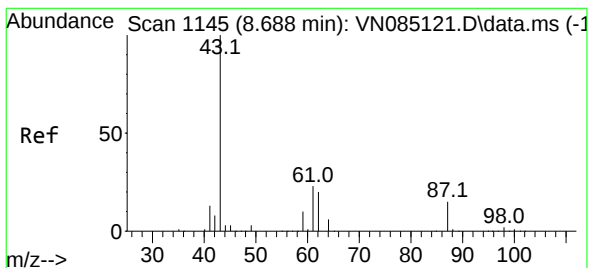
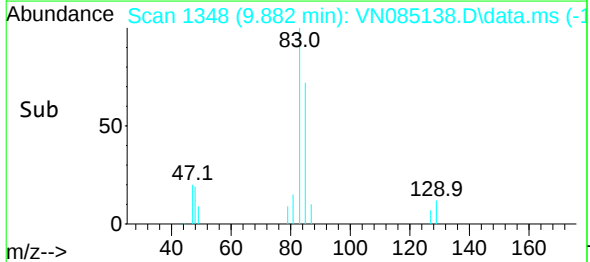
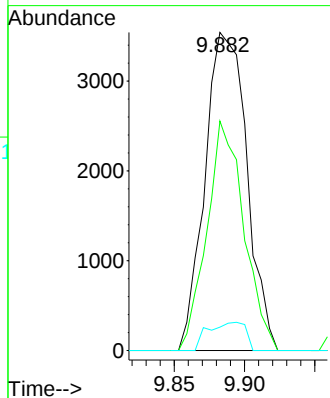
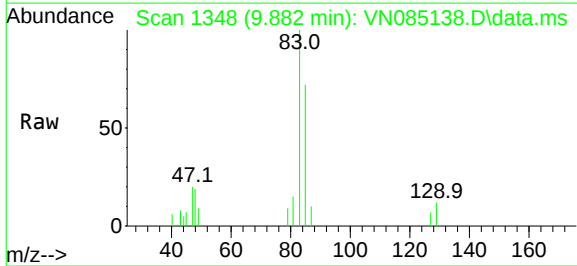
Tgt Ion: 83 Resp: 7340

Ion Ratio Lower Upper

83 100

85 72.1 54.6 81.8

127 7.3 7.0 10.6



#44

Isopropyl Acetate

Concen: 1.860 ug/l

RT: 8.694 min Scan# 1146

Delta R.T. 0.006 min

Lab File: VN085138.D

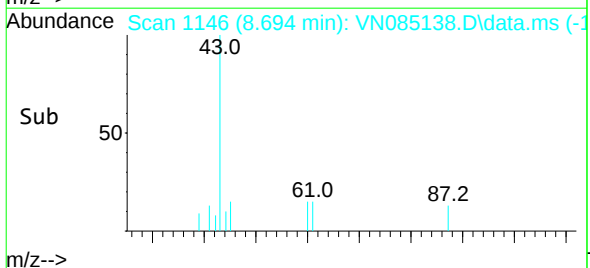
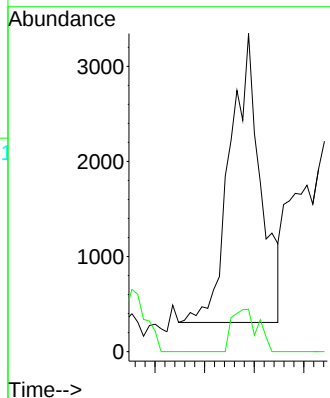
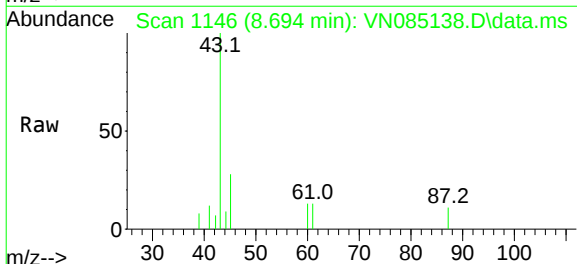
Acq: 06 Dec 2024 19:39

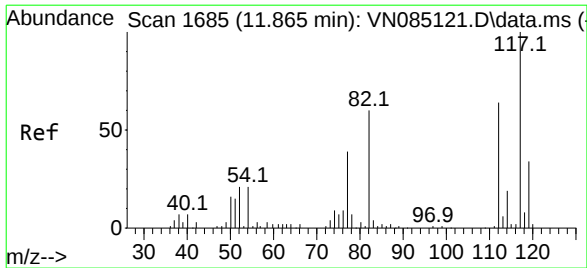
Tgt Ion: 43 Resp: 6530

Ion Ratio Lower Upper

43 100

61 9.8 21.5 32.3#





#57

Chlorobenzene-d5

Concen: 30.000 ug/l

RT: 11.865 min Scan# 1685

Delta R.T. 0.000 min

Lab File: VN085138.D

Acq: 06 Dec 2024 19:39

Instrument :

MSVOA_N

ClientSampleId :

OUTFALL-DSN-002

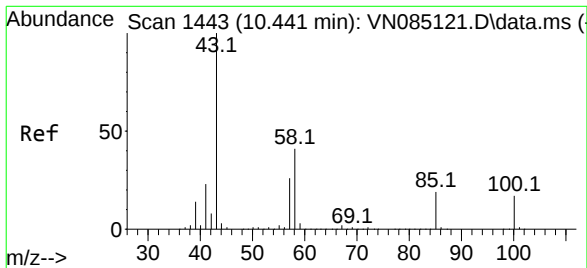
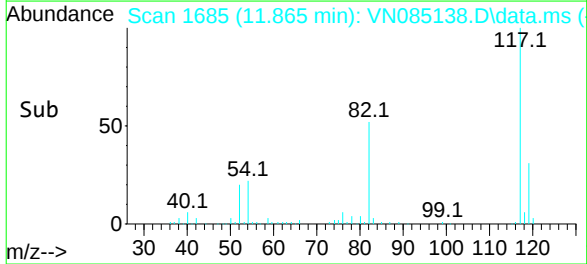
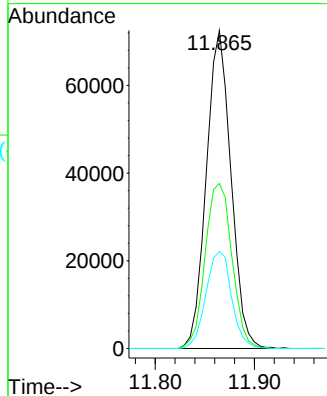
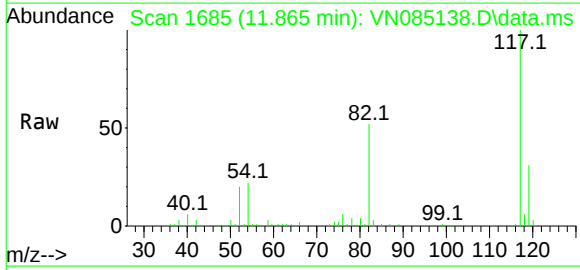
Tgt Ion: 117 Resp: 125124

Ion Ratio Lower Upper

117 100

82 56.3 44.2 66.4

119 31.9 25.4 38.2



#58

4-Methyl-2-Pentanone

Concen: 2.425 ug/l

RT: 10.441 min Scan# 1443

Delta R.T. 0.000 min

Lab File: VN085138.D

Acq: 06 Dec 2024 19:39

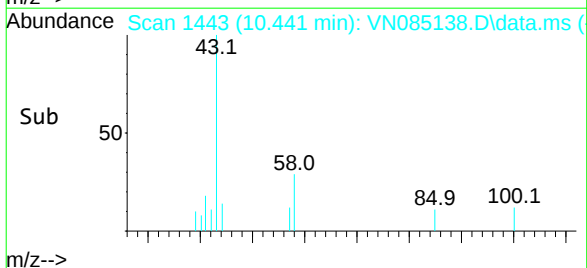
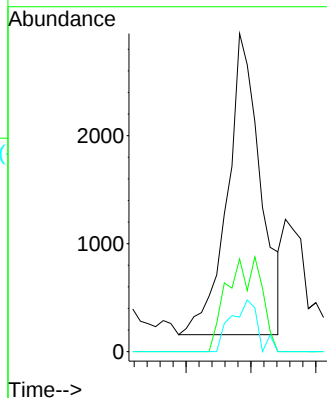
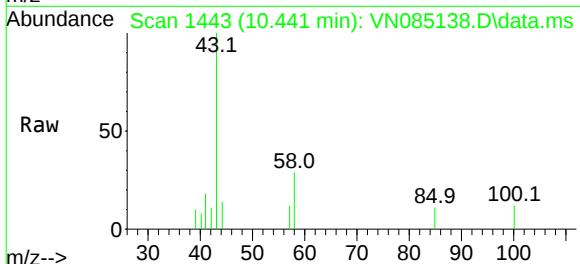
Tgt Ion: 43 Resp: 4952

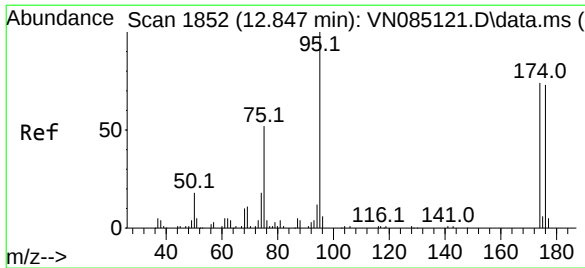
Ion Ratio Lower Upper

43 100

58 20.8 31.6 47.4#

85 6.3 15.0 22.6#





#60

4-Bromofluorobenzene

Concen: 24.825 ug/l

RT: 12.847 min Scan# 1852

Delta R.T. 0.000 min

Lab File: VN085138.D

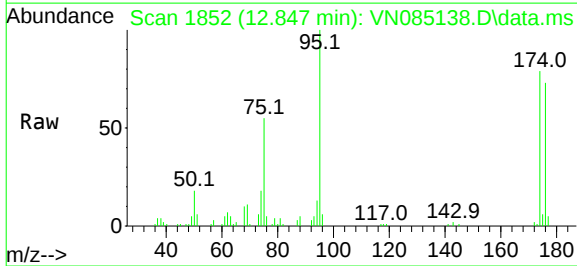
Acq: 06 Dec 2024 19:39

Instrument :

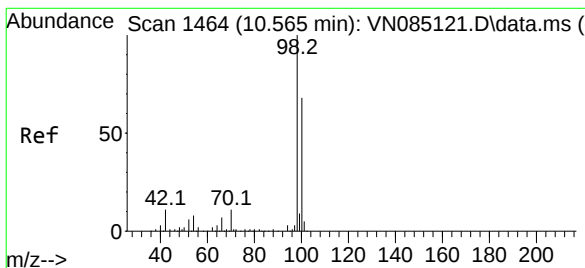
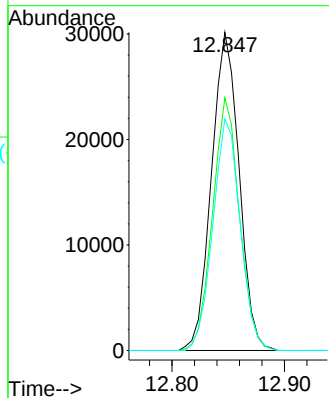
MSVOA_N

ClientSampleId :

OUTFALL-DSN-002



Tgt Ion:	95	Resp:	51396
Ion Ratio	Lower	Upper	
95	100		
174	77.1	60.3	90.5
176	72.4	57.4	86.0



#63

Toluene-d8

Concen: 28.308 ug/l

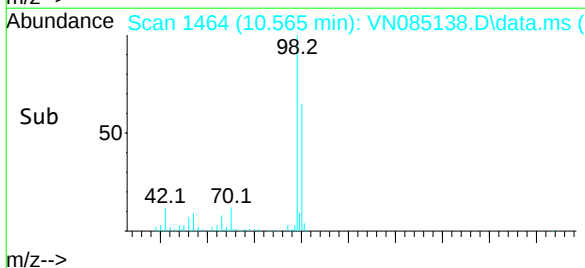
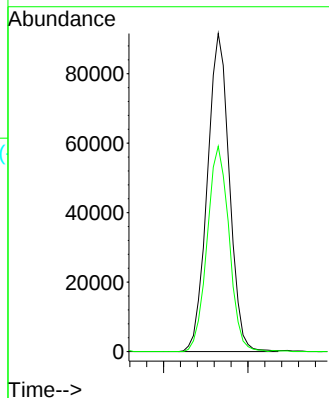
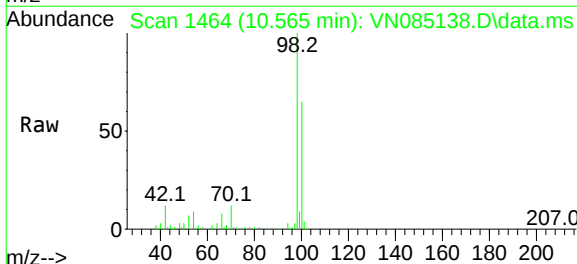
RT: 10.565 min Scan# 1464

Delta R.T. 0.000 min

Lab File: VN085138.D

Acq: 06 Dec 2024 19:39

Tgt Ion:	98	Resp:	166151
Ion Ratio	Lower	Upper	
98	100		
100	64.2	52.0	78.0





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: TRIS02
 Lab Code: CHEM Case No.: P5044 SAS No.: P5044 SDG No.: P5044
 Instrument ID: MSVOA_N Calibration Date(s): 12/06/2024 12/06/2024
 Heated Purge: (Y/N) N Calibration Time(s): 10:02 11:37
 GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID:		RRF005 = VN085117.D		RRF020 = VN085118.D		RRF050 = VN085119.D	
		RRF100 = VN085120.D		RRF150 = VN085121.D		RRF =	
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF150	RRF	% RSD
Ethyl Acetate	0.436	0.404	0.441	0.467	0.462	0.442	5.7
Isopropyl Acetate	0.740	0.746	0.749	0.793	0.813	0.768	4.2
Acetone	0.217	0.228	0.233	0.270	0.264	0.243	9.6
Methylene Chloride	2.198	2.012	1.927	2.127	2.100	2.073	5.1
1,2-Dichloroethane-d4	2.462	2.393	2.263	2.370	2.414	2.380	3.1
Toluene-d8	1.462	1.443	1.392	1.372	1.367	1.407	3.1
4-Bromofluorobenzene	0.479	0.495	0.500	0.509	0.499	0.496	2.2
n-amyl Acetate	0.520	0.619	0.656	0.720	0.716	0.646	12.8

* 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 : 624N120624W.M
 Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 Last Update : Fri Dec 06 22:50:42 2024
 Response Via : Initial Calibration

Calibration Files

5 =VN085117.D 20 =VN085118.D 50 =VN085119.D 100 =VN085120.D 150 =VN085121.D

	Compound	5	20	50	100	150	Avg	%RSD
1) I	Bromochloromethane	-----ISTD-----						
2) M	Dichlorodifluoro...	2.072	2.467	2.334	2.565	2.562	2.400	8.60
3) M	Chloromethane	2.058	2.093	2.013	2.202	2.256	2.124	4.77
4) M	Vinyl Chloride	2.171	2.147	2.026	2.258	2.263	2.173	4.46
5) M	Bromomethane	1.578	1.334	1.261	1.364	1.361	1.380	8.58
6) M	Chloroethane	1.331	1.302	1.259	1.382	1.401	1.335	4.35
7) M	Trichlorofluorom...	3.495	3.461	3.321	3.725	3.781	3.557	5.39
8) T	Diethyl Ether	0.973	1.048	1.090	1.254	1.268	1.127	11.54
9)	1,1,2-Trichlorot...	1.976	1.924	1.900	2.062	2.084	1.989	4.10
10) M	1,1-Dichloroethene	1.669	1.752	1.743	1.978	1.993	1.827	8.12
11)	Methyl Iodide	2.117	2.346	2.450	2.826	2.930	2.534	13.36
12)	Methyl Acetate	2.041	2.062	2.033	2.305	2.337	2.155	7.04
13) M	Acrolein	0.309	0.255	0.299	0.338	0.365	0.313	13.19
14) M	Acrylonitrile	0.809	0.837	0.858	0.977	0.994	0.895	9.44
15) M	Acetone	0.217	0.228	0.233	0.270	0.264	0.243	9.61
16) M	Carbon Disulfide	5.377	5.368	5.062	5.709	5.789	5.461	5.37
17)	Allyl chloride	2.340	2.399	2.527	2.903	2.903	2.614	10.40
18) M	Methylene Chloride	2.198	2.012	1.927	2.127	2.100	2.073	5.07
19) M	trans-1,2-Dichlo...	1.876	1.799	1.782	2.012	2.027	1.899	6.09
20) T	Diisopropyl ether	5.145	5.673	5.547	6.154	6.167	5.737	7.55
21) M	1,1-Dichloroethane	3.621	3.416	3.269	3.705	3.693	3.541	5.39
22) M	cis-1,2-Dichloro...	2.011	2.125	2.092	2.320	2.366	2.183	7.00
23) M	tert-Butyl Alcohol	0.280	0.294	0.296	0.365	0.371	0.321	13.45
24) M	Methyl tert-Buty...	4.744	5.454	5.524	6.311	6.507	5.708	12.48
25) M	Chloroform	3.779	3.635	3.508	3.813	3.814	3.710	3.63
26)	Cyclohexane	2.265	2.925	2.915	3.239	3.234	2.916	13.60
27) s	1,2-Dichloroetha...	2.462	2.393	2.263	2.370	2.414	2.380	3.10
28) I	1,4-Difluorobenzene	-----ISTD-----						
29)	1,1-Dichloropropene	0.458	0.482	0.468	0.506	0.506	0.484	4.49
30) M	2-Butanone	0.207	0.217	0.218	0.235	0.234	0.222	5.37
31)	2,2-Dichloropropane	0.624	0.608	0.602	0.636	0.634	0.621	2.51
32) M	1,1,1-Trichloroe...	0.683	0.665	0.619	0.657	0.652	0.655	3.60
33) M	Carbon Tetrachlo...	0.619	0.587	0.566	0.591	0.593	0.591	3.16
34) M	Benzene	1.581	1.501	1.456	1.543	1.523	1.521	3.09
35)	Methacrylonitrile	0.223	0.250	0.259	0.258	0.260	0.250	6.27
36) M	1,2-Dichloroethane	0.564	0.505	0.491	0.518	0.510	0.518	5.39
37) M	Trichloroethene	0.367	0.356	0.344	0.373	0.371	0.362	3.40
38)	Methylcyclohexane	0.453	0.481	0.526	0.579	0.593	0.526	11.51
39) M	1,2-Dichloropropane	0.388	0.370	0.351	0.366	0.368	0.368	3.66
40)	Dibromomethane	0.274	0.266	0.253	0.263	0.264	0.264	2.84
41) M	Bromodichloromet...	0.596	0.554	0.541	0.565	0.568	0.565	3.61
42) M	Vinyl Acetate	0.638	0.747	0.796	0.861	0.845	0.777	11.56
43)	Ethyl Acetate	0.436	0.404	0.441	0.467	0.462	0.442	5.73
44)	Isopropyl Acetate	0.740	0.746	0.749	0.793	0.813	0.768	4.24
45) T	1,4-Dioxane	0.005	0.006	0.006	0.007	0.007	0.006	9.00
46)	Methyl methacrylate	0.299	0.343	0.346	0.382	0.388	0.352	10.10
47)	n-amyl Acetate	0.520	0.619	0.656	0.720	0.716	0.646	12.76
48) M	t-1,3-Dichloropr...	0.518	0.517	0.541	0.592	0.603	0.554	7.36
49) T	cis-1,3-Dichloro...	0.581	0.590	0.583	0.629	0.636	0.604	4.41
50) M	1,1,2-Trichloroe...	0.387	0.355	0.336	0.353	0.349	0.356	5.23
51)	Ethyl methacrylate	0.441	0.506	0.542	0.607	0.612	0.542	13.27
52)	1,3-Dichloropropane	0.598	0.585	0.582	0.607	0.606	0.596	1.96
53) M	Dibromochloromet...	0.455	0.426	0.413	0.438	0.438	0.434	3.66
54) M	1,2-Dibromoethane	0.358	0.348	0.348	0.371	0.369	0.359	3.14
55) M	2-Chloroethyl vi...	0.200	0.247	0.258	0.284	0.269	0.252	12.73
56) M	Bromoform	0.294	0.275	0.282	0.301	0.302	0.291	4.06

Method Path : Z:\voasrv\HPCHEM1\MSVOA_N\methods\
 Method File : 624N120624W.M

57) I	Chlorobenzene-d5	-----ISTD-----						
58) M	4-Methyl-2-Penta...	0.431	0.494	0.483	0.524	0.516	0.490	7.51
59) M	2-Hexanone	0.314	0.376	0.371	0.402	0.391	0.371	9.15
60) S	4-Bromofluoroben...	0.479	0.495	0.500	0.509	0.499	0.496	2.21
61) M	Tetrachloroethene	0.407	0.358	0.342	0.359	0.351	0.363	6.99
62) M	Toluene	1.780	1.713	1.680	1.799	1.777	1.750	2.88
63) S	Toluene-d8	1.462	1.443	1.392	1.372	1.367	1.407	3.05
64) M	Chlorobenzene	1.074	1.056	1.037	1.121	1.113	1.080	3.34
65)	1,1,1,2-Tetrachl...	0.432	0.384	0.384	0.413	0.404	0.403	5.03
66) M	Ethyl Benzene	1.626	1.739	1.845	2.032	2.041	1.857	9.77
67) M	m/p-Xylenes	0.601	0.713	0.706	0.775	0.775	0.714	10.00
68) M	o-Xylene	0.561	0.648	0.681	0.734	0.729	0.671	10.54
69) M	Styrene	0.892	1.097	1.164	1.270	1.266	1.138	13.68
70)	Isopropylbenzene	1.409	1.656	1.747	1.932	1.903	1.730	12.25
71) M	1,1,2,2-Tetrachl...	0.551	0.532	0.503	0.526	0.521	0.526	3.31
72)	1,2,3-Trichlorop...	0.582	0.533	0.473	0.510	0.502	0.520	7.87
73)	Bromobenzene	0.411	0.420	0.422	0.462	0.451	0.433	5.09
74)	n-propylbenzene	1.744	2.020	2.082	2.286	2.264	2.079	10.56
75)	2-Chlorotoluene	1.143	1.271	1.266	1.378	1.371	1.286	7.45
76)	1,3,5-Trimethylb...	1.241	1.441	1.488	1.630	1.609	1.482	10.57
77)	t-1,4-Dichloro-2...	0.159	0.179	0.184	0.212	0.212	0.189	11.96
78)	4-Chlorotoluene	1.212	1.262	1.274	1.399	1.378	1.305	6.13
79)	tert-butylbenzene	0.978	1.173	1.226	1.368	1.340	1.217	12.78
80)	1,2,4-Trimethylb...	1.151	1.429	1.499	1.644	1.596	1.464	13.23
81)	sec-Butylbenzene	1.421	1.669	1.727	1.927	1.901	1.729	11.83
82)	p-Isopropyltoluene	1.090	1.372	1.460	1.626	1.620	1.434	15.36
83) M	1,3-Dichlorobenzene	0.779	0.765	0.772	0.842	0.816	0.795	4.10
84) M	1,4-Dichlorobenzene	0.725	0.742	0.759	0.829	0.818	0.775	6.00
85)	n-Butylbenzene	0.903	1.085	1.230	1.399	1.395	1.203	17.63
86) T	Hexachloroethane	0.273	0.275	0.271	0.304	0.304	0.285	6.00
87) M	1,2-Dichlorobenzene	0.743	0.721	0.734	0.787	0.767	0.750	3.51
88)	1,2-Dibromo-3-Ch...	0.095	0.103	0.101	0.112	0.116	0.105	8.00
89)	1,2,4-Trichlorob...	0.280	0.342	0.364	0.421	0.431	0.367	16.83
90)	Hexachlorobutadiene	0.206	0.184	0.173	0.196	0.196	0.191	6.66
91) M	Naphthalene	0.704	0.971	1.176	1.410	1.447	1.142	27.26
92)	1,2,3-Trichlorob...	0.280	0.342	0.364	0.421	0.431	0.367	16.83

(#) = Out of Range

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120624\
 Data File : VN085117.D
 Acq On : 06 Dec 2024 10:02
 Operator : JC\MD
 Sample : VSTDICC005
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICC005

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 12/09/2024
 Supervised By :Semsettin Yesilyurt 12/09/2024

Quant Time: Dec 06 22:28:05 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N120624W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Dec 06 22:19:40 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	7.812	128	29169	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.100	114	144230	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.865	117	136167	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.577	65	71806	31.025	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery = 103.400%			
60) 4-Bromofluorobenzene	12.847	95	65235	28.954	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery = 96.500%			
63) Toluene-d8	10.565	98	199139	31.177	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery = 103.933%			
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.124	85	10073	4.316	ug/l	100
3) Chloromethane	2.359	50	10004	4.843	ug/l	96
4) Vinyl Chloride	2.518	62	10554	4.995	ug/l #	88
5) Bromomethane	2.953	94	7670	5.718	ug/l	97
6) Chloroethane	3.124	64	6472	4.986	ug/l #	87
7) Trichlorofluoromethane	3.500	101	16991	4.913	ug/l	98
8) Diethyl Ether	3.965	74	4729	4.317	ug/l	100
9) 1,1,2-Trichlorotrifluo...	4.365	101	9605m	4.967	ug/l	
10) 1,1-Dichloroethene	4.342	96	8113	4.567	ug/l	92
11) Methyl Iodide	4.594	142	10293m	4.178	ug/l	
12) Methyl Acetate	5.030	43	9920	4.734	ug/l	99
13) Acrolein	4.189	56	7501	24.630	ug/l	87
14) Acrylonitrile	5.706	53	19671m	22.606	ug/l	
15) Acetone	4.418	58	5274	22.365	ug/l	85
16) Carbon Disulfide	4.706	76	26140	4.923	ug/l	96
17) Allyl chloride	5.024	41	11376	4.476	ug/l	89
18) Methylene Chloride	5.271	84	10687	5.302	ug/l #	83
19) trans-1,2-Dichloroethene	5.789	96	9118	4.938	ug/l #	79
20) Diisopropyl ether	6.659	45	25012m	4.484	ug/l	
21) 1,1-Dichloroethane	6.571	63	17605	5.113	ug/l	95
22) cis-1,2-Dichloroethene	7.488	96	9776	4.606	ug/l	96
23) tert-Butyl Alcohol	5.518	59	6813m	21.825	ug/l	
24) Methyl tert-Butyl Ether	5.794	73	23064	4.159	ug/l #	73
25) Chloroform	7.959	83	18374	5.094	ug/l	96
26) Cyclohexane	8.253	56	11013	3.885	ug/l #	89
29) 1,1-Dichloropropene	8.371	75	11010	4.731	ug/l	97
30) 2-Butanone	7.477	43	24858	23.275	ug/l #	97
31) 2,2-Dichloropropane	7.488	77	14990	5.023	ug/l #	100
32) 1,1,1-Trichloroethane	8.171	97	16430	5.216	ug/l	96
33) Carbon Tetrachloride	8.359	117	14874	5.233	ug/l #	95
34) Benzene	8.606	78	38013	5.199	ug/l #	92
35) Methacrylonitrile	7.777	41	5355	4.455	ug/l	89
36) 1,2-Dichloroethane	8.671	62	13568	5.451	ug/l #	93
37) Trichloroethene	9.347	130	8822	5.067	ug/l	92
38) Methylcyclohexane	9.600	83	10891	4.304	ug/l	98
39) 1,2-Dichloropropane	9.624	63	9337	5.273	ug/l	100
40) Dibromomethane	9.706	93	6598	5.194	ug/l	95
41) Bromodichloromethane	9.882	83	14332	5.278	ug/l #	84
42) Vinyl Acetate	6.600	43	76634	20.505	ug/l #	85

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120624\
 Data File : VN085117.D
 Acq On : 06 Dec 2024 10:02
 Operator : JC\MD
 Sample : VSTDICC005
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 2 Sample Multiplier: 1

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC005

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 12/09/2024

Supervised By :Semsettin Yesilyurt 12/09/2024

Quant Time: Dec 06 22:28:05 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N120624W.M

Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS

QLast Update : Fri Dec 06 22:19:40 2024

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	7.559	43	10470	4.927	ug/l #	86
44) Isopropyl Acetate	8.682	43	17789	4.817	ug/l	98
45) 1,4-Dioxane	9.688	88	2638	85.662	ug/l #	78
46) Methyl methacrylate	9.682	41	7196	4.258	ug/l	92
47) n-amyl Acetate	12.494	43	12494	4.021	ug/l	97
48) t-1,3-Dichloropropene	10.835	75	12463	4.675	ug/l	93
49) cis-1,3-Dichloropropene	10.306	75	13955	4.809	ug/l	99
50) 1,1,2-Trichloroethane	11.018	97	9292	5.429	ug/l	91
51) Ethyl methacrylate	10.871	69	10590	4.068	ug/l	88
52) 1,3-Dichloropropane	11.159	76	14378	5.019	ug/l	98
53) Dibromochloromethane	11.353	129	10942	5.246	ug/l	98
54) 1,2-Dibromoethane	11.471	107	8602	4.988	ug/l	97
55) 2-Chloroethyl vinyl ether	10.159	63	23999	19.844	ug/l	98
56) Bromoform	12.576	173	7066	5.052	ug/l	95
58) 4-Methyl-2-Pentanone	10.441	43	48868	21.990	ug/l	99
59) 2-Hexanone	11.194	43	35678	21.188	ug/l	97
61) Tetrachloroethene	11.100	164	9241	5.604	ug/l	93
62) Toluene	10.629	91	40385	5.085	ug/l	96
64) Chlorobenzene	11.888	112	24379	4.972	ug/l	97
65) 1,1,1,2-Tetrachloroethane	11.959	131	9796	5.352	ug/l	93
66) Ethyl Benzene	11.959	91	36907	4.380	ug/l	98
67) m/p-Xylenes	12.070	106	27271	8.414	ug/l	98
68) o-Xylene	12.394	106	12741	4.186	ug/l	97
69) Styrene	12.412	104	20235	3.918	ug/l	95
70) Isopropylbenzene	12.694	105	31980	4.073	ug/l	100
71) 1,1,2,2-Tetrachloroethane	12.935	83	12502	5.232	ug/l	97
72) 1,2,3-Trichloropropane	12.988	75	13212m	5.597	ug/l	
73) Bromobenzene	12.976	156	9325	4.742	ug/l	94
74) n-propylbenzene	13.035	91	39585	4.194	ug/l	100
75) 2-Chlorotoluene	13.123	91	25942	4.445	ug/l	98
76) 1,3,5-Trimethylbenzene	13.170	105	28160	4.187	ug/l	98
77) t-1,4-Dichloro-2-butene	12.735	75	3618	4.218	ug/l	96
78) 4-Chlorotoluene	13.217	91	27508	4.644	ug/l	99
79) tert-butylbenzene	13.435	119	22204	4.019	ug/l	95
80) 1,2,4-Trimethylbenzene	13.482	105	26128	3.933	ug/l	100
81) sec-Butylbenzene	13.617	105	32252	4.109	ug/l	99
82) p-Isopropyltoluene	13.729	119	24743	3.803	ug/l	99
83) 1,3-Dichlorobenzene	13.729	146	17680	4.900	ug/l	98
84) 1,4-Dichlorobenzene	13.812	146	16455	4.680	ug/l	98
85) n-Butylbenzene	14.053	91	20500	3.756	ug/l	97
86) Hexachloroethane	14.335	117	6189	4.778	ug/l	84
87) 1,2-Dichlorobenzene	14.106	146	16856	4.950	ug/l	94
88) 1,2-Dibromo-3-Chloropr...	14.711	75	2146	4.495	ug/l	93
89) 1,2,4-Trichlorobenzene	15.835	180	6347	3.806	ug/l	91
90) Hexachlorobutadiene	15.494	225	4673	5.392	ug/l	93
91) Naphthalene	15.635	128	15972	3.083	ug/l #	95
92) 1,2,3-Trichlorobenzene	15.835	180	6347	3.806	ug/l	91

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

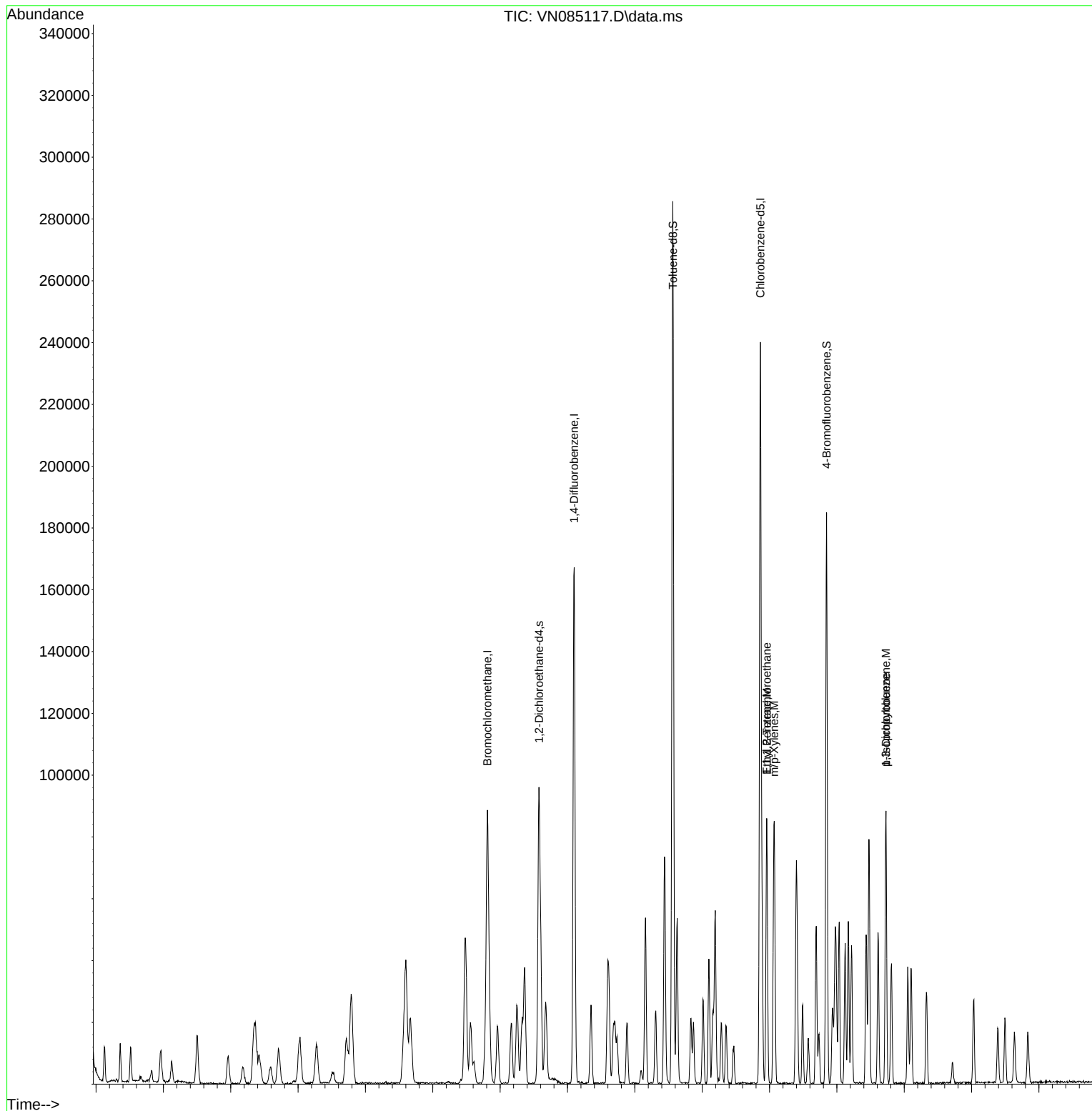
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120624\
Data File : VN085117.D
Acq On : 06 Dec 2024 10:02
Operator : JC\MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

Reviewed By : Mahesh Dadoda 12/09/2024
Supervised By : Semsettin Yesilyurt 12/09/2024

Quant Time: Dec 06 22:28:05 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N120624W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Dec 06 22:19:40 2024
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120624\
 Data File : VN085118.D
 Acq On : 06 Dec 2024 10:26
 Operator : JC\MD
 Sample : VSTDICCC020
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICCC020

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 12/09/2024
 Supervised By :Semsettin Yesilyurt 12/09/2024

Quant Time: Dec 06 22:28:56 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N120624W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Dec 06 22:19:40 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	7.812	128	31263	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.100	114	162398	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.865	117	151793	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.577	65	74804	30.155	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery = 100.533%			
60) 4-Bromofluorobenzene	12.847	95	75101	29.902	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery = 99.667%			
63) Toluene-d8	10.565	98	218988	30.755	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery = 102.533%			
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	2.124	85	51416	20.557	ug/l	100
3) Chloromethane	2.359	50	43625	19.705	ug/l	100
4) Vinyl Chloride	2.512	62	44749	19.762	ug/l	100
5) Bromomethane	2.965	94	27801	19.338	ug/l	100
6) Chloroethane	3.124	64	27130	19.501	ug/l	100
7) Trichlorofluoromethane	3.500	101	72134	19.461	ug/l	100
8) Diethyl Ether	3.959	74	21832	18.596	ug/l	100
9) 1,1,2-Trichlorotrifluoro...	4.371	101	40093	19.343	ug/l	100
10) 1,1-Dichloroethene	4.342	96	36518	19.181	ug/l	100
11) Methyl Iodide	4.589	142	48887	18.514	ug/l	100
12) Methyl Acetate	5.018	43	42971	19.131	ug/l	100
13) Acrolein	4.183	56	26615	81.540	ug/l	100
14) Acrylonitrile	5.718	53	87191	93.488	ug/l	100
15) Acetone	4.424	58	23800	94.168	ug/l	100
16) Carbon Disulfide	4.712	76	111875	19.659	ug/l	100
17) Allyl chloride	5.024	41	49995	18.351	ug/l	100
18) Methylene Chloride	5.271	84	41937	19.412	ug/l	100
19) trans-1,2-Dichloroethene	5.783	96	37486	18.942	ug/l	100
20) Diisopropyl ether	6.665	45	118238	19.776	ug/l	100
21) 1,1-Dichloroethane	6.565	63	71204	19.296	ug/l	100
22) cis-1,2-Dichloroethene	7.488	96	44288	19.471	ug/l	100
23) tert-Butyl Alcohol	5.512	59	30593	91.438	ug/l #	100
24) Methyl tert-Butyl Ether	5.794	73	113672	19.125	ug/l	100
25) Chloroform	7.959	83	75756	19.596	ug/l	100
26) Cyclohexane	8.253	56	60954	20.061	ug/l	100
29) 1,1-Dichloropropene	8.371	75	52226	19.930	ug/l	100
30) 2-Butanone	7.483	43	117537	97.739	ug/l	100
31) 2,2-Dichloropropane	7.488	77	65781	19.575	ug/l #	100
32) 1,1,1-Trichloroethane	8.171	97	71977	20.293	ug/l	100
33) Carbon Tetrachloride	8.359	117	63567	19.861	ug/l	100
34) Benzene	8.606	78	162502	19.740	ug/l	100
35) Methacrylonitrile	7.777	41	27120	20.040	ug/l	100
36) 1,2-Dichloroethane	8.665	62	54631	19.494	ug/l	100
37) Trichloroethene	9.353	130	38555	19.667	ug/l	100
38) Methylcyclohexane	9.600	83	52032	18.261	ug/l	100
39) 1,2-Dichloropropane	9.618	63	40007	20.064	ug/l	100
40) Dibromomethane	9.706	93	28813	20.145	ug/l	100
41) Bromodichloromethane	9.882	83	60013	19.628	ug/l	100
42) Vinyl Acetate	6.600	43	404546	96.136	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120624\
 Data File : VN085118.D
 Acq On : 06 Dec 2024 10:26
 Operator : JC\MD
 Sample : VSTDICCC020
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICCC020

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 12/09/2024
 Supervised By :Semsettin Yesilyurt 12/09/2024

Quant Time: Dec 06 22:28:56 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N120624W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Dec 06 22:19:40 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	7.559	43	43730	18.276	ug/l	100
44) Isopropyl Acetate	8.688	43	80717	19.412	ug/l	100
45) 1,4-Dioxane	9.694	88	13988	403.408	ug/l	100
46) Methyl methacrylate	9.682	41	37174	19.535	ug/l	100
47) n-amyl Acetate	12.494	43	67009	19.154	ug/l	100
48) t-1,3-Dichloropropene	10.835	75	55998	18.657	ug/l	100
49) cis-1,3-Dichloropropene	10.312	75	63845	19.540	ug/l	100
50) 1,1,2-Trichloroethane	11.012	97	38466	19.958	ug/l	100
51) Ethyl methacrylate	10.871	69	54805	18.696	ug/l	100
52) 1,3-Dichloropropane	11.159	76	63330	19.634	ug/l	100
53) Dibromochloromethane	11.353	129	46068	19.614	ug/l	100
54) 1,2-Dibromoethane	11.465	107	37625	19.376	ug/l	100
55) 2-Chloroethyl vinyl ether	10.159	63	133977	98.387	ug/l	100
56) Bromoform	12.576	173	29780	18.911	ug/l	100
58) 4-Methyl-2-Pentanone	10.441	43	249951	100.896	ug/l	100
59) 2-Hexanone	11.194	43	190003	101.223	ug/l	100
61) Tetrachloroethene	11.100	164	36183	19.684	ug/l	100
62) Toluene	10.629	91	173344	19.581	ug/l	100
64) Chlorobenzene	11.888	112	106855	19.550	ug/l	100
65) 1,1,1,2-Tetrachloroethane	11.959	131	38831	19.032	ug/l	100
66) Ethyl Benzene	11.965	91	176006	18.737	ug/l	100
67) m/p-Xylenes	12.070	106	144263	39.929	ug/l	100
68) o-Xylene	12.394	106	65568	19.324	ug/l	100
69) Styrene	12.412	104	111060	19.289	ug/l	100
70) Isopropylbenzene	12.694	105	167624	19.153	ug/l	100
71) 1,1,2,2-Tetrachloroethane	12.935	83	53829	20.208	ug/l	100
72) 1,2,3-Trichloropropane	12.994	75	53975m	20.512	ug/l	
73) Bromobenzene	12.976	156	42513	19.393	ug/l	100
74) n-propylbenzene	13.035	91	204446	19.431	ug/l	100
75) 2-Chlorotoluene	13.123	91	128581	19.766	ug/l	100
76) 1,3,5-Trimethylbenzene	13.170	105	145824	19.449	ug/l	100
77) t-1,4-Dichloro-2-butene	12.735	75	18073	18.901	ug/l	100
78) 4-Chlorotoluene	13.217	91	127680	19.337	ug/l	100
79) tert-butylbenzene	13.435	119	118752	19.283	ug/l	100
80) 1,2,4-Trimethylbenzene	13.476	105	144579	19.521	ug/l	100
81) sec-Butylbenzene	13.612	105	168895	19.304	ug/l	100
82) p-Isopropyltoluene	13.729	119	138833	19.140	ug/l	100
83) 1,3-Dichlorobenzene	13.729	146	77464	19.261	ug/l	100
84) 1,4-Dichlorobenzene	13.812	146	75083	19.156	ug/l	100
85) n-Butylbenzene	14.053	91	109819	18.049	ug/l	100
86) Hexachloroethane	14.329	117	27795	19.248	ug/l	100
87) 1,2-Dichlorobenzene	14.100	146	72993	19.228	ug/l	100
88) 1,2-Dibromo-3-Chloropr...	14.717	75	10448	19.634	ug/l	100
89) 1,2,4-Trichlorobenzene	15.835	180	34577	18.598	ug/l	100
90) Hexachlorobutadiene	15.500	225	18570	19.222	ug/l	100
91) Naphthalene	15.641	128	98254	17.011	ug/l	100
92) 1,2,3-Trichlorobenzene	15.835	180	34577	18.598	ug/l	100

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

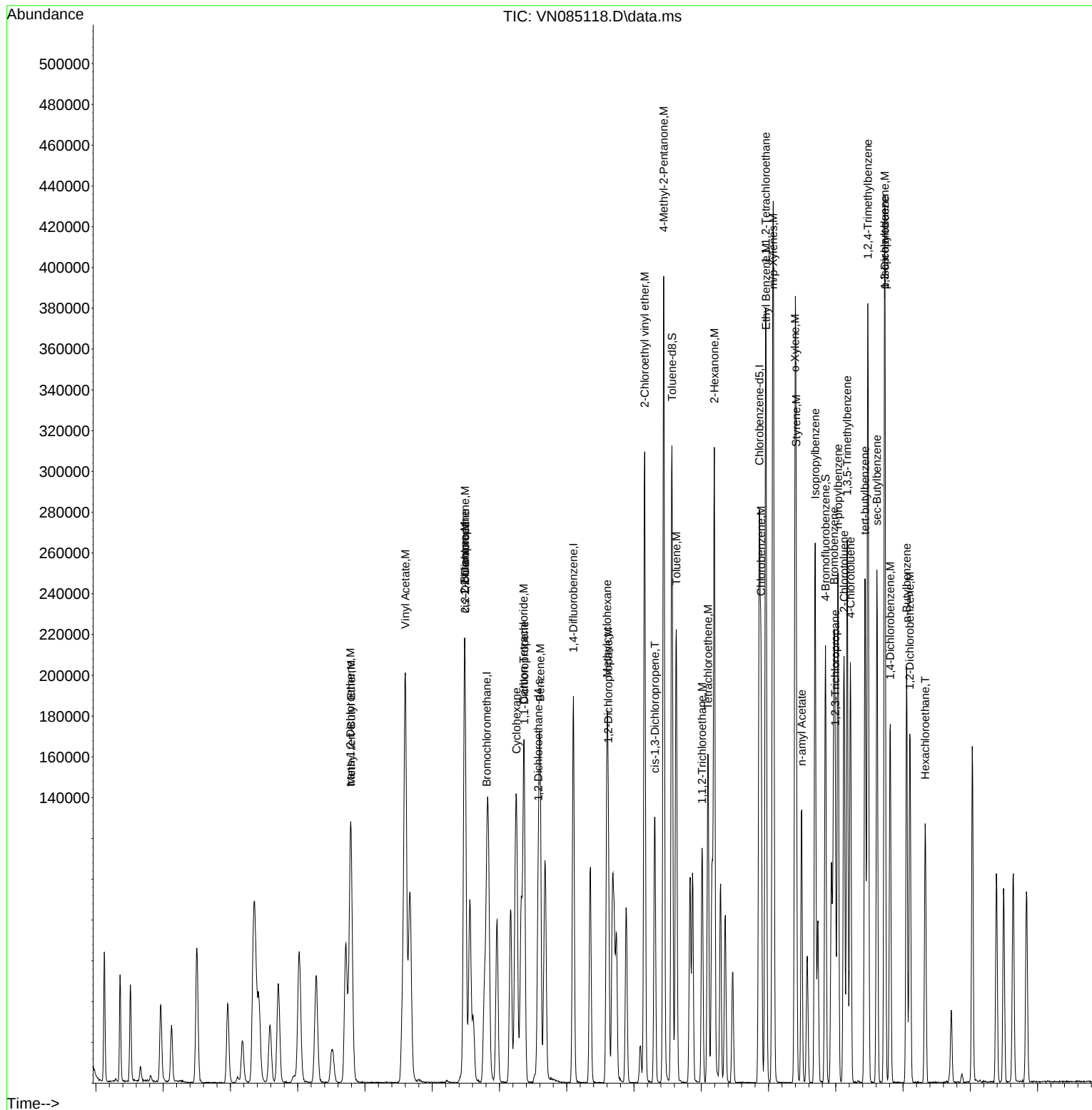
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Data File : VN085118.D
Acq On : 06 Dec 2024 10:26
Operator : JC\MD
Sample : VSTDICCC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

Quant Time: Dec 06 22:28:56 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N120624W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Dec 06 22:19:40 2024
Response via : Initial Calibration

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 12/09/2024
Supervised By :Semsettin Yesilyurt 12/09/2024



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120624\
 Data File : VN085119.D
 Acq On : 06 Dec 2024 10:49
 Operator : JC\MD
 Sample : VSTDICC050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICC050

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 12/09/2024
 Supervised By :Semsettin Yesilyurt 12/09/2024

Quant Time: Dec 06 22:29:45 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N120624W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Dec 06 22:19:40 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	7.812	128	32631	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.100	114	169083	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.865	117	158595	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.576	65	73850	28.523	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery =	95.067%		
60) 4-Bromofluorobenzene	12.847	95	79229	30.193	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery =	100.633%		
63) Toluene-d8	10.565	98	220709	29.668	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery =	98.900%		
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	2.124	85	126923	48.618	ug/l	95
3) Chloromethane	2.359	50	109481	47.379	ug/l	97
4) Vinyl Chloride	2.512	62	110184	46.620	ug/l	95
5) Bromomethane	2.959	94	68578	45.702	ug/l	97
6) Chloroethane	3.124	64	68457	47.145	ug/l	96
7) Trichlorofluoromethane	3.500	101	180635	46.691	ug/l	99
8) Diethyl Ether	3.959	74	59301	48.393	ug/l	100
9) 1,1,2-Trichlorotrifluo...	4.371	101	103346	47.768	ug/l	97
10) 1,1-Dichloroethene	4.341	96	94788	47.699	ug/l	96
11) Methyl Iodide	4.589	142	133247	48.346	ug/l	97
12) Methyl Acetate	5.018	43	110575	47.166	ug/l	99
13) Acrolein	4.171	56	81406	238.946	ug/l	93
14) Acrylonitrile	5.712	53	233375	239.739	ug/l	97
15) Acetone	4.418	58	63386	240.283	ug/l	89
16) Carbon Disulfide	4.712	76	275285	46.345	ug/l	100
17) Allyl chloride	5.024	41	137437	48.333	ug/l	92
18) Methylene Chloride	5.277	84	104822	46.488	ug/l	98
19) trans-1,2-Dichloroethene	5.788	96	96901	46.913	ug/l	90
20) Diisopropyl ether	6.671	45	301677	48.342	ug/l	99
21) 1,1-Dichloroethane	6.565	63	177808	46.165	ug/l	99
22) cis-1,2-Dichloroethene	7.482	96	113782	47.926	ug/l	98
23) tert-Butyl Alcohol	5.512	59	80412	230.265	ug/l #	100
24) Methyl tert-Butyl Ether	5.794	73	300411	48.425	ug/l #	77
25) Chloroform	7.965	83	190773	47.279	ug/l	98
26) Cyclohexane	8.253	56	158534	49.989	ug/l	98
29) 1,1-Dichloropropene	8.371	75	131946	48.360	ug/l	99
30) 2-Butanone	7.477	43	307572	245.653	ug/l	99
31) 2,2-Dichloropropane	7.488	77	169610	48.478	ug/l #	100
32) 1,1,1-Trichloroethane	8.165	97	174371	47.217	ug/l	98
33) Carbon Tetrachloride	8.359	117	159586	47.889	ug/l	97
34) Benzene	8.606	78	410169	47.855	ug/l	98
35) Methacrylonitrile	7.777	41	72876	51.722	ug/l	91
36) 1,2-Dichloroethane	8.671	62	138391	47.430	ug/l	100
37) Trichloroethene	9.353	130	96801	47.426	ug/l	96
38) Methylcyclohexane	9.600	83	148222	49.963	ug/l	95
39) 1,2-Dichloropropane	9.618	63	98790	47.586	ug/l	96
40) Dibromomethane	9.706	93	71433	47.969	ug/l	99
41) Bromodichloromethane	9.882	83	152481	47.898	ug/l	96
42) Vinyl Acetate	6.600	43	1122209	256.138	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120624\
 Data File : VN085119.D
 Acq On : 06 Dec 2024 10:49
 Operator : JC\MD
 Sample : VSTDICC050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 4 Sample Multiplier: 1

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC050

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 12/09/2024

Supervised By :Semsettin Yesilyurt 12/09/2024

Quant Time: Dec 06 22:29:45 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N120624W.M

Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS

QLast Update : Fri Dec 06 22:19:40 2024

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	7.553	43	124173	49.844	ug/l	# 92
44) Isopropyl Acetate	8.682	43	211189	48.782	ug/l	99
45) 1,4-Dioxane	9.694	88	35720	989.420	ug/l	95
46) Methyl methacrylate	9.676	41	97397	49.158	ug/l	94
47) n-amyl Acetate	12.488	43	184994	50.788	ug/l	95
48) t-1,3-Dichloropropene	10.835	75	152504	48.801	ug/l	98
49) cis-1,3-Dichloropropene	10.306	75	164287	48.292	ug/l	96
50) 1,1,2-Trichloroethane	11.018	97	94692	47.189	ug/l	98
51) Ethyl methacrylate	10.870	69	152776	50.057	ug/l	97
52) 1,3-Dichloropropane	11.159	76	164130	48.874	ug/l	99
53) Dibromochloromethane	11.359	129	116277	47.550	ug/l	97
54) 1,2-Dibromoethane	11.465	107	98049	48.496	ug/l	98
55) 2-Chloroethyl vinyl ether	10.159	63	363042	256.062	ug/l	100
56) Bromoform	12.576	173	79589	48.542	ug/l	96
58) 4-Methyl-2-Pentanone	10.441	43	638976	246.869	ug/l	98
59) 2-Hexanone	11.194	43	490910	250.312	ug/l	98
61) Tetrachloroethene	11.100	164	90418	47.078	ug/l	96
62) Toluene	10.629	91	444180	48.023	ug/l	99
64) Chlorobenzene	11.888	112	274152	48.008	ug/l	99
65) 1,1,1,2-Tetrachloroethane	11.959	131	101559	47.641	ug/l	95
66) Ethyl Benzene	11.959	91	487612	49.682	ug/l	96
67) m/p-Xylenes	12.070	106	373298	98.889	ug/l	95
68) o-Xylene	12.394	106	179899	50.744	ug/l	97
69) Styrene	12.406	104	307715	51.151	ug/l	98
70) Isopropylbenzene	12.694	105	461786	50.502	ug/l	99
71) 1,1,2,2-Tetrachloroethane	12.935	83	132922	47.759	ug/l	97
72) 1,2,3-Trichloropropane	12.988	75	125007m	45.469	ug/l	
73) Bromobenzene	12.976	156	111567	48.711	ug/l	99
74) n-propylbenzene	13.035	91	550361	50.065	ug/l	99
75) 2-Chlorotoluene	13.123	91	334590	49.227	ug/l	99
76) 1,3,5-Trimethylbenzene	13.170	105	393277	50.202	ug/l	99
77) t-1,4-Dichloro-2-butene	12.735	75	48505	48.553	ug/l	97
78) 4-Chlorotoluene	13.217	91	336818	48.823	ug/l	98
79) tert-butylbenzene	13.435	119	324073	50.365	ug/l	99
80) 1,2,4-Trimethylbenzene	13.476	105	396249	51.207	ug/l	100
81) sec-Butylbenzene	13.611	105	456540	49.942	ug/l	99
82) p-Isopropyltoluene	13.729	119	386040	50.937	ug/l	99
83) 1,3-Dichlorobenzene	13.729	146	204168	48.588	ug/l	99
84) 1,4-Dichlorobenzene	13.811	146	200637	48.993	ug/l	99
85) n-Butylbenzene	14.053	91	325144	51.146	ug/l	99
86) Hexachloroethane	14.329	117	71737	47.548	ug/l	96
87) 1,2-Dichlorobenzene	14.106	146	193910	48.889	ug/l	99
88) 1,2-Dibromo-3-Chloropr...	14.717	75	26674	47.975	ug/l	97
89) 1,2,4-Trichlorobenzene	15.835	180	96150	49.499	ug/l	98
90) Hexachlorobutadiene	15.500	225	45780	45.354	ug/l	97
91) Naphthalene	15.641	128	310785	51.498	ug/l	99
92) 1,2,3-Trichlorobenzene	15.835	180	96150	49.499	ug/l	98

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

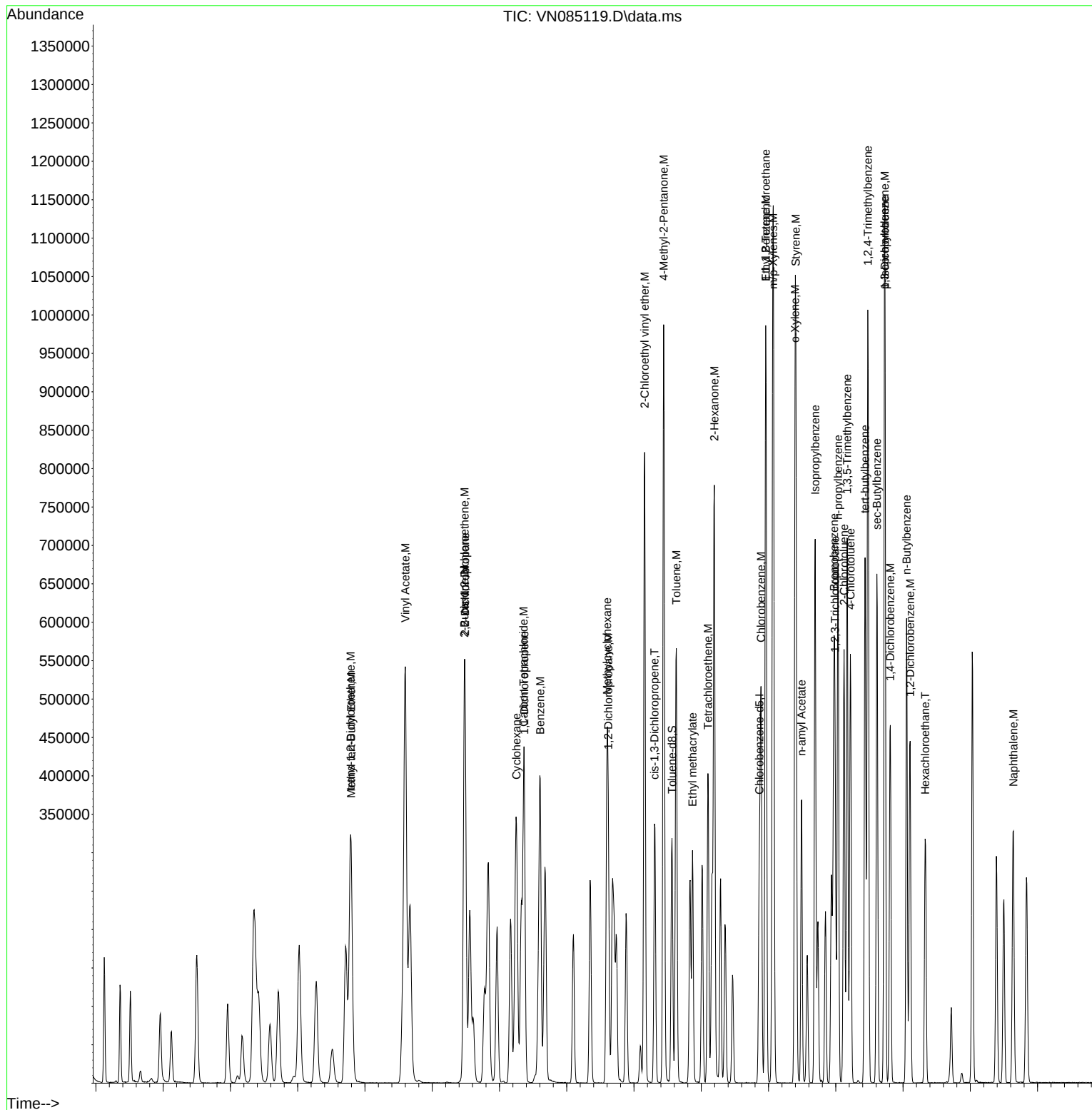
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Data File : VN085119.D
Acq On : 06 Dec 2024 10:49
Operator : JC\MD
Sample : VSTDICC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC050

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 12/09/2024
Supervised By :Semsettin Yesilyurt 12/09/2024

Quant Time: Dec 06 22:29:45 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N120624W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Dec 06 22:19:40 2024
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120624\
 Data File : VN085120.D
 Acq On : 06 Dec 2024 11:13
 Operator : JC\MD
 Sample : VSTDICC100
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICC100

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 12/09/2024
 Supervised By :Semsettin Yesilyurt 12/09/2024

Quant Time: Dec 06 22:30:38 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N120624W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Dec 06 22:19:40 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	7.812	128	30288	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.100	114	165873	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.865	117	153060	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.577	65	71793	29.873	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery =	99.567%		
60) 4-Bromofluorobenzene	12.847	95	77922	30.768	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery =	102.567%		
63) Toluene-d8	10.565	98	210008	29.250	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery =	97.500%		
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.124	85	259006	106.887	ug/l	99
3) Chloromethane	2.359	50	222342	103.665	ug/l	98
4) Vinyl Chloride	2.512	62	227959	103.912	ug/l	99
5) Bromomethane	2.942	94	137690	98.857	ug/l	99
6) Chloroethane	3.112	64	139552	103.541	ug/l	100
7) Trichlorofluoromethane	3.494	101	376125	104.742	ug/l	100
8) Diethyl Ether	3.959	74	126597	111.303	ug/l	98
9) 1,1,2-Trichlorotrifluo...	4.371	101	208174	103.665	ug/l	99
10) 1,1-Dichloroethene	4.336	96	199737	108.286	ug/l	98
11) Methyl Iodide	4.589	142	285314	111.529	ug/l	96
12) Methyl Acetate	5.018	43	232698	106.935	ug/l	96
13) Acrolein	4.177	56	170574	539.405	ug/l	96
14) Acrylonitrile	5.712	53	493102	545.734	ug/l	97
15) Acetone	4.418	58	136513	557.523	ug/l	99
16) Carbon Disulfide	4.712	76	576373	104.540	ug/l	100
17) Allyl chloride	5.024	41	293051	111.032	ug/l	93
18) Methylene Chloride	5.271	84	214729	102.597	ug/l	99
19) trans-1,2-Dichloroethene	5.788	96	203123	105.945	ug/l	94
20) Diisopropyl ether	6.665	45	621282	107.259	ug/l	99
21) 1,1-Dichloroethane	6.565	63	374090	104.639	ug/l	99
22) cis-1,2-Dichloroethene	7.482	96	234199	106.277	ug/l	99
23) tert-Butyl Alcohol	5.518	59	184150	568.118	ug/l #	100
24) Methyl tert-Butyl Ether	5.794	73	637140	110.650	ug/l #	77
25) Chloroform	7.965	83	384926	102.776	ug/l	94
26) Cyclohexane	8.253	56	327008	111.090	ug/l #	95
29) 1,1-Dichloropropene	8.371	75	279872	104.562	ug/l	99
30) 2-Butanone	7.477	43	648934	528.323	ug/l	99
31) 2,2-Dichloropropane	7.488	77	351838	102.508	ug/l #	100
32) 1,1,1-Trichloroethane	8.165	97	363069	100.216	ug/l	98
33) Carbon Tetrachloride	8.359	117	327001	100.027	ug/l	94
34) Benzene	8.606	78	853279	101.479	ug/l	99
35) Methacrylonitrile	7.777	41	142639	103.194	ug/l	94
36) 1,2-Dichloroethane	8.665	62	286487	100.087	ug/l	100
37) Trichloroethene	9.347	130	206395	103.077	ug/l	97
38) Methylcyclohexane	9.594	83	320395	110.090	ug/l	94
39) 1,2-Dichloropropane	9.618	63	202160	99.263	ug/l	98
40) Dibromomethane	9.706	93	145378	99.515	ug/l	99
41) Bromodichloromethane	9.882	83	312321	100.007	ug/l	95
42) Vinyl Acetate	6.600	43	2379940	553.721	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120624\
 Data File : VN085120.D
 Acq On : 06 Dec 2024 11:13
 Operator : JC\MD
 Sample : VSTDICC100
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 5 Sample Multiplier: 1

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Manual Integrations**APPROVED**

Reviewed By :Mahesh Dadoda 12/09/2024

Supervised By :Semsettin Yesilyurt 12/09/2024

Quant Time: Dec 06 22:30:38 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N120624W.M

Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS

QLast Update : Fri Dec 06 22:19:40 2024

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	7.559	43	258485	105.766	ug/l	95
44) Isopropyl Acetate	8.682	43	438465	103.239	ug/l	98
45) 1,4-Dioxane	9.694	88	77646	2192.363	ug/l	97
46) Methyl methacrylate	9.676	41	210976	108.543	ug/l	97
47) n-amyl Acetate	12.494	43	398085	111.404	ug/l	93
48) t-1,3-Dichloropropene	10.835	75	327429	106.805	ug/l	99
49) cis-1,3-Dichloropropene	10.312	75	347791	104.212	ug/l	97
50) 1,1,2-Trichloroethane	11.012	97	195188	99.153	ug/l	95
51) Ethyl methacrylate	10.870	69	335501	112.054	ug/l	96
52) 1,3-Dichloropropane	11.159	76	335834	101.938	ug/l	100
53) Dibromochloromethane	11.359	129	242265	100.988	ug/l	96
54) 1,2-Dibromoethane	11.465	107	205342	103.531	ug/l	99
55) 2-Chloroethyl vinyl ether	10.159	63	785193	564.533	ug/l	100
56) Bromoform	12.576	173	166661	103.616	ug/l	96
58) 4-Methyl-2-Pentanone	10.441	43	1337734	535.524	ug/l	98
59) 2-Hexanone	11.194	43	1026218	542.184	ug/l	97
61) Tetrachloroethene	11.100	164	182933	98.693	ug/l	97
62) Toluene	10.623	91	917622	102.798	ug/l	100
64) Chlorobenzene	11.888	112	571760	103.744	ug/l	99
65) 1,1,1,2-Tetrachloroethane	11.959	131	210736	102.429	ug/l	97
66) Ethyl Benzene	11.959	91	1036629	109.440	ug/l	98
67) m/p-Xylenes	12.070	106	791201	217.173	ug/l	98
68) o-Xylene	12.394	106	374478	109.449	ug/l	100
69) Styrene	12.406	104	648187	111.644	ug/l	100
70) Isopropylbenzene	12.694	105	985915	111.721	ug/l	100
71) 1,1,2,2-Tetrachloroethane	12.935	83	268272	99.877	ug/l	95
72) 1,2,3-Trichloropropane	12.988	75	260354m	98.123	ug/l	
73) Bromobenzene	12.976	156	235738	106.648	ug/l	100
74) n-propylbenzene	13.035	91	1166509	109.952	ug/l	99
75) 2-Chlorotoluene	13.123	91	703050	107.179	ug/l	99
76) 1,3,5-Trimethylbenzene	13.170	105	831794	110.018	ug/l	100
77) t-1,4-Dichloro-2-butene	12.735	75	107962	111.976	ug/l	98
78) 4-Chlorotoluene	13.217	91	713716	107.197	ug/l	99
79) tert-butylbenzene	13.435	119	697873	112.381	ug/l	99
80) 1,2,4-Trimethylbenzene	13.482	105	838873	112.327	ug/l	99
81) sec-Butylbenzene	13.611	105	983338	111.460	ug/l	98
82) p-Isopropyltoluene	13.723	119	829472	113.406	ug/l	99
83) 1,3-Dichlorobenzene	13.729	146	429389	105.881	ug/l	100
84) 1,4-Dichlorobenzene	13.811	146	423137	107.060	ug/l	99
85) n-Butylbenzene	14.053	91	713519	116.298	ug/l	98
86) Hexachloroethane	14.329	117	154986	106.440	ug/l	96
87) 1,2-Dichlorobenzene	14.106	146	401301	104.836	ug/l	100
88) 1,2-Dibromo-3-Chloropr...	14.717	75	56942	106.118	ug/l	97
89) 1,2,4-Trichlorobenzene	15.835	180	214927	114.647	ug/l	99
90) Hexachlorobutadiene	15.500	225	100252	102.912	ug/l	99
91) Naphthalene	15.635	128	719387	123.516	ug/l	98
92) 1,2,3-Trichlorobenzene	15.835	180	214927	114.647	ug/l	99

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

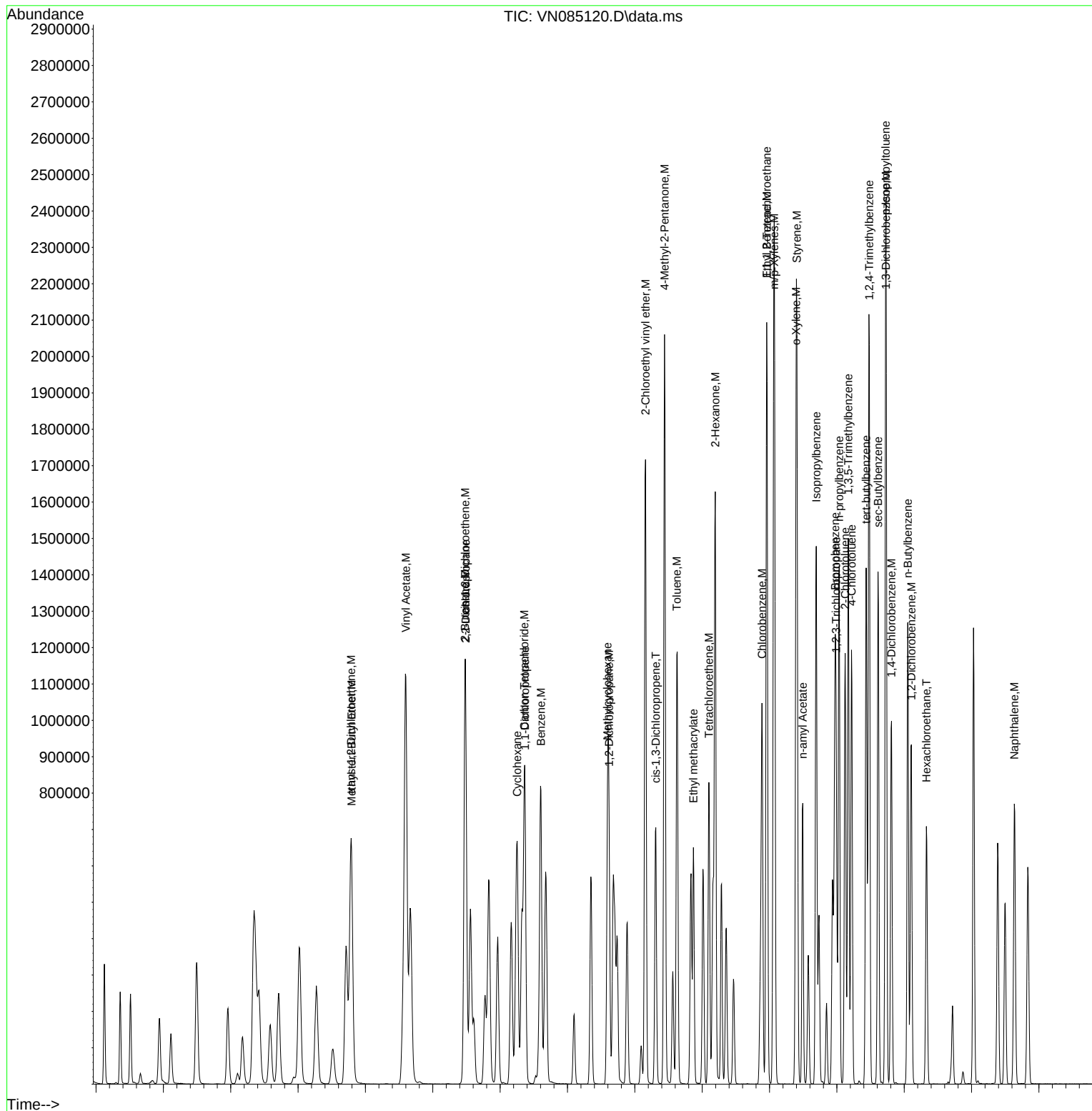
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Data File : VN085120.D  
Acq On    : 06 Dec 2024  11:13  
Operator  : JC\MD  
Sample    : VSTDICC100  
Misc      : 5.0mL/MSVOA_N/WATER  
ALS Vial  : 5      Sample Multiplier: 1
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Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 12/09/2024
Supervised By :Semsettin Yesilyurt 12/09/2024

Quant Time: Dec 06 22:30:38 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N120624W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Dec 06 22:19:40 2024
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120624\
 Data File : VN085121.D
 Acq On : 06 Dec 2024 11:37
 Operator : JC\MD
 Sample : VSTDICC150
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICC150

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 12/09/2024
 Supervised By :Semsettin Yesilyurt 12/09/2024

Quant Time: Dec 06 22:31:31 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N120624W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Dec 06 22:19:40 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	7.812	128	29869	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.094	114	165478	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.865	117	154258	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.577	65	72104	30.424	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery = 101.400%			
60) 4-Bromofluorobenzene	12.847	95	77038	30.183	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery = 100.600%			
63) Toluene-d8	10.565	98	210929	29.150	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery = 97.167%			
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.124	85	382696	160.147	ug/l	100
3) Chloromethane	2.359	50	336891	159.276	ug/l	96
4) Vinyl Chloride	2.512	62	337908	156.192	ug/l	98
5) Bromomethane	2.930	94	203330	148.033	ug/l	96
6) Chloroethane	3.106	64	209222	157.410	ug/l	100
7) Trichlorofluoromethane	3.489	101	564698	159.461	ug/l	98
8) Diethyl Ether	3.959	74	189430	168.881	ug/l	98
9) 1,1,2-Trichlorotrifluo...	4.371	101	311182	157.134	ug/l	98
10) 1,1-Dichloroethene	4.336	96	297605	163.607	ug/l	94
11) Methyl Iodide	4.589	142	437650	173.477	ug/l	96
12) Methyl Acetate	5.018	43	348950	162.608	ug/l	95
13) Acrolein	4.171	56	272433	873.598	ug/l	94
14) Acrylonitrile	5.712	53	742116	832.848	ug/l	97
15) Acetone	4.424	58	196952	815.641	ug/l	97
16) Carbon Disulfide	4.712	76	864628	159.023	ug/l	100
17) Allyl chloride	5.018	41	433507	166.552	ug/l	91
18) Methylene Chloride	5.271	84	313694	151.985	ug/l	97
19) trans-1,2-Dichloroethene	5.783	96	302760	160.130	ug/l	92
20) Diisopropyl ether	6.665	45	921058	161.244	ug/l	99
21) 1,1-Dichloroethane	6.565	63	551498	156.428	ug/l #	98
22) cis-1,2-Dichloroethene	7.483	96	353328	162.585	ug/l	99
23) tert-Butyl Alcohol	5.518	59	276979	866.490	ug/l #	100
24) Methyl tert-Butyl Ether	5.794	73	971837m	171.143	ug/l	
25) Chloroform	7.965	83	569561	154.206	ug/l	96
26) Cyclohexane	8.253	56	483028	166.394	ug/l #	93
29) 1,1-Dichloropropene	8.371	75	418388	156.686	ug/l	99
30) 2-Butanone	7.477	43	967143	789.269	ug/l	99
31) 2,2-Dichloropropane	7.488	77	524946	153.308	ug/l #	100
32) 1,1,1-Trichloroethane	8.165	97	539832	149.363	ug/l	99
33) Carbon Tetrachloride	8.359	117	490377	150.360	ug/l	96
34) Benzene	8.600	78	1259887	150.194	ug/l	97
35) Methacrylonitrile	7.777	41	215224	156.078	ug/l	95
36) 1,2-Dichloroethane	8.665	62	422140	147.830	ug/l	99
37) Trichloroethene	9.347	130	306812	153.593	ug/l	94
38) Methylcyclohexane	9.600	83	490389	168.903	ug/l	93
39) 1,2-Dichloropropane	9.618	63	304138	149.691	ug/l	95
40) Dibromomethane	9.706	93	218470	149.905	ug/l	98
41) Bromodichloromethane	9.888	83	469670	150.750	ug/l	96
42) Vinyl Acetate	6.600	43	3493830	814.821	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120624\
 Data File : VN085121.D
 Acq On : 06 Dec 2024 11:37
 Operator : JC\MD
 Sample : VSTDICC150
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 6 Sample Multiplier: 1

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC150

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 12/09/2024

Supervised By :Semsettin Yesilyurt 12/09/2024

Quant Time: Dec 06 22:31:31 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N120624W.M

Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS

QLast Update : Fri Dec 06 22:19:40 2024

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	7.553	43	382630	156.937	ug/l	96
44) Isopropyl Acetate	8.688	43	672392	158.696	ug/l	99
45) 1,4-Dioxane	9.694	88	111218	3147.777	ug/l	96
46) Methyl methacrylate	9.677	41	320862	165.471	ug/l	97
47) n-amyl Acetate	12.494	43	592642	166.246	ug/l	92
48) t-1,3-Dichloropropene	10.835	75	499133	163.202	ug/l	100
49) cis-1,3-Dichloropropene	10.312	75	525997	157.986	ug/l	98
50) 1,1,2-Trichloroethane	11.012	97	289001	147.159	ug/l	94
51) Ethyl methacrylate	10.871	69	506274	169.495	ug/l	96
52) 1,3-Dichloropropane	11.159	76	501665	152.638	ug/l	99
53) Dibromochloromethane	11.359	129	362326	151.395	ug/l	96
54) 1,2-Dibromoethane	11.471	107	305232	154.261	ug/l	99
55) 2-Chloroethyl vinyl ether	10.159	63	1112538	801.795	ug/l	99
56) Bromoform	12.576	173	249601	155.551	ug/l	98
58) 4-Methyl-2-Pentanone	10.441	43	1988082	789.691	ug/l	98
59) 2-Hexanone	11.194	43	1508817	790.966	ug/l	98
61) Tetrachloroethene	11.100	164	270825	144.976	ug/l	96
62) Toluene	10.629	91	1370241	152.311	ug/l	100
64) Chlorobenzene	11.888	112	858494	154.562	ug/l	98
65) 1,1,1,2-Tetrachloroethane	11.959	131	311301	150.134	ug/l	98
66) Ethyl Benzene	11.959	91	1573924	164.874	ug/l	98
67) m/p-Xylenes	12.071	106	1195807	325.683	ug/l	99
68) o-Xylene	12.394	106	562377	163.091	ug/l	100
69) Styrene	12.406	104	976478	166.883	ug/l	99
70) Isopropylbenzene	12.694	105	1467994	165.057	ug/l	99
71) 1,1,2,2-Tetrachloroethane	12.935	83	401707	148.393	ug/l	98
72) 1,2,3-Trichloropropane	12.988	75	386819m	144.654	ug/l	
73) Bromobenzene	12.976	156	347939	156.185	ug/l	99
74) n-propylbenzene	13.035	91	1746230	163.317	ug/l	99
75) 2-Chlorotoluene	13.123	91	1057392	159.945	ug/l	100
76) 1,3,5-Trimethylbenzene	13.170	105	1241282	162.904	ug/l	100
77) t-1,4-Dichloro-2-butene	12.735	75	163318	168.075	ug/l	94
78) 4-Chlorotoluene	13.218	91	1062762	158.383	ug/l	99
79) tert-butylbenzene	13.435	119	1033507	165.137	ug/l	98
80) 1,2,4-Trimethylbenzene	13.482	105	1230594	163.500	ug/l	100
81) sec-Butylbenzene	13.612	105	1466428	164.927	ug/l	98
82) p-Isopropyltoluene	13.729	119	1249133	169.455	ug/l	99
83) 1,3-Dichlorobenzene	13.729	146	629183	153.943	ug/l	99
84) 1,4-Dichlorobenzene	13.812	146	630821	158.368	ug/l	99
85) n-Butylbenzene	14.053	91	1076317	174.069	ug/l	98
86) Hexachloroethane	14.329	117	234799	160.002	ug/l	98
87) 1,2-Dichlorobenzene	14.106	146	591716	153.379	ug/l	99
88) 1,2-Dibromo-3-Chloropr...	14.717	75	89112	164.781	ug/l	96
89) 1,2,4-Trichlorobenzene	15.835	180	332292	175.876	ug/l	98
90) Hexachlorobutadiene	15.500	225	150844	153.643	ug/l	98
91) Naphthalene	15.635	128	1116289	190.174	ug/l	99
92) 1,2,3-Trichlorobenzene	15.835	180	332292	175.876	ug/l	98

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

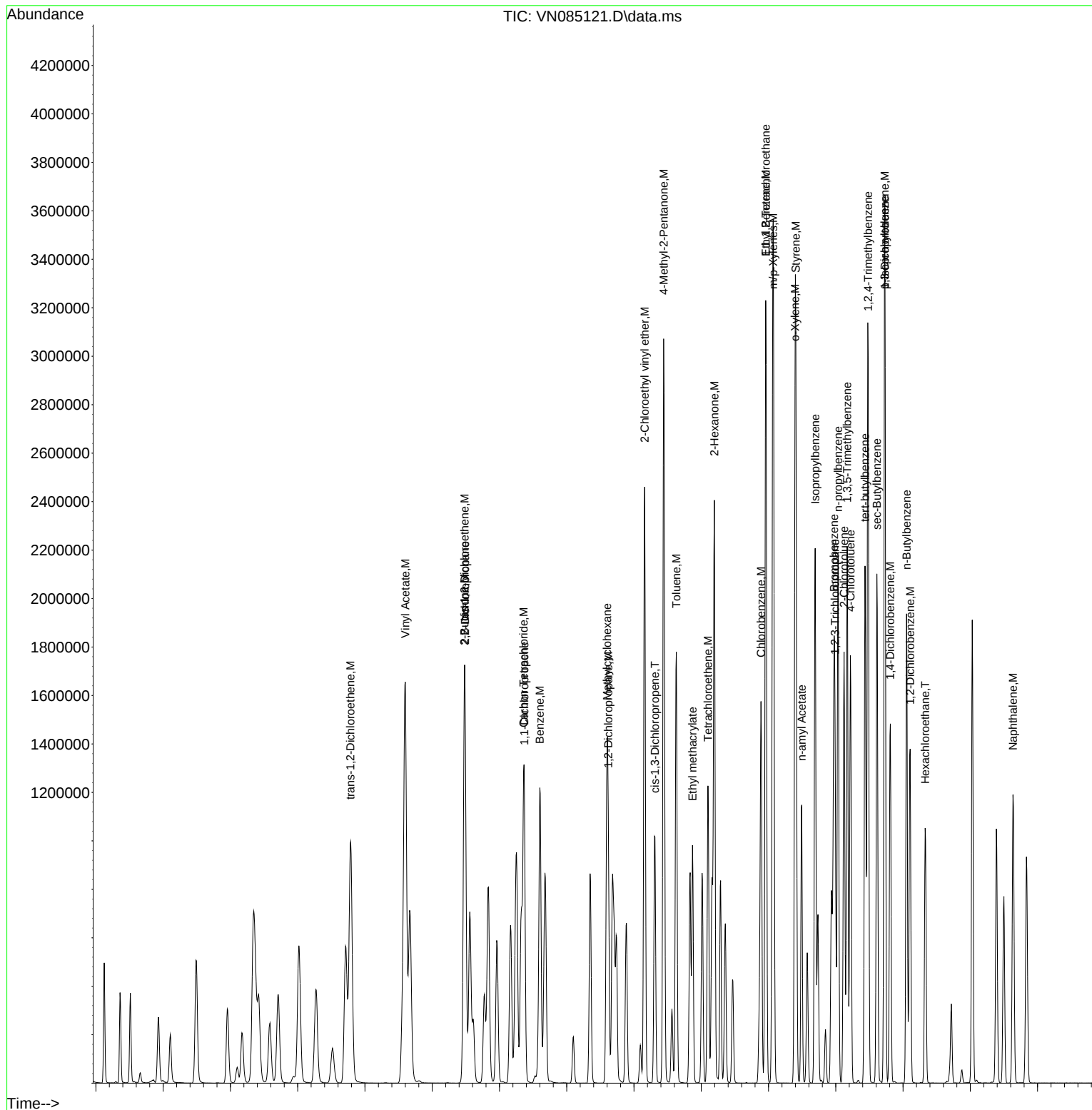
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120624\
Data File : VN085121.D
Acq On : 06 Dec 2024 11:37
Operator : JC\MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 12/09/2024
Supervised By :Semsettin Yesilyurt 12/09/2024

Quant Time: Dec 06 22:31:31 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N120624W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Dec 06 22:19:40 2024
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120624\
 Data File : VN085123.D
 Acq On : 06 Dec 2024 12:28
 Operator : JC\MD
 Sample : VSTDICV020
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 ICVVN120624

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 12/09/2024
 Supervised By :Semsettin Yesilyurt 12/09/2024

Quant Time: Dec 06 23:06:11 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N120624W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Dec 06 22:50:42 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	7.818	128	34320	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.100	114	185717	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.865	117	167596	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.577	65	80315	29.493	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery =	98.300%		
60) 4-Bromofluorobenzene	12.847	95	85871	30.966	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery =	103.233%		
63) Toluene-d8	10.565	98	238389	30.323	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery =	101.067%		
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	2.124	85	60791	22.140	ug/l	99
3) Chloromethane	2.359	50	54189	22.297	ug/l	94
4) Vinyl Chloride	2.512	62	53524	21.532	ug/l	96
5) Bromomethane	2.965	94	37678	23.874	ug/l	100
6) Chloroethane	3.124	64	34096	22.326	ug/l	96
7) Trichlorofluoromethane	3.500	101	88313	21.704	ug/l	97
8) Diethyl Ether	3.959	74	28800	22.346	ug/l	97
9) 1,1,2-Trichlorotrifluo...	4.377	101	50308	22.109	ug/l	97
10) 1,1-Dichloroethene	4.342	96	45812	21.919	ug/l	98
11) Methyl Iodide	4.589	142	63446	21.887	ug/l	96
12) Methyl Acetate	5.018	43	53958	21.883	ug/l	91
13) Acrolein	4.177	56	29807	83.185	ug/l	97
14) Acrylonitrile	5.718	53	111980	109.372	ug/l	96
15) Acetone	4.424	58	29118	104.948	ug/l	97
16) Carbon Disulfide	4.712	76	137866	22.068	ug/l	97
17) Allyl chloride	5.024	41	65461	21.888	ug/l	94
18) Methylene Chloride	5.283	84	49652	20.936	ug/l	94
19) trans-1,2-Dichloroethene	5.783	96	47495	21.862	ug/l	96
20) Diisopropyl ether	6.665	45	143427	21.853	ug/l	98
21) 1,1-Dichloroethane	6.565	63	88356	21.811	ug/l #	97
22) cis-1,2-Dichloroethene	7.488	96	56787	22.742	ug/l	98
23) tert-Butyl Alcohol	5.512	59	41094	111.884	ug/l #	100
24) Methyl tert-Butyl Ether	5.794	73	145319	22.254	ug/l #	76
25) Chloroform	7.965	83	91959	21.669	ug/l	96
26) Cyclohexane	8.259	56	75227	22.553	ug/l	97
29) 1,1-Dichloropropene	8.371	75	65505	21.858	ug/l	99
30) 2-Butanone	7.483	43	147216	107.048	ug/l	98
31) 2,2-Dichloropropane	7.488	77	82584	21.490	ug/l #	100
32) 1,1,1-Trichloroethane	8.165	97	86299	21.275	ug/l	99
33) Carbon Tetrachloride	8.359	117	76333	20.855	ug/l	95
34) Benzene	8.606	78	199228	21.162	ug/l	94
35) Methacrylonitrile	7.771	41	34766	22.464	ug/l	97
36) 1,2-Dichloroethane	8.665	62	68920	21.505	ug/l	100
37) Trichloroethene	9.347	130	48331	21.558	ug/l	92
38) Methylcyclohexane	9.600	83	71750	22.020	ug/l	95
39) 1,2-Dichloropropane	9.618	63	47583	20.867	ug/l	94
40) Dibromomethane	9.712	93	34556	21.127	ug/l	98
41) Bromodichloromethane	9.888	83	73839	21.117	ug/l	94
42) Vinyl Acetate	6.600	43	554646	115.256	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120624\
 Data File : VN085123.D
 Acq On : 06 Dec 2024 12:28
 Operator : JC\MD
 Sample : VSTDICV020
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 ICVVN120624

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 12/09/2024
 Supervised By :Semsettin Yesilyurt 12/09/2024

Quant Time: Dec 06 23:06:11 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N120624W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Dec 06 22:50:42 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	7.559	43	62407	22.807	ug/l	93
44) Isopropyl Acetate	8.682	43	103521	21.770	ug/l	100
45) 1,4-Dioxane	9.694	88	17346	437.438	ug/l	96
46) Methyl methacrylate	9.677	41	47854	21.989	ug/l	96
47) n-amyl Acetate	12.488	43	87700	21.920	ug/l	97
48) t-1,3-Dichloropropene	10.835	75	72633	21.161	ug/l	99
49) cis-1,3-Dichloropropene	10.312	75	79711	21.333	ug/l	98
50) 1,1,2-Trichloroethane	11.012	97	47258	21.441	ug/l	95
51) Ethyl methacrylate	10.871	69	74129	22.113	ug/l	97
52) 1,3-Dichloropropane	11.159	76	79252	21.486	ug/l	99
53) Dibromochloromethane	11.353	129	55601	20.701	ug/l	93
54) 1,2-Dibromoethane	11.465	107	47513	21.396	ug/l	99
55) 2-Chloroethyl vinyl ether	10.159	63	120953	77.670	ug/l	99
56) Bromoform	12.576	173	37077	20.588	ug/l	96
58) 4-Methyl-2-Pentanone	10.441	43	305762	111.787	ug/l	99
59) 2-Hexanone	11.194	43	233377	112.607	ug/l	98
61) Tetrachloroethene	11.100	164	45248	22.294	ug/l	95
62) Toluene	10.629	91	214790	21.975	ug/l	99
64) Chlorobenzene	11.888	112	133437	22.112	ug/l	100
65) 1,1,1,2-Tetrachloroethane	11.959	131	48941	21.725	ug/l	98
66) Ethyl Benzene	11.965	91	231289	22.300	ug/l	96
67) m/p-Xylenes	12.070	106	182990	45.872	ug/l	99
68) o-Xylene	12.394	106	84266	22.492	ug/l	99
69) Styrene	12.412	104	145082	22.822	ug/l	99
70) Isopropylbenzene	12.694	105	217804	22.540	ug/l	99
71) 1,1,2,2-Tetrachloroethane	12.935	83	65321	22.210	ug/l	98
72) 1,2,3-Trichloropropane	12.988	75	68116m	23.445	ug/l	
73) Bromobenzene	12.976	156	53832	22.241	ug/l	99
74) n-propylbenzene	13.035	91	261027	22.470	ug/l	99
75) 2-Chlorotoluene	13.123	91	161221	22.446	ug/l	99
76) 1,3,5-Trimethylbenzene	13.170	105	189105	22.843	ug/l	99
77) t-1,4-Dichloro-2-butene	12.735	75	22735	21.535	ug/l	99
78) 4-Chlorotoluene	13.217	91	163711	22.456	ug/l	100
79) tert-butylbenzene	13.435	119	152793	22.471	ug/l	98
80) 1,2,4-Trimethylbenzene	13.482	105	188016	22.992	ug/l	100
81) sec-Butylbenzene	13.612	105	221463	22.925	ug/l	99
82) p-Isopropyltoluene	13.729	119	181815	22.702	ug/l	100
83) 1,3-Dichlorobenzene	13.729	146	96640	21.763	ug/l	98
84) 1,4-Dichlorobenzene	13.812	146	98028	22.651	ug/l	99
85) n-Butylbenzene	14.053	91	148587	22.118	ug/l	98
86) Hexachloroethane	14.329	117	34505	21.642	ug/l	97
87) 1,2-Dichlorobenzene	14.106	146	92278	22.016	ug/l	99
88) 1,2-Dibromo-3-Chloropr...	14.717	75	12928	22.003	ug/l	98
89) 1,2,4-Trichlorobenzene	15.835	180	47265	23.026	ug/l	97
90) Hexachlorobutadiene	15.500	225	24662	23.121	ug/l	98
91) Naphthalene	15.641	128	145950	22.886	ug/l	98
92) 1,2,3-Trichlorobenzene	15.835	180	47265	23.026	ug/l	97

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120624\
Data File : VN085123.D
Acq On : 06 Dec 2024 12:28
Operator : JC\MD
Sample : VSTDICV020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :

MSVOA_N

ClientSampleId :

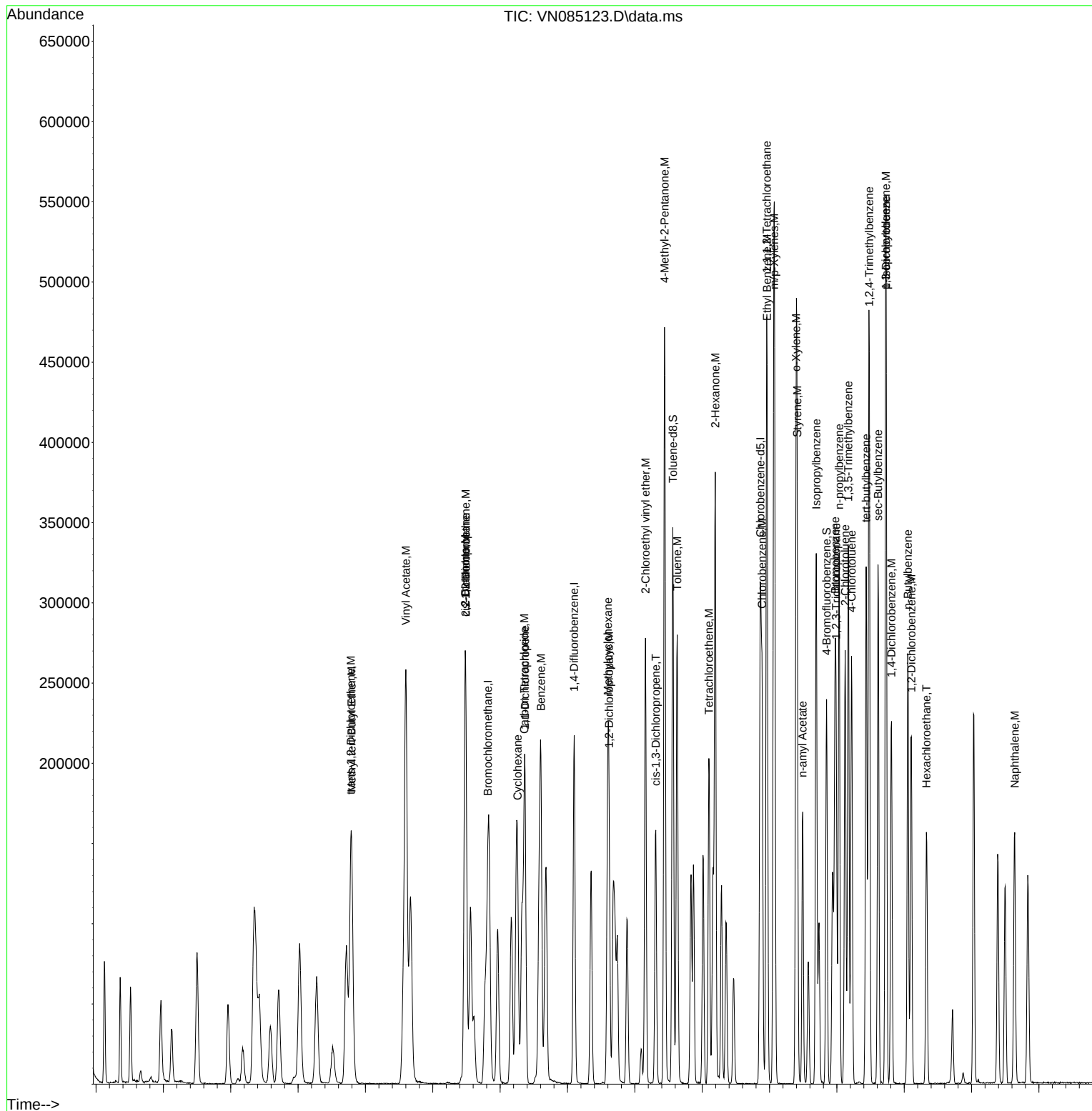
ICVVN120624

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 12/09/2024
Supervised By :Semsettin Yesilyurt 12/09/2024

Quant Time: Dec 06 23:06:11 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N120624W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Dec 06 22:50:42 2024
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120624\
 Data File : VN085123.D
 Acq On : 06 Dec 2024 12:28
 Operator : JC\MD
 Sample : VSTDICV020
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 ICVVN120624

Quant Time: Dec 06 23:06:11 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N120624W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Dec 06 22:50:42 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	110	0.00
2 M	Dichlorodifluoromethane	2.400	2.657	-10.7	118	0.00
3 M	Chloromethane	2.124	2.368	-11.5	124	0.00
4 M	Vinyl Chloride	2.173	2.339	-7.6	120	0.00
5 M	Bromomethane	1.380	1.647	-19.3	136	0.00
6 M	Chloroethane	1.335	1.490	-11.6	126	0.00
7 M	Trichlorofluoromethane	3.557	3.860	-8.5	122	0.00
8 T	Diethyl Ether	1.127	1.259	-11.7	132	0.00
9	1,1,2-Trichlorotrifluoroeth	1.989	2.199	-10.6	125	0.00
10 M	1,1-Dichloroethene	1.827	2.002	-9.6	125	0.00
11	Methyl Iodide	2.534	2.773	-9.4	130	0.00
12	Methyl Acetate	2.155	2.358	-9.4	126	0.00
13 M	Acrolein	0.313	0.261	16.6	112	0.00
14 M	Acrylonitrile	0.895	0.979	-9.4	128	0.00
15 M	Acetone	0.243	0.255	-4.9	122	0.00
16 M	Carbon Disulfide	5.461	6.026	-10.3	123	0.00
17	Allyl chloride	2.614	2.861	-9.4	131	0.00
18 M	Methylene Chloride	2.073	2.170	-4.7	118	0.01
19 M	trans-1,2-Dichloroethene	1.899	2.076	-9.3	127	0.00
20 T	Diisopropyl ether	5.737	6.269	-9.3	121	0.00
21 M	1,1-Dichloroethane	3.541	3.862	-9.1	124	0.00
22 M	cis-1,2-Dichloroethene	2.183	2.482	-13.7	128	0.00
23 M	tert-Butyl Alcohol	0.321	0.359	-11.8	134	0.00
24 M	Methyl tert-Butyl Ether	5.708	6.351	-11.3	128	0.00
25 M	Chloroform	3.710	4.019	-8.3	121	0.00
26	Cyclohexane	2.916	3.288	-12.8	123	0.00
27 s	1,2-Dichloroethane-d4	2.380	2.340	1.7	107	0.00
28 I	1,4-Difluorobenzene	1.000	1.000	0.0	114	0.00
29	1,1-Dichloropropene	0.484	0.529	-9.3	125	0.00
30 M	2-Butanone	0.222	0.238	-7.2	125	0.00
31	2,2-Dichloropropane	0.621	0.667	-7.4	126	0.00
32 M	1,1,1-Trichloroethane	0.655	0.697	-6.4	120	0.00
33 M	Carbon Tetrachloride	0.591	0.617	-4.4	120	0.00
34 M	Benzene	1.521	1.609	-5.8	123	0.00
35	Methacrylonitrile	0.250	0.281	-12.4	128	0.00
36 M	1,2-Dichloroethane	0.518	0.557	-7.5	126	0.00
37 M	Trichloroethene	0.362	0.390	-7.7	125	0.00
38	Methylcyclohexane	0.526	0.580	-10.3	138	0.00
39 M	1,2-Dichloropropane	0.368	0.384	-4.3	119	0.00
40	Dibromomethane	0.264	0.279	-5.7	120	0.00
41 M	Bromodichloromethane	0.565	0.596	-5.5	123	0.00
42 M	Vinyl Acetate	0.777	0.896	-15.3	137	0.00
43	Ethyl Acetate	0.442	0.504	-14.0	143	0.00
44	Isopropyl Acetate	0.768	0.836	-8.9	128	0.00
45 T	1,4-Dioxane	0.006	0.007	-16.7	124	0.00
46	Methyl methacrylate	0.352	0.387	-9.9	129	0.00
47	n-amyl Acetate	0.646	0.708	-9.6	131	0.00
48 M	t-1,3-Dichloropropene	0.554	0.587	-6.0	130	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120624\
 Data File : VN085123.D
 Acq On : 06 Dec 2024 12:28
 Operator : JC\MD
 Sample : VSTDICV020
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 ICVVN120624

Quant Time: Dec 06 23:06:11 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N120624W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Dec 06 22:50:42 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	0.604	0.644	-6.6	125	0.00
50 M	1,1,2-Trichloroethane	0.356	0.382	-7.3	123	0.00
51	Ethyl methacrylate	0.542	0.599	-10.5	135	0.00
52	1,3-Dichloropropane	0.596	0.640	-7.4	125	0.00
53 M	Dibromochloromethane	0.434	0.449	-3.5	121	0.00
54 M	1,2-Dibromoethane	0.359	0.384	-7.0	126	0.00
55 M	2-Chloroethyl vinyl ether	0.252	0.195	22.6	90	0.00
56 M	Bromoform	0.291	0.299	-2.7	125	0.00
57 I	Chlorobenzene-d5	1.000	1.000	0.0	110	0.00
58 M	4-Methyl-2-Pentanone	0.490	0.547	-11.6	122	0.00
59 M	2-Hexanone	0.371	0.418	-12.7	123	0.00
60 S	4-Bromofluorobenzene	0.496	0.512	-3.2	114	0.00
61 M	Tetrachloroethene	0.363	0.405	-11.6	125	0.00
62 M	Toluene	1.750	1.922	-9.8	124	0.00
63 S	Toluene-d8	1.407	1.422	-1.1	109	0.00
64 M	Chlorobenzene	1.080	1.194	-10.6	125	0.00
65	1,1,1,2-Tetrachloroethane	0.403	0.438	-8.7	126	0.00
66 M	Ethyl Benzene	1.857	2.070	-11.5	131	0.00
67 M	m/p-Xylenes	0.714	0.819	-14.7	127	0.00
68 M	o-Xylene	0.671	0.754	-12.4	129	0.00
69 M	Styrene	1.138	1.298	-14.1	131	0.00
70	Isopropylbenzene	1.730	1.949	-12.7	130	0.00
71 M	1,1,2,2-Tetrachloroethane	0.526	0.585	-11.2	121	0.00
72	1,2,3-Trichloropropane	0.520	0.610	-17.3	126	0.00
73	Bromobenzene	0.433	0.482	-11.3	127	0.00
74	n-propylbenzene	2.079	2.336	-12.4	128	0.00
75	2-Chlorotoluene	1.286	1.443	-12.2	125	0.00
76	1,3,5-Trimethylbenzene	1.482	1.693	-14.2	130	0.00
77	t-1,4-Dichloro-2-butene	0.189	0.203	-7.4	126	0.00
78	4-Chlorotoluene	1.305	1.465	-12.3	128	0.00
79	tert-butylbenzene	1.217	1.368	-12.4	129	0.00
80	1,2,4-Trimethylbenzene	1.464	1.683	-15.0	130	0.00
81	sec-Butylbenzene	1.729	1.982	-14.6	131	0.00
82	p-Isopropyltoluene	1.434	1.627	-13.5	131	0.00
83 M	1,3-Dichlorobenzene	0.795	0.865	-8.8	125	0.00
84 M	1,4-Dichlorobenzene	0.775	0.877	-13.2	131	0.00
85	n-Butylbenzene	1.203	1.330	-10.6	135	0.00
86 T	Hexachloroethane	0.285	0.309	-8.4	124	0.00
87 M	1,2-Dichlorobenzene	0.750	0.826	-10.1	126	0.00
88	1,2-Dibromo-3-Chloropropane	0.105	0.116	-10.5	124	0.00
89	1,2,4-Trichlorobenzene	0.367	0.423	-15.3	137	0.00
90	Hexachlorobutadiene	0.191	0.221	-15.7	133	0.00
91 M	Naphthalene	1.142	1.306	-14.4	149	0.00
92	1,2,3-Trichlorobenzene	0.367	0.423	-15.3	137	0.00

(#) = Out of Range

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120624\
 Data File : VN085123.D
 Acq On : 06 Dec 2024 12:28
 Operator : JC\MD
 Sample : VSTDICV020
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 ICVVN120624

Quant Time: Dec 06 23:06:11 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N120624W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Dec 06 22:50:42 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	110	0.00
2 M	Dichlorodifluoromethane	20.000	22.140	-10.7	118	0.00
3 M	Chloromethane	20.000	22.297	-11.5	124	0.00
4 M	Vinyl Chloride	20.000	21.532	-7.7	120	0.00
5 M	Bromomethane	20.000	23.874	-19.4	136	0.00
6 M	Chloroethane	20.000	22.326	-11.6	126	0.00
7 M	Trichlorofluoromethane	20.000	21.704	-8.5	122	0.00
8 T	Diethyl Ether	20.000	22.346	-11.7	132	0.00
9	1,1,2-Trichlorotrifluoroeth	20.000	22.109	-10.5	125	0.00
10 M	1,1-Dichloroethene	20.000	21.919	-9.6	125	0.00
11	Methyl Iodide	20.000	21.887	-9.4	130	0.00
12	Methyl Acetate	20.000	21.883	-9.4	126	0.00
13 M	Acrolein	100.000	83.185	16.8	112	0.00
14 M	Acrylonitrile	100.000	109.372	-9.4	128	0.00
15 M	Acetone	100.000	104.948	-4.9	122	0.00
16 M	Carbon Disulfide	20.000	22.068	-10.3	123	0.00
17	Allyl chloride	20.000	21.888	-9.4	131	0.00
18 M	Methylene Chloride	20.000	20.936	-4.7	118	0.01
19 M	trans-1,2-Dichloroethene	20.000	21.862	-9.3	127	0.00
20 T	Diisopropyl ether	20.000	21.853	-9.3	121	0.00
21 M	1,1-Dichloroethane	20.000	21.811	-9.1	124	0.00
22 M	cis-1,2-Dichloroethene	20.000	22.742	-13.7	128	0.00
23 M	tert-Butyl Alcohol	100.000	111.884	-11.9	134	0.00
24 M	Methyl tert-Butyl Ether	20.000	22.254	-11.3	128	0.00
25 M	Chloroform	20.000	21.669	-8.3	121	0.00
26	Cyclohexane	20.000	22.553	-12.8	123	0.00
27 s	1,2-Dichloroethane-d4	30.000	29.493	1.7	107	0.00
28 I	1,4-Difluorobenzene	30.000	30.000	0.0	114	0.00
29	1,1-Dichloropropene	20.000	21.858	-9.3	125	0.00
30 M	2-Butanone	100.000	107.048	-7.0	125	0.00
31	2,2-Dichloropropane	20.000	21.490	-7.4	126	0.00
32 M	1,1,1-Trichloroethane	20.000	21.275	-6.4	120	0.00
33 M	Carbon Tetrachloride	20.000	20.855	-4.3	120	0.00
34 M	Benzene	20.000	21.162	-5.8	123	0.00
35	Methacrylonitrile	20.000	22.464	-12.3	128	0.00
36 M	1,2-Dichloroethane	20.000	21.505	-7.5	126	0.00
37 M	Trichloroethene	20.000	21.558	-7.8	125	0.00
38	Methylcyclohexane	20.000	22.020	-10.1	138	0.00
39 M	1,2-Dichloropropane	20.000	20.867	-4.3	119	0.00
40	Dibromomethane	20.000	21.127	-5.6	120	0.00
41 M	Bromodichloromethane	20.000	21.117	-5.6	123	0.00
42 M	Vinyl Acetate	100.000	115.256	-15.3	137	0.00
43	Ethyl Acetate	20.000	22.807	-14.0	143	0.00
44	Isopropyl Acetate	20.000	21.770	-8.8	128	0.00
45 T	1,4-Dioxane	400.000	437.438	-9.4	124	0.00
46	Methyl methacrylate	20.000	21.989	-9.9	129	0.00
47	n-amyl Acetate	20.000	21.920	-9.6	131	0.00
48 M	t-1,3-Dichloropropene	20.000	21.161	-5.8	130	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120624\
 Data File : VN085123.D
 Acq On : 06 Dec 2024 12:28
 Operator : JC\MD
 Sample : VSTDICV020
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 ICVVN120624

Quant Time: Dec 06 23:06:11 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N120624W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Dec 06 22:50:42 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	21.333	-6.7	125	0.00
50 M	1,1,2-Trichloroethane	20.000	21.441	-7.2	123	0.00
51	Ethyl methacrylate	20.000	22.113	-10.6	135	0.00
52	1,3-Dichloropropane	20.000	21.486	-7.4	125	0.00
53 M	Dibromochloromethane	20.000	20.701	-3.5	121	0.00
54 M	1,2-Dibromoethane	20.000	21.396	-7.0	126	0.00
55 M	2-Chloroethyl vinyl ether	100.000	77.670	22.3	90	0.00
56 M	Bromoform	20.000	20.588	-2.9	125	0.00
57 I	Chlorobenzene-d5	30.000	30.000	0.0	110	0.00
58 M	4-Methyl-2-Pentanone	100.000	111.787	-11.8	122	0.00
59 M	2-Hexanone	100.000	112.607	-12.6	123	0.00
60 S	4-Bromofluorobenzene	30.000	30.966	-3.2	114	0.00
61 M	Tetrachloroethene	20.000	22.294	-11.5	125	0.00
62 M	Toluene	20.000	21.975	-9.9	124	0.00
63 S	Toluene-d8	30.000	30.323	-1.1	109	0.00
64 M	Chlorobenzene	20.000	22.112	-10.6	125	0.00
65	1,1,1,2-Tetrachloroethane	20.000	21.725	-8.6	126	0.00
66 M	Ethyl Benzene	20.000	22.300	-11.5	131	0.00
67 M	m/p-Xylenes	40.000	45.872	-14.7	127	0.00
68 M	o-Xylene	20.000	22.492	-12.5	129	0.00
69 M	Styrene	20.000	22.822	-14.1	131	0.00
70	Isopropylbenzene	20.000	22.540	-12.7	130	0.00
71 M	1,1,2,2-Tetrachloroethane	20.000	22.210	-11.1	121	0.00
72	1,2,3-Trichloropropane	20.000	23.445	-17.2	126	0.00
73	Bromobenzene	20.000	22.241	-11.2	127	0.00
74	n-propylbenzene	20.000	22.470	-12.3	128	0.00
75	2-Chlorotoluene	20.000	22.446	-12.2	125	0.00
76	1,3,5-Trimethylbenzene	20.000	22.843	-14.2	130	0.00
77	t-1,4-Dichloro-2-butene	20.000	21.535	-7.7	126	0.00
78	4-Chlorotoluene	20.000	22.456	-12.3	128	0.00
79	tert-butylbenzene	20.000	22.471	-12.4	129	0.00
80	1,2,4-Trimethylbenzene	20.000	22.992	-15.0	130	0.00
81	sec-Butylbenzene	20.000	22.925	-14.6	131	0.00
82	p-Isopropyltoluene	20.000	22.702	-13.5	131	0.00
83 M	1,3-Dichlorobenzene	20.000	21.763	-8.8	125	0.00
84 M	1,4-Dichlorobenzene	20.000	22.651	-13.3	131	0.00
85	n-Butylbenzene	20.000	22.118	-10.6	135	0.00
86 T	Hexachloroethane	20.000	21.642	-8.2	124	0.00
87 M	1,2-Dichlorobenzene	20.000	22.016	-10.1	126	0.00
88	1,2-Dibromo-3-Chloropropane	20.000	22.003	-10.0	124	0.00
89	1,2,4-Trichlorobenzene	20.000	23.026	-15.1	137	0.00
90	Hexachlorobutadiene	20.000	23.121	-15.6	133	0.00
91 M	Naphthalene	20.000	22.886	-14.4	149	0.00
92	1,2,3-Trichlorobenzene	20.000	23.026	-15.1	137	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: TRIS02

Lab Code: CHEM Case No.: P5044 SAS No.: P5044 SDG No.: P5044

Instrument ID: MSVOA_N Calibration Date/Time: 12/06/2024 10:26

Lab File ID: VN085118.D Init. Calib. Date(s): 12/06/2024 12/06/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 10:02 11:37

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

COMPOUND	RRF	RRF020	MIN RRF	%D	MAX%D
Ethyl Acetate	0.442	0.404		-8.6	
Isopropyl Acetate	0.768	0.746		-2.87	
Acetone	0.243	0.228		-6.17	
Methylene Chloride	2.073	2.012		-2.94	
1,2-Dichloroethane-d4	2.380	2.393		0.55	
Toluene-d8	1.407	1.443		2.56	
4-Bromofluorobenzene	0.496	0.495		-0.2	
n-amyl Acetate	0.646	0.619		-4.18	

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\VN120624\
 Data File : VN085118.D
 Acq On : 06 Dec 2024 10:26
 Operator : JC\MD
 Sample : VSTDICCC020
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICCC020

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 12/09/2024
 Supervised By :Semsettin Yesilyurt 12/09/2024

Quant Time: Dec 06 22:28:56 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N120624W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Dec 06 22:19:40 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	7.812	128	31263	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.100	114	162398	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.865	117	151793	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.577	65	74804	30.155	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery = 100.533%			
60) 4-Bromofluorobenzene	12.847	95	75101	29.902	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery = 99.667%			
63) Toluene-d8	10.565	98	218988	30.755	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery = 102.533%			
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	2.124	85	51416	20.557	ug/l	100
3) Chloromethane	2.359	50	43625	19.705	ug/l	100
4) Vinyl Chloride	2.512	62	44749	19.762	ug/l	100
5) Bromomethane	2.965	94	27801	19.338	ug/l	100
6) Chloroethane	3.124	64	27130	19.501	ug/l	100
7) Trichlorofluoromethane	3.500	101	72134	19.461	ug/l	100
8) Diethyl Ether	3.959	74	21832	18.596	ug/l	100
9) 1,1,2-Trichlorotrifluo...	4.371	101	40093	19.343	ug/l	100
10) 1,1-Dichloroethene	4.342	96	36518	19.181	ug/l	100
11) Methyl Iodide	4.589	142	48887	18.514	ug/l	100
12) Methyl Acetate	5.018	43	42971	19.131	ug/l	100
13) Acrolein	4.183	56	26615	81.540	ug/l	100
14) Acrylonitrile	5.718	53	87191	93.488	ug/l	100
15) Acetone	4.424	58	23800	94.168	ug/l	100
16) Carbon Disulfide	4.712	76	111875	19.659	ug/l	100
17) Allyl chloride	5.024	41	49995	18.351	ug/l	100
18) Methylene Chloride	5.271	84	41937	19.412	ug/l	100
19) trans-1,2-Dichloroethene	5.783	96	37486	18.942	ug/l	100
20) Diisopropyl ether	6.665	45	118238	19.776	ug/l	100
21) 1,1-Dichloroethane	6.565	63	71204	19.296	ug/l	100
22) cis-1,2-Dichloroethene	7.488	96	44288	19.471	ug/l	100
23) tert-Butyl Alcohol	5.512	59	30593	91.438	ug/l #	100
24) Methyl tert-Butyl Ether	5.794	73	113672	19.125	ug/l	100
25) Chloroform	7.959	83	75756	19.596	ug/l	100
26) Cyclohexane	8.253	56	60954	20.061	ug/l	100
29) 1,1-Dichloropropene	8.371	75	52226	19.930	ug/l	100
30) 2-Butanone	7.483	43	117537	97.739	ug/l	100
31) 2,2-Dichloropropane	7.488	77	65781	19.575	ug/l #	100
32) 1,1,1-Trichloroethane	8.171	97	71977	20.293	ug/l	100
33) Carbon Tetrachloride	8.359	117	63567	19.861	ug/l	100
34) Benzene	8.606	78	162502	19.740	ug/l	100
35) Methacrylonitrile	7.777	41	27120	20.040	ug/l	100
36) 1,2-Dichloroethane	8.665	62	54631	19.494	ug/l	100
37) Trichloroethene	9.353	130	38555	19.667	ug/l	100
38) Methylcyclohexane	9.600	83	52032	18.261	ug/l	100
39) 1,2-Dichloropropane	9.618	63	40007	20.064	ug/l	100
40) Dibromomethane	9.706	93	28813	20.145	ug/l	100
41) Bromodichloromethane	9.882	83	60013	19.628	ug/l	100
42) Vinyl Acetate	6.600	43	404546	96.136	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120624\
 Data File : VN085118.D
 Acq On : 06 Dec 2024 10:26
 Operator : JC\MD
 Sample : VSTDICCC020
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICCC020

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 12/09/2024
 Supervised By :Semsettin Yesilyurt 12/09/2024

Quant Time: Dec 06 22:28:56 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N120624W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Dec 06 22:19:40 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	7.559	43	43730	18.276	ug/l	100
44) Isopropyl Acetate	8.688	43	80717	19.412	ug/l	100
45) 1,4-Dioxane	9.694	88	13988	403.408	ug/l	100
46) Methyl methacrylate	9.682	41	37174	19.535	ug/l	100
47) n-amyl Acetate	12.494	43	67009	19.154	ug/l	100
48) t-1,3-Dichloropropene	10.835	75	55998	18.657	ug/l	100
49) cis-1,3-Dichloropropene	10.312	75	63845	19.540	ug/l	100
50) 1,1,2-Trichloroethane	11.012	97	38466	19.958	ug/l	100
51) Ethyl methacrylate	10.871	69	54805	18.696	ug/l	100
52) 1,3-Dichloropropane	11.159	76	63330	19.634	ug/l	100
53) Dibromochloromethane	11.353	129	46068	19.614	ug/l	100
54) 1,2-Dibromoethane	11.465	107	37625	19.376	ug/l	100
55) 2-Chloroethyl vinyl ether	10.159	63	133977	98.387	ug/l	100
56) Bromoform	12.576	173	29780	18.911	ug/l	100
58) 4-Methyl-2-Pentanone	10.441	43	249951	100.896	ug/l	100
59) 2-Hexanone	11.194	43	190003	101.223	ug/l	100
61) Tetrachloroethene	11.100	164	36183	19.684	ug/l	100
62) Toluene	10.629	91	173344	19.581	ug/l	100
64) Chlorobenzene	11.888	112	106855	19.550	ug/l	100
65) 1,1,1,2-Tetrachloroethane	11.959	131	38831	19.032	ug/l	100
66) Ethyl Benzene	11.965	91	176006	18.737	ug/l	100
67) m/p-Xylenes	12.070	106	144263	39.929	ug/l	100
68) o-Xylene	12.394	106	65568	19.324	ug/l	100
69) Styrene	12.412	104	111060	19.289	ug/l	100
70) Isopropylbenzene	12.694	105	167624	19.153	ug/l	100
71) 1,1,2,2-Tetrachloroethane	12.935	83	53829	20.208	ug/l	100
72) 1,2,3-Trichloropropane	12.994	75	53975m	20.512	ug/l	
73) Bromobenzene	12.976	156	42513	19.393	ug/l	100
74) n-propylbenzene	13.035	91	204446	19.431	ug/l	100
75) 2-Chlorotoluene	13.123	91	128581	19.766	ug/l	100
76) 1,3,5-Trimethylbenzene	13.170	105	145824	19.449	ug/l	100
77) t-1,4-Dichloro-2-butene	12.735	75	18073	18.901	ug/l	100
78) 4-Chlorotoluene	13.217	91	127680	19.337	ug/l	100
79) tert-butylbenzene	13.435	119	118752	19.283	ug/l	100
80) 1,2,4-Trimethylbenzene	13.476	105	144579	19.521	ug/l	100
81) sec-Butylbenzene	13.612	105	168895	19.304	ug/l	100
82) p-Isopropyltoluene	13.729	119	138833	19.140	ug/l	100
83) 1,3-Dichlorobenzene	13.729	146	77464	19.261	ug/l	100
84) 1,4-Dichlorobenzene	13.812	146	75083	19.156	ug/l	100
85) n-Butylbenzene	14.053	91	109819	18.049	ug/l	100
86) Hexachloroethane	14.329	117	27795	19.248	ug/l	100
87) 1,2-Dichlorobenzene	14.100	146	72993	19.228	ug/l	100
88) 1,2-Dibromo-3-Chloropr...	14.717	75	10448	19.634	ug/l	100
89) 1,2,4-Trichlorobenzene	15.835	180	34577	18.598	ug/l	100
90) Hexachlorobutadiene	15.500	225	18570	19.222	ug/l	100
91) Naphthalene	15.641	128	98254	17.011	ug/l	100
92) 1,2,3-Trichlorobenzene	15.835	180	34577	18.598	ug/l	100

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

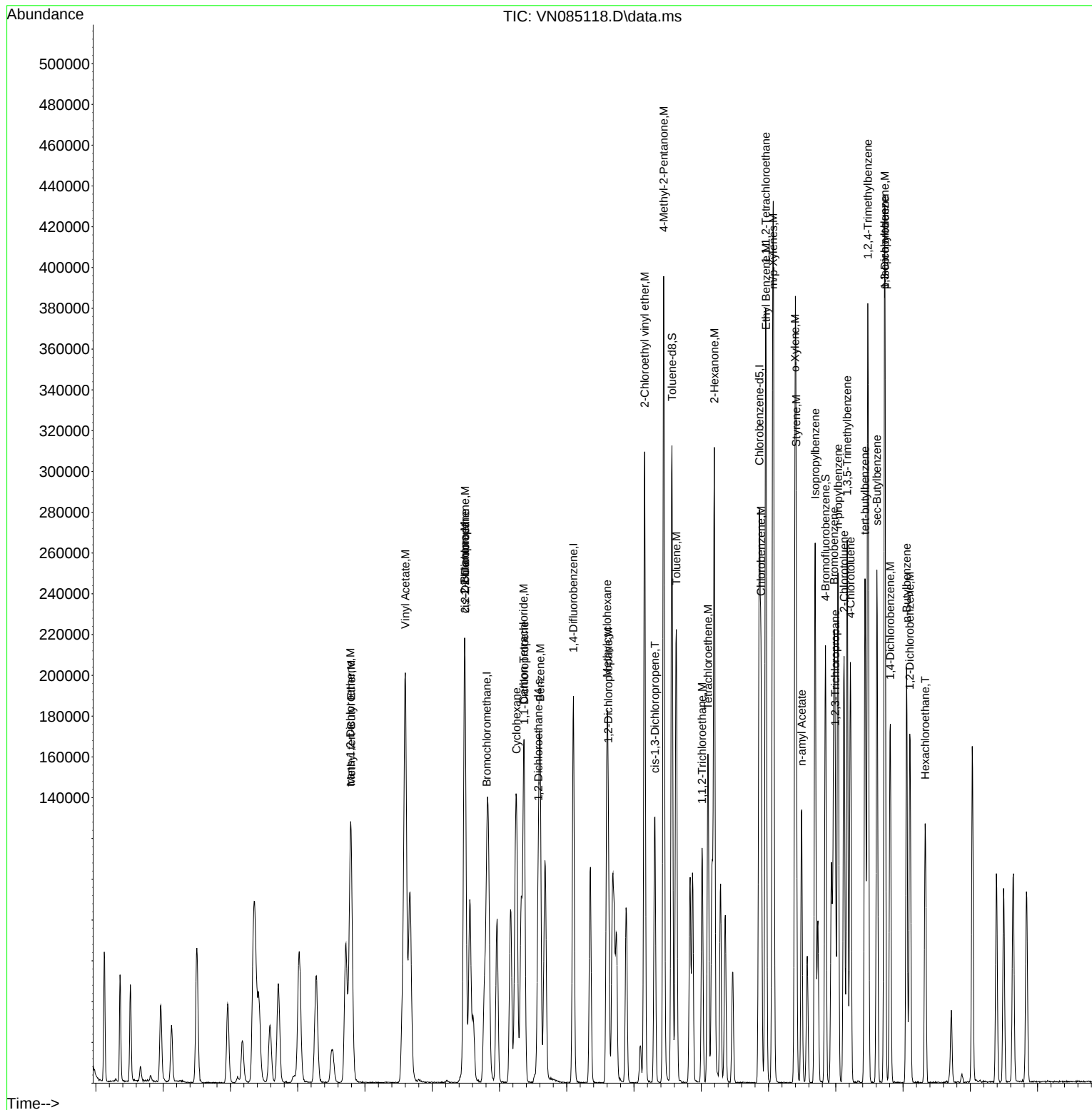
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Data File : VN085118.D  
Acq On    : 06 Dec 2024  10:26  
Operator  : JC\MD  
Sample    : VSTDICCC020  
Misc      : 5.0mL/MSVOA_N/WATER  
ALS Vial  : 3   Sample Multiplier: 1
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Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC020

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 12/09/2024
Supervised By :Semsettin Yesilyurt 12/09/2024

Quant Time: Dec 06 22:28:56 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N120624W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Dec 06 22:19:40 2024
Response via : Initial Calibration





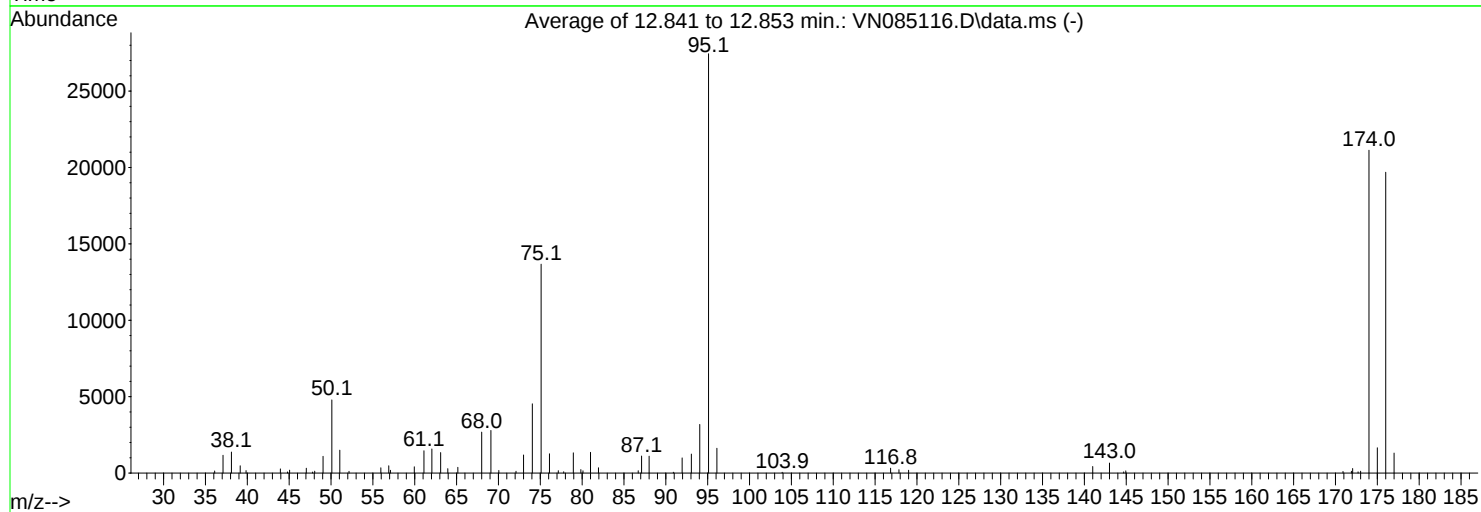
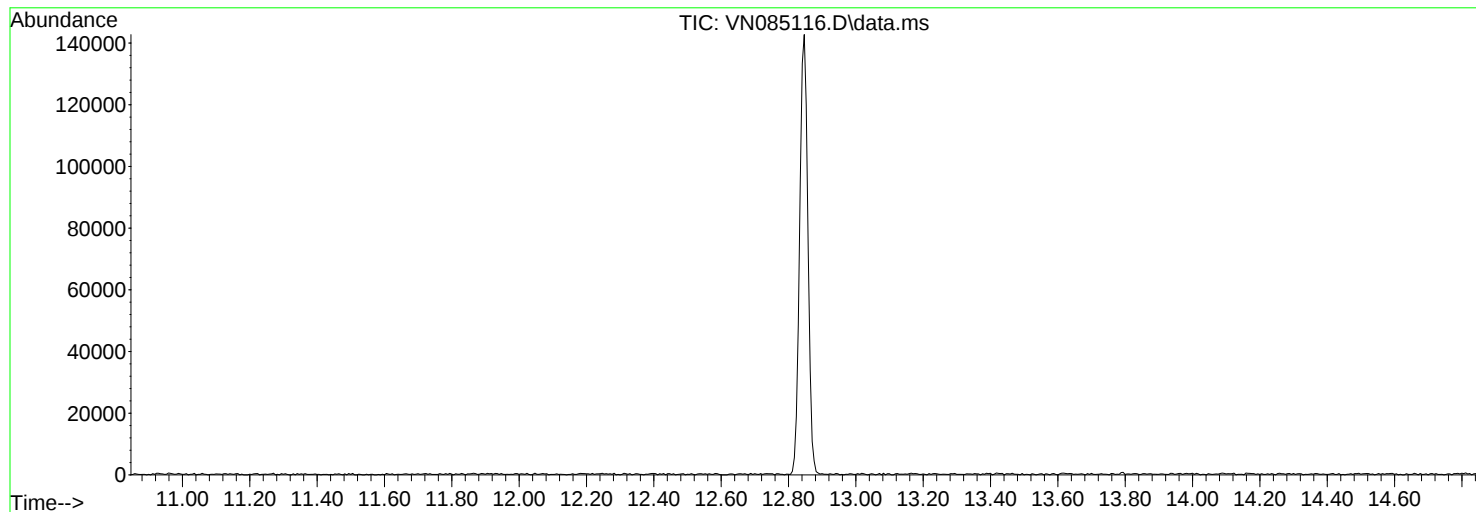
QC SAMPLE DATA

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120624\
Data File : VN085116.D
Acq On : 06 Dec 2024 08:14
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\624N120624W.M
Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
Last Update : Fri Dec 06 22:50:42 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	17.4	4787	PASS
75	95	30	60	49.8	13671	PASS
95	95	100	100	100.0	27445	PASS
96	95	5	9	5.9	1624	PASS
173	174	0.00	2	0.6	123	PASS
174	95	50	100	77.0	21131	PASS
175	174	5	9	7.8	1656	PASS
176	174	95	101	93.2	19688	FAIL*
177	176	5	9	6.7	1311	PASS

Report of Analysis

Client:	Tris Pharma, Inc.	Date Collected:	
Project:	Quarterly	Date Received:	
Client Sample ID:	VN1206WBL01	SDG No.:	P5044
Lab Sample ID:	VN1206WBL01	Matrix:	Water
Analytical Method:	E624.1	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085126.D	1		12/06/24 14:40	VN120624

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
141-78-6	Ethyl Acetate	1.50	U	1.50	5.00	ug/L
108-21-4	Isopropyl Acetate	0.66	U	0.66	5.00	ug/L
67-64-1	Acetone	4.90	U	4.90	25.0	ug/L
75-09-2	Methylene Chloride	1.20	U	1.20	5.00	ug/L
628-63-7	n-amyl Acetate	0.91	U	0.91	5.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	30.7		91 - 110	102%	SPK: 30
2037-26-5	Toluene-d8	29.0		91 - 112	97%	SPK: 30
460-00-4	4-Bromofluorobenzene	24.3		63 - 112	81%	SPK: 30
INTERNAL STANDARDS						
74-97-5	Bromochloromethane	29600	7.812			
540-36-3	1,4-Difluorobenzene	150000	9.1			
3114-55-4	Chlorobenzene-d5	136000	11.865			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120624\
Data File : VN085126.D
Acq On : 06 Dec 2024 14:40
Operator : JC\MD
Sample : VN1206WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN1206WBL01

Quant Time: Dec 06 23:08:53 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N120624W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Dec 06 22:50:42 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	7.812	128	29636	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.100	114	149919	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.865	117	136142	30.000	ug/l	0.00

System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.576	65	72228	30.715	ug/l	0.00
Spiked Amount	30.000	Range	91 - 110	Recovery	=	102.400%
60) 4-Bromofluorobenzene	12.847	95	54751	24.306	ug/l	0.00
Spiked Amount	30.000	Range	63 - 112	Recovery	=	81.033%
63) Toluene-d8	10.565	98	185417	29.034	ug/l	0.00
Spiked Amount	30.000	Range	91 - 112	Recovery	=	96.767%

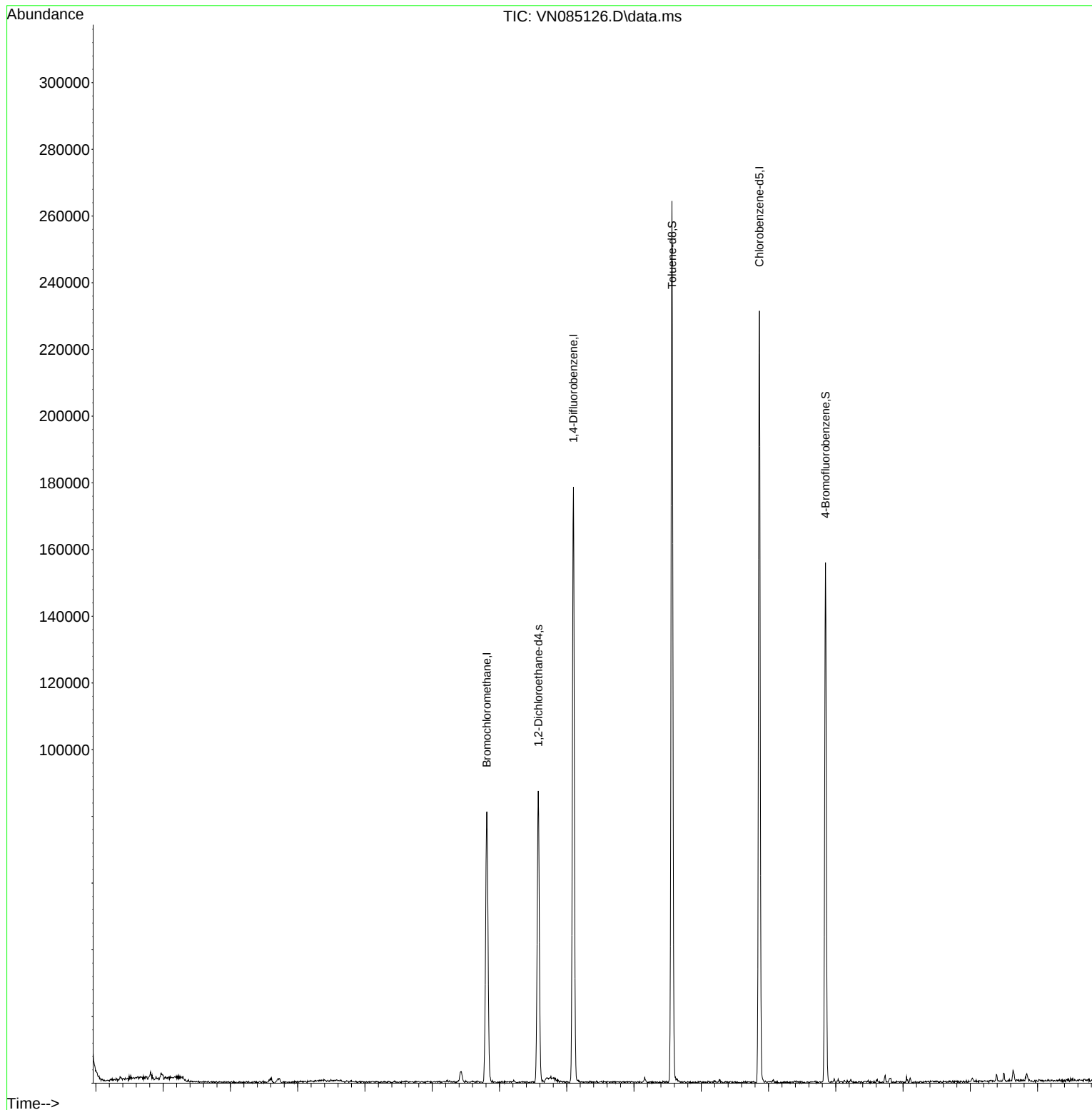
Target Compounds	Qvalue

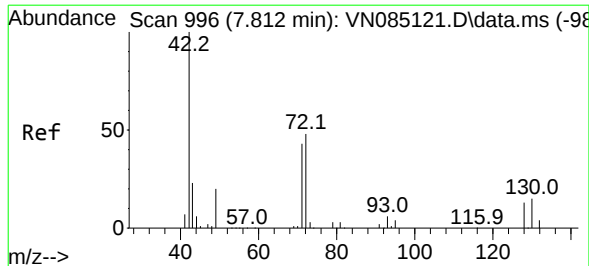
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120624\
Data File : VN085126.D
Acq On : 06 Dec 2024 14:40
Operator : JC\MD
Sample : VN1206WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN1206WBL01

Quant Time: Dec 06 23:08:53 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N120624W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Dec 06 22:50:42 2024
Response via : Initial Calibration

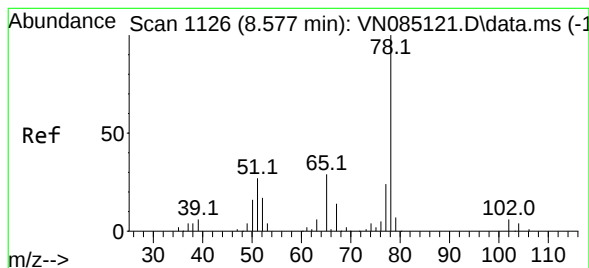
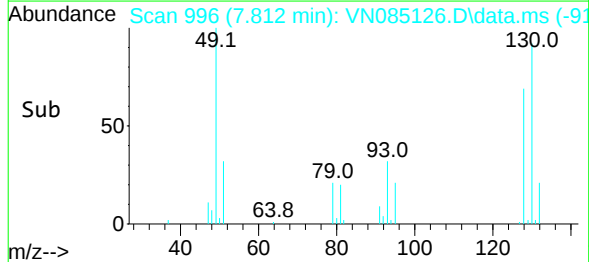
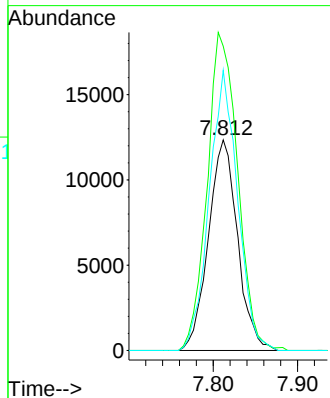
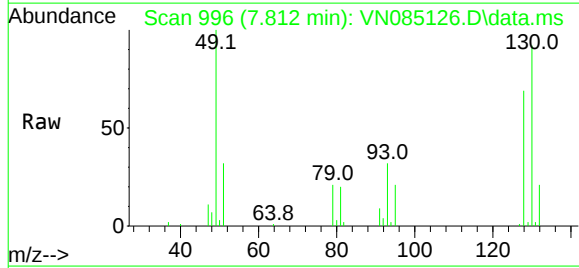




#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 7.812 min Scan# 996
Delta R.T. -0.000 min
Lab File: VN085126.D
Acq: 06 Dec 2024 14:40

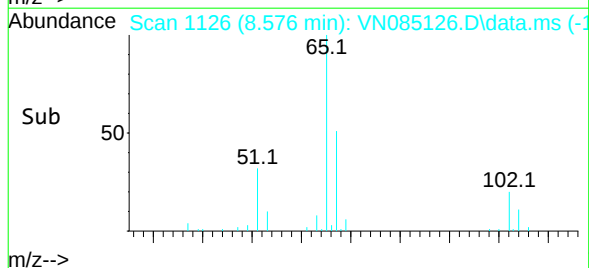
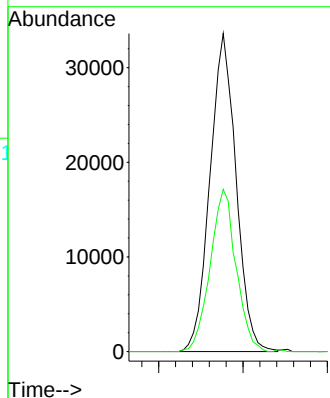
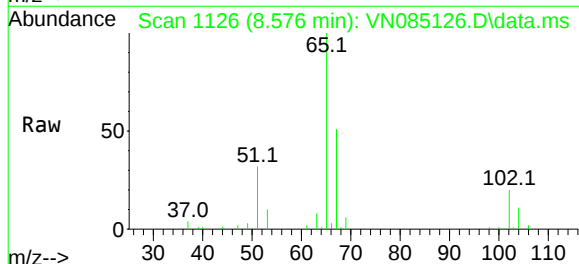
Instrument :
MSVOA_N
ClientSampleId :
VN1206WBL01

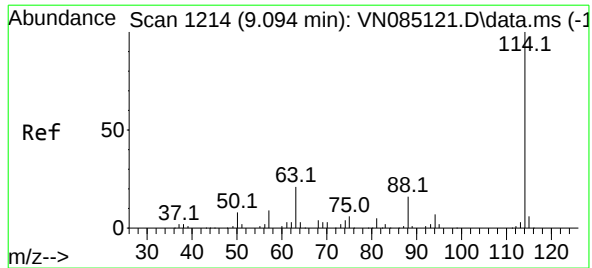
Tgt Ion	128	Resp	29636
Ion	Ratio	Lower	Upper
128	100		
49	157.4	0.0	394.5
130	129.9	0.0	316.5



#27
1,2-Dichloroethane-d4
Concen: 30.715 ug/l
RT: 8.576 min Scan# 1126
Delta R.T. -0.000 min
Lab File: VN085126.D
Acq: 06 Dec 2024 14:40

Tgt Ion	65	Resp	72228
Ion	Ratio	Lower	Upper
65	100		
67	50.7	39.9	59.9

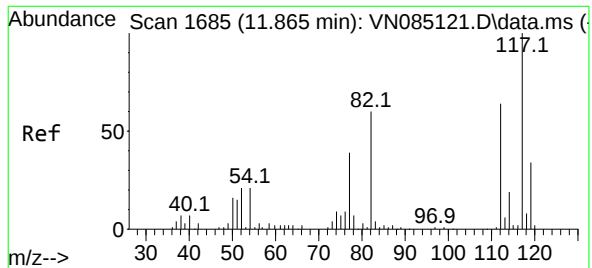
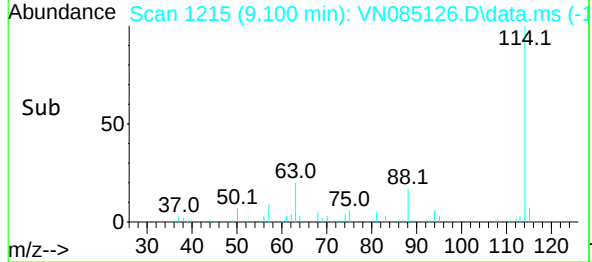
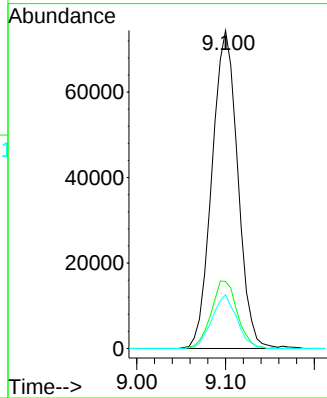
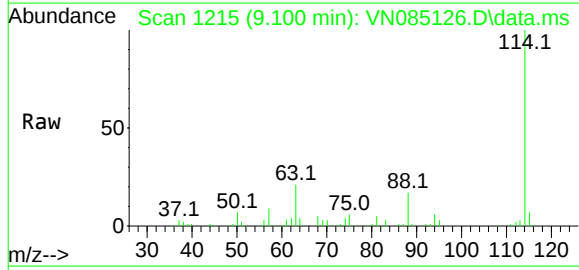




#28
1,4-Difluorobenzene
Concen: 30.000 ug/l
RT: 9.100 min Scan# 1214
Delta R.T. -0.000 min
Lab File: VN085126.D
Acq: 06 Dec 2024 14:40

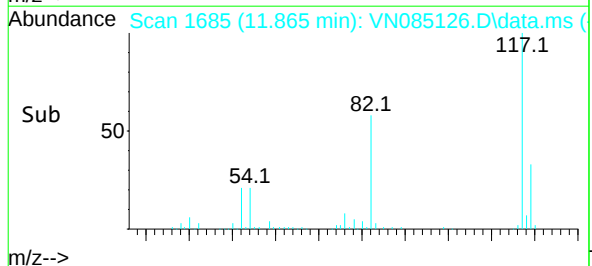
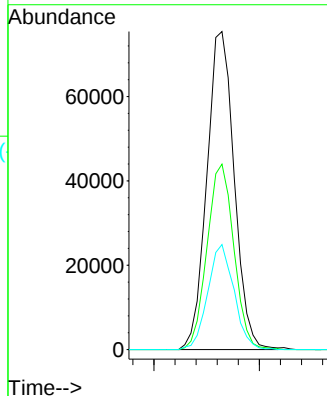
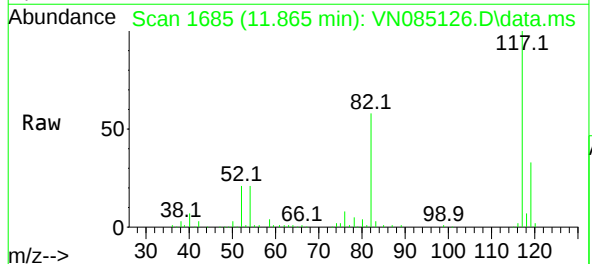
Instrument :
MSVOA_N
ClientSampleId :
VN1206WBL01

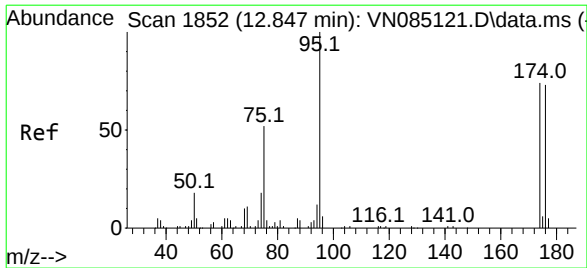
Tgt Ion:	114	Resp:	149919
Ion	Ratio	Lower	Upper
114	100		
63	21.6	16.2	24.2
88	16.3	12.5	18.7



#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 11.865 min Scan# 1685
Delta R.T. -0.000 min
Lab File: VN085126.D
Acq: 06 Dec 2024 14:40

Tgt Ion:	117	Resp:	136142
Ion	Ratio	Lower	Upper
117	100		
82	57.1	44.2	66.4
119	31.7	25.4	38.2





#60

4-Bromofluorobenzene

Concen: 24.306 ug/l

RT: 12.847 min Scan# 1852

Delta R.T. -0.000 min

Lab File: VN085126.D

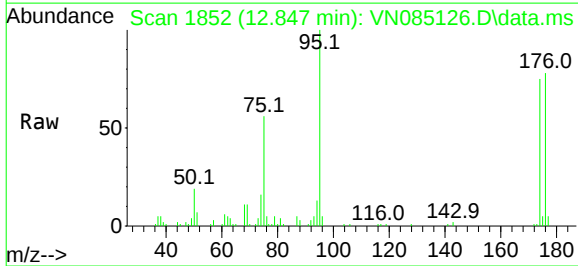
Acq: 06 Dec 2024 14:40

Instrument :

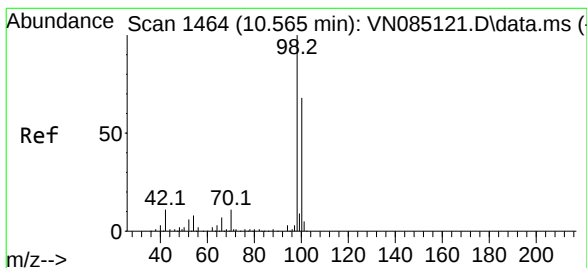
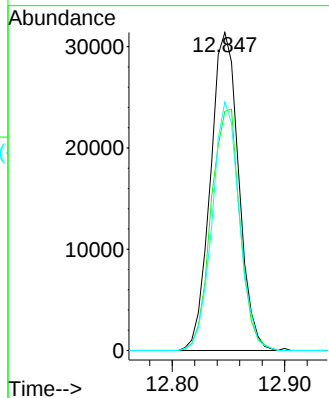
MSVOA_N

ClientSampleId :

VN1206WBL01



Tgt Ion:	95	Resp:	54751
Ion	Ratio	Lower	Upper
95	100		
174	77.5	60.3	90.5
176	75.3	57.4	86.0



#63

Toluene-d8

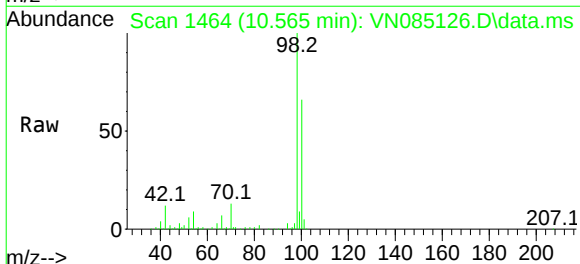
Concen: 29.034 ug/l

RT: 10.565 min Scan# 1464

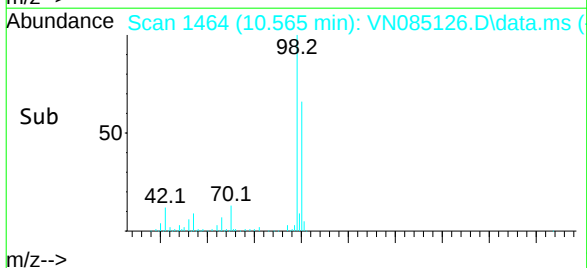
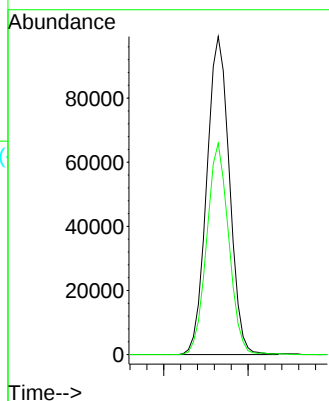
Delta R.T. -0.000 min

Lab File: VN085126.D

Acq: 06 Dec 2024 14:40



Tgt Ion:	98	Resp:	185417
Ion	Ratio	Lower	Upper
98	100		
100	64.2	52.0	78.0



Report of Analysis

Client:	Tris Pharma, Inc.	Date Collected:	
Project:	Quarterly	Date Received:	
Client Sample ID:	VN1206WBS01	SDG No.:	P5044
Lab Sample ID:	VN1206WBS01	Matrix:	Water
Analytical Method:	E624.1	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085124.D	1		12/06/24 13:42	VN120624

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
141-78-6	Ethyl Acetate	18.7		1.50	5.00	ug/L
108-21-4	Isopropyl Acetate	18.6		0.66	5.00	ug/L
67-64-1	Acetone	110		4.90	25.0	ug/L
75-09-2	Methylene Chloride	19.6		1.20	5.00	ug/L
628-63-7	n-amyl Acetate	19.4		0.91	5.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	30.1		91 - 110	100%	SPK: 30
2037-26-5	Toluene-d8	29.7		91 - 112	99%	SPK: 30
460-00-4	4-Bromofluorobenzene	30.0		63 - 112	100%	SPK: 30
INTERNAL STANDARDS						
74-97-5	Bromochloromethane	33300	7.812			
540-36-3	1,4-Difluorobenzene	184000	9.1			
3114-55-4	Chlorobenzene-d5	166000	11.865			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120624\
 Data File : VN085124.D
 Acq On : 06 Dec 2024 13:42
 Operator : JC\MD
 Sample : VN1206WBS01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN1206WBS01

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 12/09/2024
 Supervised By :Semsettin Yesilyurt 12/09/2024

Quant Time: Dec 06 23:07:05 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N120624W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Dec 06 22:50:42 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	7.812	128	33289	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.100	114	183983	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.865	117	166391	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.577	65	79582	30.129	ug/l	0.00
Spiked Amount 30.000	Range	91 - 110	Recovery	= 100.433%		
60) 4-Bromofluorobenzene	12.847	95	82491	29.963	ug/l	0.00
Spiked Amount 30.000	Range	63 - 112	Recovery	= 99.867%		
63) Toluene-d8	10.565	98	231760	29.693	ug/l	0.00
Spiked Amount 30.000	Range	91 - 112	Recovery	= 98.967%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.124	85	54416	20.432	ug/l	97
3) Chloromethane	2.359	50	48488	20.569	ug/l	96
4) Vinyl Chloride	2.512	62	47272	19.606	ug/l	98
5) Bromomethane	2.965	94	32409	21.171	ug/l	97
6) Chloroethane	3.130	64	29368	19.825	ug/l	94
7) Trichlorofluoromethane	3.501	101	80648	20.434	ug/l	98
8) Diethyl Ether	3.959	74	25855	20.682	ug/l	99
9) 1,1,2-Trichlorotrifluo...	4.365	101	44318	20.080	ug/l #	28
10) 1,1-Dichloroethene	4.348	96	40102	19.781	ug/l	95
11) Methyl Iodide	4.589	142	56326	20.033	ug/l	98
12) Methyl Acetate	5.024	43	47778	19.977	ug/l	98
13) Acrolein	4.177	56	30290	87.151	ug/l	93
14) Acrylonitrile	5.718	53	100066	100.763	ug/l	95
15) Acetone	4.424	58	28962	107.619	ug/l	93
16) Carbon Disulfide	4.712	76	121752	20.092	ug/l	99
17) Allyl chloride	5.024	41	57980	19.987	ug/l	95
18) Methylene Chloride	5.277	84	45038	19.579	ug/l	94
19) trans-1,2-Dichloroethene	5.783	96	42080	19.970	ug/l	93
20) Diisopropyl ether	6.665	45	125999	19.792	ug/l	97
21) 1,1-Dichloroethane	6.565	63	77910	19.828	ug/l #	98
22) cis-1,2-Dichloroethene	7.488	96	48623	20.075	ug/l	99
23) tert-Butyl Alcohol	5.518	59	35356	99.243	ug/l #	100
24) Methyl tert-Butyl Ether	5.789	73	127980	20.206	ug/l #	76
25) Chloroform	7.959	83	82942	20.149	ug/l	99
26) Cyclohexane	8.253	56	66153	20.447	ug/l #	95
29) 1,1-Dichloropropene	8.371	75	56960	19.186	ug/l	99
30) 2-Butanone	7.483	43	134385	98.639	ug/l	99
31) 2,2-Dichloropropane	7.483	77	73545	19.318	ug/l #	100
32) 1,1,1-Trichloroethane	8.165	97	75687	18.835	ug/l	98
33) Carbon Tetrachloride	8.359	117	67084	18.501	ug/l	94
34) Benzene	8.606	78	177489	19.031	ug/l	97
35) Methacrylonitrile	7.777	41	28690	18.713	ug/l	92
36) 1,2-Dichloroethane	8.671	62	59405	18.711	ug/l	100
37) Trichloroethene	9.347	130	43800	19.721	ug/l	92
38) Methylcyclohexane	9.600	83	62426	19.339	ug/l	96
39) 1,2-Dichloropropane	9.618	63	42928	19.003	ug/l	89
40) Dibromomethane	9.706	93	29958	18.488	ug/l	99
41) Bromodichloromethane	9.882	83	64561	18.638	ug/l	94
42) Vinyl Acetate	6.600	43	478732	100.419	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120624\
 Data File : VN085124.D
 Acq On : 06 Dec 2024 13:42
 Operator : JC\MD
 Sample : VN1206WBS01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN1206WBS01

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 12/09/2024
 Supervised By :Semsettin Yesilyurt 12/09/2024

Quant Time: Dec 06 23:07:05 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N120624W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Dec 06 22:50:42 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	7.559	43	50596	18.665	ug/l	# 89
44) Isopropyl Acetate	8.683	43	87514	18.577	ug/l	99
45) 1,4-Dioxane	9.694	88	15690	399.406	ug/l	98
46) Methyl methacrylate	9.682	41	40003	18.555	ug/l	97
47) n-amyl Acetate	12.488	43	76887	19.399	ug/l	95
48) t-1,3-Dichloropropene	10.835	75	64697	19.026	ug/l	96
49) cis-1,3-Dichloropropene	10.312	75	69368	18.739	ug/l	97
50) 1,1,2-Trichloroethane	11.012	97	40356	18.482	ug/l	93
51) Ethyl methacrylate	10.871	69	62292	18.757	ug/l	99
52) 1,3-Dichloropropane	11.159	76	68737	18.811	ug/l	98
53) Dibromochloromethane	11.359	129	48861	18.363	ug/l	96
54) 1,2-Dibromoethane	11.465	107	41071	18.669	ug/l	98
55) 2-Chloroethyl vinyl ether	10.159	63	128583	83.348	ug/l	100
56) Bromoform	12.576	173	32347	18.131	ug/l	97
58) 4-Methyl-2-Pentanone	10.441	43	264893	97.546	ug/l	98
59) 2-Hexanone	11.194	43	202414	98.374	ug/l	98
61) Tetrachloroethene	11.100	164	39208	19.458	ug/l	95
62) Toluene	10.629	91	188041	19.378	ug/l	99
64) Chlorobenzene	11.888	112	115417	19.264	ug/l	99
65) 1,1,1,2-Tetrachloroethane	11.959	131	42822	19.146	ug/l	98
66) Ethyl Benzene	11.959	91	199427	19.367	ug/l	97
67) m/p-Xylenes	12.071	106	158491	40.018	ug/l	99
68) o-Xylene	12.394	106	76155	20.475	ug/l	95
69) Styrene	12.406	104	128312	20.330	ug/l	98
70) Isopropylbenzene	12.694	105	190502	19.858	ug/l	100
71) 1,1,2,2-Tetrachloroethane	12.935	83	56710	19.421	ug/l	96
72) 1,2,3-Trichloropropane	12.988	75	60060m	20.822	ug/l	
73) Bromobenzene	12.976	156	46666	19.420	ug/l	98
74) n-propylbenzene	13.035	91	227408	19.718	ug/l	100
75) 2-Chlorotoluene	13.123	91	140821	19.748	ug/l	100
76) 1,3,5-Trimethylbenzene	13.170	105	163758	19.924	ug/l	100
77) t-1,4-Dichloro-2-butene	12.735	75	20835	19.878	ug/l	92
78) 4-Chlorotoluene	13.218	91	140168	19.366	ug/l	99
79) tert-butylbenzene	13.435	119	132907	19.688	ug/l	98
80) 1,2,4-Trimethylbenzene	13.482	105	161334	19.872	ug/l	98
81) sec-Butylbenzene	13.612	105	190216	19.833	ug/l	99
82) p-Isopropyltoluene	13.729	119	161209	20.275	ug/l	100
83) 1,3-Dichlorobenzene	13.729	146	85714	19.442	ug/l	99
84) 1,4-Dichlorobenzene	13.812	146	83924	19.533	ug/l	99
85) n-Butylbenzene	14.053	91	131766	19.756	ug/l	99
86) Hexachloroethane	14.329	117	29730	18.782	ug/l	97
87) 1,2-Dichlorobenzene	14.106	146	81646	19.620	ug/l	99
88) 1,2-Dibromo-3-Chloropr...	14.717	75	10972	18.809	ug/l	98
89) 1,2,4-Trichlorobenzene	15.835	180	41692	20.458	ug/l	98
90) Hexachlorobutadiene	15.500	225	21907	20.686	ug/l	96
91) Naphthalene	15.641	128	121693	19.220	ug/l	98
92) 1,2,3-Trichlorobenzene	15.835	180	41692	20.458	ug/l	98

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

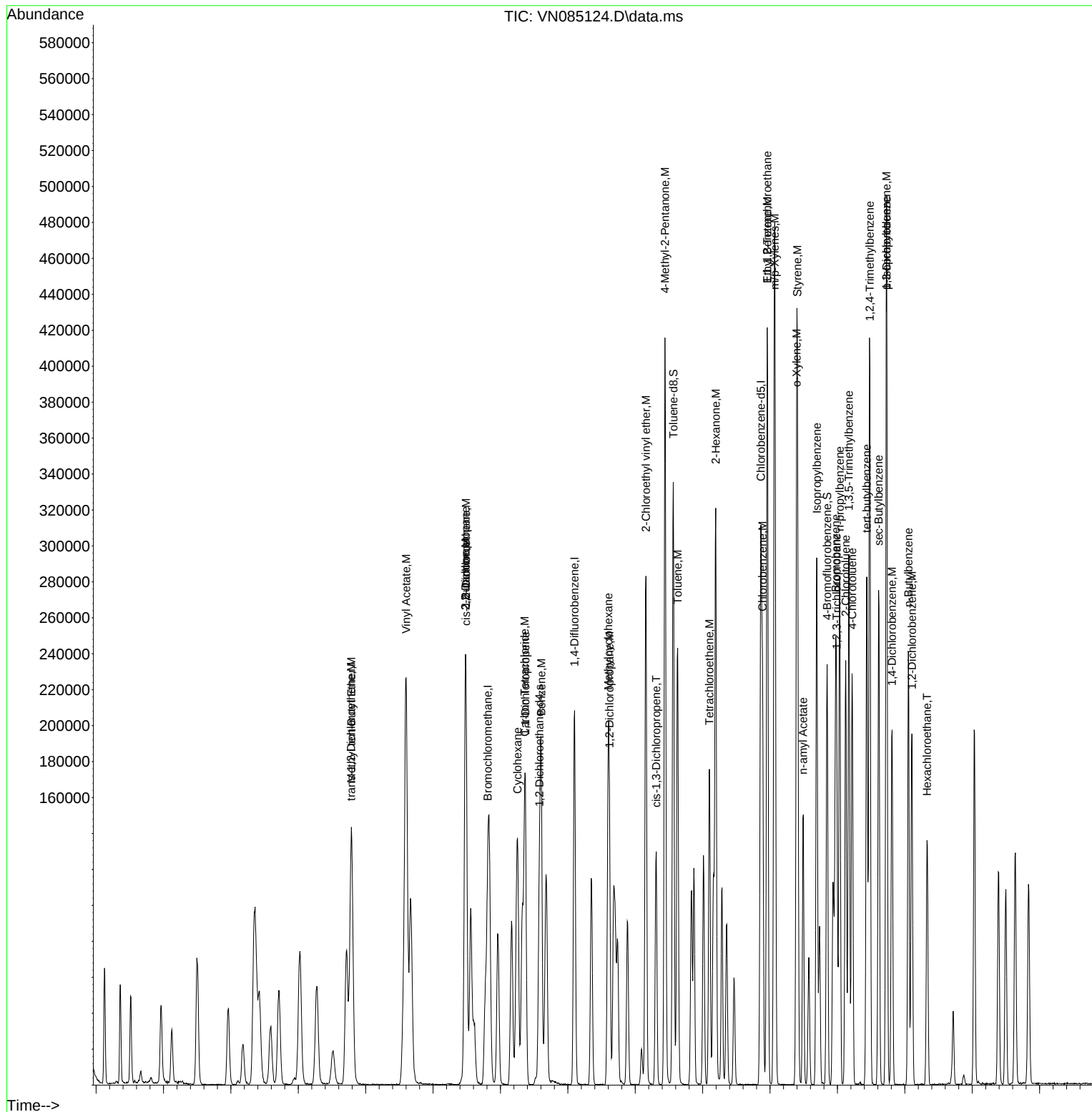
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120624\
 Data File : VN085124.D
 Acq On : 06 Dec 2024 13:42
 Operator : JC\MD
 Sample : VN1206WBS01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN1206WBS01

Manual Integrations APPROVED

Reviewed By : Mahesh Dadoda 12/09/2024
 Supervised By : Semsettin Yesilyurt 12/09/2024

Quant Time: Dec 06 23:07:05 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N120624W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Dec 06 22:50:42 2024
 Response via : Initial Calibration



Report of Analysis

Client:	Tris Pharma, Inc.			Date Collected:	
Project:	Quarterly			Date Received:	
Client Sample ID:	VN1206WBSD01			SDG No.:	P5044
Lab Sample ID:	VN1206WBSD01			Matrix:	Water
Analytical Method:	E624.1			% Solid:	0
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000 uL
Soil Aliquot Vol:			uL	Test:	VOCMS Group1
GC Column:	RXI-624	ID :	0.25	Level :	LOW
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085125.D	1		12/06/24 14:16	VN120624

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
141-78-6	Ethyl Acetate	20.6		1.50	5.00	ug/L
108-21-4	Isopropyl Acetate	20.0		0.66	5.00	ug/L
67-64-1	Acetone	100		4.90	25.0	ug/L
75-09-2	Methylene Chloride	19.6		1.20	5.00	ug/L
628-63-7	n-amyl Acetate	20.2		0.91	5.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	30.8		91 - 110	103%	SPK: 30
2037-26-5	Toluene-d8	29.6		91 - 112	99%	SPK: 30
460-00-4	4-Bromofluorobenzene	29.6		63 - 112	99%	SPK: 30
INTERNAL STANDARDS						
74-97-5	Bromochloromethane	30200	7.812			
540-36-3	1,4-Difluorobenzene	163000	9.1			
3114-55-4	Chlorobenzene-d5	150000	11.865			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of OC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120624\
 Data File : VN085125.D
 Acq On : 06 Dec 2024 14:16
 Operator : JC\MD
 Sample : VN1206WBSD01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN1206WBSD01

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 12/09/2024
 Supervised By :Semsettin Yesilyurt 12/09/2024

Quant Time: Dec 06 23:08:01 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N120624W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Dec 06 22:50:42 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	7.812	128	30215	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.100	114	162631	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.865	117	149659	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.577	65	73848	30.803	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery = 102.667%			
60) 4-Bromofluorobenzene	12.847	95	73250	29.581	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery = 98.600%			
63) Toluene-d8	10.565	98	208085	29.641	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery = 98.800%			
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	2.124	85	46563	19.262	ug/l	97
3) Chloromethane	2.359	50	41445	19.370	ug/l	95
4) Vinyl Chloride	2.512	62	41044	18.755	ug/l	100
5) Bromomethane	2.965	94	29476	21.214	ug/l	96
6) Chloroethane	3.124	64	26651	19.822	ug/l	90
7) Trichlorofluoromethane	3.501	101	68485	19.118	ug/l	97
8) Diethyl Ether	3.965	74	22997	20.268	ug/l	100
9) 1,1,2-Trichlorotrifluoro...	4.371	101	37793	18.865	ug/l	99
10) 1,1-Dichloroethene	4.342	96	35666	19.383	ug/l	98
11) Methyl Iodide	4.595	142	50513	19.793	ug/l	97
12) Methyl Acetate	5.018	43	45286	20.861	ug/l	93
13) Acrolein	4.183	56	31342	99.352	ug/l	93
14) Acrylonitrile	5.712	53	92305	102.404	ug/l	96
15) Acetone	4.424	58	25223	103.260	ug/l	92
16) Carbon Disulfide	4.718	76	105590	19.198	ug/l	99
17) Allyl chloride	5.024	41	52079	19.779	ug/l	90
18) Methylene Chloride	5.271	84	40895	19.587	ug/l	92
19) trans-1,2-Dichloroethene	5.783	96	36978	19.334	ug/l	89
20) Diisopropyl ether	6.665	45	120242	20.809	ug/l	96
21) 1,1-Dichloroethane	6.571	63	68704	19.264	ug/l #	94
22) cis-1,2-Dichloroethene	7.489	96	44067	20.045	ug/l	99
23) tert-Butyl Alcohol	5.524	59	34829m	107.710	ug/l	
24) Methyl tert-Butyl Ether	5.795	73	118736	20.654	ug/l #	77
25) Chloroform	7.965	83	74785	20.016	ug/l	99
26) Cyclohexane	8.259	56	57436	19.559	ug/l #	89
29) 1,1-Dichloropropene	8.371	75	49308	18.789	ug/l	99
30) 2-Butanone	7.483	43	124141	103.083	ug/l	100
31) 2,2-Dichloropropane	7.489	77	65455	19.450	ug/l #	100
32) 1,1,1-Trichloroethane	8.171	97	66383	18.689	ug/l	97
33) Carbon Tetrachloride	8.365	117	58412	18.224	ug/l	92
34) Benzene	8.606	78	158494	19.225	ug/l	98
35) Methacrylonitrile	7.771	41	26084	19.247	ug/l	92
36) 1,2-Dichloroethane	8.671	62	53784	19.164	ug/l	98
37) Trichloroethene	9.353	130	37594	19.149	ug/l	99
38) Methylcyclohexane	9.600	83	52495	18.397	ug/l	96
39) 1,2-Dichloropropane	9.618	63	38006	19.033	ug/l	98
40) Dibromomethane	9.700	93	27875	19.461	ug/l	98
41) Bromodichloromethane	9.888	83	58037	18.954	ug/l	94
42) Vinyl Acetate	6.600	43	432446	102.619	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120624\
 Data File : VN085125.D
 Acq On : 06 Dec 2024 14:16
 Operator : JC\MD
 Sample : VN1206WBSD01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN1206WBSD01

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 12/09/2024
 Supervised By :Semsettin Yesilyurt 12/09/2024

Quant Time: Dec 06 23:08:01 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N120624W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Dec 06 22:50:42 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	7.559	43	49340	20.591	ug/l	98
44) Isopropyl Acetate	8.688	43	83425	20.034	ug/l	100
45) 1,4-Dioxane	9.694	88	14561	419.331	ug/l #	80
46) Methyl methacrylate	9.677	41	37869	19.871	ug/l	96
47) n-amyl Acetate	12.494	43	70726	20.187	ug/l	97
48) t-1,3-Dichloropropene	10.829	75	58000	19.296	ug/l	99
49) cis-1,3-Dichloropropene	10.312	75	62980	19.248	ug/l	96
50) 1,1,2-Trichloroethane	11.012	97	36716	19.023	ug/l	94
51) Ethyl methacrylate	10.871	69	58063	19.779	ug/l	97
52) 1,3-Dichloropropane	11.165	76	64744	20.044	ug/l	99
53) Dibromochloromethane	11.353	129	46500	19.770	ug/l	99
54) 1,2-Dibromoethane	11.471	107	38167	19.627	ug/l	100
55) 2-Chloroethyl vinyl ether	10.159	63	128948	94.558	ug/l	99
56) Bromoform	12.576	173	30569	19.384	ug/l	98
58) 4-Methyl-2-Pentanone	10.441	43	252790	103.497	ug/l	99
59) 2-Hexanone	11.194	43	189976	102.651	ug/l	98
61) Tetrachloroethene	11.100	164	34258	18.902	ug/l	92
62) Toluene	10.629	91	167628	19.205	ug/l	99
64) Chlorobenzene	11.888	112	104675	19.425	ug/l	98
65) 1,1,1,2-Tetrachloroethane	11.959	131	38427	19.102	ug/l	100
66) Ethyl Benzene	11.959	91	177519	19.167	ug/l	99
67) m/p-Xylenes	12.071	106	137973	38.732	ug/l	97
68) o-Xylene	12.394	106	65268	19.510	ug/l	99
69) Styrene	12.412	104	113572	20.006	ug/l	98
70) Isopropylbenzene	12.694	105	170301	19.737	ug/l	98
71) 1,1,2,2-Tetrachloroethane	12.935	83	53462	20.356	ug/l	99
72) 1,2,3-Trichloropropane	12.994	75	49365m	19.028	ug/l	
73) Bromobenzene	12.982	156	43323	20.045	ug/l	97
74) n-propylbenzene	13.035	91	196513	18.944	ug/l	99
75) 2-Chlorotoluene	13.123	91	124954	19.482	ug/l	99
76) 1,3,5-Trimethylbenzene	13.171	105	144321	19.523	ug/l	99
77) t-1,4-Dichloro-2-butene	12.735	75	18015	19.109	ug/l	90
78) 4-Chlorotoluene	13.218	91	125648	19.301	ug/l	100
79) tert-butylbenzene	13.435	119	118364	19.494	ug/l	100
80) 1,2,4-Trimethylbenzene	13.482	105	143920	19.709	ug/l	100
81) sec-Butylbenzene	13.612	105	167194	19.382	ug/l	98
82) p-Isopropyltoluene	13.729	119	138936	19.427	ug/l	99
83) 1,3-Dichlorobenzene	13.729	146	75975	19.160	ug/l	99
84) 1,4-Dichlorobenzene	13.812	146	75466	19.528	ug/l	99
85) n-Butylbenzene	14.053	91	110828	18.475	ug/l	99
86) Hexachloroethane	14.335	117	26669	18.732	ug/l	97
87) 1,2-Dichlorobenzene	14.106	146	73713	19.694	ug/l	98
88) 1,2-Dibromo-3-Chloropr...	14.717	75	10637	20.274	ug/l	98
89) 1,2,4-Trichlorobenzene	15.835	180	37082	20.230	ug/l	98
90) Hexachlorobutadiene	15.500	225	18313	19.226	ug/l	97
91) Naphthalene	15.641	128	110815	19.459	ug/l	100
92) 1,2,3-Trichlorobenzene	15.835	180	37082	20.230	ug/l	98

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

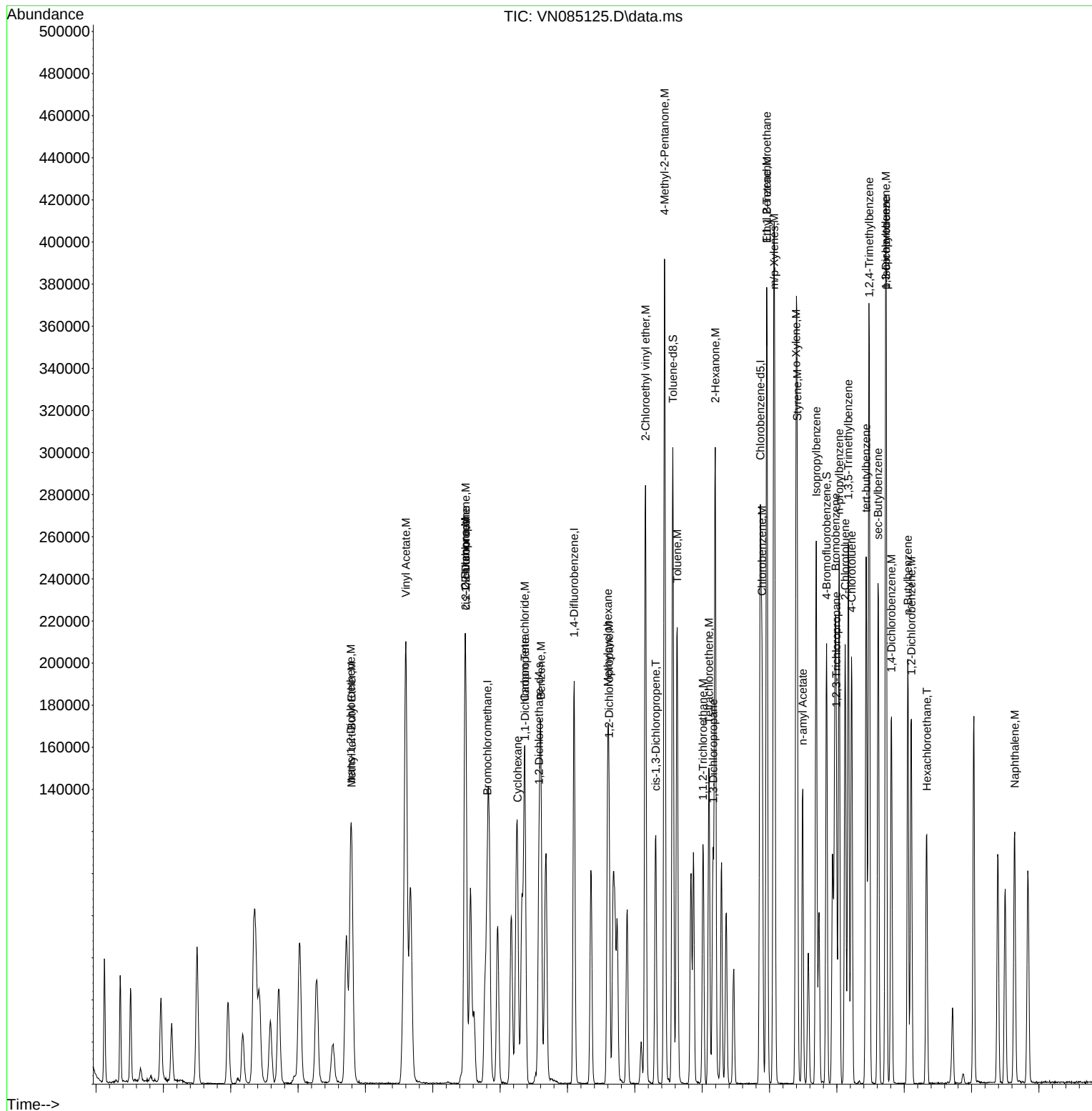
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120624\
Data File : VN085125.D
Acq On : 06 Dec 2024 14:16
Operator : JC\MD
Sample : VN1206WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN1206WBSD01

Manual Integrations
APPROVED

Reviewed By : Mahesh Dadoda 12/09/2024
Supervised By : Semsettin Yesilyurt 12/09/2024

Quant Time: Dec 06 23:08:01 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N120624W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Dec 06 22:50:42 2024
Response via : Initial Calibration



Manual Integration Report

Sequence:	VN120624	Instrument	MSVOA_n
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC005	VN085117.D	1,1,2-Trichlorotrifluoroethane	MMDadoda	12/9/2024 8:33:19 AM	SAM	12/9/2024 8:36:08 AM	Peak Integrated by Software
VSTDICC005	VN085117.D	1,2,3-Trichloropropane	MMDadoda	12/9/2024 8:33:19 AM	SAM	12/9/2024 8:36:08 AM	Peak Integrated by Software
VSTDICC005	VN085117.D	Acrylonitrile	MMDadoda	12/9/2024 8:33:19 AM	SAM	12/9/2024 8:36:08 AM	Peak Integrated by Software
VSTDICC005	VN085117.D	Diisopropyl ether	MMDadoda	12/9/2024 8:33:19 AM	SAM	12/9/2024 8:36:08 AM	Peak Integrated by Software
VSTDICC005	VN085117.D	Methyl Iodide	MMDadoda	12/9/2024 8:33:19 AM	SAM	12/9/2024 8:36:08 AM	Peak Integrated by Software
VSTDICC005	VN085117.D	tert-Butyl Alcohol	MMDadoda	12/9/2024 8:33:19 AM	SAM	12/9/2024 8:36:08 AM	Peak Integrated by Software
VSTDICCC020	VN085118.D	1,2,3-Trichloropropane	MMDadoda	12/9/2024 8:33:21 AM	SAM	12/9/2024 8:36:06 AM	Peak Integrated by Software
VSTDICC050	VN085119.D	1,2,3-Trichloropropane	MMDadoda	12/9/2024 8:33:23 AM	SAM	12/9/2024 8:36:04 AM	Peak Integrated by Software
VSTDICC100	VN085120.D	1,2,3-Trichloropropane	MMDadoda	12/9/2024 8:33:25 AM	SAM	12/9/2024 8:36:00 AM	Peak Integrated by Software
VSTDICC150	VN085121.D	1,2,3-Trichloropropane	MMDadoda	12/9/2024 8:33:26 AM	SAM	12/9/2024 8:35:58 AM	Peak Integrated by Software
VSTDICC150	VN085121.D	Methyl tert-Butyl Ether	MMDadoda	12/9/2024 8:33:26 AM	SAM	12/9/2024 8:35:58 AM	Peak Integrated by Software
VSTDICV020	VN085123.D	1,2,3-Trichloropropane	MMDadoda	12/9/2024 8:33:28 AM	SAM	12/9/2024 8:35:57 AM	Peak Integrated by Software
VN1206WBS01	VN085124.D	1,2,3-Trichloropropane	MMDadoda	12/9/2024 8:33:29 AM	SAM	12/9/2024 8:35:55 AM	Peak Integrated by Software

Manual Integration Report

Sequence:	VN120624	Instrument	MSVOA_n
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VN1206WBSD01	VN085125.D	1,2,3-Trichloropropane	MMDadoda	12/9/2024 8:33:31 AM	SAM	12/9/2024 8:35:53 AM	Peak Integrated by Software
VN1206WBSD01	VN085125.D	tert-Butyl Alcohol	MMDadoda	12/9/2024 8:33:31 AM	SAM	12/9/2024 8:35:53 AM	Peak Integrated by Software
P5044-01	VN085137.D	Bromodichloromethane	MMDadoda	12/9/2024 8:33:34 AM	SAM	12/9/2024 8:35:49 AM	Peak Integrated by Software

Instrument ID: **MSVOA_N**

Daily Analysis Runlog For Sequence/QC Batch ID # VN120624

Review By	Mahesh Dadoda	Review On	12/9/2024 8:33:44 AM
Supervise By	Semsettin Yesilyurt	Supervise On	12/9/2024 8:36:31 AM
SubDirectory	VN120624	HP Acquire Method	HP Processing Method 624N120624W.M
STD. NAME	STD REF.#		
Tune/Reschk	VP131993		
Initial Calibration Stds	VP131999,VP132000,VP132001,VP132002,VP132003		
CCC	VP131995		
Internal Standard/PEM			
ICV/I.BLK	VP132004		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VN085116.D	06 Dec 2024 08:14	JC\MD	Ok
2	VSTDIC005	VN085117.D	06 Dec 2024 10:02	JC\MD	Ok,M
3	VSTDICCC020	VN085118.D	06 Dec 2024 10:26	JC\MD	Ok,M
4	VSTDIC050	VN085119.D	06 Dec 2024 10:49	JC\MD	Ok,M
5	VSTDIC100	VN085120.D	06 Dec 2024 11:13	JC\MD	Ok,M
6	VSTDIC150	VN085121.D	06 Dec 2024 11:37	JC\MD	Ok,M
7	IBLK	VN085122.D	06 Dec 2024 12:01	JC\MD	Ok
8	VSTDICV020	VN085123.D	06 Dec 2024 12:28	JC\MD	Ok,M
9	VN1206WBS01	VN085124.D	06 Dec 2024 13:42	JC\MD	Ok,M
10	VN1206WBSD01	VN085125.D	06 Dec 2024 14:16	JC\MD	Ok,M
11	VN1206WBL01	VN085126.D	06 Dec 2024 14:40	JC\MD	Ok
12	P5051-01	VN085127.D	06 Dec 2024 15:15	JC\MD	Ok
13	P5051-02	VN085128.D	06 Dec 2024 15:39	JC\MD	Ok
14	P5051-03	VN085129.D	06 Dec 2024 16:03	JC\MD	Ok
15	P5051-04	VN085130.D	06 Dec 2024 16:27	JC\MD	Ok
16	P5068-01	VN085131.D	06 Dec 2024 16:51	JC\MD	Ok
17	P5068-02	VN085132.D	06 Dec 2024 17:15	JC\MD	Ok
18	P5068-03	VN085133.D	06 Dec 2024 17:39	JC\MD	Ok
19	P5068-04	VN085134.D	06 Dec 2024 18:03	JC\MD	Ok,M
20	P5139-01	VN085135.D	06 Dec 2024 18:27	JC\MD	Ok
21	P5139-02	VN085136.D	06 Dec 2024 18:51	JC\MD	Ok

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QC Batch ID # VN120624

Review By	Mahesh Dadoda	Review On	12/9/2024 8:33:44 AM
Supervise By	Semsettin Yesilyurt	Supervise On	12/9/2024 8:36:31 AM
SubDirectory	VN120624	HP Acquire Method	HP Processing Method 624N120624W.M
STD. NAME	STD REF.#		
Tune/Reschk	VP131993		
Initial Calibration Stds	VP131999,VP132000,VP132001,VP132002,VP132003		
CCC	VP131995		
Internal Standard/PEM			
ICV/I.BLK	VP132004		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

22	P5044-01	VN085137.D	06 Dec 2024 19:15	JC\MD	Ok,M
23	P5044-02	VN085138.D	06 Dec 2024 19:39	JC\MD	Ok
24	P5192-01	VN085139.D	06 Dec 2024 20:03	JC\MD	Ok

M : Manual Integration

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QC Batch ID # VN120624

Review By	Mahesh Dadoda	Review On	12/9/2024 8:33:44 AM
Supervise By	Semsettin Yesilyurt	Supervise On	12/9/2024 8:36:31 AM
SubDirectory	VN120624	HP Acquire Method	HP Processing Method 624N120624W.M

STD. NAME	STD REF.#
Tune/Reschk	VP131993
Initial Calibration Stds	VP131999,VP132000,VP132001,VP132002,VP132003
CCC	VP131995
Internal Standard/PEM	
ICV/I.BLK	VP132004
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VN085116.D	06 Dec 2024 08:14		JC\MD	Ok
2	VSTDIC005	VSTDIC005	VN085117.D	06 Dec 2024 10:02	V13516	JC\MD	Ok,M
3	VSTDICCC020	VSTDICCC020	VN085118.D	06 Dec 2024 10:26		JC\MD	Ok,M
4	VSTDIC050	VSTDIC050	VN085119.D	06 Dec 2024 10:49		JC\MD	Ok,M
5	VSTDIC100	VSTDIC100	VN085120.D	06 Dec 2024 11:13		JC\MD	Ok,M
6	VSTDIC150	VSTDIC150	VN085121.D	06 Dec 2024 11:37		JC\MD	Ok,M
7	IBLK	IBLK	VN085122.D	06 Dec 2024 12:01		JC\MD	Ok
8	VSTDICV020	ICVVN120624	VN085123.D	06 Dec 2024 12:28		JC\MD	Ok,M
9	VN1206WBS01	VN1206WBS01	VN085124.D	06 Dec 2024 13:42		JC\MD	Ok,M
10	VN1206WBSD01	VN1206WBSD01	VN085125.D	06 Dec 2024 14:16		JC\MD	Ok,M
11	VN1206WBL01	VN1206WBL01	VN085126.D	06 Dec 2024 14:40		JC\MD	Ok
12	P5051-01	14B-1	VN085127.D	06 Dec 2024 15:15	vial A pH#6.0	JC\MD	Ok
13	P5051-02	14B-2	VN085128.D	06 Dec 2024 15:39	vial A pH#6.0	JC\MD	Ok
14	P5051-03	14B-3	VN085129.D	06 Dec 2024 16:03	vial A pH#6.0	JC\MD	Ok
15	P5051-04	14B-4	VN085130.D	06 Dec 2024 16:27	vial A pH#6.0	JC\MD	Ok
16	P5068-01	14B-1	VN085131.D	06 Dec 2024 16:51	vial A pH#6.0	JC\MD	Ok
17	P5068-02	14B-2	VN085132.D	06 Dec 2024 17:15	vial A pH#6.0	JC\MD	Ok
18	P5068-03	14B-3	VN085133.D	06 Dec 2024 17:39	vial A pH#6.0	JC\MD	Ok

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QC Batch ID # VN120624

Review By	Maresh Dadoda	Review On	12/9/2024 8:33:44 AM
Supervise By	Semsettin Yesilyurt	Supervise On	12/9/2024 8:36:31 AM
SubDirectory	VN120624	HP Acquire Method	HP Processing Method 624N120624W.M
STD. NAME	STD REF.#		
Tune/Reschk	VP131993		
Initial Calibration Stds	VP131999,VP132000,VP132001,VP132002,VP132003		
CCC	VP131995		
Internal Standard/PEM			
ICV/I.BLK	VP132004		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

19	P5068-04	14B-4	VN085134.D	06 Dec 2024 18:03	vial A pH#6.0	JC\MD	Ok,M
20	P5139-01	001-WILLETS-PT-BLVD	VN085135.D	06 Dec 2024 18:27	vial A pH<2	JC\MD	Ok
21	P5139-02	002-35TH-AVE(DEC)	VN085136.D	06 Dec 2024 18:51	vial A pH<2	JC\MD	Ok
22	P5044-01	OUTFALL-DSN-001	VN085137.D	06 Dec 2024 19:15	vial A pH<2	JC\MD	Ok,M
23	P5044-02	OUTFALL-DSN-002	VN085138.D	06 Dec 2024 19:39	vial A pH<2	JC\MD	Ok
24	P5192-01	EFF-WASTE WATER	VN085139.D	06 Dec 2024 20:03	vial A pH<2	JC\MD	Ok

M : Manual Integration



SHIPPING DOCUMENTS

CHEMTECH

CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 • Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO. **P5044**
QUOTE NO.
COC Number **2041750**

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: **TRIS PHARMA, INC**
ADDRESS: **2033 ROUTE 130**
CITY: **MONMOUTH JUNCTION** STATE: **NJ** ZIP: **08852**
ATTENTION: **NIKKI TIERNEY**
PHONE: **732.823.4938** FAX: **N/A**

CLIENT PROJECT INFORMATION

PROJECT NAME: **QUARTERLY**
PROJECT NO.: LOCATION:
PROJECT MANAGER: **NIKKI TIERNEY**
e-mail: **NMTIERNEY@trispharma.com**
PHONE: **SAME** FAX: **N/A**

CLIENT BILLING INFORMATION

BILL TO: PO#: **211765**
ADDRESS:
CITY: **SAME** STATE: ZIP:
ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

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

DATA DELIVERABLE INFORMATION

☒ 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

1 **BOD 5**
2 **TSS**
3 **METALS GRP 3**
4 **COB**
5 **VOCMS GRP 1**
6 **NON-POLAR METALS**
7
8
9

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES						COMMENTS
			COMP	GRAB	DATE	TIME		E	E	B	C	A	C	
1.DSN-001	OUTFALL DSN-001	NW		X	11/27/24	9:07AM	7	X	X	X	X	X	X	
2.DSN-002	OUTFALL DSN-002	NW		X	11/27/24	8:32AM	7	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. N. Tierney	DATE/TIME: 11/27/24 9:41AM	RECEIVED BY: [Signature] 1210	Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 3.1 °C
RELINQUISHED BY SAMPLER: 2.	DATE/TIME:	RECEIVED BY:	Comments:
RELINQUISHED BY SAMPLER: 3. [Signature]	DATE/TIME: 11-27-24	RECEIVED BY: 11-27-24	

Page ____ of ____

CLIENT: ☐ Hand Delivered ☐ Other
CHEMTECH: ☐ Picked Up ☐ Field Sampling

Shipment Complete
☐ YES ☐ NO



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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : P5044 TRIS02

Order Date : 11/27/2024 12:16:00 PM

Project Mgr :

Client Name : Tris Pharma, Inc.

Project Name : Quarterly

Report Type : Results Only

Client Contact : Nichole Nikki Ferrari

Receive DateTime : 11/27/2024 ~~12:00:00~~ AM

EDD Type : EXCEL NOCLEANUP

Invoice Name : Tris Pharma, Inc.

Purchase Order :

Hard Copy Date :

Invoice Contact : Nichole Nikki Ferrari

Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
P5044-01	OUTFALL-DSN-001	Water	11/27/2024	09:07					
					VOCMS Group1		624.1	10 Bus. Days	
P5044-02	OUTFALL-DSN-002	Water	11/27/2024	08:32					
					VOCMS Group1		624.1	10 Bus. Days	

Relinquished By :

Date / Time : 11-27-24 1745

Received By :

Date / Time : 12/02/24 8:20 Ref # 5

Storage Area : VOA Refridgerator Room

* Samples in (SM) Fridge @ 1745.