

Cover Page

Order ID : P4258

Project ID : Perth Amboy

Client : Roman E&G Corp

Lab Sample Number

P4258-01
P4258-02
P4258-03
P4258-04

Client Sample Number

Chamberlain Ave
Chamberlain Ave
Chamberlain Ave
Chamberlain Ave

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: 10/9/2024

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 #: P4258

Completed

For thorough review, the report must have the following:

GENERAL:

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

✓

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

✓

Is the chain of custody signed and complete

✓

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

✓

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

✓

COVER PAGE:

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

✓

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

✓

CHAIN OF CUSTODY:

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

✓

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

✓

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

✓

Were the samples received within hold time

✓

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

✓

ANALYTICAL:

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

QA Review Signature: NILESH PRAJAPATI

Date: 10/09/2024

LAB CHRONICLE

OrderID:	P4258	OrderDate:	10/1/2024 1:21:00 PM
Client:	Roman E&G Corp	Project:	Perth Amboy
Contact:	Mark Mattheiss	Location:	H11,H51

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P4258-03	Chamberlain Ave	SOIL	VOC-TCLVOA-10	8260D	10/01/24		10/02/24	10/01/24
P4258-03RE	Chamberlain AveRE	SOIL	VOC-TCLVOA-10	8260D	10/01/24		10/03/24	10/01/24
P4258-04	Chamberlain Ave	TCLP	TCLP VOA	8260D	10/01/24		10/03/24	10/01/24



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

Hit Summary Sheet
SW-846

SDG No.: P4258

Client: Roman E&G Corp

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
-----------	-----------	--------	-----------	---------------	---	-----	-----	-------

Client ID:

0

Total Voc :

Total Concentration:



QC SUMMARY

Surrogate Summary

SDG No.: P4258

Client: Roman E&G Corp

Analytical Method: SW8260D

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits	
						Low	High
P4258-04	Chamberlain Ave	1,2-Dichloroethane-d4	50	49.9	100	74	125
		Dibromofluoromethane	50	48.5	97	75	124
		Toluene-d8	50	50.9	102	86	113
		4-Bromofluorobenzene	50	47.2	94	77	121

Surrogate Summary

SDG No.: P4258

Client: Roman E&G Corp

Analytical Method: SW8260-Low

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits	
						Low	High
VN1003WBL01	VN1003WBL01	1,2-Dichloroethane-d4	50	51.9	104	74	125
		Dibromofluoromethane	50	51.9	104	75	124
		Toluene-d8	50	50.4	101	86	113
		4-Bromofluorobenzene	50	46.5	93	77	121
VN1003WBS01	VN1003WBS01	1,2-Dichloroethane-d4	50	52.8	106	74	125
		Dibromofluoromethane	50	54.6	109	75	124
		Toluene-d8	50	56.2	112	86	113
		4-Bromofluorobenzene	50	53.1	106	77	121
VN1003WBSD0	VN1003WBSD01	1,2-Dichloroethane-d4	50	54.8	110	74	125
		Dibromofluoromethane	50	55.0	110	75	124
		Toluene-d8	50	54.8	110	86	113
		4-Bromofluorobenzene	50	54.7	109	77	121

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P4258

Client: Roman E&G Corp

Analytical Method: SW8260-Low

Datafile : VN084286.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VN1003WBS01	Vinyl chloride	20	19.7	ug/L	99			65	117	
	1,1-Dichloroethene	20	19.6	ug/L	98			74	110	
	2-Butanone	100	98.2	ug/L	98			65	122	
	Carbon Tetrachloride	20	20.1	ug/L	101			77	113	
	Chloroform	20	20.6	ug/L	103			79	113	
	Benzene	20	20.2	ug/L	101			82	109	
	1,2-Dichloroethane	20	20.4	ug/L	102			80	115	
	Trichloroethene	20	20.0	ug/L	100			77	113	
	Tetrachloroethene	20	20.2	ug/L	101			67	123	
	Chlorobenzene	20	19.7	ug/L	99			82	109	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P4258

Client: Roman E&G Corp

Analytical Method: SW8260-Low

Datafile : VN084287.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VN1003WBSD01	Vinyl chloride	20	19.7	ug/L	99	0		65	117	20
	1,1-Dichloroethene	20	19.5	ug/L	98	0		74	110	20
	2-Butanone	100	100	ug/L	100	2		65	122	20
	Carbon Tetrachloride	20	20.3	ug/L	102	1		77	113	20
	Chloroform	20	20.7	ug/L	104	1		79	113	20
	Benzene	20	20.8	ug/L	104	3		82	109	20
	1,2-Dichloroethane	20	21.7	ug/L	109	7		80	115	20
	Trichloroethene	20	19.9	ug/L	100	0		77	113	20
	Tetrachloroethene	20	20.3	ug/L	102	1		67	123	20
	Chlorobenzene	20	20.4	ug/L	102	3		82	109	20

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VN1003WBL01

Lab Name: CHEMTECH

Contract: ROMA02

Lab Code: CHEM Case No.: P4258

SAS No.: P4258 SDG NO.: P4258

Lab File ID: VN084285.D

Lab Sample ID: VN1003WBL01

Date Analyzed: 10/03/2024

Time Analyzed: 09:42

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
VN1003WBS01	VN1003WBS01	VN084286.D	10/03/2024
VN1003WBSD01	VN1003WBSD01	VN084287.D	10/03/2024
Chamberlain Ave	P4258-04	VN084304.D	10/03/2024

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: ROMA02
Lab Code: CHEM Case No.: P4258 SAS No.: P4258 SDG NO.: P4258
Lab File ID: VN084211.D BFB Injection Date: 09/30/2024
Instrument ID: MSVOA_N BFB Injection Time: 09:24
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.9
75	30.0 - 60.0% of mass 95	53.9
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.3
173	Less than 2.0% of mass 174	0.6 (0.8) 1
174	50.0 - 100.0% of mass 95	71
175	5.0 - 9.0% of mass 174	5.5 (7.8) 1
176	95.0 - 101.0% of mass 174	69.7 (98.2) 1
177	5.0 - 9.0% of mass 176	4.9 (7) 2

1-Value is % mass 174

2-Value is % mass 176

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDICC100	VSTDICC100	VN084213.D	09/30/2024	12:25
VSTDICCC050	VSTDICCC050	VN084214.D	09/30/2024	12:49
VSTDICC020	VSTDICC020	VN084215.D	09/30/2024	13:13
VSTDICC010	VSTDICC010	VN084216.D	09/30/2024	13:37
VSTDICC005	VSTDICC005	VN084217.D	09/30/2024	14:00
VSTDICC001	VSTDICC001	VN084218.D	09/30/2024	14:48



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: ROMA02
Lab Code: CHEM Case No.: P4258 SAS No.: P4258 SDG NO.: P4258
Lab File ID: VN084282.D BFB Injection Date: 10/03/2024
Instrument ID: MSVOA_N BFB Injection Time: 08:20
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	20.1
75	30.0 - 60.0% of mass 95	52.6
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	0.0 (0.0) 1
174	50.0 - 100.0% of mass 95	75.8
175	5.0 - 9.0% of mass 174	6.2 (8.2) 1
176	95.0 - 101.0% of mass 174	75.1 (99.1) 1
177	5.0 - 9.0% of mass 176	5 (6.6) 2

1-Value is % mass 174

2-Value is % mass 176

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VN084283.D	10/03/2024	08:43
VN1003WBL01	VN1003WBL01	VN084285.D	10/03/2024	09:42
VN1003WBS01	VN1003WBS01	VN084286.D	10/03/2024	10:05
VN1003WBSD01	VN1003WBSD01	VN084287.D	10/03/2024	10:40
Chamberlain Ave	P4258-04	VN084304.D	10/03/2024	17:27

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: ROMA02
Lab Code: CHEM Case No.: P4258 SAS No.: P4258 SDG NO.: P4258
Lab File ID: VN084283.D Date Analyzed: 10/03/2024
Instrument ID: MSVOA_N Time Analyzed: 08:43
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	169381	8.22	285966	9.10	262806	11.87
UPPER LIMIT	338762	8.724	571932	9.6	525612	12.365
LOWER LIMIT	84690.5	7.724	142983	8.6	131403	11.365
EPA SAMPLE NO.						
Chamberlain Ave	164187	8.22	302561	9.10	265786	11.87
VN1003WBL01	163611	8.22	286487	9.10	249556	11.87
VN1003WBS01	164341	8.22	282487	9.10	252092	11.87
VN1003WBSD01	156141	8.22	268205	9.10	240791	11.87

IS1 = Pentafluorobenzene
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.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: ROMA02
 Lab Code: CHEM Case No.: P4258 SAS No.: P4258 SDG NO.: P4258
 Lab File ID: VN084283.D Date Analyzed: 10/03/2024
 Instrument ID: MSVOA_N Time Analyzed: 08:43
 GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	131016	13.788				
UPPER LIMIT	262032	14.288				
LOWER LIMIT	65508	13.288				
EPA SAMPLE NO.						
Chamberlain Ave	107062	13.79				
VN1003WBL01	98264	13.79				
VN1003WBS01	119632	13.79				
VN1003WBSD01	117079	13.79				

IS4 = 1,4-Dichlorobenzene-d4

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:	Roman E&G Corp	Date Collected:	10/01/24
Project:	Perth Amboy	Date Received:	10/01/24
Client Sample ID:	Chamberlain Ave	SDG No.:	P4258
Lab Sample ID:	P4258-04	Matrix:	TCLP
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	TCLP VOA
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :	SW5035		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084304.D	1		10/03/24 17:27	VN100324

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-01-4	Vinyl Chloride	0.34	U	0.34	5.00	ug/L
75-35-4	1,1-Dichloroethene	0.26	U	0.26	5.00	ug/L
78-93-3	2-Butanone	1.30	U	1.30	25.0	ug/L
56-23-5	Carbon Tetrachloride	0.25	U	0.25	5.00	ug/L
67-66-3	Chloroform	0.26	U	0.26	5.00	ug/L
71-43-2	Benzene	0.16	U	0.16	5.00	ug/L
107-06-2	1,2-Dichloroethane	0.24	U	0.24	5.00	ug/L
79-01-6	Trichloroethene	0.32	U	0.32	5.00	ug/L
127-18-4	Tetrachloroethene	0.25	U	0.25	5.00	ug/L
108-90-7	Chlorobenzene	0.13	U	0.13	5.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	49.8		74 - 125	100%	SPK: 50
1868-53-7	Dibromofluoromethane	48.6		75 - 124	97%	SPK: 50
2037-26-5	Toluene-d8	50.9		86 - 113	102%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.2		77 - 121	94%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	164000	8.224			
540-36-3	1,4-Difluorobenzene	303000	9.1			
3114-55-4	Chlorobenzene-d5	266000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	107000	13.788			

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\VN100324\
 Data File : VN084304.D
 Acq On : 03 Oct 2024 17:27
 Operator : JC\MD
 Sample : P4258-04
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 24 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 Chamberlain Ave

Manual Integrations
 APPROVED

Reviewed By : John Carlone 10/04/2024
 Supervised By : Mahesh Dadoda 10/04/2024

Quant Time: Oct 04 01:39:17 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
 Quant Title : SW846 8260
 QLast Update : Tue Oct 01 07:11:01 2024
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	8.224	168	164187	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	302561	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	265786	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	107062	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	121347	49.847	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery =	99.700%		
35) Dibromofluoromethane	8.165	113	96852	48.555	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	97.120%		
50) Toluene-d8	10.565	98	373293	50.867	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery =	101.740%		
62) 4-Bromofluorobenzene	12.847	95	126134	47.179	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery =	94.360%		
Target Compounds						
16) Acetone	4.430	43	15883	15.188	ug/l	92
20) Methylene Chloride	5.283	84	4056	1.908	ug/l #	89
43) Isopropyl Acetate	8.688	43	181785m	31.223	ug/l	

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

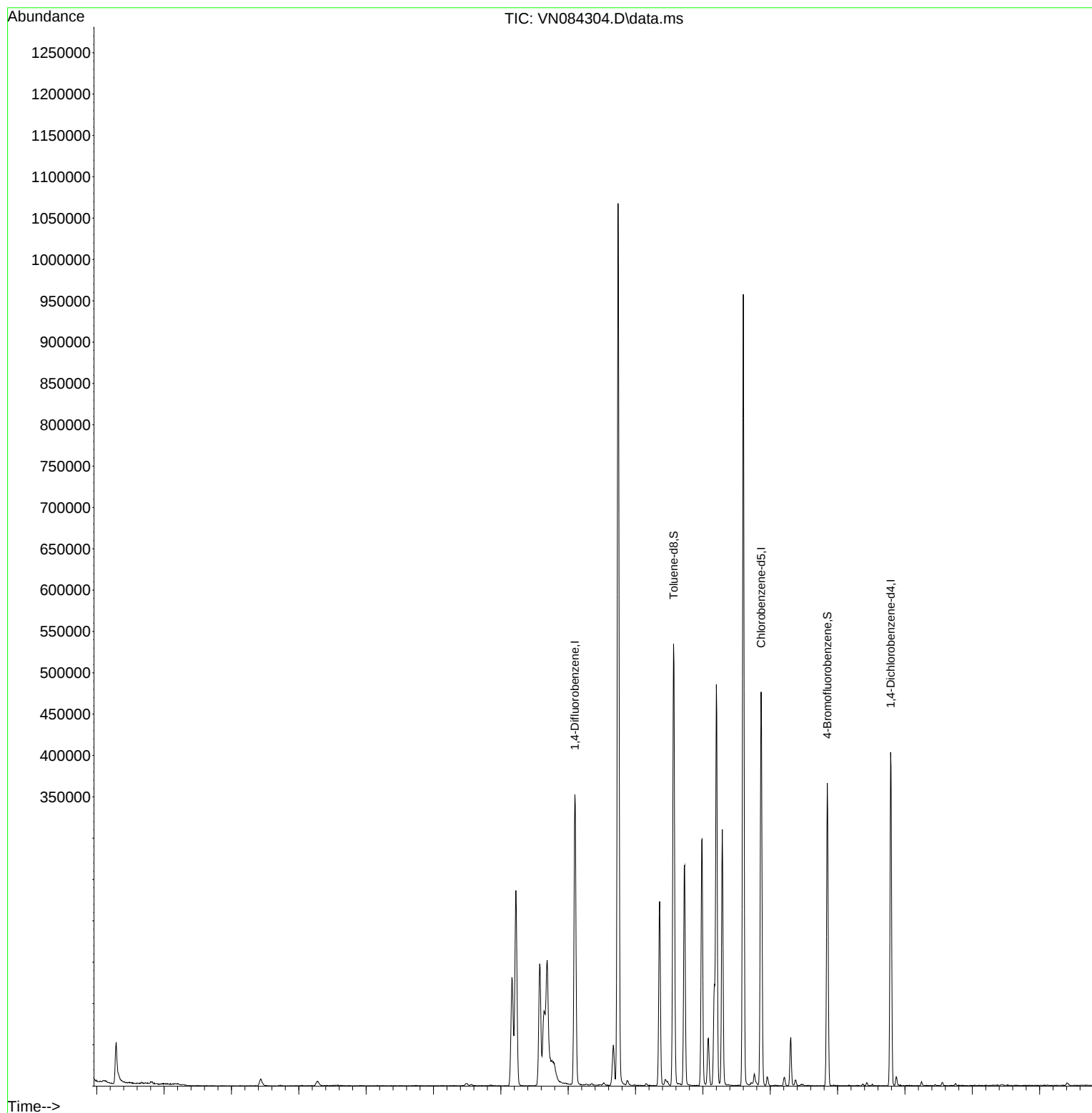
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN100324\
Data File : VN084304.D
Acq On : 03 Oct 2024 17:27
Operator : JC\MD
Sample : P4258-04
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 24 Sample Multiplier: 1

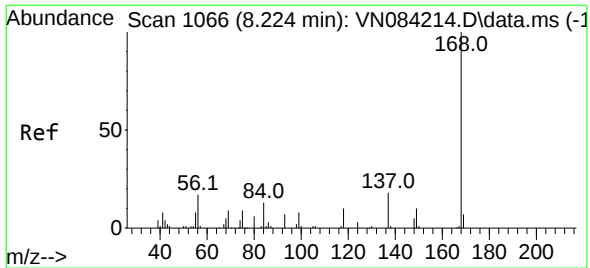
Instrument :
MSVOA_N
ClientSampleId :
Chamberlain Ave

Manual Integrations
APPROVED

Reviewed By : John Carlone 10/04/2024
Supervised By : Mahesh Dadoda 10/04/2024

Quant Time: Oct 04 01:39:17 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
Quant Title : SW846 8260
QLast Update : Tue Oct 01 07:11:01 2024
Response via : Initial Calibration





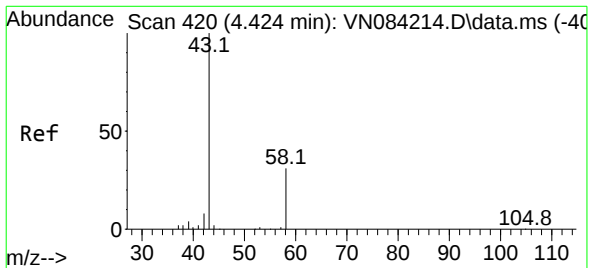
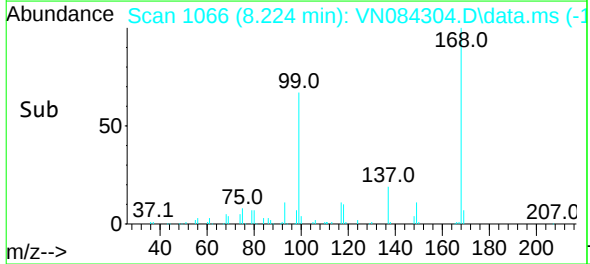
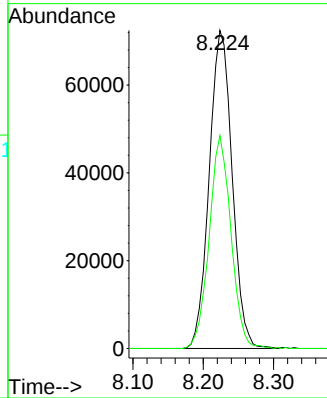
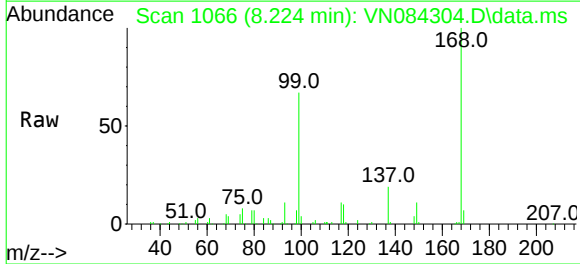
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1066
Delta R.T. -0.000 min
Lab File: VN084304.D
Acq: 03 Oct 2024 17:27

Instrument :
MSVOA_N
ClientSampleId :
Chamberlain Ave

Tgt Ion: 168 Resp: 164187
Ion Ratio Lower Upper
168 100
99 67.0 54.2 81.2

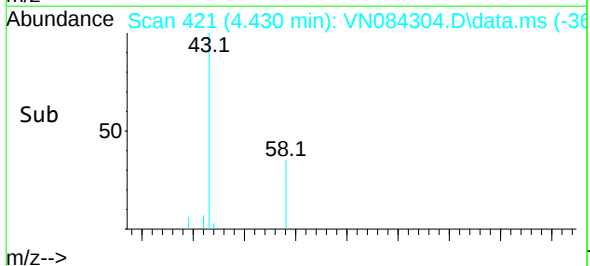
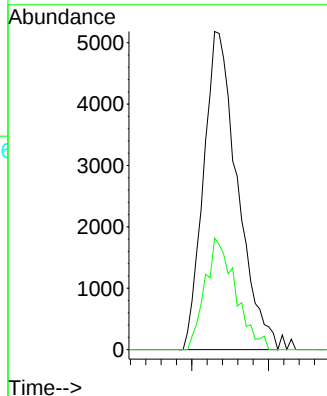
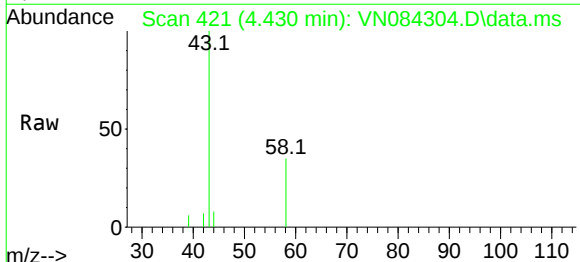
Manual Integrations
APPROVED

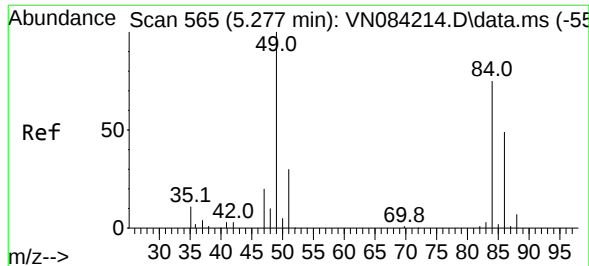
Reviewed By :John Carlone 10/04/2024
Supervised By :Mahesh Dadoda 10/04/2024



#16
Acetone
Concen: 15.188 ug/l
RT: 4.430 min Scan# 421
Delta R.T. 0.006 min
Lab File: VN084304.D
Acq: 03 Oct 2024 17:27

Tgt Ion: 43 Resp: 15883
Ion Ratio Lower Upper
43 100
58 35.1 24.4 36.6





#20

Methylene Chloride

Concen: 1.908 ug/l

RT: 5.283 min Scan# 565

Delta R.T. 0.006 min

Lab File: VN084304.D

Acq: 03 Oct 2024 17:27

Instrument :

MSVOA_N

ClientSampleId :

Chamberlain Ave

Tgt Ion: 84 Resp: 4056

Ion Ratio Lower Upper

84 100

49 122.2 107.2 160.8

51 28.6 31.8 47.8

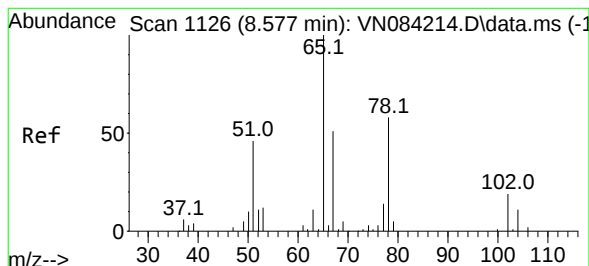
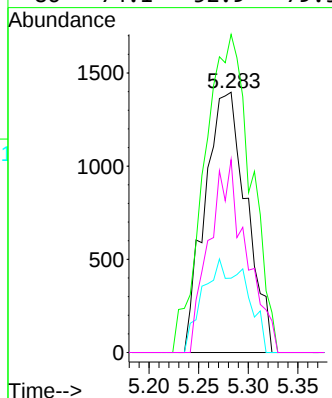
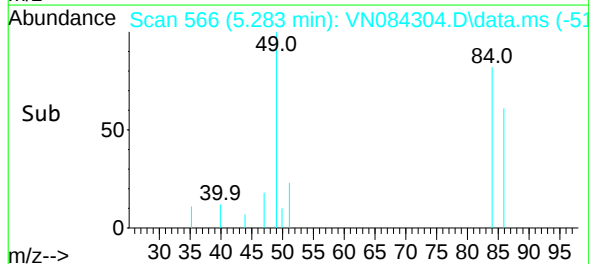
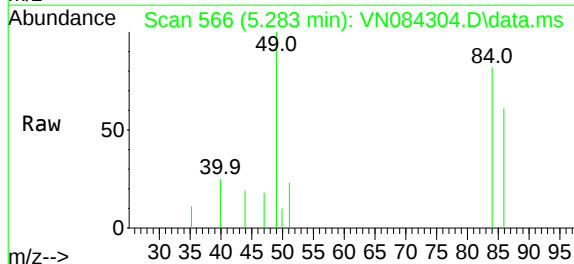
86 74.1 52.9 79.3

Manual Integrations

APPROVED

Reviewed By :John Carlone 10/04/2024

Supervised By :Mahesh Dadoda 10/04/2024



#33

1,2-Dichloroethane-d4

Concen: 49.847 ug/l

RT: 8.577 min Scan# 1126

Delta R.T. -0.000 min

Lab File: VN084304.D

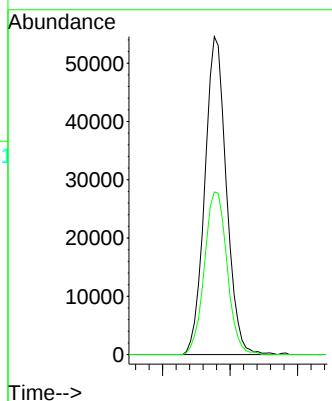
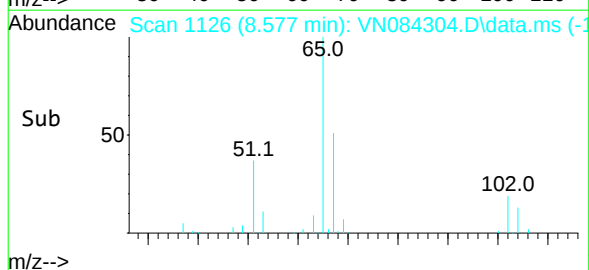
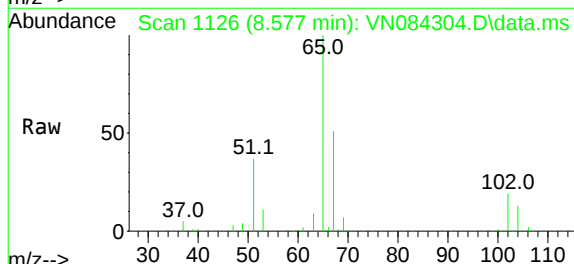
Acq: 03 Oct 2024 17:27

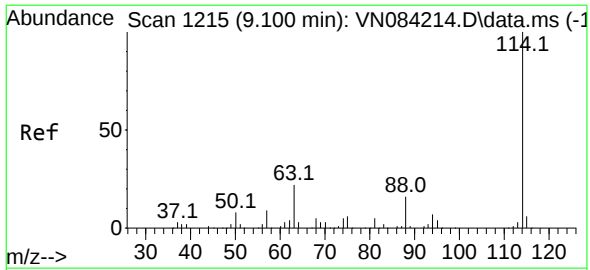
Tgt Ion: 65 Resp: 121347

Ion Ratio Lower Upper

65 100

67 53.7 0.0 102.0





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.100 min Scan# 1215

Delta R.T. -0.000 min

Lab File: VN084304.D

Acq: 03 Oct 2024 17:27

Instrument :

MSVOA_N

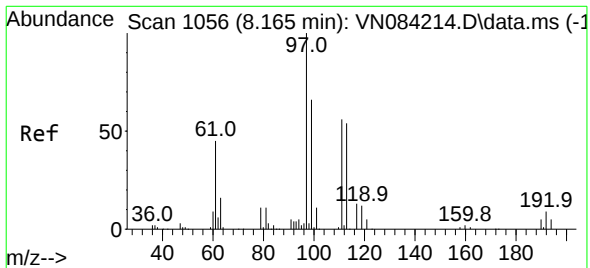
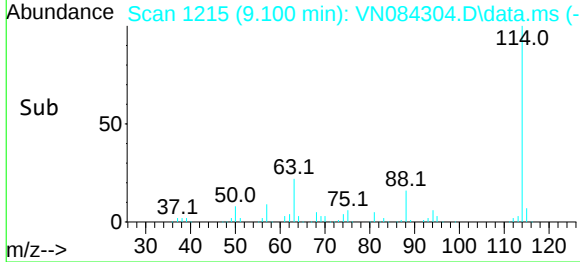
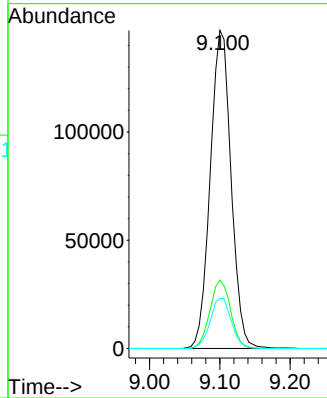
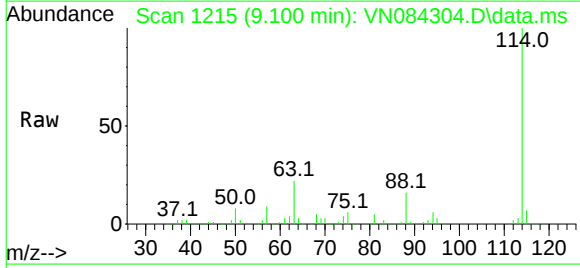
ClientSampleId :

Chamberlain Ave

Tgt Ion:	114	Resp:	302561
Ion	Ratio	Lower	Upper
114	100		
63	21.5	0.0	43.8
88	15.8	0.0	31.6

Manual Integrations
APPROVED

Reviewed By :John Carlone 10/04/2024
Supervised By :Mahesh Dadoda 10/04/2024



#35

Dibromofluoromethane

Concen: 48.555 ug/l

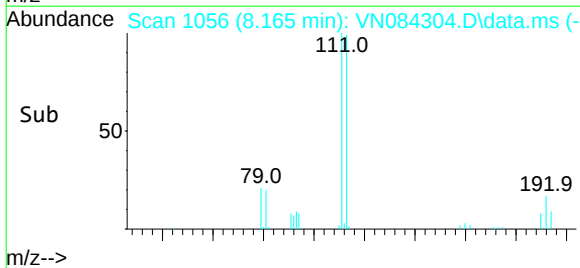
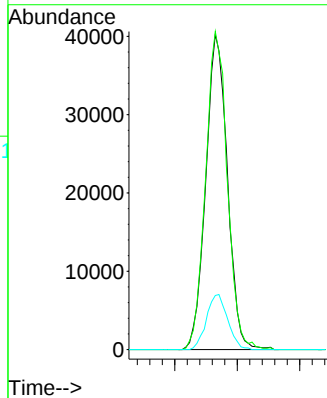
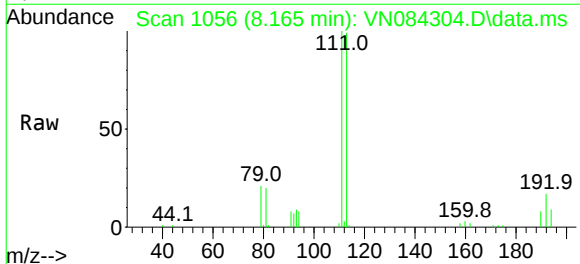
RT: 8.165 min Scan# 1056

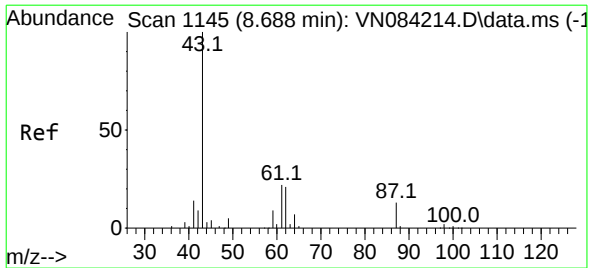
Delta R.T. -0.000 min

Lab File: VN084304.D

Acq: 03 Oct 2024 17:27

Tgt Ion:	113	Resp:	96852
Ion	Ratio	Lower	Upper
113	100		
111	101.4	83.3	124.9
192	17.1	13.5	20.3





#43

Isopropyl Acetate

Concen: 31.223 ug/l m

RT: 8.688 min Scan# 1145

Delta R.T. -0.000 min

Lab File: VN084304.D

Acq: 03 Oct 2024 17:27

Instrument :

MSVOA_N

ClientSampleId :

Chamberlain Ave

Tgt Ion: 43 Resp: 181785

Ion Ratio Lower Upper

43 100

61 13.3 20.4 30.6#

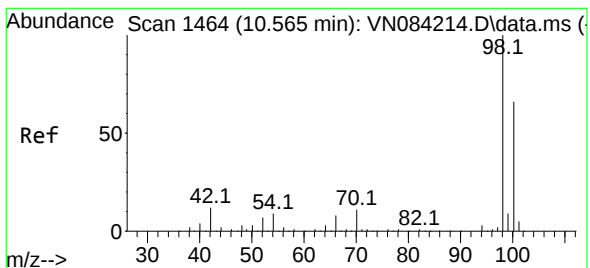
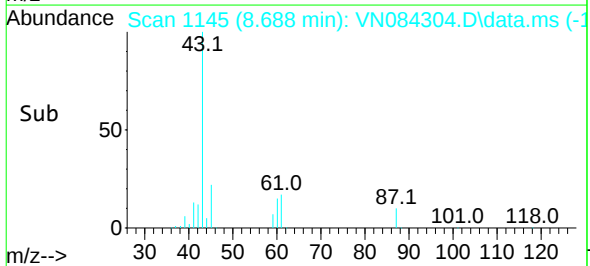
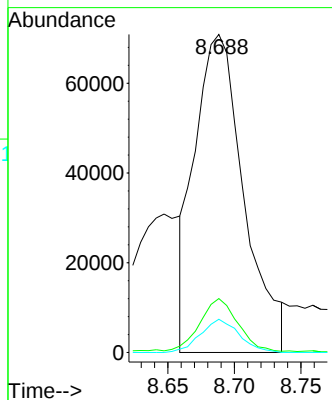
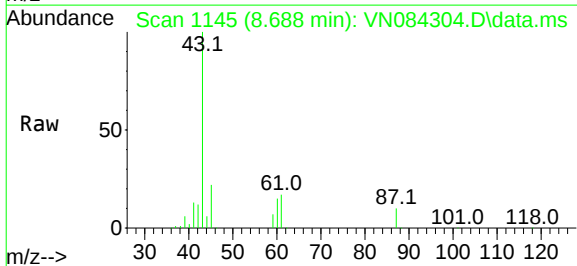
87 8.2 10.3 15.5#

Manual Integrations

APPROVED

Reviewed By :John Carlone 10/04/2024

Supervised By :Mahesh Dadoda 10/04/2024



#50

Toluene-d8

Concen: 50.867 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. -0.000 min

Lab File: VN084304.D

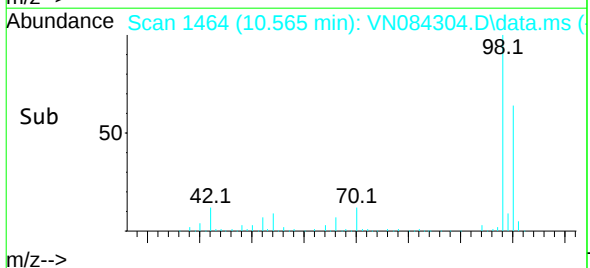
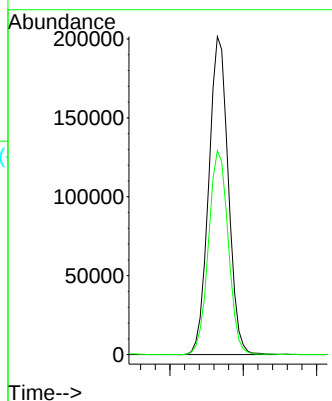
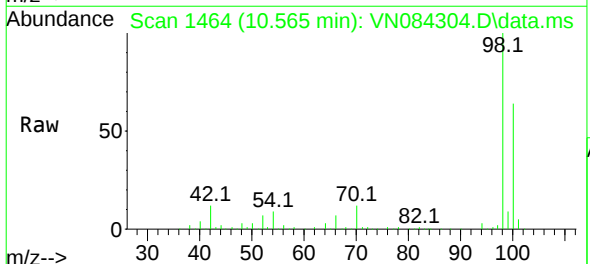
Acq: 03 Oct 2024 17:27

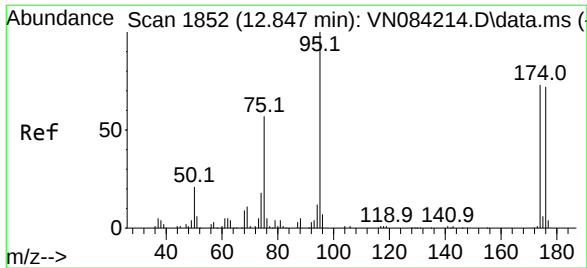
Tgt Ion: 98 Resp: 373293

Ion Ratio Lower Upper

98 100

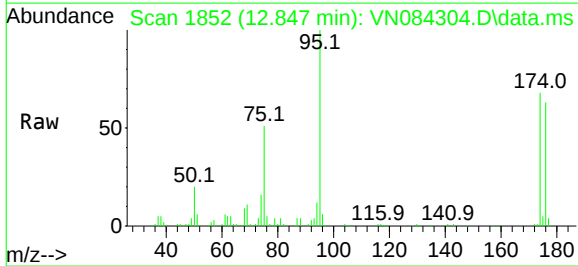
100 64.7 52.7 79.1





#62
4-Bromofluorobenzene
Concen: 47.179 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN084304.D
Acq: 03 Oct 2024 17:27

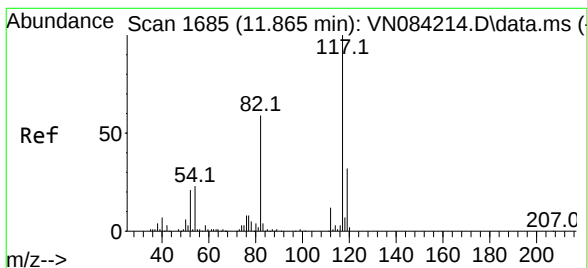
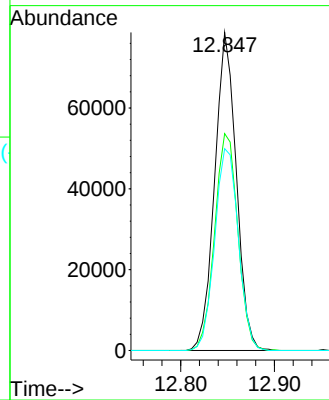
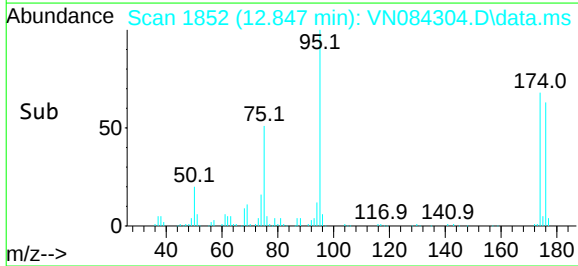
Instrument :
MSVOA_N
ClientSampleId :
Chamberlain Ave



Tgt Ion: 95 Resp: 126134
Ion Ratio Lower Upper
95 100
174 73.0 0.0 145.2
176 69.3 0.0 140.0

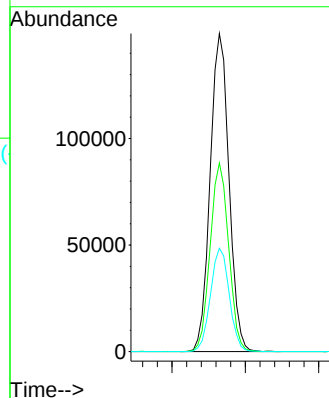
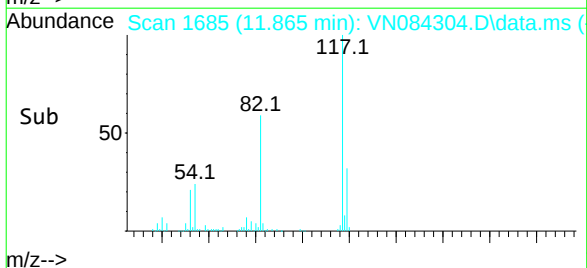
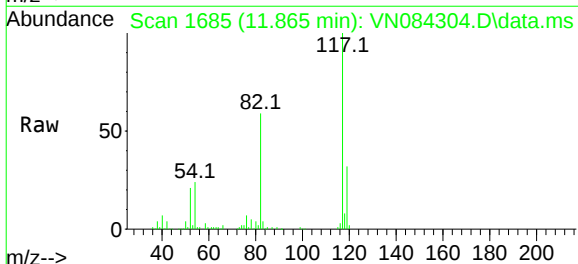
Manual Integrations
APPROVED

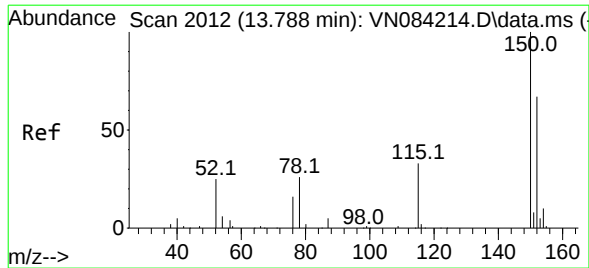
Reviewed By :John Carlone 10/04/2024
Supervised By :Mahesh Dadoda 10/04/2024



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1685
Delta R.T. -0.000 min
Lab File: VN084304.D
Acq: 03 Oct 2024 17:27

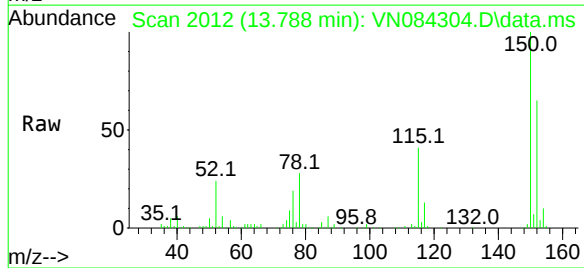
Tgt Ion:117 Resp: 265786
Ion Ratio Lower Upper
117 100
82 59.3 47.2 70.8
119 32.5 25.4 38.0





1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 20
Delta R.T. -0.000 min
Lab File: VN084304.D
Acq: 03 Oct 2024 17:27

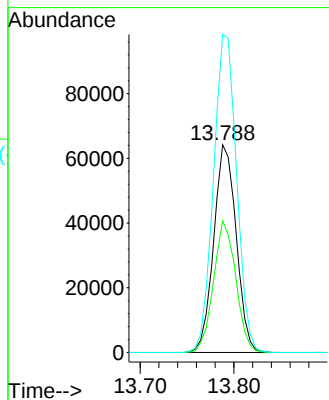
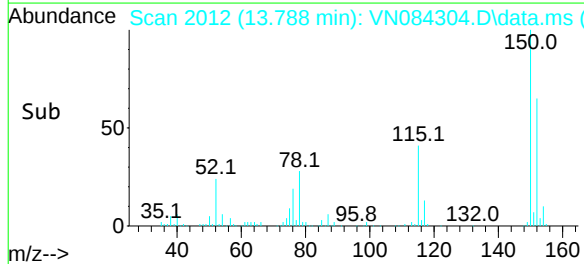
Instrument :
MSVOA_N
ClientSampleId :
Chamberlain Ave



Tgt	Ion	Ratio	Lower	Upper
152	100			
115	62.5	31.3	93.9	
150	157.4	0.0	349.8	

Manual Integrations
APPROVED

Reviewed By :John Carlone 10/04/2024
Supervised By :Mahesh Dadoda 10/04/2024





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: ROMA02
 Lab Code: CHEM Case No.: P4258 SAS No.: P4258 SDG No.: P4258
 Instrument ID: MSVOA_N Calibration Date(s): 09/30/2024 09/30/2024
 Heated Purge: (Y/N) N Calibration Time(s): 12:25 14:48
 GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID:		RRF100 = VN084213.D		RRF050 = VN084214.D		RRF020 = VN084215.D			
		RRF010 = VN084216.D		RRF005 = VN084217.D		RRF001 = VN084218.D			
COMPOUND	RRF100	RRF050	RRF020	RRF010	RRF005	RRF001	RRF	% RSD	
Vinyl Chloride	0.611	0.667	0.665	0.641	0.724	0.617	0.654	6.4	
1,1-Dichloroethene	0.538	0.587	0.596	0.533	0.631	0.493	0.563	8.9	
2-Butanone	0.395	0.452	0.465	0.419	0.467	0.404	0.434	7.3	
Carbon Tetrachloride	0.515	0.549	0.553	0.508	0.545	0.482	0.525	5.4	
Chloroform	1.083	1.204	1.205	1.117	1.259	1.181	1.175	5.5	
Benzene	1.434	1.553	1.559	1.410	1.574	1.421	1.492	5.2	
1,2-Dichloroethane	0.480	0.528	0.524	0.498	0.544	0.460	0.506	6.3	
Trichloroethene	0.334	0.362	0.361	0.329	0.379	0.325	0.348	6.3	
Tetrachloroethene	0.323	0.359	0.351	0.338	0.373	0.346	0.348	5	
Chlorobenzene	1.068	1.170	1.143	1.069	1.173	1.028	1.109	5.5	
1,2-Dichloroethane-d4	0.673	0.737	0.764	0.712	0.821		0.741	7.5	
Dibromofluoromethane	0.308	0.324	0.341	0.316	0.359		0.330	6.1	
Toluene-d8	1.189	1.243	1.242	1.148	1.242		1.213	3.5	
4-Bromofluorobenzene	0.447	0.452	0.449	0.406	0.456		0.442	4.6	

* 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 : 82N093024W.M
 Title : SW846 8260
 Last Update : Tue Oct 01 07:11:01 2024
 Response Via : Initial Calibration

Calibration Files

1 =VN084218.D 5 =VN084217.D 10 =VN084216.D 20 =VN084215.D 50 =VN084214.D 100 =VN084213.

D

	Compound	1	5	10	20	50	100	Avg	%RSD
1) I	Pentafluorobenzene	-----ISTD-----							
2) T	Dichlorodifluo...	0.600	0.607	0.562	0.600	0.613	0.567	0.591	3.67
3) P	Chloromethane	0.690	0.747	0.648	0.677	0.671	0.619	0.675	6.39
4) C	Vinyl Chloride	0.617	0.724	0.641	0.665	0.667	0.611	0.654	6.37#
5) T	Bromomethane	0.501	0.424	0.432	0.432	0.368	0.431	0.431	10.93
6) T	Chloroethane	0.632	0.522	0.433	0.430	0.419	0.375	0.468	19.90
7) T	Trichlorofluor...	0.978	1.113	0.959	1.047	1.060	0.953	1.019	6.36
8) T	Diethyl Ether	0.363	0.398	0.352	0.408	0.390	0.355	0.378	6.36
9) T	1,1,2-Trichlor...	0.602	0.633	0.532	0.603	0.590	0.542	0.584	6.68
10) T	Methyl Iodide	0.764	0.688	0.769	0.806	0.731	0.752	0.752	5.87
11) T	Tert butyl alc...	0.143	0.116	0.128	0.123	0.101	0.122	0.122	12.49
12) CM	1,1-Dichloroet...	0.493	0.631	0.533	0.596	0.587	0.538	0.563	8.94#
13) T	Acrolein	0.162	0.130	0.135	0.142	0.131	0.140	0.140	9.47
14) T	Allyl chloride	0.888	1.097	0.896	1.086	0.995	0.905	0.978	9.85
15) T	Acrylonitrile	0.306	0.329	0.300	0.324	0.316	0.277	0.309	6.10
16) T	Acetone	0.299	0.336	0.298	0.337	0.342	0.299	0.318	6.80
17) T	Carbon Disulfide	2.080	1.908	1.650	1.746	1.723	1.588	1.782	10.18
18) T	Methyl Acetate	0.700	0.765	0.691	0.694	0.707	0.607	0.694	7.27
19) T	Methyl tert-bu...	1.656	2.049	1.802	2.035	2.033	1.825	1.900	8.57
20) T	Methylene Chlo...	0.686	0.669	0.618	0.661	0.655	0.594	0.647	5.29
21) T	trans-1,2-Dich...	0.546	0.627	0.570	0.619	0.622	0.555	0.590	6.21
22) T	Diisopropyl ether	1.756	2.207	1.900	2.170	2.164	1.938	2.022	9.10
23) T	Vinyl Acetate	1.196	1.585	1.411	1.655	1.648	1.505	1.500	11.67
24) P	1,1-Dichloroet...	1.046	1.226	1.084	1.163	1.193	1.075	1.131	6.43
25) T	2-Butanone	0.404	0.467	0.419	0.465	0.452	0.395	0.434	7.35
26) T	2,2-Dichloropr...	0.904	1.086	0.983	1.078	1.082	0.985	1.020	7.31
27) T	cis-1,2-Dichlo...	0.703	0.767	0.655	0.741	0.741	0.670	0.713	6.19
28) T	Bromochloromet...	0.535	0.619	0.423	0.486	0.494	0.472	0.505	13.20
29) T	Tetrahydrofuran	0.249	0.290	0.266	0.281	0.283	0.236	0.268	8.01
30) C	Chloroform	1.181	1.259	1.116	1.205	1.204	1.083	1.175	5.49#
31) T	Cyclohexane	1.321	1.047	1.084	1.068	0.970	1.098	1.098	12.01
32) T	1,1,1-Trichlor...	0.972	1.154	1.018	1.089	1.102	0.997	1.055	6.68
33) S	1,2-Dichloroet...	0.821	0.712	0.764	0.737	0.673	0.741	0.741	7.51
34) I	1,4-Difluorobenzene	-----ISTD-----							
35) S	Dibromofluorom...	0.359	0.316	0.341	0.324	0.308	0.330	0.330	6.14
36) T	1,1-Dichloropr...	0.417	0.504	0.468	0.501	0.509	0.474	0.479	7.25
37) T	Ethyl Acetate	0.447	0.560	0.488	0.496	0.503	0.452	0.491	8.34
38) T	Carbon Tetrach...	0.482	0.545	0.508	0.553	0.549	0.515	0.525	5.41
39) T	Methylcyclohexane	0.428	0.534	0.507	0.577	0.583	0.567	0.533	11.04
40) TM	Benzene	1.421	1.574	1.410	1.559	1.553	1.434	1.492	5.18
41) T	Methacrylonitrile	0.257	0.273	0.251	0.284	0.287	0.247	0.267	6.50
42) TM	1,2-Dichloroet...	0.460	0.544	0.498	0.524	0.528	0.480	0.506	6.32
43) T	Isopropyl Acetate	1.312	0.973	0.857	0.930	0.898	0.804	0.962	18.82
44) TM	Trichloroethene	0.325	0.379	0.329	0.361	0.362	0.334	0.348	6.32
45) C	1,2-Dichloropr...	0.289	0.388	0.339	0.380	0.375	0.346	0.353	10.44#
46) T	Dibromomethane	0.197	0.250	0.226	0.258	0.260	0.238	0.238	9.99
47) T	Bromodichlorom...	0.475	0.570	0.497	0.556	0.557	0.521	0.529	7.17
48) T	Methyl methacr...	0.314	0.408	0.371	0.411	0.418	0.376	0.383	10.14
49) T	1,4-Dioxane	0.007	0.007	0.007	0.007	0.007	0.006	0.007	5.48
50) S	Toluene-d8	1.242	1.148	1.242	1.243	1.189	1.213	1.213	3.54
51) T	4-Methyl-2-Pen...	0.387	0.484	0.468	0.510	0.508	0.449	0.468	9.88
52) CM	Toluene	0.840	0.920	0.861	0.963	0.970	0.904	0.910	5.79#
53) T	t-1,3-Dichloro...	0.430	0.564	0.517	0.573	0.590	0.562	0.539	10.92
54) T	cis-1,3-Dichlo...	0.469	0.606	0.569	0.608	0.638	0.592	0.580	10.18
55) T	1,1,2-Trichlor...	0.288	0.340	0.316	0.347	0.349	0.317	0.326	7.33

Method Path : Z:\voasrv\HPCHEM1\MSVOA_N\methods\										
Method File : 82N093024W.M										
56)	T	Ethyl methacry...	0.414	0.548	0.513	0.587	0.602	0.556	0.537	12.63
57)	T	1,3-Dichloropr...	0.533	0.623	0.551	0.618	0.616	0.555	0.583	6.95
58)	T	2-Chloroethyl ...	0.213	0.267	0.233	0.232	0.280	0.268	0.249	10.63
59)	T	2-Hexanone	0.285	0.357	0.340	0.387	0.387	0.341	0.349	10.80
60)	T	Dibromochlorom...	0.330	0.396	0.374	0.409	0.418	0.384	0.385	8.12
61)	T	1,2-Dibromoethane	0.309	0.361	0.315	0.362	0.358	0.328	0.339	7.18
62)	S	4-Bromofluorob...	0.456	0.406	0.449	0.452	0.447	0.442		4.62
-----ISTD-----										
63)	I	Chlorobenzene-d5								
64)	T	Tetrachloroethene	0.346	0.373	0.338	0.351	0.359	0.323	0.348	4.98
65)	PM	Chlorobenzene	1.028	1.173	1.069	1.143	1.170	1.068	1.109	5.52
66)	T	1,1,1,2-Tetrac...	0.334	0.409	0.366	0.409	0.404	0.369	0.382	8.01
67)	C	Ethyl Benzene	1.756	2.030	1.840	2.028	2.121	1.988	1.961	6.94#
68)	T	m/p-Xylenes	0.600	0.729	0.695	0.779	0.806	0.741	0.725	10.00
69)	T	o-Xylene	0.491	0.734	0.666	0.738	0.774	0.714	0.686	14.87
70)	T	Styrene	0.918	1.159	1.112	1.238	1.312	1.234	1.162	11.87
71)	P	Bromoform	0.239	0.288	0.260	0.303	0.315	0.282	0.281	9.98
-----ISTD-----										
72)	I	1,4-Dichlorobenzen...								
73)	T	Isopropylbenzene	3.428	3.864	3.677	4.055	4.132	3.737	3.815	6.78
74)	T	N-amyl acetate	1.583	1.758	1.705	1.827	1.857	1.636	1.728	6.20
75)	P	1,1,2,2-Tetrac...	1.095	1.291	1.127	1.187	1.183	1.001	1.147	8.52
76)	T	1,2,3-Trichlor...	0.895	1.251	0.999	1.003	1.125	0.851	1.021	14.47
77)	T	Bromobenzene	0.891	0.982	0.896	0.955	0.947	0.851	0.920	5.33
78)	T	n-propylbenzene	3.455	4.544	4.401	4.719	4.906	4.498	4.421	11.44
79)	T	2-Chlorotoluene	2.640	2.948	2.737	2.891	3.013	2.696	2.821	5.34
80)	T	1,3,5-Trimethy...	2.369	3.209	3.077	3.358	3.491	3.170	3.112	12.62
81)	T	trans-1,4-Dich...	0.408	0.428	0.435	0.451	0.407	0.426		4.34
82)	T	4-Chlorotoluene	2.537	2.968	2.777	2.962	3.029	2.765	2.840	6.46
83)	T	tert-Butylbenzene	2.407	2.844	2.681	2.891	3.027	2.748	2.766	7.68
84)	T	1,2,4-Trimethy...	2.334	3.209	3.102	3.449	3.522	3.195	3.135	13.53
85)	T	sec-Butylbenzene	2.842	3.641	3.715	4.021	4.143	3.787	3.691	12.39
86)	T	p-Isopropyltol...	2.204	3.030	2.995	3.361	3.509	3.215	3.052	15.04
87)	T	1,3-Dichlorobe...	1.679	1.843	1.646	1.780	1.787	1.624	1.727	5.13
88)	T	1,4-Dichlorobe...	1.789	1.889	1.638	1.734	1.784	1.628	1.744	5.71
89)	T	n-Butylbenzene	2.386	2.689	2.567	2.961	3.092	2.912	2.768	9.63
90)	T	Hexachloroethane	0.564	0.678	0.608	0.637	0.639	0.590	0.620	6.51
91)	T	1,2-Dichlorobe...	1.770	1.769	1.613	1.740	1.710	1.555	1.693	5.28
92)	T	1,2-Dibromo-3-...	0.207	0.271	0.242	0.253	0.238	0.209	0.237	10.44
93)	T	1,2,4-Trichlor...	0.657	0.839	0.792	0.923	0.933	0.859	0.834	12.15
94)	T	Hexachlorobuta...	0.422	0.460	0.401	0.445	0.397	0.370	0.416	7.98
95)	T	Naphthalene	2.467	2.702	2.657	2.935	3.079	2.747	2.764	7.79
96)	T	1,2,3-Trichlor...	0.751	0.822	0.820	0.903	0.896	0.816	0.835	6.83

(#) = Out of Range

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN093024\
 Data File : VN084213.D
 Acq On : 30 Sep 2024 12:25
 Operator : JC\MD
 Sample : VSTDICC100
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICC100

Quant Time: Oct 01 06:48:05 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
 Quant Title : SW846 8260
 QLast Update : Tue Oct 01 06:46:32 2024
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By : John Carlone 10/01/2024
 Supervised By : Mahesh Dadoda 10/01/2024

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

Internal Standards						
1) Pentafluorobenzene	8.224	168	192402	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	324582	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	288467	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	142880	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	259018	90.797	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 181.600%#			
35) Dibromofluoromethane	8.165	113	200166	93.542	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 187.080%#			
50) Toluene-d8	10.565	98	772146	98.079	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 196.160%#			
62) 4-Bromofluorobenzene	12.847	95	289867	101.065	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 202.140%#			
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	2.124	85	218015	95.796	ug/l	94
3) Chloromethane	2.359	50	238104	91.628	ug/l	98
4) Vinyl Chloride	2.512	62	234942	93.338	ug/l	99
5) Bromomethane	2.936	94	141604	85.288	ug/l	94
6) Chloroethane	3.112	64	144394	80.099	ug/l	92
7) Trichlorofluoromethane	3.495	101	366907	93.608	ug/l	98
8) Diethyl Ether	3.953	74	136436	93.854	ug/l	99
9) 1,1,2-Trichlorotrifluo...	4.365	101	208443	92.811	ug/l	99
10) Methyl Iodide	4.589	142	281269	97.248	ug/l	97
11) Tert butyl alcohol	5.518	59	194750	414.018	ug/l	99
12) 1,1-Dichloroethene	4.336	96	206863	95.491	ug/l	95
13) Acrolein	4.177	56	251811	466.304	ug/l	99
14) Allyl chloride	5.018	41	348108	92.526	ug/l	99
15) Acrylonitrile	5.712	53	533270	448.931	ug/l	99
16) Acetone	4.424	43	576139	470.138	ug/l	99
17) Carbon Disulfide	4.712	76	611042	89.090	ug/l	100
18) Methyl Acetate	5.018	43	233708	87.499	ug/l	99
19) Methyl tert-butyl Ether	5.794	73	702366	96.061	ug/l	99
20) Methylene Chloride	5.277	84	228706	91.809	ug/l	91
21) trans-1,2-Dichloroethene	5.783	96	213704	94.160	ug/l	94
22) Diisopropyl ether	6.671	45	745614	95.811	ug/l	98
23) Vinyl Acetate	6.600	43	2895429	498.979	ug/l	99
24) 1,1-Dichloroethane	6.565	63	413523	95.021	ug/l	99
25) 2-Butanone	7.483	43	759354	454.946	ug/l	100
26) 2,2-Dichloropropane	7.488	77	378893	96.560	ug/l	99
27) cis-1,2-Dichloroethene	7.483	96	257696	93.962	ug/l	99
28) Bromochloromethane	7.812	49	181546	93.497	ug/l	100
29) Tetrahydrofuran	7.836	42	453342	440.124	ug/l	99
30) Chloroform	7.965	83	416595	92.156	ug/l	100
31) Cyclohexane	8.253	56	373445	88.380	ug/l	99
32) 1,1,1-Trichloroethane	8.165	97	383566	94.476	ug/l	98
36) 1,1-Dichloropropene	8.371	75	307616	98.969	ug/l	99
37) Ethyl Acetate	7.559	43	293597	92.073	ug/l	100
38) Carbon Tetrachloride	8.359	117	334398	98.077	ug/l	98
39) Methylcyclohexane	9.600	83	368299	106.466	ug/l	99
40) Benzene	8.606	78	931076	96.145	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN093024\
 Data File : VN084213.D
 Acq On : 30 Sep 2024 12:25
 Operator : JC\MD
 Sample : VSTDICC100
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICC100

Manual Integrations
 APPROVED

Reviewed By : John Carlone 10/01/2024
 Supervised By : Mahesh Dadoda 10/01/2024

Quant Time: Oct 01 06:48:05 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
 Quant Title : SW846 8260
 QLast Update : Tue Oct 01 06:46:32 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.777	41	160270	92.581	ug/l	97
42) 1,2-Dichloroethane	8.671	62	311563	94.900	ug/l	100
43) Isopropyl Acetate	8.688	43	521814	83.581	ug/l	100
44) Trichloroethene	9.347	130	216678	95.798	ug/l	97
45) 1,2-Dichloropropane	9.618	63	224724	98.095	ug/l	97
46) Dibromomethane	9.706	93	154739	100.091	ug/l	99
47) Bromodichloromethane	9.888	83	338406	98.526	ug/l	99
48) Methyl methacrylate	9.677	41	244061	98.163	ug/l	99
49) 1,4-Dioxane	9.694	88	82854	1810.110	ug/l	99
51) 4-Methyl-2-Pentanone	10.441	43	1456154	479.699	ug/l	100
52) Toluene	10.629	92	586544	99.324	ug/l	100
53) t-1,3-Dichloropropene	10.835	75	365099	104.280	ug/l	99
54) cis-1,3-Dichloropropene	10.312	75	384030	101.975	ug/l	98
55) 1,1,2-Trichloroethane	11.018	97	205711	97.170	ug/l	97
56) Ethyl methacrylate	10.871	69	360916	103.608	ug/l	99
57) 1,3-Dichloropropane	11.165	76	360601	95.326	ug/l	99
58) 2-Chloroethyl Vinyl ether	10.159	63	870416	538.640	ug/l	99
59) 2-Hexanone	11.194	43	1105736	487.363	ug/l	99
60) Dibromochloromethane	11.359	129	249435	99.721	ug/l	98
61) 1,2-Dibromoethane	11.465	107	212705	96.694	ug/l	100
64) Tetrachloroethene	11.100	164	186069	92.608	ug/l	99
65) Chlorobenzene	11.888	112	616423	96.376	ug/l	97
66) 1,1,1,2-Tetrachloroethane	11.959	131	212695	96.546	ug/l	99
67) Ethyl Benzene	11.959	91	1146786	101.385	ug/l	98
68) m/p-Xylenes	12.071	106	855381	204.437	ug/l	100
69) o-Xylene	12.394	106	412098	104.101	ug/l	99
70) Styrene	12.412	104	711855	106.165	ug/l	99
71) Bromoform	12.576	173	162862	100.412	ug/l #	97
73) Isopropylbenzene	12.694	105	1067798	97.936	ug/l	100
74) N-amyl acetate	12.494	43	467641	94.716	ug/l	100
75) 1,1,2,2-Tetrachloroethane	12.935	83	286161	87.285	ug/l	98
76) 1,2,3-Trichloropropane	12.994	75	243293m	85.433	ug/l	
77) Bromobenzene	12.982	156	243075	92.425	ug/l	100
78) n-propylbenzene	13.035	91	1285399	101.754	ug/l	99
79) 2-Chlorotoluene	13.123	91	770341	95.567	ug/l	100
80) 1,3,5-Trimethylbenzene	13.170	105	905999	101.869	ug/l	100
81) trans-1,4-Dichloro-2-b...	12.735	75	116289	95.579	ug/l	98
82) 4-Chlorotoluene	13.218	91	790045	97.362	ug/l	100
83) tert-Butylbenzene	13.435	119	785331	99.349	ug/l	99
84) 1,2,4-Trimethylbenzene	13.482	105	913037	101.908	ug/l	99
85) sec-Butylbenzene	13.612	105	1082055	102.580	ug/l	100
86) p-Isopropyltoluene	13.729	119	918730	105.328	ug/l	100
87) 1,3-Dichlorobenzene	13.729	146	463998	94.046	ug/l	100
88) 1,4-Dichlorobenzene	13.812	146	465087	93.346	ug/l	99
89) n-Butylbenzene	14.053	91	832034	105.197	ug/l	99
90) Hexachloroethane	14.329	117	168712	95.289	ug/l	98
91) 1,2-Dichlorobenzene	14.106	146	444319	91.843	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.717	75	59837	88.446	ug/l	98
93) 1,2,4-Trichlorobenzene	15.388	180	245477	103.017	ug/l	99
94) Hexachlorobutadiene	15.500	225	105801	89.034	ug/l	98
95) Naphthalene	15.635	128	784876	99.356	ug/l	99
96) 1,2,3-Trichlorobenzene	15.841	180	233126	97.736	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN093024\
Data File : VN084213.D
Acq On : 30 Sep 2024 12:25
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

Reviewed By :John Carlone 10/01/2024
Supervised By :Mahesh Dadoda 10/01/2024

Quant Time: Oct 01 06:48:05 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
Quant Title : SW846 8260
QLast Update : Tue Oct 01 06:46:32 2024
Response via : Initial Calibration

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

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN093024\
Data File : VN084213.D
Acq On : 30 Sep 2024 12:25
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

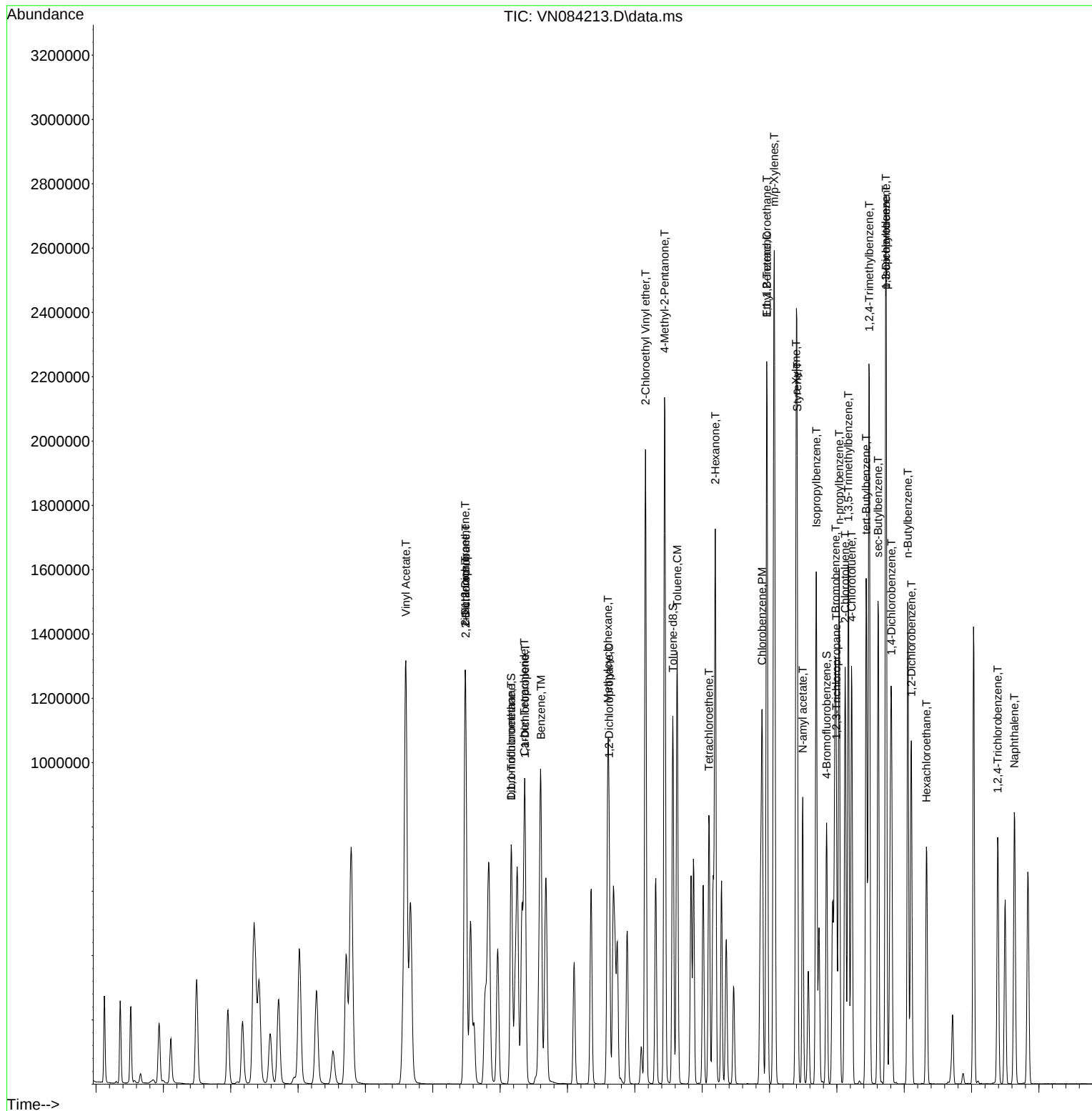
Manual Integrations

APPROVED

Reviewed By :John Carlone 10/01/2024

Supervised By :Mahesh Dadoda 10/01/2024

Quant Time: Oct 01 06:48:05 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
Quant Title : SW846 8260
QLast Update : Tue Oct 01 06:46:32 2024
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN093024\
 Data File : VN084214.D
 Acq On : 30 Sep 2024 12:49
 Operator : JC\MD
 Sample : VSTDICCC050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICCC050

Manual Integrations
 APPROVED

Reviewed By : John Carlone 10/01/2024
 Supervised By : Mahesh Dadoda 10/01/2024

Quant Time: Oct 01 06:48:32 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
 Quant Title : SW846 8260
 QLast Update : Tue Oct 01 06:46:32 2024
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	8.224	168	175379	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	304127	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	264820	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	127701	50.000	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	129300	49.725	ug/l	0.00
Spiked Amount	50.000	Range	74 - 125	Recovery	=	99.440%
35) Dibromofluoromethane	8.165	113	98531	49.143	ug/l	0.00
Spiked Amount	50.000	Range	75 - 124	Recovery	=	98.280%
50) Toluene-d8	10.565	98	377886	51.228	ug/l	0.00
Spiked Amount	50.000	Range	86 - 113	Recovery	=	102.460%
62) 4-Bromofluorobenzene	12.847	95	137388	51.124	ug/l	0.00
Spiked Amount	50.000	Range	77 - 121	Recovery	=	102.240%

Target Compounds					Qvalue	
2) Dichlorodifluoromethane	2.124	85	107530	51.835	ug/l	100
3) Chloromethane	2.359	50	117689	49.686	ug/l	100
4) Vinyl Chloride	2.518	62	117031	51.007	ug/l	100
5) Bromomethane	2.953	94	75848	50.118	ug/l	100
6) Chloroethane	3.118	64	73440	44.693	ug/l	100
7) Trichlorofluoromethane	3.495	101	185982	52.055	ug/l	100
8) Diethyl Ether	3.959	74	68385	51.608	ug/l	100
9) 1,1,2-Trichlorotrifluo...	4.371	101	103552	50.583	ug/l	100
10) Methyl Iodide	4.595	142	141310	53.600	ug/l	100
11) Tert butyl alcohol	5.524	59	107986	251.850	ug/l	100
12) 1,1-Dichloroethene	4.342	96	102934	52.128	ug/l	100
13) Acrolein	4.177	56	124940	253.821	ug/l	100
14) Allyl chloride	5.024	41	174518	50.889	ug/l	100
15) Acrylonitrile	5.718	53	277346	256.145	ug/l	100
16) Acetone	4.424	43	299515	268.132	ug/l	100
17) Carbon Disulfide	4.712	76	302183	48.335	ug/l	100
18) Methyl Acetate	5.018	43	124007	50.934	ug/l	100
19) Methyl tert-butyl Ether	5.794	73	356478	53.487	ug/l	100
20) Methylene Chloride	5.277	84	114918	50.609	ug/l	100
21) trans-1,2-Dichloroethene	5.789	96	109048	52.711	ug/l	100
22) Diisopropyl ether	6.671	45	379516	53.501	ug/l	100
23) Vinyl Acetate	6.600	43	1444909	273.176	ug/l	100
24) 1,1-Dichloroethane	6.571	63	209222	52.742	ug/l	100
25) 2-Butanone	7.483	43	396369	260.524	ug/l	100
26) 2,2-Dichloropropane	7.488	77	189745	53.050	ug/l	100
27) cis-1,2-Dichloroethene	7.488	96	129873	51.951	ug/l	100
28) Bromochloromethane	7.812	49	86584	48.919	ug/l	100
29) Tetrahydrofuran	7.835	42	248328	264.488	ug/l	100
30) Chloroform	7.965	83	211178	51.249	ug/l	100
31) Cyclohexane	8.253	56	187282	48.624	ug/l	100
32) 1,1,1-Trichloroethane	8.171	97	193315	52.237	ug/l	100
36) 1,1-Dichloropropene	8.371	75	154855	53.172	ug/l	100
37) Ethyl Acetate	7.559	43	153024	51.216	ug/l	100
38) Carbon Tetrachloride	8.359	117	167086	52.301	ug/l	100
39) Methylcyclohexane	9.600	83	177433	54.741	ug/l	100
40) Benzene	8.606	78	472170	52.037	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN093024\
 Data File : VN084214.D
 Acq On : 30 Sep 2024 12:49
 Operator : JC\MD
 Sample : VSTDICCC050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICCC050

Manual Integrations
 APPROVED

Reviewed By : John Carlone 10/01/2024
 Supervised By : Mahesh Dadoda 10/01/2024

Quant Time: Oct 01 06:48:32 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
 Quant Title : SW846 8260
 QLast Update : Tue Oct 01 06:46:32 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.777	41	87365	53.861	ug/l	100
42) 1,2-Dichloroethane	8.671	62	160606	52.210	ug/l	100
43) Isopropyl Acetate	8.688	43	272992	46.667	ug/l	100
44) Trichloroethene	9.347	130	110119	51.961	ug/l	100
45) 1,2-Dichloropropane	9.618	63	114143	53.176	ug/l	100
46) Dibromomethane	9.706	93	79007	54.542	ug/l	100
47) Bromodichloromethane	9.888	83	169263	52.595	ug/l	100
48) Methyl methacrylate	9.677	41	127042	54.534	ug/l	100
49) 1,4-Dioxane	9.694	88	44512	1037.858	ug/l	100
51) 4-Methyl-2-Pentanone	10.441	43	772927	271.750	ug/l	100
52) Toluene	10.629	92	295099	53.332	ug/l	100
53) t-1,3-Dichloropropene	10.835	75	179453	54.703	ug/l	100
54) cis-1,3-Dichloropropene	10.312	75	193952	54.966	ug/l	100
55) 1,1,2-Trichloroethane	11.012	97	106288	53.583	ug/l	100
56) Ethyl methacrylate	10.871	69	183059	56.085	ug/l	100
57) 1,3-Dichloropropane	11.159	76	187372	52.864	ug/l	100
58) 2-Chloroethyl Vinyl ether	10.159	63	426364	281.593	ug/l	100
59) 2-Hexanone	11.194	43	588361	276.767	ug/l	100
60) Dibromochloromethane	11.359	129	126992	54.184	ug/l	100
61) 1,2-Dibromoethane	11.465	107	108817	52.794	ug/l	100
64) Tetrachloroethene	11.100	164	94966	51.486	ug/l	100
65) Chlorobenzene	11.888	112	309849	52.770	ug/l	100
66) 1,1,1,2-Tetrachloroethane	11.959	131	106981	52.897	ug/l	100
67) Ethyl Benzene	11.959	91	561770	54.100	ug/l	100
68) m/p-Xylenes	12.071	106	427131	111.201	ug/l	100
69) o-Xylene	12.394	106	204854	56.370	ug/l	100
70) Styrene	12.412	104	347383	56.434	ug/l	100
71) Bromoform	12.576	173	83487	56.070	ug/l #	100
73) Isopropylbenzene	12.694	105	527625	54.145	ug/l	100
74) N-amyl acetate	12.494	43	237131	53.738	ug/l	100
75) 1,1,2,2-Tetrachloroethane	12.935	83	151079	51.560	ug/l	100
76) 1,2,3-Trichloropropane	12.988	75	143676m	56.449	ug/l	
77) Bromobenzene	12.982	156	120918	51.442	ug/l	100
78) n-propylbenzene	13.035	91	626503	55.490	ug/l	100
79) 2-Chlorotoluene	13.123	91	384795	53.411	ug/l	100
80) 1,3,5-Trimethylbenzene	13.170	105	445807	56.084	ug/l	100
81) trans-1,4-Dichloro-2-b...	12.735	75	57572	52.943	ug/l	100
82) 4-Chlorotoluene	13.217	91	386854	53.341	ug/l	100
83) tert-Butylbenzene	13.435	119	386532	54.711	ug/l	100
84) 1,2,4-Trimethylbenzene	13.482	105	449720	56.161	ug/l	100
85) sec-Butylbenzene	13.617	105	529076	56.119	ug/l	100
86) p-Isopropyltoluene	13.729	119	448148	57.485	ug/l	100
87) 1,3-Dichlorobenzene	13.729	146	228219	51.755	ug/l	100
88) 1,4-Dichlorobenzene	13.812	146	227835	51.163	ug/l	100
89) n-Butylbenzene	14.053	91	394831	55.854	ug/l	100
90) Hexachloroethane	14.329	117	81626	51.582	ug/l	100
91) 1,2-Dichlorobenzene	14.106	146	218378	50.506	ug/l	100
92) 1,2-Dibromo-3-Chloropr...	14.717	75	30379	50.241	ug/l	100
93) 1,2,4-Trichlorobenzene	15.388	180	119164	55.953	ug/l	100
94) Hexachlorobutadiene	15.500	225	50680	47.718	ug/l	100
95) Naphthalene	15.635	128	393177	55.688	ug/l	100
96) 1,2,3-Trichlorobenzene	15.835	180	114483	53.701	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN093024\
Data File : VN084214.D
Acq On : 30 Sep 2024 12:49
Operator : JC\MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

Reviewed By :John Carlone 10/01/2024
Supervised By :Mahesh Dadoda 10/01/2024

Quant Time: Oct 01 06:48:32 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
Quant Title : SW846 8260
QLast Update : Tue Oct 01 06:46:32 2024
Response via : Initial Calibration

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

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

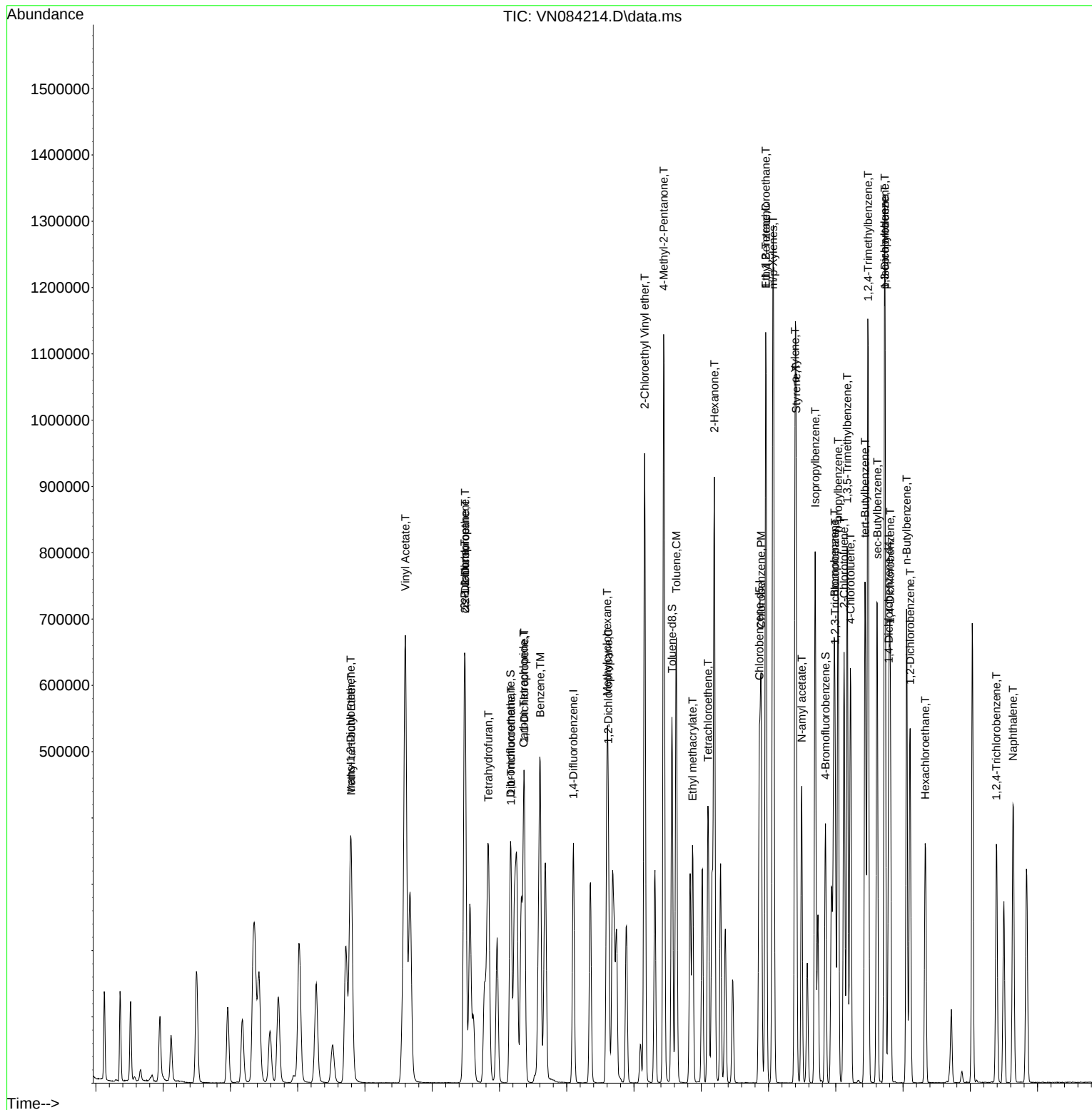
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN093024\
Data File : VN084214.D
Acq On : 30 Sep 2024 12:49
Operator : JC\MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 10/01/2024
Supervised By :Mahesh Dadoda 10/01/2024

Quant Time: Oct 01 06:48:32 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
Quant Title : SW846 8260
QLast Update : Tue Oct 01 06:46:32 2024
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN093024\
 Data File : VN084215.D
 Acq On : 30 Sep 2024 13:13
 Operator : JC\MD
 Sample : VSTDICC020
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICC020

Manual Integrations
 APPROVED

Reviewed By : John Carlone 10/01/2024
 Supervised By : Mahesh
 Dadoda 10/01/2024

Quant Time: Oct 01 06:48:50 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
 Quant Title : SW846 8260
 QLast Update : Tue Oct 01 06:46:32 2024
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	8.224	168	178087	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	307298	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	270754	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	127763	50.000	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	54409	20.606	ug/l	0.00
Spiked Amount	50.000	Range	74 - 125	Recovery	=	41.220%#
35) Dibromofluoromethane	8.171	113	41903	20.684	ug/l	0.00
Spiked Amount	50.000	Range	75 - 124	Recovery	=	41.360%#
50) Toluene-d8	10.565	98	152668	20.483	ug/l	0.00
Spiked Amount	50.000	Range	86 - 113	Recovery	=	40.960%#
62) 4-Bromofluorobenzene	12.847	95	55201	20.329	ug/l	0.00
Spiked Amount	50.000	Range	77 - 121	Recovery	=	40.660%#

Target Compounds					Qvalue	
2) Dichlorodifluoromethane	2.124	85	42709	20.275	ug/l	94
3) Chloromethane	2.359	50	48218	20.047	ug/l	99
4) Vinyl Chloride	2.518	62	47375	20.334	ug/l	96
5) Bromomethane	2.942	94	30751	20.010	ug/l	97
6) Chloroethane	3.118	64	30650	18.369	ug/l	96
7) Trichlorofluoromethane	3.495	101	74579	20.557	ug/l	95
8) Diethyl Ether	3.959	74	29090	21.619	ug/l	97
9) 1,1,2-Trichlorotrifluo...	4.377	101	42958	20.665	ug/l	99
10) Methyl Iodide	4.589	142	54769	20.458	ug/l	97
11) Tert butyl alcohol	5.518	59	45501	104.506	ug/l	98
12) 1,1-Dichloroethene	4.336	96	42450	21.171	ug/l	95
13) Acrolein	4.183	56	48261	96.553	ug/l	98
14) Allyl chloride	5.024	41	77338	22.208	ug/l	92
15) Acrylonitrile	5.718	53	115451	105.004	ug/l	99
16) Acetone	4.430	43	119948	105.747	ug/l	98
17) Carbon Disulfide	4.706	76	124366	19.590	ug/l	99
18) Methyl Acetate	5.030	43	49436	19.996	ug/l	99
19) Methyl tert-butyl Ether	5.794	73	144972	21.421	ug/l	100
20) Methylene Chloride	5.271	84	47091	20.423	ug/l	94
21) trans-1,2-Dichloroethene	5.783	96	44064	20.976	ug/l	92
22) Diisopropyl ether	6.671	45	154575	21.460	ug/l	98
23) Vinyl Acetate	6.600	43	589404	109.739	ug/l	99
24) 1,1-Dichloroethane	6.565	63	82821	20.561	ug/l	98
25) 2-Butanone	7.482	43	165762	107.295	ug/l	100
26) 2,2-Dichloropropane	7.494	77	76824	21.152	ug/l	100
27) cis-1,2-Dichloroethene	7.488	96	52758	20.783	ug/l	99
28) Bromochloromethane	7.812	49	34591	19.246	ug/l	99
29) Tetrahydrofuran	7.835	42	100146	105.041	ug/l	99
30) Chloroform	7.965	83	85848	20.517	ug/l	99
31) Cyclohexane	8.253	56	77216	19.743	ug/l	98
32) 1,1,1-Trichloroethane	8.171	97	77552	20.637	ug/l	97
36) 1,1-Dichloropropene	8.371	75	61556	20.918	ug/l	99
37) Ethyl Acetate	7.559	43	61023	20.213	ug/l	99
38) Carbon Tetrachloride	8.359	117	67913	21.039	ug/l	95
39) Methylcyclohexane	9.600	83	70956	21.665	ug/l	99
40) Benzene	8.606	78	191581	20.896	ug/l	97

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN093024\
 Data File : VN084215.D
 Acq On : 30 Sep 2024 13:13
 Operator : JC\MD
 Sample : VSTDICC020
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICC020

Manual Integrations
 APPROVED

Reviewed By : John Carlone 10/01/2024
 Supervised By : Mahesh
 Dadoda 10/01/2024

Quant Time: Oct 01 06:48:50 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
 Quant Title : SW846 8260
 QLast Update : Tue Oct 01 06:46:32 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.782	41	34943	21.320	ug/l	99
42) 1,2-Dichloroethane	8.671	62	64453	20.736	ug/l	99
43) Isopropyl Acetate	8.688	43	114278	19.334	ug/l	99
44) Trichloroethene	9.347	130	44412	20.740	ug/l	98
45) 1,2-Dichloropropane	9.618	63	46651	21.509	ug/l	100
46) Dibromomethane	9.706	93	31672	21.639	ug/l	97
47) Bromodichloromethane	9.888	83	68343	21.017	ug/l	96
48) Methyl methacrylate	9.682	41	50498	21.453	ug/l	98
49) 1,4-Dioxane	9.700	88	18411	424.848	ug/l #	93
51) 4-Methyl-2-Pentanone	10.441	43	313636	109.132	ug/l	99
52) Toluene	10.629	92	118412	21.179	ug/l	100
53) t-1,3-Dichloropropene	10.835	75	70403	21.240	ug/l	99
54) cis-1,3-Dichloropropene	10.312	75	74778	20.973	ug/l	96
55) 1,1,2-Trichloroethane	11.018	97	42631	21.270	ug/l	98
56) Ethyl methacrylate	10.871	69	72159	21.880	ug/l	99
57) 1,3-Dichloropropane	11.159	76	75915	21.197	ug/l	98
58) 2-Chloroethyl Vinyl ether	10.159	63	142843	93.367	ug/l	99
59) 2-Hexanone	11.194	43	237694	110.658	ug/l	100
60) Dibromochloromethane	11.359	129	50326	21.251	ug/l	97
61) 1,2-Dibromoethane	11.470	107	44554	21.393	ug/l	98
64) Tetrachloroethene	11.100	164	38055	20.179	ug/l	97
65) Chlorobenzene	11.888	112	123787	20.620	ug/l	99
66) 1,1,1,2-Tetrachloroethane	11.959	131	44285	21.417	ug/l	96
67) Ethyl Benzene	11.959	91	219635	20.688	ug/l	98
68) m/p-Xylenes	12.070	106	168826	42.989	ug/l	98
69) o-Xylene	12.394	106	79896	21.503	ug/l	98
70) Styrene	12.412	104	134066	21.302	ug/l	98
71) Bromoform	12.576	173	32824	21.561	ug/l #	99
73) Isopropylbenzene	12.694	105	207217	21.254	ug/l	99
74) N-amyl acetate	12.494	43	93392	21.154	ug/l	100
75) 1,1,2,2-Tetrachloroethane	12.935	83	60656	20.690	ug/l	98
76) 1,2,3-Trichloropropane	12.994	75	51246m	20.124	ug/l	
77) Bromobenzene	12.976	156	48803	20.752	ug/l	98
78) n-propylbenzene	13.035	91	241164	21.350	ug/l	98
79) 2-Chlorotoluene	13.123	91	147738	20.497	ug/l	99
80) 1,3,5-Trimethylbenzene	13.170	105	171600	21.577	ug/l	100
81) trans-1,4-Dichloro-2-b...	12.735	75	22222	20.426	ug/l	92
82) 4-Chlorotoluene	13.217	91	151387	20.864	ug/l	100
83) tert-Butylbenzene	13.435	119	147727	20.899	ug/l	99
84) 1,2,4-Trimethylbenzene	13.482	105	176283	22.004	ug/l	99
85) sec-Butylbenzene	13.611	105	205477	21.784	ug/l	99
86) p-Isopropyltoluene	13.729	119	171766	22.022	ug/l	99
87) 1,3-Dichlorobenzene	13.729	146	90970	20.620	ug/l	99
88) 1,4-Dichlorobenzene	13.811	146	88628	19.893	ug/l	96
89) n-Butylbenzene	14.053	91	151334	21.398	ug/l	100
90) Hexachloroethane	14.335	117	32554	20.562	ug/l	95
91) 1,2-Dichlorobenzene	14.106	146	88942	20.560	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.717	75	12914	21.347	ug/l	96
93) 1,2,4-Trichlorobenzene	15.388	180	47149	22.128	ug/l	99
94) Hexachlorobutadiene	15.500	225	22742	21.402	ug/l	97
95) Naphthalene	15.641	128	149988	21.233	ug/l	99
96) 1,2,3-Trichlorobenzene	15.841	180	46153	21.639	ug/l	95

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN093024\
Data File : VN084215.D
Acq On : 30 Sep 2024 13:13
Operator : JC\MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

Reviewed By :John Carlone 10/01/2024
Supervised By :Mahesh
Dadoda 10/01/2024

Quant Time: Oct 01 06:48:50 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
Quant Title : SW846 8260
QLast Update : Tue Oct 01 06:46:32 2024
Response via : Initial Calibration

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

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

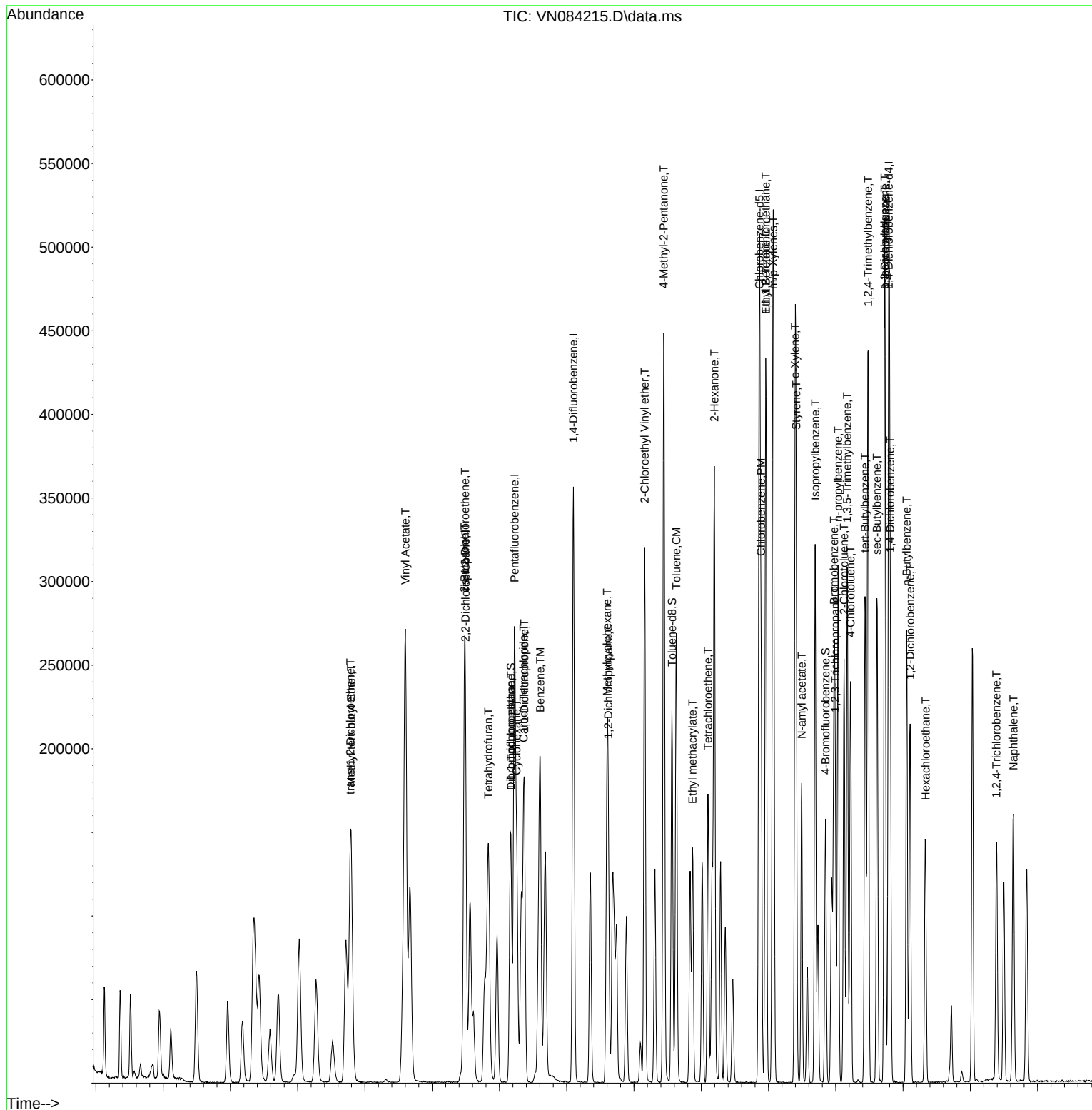
```
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN093024\  
Data File : VN084215.D  
Acq On    : 30 Sep 2024 13:13  
Operator  : JC\MD  
Sample    : VSTDICC020  
Misc      : 5.0mL/MSVOA_N/WATER  
ALS Vial  : 6 Sample Multiplier: 1
```

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :John Carlone 10/01/2024
Supervised By :Mahesh
Dadoda 10/01/2024

Quant Time: Oct 01 06:48:50 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
Quant Title : SW846 8260
QLast Update : Tue Oct 01 06:46:32 2024
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN093024\
 Data File : VN084216.D
 Acq On : 30 Sep 2024 13:37
 Operator : JC\MD
 Sample : VSTDICC010
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICC010

Manual Integrations
 APPROVED

Reviewed By : John Carlone 10/01/2024
 Supervised By : Mahesh Dadoda 10/01/2024

Quant Time: Oct 01 06:49:09 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
 Quant Title : SW846 8260
 QLast Update : Tue Oct 01 06:46:32 2024
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	8.224	168	176243	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	304981	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	262325	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	119657	50.000	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.582	65	25083	9.599	ug/l	0.00
Spiked Amount	50.000	Range	74 - 125	Recovery	=	19.200%#
35) Dibromofluoromethane	8.165	113	19289	9.594	ug/l	0.00
Spiked Amount	50.000	Range	75 - 124	Recovery	=	19.180%#
50) Toluene-d8	10.565	98	70000	9.463	ug/l	0.00
Spiked Amount	50.000	Range	86 - 113	Recovery	=	18.920%#
62) 4-Bromofluorobenzene	12.847	95	24756	9.186	ug/l	0.00
Spiked Amount	50.000	Range	77 - 121	Recovery	=	18.380%#

Target Compounds					Qvalue	
2) Dichlorodifluoromethane	2.130	85	19806	9.501	ug/l	96
3) Chloromethane	2.359	50	22840	9.595	ug/l	97
4) Vinyl Chloride	2.518	62	22584	9.795	ug/l	97
5) Bromomethane	2.965	94	14957	9.835	ug/l	96
6) Chloroethane	3.124	64	15254	9.238	ug/l	89
7) Trichlorofluoromethane	3.494	101	33820	9.420	ug/l	99
8) Diethyl Ether	3.965	74	12422	9.328	ug/l	96
9) 1,1,2-Trichlorotrifluo...	4.377	101	18747	9.113	ug/l	98
10) Methyl Iodide	4.594	142	24268	9.160	ug/l	96
11) Tert butyl alcohol	5.512	59	20490	47.553	ug/l #	86
12) 1,1-Dichloroethene	4.341	96	18798	9.473	ug/l	86
13) Acrolein	4.183	56	22976	46.448	ug/l	98
14) Allyl chloride	5.024	41	31571	9.161	ug/l	98
15) Acrylonitrile	5.718	53	52809	48.533	ug/l	99
16) Acetone	4.424	43	52518	46.785	ug/l	96
17) Carbon Disulfide	4.718	76	58158	9.257	ug/l	99
18) Methyl Acetate	5.024	43	24366	9.959	ug/l	95
19) Methyl tert-butyl Ether	5.794	73	63531	9.486	ug/l	94
20) Methylene Chloride	5.277	84	21801	9.554	ug/l	87
21) trans-1,2-Dichloroethene	5.788	96	20107	9.672	ug/l	85
22) Diisopropyl ether	6.671	45	66959	9.393	ug/l	97
23) Vinyl Acetate	6.606	43	248594	46.769	ug/l	98
24) 1,1-Dichloroethane	6.571	63	38215	9.586	ug/l	99
25) 2-Butanone	7.482	43	73877	48.320	ug/l	99
26) 2,2-Dichloropropane	7.488	77	34655	9.641	ug/l	98
27) cis-1,2-Dichloroethene	7.488	96	23095	9.193	ug/l	98
28) Bromochloromethane	7.812	49	14904	8.379	ug/l	100
29) Tetrahydrofuran	7.835	42	46917	49.725	ug/l	99
30) Chloroform	7.965	83	39355	9.504	ug/l	90
31) Cyclohexane	8.253	56	36916	9.538	ug/l	92
32) 1,1,1-Trichloroethane	8.171	97	35869	9.645	ug/l #	87
36) 1,1-Dichloropropene	8.377	75	28525	9.767	ug/l	99
37) Ethyl Acetate	7.565	43	29754	9.931	ug/l #	81
38) Carbon Tetrachloride	8.365	117	30964	9.665	ug/l	92
39) Methylcyclohexane	9.600	83	30932	9.516	ug/l	95
40) Benzene	8.606	78	86029	9.454	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN093024\
 Data File : VN084216.D
 Acq On : 30 Sep 2024 13:37
 Operator : JC\MD
 Sample : VSTDICC010
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICC010

Manual Integrations
 APPROVED

Reviewed By : John Carlone 10/01/2024
 Supervised By : Mahesh Dadoda 10/01/2024

Quant Time: Oct 01 06:49:09 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
 Quant Title : SW846 8260
 QLast Update : Tue Oct 01 06:46:32 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.777	41	15332	9.426	ug/l	97
42) 1,2-Dichloroethane	8.671	62	30402	9.855	ug/l	97
43) Isopropyl Acetate	8.688	43	52246	8.906	ug/l	99
44) Trichloroethene	9.347	130	20092	9.454	ug/l	99
45) 1,2-Dichloropropane	9.618	63	20703	9.618	ug/l	96
46) Dibromomethane	9.706	93	13770	9.479	ug/l	95
47) Bromodichloromethane	9.888	83	30289	9.385	ug/l #	98
48) Methyl methacrylate	9.682	41	22612	9.679	ug/l	98
49) 1,4-Dioxane	9.694	88	8627	200.587	ug/l #	78
51) 4-Methyl-2-Pentanone	10.441	43	142632	50.007	ug/l	99
52) Toluene	10.629	92	52537	9.468	ug/l	99
53) t-1,3-Dichloropropene	10.835	75	31555	9.592	ug/l	93
54) cis-1,3-Dichloropropene	10.312	75	34684	9.802	ug/l	96
55) 1,1,2-Trichloroethane	11.018	97	19245	9.675	ug/l	97
56) Ethyl methacrylate	10.870	69	31262	9.551	ug/l	97
57) 1,3-Dichloropropane	11.165	76	33613	9.457	ug/l	97
58) 2-Chloroethyl Vinyl ether	10.159	63	71035	46.784	ug/l	99
59) 2-Hexanone	11.194	43	103615	48.604	ug/l	100
60) Dibromochloromethane	11.359	129	22833	9.715	ug/l	99
61) 1,2-Dibromoethane	11.470	107	19220	9.299	ug/l	95
64) Tetrachloroethene	11.100	164	17743	9.711	ug/l	97
65) Chlorobenzene	11.894	112	56099	9.645	ug/l	98
66) 1,1,1,2-Tetrachloroethane	11.959	131	19227	9.597	ug/l	97
67) Ethyl Benzene	11.964	91	96533	9.385	ug/l	97
68) m/p-Xylenes	12.070	106	72910	19.162	ug/l	100
69) o-Xylene	12.394	106	34965	9.713	ug/l	100
70) Styrene	12.412	104	58367	9.572	ug/l	99
71) Bromoform	12.576	173	13618	9.233	ug/l #	96
73) Isopropylbenzene	12.694	105	88000	9.638	ug/l	99
74) N-ethyl acetate	12.494	43	40801	9.868	ug/l	99
75) 1,1,2,2-Tetrachloroethane	12.935	83	26966	9.822	ug/l	99
76) 1,2,3-Trichloropropane	12.994	75	23907m	10.024	ug/l	
77) Bromobenzene	12.982	156	21439	9.734	ug/l	99
78) n-propylbenzene	13.035	91	105334	9.957	ug/l	99
79) 2-Chlorotoluene	13.123	91	65511	9.704	ug/l	99
80) 1,3,5-Trimethylbenzene	13.170	105	73637	9.887	ug/l	100
81) trans-1,4-Dichloro-2-b...	12.729	75	10237	10.047	ug/l	94
82) 4-Chlorotoluene	13.223	91	66449	9.778	ug/l	99
83) tert-Butylbenzene	13.435	119	64152	9.691	ug/l	99
84) 1,2,4-Trimethylbenzene	13.482	105	74245	9.895	ug/l	99
85) sec-Butylbenzene	13.611	105	88913	10.065	ug/l	100
86) p-Isopropyltoluene	13.729	119	71675	9.812	ug/l	99
87) 1,3-Dichlorobenzene	13.729	146	39402	9.536	ug/l	98
88) 1,4-Dichlorobenzene	13.811	146	39191	9.392	ug/l	97
89) n-Butylbenzene	14.053	91	61422	9.273	ug/l	99
90) Hexachloroethane	14.335	117	14560	9.820	ug/l	99
91) 1,2-Dichlorobenzene	14.106	146	38594	9.526	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.717	75	5799	10.235	ug/l	97
93) 1,2,4-Trichlorobenzene	15.388	180	18960	9.501	ug/l	99
94) Hexachlorobutadiene	15.500	225	9592	9.638	ug/l	95
95) Naphthalene	15.635	128	63596	9.613	ug/l	100
96) 1,2,3-Trichlorobenzene	15.841	180	19629	9.826	ug/l	97

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN093024\
Data File : VN084216.D
Acq On : 30 Sep 2024 13:37
Operator : JC\MD
Sample : VSTDICC010
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations
APPROVED

Reviewed By :John Carlone 10/01/2024
Supervised By :Mahesh Dadoda 10/01/2024

Quant Time: Oct 01 06:49:09 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
Quant Title : SW846 8260
QLast Update : Tue Oct 01 06:46:32 2024
Response via : Initial Calibration

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

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

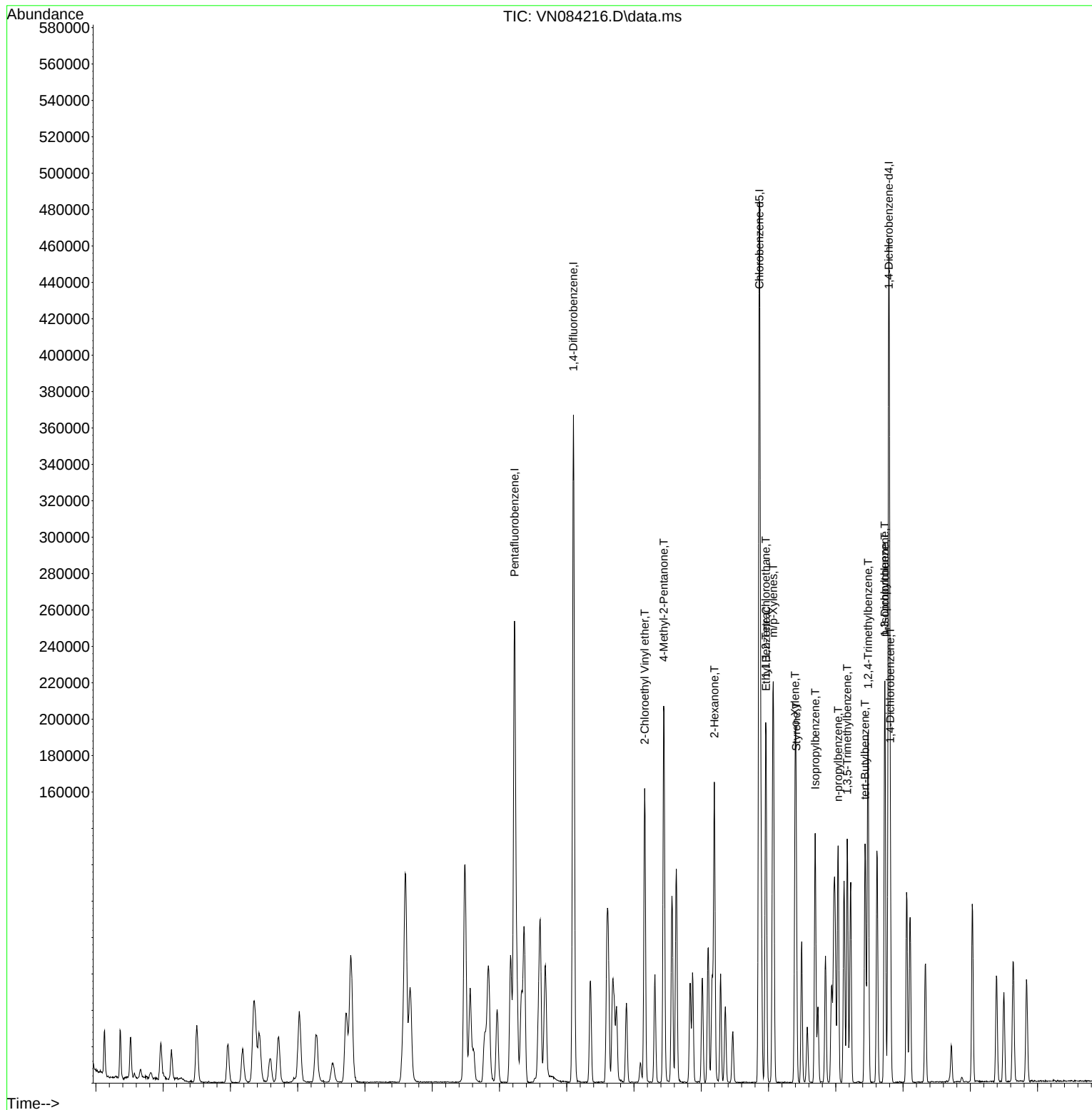
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN093024\
Data File : VN084216.D
Acq On : 30 Sep 2024 13:37
Operator : JC\MD
Sample : VSTDICC010
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations
APPROVED

Reviewed By : John Carlone 10/01/2024
Supervised By : Mahesh Dadoda 10/01/2024

Quant Time: Oct 01 06:49:09 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
Quant Title : SW846 8260
QLast Update : Tue Oct 01 06:46:32 2024
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN093024\
 Data File : VN084217.D
 Acq On : 30 Sep 2024 14:00
 Operator : JC\MD
 Sample : VSTDICC005
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICC005

Manual Integrations
 APPROVED

Reviewed By : John Carlone 10/01/2024
 Supervised By : Mahesh Dadoda 10/01/2024

Quant Time: Oct 01 06:49:24 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
 Quant Title : SW846 8260
 QLast Update : Tue Oct 01 06:46:32 2024
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	8.224	168	161547	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	288067	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	245710	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	112491	50.000	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.571	65	13262	5.537	ug/l	0.00
Spiked Amount	50.000	Range	74 - 125	Recovery	=	11.080%#
35) Dibromofluoromethane	8.171	113	10333	5.441	ug/l	0.00
Spiked Amount	50.000	Range	75 - 124	Recovery	=	10.880%#
50) Toluene-d8	10.565	98	35782	5.121	ug/l	0.00
Spiked Amount	50.000	Range	86 - 113	Recovery	=	10.240%#
62) 4-Bromofluorobenzene	12.847	95	13132	5.159	ug/l	0.00
Spiked Amount	50.000	Range	77 - 121	Recovery	=	10.320%#

Target Compounds					Qvalue	
2) Dichlorodifluoromethane	2.130	85	9807	5.132	ug/l	94
3) Chloromethane	2.359	50	12064	5.529	ug/l	92
4) Vinyl Chloride	2.512	62	11701	5.536	ug/l	96
5) Bromomethane	2.947	94	8091	5.804	ug/l	97
6) Chloroethane	3.118	64	8433	5.571	ug/l	94
7) Trichlorofluoromethane	3.495	101	17988	5.466	ug/l	90
8) Diethyl Ether	3.953	74	6430	5.268	ug/l	98
9) 1,1,2-Trichlorotrifluo...	4.365	101	10220m	5.420	ug/l	
10) Methyl Iodide	4.589	142	12344	5.083	ug/l #	97
11) Tert butyl alcohol	5.512	59	11537	29.211	ug/l #	91
12) 1,1-Dichloroethene	4.342	96	10191	5.603	ug/l	95
13) Acrolein	4.177	56	13122	28.940	ug/l	99
14) Allyl chloride	5.030	41	17724	5.611	ug/l	90
15) Acrylonitrile	5.718	53	26537	26.607	ug/l	99
16) Acetone	4.430	43	27153	26.389	ug/l	95
17) Carbon Disulfide	4.712	76	30816	5.351	ug/l	97
18) Methyl Acetate	5.024	43	12354	5.509	ug/l #	72
19) Methyl tert-butyl Ether	5.800	73	33101	5.392	ug/l	97
20) Methylene Chloride	5.265	84	10809	5.168	ug/l	96
21) trans-1,2-Dichloroethene	5.789	96	10126m	5.314	ug/l	
22) Diisopropyl ether	6.671	45	35654	5.457	ug/l	99
23) Vinyl Acetate	6.606	43	128057m	26.284	ug/l	
24) 1,1-Dichloroethane	6.565	63	19800	5.419	ug/l	95
25) 2-Butanone	7.482	43	37739	26.929	ug/l	99
26) 2,2-Dichloropropane	7.488	77	17552	5.327	ug/l	98
27) cis-1,2-Dichloroethene	7.488	96	12388	5.380	ug/l	99
28) Bromochloromethane	7.812	49	9996	6.131	ug/l #	95
29) Tetrahydrofuran	7.841	42	23456	27.121	ug/l	97
30) Chloroform	7.965	83	20341	5.359	ug/l	92
31) Cyclohexane	8.259	56	21337	6.014	ug/l	99
32) 1,1,1-Trichloroethane	8.171	97	18635	5.467	ug/l #	53
36) 1,1-Dichloropropene	8.371	75	14527	5.266	ug/l	99
37) Ethyl Acetate	7.565	43	16138	5.702	ug/l	97
38) Carbon Tetrachloride	8.359	117	15700	5.188	ug/l	95
39) Methylcyclohexane	9.594	83	15377	5.009	ug/l	94
40) Benzene	8.606	78	45343	5.276	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN093024\
 Data File : VN084217.D
 Acq On : 30 Sep 2024 14:00
 Operator : JC\MD
 Sample : VSTDICC005
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 8 Sample Multiplier: 1

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC005

Manual Integrations

APPROVED

Reviewed By :John Carlone 10/01/2024

Supervised By :Mahesh Dadoda 10/01/2024

Quant Time: Oct 01 06:49:24 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M

Quant Title : SW846 8260

QLast Update : Tue Oct 01 06:46:32 2024

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.782	41	7878	5.128	ug/l	93
42) 1,2-Dichloroethane	8.677	62	15661	5.375	ug/l	99
43) Isopropyl Acetate	8.682	43	28029m	5.059	ug/l	
44) Trichloroethene	9.347	130	10921	5.440	ug/l	87
45) 1,2-Dichloropropane	9.618	63	11181	5.499	ug/l	95
46) Dibromomethane	9.706	93	7207	5.253	ug/l	93
47) Bromodichloromethane	9.888	83	16407	5.382	ug/l #	97
48) Methyl methacrylate	9.676	41	11766	5.332	ug/l	97
49) 1,4-Dioxane	9.688	88	4121	101.444	ug/l #	79
51) 4-Methyl-2-Pentanone	10.441	43	69730	25.883	ug/l	99
52) Toluene	10.629	92	26489	5.054	ug/l	96
53) t-1,3-Dichloropropene	10.835	75	16242	5.227	ug/l	94
54) cis-1,3-Dichloropropene	10.312	75	17448	5.220	ug/l	98
55) 1,1,2-Trichloroethane	11.018	97	9805	5.219	ug/l	89
56) Ethyl methacrylate	10.876	69	15794	5.109	ug/l	96
57) 1,3-Dichloropropane	11.159	76	17954	5.348	ug/l	96
58) 2-Chloroethyl Vinyl ether	10.159	63	38417	26.787	ug/l	99
59) 2-Hexanone	11.194	43	51488	25.570	ug/l	98
60) Dibromochloromethane	11.359	129	11412	5.141	ug/l	96
61) 1,2-Dibromoethane	11.470	107	10394	5.324	ug/l	98
64) Tetrachloroethene	11.106	164	9167	5.356	ug/l	90
65) Chlorobenzene	11.888	112	28818	5.290	ug/l	99
66) 1,1,1,2-Tetrachloroethane	11.959	131	10054	5.358	ug/l	97
67) Ethyl Benzene	11.965	91	49891	5.178	ug/l	97
68) m/p-Xylenes	12.065	106	35820	10.051	ug/l	98
69) o-Xylene	12.400	106	18041	5.350	ug/l	96
70) Styrene	12.412	104	28472	4.985	ug/l	99
71) Bromoform	12.582	173	7067	5.115	ug/l #	95
73) Isopropylbenzene	12.694	105	43468	5.064	ug/l	98
74) N-amyl acetate	12.494	43	19775	5.087	ug/l	98
75) 1,1,2,2-Tetrachloroethane	12.941	83	14517	5.624	ug/l	94
76) 1,2,3-Trichloropropane	12.994	75	14072m	6.276	ug/l	
77) Bromobenzene	12.976	156	11049	5.336	ug/l	99
78) n-propylbenzene	13.035	91	51120	5.140	ug/l	99
79) 2-Chlorotoluene	13.123	91	33161	5.225	ug/l	99
80) 1,3,5-Trimethylbenzene	13.170	105	36100	5.156	ug/l	97
81) trans-1,4-Dichloro-2-b...	12.735	75	4595	4.797	ug/l #	79
82) 4-Chlorotoluene	13.223	91	33382	5.225	ug/l	99
83) tert-Butylbenzene	13.435	119	31990	5.140	ug/l	99
84) 1,2,4-Trimethylbenzene	13.482	105	36099	5.118	ug/l	100
85) sec-Butylbenzene	13.612	105	40954	4.931	ug/l	98
86) p-Isopropyltoluene	13.729	119	34083	4.963	ug/l	99
87) 1,3-Dichlorobenzene	13.729	146	20730	5.337	ug/l	98
88) 1,4-Dichlorobenzene	13.812	146	21249	5.417	ug/l	96
89) n-Butylbenzene	14.059	91	30253	4.858	ug/l	99
90) Hexachloroethane	14.329	117	7628	5.472	ug/l	98
91) 1,2-Dichlorobenzene	14.106	146	19905	5.226	ug/l	98
92) 1,2-Dibromo-3-Chloropr...	14.723	75	3046	5.719	ug/l	92
93) 1,2,4-Trichlorobenzene	15.394	180	9439	5.031	ug/l	95
94) Hexachlorobutadiene	15.500	225	5174	5.530	ug/l	89
95) Naphthalene	15.641	128	30391	4.886	ug/l	99
96) 1,2,3-Trichlorobenzene	15.841	180	9245	4.923	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN093024\
Data File : VN084217.D
Acq On : 30 Sep 2024 14:00
Operator : JC\MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

Reviewed By :John Carlone 10/01/2024
Supervised By :Mahesh Dadoda 10/01/2024

Quant Time: Oct 01 06:49:24 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
Quant Title : SW846 8260
QLast Update : Tue Oct 01 06:46:32 2024
Response via : Initial Calibration

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

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

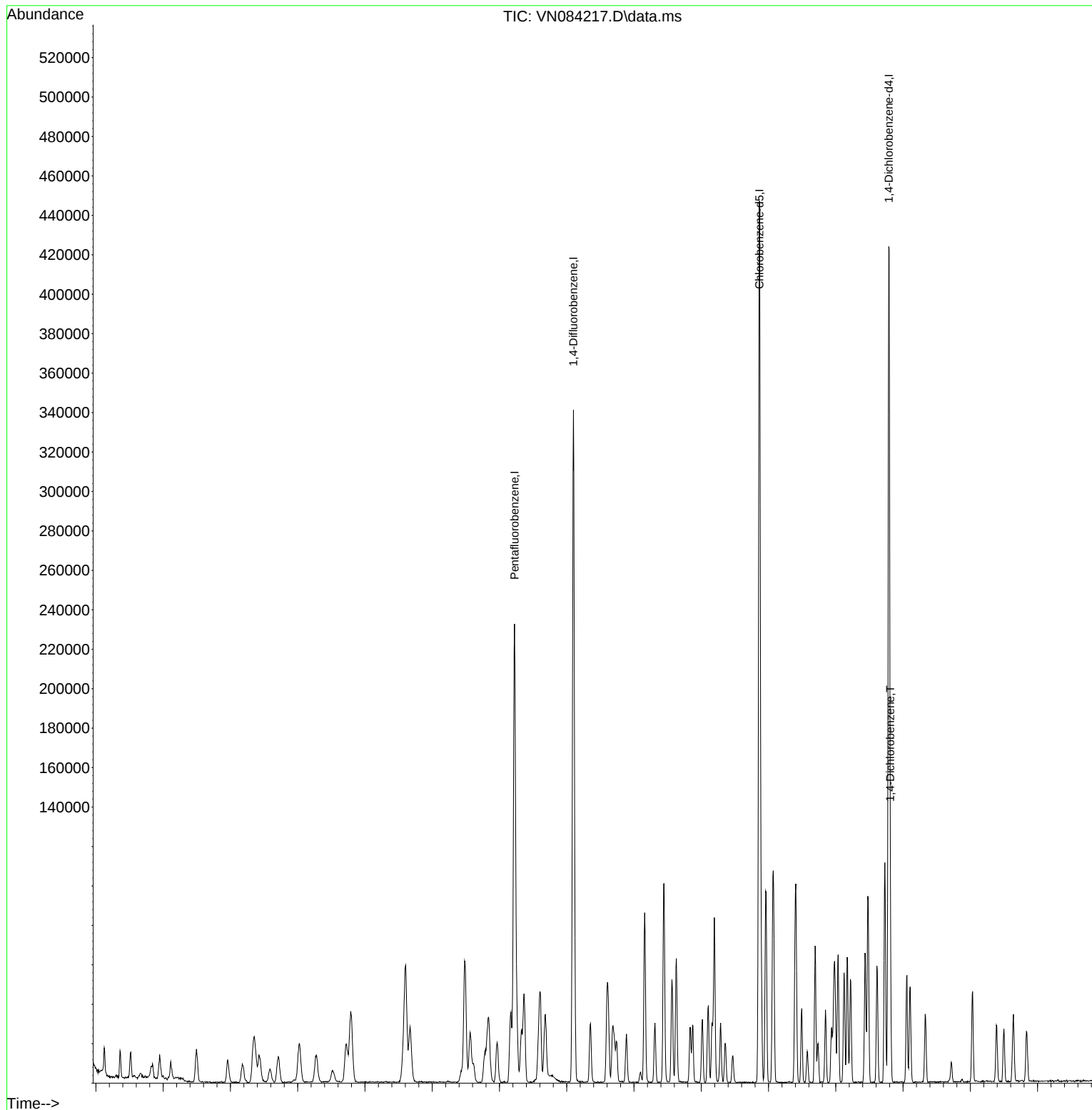
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN093024\
Data File : VN084217.D
Acq On : 30 Sep 2024 14:00
Operator : JC\MD
Sample : VSTDIC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDIC005

Manual Integrations
APPROVED

Reviewed By : John Carlone 10/01/2024
Supervised By : Mahesh Dadoda 10/01/2024

Quant Time: Oct 01 06:49:24 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
Quant Title : SW846 8260
QLast Update : Tue Oct 01 06:46:32 2024
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN093024\
 Data File : VN084218.D
 Acq On : 30 Sep 2024 14:48
 Operator : JC\MD
 Sample : VSTDICC001
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICC001

Manual Integrations
 APPROVED

Reviewed By : John Carlone 10/01/2024
 Supervised By : Mahesh Dadoda 10/01/2024

Quant Time: Oct 01 06:49:39 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
 Quant Title : SW846 8260
 QLast Update : Tue Oct 01 06:46:32 2024
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	8.224	168	160573	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	290146	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	244376	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.794	152	101963	50.000	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	0.000	65	0d	0.000	ug/l	
Spiked Amount	50.000	Range	74 - 125	Recovery	=	0.000%#
35) Dibromofluoromethane	0.000	113	0d	0.000	ug/l	
Spiked Amount	50.000	Range	75 - 124	Recovery	=	0.000%#
50) Toluene-d8	0.000	98	0d	0.000	ug/l	
Spiked Amount	50.000	Range	86 - 113	Recovery	=	0.000%#
62) 4-Bromofluorobenzene	0.000	95	0d	0.000	ug/l	
Spiked Amount	50.000	Range	77 - 121	Recovery	=	0.000%#

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	2.124	85	1928	1.015	ug/l	83
3) Chloromethane	2.365	50	2217	1.022	ug/l	99
4) Vinyl Chloride	2.512	62	1981	0.943	ug/l	89
6) Chloroethane	3.124	64	2029	1.349	ug/l	97
7) Trichlorofluoromethane	3.500	101	3140	0.960	ug/l	94
8) Diethyl Ether	3.965	74	1167	0.962	ug/l	88
9) 1,1,2-Trichlorotrifluo...	4.371	101	1934	1.032	ug/l #	63
12) 1,1-Dichloroethene	4.353	96	1584	0.876	ug/l #	50
14) Allyl chloride	5.018	41	2852m	0.908	ug/l	
15) Acrylonitrile	5.736	53	4920	4.963	ug/l #	81
16) Acetone	4.436	43	4799	4.692	ug/l	90
17) Carbon Disulfide	4.718	76	6680	1.167	ug/l	100
18) Methyl Acetate	5.030	43	2249	1.009	ug/l #	64
19) Methyl tert-butyl Ether	5.806	73	5319	0.872	ug/l #	83
20) Methylene Chloride	5.277	84	2203	1.060	ug/l #	83
21) trans-1,2-Dichloroethene	5.783	96	1753	0.925	ug/l	86
22) Diisopropyl ether	6.671	45	5639	0.868	ug/l #	96
23) Vinyl Acetate	6.606	43	19212m	3.967	ug/l	
24) 1,1-Dichloroethane	6.571	63	3358	0.925	ug/l #	83
25) 2-Butanone	7.488	43	6488	4.658	ug/l	91
26) 2,2-Dichloropropane	7.494	77	2902	0.886	ug/l	96
27) cis-1,2-Dichloroethene	7.483	96	2259	0.987	ug/l	92
28) Bromochloromethane	7.824	49	1718	1.060	ug/l #	87
29) Tetrahydrofuran	7.841	42	4006	4.660	ug/l	92
30) Chloroform	7.971	83	3793	1.005	ug/l	99
32) 1,1,1-Trichloroethane	8.171	97	3120	0.921	ug/l #	53
36) 1,1-Dichloropropene	8.365	75	2420	0.871	ug/l	98
37) Ethyl Acetate	7.559	43	2596	0.911	ug/l #	78
38) Carbon Tetrachloride	8.359	117	2795	0.917	ug/l	90
39) Methylcyclohexane	9.600	83	2486	0.804	ug/l #	88
40) Benzene	8.606	78	8245	0.952	ug/l	94
41) Methacrylonitrile	7.782	41	1490	0.963	ug/l #	66
42) 1,2-Dichloroethane	8.671	62	2669	0.909	ug/l	88
43) Isopropyl Acetate	8.688	43	7614m	1.364	ug/l	
44) Trichloroethene	9.347	130	1885	0.932	ug/l	87
45) 1,2-Dichloropropane	9.624	63	1676	0.818	ug/l #	44

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN093024\
 Data File : VN084218.D
 Acq On : 30 Sep 2024 14:48
 Operator : JC\MD
 Sample : VSTDICC001
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICC001

Manual Integrations
 APPROVED

Reviewed By : John Carlone 10/01/2024
 Supervised By : Mahesh Dadoda 10/01/2024

Quant Time: Oct 01 06:49:39 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
 Quant Title : SW846 8260
 QLast Update : Tue Oct 01 06:46:32 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) Dibromomethane	9.706	93	1144	0.828	ug/l	87
47) Bromodichloromethane	9.894	83	2754	0.897	ug/l #	93
48) Methyl methacrylate	9.676	41	1824	0.821	ug/l	93
49) 1,4-Dioxane	9.694	88	800	19.552	ug/l #	78
51) 4-Methyl-2-Pentanone	10.447	43	11218	4.134	ug/l	97
52) Toluene	10.629	92	4875	0.923	ug/l	91
53) t-1,3-Dichloropropene	10.829	75	2493	0.797	ug/l	98
54) cis-1,3-Dichloropropene	10.306	75	2720	0.808	ug/l	95
55) 1,1,2-Trichloroethane	11.018	97	1669	0.882	ug/l	90
56) Ethyl methacrylate	10.876	69	2402	0.771	ug/l #	77
57) 1,3-Dichloropropane	11.159	76	3092	0.914	ug/l	100
58) 2-Chloroethyl Vinyl ether	10.159	63	6179	4.278	ug/l	98
59) 2-Hexanone	11.194	43	8282	4.084	ug/l	96
60) Dibromochloromethane	11.353	129	1916	0.857	ug/l	91
61) 1,2-Dibromoethane	11.465	107	1795	0.913	ug/l	99
64) Tetrachloroethene	11.106	164	1690	0.993	ug/l #	87
65) Chlorobenzene	11.888	112	5025	0.927	ug/l #	86
66) 1,1,1,2-Tetrachloroethane	11.959	131	1632	0.874	ug/l #	66
67) Ethyl Benzene	11.965	91	8582	0.896	ug/l #	88
68) m/p-Xylenes	12.070	106	5869	1.656	ug/l	95
69) o-Xylene	12.400	106	2398	0.715	ug/l	83
70) Styrene	12.412	104	4489	0.790	ug/l	94
71) Bromoform	12.576	173	1168	0.850	ug/l #	94
73) Isopropylbenzene	12.688	105	6991	0.899	ug/l	97
74) N-amyl acetate	12.494	43	3228	0.916	ug/l #	88
75) 1,1,2,2-Tetrachloroethane	12.941	83	2233	0.954	ug/l #	95
76) 1,2,3-Trichloropropane	12.994	75	1826m	0.899	ug/l	
77) Bromobenzene	12.976	156	1818	0.969	ug/l	98
78) n-propylbenzene	13.035	91	7045	0.781	ug/l	95
79) 2-Chlorotoluene	13.129	91	5383	0.936	ug/l	92
80) 1,3,5-Trimethylbenzene	13.170	105	4830	0.761	ug/l	95
82) 4-Chlorotoluene	13.223	91	5174	0.893	ug/l	100
83) tert-Butylbenzene	13.435	119	4909	0.870	ug/l	88
84) 1,2,4-Trimethylbenzene	13.482	105	4760	0.744	ug/l	100
85) sec-Butylbenzene	13.612	105	5795	0.770	ug/l	99
86) p-Isopropyltoluene	13.723	119	4495	0.722	ug/l	98
87) 1,3-Dichlorobenzene	13.729	146	3424	0.972	ug/l	96
88) 1,4-Dichlorobenzene	13.812	146	3648m	1.026	ug/l	
89) n-Butylbenzene	14.053	91	4866	0.862	ug/l	97
90) Hexachloroethane	14.335	117	1151	0.911	ug/l	82
91) 1,2-Dichlorobenzene	14.100	146	3610	1.046	ug/l	92
92) 1,2-Dibromo-3-Chloropr...	14.711	75	423	0.876	ug/l	65
93) 1,2,4-Trichlorobenzene	15.400	180	1340	0.788	ug/l	89
94) Hexachlorobutadiene	15.494	225	861	1.015	ug/l	90
95) Naphthalene	15.641	128	5031	0.892	ug/l	97
96) 1,2,3-Trichlorobenzene	15.847	180	1531	0.899	ug/l	95

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

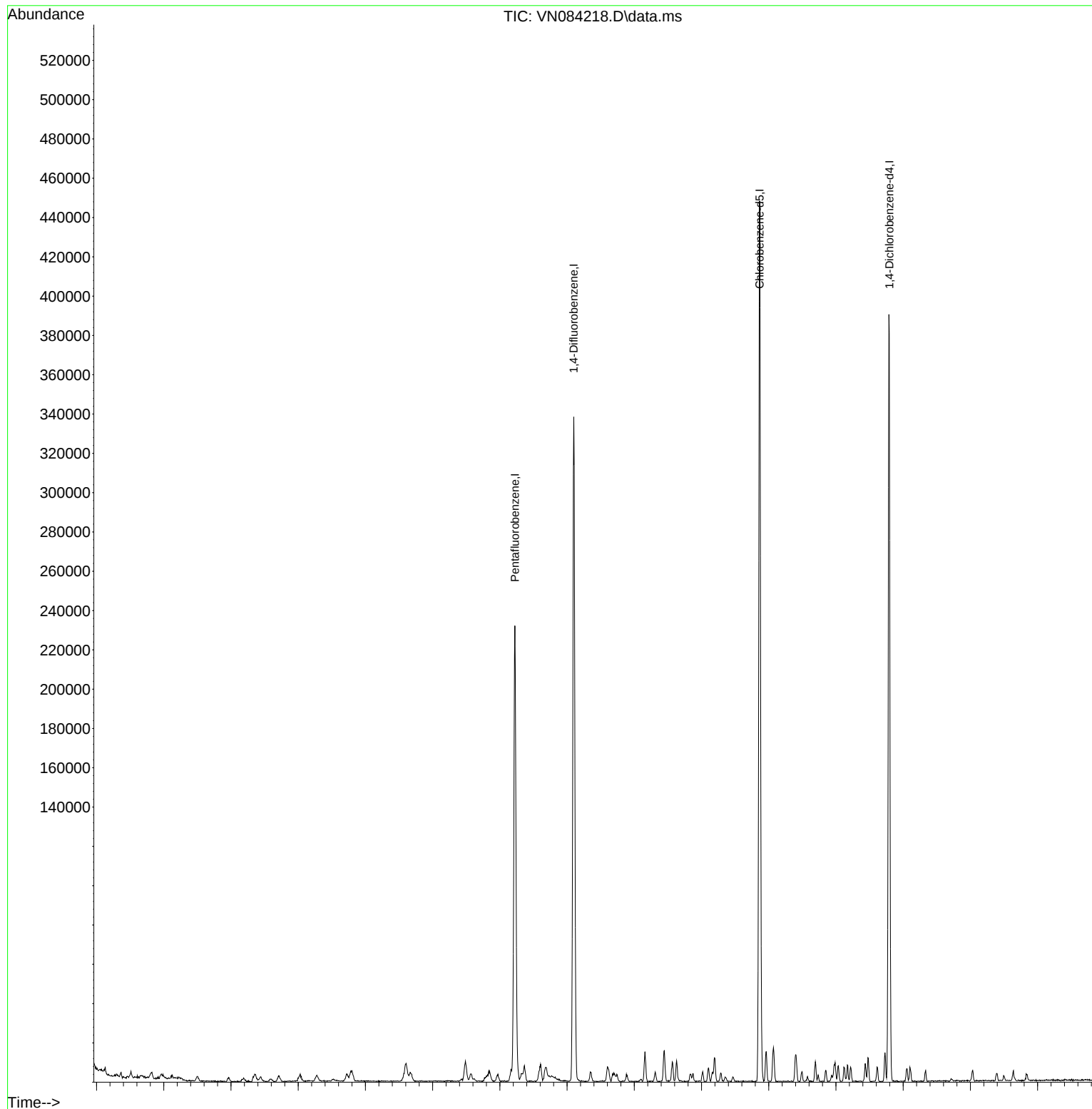
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN093024\
Data File : VN084218.D
Acq On : 30 Sep 2024 14:48
Operator : JC\MD
Sample : VSTDIC001
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDIC001

Manual Integrations
APPROVED

Reviewed By : John Carlone 10/01/2024
Supervised By : Mahesh Dadoda 10/01/2024

Quant Time: Oct 01 06:49:39 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
Quant Title : SW846 8260
QLast Update : Tue Oct 01 06:46:32 2024
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN093024\
 Data File : VN084220.D
 Acq On : 30 Sep 2024 15:36
 Operator : JC\MD
 Sample : VSTDICV050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 ICVVN093024

Quant Time: Oct 01 07:14:39 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
 Quant Title : SW846 8260
 QLast Update : Tue Oct 01 07:11:01 2024
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By : John Carlone 10/01/2024
 Supervised By : Mahesh Dadoda 10/01/2024

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

Internal Standards						
1) Pentafluorobenzene	8.224	168	174241	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	300916	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	263364	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	130851	50.000	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	130630	50.564	ug/l	0.00
Spiked Amount	50.000	Range	74 - 125	Recovery	=	101.120%
35) Dibromofluoromethane	8.165	113	100200	50.508	ug/l	0.00
Spiked Amount	50.000	Range	75 - 124	Recovery	=	101.020%
50) Toluene-d8	10.565	98	387775	53.129	ug/l	0.00
Spiked Amount	50.000	Range	86 - 113	Recovery	=	106.260%
62) 4-Bromofluorobenzene	12.847	95	140850	52.971	ug/l	0.00
Spiked Amount	50.000	Range	77 - 121	Recovery	=	105.940%

Target Compounds					Qvalue	
2) Dichlorodifluoromethane	2.124	85	108641	52.712	ug/l	95
3) Chloromethane	2.359	50	121140	51.477	ug/l	97
4) Vinyl Chloride	2.512	62	116792	51.235	ug/l	99
5) Bromomethane	2.947	94	71654	47.656	ug/l	99
6) Chloroethane	3.118	64	73658	45.119	ug/l	94
7) Trichlorofluoromethane	3.495	101	188482	53.099	ug/l	98
8) Diethyl Ether	3.959	74	70360	53.445	ug/l	98
9) 1,1,2-Trichlorotrifluo...	4.371	101	104895	51.573	ug/l	99
10) Methyl Iodide	4.589	142	141430	53.996	ug/l	92
11) Tert butyl alcohol	5.524	59	109545	257.154	ug/l	99
12) 1,1-Dichloroethene	4.342	96	104103	53.064	ug/l	95
13) Acrolein	4.177	56	125971	257.587	ug/l	97
14) Allyl chloride	5.024	41	174077	51.092	ug/l	100
15) Acrylonitrile	5.718	53	293962	273.264	ug/l	99
16) Acetone	4.430	43	308020	277.547	ug/l	97
17) Carbon Disulfide	4.712	76	302450	48.693	ug/l	100
18) Methyl Acetate	5.024	43	130494	53.948	ug/l	98
19) Methyl tert-butyl Ether	5.800	73	360019	54.371	ug/l	96
20) Methylene Chloride	5.277	84	117572	52.116	ug/l	89
21) trans-1,2-Dichloroethene	5.783	96	108894	52.980	ug/l	97
22) Diisopropyl ether	6.671	45	384647	54.579	ug/l	99
23) Vinyl Acetate	6.600	43	1492704	285.569	ug/l	99
24) 1,1-Dichloroethane	6.565	63	211544	53.676	ug/l	98
25) 2-Butanone	7.482	43	426860	282.397	ug/l	98
26) 2,2-Dichloropropane	7.488	77	189858	53.428	ug/l	99
27) cis-1,2-Dichloroethene	7.488	96	128843	51.876	ug/l	98
28) Bromochloromethane	7.818	49	84632	48.129	ug/l	97
29) Tetrahydrofuran	7.835	42	262996	281.940	ug/l	99
30) Chloroform	7.965	83	213634	52.184	ug/l	95
31) Cyclohexane	8.259	56	190602	49.809	ug/l	100
32) 1,1,1-Trichloroethane	8.171	97	196319	53.395	ug/l	99
36) 1,1-Dichloropropene	8.371	75	155365	53.917	ug/l	99
37) Ethyl Acetate	7.559	43	159764	54.043	ug/l	99
38) Carbon Tetrachloride	8.359	117	169403	53.593	ug/l	94
39) Methylcyclohexane	9.600	83	181676	56.648	ug/l	98
40) Benzene	8.606	78	478538	53.301	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN093024\
 Data File : VN084220.D
 Acq On : 30 Sep 2024 15:36
 Operator : JC\MD
 Sample : VSTDICV050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 ICVVN093024

Manual Integrations
 APPROVED

Reviewed By :John Carlone 10/01/2024
 Supervised By :Mahesh Dadoda 10/01/2024

Quant Time: Oct 01 07:14:39 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
 Quant Title : SW846 8260
 QLast Update : Tue Oct 01 07:11:01 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.777	41	89407	55.708	ug/l	98
42) 1,2-Dichloroethane	8.671	62	164758	54.131	ug/l	99
43) Isopropyl Acetate	8.688	43	278668	48.126	ug/l	100
44) Trichloroethene	9.353	130	109810	52.368	ug/l	100
45) 1,2-Dichloropropane	9.618	63	116161	54.694	ug/l	99
46) Dibromomethane	9.706	93	80284	56.015	ug/l	100
47) Bromodichloromethane	9.888	83	173015	54.335	ug/l	98
48) Methyl methacrylate	9.682	41	132287	57.391	ug/l	98
49) 1,4-Dioxane	9.694	88	47169	1111.545	ug/l	99
51) 4-Methyl-2-Pentanone	10.441	43	808630	287.336	ug/l	100
52) Toluene	10.629	92	296651	54.185	ug/l	99
53) t-1,3-Dichloropropene	10.835	75	183153	56.426	ug/l	99
54) cis-1,3-Dichloropropene	10.312	75	193475	55.416	ug/l	98
55) 1,1,2-Trichloroethane	11.018	97	108550	55.307	ug/l	98
56) Ethyl methacrylate	10.876	69	189121	58.561	ug/l	100
57) 1,3-Dichloropropane	11.165	76	191966	54.738	ug/l	100
58) 2-Chloroethyl Vinyl ether	10.159	63	415454	277.315	ug/l	98
59) 2-Hexanone	11.194	43	621000	295.238	ug/l	100
60) Dibromochloromethane	11.359	129	127786	55.105	ug/l	99
61) 1,2-Dibromoethane	11.470	107	111244	54.548	ug/l	98
64) Tetrachloroethene	11.100	164	96460	52.585	ug/l	99
65) Chlorobenzene	11.888	112	312728	53.555	ug/l	97
66) 1,1,1,2-Tetrachloroethane	11.959	131	111388	55.381	ug/l	97
67) Ethyl Benzene	11.965	91	573790	55.563	ug/l	99
68) m/p-Xylenes	12.070	106	434515	113.748	ug/l	99
69) o-Xylene	12.400	106	209737	58.032	ug/l	99
70) Styrene	12.412	104	355892	58.136	ug/l	99
71) Bromoform	12.576	173	84787	57.258	ug/l #	99
73) Isopropylbenzene	12.694	105	535240	53.604	ug/l	100
74) N-amyl acetate	12.494	43	249223	55.118	ug/l	99
75) 1,1,2,2-Tetrachloroethane	12.935	83	157322	52.398	ug/l	100
76) 1,2,3-Trichloropropane	12.994	75	134836m	50.475	ug/l	
77) Bromobenzene	12.976	156	124463	51.676	ug/l	98
78) n-propylbenzene	13.035	91	638464	55.188	ug/l	99
79) 2-Chlorotoluene	13.123	91	390502	52.898	ug/l	100
80) 1,3,5-Trimethylbenzene	13.170	105	456943	56.101	ug/l	99
81) trans-1,4-Dichloro-2-b...	12.735	75	58987	52.939	ug/l	99
82) 4-Chlorotoluene	13.217	91	397246	53.455	ug/l	100
83) tert-Butylbenzene	13.435	119	390221	53.903	ug/l	99
84) 1,2,4-Trimethylbenzene	13.482	105	461123	56.199	ug/l	98
85) sec-Butylbenzene	13.617	105	536685	55.556	ug/l	99
86) p-Isopropyltoluene	13.729	119	452245	56.614	ug/l	100
87) 1,3-Dichlorobenzene	13.729	146	234190	51.830	ug/l	99
88) 1,4-Dichlorobenzene	13.811	146	234070	51.298	ug/l	99
89) n-Butylbenzene	14.053	91	396001	54.671	ug/l	100
90) Hexachloroethane	14.329	117	82363	50.795	ug/l	100
91) 1,2-Dichlorobenzene	14.106	146	226320	51.082	ug/l	100
92) 1,2-Dibromo-3-Chloropr...	14.717	75	32296	52.125	ug/l	96
93) 1,2,4-Trichlorobenzene	15.394	180	114157	52.311	ug/l	99
94) Hexachlorobutadiene	15.500	225	50461	46.368	ug/l	97
95) Naphthalene	15.641	128	380549	52.602	ug/l	99
96) 1,2,3-Trichlorobenzene	15.835	180	111086	50.853	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN093024\
Data File : VN084220.D
Acq On : 30 Sep 2024 15:36
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN093024

Manual Integrations
APPROVED

Reviewed By :John Carlone 10/01/2024
Supervised By :Mahesh Dadoda 10/01/2024

Quant Time: Oct 01 07:14:39 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
Quant Title : SW846 8260
QLast Update : Tue Oct 01 07:11:01 2024
Response via : Initial Calibration

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

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

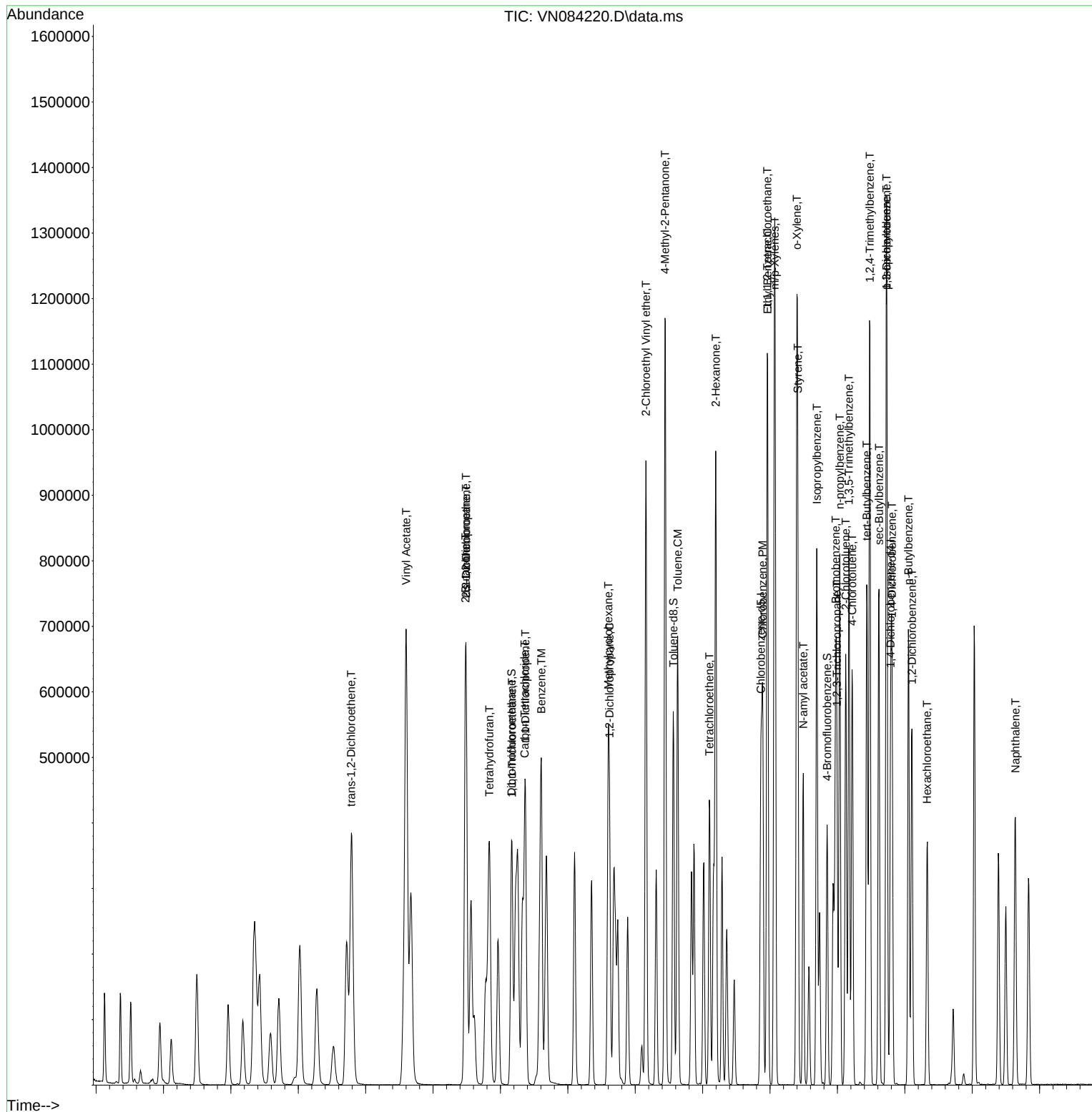
```
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN093024\  
Data File : VN084220.D  
Acq On    : 30 Sep 2024 15:36  
Operator  : JC\MD  
Sample    : VSTDICV050  
Misc      : 5.0mL/MSVOA_N/WATER  
ALS Vial  : 12 Sample Multiplier: 1
```

Instrument :
MSVOA_N
ClientSampleId :
ICVVN093024

Manual Integrations APPROVED

Reviewed By :John Carlone 10/01/2024
Supervised By :Mahesh Dadoda 10/01/2024

Quant Time: Oct 01 07:14:39 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
Quant Title : SW846 8260
QLast Update : Tue Oct 01 07:11:01 2024
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN093024\
 Data File : VN084220.D
 Acq On : 30 Sep 2024 15:36
 Operator : JC\MD
 Sample : VSTDICV050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 ICVVN093024

Quant Time: Oct 01 07:14:39 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
 Quant Title : SW846 8260
 QLast Update : Tue Oct 01 07:11:01 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	Pentafluorobenzene	1.000	1.000	0.0	99	0.00
2 T	Dichlorodifluoromethane	0.591	0.624	-5.6	101	0.00
3 P	Chloromethane	0.675	0.695	-3.0	103	0.00
4 C	Vinyl Chloride	0.654	0.670	-2.4#	100	0.00
5 T	Bromomethane	0.431	0.411	4.6	94	0.00
6 T	Chloroethane	0.468	0.423	9.6	100	0.00
7 T	Trichlorofluoromethane	1.019	1.082	-6.2	101	0.00
8 T	Diethyl Ether	0.378	0.404	-6.9	103	0.00
9 T	1,1,2-Trichlorotrifluoroeth	0.584	0.602	-3.1	101	0.00
10 T	Methyl Iodide	0.752	0.812	-8.0	100	0.00
11 T	Tert butyl alcohol	0.122	0.126	-3.3	101	0.00
12 CM	1,1-Dichloroethene	0.563	0.597	-6.0#	101	0.00
13 T	Acrolein	0.140	0.145	-3.6	101	0.00
14 T	Allyl chloride	0.978	0.999	-2.1	100	0.00
15 T	Acrylonitrile	0.309	0.337	-9.1	106	0.00
16 T	Acetone	0.318	0.354	-11.3	103	0.00
17 T	Carbon Disulfide	1.782	1.736	2.6	100	0.00
18 T	Methyl Acetate	0.694	0.749	-7.9	105	0.00
19 T	Methyl tert-butyl Ether	1.900	2.066	-8.7	101	0.00
20 T	Methylene Chloride	0.647	0.675	-4.3	102	0.00
21 T	trans-1,2-Dichloroethene	0.590	0.625	-5.9	100	0.00
22 T	Diisopropyl ether	2.022	2.208	-9.2	101	0.00
23 T	Vinyl Acetate	1.500	1.713	-14.2	103	0.00
24 P	1,1-Dichloroethane	1.131	1.214	-7.3	101	0.00
25 T	2-Butanone	0.434	0.490	-12.9	108	0.00
26 T	2,2-Dichloropropane	1.020	1.090	-6.9	100	0.00
27 T	cis-1,2-Dichloroethene	0.713	0.739	-3.6	99	0.00
28 T	Bromochloromethane	0.505	0.486	3.8	98	0.00
29 T	Tetrahydrofuran	0.268	0.302	-12.7	106	0.00
30 C	Chloroform	1.175	1.226	-4.3#	101	0.00
31 T	Cyclohexane	1.098	1.094	0.4	102	0.00
32 T	1,1,1-Trichloroethane	1.055	1.127	-6.8	102	0.00
33 S	1,2-Dichloroethane-d4	0.741	0.750	-1.2	101	0.00
34 I	1,4-Difluorobenzene	1.000	1.000	0.0	99	0.00
35 S	Dibromofluoromethane	0.330	0.333	-0.9	102	0.00
36 T	1,1-Dichloropropene	0.479	0.516	-7.7	100	0.00
37 T	Ethyl Acetate	0.491	0.531	-8.1	104	0.00
38 T	Carbon Tetrachloride	0.525	0.563	-7.2	101	0.00
39 T	Methylcyclohexane	0.533	0.604	-13.3	102	0.00
40 TM	Benzene	1.492	1.590	-6.6	101	0.00
41 T	Methacrylonitrile	0.267	0.297	-11.2	102	0.00
42 TM	1,2-Dichloroethane	0.506	0.548	-8.3	103	0.00
43 T	Isopropyl Acetate	0.962	0.926	3.7	102	0.00
44 TM	Trichloroethene	0.348	0.365	-4.9	100	0.00
45 C	1,2-Dichloropropane	0.353	0.386	-9.3#	102	0.00
46 T	Dibromomethane	0.238	0.267	-12.2	102	0.00
47 T	Bromodichloromethane	0.529	0.575	-8.7	102	0.00
48 T	Methyl methacrylate	0.383	0.440	-14.9	104	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN093024\
 Data File : VN084220.D
 Acq On : 30 Sep 2024 15:36
 Operator : JC\MD
 Sample : VSTDICV050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 ICSVN093024

Quant Time: Oct 01 07:14:39 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
 Quant Title : SW846 8260
 QLast Update : Tue Oct 01 07:11:01 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	1,4-Dioxane	0.007	0.008	-14.3	106	0.00
50 S	Toluene-d8	1.213	1.289	-6.3	103	0.00
51 T	4-Methyl-2-Pentanone	0.468	0.537	-14.7	105	0.00
52 CM	Toluene	0.910	0.986	-8.4#	101	0.00
53 T	t-1,3-Dichloropropene	0.539	0.609	-13.0	102	0.00
54 T	cis-1,3-Dichloropropene	0.580	0.643	-10.9	100	0.00
55 T	1,1,2-Trichloroethane	0.326	0.361	-10.7	102	0.00
56 T	Ethyl methacrylate	0.537	0.628	-16.9	103	0.00
57 T	1,3-Dichloropropane	0.583	0.638	-9.4	102	0.00
58 T	2-Chloroethyl Vinyl ether	0.249	0.276	-10.8	97	0.00
59 T	2-Hexanone	0.349	0.413	-18.3	106	0.00
60 T	Dibromochloromethane	0.385	0.425	-10.4	101	0.00
61 T	1,2-Dibromoethane	0.339	0.370	-9.1	102	0.00
62 S	4-Bromofluorobenzene	0.442	0.468	-5.9	103	0.00
63 I	Chlorobenzene-d5	1.000	1.000	0.0	99	0.00
64 T	Tetrachloroethene	0.348	0.366	-5.2	102	0.00
65 PM	Chlorobenzene	1.109	1.187	-7.0	101	0.00
66 T	1,1,1,2-Tetrachloroethane	0.382	0.423	-10.7	104	0.00
67 C	Ethyl Benzene	1.961	2.179	-11.1#	102	0.00
68 T	m/p-Xylenes	0.725	0.825	-13.8	102	0.00
69 T	o-Xylene	0.686	0.796	-16.0	102	0.00
70 T	Styrene	1.162	1.351	-16.3	102	0.00
71 P	Bromoform	0.281	0.322	-14.6	102	0.00
72 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	102	0.00
73 T	Isopropylbenzene	3.815	4.090	-7.2	101	0.00
74 T	N-amyl acetate	1.728	1.905	-10.2	105	0.00
75 P	1,1,2,2-Tetrachloroethane	1.147	1.202	-4.8	104	0.00
76 T	1,2,3-Trichloropropane	1.021	1.030	-0.9	94	0.00
77 T	Bromobenzene	0.920	0.951	-3.4	103	0.00
78 T	n-propylbenzene	4.421	4.879	-10.4	102	0.00
79 T	2-Chlorotoluene	2.821	2.984	-5.8	101	0.00
80 T	1,3,5-Trimethylbenzene	3.112	3.492	-12.2	102	0.00
81 T	trans-1,4-Dichloro-2-butene	0.426	0.451	-5.9	102	0.00
82 T	4-Chlorotoluene	2.840	3.036	-6.9	103	0.00
83 T	tert-Butylbenzene	2.766	2.982	-7.8	101	0.00
84 T	1,2,4-Trimethylbenzene	3.135	3.524	-12.4	103	0.00
85 T	sec-Butylbenzene	3.691	4.101	-11.1	101	0.00
86 T	p-Isopropyltoluene	3.052	3.456	-13.2	101	0.00
87 T	1,3-Dichlorobenzene	1.727	1.790	-3.6	103	0.00
88 T	1,4-Dichlorobenzene	1.744	1.789	-2.6	103	0.00
89 T	n-Butylbenzene	2.768	3.026	-9.3	100	0.00
90 T	Hexachloroethane	0.620	0.629	-1.5	101	0.00
91 T	1,2-Dichlorobenzene	1.693	1.730	-2.2	104	0.00
92 T	1,2-Dibromo-3-Chloropropane	0.237	0.247	-4.2	106	0.00
93 T	1,2,4-Trichlorobenzene	0.834	0.872	-4.6	96	0.00
94 T	Hexachlorobutadiene	0.416	0.386	7.2	100	0.00
95 T	Naphthalene	2.764	2.908	-5.2	97	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN093024\
Data File : VN084220.D
Acq On : 30 Sep 2024 15:36
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN093024

Quant Time: Oct 01 07:14:39 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
Quant Title : SW846 8260
QLast Update : Tue Oct 01 07:11:01 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)
96 T	1,2,3-Trichlorobenzene	0.835	0.849	-1.7	97	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 6

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN093024\
Data File : VN084220.D
Acq On : 30 Sep 2024 15:36
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN093024

Quant Time: Oct 01 07:14:39 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
Quant Title : SW846 8260
QLast Update : Tue Oct 01 07:11:01 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	Pentafluorobenzene	50.000	50.000	0.0	99	0.00
2 T	Dichlorodifluoromethane	50.000	52.712	-5.4	101	0.00
3 P	Chloromethane	50.000	51.477	-3.0	103	0.00
4 C	Vinyl Chloride	50.000	51.235	-2.5#	100	0.00
5 T	Bromomethane	50.000	47.656	4.7	94	0.00
6 T	Chloroethane	50.000	45.119	9.8	100	0.00
7 T	Trichlorofluoromethane	50.000	53.099	-6.2	101	0.00
8 T	Diethyl Ether	50.000	53.445	-6.9	103	0.00
9 T	1,1,2-Trichlorotrifluoroeth	50.000	51.573	-3.1	101	0.00
10 T	Methyl Iodide	50.000	53.996	-8.0	100	0.00
11 T	Tert butyl alcohol	250.000	257.154	-2.9	101	0.00
12 CM	1,1-Dichloroethene	50.000	53.064	-6.1#	101	0.00
13 T	Acrolein	250.000	257.587	-3.0	101	0.00
14 T	Allyl chloride	50.000	51.092	-2.2	100	0.00
15 T	Acrylonitrile	250.000	273.264	-9.3	106	0.00
16 T	Acetone	250.000	277.547	-11.0	103	0.00
17 T	Carbon Disulfide	50.000	48.693	2.6	100	0.00
18 T	Methyl Acetate	50.000	53.948	-7.9	105	0.00
19 T	Methyl tert-butyl Ether	50.000	54.371	-8.7	101	0.00
20 T	Methylene Chloride	50.000	52.116	-4.2	102	0.00
21 T	trans-1,2-Dichloroethene	50.000	52.980	-6.0	100	0.00
22 T	Diisopropyl ether	50.000	54.579	-9.2	101	0.00
23 T	Vinyl Acetate	250.000	285.569	-14.2	103	0.00
24 P	1,1-Dichloroethane	50.000	53.676	-7.4	101	0.00
25 T	2-Butanone	250.000	282.397	-13.0	108	0.00
26 T	2,2-Dichloropropane	50.000	53.428	-6.9	100	0.00
27 T	cis-1,2-Dichloroethene	50.000	51.876	-3.8	99	0.00
28 T	Bromochloromethane	50.000	48.129	3.7	98	0.00
29 T	Tetrahydrofuran	250.000	281.940	-12.8	106	0.00
30 C	Chloroform	50.000	52.184	-4.4#	101	0.00
31 T	Cyclohexane	50.000	49.809	0.4	102	0.00
32 T	1,1,1-Trichloroethane	50.000	53.395	-6.8	102	0.00
33 S	1,2-Dichloroethane-d4	50.000	50.564	-1.1	101	0.00
34 I	1,4-Difluorobenzene	50.000	50.000	0.0	99	0.00
35 S	Dibromofluoromethane	50.000	50.508	-1.0	102	0.00
36 T	1,1-Dichloropropene	50.000	53.917	-7.8	100	0.00
37 T	Ethyl Acetate	50.000	54.043	-8.1	104	0.00
38 T	Carbon Tetrachloride	50.000	53.593	-7.2	101	0.00
39 T	Methylcyclohexane	50.000	56.648	-13.3	102	0.00
40 TM	Benzene	50.000	53.301	-6.6	101	0.00
41 T	Methacrylonitrile	50.000	55.708	-11.4	102	0.00
42 TM	1,2-Dichloroethane	50.000	54.131	-8.3	103	0.00
43 T	Isopropyl Acetate	50.000	48.126	3.7	102	0.00
44 TM	Trichloroethene	50.000	52.368	-4.7	100	0.00
45 C	1,2-Dichloropropane	50.000	54.694	-9.4#	102	0.00
46 T	Dibromomethane	50.000	56.015	-12.0	102	0.00
47 T	Bromodichloromethane	50.000	54.335	-8.7	102	0.00
48 T	Methyl methacrylate	50.000	57.391	-14.8	104	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN093024\
 Data File : VN084220.D
 Acq On : 30 Sep 2024 15:36
 Operator : JC\MD
 Sample : VSTDICV050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 ICSVN093024

Quant Time: Oct 01 07:14:39 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
 Quant Title : SW846 8260
 QLast Update : Tue Oct 01 07:11:01 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	1,4-Dioxane	1000.000	1111.545	-11.2	106	0.00
50 S	Toluene-d8	50.000	53.129	-6.3	103	0.00
51 T	4-Methyl-2-Pentanone	250.000	287.336	-14.9	105	0.00
52 CM	Toluene	50.000	54.185	-8.4#	101	0.00
53 T	t-1,3-Dichloropropene	50.000	56.426	-12.9	102	0.00
54 T	cis-1,3-Dichloropropene	50.000	55.416	-10.8	100	0.00
55 T	1,1,2-Trichloroethane	50.000	55.307	-10.6	102	0.00
56 T	Ethyl methacrylate	50.000	58.561	-17.1	103	0.00
57 T	1,3-Dichloropropane	50.000	54.738	-9.5	102	0.00
58 T	2-Chloroethyl Vinyl ether	250.000	277.315	-10.9	97	0.00
59 T	2-Hexanone	250.000	295.238	-18.1	106	0.00
60 T	Dibromochloromethane	50.000	55.105	-10.2	101	0.00
61 T	1,2-Dibromoethane	50.000	54.548	-9.1	102	0.00
62 S	4-Bromofluorobenzene	50.000	52.971	-5.9	103	0.00
63 I	Chlorobenzene-d5	50.000	50.000	0.0	99	0.00
64 T	Tetrachloroethene	50.000	52.585	-5.2	102	0.00
65 PM	Chlorobenzene	50.000	53.555	-7.1	101	0.00
66 T	1,1,1,2-Tetrachloroethane	50.000	55.381	-10.8	104	0.00
67 C	Ethyl Benzene	50.000	55.563	-11.1#	102	0.00
68 T	m/p-Xylenes	100.000	113.748	-13.7	102	0.00
69 T	o-Xylene	50.000	58.032	-16.1	102	0.00
70 T	Styrene	50.000	58.136	-16.3	102	0.00
71 P	Bromoform	50.000	57.258	-14.5	102	0.00
72 I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	102	0.00
73 T	Isopropylbenzene	50.000	53.604	-7.2	101	0.00
74 T	N-amyl acetate	50.000	55.118	-10.2	105	0.00
75 P	1,1,2,2-Tetrachloroethane	50.000	52.398	-4.8	104	0.00
76 T	1,2,3-Trichloropropane	50.000	50.475	-1.0	94	0.00
77 T	Bromobenzene	50.000	51.676	-3.4	103	0.00
78 T	n-propylbenzene	50.000	55.188	-10.4	102	0.00
79 T	2-Chlorotoluene	50.000	52.898	-5.8	101	0.00
80 T	1,3,5-Trimethylbenzene	50.000	56.101	-12.2	102	0.00
81 T	trans-1,4-Dichloro-2-butene	50.000	52.939	-5.9	102	0.00
82 T	4-Chlorotoluene	50.000	53.455	-6.9	103	0.00
83 T	tert-Butylbenzene	50.000	53.903	-7.8	101	0.00
84 T	1,2,4-Trimethylbenzene	50.000	56.199	-12.4	103	0.00
85 T	sec-Butylbenzene	50.000	55.556	-11.1	101	0.00
86 T	p-Isopropyltoluene	50.000	56.614	-13.2	101	0.00
87 T	1,3-Dichlorobenzene	50.000	51.830	-3.7	103	0.00
88 T	1,4-Dichlorobenzene	50.000	51.298	-2.6	103	0.00
89 T	n-Butylbenzene	50.000	54.671	-9.3	100	0.00
90 T	Hexachloroethane	50.000	50.795	-1.6	101	0.00
91 T	1,2-Dichlorobenzene	50.000	51.082	-2.2	104	0.00
92 T	1,2-Dibromo-3-Chloropropane	50.000	52.125	-4.3	106	0.00
93 T	1,2,4-Trichlorobenzene	50.000	52.311	-4.6	96	0.00
94 T	Hexachlorobutadiene	50.000	46.368	7.3	100	0.00
95 T	Naphthalene	50.000	52.602	-5.2	97	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN093024\
Data File : VN084220.D
Acq On : 30 Sep 2024 15:36
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN093024

Quant Time: Oct 01 07:14:39 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
Quant Title : SW846 8260
QLast Update : Tue Oct 01 07:11:01 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)
96 T	1,2,3-Trichlorobenzene	50.000	50.853	-1.7	97	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 6



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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: ROMA02
 Lab Code: CHEM Case No.: P4258 SAS No.: P4258 SDG No.: P4258
 Instrument ID: MSVOA_N Calibration Date/Time: 10/03/2024 08:43
 Lab File ID: VN084283.D Init. Calib. Date(s): 09/30/2024 09/30/2024
 Heated Purge: (Y/N) N Init. Calib. Time(s): 12:25 14:48
 GC Column: RXI-624 ID: 0.25 (mm)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Vinyl Chloride	0.654	0.623		-4.74	20
1,1-Dichloroethene	0.563	0.545		-3.2	20
2-Butanone	0.434	0.451		3.92	20
Carbon Tetrachloride	0.525	0.548		4.38	20
Chloroform	1.175	1.187		1.02	20
Benzene	1.492	1.529		2.48	20
1,2-Dichloroethane	0.506	0.529		4.55	20
Trichloroethene	0.348	0.350		0.57	20
Tetrachloroethene	0.348	0.348		0	20
Chlorobenzene	1.109	1.084	0.3	-2.25	20
1,2-Dichloroethane-d4	0.741	0.758		2.29	20
Dibromofluoromethane	0.330	0.342		3.64	20
Toluene-d8	1.213	1.304		7.5	20
4-Bromofluorobenzene	0.442	0.468		5.88	20

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\VN100324\
 Data File : VN084283.D
 Acq On : 03 Oct 2024 08:43
 Operator : JC\MD
 Sample : VSTDCCC050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDCCC050

Manual Integrations
 APPROVED

Reviewed By : John Carlone 10/04/2024
 Supervised By : Mahesh Dadoda 10/04/2024

Quant Time: Oct 04 01:27:25 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
 Quant Title : SW846 8260
 QLast Update : Tue Oct 01 07:11:01 2024
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	8.224	168	169381	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	285966	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	262806	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	131016	50.000	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	128394	51.125	ug/l	0.00
Spiked Amount	50.000	Range	74 - 125	Recovery	=	102.240%
35) Dibromofluoromethane	8.165	113	97715	51.831	ug/l	0.00
Spiked Amount	50.000	Range	75 - 124	Recovery	=	103.660%
50) Toluene-d8	10.565	98	372971	53.772	ug/l	0.00
Spiked Amount	50.000	Range	86 - 113	Recovery	=	107.540%
62) 4-Bromofluorobenzene	12.847	95	133948	53.009	ug/l	0.00
Spiked Amount	50.000	Range	77 - 121	Recovery	=	106.020%

Target Compounds					Qvalue
2) Dichlorodifluoromethane	2.124	85	95119	47.476	ug/l 92
3) Chloromethane	2.359	50	108201	47.298	ug/l 99
4) Vinyl Chloride	2.518	62	105528	47.622	ug/l 98
5) Bromomethane	2.948	94	67550	46.215	ug/l 97
6) Chloroethane	3.112	64	70468	44.403	ug/l 96
7) Trichlorofluoromethane	3.495	101	171396	49.671	ug/l 99
8) Diethyl Ether	3.959	74	60730	47.454	ug/l 97
9) 1,1,2-Trichlorotrifluo...	4.371	101	97746	49.437	ug/l 99
10) Methyl Iodide	4.589	142	125039	49.108	ug/l 94
11) Tert butyl alcohol	5.518	59	97421	235.255	ug/l 99
12) 1,1-Dichloroethene	4.342	96	92396	48.448	ug/l 95
13) Acrolein	4.177	56	116834	245.758	ug/l 99
14) Allyl chloride	5.024	41	149826	45.236	ug/l 100
15) Acrylonitrile	5.718	53	266760	255.093	ug/l 99
16) Acetone	4.424	43	294902	273.351	ug/l 96
17) Carbon Disulfide	4.712	76	270083	44.730	ug/l 100
18) Methyl Acetate	5.024	43	120617	51.296	ug/l 100
19) Methyl tert-butyl Ether	5.794	73	320510	49.793	ug/l 100
20) Methylene Chloride	5.277	84	108797	49.610	ug/l 94
21) trans-1,2-Dichloroethene	5.789	96	100414	50.256	ug/l 98
22) Diisopropyl ether	6.671	45	351280	51.275	ug/l 99
23) Vinyl Acetate	6.600	43	1328696	261.486	ug/l 99
24) 1,1-Dichloroethane	6.571	63	196861	51.383	ug/l 99
25) 2-Butanone	7.483	43	381981	259.958	ug/l 100
26) 2,2-Dichloropropane	7.488	77	171757	49.721	ug/l 98
27) cis-1,2-Dichloroethene	7.488	96	118403	49.040	ug/l 99
28) Bromochloromethane	7.812	49	87187	51.004	ug/l 99
29) Tetrahydrofuran	7.835	42	237704	262.138	ug/l 99
30) Chloroform	7.965	83	201087	50.529	ug/l 98
31) Cyclohexane	8.253	56	166819	44.845	ug/l 97
32) 1,1,1-Trichloroethane	8.165	97	179442	50.205	ug/l 100
36) 1,1-Dichloropropene	8.371	75	137099	50.065	ug/l 99
37) Ethyl Acetate	7.559	43	148071	52.706	ug/l 98
38) Carbon Tetrachloride	8.359	117	156653	52.150	ug/l 96
39) Methylcyclohexane	9.600	83	154837	50.803	ug/l 98
40) Benzene	8.606	78	437213	51.244	ug/l 99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN100324\
 Data File : VN084283.D
 Acq On : 03 Oct 2024 08:43
 Operator : JC\MD
 Sample : VSTDCCC050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDCCC050

Manual Integrations
 APPROVED

Reviewed By : John Carlone 10/04/2024
 Supervised By : Mahesh Dadoda 10/04/2024

Quant Time: Oct 04 01:27:25 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
 Quant Title : SW846 8260
 QLast Update : Tue Oct 01 07:11:01 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.777	41	76729	50.308	ug/l	96
42) 1,2-Dichloroethane	8.671	62	151403	52.344	ug/l	100
43) Isopropyl Acetate	8.688	43	236525	42.983	ug/l	97
44) Trichloroethene	9.353	130	100209	50.287	ug/l	96
45) 1,2-Dichloropropane	9.624	63	109995	54.498	ug/l	100
46) Dibromomethane	9.706	93	75268	55.261	ug/l	98
47) Bromodichloromethane	9.888	83	161408	53.339	ug/l #	99
48) Methyl methacrylate	9.682	41	114801	52.409	ug/l	99
49) 1,4-Dioxane	9.694	88	42726	1059.482	ug/l	99
51) 4-Methyl-2-Pentanone	10.441	43	741671	277.321	ug/l	100
52) Toluene	10.629	92	272951	52.462	ug/l	100
53) t-1,3-Dichloropropene	10.835	75	164126	53.208	ug/l	99
54) cis-1,3-Dichloropropene	10.312	75	174324	52.541	ug/l	99
55) 1,1,2-Trichloroethane	11.012	97	101963	54.667	ug/l	97
56) Ethyl methacrylate	10.871	69	167413	54.549	ug/l	100
57) 1,3-Dichloropropane	11.159	76	177240	53.181	ug/l	100
58) 2-Chloroethyl Vinyl ether	10.159	63	382831	268.899	ug/l	99
59) 2-Hexanone	11.194	43	559511	279.911	ug/l	99
60) Dibromochloromethane	11.359	129	122149	55.428	ug/l	99
61) 1,2-Dibromoethane	11.470	107	101959	52.609	ug/l	100
64) Tetrachloroethene	11.100	164	91549	50.014	ug/l	98
65) Chlorobenzene	11.888	112	284880	48.889	ug/l	98
66) 1,1,1,2-Tetrachloroethane	11.959	131	101035	50.340	ug/l	99
67) Ethyl Benzene	11.965	91	518744	50.339	ug/l	99
68) m/p-Xylenes	12.070	106	391711	102.761	ug/l	99
69) o-Xylene	12.400	106	186483	51.708	ug/l	98
70) Styrene	12.412	104	328692	53.807	ug/l	99
71) Bromoform	12.576	173	80296	54.340	ug/l #	99
73) Isopropylbenzene	12.694	105	479675	47.979	ug/l	100
74) N-amyl acetate	12.494	43	214958	47.480	ug/l	99
75) 1,1,2,2-Tetrachloroethane	12.935	83	147357	49.017	ug/l	99
76) 1,2,3-Trichloropropane	12.994	75	122634m	45.849	ug/l	
77) Bromobenzene	12.976	156	115333	47.825	ug/l	97
78) n-propylbenzene	13.035	91	583225	50.350	ug/l	100
79) 2-Chlorotoluene	13.123	91	352076	47.633	ug/l	99
80) 1,3,5-Trimethylbenzene	13.170	105	417226	51.160	ug/l	99
81) trans-1,4-Dichloro-2-b...	12.735	75	53699m	48.132	ug/l	
82) 4-Chlorotoluene	13.217	91	363150	48.806	ug/l	100
83) tert-Butylbenzene	13.435	119	336351	46.403	ug/l	97
84) 1,2,4-Trimethylbenzene	13.482	105	423234	51.516	ug/l	99
85) sec-Butylbenzene	13.617	105	487727	50.424	ug/l	99
86) p-Isopropyltoluene	13.729	119	412360	51.556	ug/l	99
87) 1,3-Dichlorobenzene	13.729	146	218515	48.300	ug/l	98
88) 1,4-Dichlorobenzene	13.812	146	217720	47.655	ug/l	99
89) n-Butylbenzene	14.053	91	360507	49.708	ug/l	99
90) Hexachloroethane	14.329	117	75448	46.472	ug/l	100
91) 1,2-Dichlorobenzene	14.106	146	212548	47.913	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.717	75	29217	47.097	ug/l	95
93) 1,2,4-Trichlorobenzene	15.388	180	101383	46.399	ug/l	99
94) Hexachlorobutadiene	15.500	225	47524	43.614	ug/l	98
95) Naphthalene	15.635	128	328212	45.310	ug/l	99
96) 1,2,3-Trichlorobenzene	15.835	180	100783	46.079	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN100324\
Data File : VN084283.D
Acq On : 03 Oct 2024 08:43
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

Reviewed By :John Carlone 10/04/2024
Supervised By :Mahesh Dadoda 10/04/2024

Quant Time: Oct 04 01:27:25 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
Quant Title : SW846 8260
QLast Update : Tue Oct 01 07:11:01 2024
Response via : Initial Calibration

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

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

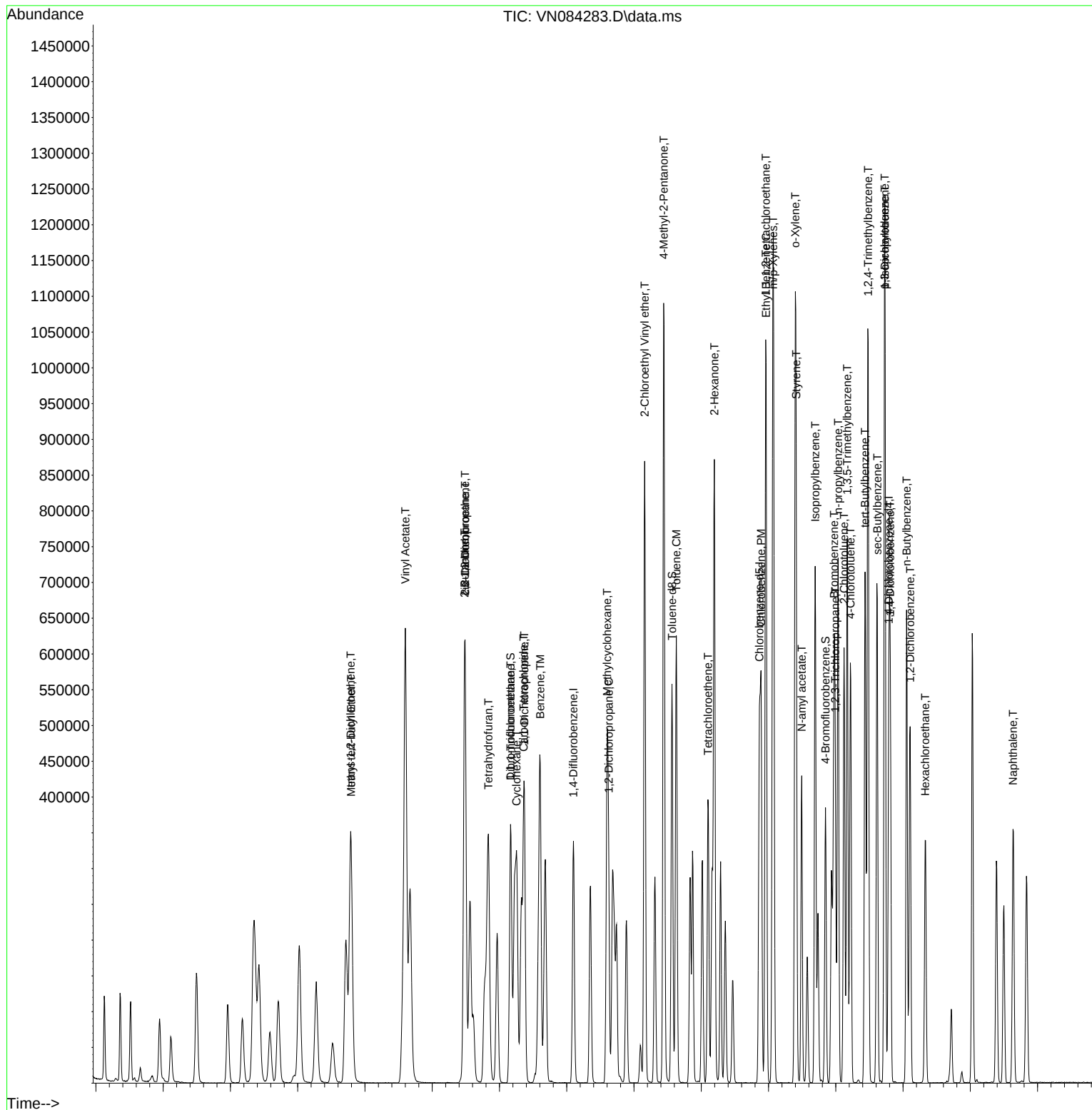
```
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN100324\  
Data File : VN084283.D  
Acq On    : 03 Oct 2024   08:43  
Operator  : JC\MD  
Sample    : VSTDCCC050  
Misc      : 5.0mL/MSVOA_N/WATER  
ALS Vial  : 3    Sample Multiplier: 1
```

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 10/04/2024
Supervised By :Mahesh Dadoda 10/04/2024

Quant Time: Oct 04 01:27:25 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
Quant Title : SW846 8260
QLast Update : Tue Oct 01 07:11:01 2024
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN100324\
 Data File : VN084283.D
 Acq On : 03 Oct 2024 08:43
 Operator : JC\MD
 Sample : VSTDCCC050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_N
 LabSampleId :
 VSTDCCC050

Quant Time: Oct 04 01:27:25 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
 Quant Title : SW846 8260
 QLast Update : Tue Oct 01 07:11:01 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	Pentafluorobenzene	1.000	1.000	0.0	97	0.00
2 T	Dichlorodifluoromethane	0.591	0.562	4.9	88	0.00
3 P	Chloromethane	0.675	0.639	5.3	92	0.00
4 C	Vinyl Chloride	0.654	0.623	4.7#	90	0.00
5 T	Bromomethane	0.431	0.399	7.4	89	0.00
6 T	Chloroethane	0.468	0.416	11.1	96	0.00
7 T	Trichlorofluoromethane	1.019	1.012	0.7	92	0.00
8 T	Diethyl Ether	0.378	0.359	5.0	89	0.00
9 T	1,1,2-Trichlorotrifluoroeth	0.584	0.577	1.2	94	0.00
10 T	Methyl Iodide	0.752	0.738	1.9	88	0.00
11 T	Tert butyl alcohol	0.122	0.115	5.7	90	0.00
12 CM	1,1-Dichloroethene	0.563	0.545	3.2#	90	0.00
13 T	Acrolein	0.140	0.138	1.4	94	0.00
14 T	Allyl chloride	0.978	0.885	9.5	86	0.00
15 T	Acrylonitrile	0.309	0.315	-1.9	96	0.00
16 T	Acetone	0.318	0.348	-9.4	98	0.00
17 T	Carbon Disulfide	1.782	1.595	10.5	89	0.00
18 T	Methyl Acetate	0.694	0.712	-2.6	97	0.00
19 T	Methyl tert-butyl Ether	1.900	1.892	0.4	90	0.00
20 T	Methylene Chloride	0.647	0.642	0.8	95	0.00
21 T	trans-1,2-Dichloroethene	0.590	0.593	-0.5	92	0.00
22 T	Diisopropyl ether	2.022	2.074	-2.6	93	0.00
23 T	Vinyl Acetate	1.500	1.569	-4.6	92	0.00
24 P	1,1-Dichloroethane	1.131	1.162	-2.7	94	0.00
25 T	2-Butanone	0.434	0.451	-3.9	96	0.00
26 T	2,2-Dichloropropane	1.020	1.014	0.6	91	0.00
27 T	cis-1,2-Dichloroethene	0.713	0.699	2.0	91	0.00
28 T	Bromochloromethane	0.505	0.515	-2.0	101	0.00
29 T	Tetrahydrofuran	0.268	0.281	-4.9	96	0.00
30 C	Chloroform	1.175	1.187	-1.0#	95	0.00
31 T	Cyclohexane	1.098	0.985	10.3	89	0.00
32 T	1,1,1-Trichloroethane	1.055	1.059	-0.4	93	0.00
33 S	1,2-Dichloroethane-d4	0.741	0.758	-2.3	99	0.00
34 I	1,4-Difluorobenzene	1.000	1.000	0.0	94	0.00
35 S	Dibromofluoromethane	0.330	0.342	-3.6	99	0.00
36 T	1,1-Dichloropropene	0.479	0.479	0.0	89	0.00
37 T	Ethyl Acetate	0.491	0.518	-5.5	97	0.00
38 T	Carbon Tetrachloride	0.525	0.548	-4.4	94	0.00
39 T	Methylcyclohexane	0.533	0.541	-1.5	87	0.00
40 TM	Benzene	1.492	1.529	-2.5	93	0.00
41 T	Methacrylonitrile	0.267	0.268	-0.4	88	0.00
42 TM	1,2-Dichloroethane	0.506	0.529	-4.5	94	0.00
43 T	Isopropyl Acetate	0.962	0.827	14.0	87	0.00
44 TM	Trichloroethene	0.348	0.350	-0.6	91	0.00
45 C	1,2-Dichloropropane	0.353	0.385	-9.1#	96	0.00
46 T	Dibromomethane	0.238	0.263	-10.5	95	0.00
47 T	Bromodichloromethane	0.529	0.564	-6.6	95	0.00
48 T	Methyl methacrylate	0.383	0.401	-4.7	90	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN100324\
 Data File : VN084283.D
 Acq On : 03 Oct 2024 08:43
 Operator : JC\MD
 Sample : VSTDCCC050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_N
 LabSampleId :
 VSTDCCC050

Quant Time: Oct 04 01:27:25 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
 Quant Title : SW846 8260
 QLast Update : Tue Oct 01 07:11:01 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	1,4-Dioxane	0.007	0.007	0.0	96	0.00
50 S	Toluene-d8	1.213	1.304	-7.5	99	0.00
51 T	4-Methyl-2-Pentanone	0.468	0.519	-10.9	96	0.00
52 CM	Toluene	0.910	0.954	-4.8#	92	0.00
53 T	t-1,3-Dichloropropene	0.539	0.574	-6.5	91	0.00
54 T	cis-1,3-Dichloropropene	0.580	0.610	-5.2	90	0.00
55 T	1,1,2-Trichloroethane	0.326	0.357	-9.5	96	0.00
56 T	Ethyl methacrylate	0.537	0.585	-8.9	91	0.00
57 T	1,3-Dichloropropane	0.583	0.620	-6.3	95	0.00
58 T	2-Chloroethyl Vinyl ether	0.249	0.268	-7.6	90	0.00
59 T	2-Hexanone	0.349	0.391	-12.0	95	0.00
60 T	Dibromochloromethane	0.385	0.427	-10.9	96	0.00
61 T	1,2-Dibromoethane	0.339	0.357	-5.3	94	0.00
62 S	4-Bromofluorobenzene	0.442	0.468	-5.9	97	0.00
63 I	Chlorobenzene-d5	1.000	1.000	0.0	99	0.00
64 T	Tetrachloroethene	0.348	0.348	0.0	96	0.00
65 PM	Chlorobenzene	1.109	1.084	2.3	92	0.00
66 T	1,1,1,2-Tetrachloroethane	0.382	0.384	-0.5	94	0.00
67 C	Ethyl Benzene	1.961	1.974	-0.7#	92	0.00
68 T	m/p-Xylenes	0.725	0.745	-2.8	92	0.00
69 T	o-Xylene	0.686	0.710	-3.5	91	0.00
70 T	Styrene	1.162	1.251	-7.7	95	0.00
71 P	Bromoform	0.281	0.306	-8.9	96	0.00
72 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	103	0.00
73 T	Isopropylbenzene	3.815	3.661	4.0	91	0.00
74 T	N-amyl acetate	1.728	1.641	5.0	91	0.00
75 P	1,1,2,2-Tetrachloroethane	1.147	1.125	1.9	98	0.00
76 T	1,2,3-Trichloropropane	1.021	0.936	8.3	85	0.00
77 T	Bromobenzene	0.920	0.880	4.3	95	0.00
78 T	n-propylbenzene	4.421	4.452	-0.7	93	0.00
79 T	2-Chlorotoluene	2.821	2.687	4.8	91	0.00
80 T	1,3,5-Trimethylbenzene	3.112	3.185	-2.3	94	0.00
81 T	trans-1,4-Dichloro-2-butene	0.426	0.410	3.8	93	0.00
82 T	4-Chlorotoluene	2.840	2.772	2.4	94	0.00
83 T	tert-Butylbenzene	2.766	2.567	7.2	87	0.00
84 T	1,2,4-Trimethylbenzene	3.135	3.230	-3.0	94	0.00
85 T	sec-Butylbenzene	3.691	3.723	-0.9	92	0.00
86 T	p-Isopropyltoluene	3.052	3.147	-3.1	92	0.00
87 T	1,3-Dichlorobenzene	1.727	1.668	3.4	96	0.00
88 T	1,4-Dichlorobenzene	1.744	1.662	4.7	96	0.00
89 T	n-Butylbenzene	2.768	2.752	0.6	91	0.00
90 T	Hexachloroethane	0.620	0.576	7.1	92	0.00
91 T	1,2-Dichlorobenzene	1.693	1.622	4.2	97	0.00
92 T	1,2-Dibromo-3-Chloropropane	0.237	0.223	5.9	96	0.00
93 T	1,2,4-Trichlorobenzene	0.834	0.774	7.2	85	0.00
94 T	Hexachlorobutadiene	0.416	0.363	12.7	94	0.00
95 T	Naphthalene	2.764	2.505	9.4	83	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN100324\
Data File : VN084283.D
Acq On : 03 Oct 2024 08:43
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Oct 04 01:27:25 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
Quant Title : SW846 8260
QLast Update : Tue Oct 01 07:11:01 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)
96 T	1,2,3-Trichlorobenzene	0.835	0.769	7.9	88	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 6

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN100324\
Data File : VN084283.D
Acq On : 03 Oct 2024 08:43
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Oct 04 01:27:25 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
Quant Title : SW846 8260
QLast Update : Tue Oct 01 07:11:01 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	Pentafluorobenzene	50.000	50.000	0.0	97	0.00
2 T	Dichlorodifluoromethane	50.000	47.476	5.0	88	0.00
3 P	Chloromethane	50.000	47.298	5.4	92	0.00
4 C	Vinyl Chloride	50.000	47.622	4.8#	90	0.00
5 T	Bromomethane	50.000	46.215	7.6	89	0.00
6 T	Chloroethane	50.000	44.403	11.2	96	0.00
7 T	Trichlorofluoromethane	50.000	49.671	0.7	92	0.00
8 T	Diethyl Ether	50.000	47.454	5.1	89	0.00
9 T	1,1,2-Trichlorotrifluoroeth	50.000	49.437	1.1	94	0.00
10 T	Methyl Iodide	50.000	49.108	1.8	88	0.00
11 T	Tert butyl alcohol	250.000	235.255	5.9	90	0.00
12 CM	1,1-Dichloroethene	50.000	48.448	3.1#	90	0.00
13 T	Acrolein	250.000	245.758	1.7	94	0.00
14 T	Allyl chloride	50.000	45.236	9.5	86	0.00
15 T	Acrylonitrile	250.000	255.093	-2.0	96	0.00
16 T	Acetone	250.000	273.351	-9.3	98	0.00
17 T	Carbon Disulfide	50.000	44.730	10.5	89	0.00
18 T	Methyl Acetate	50.000	51.296	-2.6	97	0.00
19 T	Methyl tert-butyl Ether	50.000	49.793	0.4	90	0.00
20 T	Methylene Chloride	50.000	49.610	0.8	95	0.00
21 T	trans-1,2-Dichloroethene	50.000	50.256	-0.5	92	0.00
22 T	Diisopropyl ether	50.000	51.275	-2.5	93	0.00
23 T	Vinyl Acetate	250.000	261.486	-4.6	92	0.00
24 P	1,1-Dichloroethane	50.000	51.383	-2.8	94	0.00
25 T	2-Butanone	250.000	259.958	-4.0	96	0.00
26 T	2,2-Dichloropropane	50.000	49.721	0.6	91	0.00
27 T	cis-1,2-Dichloroethene	50.000	49.040	1.9	91	0.00
28 T	Bromochloromethane	50.000	51.004	-2.0	101	0.00
29 T	Tetrahydrofuran	250.000	262.138	-4.9	96	0.00
30 C	Chloroform	50.000	50.529	-1.1#	95	0.00
31 T	Cyclohexane	50.000	44.845	10.3	89	0.00
32 T	1,1,1-Trichloroethane	50.000	50.205	-0.4	93	0.00
33 S	1,2-Dichloroethane-d4	50.000	51.125	-2.3	99	0.00
34 I	1,4-Difluorobenzene	50.000	50.000	0.0	94	0.00
35 S	Dibromofluoromethane	50.000	51.831	-3.7	99	0.00
36 T	1,1-Dichloropropene	50.000	50.065	-0.1	89	0.00
37 T	Ethyl Acetate	50.000	52.706	-5.4	97	0.00
38 T	Carbon Tetrachloride	50.000	52.150	-4.3	94	0.00
39 T	Methylcyclohexane	50.000	50.803	-1.6	87	0.00
40 TM	Benzene	50.000	51.244	-2.5	93	0.00
41 T	Methacrylonitrile	50.000	50.308	-0.6	88	0.00
42 TM	1,2-Dichloroethane	50.000	52.344	-4.7	94	0.00
43 T	Isopropyl Acetate	50.000	42.983	14.0	87	0.00
44 TM	Trichloroethene	50.000	50.287	-0.6	91	0.00
45 C	1,2-Dichloropropane	50.000	54.498	-9.0#	96	0.00
46 T	Dibromomethane	50.000	55.261	-10.5	95	0.00
47 T	Bromodichloromethane	50.000	53.339	-6.7	95	0.00
48 T	Methyl methacrylate	50.000	52.409	-4.8	90	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN100324\
 Data File : VN084283.D
 Acq On : 03 Oct 2024 08:43
 Operator : JC\MD
 Sample : VSTDCCC050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_N
 LabSampleId :
 VSTDCCC050

Quant Time: Oct 04 01:27:25 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
 Quant Title : SW846 8260
 QLast Update : Tue Oct 01 07:11:01 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	1,4-Dioxane	1000.000	1059.482	-5.9	96	0.00
50 S	Toluene-d8	50.000	53.772	-7.5	99	0.00
51 T	4-Methyl-2-Pentanone	250.000	277.321	-10.9	96	0.00
52 CM	Toluene	50.000	52.462	-4.9#	92	0.00
53 T	t-1,3-Dichloropropene	50.000	53.208	-6.4	91	0.00
54 T	cis-1,3-Dichloropropene	50.000	52.541	-5.1	90	0.00
55 T	1,1,2-Trichloroethane	50.000	54.667	-9.3	96	0.00
56 T	Ethyl methacrylate	50.000	54.549	-9.1	91	0.00
57 T	1,3-Dichloropropane	50.000	53.181	-6.4	95	0.00
58 T	2-Chloroethyl Vinyl ether	250.000	268.899	-7.6	90	0.00
59 T	2-Hexanone	250.000	279.911	-12.0	95	0.00
60 T	Dibromochloromethane	50.000	55.428	-10.9	96	0.00
61 T	1,2-Dibromoethane	50.000	52.609	-5.2	94	0.00
62 S	4-Bromofluorobenzene	50.000	53.009	-6.0	97	0.00
63 I	Chlorobenzene-d5	50.000	50.000	0.0	99	0.00
64 T	Tetrachloroethene	50.000	50.014	-0.0	96	0.00
65 PM	Chlorobenzene	50.000	48.889	2.2	92	0.00
66 T	1,1,1,2-Tetrachloroethane	50.000	50.340	-0.7	94	0.00
67 C	Ethyl Benzene	50.000	50.339	-0.7#	92	0.00
68 T	m/p-Xylenes	100.000	102.761	-2.8	92	0.00
69 T	o-Xylene	50.000	51.708	-3.4	91	0.00
70 T	Styrene	50.000	53.807	-7.6	95	0.00
71 P	Bromoform	50.000	54.340	-8.7	96	0.00
72 I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	103	0.00
73 T	Isopropylbenzene	50.000	47.979	4.0	91	0.00
74 T	N-amyl acetate	50.000	47.480	5.0	91	0.00
75 P	1,1,2,2-Tetrachloroethane	50.000	49.017	2.0	98	0.00
76 T	1,2,3-Trichloropropane	50.000	45.849	8.3	85	0.00
77 T	Bromobenzene	50.000	47.825	4.3	95	0.00
78 T	n-propylbenzene	50.000	50.350	-0.7	93	0.00
79 T	2-Chlorotoluene	50.000	47.633	4.7	91	0.00
80 T	1,3,5-Trimethylbenzene	50.000	51.160	-2.3	94	0.00
81 T	trans-1,4-Dichloro-2-butene	50.000	48.132	3.7	93	0.00
82 T	4-Chlorotoluene	50.000	48.806	2.4	94	0.00
83 T	tert-Butylbenzene	50.000	46.403	7.2	87	0.00
84 T	1,2,4-Trimethylbenzene	50.000	51.516	-3.0	94	0.00
85 T	sec-Butylbenzene	50.000	50.424	-0.8	92	0.00
86 T	p-Isopropyltoluene	50.000	51.556	-3.1	92	0.00
87 T	1,3-Dichlorobenzene	50.000	48.300	3.4	96	0.00
88 T	1,4-Dichlorobenzene	50.000	47.655	4.7	96	0.00
89 T	n-Butylbenzene	50.000	49.708	0.6	91	0.00
90 T	Hexachloroethane	50.000	46.472	7.1	92	0.00
91 T	1,2-Dichlorobenzene	50.000	47.913	4.2	97	0.00
92 T	1,2-Dibromo-3-Chloropropane	50.000	47.097	5.8	96	0.00
93 T	1,2,4-Trichlorobenzene	50.000	46.399	7.2	85	0.00
94 T	Hexachlorobutadiene	50.000	43.614	12.8	94	0.00
95 T	Naphthalene	50.000	45.310	9.4	83	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN100324\
Data File : VN084283.D
Acq On : 03 Oct 2024 08:43
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Oct 04 01:27:25 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
Quant Title : SW846 8260
QLast Update : Tue Oct 01 07:11:01 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)
96 T	1,2,3-Trichlorobenzene	50.000	46.079	7.8	88	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 6



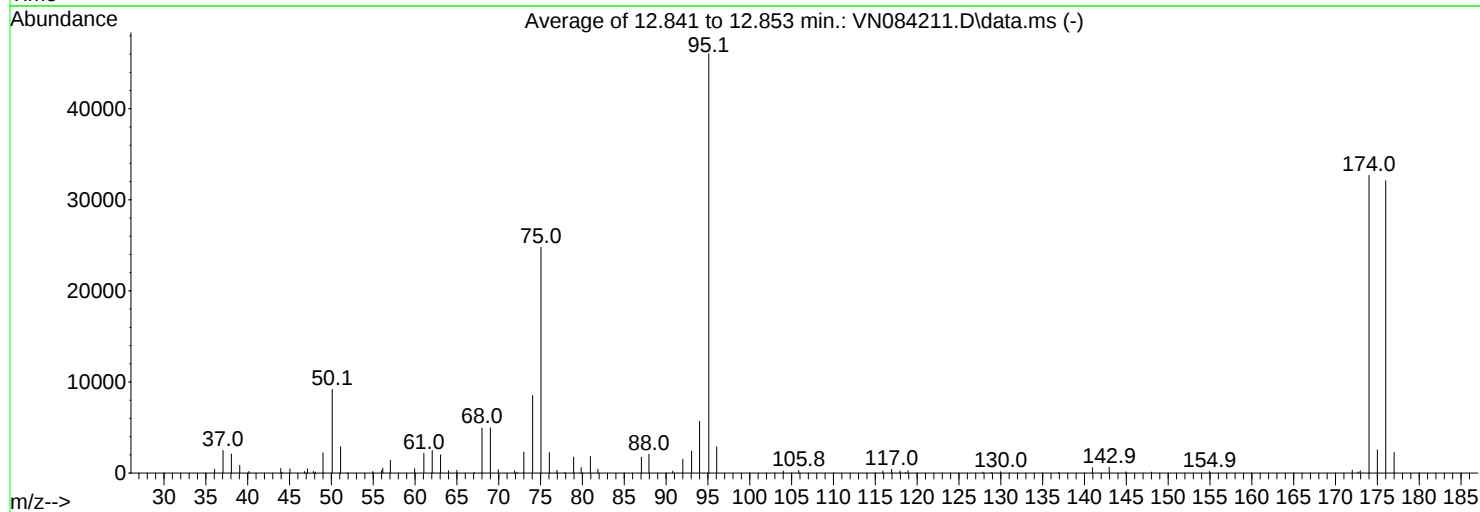
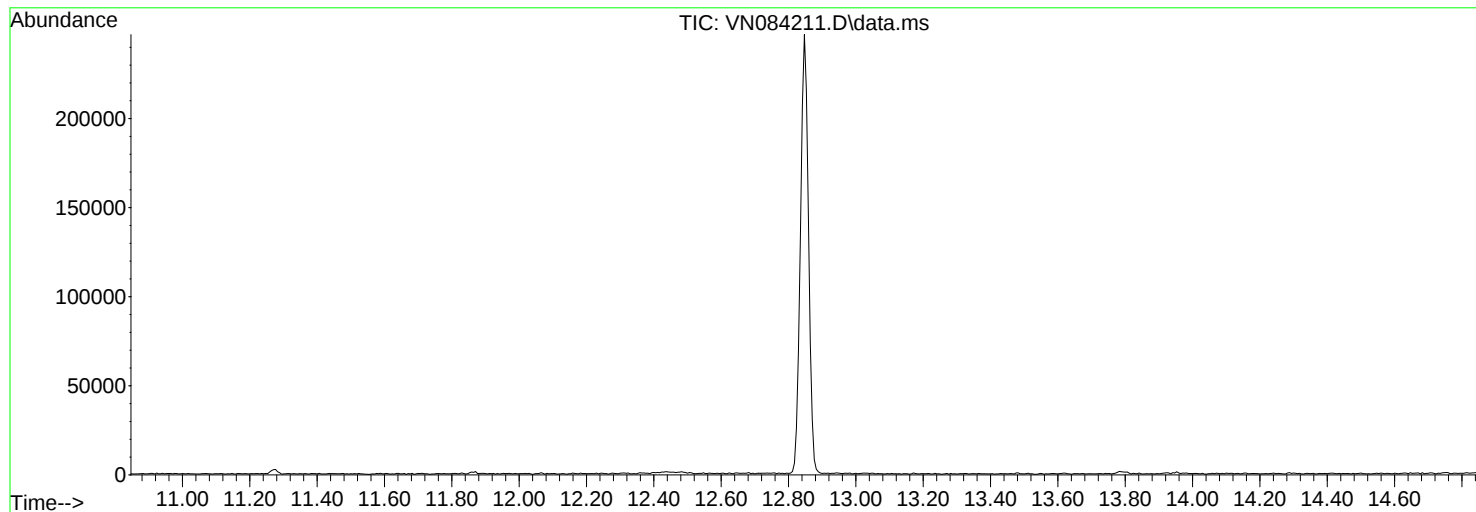
QC SAMPLE DATA

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN093024\
Data File : VN084211.D
Acq On : 30 Sep 2024 09:24
Operator : JC\MD
Sample : BFB
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
Title : SW846 8260
Last Update : Tue Oct 01 07:11:01 2024



AutoFind: Scans 1851, 1852, 1853; Background Corrected with Scan 1843

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.9	9177	PASS
75	95	30	60	53.9	24795	PASS
95	95	100	100	100.0	46040	PASS
96	95	5	9	6.3	2879	PASS
173	174	0.00	2	0.8	259	PASS
174	95	50	100	71.0	32685	PASS
175	174	5	9	7.8	2541	PASS
176	174	95	101	98.2	32104	PASS
177	176	5	9	7.0	2260	PASS

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	419	48.10	111	62.05	2483	74.05	8516
37.05	2481	49.00	2237	63.05	2007	75.05	24795
38.05	2101	50.10	9177	64.00	258	76.05	2253
39.05	836	51.10	2891	65.00	322	76.95	323
40.15	179	51.90	55	67.10	55	77.90	67
43.95	503	54.95	179	68.00	4945	78.95	1743
44.10	59	56.00	274	69.00	4971	79.85	625
45.05	462	56.15	545	69.95	382	80.95	1822
46.80	174	57.05	1406	71.90	264	81.85	418
47.15	455	59.95	485	72.20	67	87.05	1750
47.85	183	61.05	2172	73.00	2306	87.95	2078

Average of 12.841 to 12.853 min.: VN084211.D\data.ms

BFB

Modified:subtracted

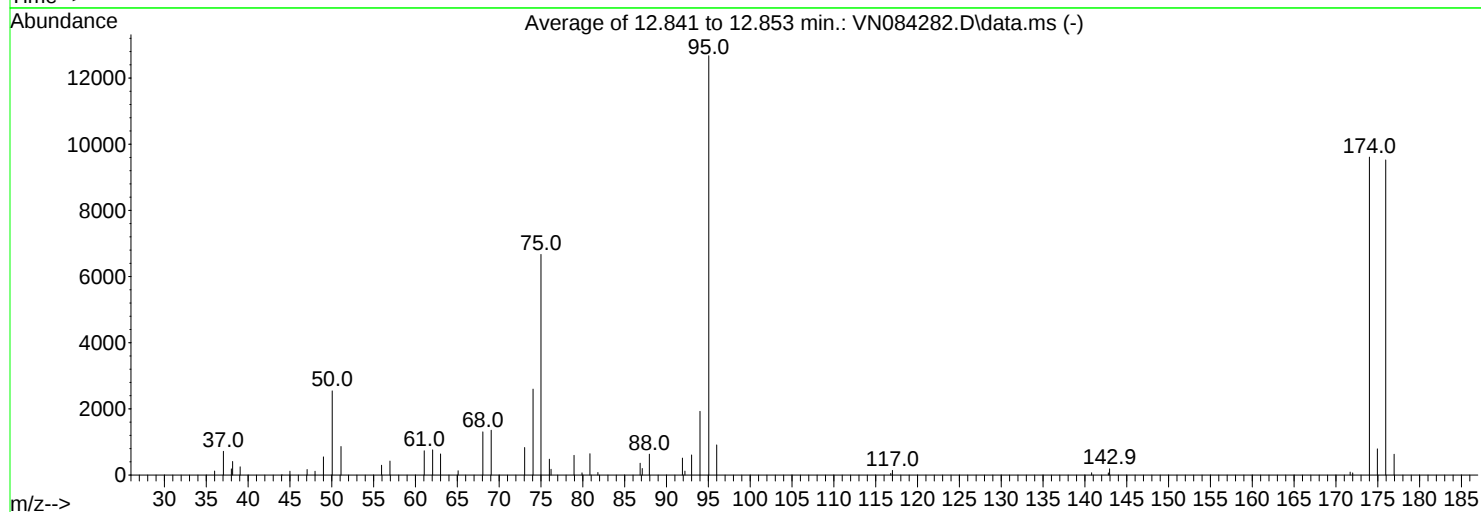
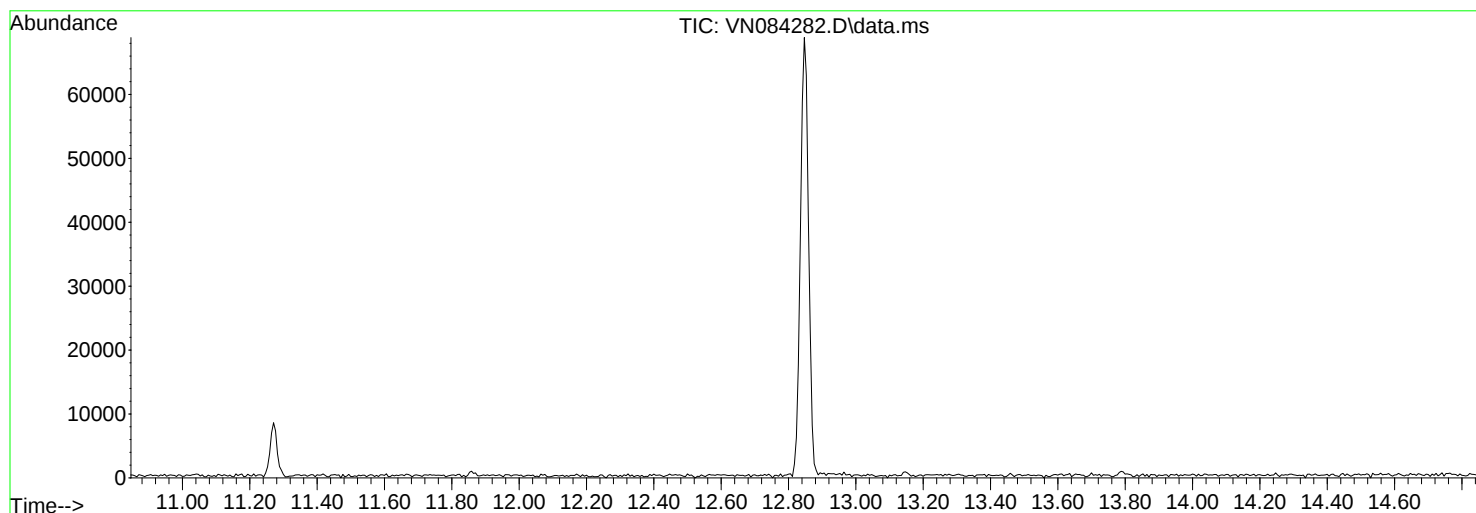
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
90.80	219	118.60	60	172.00	305		
92.00	1521	118.90	261	172.70	115		
93.05	2424	127.85	111	172.95	259		
94.00	5677	128.90	54	174.00	32685		
95.10	46040	130.00	156	175.00	2541		
96.05	2879	136.90	63	176.00	32104		
104.00	245	140.95	584	177.00	2260		
105.85	277	142.95	633				
115.90	223	144.95	142				
116.95	410	148.00	113				
117.95	228	154.95	185				

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN100324\
Data File : VN084282.D
Acq On : 03 Oct 2024 08:20
Operator : JC\MD
Sample : BFB
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
Title : SW846 8260
Last Update : Tue Oct 01 07:11:01 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	20.1	2545	PASS
75	95	30	60	52.6	6669	PASS
95	95	100	100	100.0	12674	PASS
96	95	5	9	7.2	911	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	75.8	9610	PASS
175	174	5	9	8.2	792	PASS
176	174	95	101	99.1	9524	PASS
177	176	5	9	6.6	630	PASS

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	122	51.10	863	75.00	6669	92.20	121
37.05	718	55.95	297	76.00	480	93.00	608
38.00	187	56.95	423	76.20	176	94.00	1927
38.15	410	61.05	734	78.95	596	95.05	12674
39.05	250	62.05	761	79.90	67	96.00	911
44.05	8	63.00	639	80.85	646	116.80	50
45.00	118	65.10	130	81.80	79	117.00	142
47.05	168	68.05	1306	86.85	358	140.80	69
48.00	116	69.05	1355	87.10	199	142.80	65
49.00	550	73.05	833	87.95	633	142.95	188
50.05	2545	74.05	2599	91.90	513	171.70	90

Average of 12.841 to 12.853 min.: VN084282.D\data.ms
BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
172.00	65						
174.00	9610						
174.95	792						
175.95	9524						
176.95	630						

Report of Analysis

Client:	Roman E&G Corp	Date Collected:	
Project:	Perth Amboy	Date Received:	
Client Sample ID:	VN1003WBL01	SDG No.:	P4258
Lab Sample ID:	VN1003WBL01	Matrix:	TCLP
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	TCLP VOA
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084285.D	1		10/03/24 09:42	VN100324

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-01-4	Vinyl Chloride	0.34	U	0.34	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.26	U	0.26	1.00	ug/L
78-93-3	2-Butanone	1.30	U	1.30	5.00	ug/L
56-23-5	Carbon Tetrachloride	0.25	U	0.25	1.00	ug/L
67-66-3	Chloroform	0.26	U	0.26	1.00	ug/L
71-43-2	Benzene	0.16	U	0.16	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.24	U	0.24	1.00	ug/L
79-01-6	Trichloroethene	0.32	U	0.32	1.00	ug/L
127-18-4	Tetrachloroethene	0.25	U	0.25	1.00	ug/L
108-90-7	Chlorobenzene	0.13	U	0.13	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	51.9		74 - 125	104%	SPK: 50
1868-53-7	Dibromofluoromethane	51.9		75 - 124	104%	SPK: 50
2037-26-5	Toluene-d8	50.4		86 - 113	101%	SPK: 50
460-00-4	4-Bromofluorobenzene	46.5		77 - 121	93%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	164000	8.224			
540-36-3	1,4-Difluorobenzene	286000	9.1			
3114-55-4	Chlorobenzene-d5	250000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	98300	13.788			

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\VN100324\
Data File : VN084285.D
Acq On : 03 Oct 2024 09:42
Operator : JC\MD
Sample : VN1003WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN1003WBL01

Quant Time: Oct 04 01:29:02 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
Quant Title : SW846 8260
QLast Update : Tue Oct 01 07:11:01 2024
Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	8.224	168	163611	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	286487	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	249556	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	98264	50.000	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	125911	51.904	ug/l	0.00
Spiked Amount	50.000	Range 74 - 125	Recovery	=	103.800%	
35) Dibromofluoromethane	8.165	113	98018	51.897	ug/l	0.00
Spiked Amount	50.000	Range 75 - 124	Recovery	=	103.800%	
50) Toluene-d8	10.565	98	350297	50.412	ug/l	0.00
Spiked Amount	50.000	Range 86 - 113	Recovery	=	100.820%	
62) 4-Bromofluorobenzene	12.847	95	117713	46.499	ug/l	0.00
Spiked Amount	50.000	Range 77 - 121	Recovery	=	93.000%	

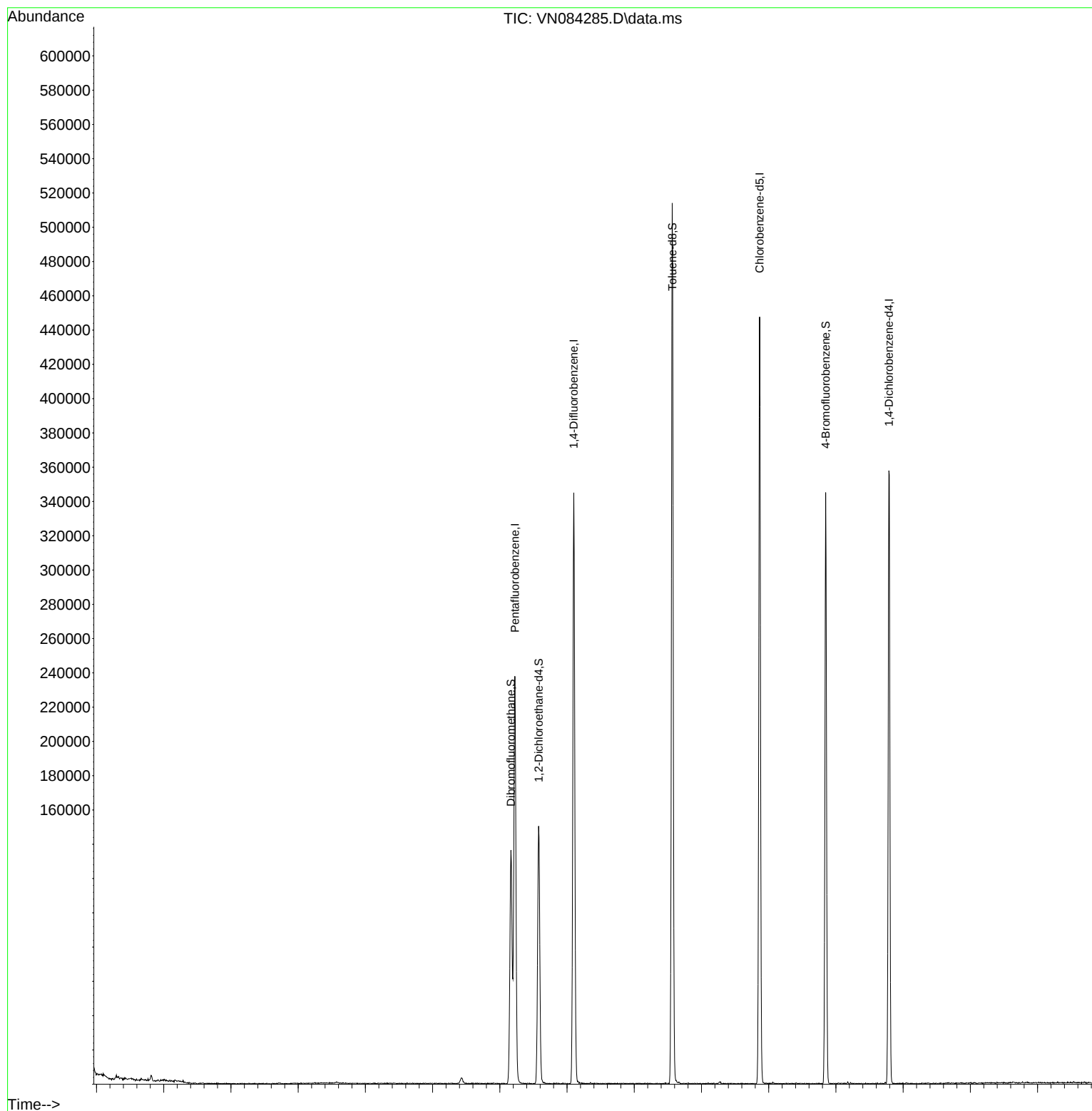
Target Compounds	Qvalue

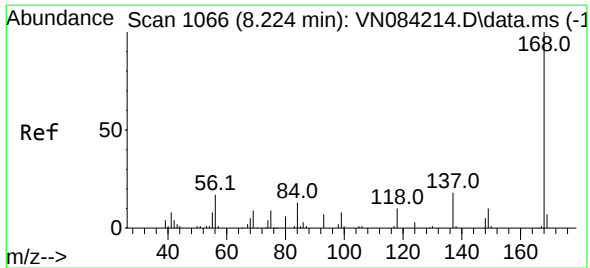
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN100324\
Data File : VN084285.D
Acq On : 03 Oct 2024 09:42
Operator : JC\MD
Sample : VN1003WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN1003WBL01

Quant Time: Oct 04 01:29:02 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
Quant Title : SW846 8260
QLast Update : Tue Oct 01 07:11:01 2024
Response via : Initial Calibration

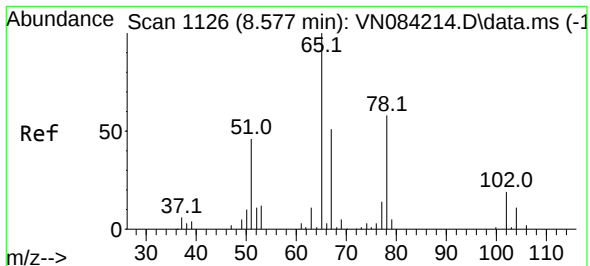
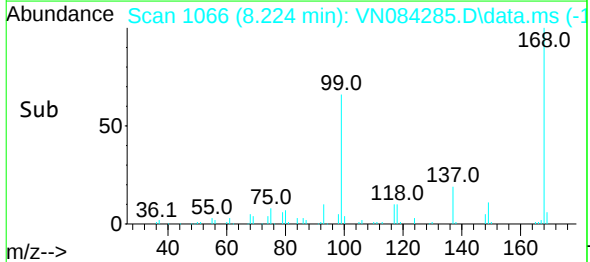
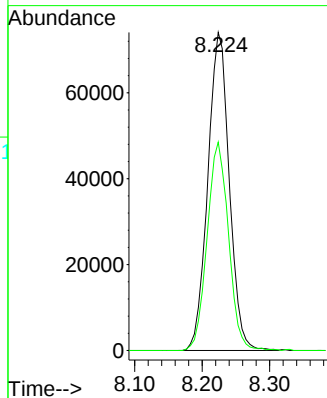
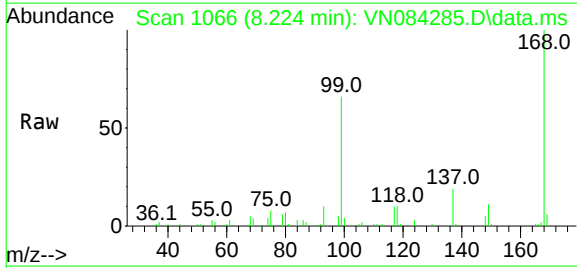




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1066
Delta R.T. -0.000 min
Lab File: VN084285.D
Acq: 03 Oct 2024 09:42

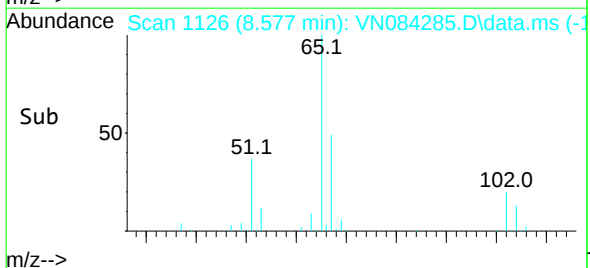
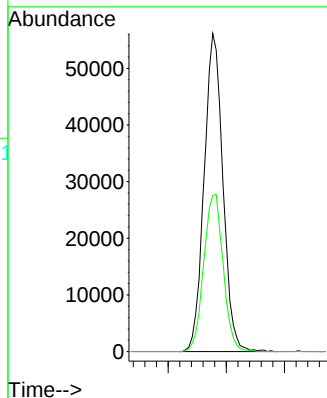
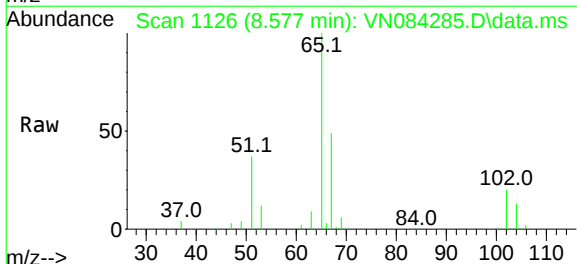
Instrument :
MSVOA_N
ClientSampleId :
VN1003WBL01

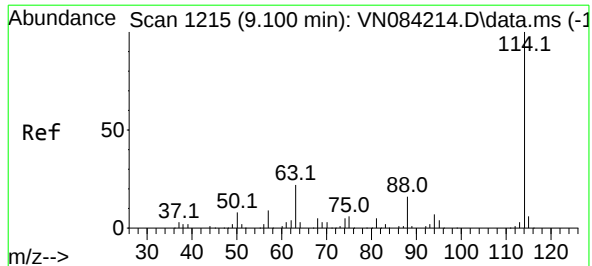
Tgt Ion:168 Resp: 163611
Ion Ratio Lower Upper
168 100
99 65.5 54.2 81.2



#33
1,2-Dichloroethane-d4
Concen: 51.904 ug/l
RT: 8.577 min Scan# 1126
Delta R.T. 0.000 min
Lab File: VN084285.D
Acq: 03 Oct 2024 09:42

Tgt Ion: 65 Resp: 125911
Ion Ratio Lower Upper
65 100
67 51.2 0.0 102.0





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.100 min Scan# 1215

Delta R.T. 0.000 min

Lab File: VN084285.D

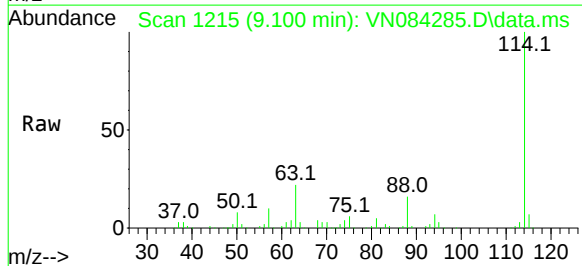
Acq: 03 Oct 2024 09:42

Instrument :

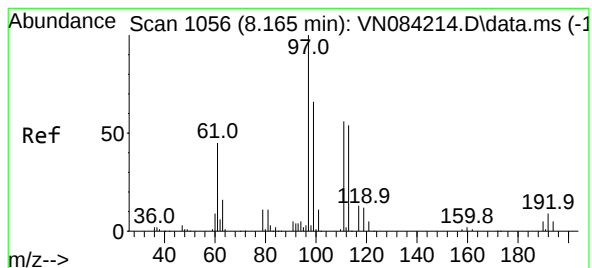
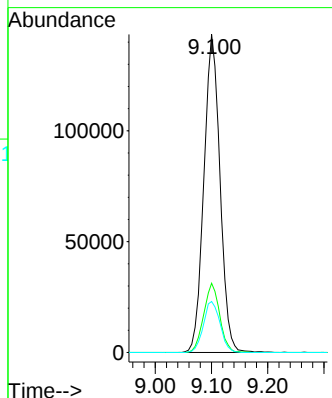
MSVOA_N

ClientSampleId :

VN1003WBL01



Tgt Ion:	114	Resp:	286487
Ion	Ratio	Lower	Upper
114	100		
63	21.8	0.0	43.8
88	16.0	0.0	31.6



#35

Dibromofluoromethane

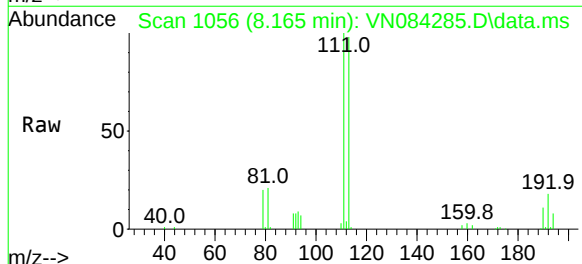
Concen: 51.897 ug/l

RT: 8.165 min Scan# 1056

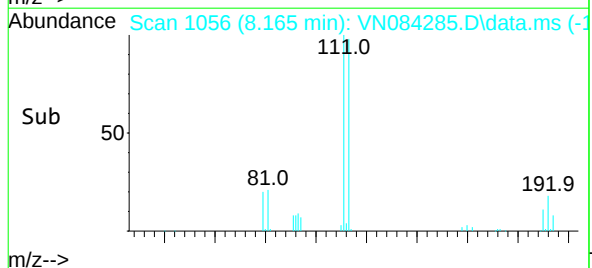
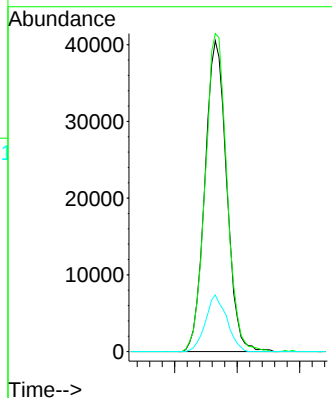
Delta R.T. 0.000 min

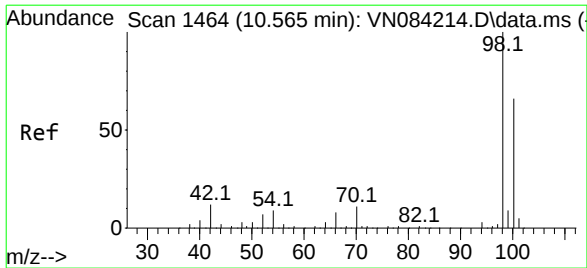
Lab File: VN084285.D

Acq: 03 Oct 2024 09:42



Tgt Ion:	113	Resp:	98018
Ion	Ratio	Lower	Upper
113	100		
111	102.2	83.3	124.9
192	17.9	13.5	20.3





#50

Toluene-d8

Concen: 50.412 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. 0.000 min

Lab File: VN084285.D

Acq: 03 Oct 2024 09:42

Instrument :

MSVOA_N

ClientSampleId :

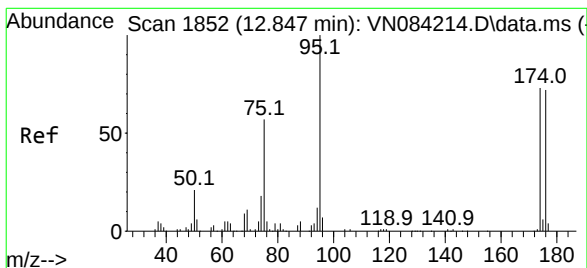
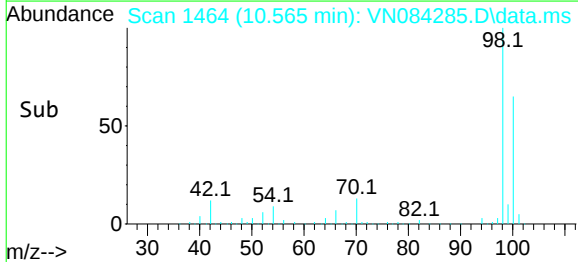
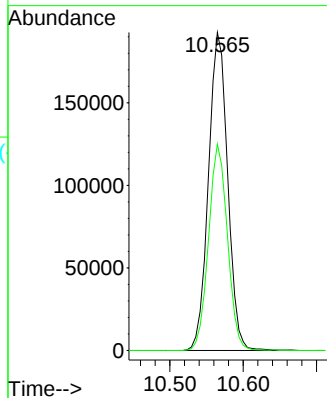
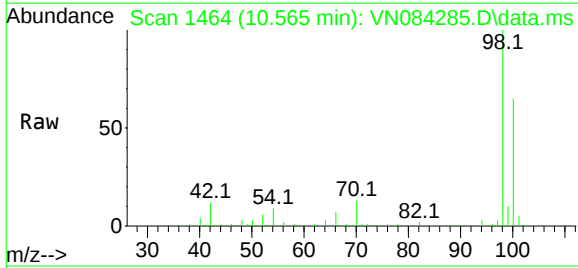
VN1003WBL01

Tgt Ion: 98 Resp: 350297

Ion Ratio Lower Upper

98 100

100 63.9 52.7 79.1



#62

4-Bromofluorobenzene

Concen: 46.499 ug/l

RT: 12.847 min Scan# 1852

Delta R.T. 0.000 min

Lab File: VN084285.D

Acq: 03 Oct 2024 09:42

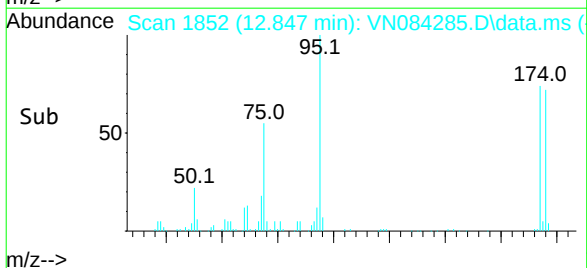
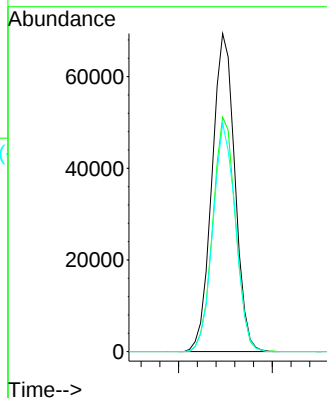
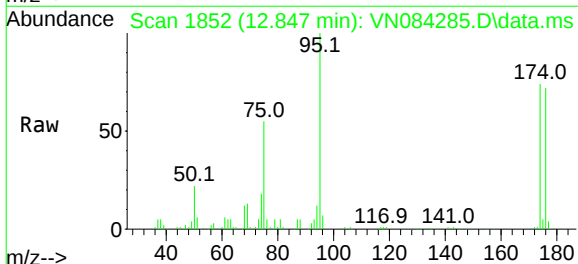
Tgt Ion: 95 Resp: 117713

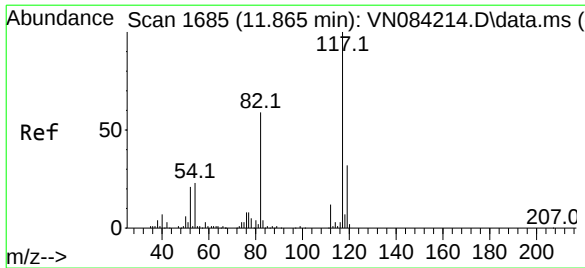
Ion Ratio Lower Upper

95 100

174 73.3 0.0 145.2

176 70.7 0.0 140.0





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.865 min Scan# 1685

Delta R.T. 0.000 min

Lab File: VN084285.D

Acq: 03 Oct 2024 09:42

Instrument :

MSVOA_N

ClientSampleId :

VN1003WBL01

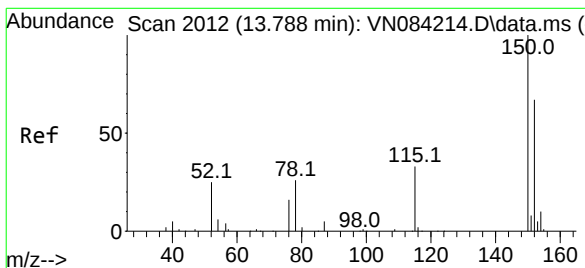
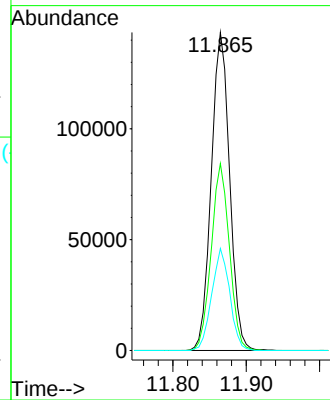
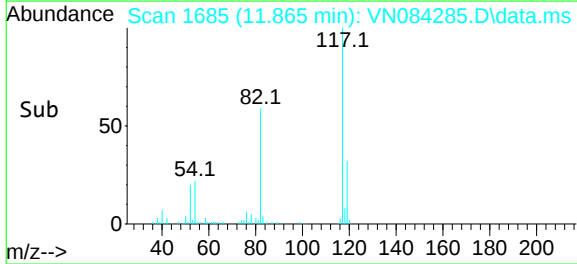
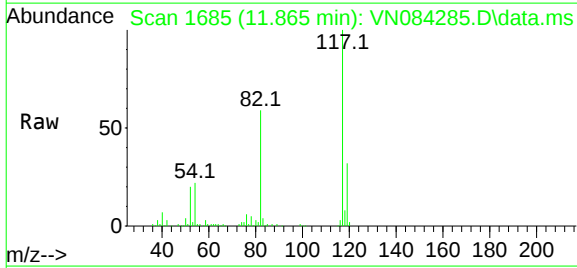
Tgt Ion:117 Resp: 249556

Ion Ratio Lower Upper

117 100

82 58.8 47.2 70.8

119 32.1 25.4 38.0



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.788 min Scan# 2012

Delta R.T. 0.000 min

Lab File: VN084285.D

Acq: 03 Oct 2024 09:42

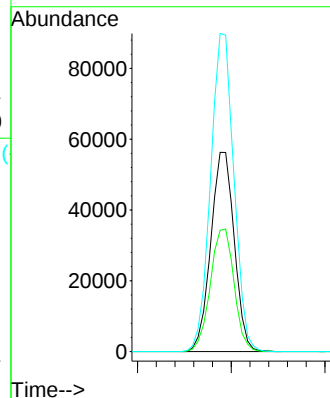
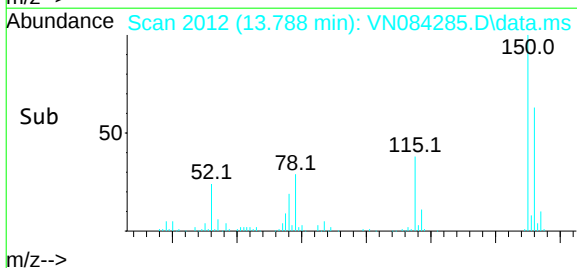
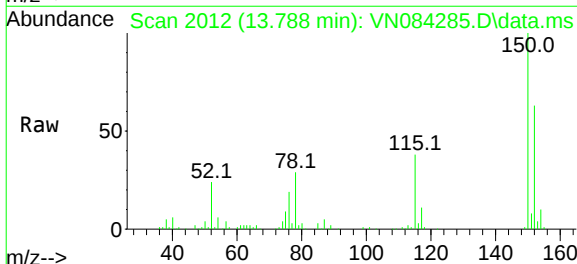
Tgt Ion:152 Resp: 98264

Ion Ratio Lower Upper

152 100

115 62.2 31.3 93.9

150 158.1 0.0 349.8



Report of Analysis

Client:	Roman E&G Corp	Date Collected:	
Project:	Perth Amboy	Date Received:	
Client Sample ID:	VN1003WBS01	SDG No.:	P4258
Lab Sample ID:	VN1003WBS01	Matrix:	TCLP
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	TCLP VOA
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084286.D	1		10/03/24 10:05	VN100324

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-01-4	Vinyl Chloride	19.7		0.34	1.00	ug/L
75-35-4	1,1-Dichloroethene	19.6		0.26	1.00	ug/L
78-93-3	2-Butanone	98.2		1.30	5.00	ug/L
56-23-5	Carbon Tetrachloride	20.1		0.25	1.00	ug/L
67-66-3	Chloroform	20.6		0.26	1.00	ug/L
71-43-2	Benzene	20.2		0.16	1.00	ug/L
107-06-2	1,2-Dichloroethane	20.4		0.24	1.00	ug/L
79-01-6	Trichloroethene	20.0		0.32	1.00	ug/L
127-18-4	Tetrachloroethene	20.2		0.25	1.00	ug/L
108-90-7	Chlorobenzene	19.7		0.13	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	52.8		74 - 125	106%	SPK: 50
1868-53-7	Dibromofluoromethane	54.6		75 - 124	109%	SPK: 50
2037-26-5	Toluene-d8	56.2		86 - 113	112%	SPK: 50
460-00-4	4-Bromofluorobenzene	53.1		77 - 121	106%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	164000	8.224			
540-36-3	1,4-Difluorobenzene	282000	9.1			
3114-55-4	Chlorobenzene-d5	252000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	120000	13.788			

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\VN100324\
 Data File : VN084286.D
 Acq On : 03 Oct 2024 10:05
 Operator : JC\MD
 Sample : VN1003WBS01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN1003WBS01

Manual Integrations
 APPROVED

Reviewed By : John Carlone 10/04/2024
 Supervised By : Mahesh Dadoda 10/04/2024

Quant Time: Oct 04 01:29:26 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
 Quant Title : SW846 8260
 QLast Update : Tue Oct 01 07:11:01 2024
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	8.224	168	164341	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	282487	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	252092	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	119632	50.000	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.576	65	128542	52.753	ug/l	0.00
Spiked Amount	50.000	Range	74 - 125	Recovery	=	105.500%
35) Dibromofluoromethane	8.165	113	101663	54.589	ug/l	0.00
Spiked Amount	50.000	Range	75 - 124	Recovery	=	109.180%
50) Toluene-d8	10.565	98	385143	56.211	ug/l	0.00
Spiked Amount	50.000	Range	86 - 113	Recovery	=	112.420%
62) 4-Bromofluorobenzene	12.847	95	132668	53.149	ug/l	0.00
Spiked Amount	50.000	Range	77 - 121	Recovery	=	106.300%

Target Compounds					Qvalue
2) Dichlorodifluoromethane	2.124	85	37946	19.520	ug/l 90
3) Chloromethane	2.359	50	42644	19.213	ug/l 95
4) Vinyl Chloride	2.518	62	42326	19.686	ug/l 92
5) Bromomethane	2.959	94	26888	18.960	ug/l 88
6) Chloroethane	3.124	64	29003	18.836	ug/l 99
7) Trichlorofluoromethane	3.500	101	67007	20.014	ug/l 97
8) Diethyl Ether	3.965	74	22766	18.335	ug/l 98
9) 1,1,2-Trichlorotrifluo...	4.377	101	38872	20.263	ug/l 99
10) Methyl Iodide	4.589	142	47328	19.158	ug/l 98
11) Tert butyl alcohol	5.518	59	35351	87.985	ug/l 99
12) 1,1-Dichloroethene	4.347	96	36356	19.648	ug/l 95
13) Acrolein	4.183	56	38224	82.869	ug/l 100
14) Allyl chloride	5.030	41	56420	17.557	ug/l 99
15) Acrylonitrile	5.724	53	101779	100.312	ug/l 98
16) Acetone	4.424	43	101990	97.436	ug/l 97
17) Carbon Disulfide	4.718	76	103177	17.612	ug/l 98
18) Methyl Acetate	5.030	43	45974	20.151	ug/l 99
19) Methyl tert-butyl Ether	5.794	73	120712	19.328	ug/l 98
20) Methylene Chloride	5.271	84	41628	19.564	ug/l 93
21) trans-1,2-Dichloroethene	5.794	96	38678	19.952	ug/l 98
22) Diisopropyl ether	6.665	45	131911	19.845	ug/l 97
23) Vinyl Acetate	6.600	43	479948	97.350	ug/l 98
24) 1,1-Dichloroethane	6.571	63	75046	20.189	ug/l 100
25) 2-Butanone	7.482	43	139938	98.156	ug/l 100
26) 2,2-Dichloropropane	7.494	77	65602	19.573	ug/l 99
27) cis-1,2-Dichloroethene	7.488	96	44983	19.202	ug/l 99
28) Bromochloromethane	7.812	49	34800	20.982	ug/l 99
29) Tetrahydrofuran	7.841	42	86917	98.791	ug/l 99
30) Chloroform	7.959	83	79579	20.610	ug/l 88
31) Cyclohexane	8.259	56	65990	18.284	ug/l 99
32) 1,1,1-Trichloroethane	8.165	97	69786	20.124	ug/l 98
36) 1,1-Dichloropropene	8.371	75	52871	19.545	ug/l 99
37) Ethyl Acetate	7.559	43	54681	19.703	ug/l 99
38) Carbon Tetrachloride	8.359	117	59508	20.054	ug/l 97
39) Methylcyclohexane	9.600	83	57135	18.977	ug/l 97
40) Benzene	8.606	78	169934	20.163	ug/l 98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN100324\
 Data File : VN084286.D
 Acq On : 03 Oct 2024 10:05
 Operator : JC\MD
 Sample : VN1003WBS01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN1003WBS01

Manual Integrations
 APPROVED

Reviewed By : John Carlone 10/04/2024
 Supervised By : Mahesh Dadoda 10/04/2024

Quant Time: Oct 04 01:29:26 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
 Quant Title : SW846 8260
 QLast Update : Tue Oct 01 07:11:01 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.777	41	30342	20.139	ug/l	98
42) 1,2-Dichloroethane	8.671	62	58375	20.430	ug/l	99
43) Isopropyl Acetate	8.688	43	90050	16.566	ug/l	99
44) Trichloroethene	9.353	130	39275	19.952	ug/l	98
45) 1,2-Dichloropropane	9.618	63	40482	20.304	ug/l	90
46) Dibromomethane	9.706	93	29128	21.649	ug/l	100
47) Bromodichloromethane	9.882	83	62105	20.776	ug/l #	98
48) Methyl methacrylate	9.682	41	43156	19.944	ug/l	98
49) 1,4-Dioxane	9.694	88	15977	401.063	ug/l	98
51) 4-Methyl-2-Pentanone	10.447	43	275703	104.359	ug/l	100
52) Toluene	10.629	92	104206	20.275	ug/l	99
53) t-1,3-Dichloropropene	10.835	75	59860	19.645	ug/l	98
54) cis-1,3-Dichloropropene	10.312	75	66153	20.184	ug/l	97
55) 1,1,2-Trichloroethane	11.018	97	39141	21.244	ug/l	93
56) Ethyl methacrylate	10.870	69	58544	19.311	ug/l	97
57) 1,3-Dichloropropane	11.165	76	66842	20.303	ug/l	98
58) 2-Chloroethyl Vinyl ether	10.159	63	137654	97.878	ug/l	98
59) 2-Hexanone	11.194	43	202204	102.404	ug/l	98
60) Dibromochloromethane	11.359	129	44640	20.506	ug/l	97
61) 1,2-Dibromoethane	11.470	107	38918	20.328	ug/l	99
64) Tetrachloroethene	11.100	164	35391	20.156	ug/l	94
65) Chlorobenzene	11.894	112	109976	19.676	ug/l	91
66) 1,1,1,2-Tetrachloroethane	11.959	131	38431	19.962	ug/l	99
67) Ethyl Benzene	11.959	91	188894	19.109	ug/l	98
68) m/p-Xylenes	12.070	106	146376	40.032	ug/l	100
69) o-Xylene	12.400	106	69553	20.105	ug/l	100
70) Styrene	12.412	104	120069	20.491	ug/l	98
71) Bromoform	12.576	173	29374	20.724	ug/l #	100
73) Isopropylbenzene	12.694	105	175830	19.261	ug/l	100
74) N-ethyl acetate	12.494	43	78313	18.944	ug/l	97
75) 1,1,2,2-Tetrachloroethane	12.935	83	55997	20.399	ug/l	99
76) 1,2,3-Trichloropropane	12.994	75	48032m	19.667	ug/l	
77) Bromobenzene	12.982	156	42701	19.392	ug/l	99
78) n-propylbenzene	13.035	91	212999	20.138	ug/l	99
79) 2-Chlorotoluene	13.123	91	130433	19.326	ug/l	98
80) 1,3,5-Trimethylbenzene	13.170	105	152396	20.465	ug/l	100
81) trans-1,4-Dichloro-2-b...	12.735	75	18144	17.811	ug/l	89
82) 4-Chlorotoluene	13.217	91	135472	19.939	ug/l	99
83) tert-Butylbenzene	13.435	119	128099	19.354	ug/l	99
84) 1,2,4-Trimethylbenzene	13.482	105	152506	20.330	ug/l	100
85) sec-Butylbenzene	13.617	105	176605	19.996	ug/l	100
86) p-Isopropyltoluene	13.729	119	145368	19.904	ug/l	100
87) 1,3-Dichlorobenzene	13.729	146	80246	19.425	ug/l	99
88) 1,4-Dichlorobenzene	13.811	146	80561	19.311	ug/l	99
89) n-Butylbenzene	14.053	91	122113	18.439	ug/l	99
90) Hexachloroethane	14.335	117	29500	19.900	ug/l	99
91) 1,2-Dichlorobenzene	14.106	146	77393	19.106	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.717	75	11229	19.823	ug/l	93
93) 1,2,4-Trichlorobenzene	15.388	180	35283	17.684	ug/l	99
94) Hexachlorobutadiene	15.500	225	17527	17.616	ug/l	97
95) Naphthalene	15.641	128	105992	16.025	ug/l	99
96) 1,2,3-Trichlorobenzene	15.841	180	36046	18.049	ug/l	97

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN100324\
Data File : VN084286.D
Acq On : 03 Oct 2024 10:05
Operator : JC\MD
Sample : VN1003WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN1003WBS01

Manual Integrations
APPROVED

Reviewed By :John Carlone 10/04/2024
Supervised By :Mahesh Dadoda 10/04/2024

Quant Time: Oct 04 01:29:26 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
Quant Title : SW846 8260
QLast Update : Tue Oct 01 07:11:01 2024
Response via : Initial Calibration

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

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

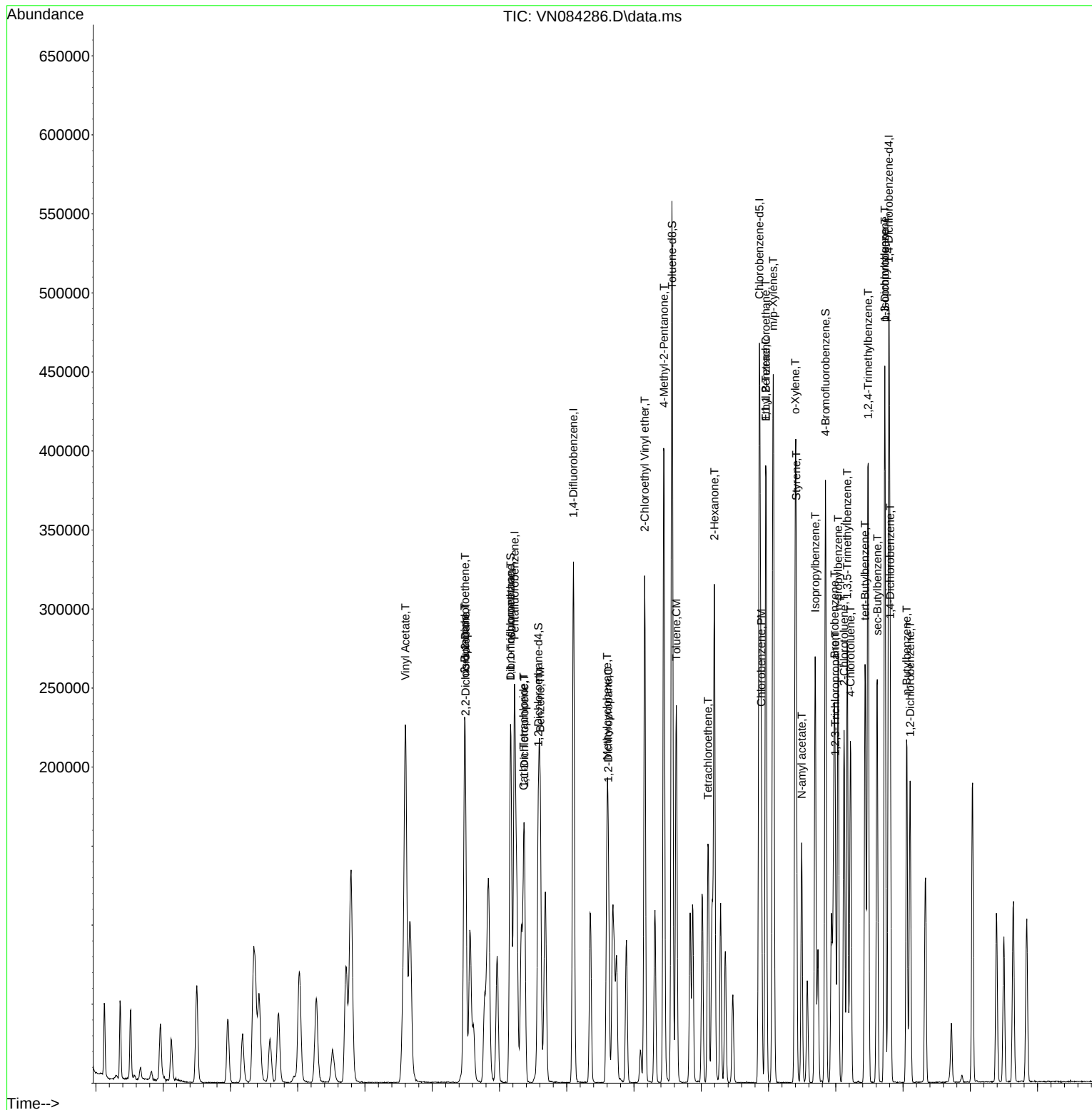
```
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN100324\  
Data File : VN084286.D  
Acq On    : 03 Oct 2024  10:05  
Operator  : JC\MD  
Sample    : VN1003WBS01  
Misc      : 5.0mL/MSVOA_N/WATER  
ALS Vial  : 6      Sample Multiplier: 1
```

Instrument :
MSVOA_N
ClientSampleId :
VN1003WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 10/04/2024
Supervised By :Mahesh Dadoda 10/04/2024

Quant Time: Oct 04 01:29:26 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
Quant Title : SW846 8260
QLast Update : Tue Oct 01 07:11:01 2024
Response via : Initial Calibration



Report of Analysis

Client:	Roman E&G Corp	Date Collected:	
Project:	Perth Amboy	Date Received:	
Client Sample ID:	VN1003WBSD01	SDG No.:	P4258
Lab Sample ID:	VN1003WBSD01	Matrix:	TCLP
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	TCLP VOA
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084287.D	1		10/03/24 10:40	VN100324

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-01-4	Vinyl Chloride	19.7		0.34	1.00	ug/L
75-35-4	1,1-Dichloroethene	19.5		0.26	1.00	ug/L
78-93-3	2-Butanone	100		1.30	5.00	ug/L
56-23-5	Carbon Tetrachloride	20.3		0.25	1.00	ug/L
67-66-3	Chloroform	20.7		0.26	1.00	ug/L
71-43-2	Benzene	20.8		0.16	1.00	ug/L
107-06-2	1,2-Dichloroethane	21.7		0.24	1.00	ug/L
79-01-6	Trichloroethene	19.9		0.32	1.00	ug/L
127-18-4	Tetrachloroethene	20.3		0.25	1.00	ug/L
108-90-7	Chlorobenzene	20.4		0.13	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	54.8		74 - 125	110%	SPK: 50
1868-53-7	Dibromofluoromethane	55.0		75 - 124	110%	SPK: 50
2037-26-5	Toluene-d8	54.8		86 - 113	110%	SPK: 50
460-00-4	4-Bromofluorobenzene	54.7		77 - 121	109%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	156000	8.224			
540-36-3	1,4-Difluorobenzene	268000	9.1			
3114-55-4	Chlorobenzene-d5	241000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	117000	13.788			

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\VN100324\
 Data File : VN084287.D
 Acq On : 03 Oct 2024 10:40
 Operator : JC\MD
 Sample : VN1003WBSD01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN1003WBSD01

Manual Integrations
 APPROVED

Reviewed By :John Carlone 10/04/2024
 Supervised By :Mahesh Dadoda 10/04/2024

Quant Time: Oct 04 01:30:27 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
 Quant Title : SW846 8260
 QLast Update : Tue Oct 01 07:11:01 2024
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	8.224	168	156141	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	268205	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	240791	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	117079	50.000	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	8.577	65	126965	54.843	ug/l	0.00
Spiked Amount	50.000	Range	74 - 125	Recovery	=	109.680%
35) Dibromofluoromethane	8.165	113	97332	55.047	ug/l	0.00
Spiked Amount	50.000	Range	75 - 124	Recovery	=	110.100%
50) Toluene-d8	10.565	98	356552	54.809	ug/l	0.00
Spiked Amount	50.000	Range	86 - 113	Recovery	=	109.620%
62) 4-Bromofluorobenzene	12.847	95	129600	54.685	ug/l	0.00
Spiked Amount	50.000	Range	77 - 121	Recovery	=	109.360%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	2.130	85	36360	19.687	ug/l	94
3) Chloromethane	2.365	50	40309	19.114	ug/l	97
4) Vinyl Chloride	2.518	62	40198	19.679	ug/l	97
5) Bromomethane	2.965	94	25935	19.248	ug/l	97
6) Chloroethane	3.124	64	27671	18.915	ug/l	95
7) Trichlorofluoromethane	3.500	101	62722	19.718	ug/l	100
8) Diethyl Ether	3.965	74	22765	19.297	ug/l	96
9) 1,1,2-Trichlorotrifluo...	4.377	101	38730	21.250	ug/l	97
10) Methyl Iodide	4.589	142	47462	20.221	ug/l	95
11) Tert butyl alcohol	5.518	59	35686	93.483	ug/l	99
12) 1,1-Dichloroethene	4.342	96	34247	19.480	ug/l	98
13) Acrolein	4.183	56	38359	87.529	ug/l	100
14) Allyl chloride	5.024	41	55508	18.180	ug/l	98
15) Acrylonitrile	5.718	53	100479	104.232	ug/l	97
16) Acetone	4.430	43	93734	94.251	ug/l	99
17) Carbon Disulfide	4.718	76	99830	17.935	ug/l	100
18) Methyl Acetate	5.030	43	45251	20.876	ug/l	100
19) Methyl tert-butyl Ether	5.794	73	122104	20.578	ug/l	100
20) Methylene Chloride	5.271	84	41574	20.565	ug/l	86
21) trans-1,2-Dichloroethene	5.789	96	36911	20.040	ug/l	99
22) Diisopropyl ether	6.671	45	132716	21.015	ug/l	97
23) Vinyl Acetate	6.606	43	494150	105.494	ug/l	99
24) 1,1-Dichloroethane	6.571	63	72893	20.639	ug/l	99
25) 2-Butanone	7.483	43	135725	100.200	ug/l	98
26) 2,2-Dichloropropane	7.488	77	60055	18.859	ug/l	96
27) cis-1,2-Dichloroethene	7.483	96	44504	19.996	ug/l	99
28) Bromochloromethane	7.812	49	36194	22.969	ug/l	99
29) Tetrahydrofuran	7.841	42	86041	102.931	ug/l	99
30) Chloroform	7.965	83	76104	20.745	ug/l	98
31) Cyclohexane	8.259	56	63688	18.573	ug/l	98
32) 1,1,1-Trichloroethane	8.171	97	66380	20.147	ug/l	95
36) 1,1-Dichloropropene	8.371	75	49686	19.346	ug/l	99
37) Ethyl Acetate	7.565	43	52477	19.916	ug/l	98
38) Carbon Tetrachloride	8.359	117	57204	20.304	ug/l	97
39) Methylcyclohexane	9.600	83	55154	19.295	ug/l	99
40) Benzene	8.606	78	166211	20.771	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN100324\
 Data File : VN084287.D
 Acq On : 03 Oct 2024 10:40
 Operator : JC\MD
 Sample : VN1003WBSD01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN1003WBSD01

Manual Integrations
 APPROVED

Reviewed By :John Carlone 10/04/2024
 Supervised By :Mahesh Dadoda 10/04/2024

Quant Time: Oct 04 01:30:27 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
 Quant Title : SW846 8260
 QLast Update : Tue Oct 01 07:11:01 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.783	41	29683	20.751	ug/l	98
42) 1,2-Dichloroethane	8.671	62	58993	21.746	ug/l	99
43) Isopropyl Acetate	8.688	43	88817	17.209	ug/l	98
44) Trichloroethene	9.353	130	37201	19.905	ug/l	93
45) 1,2-Dichloropropane	9.618	63	40803	21.555	ug/l	96
46) Dibromomethane	9.706	93	29220	22.874	ug/l	98
47) Bromodichloromethane	9.888	83	60940	21.472	ug/l	99
48) Methyl methacrylate	9.682	41	42304	20.591	ug/l	98
49) 1,4-Dioxane	9.694	88	16004	423.134	ug/l	96
51) 4-Methyl-2-Pentanone	10.441	43	270510	107.846	ug/l	100
52) Toluene	10.629	92	100302	20.555	ug/l	97
53) t-1,3-Dichloropropene	10.835	75	58839	20.338	ug/l	98
54) cis-1,3-Dichloropropene	10.312	75	64371	20.686	ug/l	94
55) 1,1,2-Trichloroethane	11.018	97	39008	22.299	ug/l	96
56) Ethyl methacrylate	10.871	69	59987	20.840	ug/l	98
57) 1,3-Dichloropropane	11.165	76	66561	21.294	ug/l	98
58) 2-Chloroethyl Vinyl ether	10.159	63	139786	104.687	ug/l	100
59) 2-Hexanone	11.194	43	198433	105.845	ug/l	98
60) Dibromochloromethane	11.359	129	45813	22.165	ug/l	98
61) 1,2-Dibromoethane	11.471	107	38918	21.411	ug/l	99
64) Tetrachloroethene	11.100	164	34099	20.332	ug/l	94
65) Chlorobenzene	11.894	112	108952	20.407	ug/l	97
66) 1,1,1,2-Tetrachloroethane	11.959	131	38392	20.877	ug/l	97
67) Ethyl Benzene	11.965	91	183902	19.478	ug/l	100
68) m/p-Xylenes	12.070	106	144563	41.392	ug/l	98
69) o-Xylene	12.394	106	66715	20.190	ug/l	99
70) Styrene	12.412	104	115957	20.718	ug/l	99
71) Bromoform	12.576	173	29230	21.590	ug/l #	96
73) Isopropylbenzene	12.694	105	170131	19.043	ug/l	100
74) N-ethyl acetate	12.494	43	76380	18.879	ug/l	98
75) 1,1,2,2-Tetrachloroethane	12.935	83	53725	19.999	ug/l	99
76) 1,2,3-Trichloropropane	12.994	75	46336m	19.386	ug/l	
77) Bromobenzene	12.976	156	42326	19.640	ug/l	99
78) n-propylbenzene	13.035	91	205979	19.899	ug/l	99
79) 2-Chlorotoluene	13.123	91	128715	19.487	ug/l	99
80) 1,3,5-Trimethylbenzene	13.170	105	146969	20.167	ug/l	100
81) trans-1,4-Dichloro-2-b...	12.735	75	18636	18.693	ug/l	97
82) 4-Chlorotoluene	13.217	91	133150	20.025	ug/l	99
83) tert-Butylbenzene	13.435	119	124662	19.246	ug/l	99
84) 1,2,4-Trimethylbenzene	13.482	105	149658	20.385	ug/l	100
85) sec-Butylbenzene	13.617	105	172092	19.910	ug/l	99
86) p-Isopropyltoluene	13.729	119	141757	19.833	ug/l	99
87) 1,3-Dichlorobenzene	13.729	146	79774	19.732	ug/l	100
88) 1,4-Dichlorobenzene	13.812	146	79022	19.355	ug/l	99
89) n-Butylbenzene	14.059	91	121728	18.782	ug/l	99
90) Hexachloroethane	14.335	117	27869	19.209	ug/l	100
91) 1,2-Dichlorobenzene	14.106	146	77582	19.571	ug/l	98
92) 1,2-Dibromo-3-Chloropr...	14.717	75	10820	19.518	ug/l	94
93) 1,2,4-Trichlorobenzene	15.394	180	36612	18.751	ug/l	98
94) Hexachlorobutadiene	15.500	225	16640	17.089	ug/l	99
95) Naphthalene	15.641	128	107461	16.601	ug/l	99
96) 1,2,3-Trichlorobenzene	15.835	180	36465	18.657	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN100324\
Data File : VN084287.D
Acq On : 03 Oct 2024 10:40
Operator : JC\MD
Sample : VN1003WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN1003WBSD01

Manual Integrations
APPROVED

Reviewed By :John Carlone 10/04/2024
Supervised By :Mahesh Dadoda 10/04/2024

Quant Time: Oct 04 01:30:27 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
Quant Title : SW846 8260
QLast Update : Tue Oct 01 07:11:01 2024
Response via : Initial Calibration

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

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

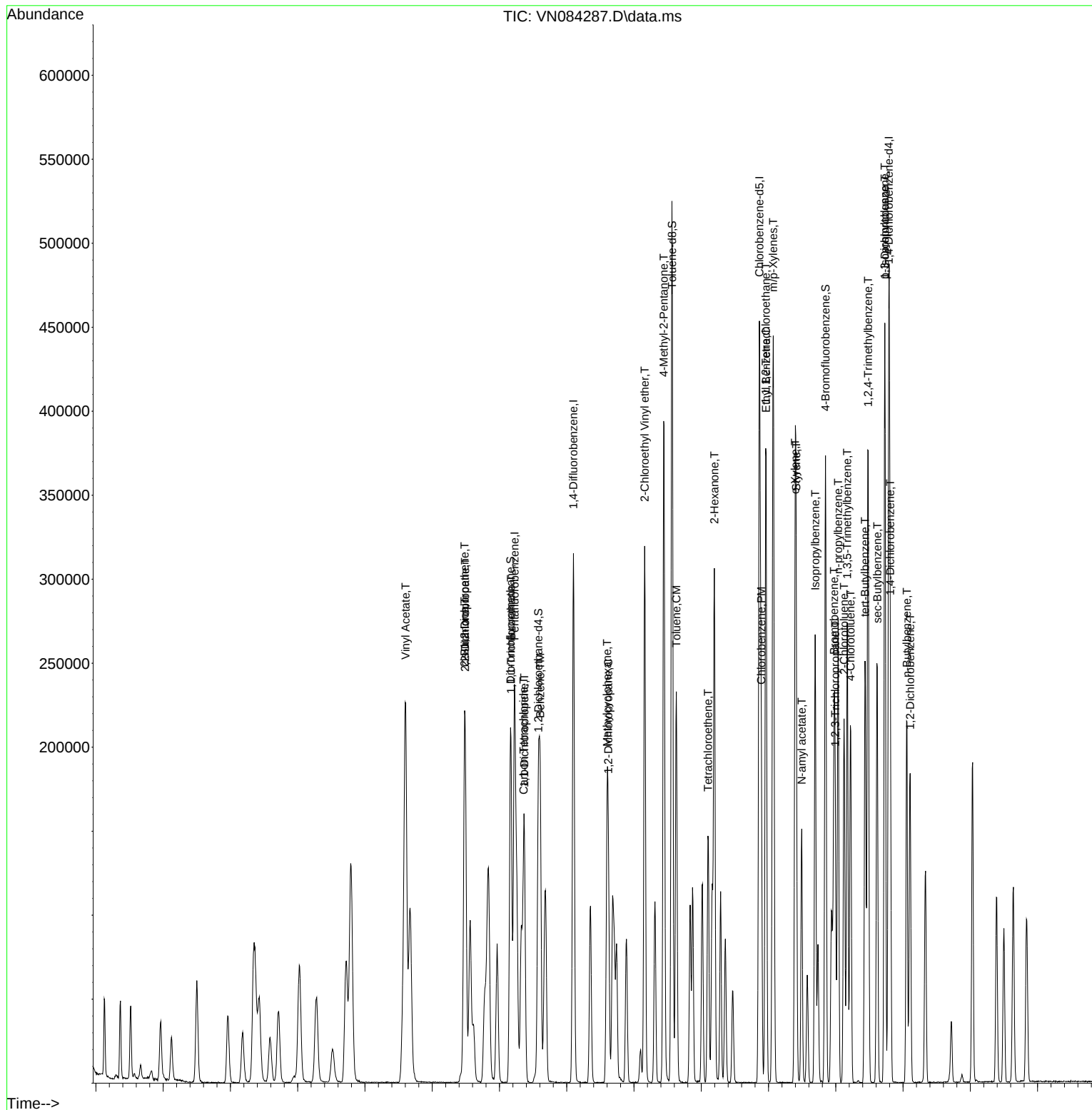
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN100324\
Data File : VN084287.D
Acq On : 03 Oct 2024 10:40
Operator : JC\MD
Sample : VN1003WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN1003WBSD01

Manual Integrations APPROVED

Reviewed By :John Carlone 10/04/2024
Supervised By :Mahesh Dadoda 10/04/2024

Quant Time: Oct 04 01:30:27 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N093024W.M
Quant Title : SW846 8260
QLast Update : Tue Oct 01 07:11:01 2024
Response via : Initial Calibration



Manual Integration Report

Sequence:	vn093024	Instrument	MSVOA_n
-----------	----------	------------	---------

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC100	VN084213.D	1,2,3-Trichloropropane	JOHN	10/1/2024 9:36:48 AM	MMDadoda	10/1/2024 5:34:17 PM	Peak Integrated by Software
VSTDICCC050	VN084214.D	1,2,3-Trichloropropane	JOHN	10/1/2024 9:36:52 AM	MMDadoda	10/1/2024 5:34:19 PM	Peak Integrated by Software
VSTDICC020	VN084215.D	1,2,3-Trichloropropane	JOHN	10/1/2024 9:36:57 AM	MMDadoda	10/1/2024 5:34:21 PM	Peak Integrated by Software
VSTDICC010	VN084216.D	1,2,3-Trichloropropane	JOHN	10/1/2024 9:37:06 AM	MMDadoda	10/1/2024 5:34:22 PM	Peak Integrated by Software
VSTDICC005	VN084217.D	1,1,2-Trichlorotrifluoroethane	JOHN	10/1/2024 9:37:11 AM	MMDadoda	10/1/2024 5:34:24 PM	Peak Integrated by Software
VSTDICC005	VN084217.D	1,2,3-Trichloropropane	JOHN	10/1/2024 9:37:11 AM	MMDadoda	10/1/2024 5:34:24 PM	Peak Integrated by Software
VSTDICC005	VN084217.D	Isopropyl Acetate	JOHN	10/1/2024 9:37:11 AM	MMDadoda	10/1/2024 5:34:24 PM	Peak Integrated by Software
VSTDICC005	VN084217.D	trans-1,2-Dichloroethene	JOHN	10/1/2024 9:37:11 AM	MMDadoda	10/1/2024 5:34:24 PM	Peak Integrated by Software
VSTDICC005	VN084217.D	Vinyl Acetate	JOHN	10/1/2024 9:37:11 AM	MMDadoda	10/1/2024 5:34:24 PM	Peak Integrated by Software
VSTDICC001	VN084218.D	1,2,3-Trichloropropane	JOHN	10/1/2024 9:37:57 AM	MMDadoda	10/1/2024 5:34:25 PM	Peak Integrated by Software
VSTDICC001	VN084218.D	1,4-Dichlorobenzene	JOHN	10/1/2024 9:37:57 AM	MMDadoda	10/1/2024 5:34:25 PM	Peak Integrated by Software
VSTDICC001	VN084218.D	Allyl chloride	JOHN	10/1/2024 9:37:57 AM	MMDadoda	10/1/2024 5:34:25 PM	Peak Integrated by Software
VSTDICC001	VN084218.D	Isopropyl Acetate	JOHN	10/1/2024 9:37:57 AM	MMDadoda	10/1/2024 5:34:25 PM	Peak Integrated by Software

Manual Integration Report

Sequence:

vn093024

Instrument

MSVOA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDIC001	VN084218.D	Vinyl Acetate	JOHN	10/1/2024 9:37:57 AM	MMDadoda	10/1/2024 5:34:25 PM	Peak Integrated by Software
VSTDICV050	VN084220.D	1,2,3-Trichloropropane	JOHN	10/1/2024 9:38:01 AM	MMDadoda	10/1/2024 5:34:27 PM	Peak Integrated by Software
VSTDCCC050	VN084229.D	1,2,3-Trichloropropane	JOHN	10/1/2024 9:38:17 AM	MMDadoda	10/1/2024 5:34:32 PM	Peak Integrated by Software

Manual Integration Report

Sequence:	VN100324	Instrument	MSVOA_n
-----------	----------	------------	---------

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC050	VN084283.D	1,2,3-Trichloropropane	JOHN	10/4/2024 9:46:46 AM	MMDadoda	10/4/2024 10:15:55 AM	Peak Integrated by Software
VSTDCCC050	VN084283.D	trans-1,4-Dichloro-2-butene	JOHN	10/4/2024 9:46:46 AM	MMDadoda	10/4/2024 10:15:55 AM	Peak Integrated by Software
VN1003WBS01	VN084286.D	1,2,3-Trichloropropane	JOHN	10/4/2024 9:46:50 AM	MMDadoda	10/4/2024 10:15:56 AM	Peak Integrated by Software
VN1003WBSD01	VN084287.D	1,2,3-Trichloropropane	JOHN	10/4/2024 9:46:55 AM	MMDadoda	10/4/2024 10:15:57 AM	Peak Integrated by Software
P4258-04	VN084304.D	Isopropyl Acetate	JOHN	10/4/2024 9:48:30 AM	MMDadoda	10/4/2024 10:16:05 AM	Peak Integrated by Software
VSTDCCC050	VN084305.D	1,2,3-Trichloropropane	JOHN	10/4/2024 9:48:35 AM	MMDadoda	10/4/2024 10:16:05 AM	Peak Integrated by Software

Instrument ID: **MSVOA_N**

Daily Analysis Runlog For Sequence/QC Batch ID # VN093024

Review By	John Carlone	Review On	10/1/2024 9:40:01 AM
Supervise By	Mahesh Dadoda	Supervise On	10/1/2024 5:34:39 PM
SubDirectory	VN093024	HP Acquire Method	HP Processing Method 82N093024W.M
STD. NAME	STD REF.#		
Tune/Reschk	VP130570		
Initial Calibration Stds	VP130580,VP130582,VP130583,VP130584,VP130585,VP130586		
CCC	VP130571,VP130572		
Internal Standard/PEM			
ICV/I.BLK	VP130587		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VN084211.D	30 Sep 2024 09:24	JC\MD	Ok
2	VSTDCCC050	VN084212.D	30 Sep 2024 11:45	JC\MD	Not Ok
3	VSTDICC100	VN084213.D	30 Sep 2024 12:25	JC\MD	Ok,M
4	VSTDICCC050	VN084214.D	30 Sep 2024 12:49	JC\MD	Ok,M
5	VSTDICC020	VN084215.D	30 Sep 2024 13:13	JC\MD	Ok,M
6	VSTDICC010	VN084216.D	30 Sep 2024 13:37	JC\MD	Ok,M
7	VSTDICC005	VN084217.D	30 Sep 2024 14:00	JC\MD	Ok,M
8	VSTDICC001	VN084218.D	30 Sep 2024 14:48	JC\MD	Ok,M
9	IBLK	VN084219.D	30 Sep 2024 15:12	JC\MD	Ok
10	VSTDICV050	VN084220.D	30 Sep 2024 15:36	JC\MD	Ok,M
11	VN0930MBL01	VN084221.D	30 Sep 2024 16:11	JC\MD	Ok
12	VN0930WBL01	VN084222.D	30 Sep 2024 16:35	JC\MD	Ok
13	VN0930WBS01	VN084223.D	30 Sep 2024 17:42	JC\MD	Ok,M
14	VN0930WBSD01	VN084224.D	30 Sep 2024 18:06	JC\MD	Ok,M
15	P4116-24	VN084225.D	30 Sep 2024 18:30	JC\MD	Dilution
16	P4116-25	VN084226.D	30 Sep 2024 18:54	JC\MD	Dilution
17	P4116-26	VN084227.D	30 Sep 2024 19:18	JC\MD	Dilution
18	P4116-27	VN084228.D	30 Sep 2024 19:42	JC\MD	Dilution
19	VSTDCCC050	VN084229.D	30 Sep 2024 20:06	JC\MD	Ok,M

M : Manual Integration

Instrument ID: **MSVOA_N**

Daily Analysis Runlog For Sequence/QC Batch ID # VN100324

Review By	John Carlone	Review On	10/4/2024 9:52:33 AM
Supervise By	Mahesh Dadoda	Supervise On	10/4/2024 10:16:10 AM
SubDirectory	VN100324	HP Acquire Method	HP Processing Method 82N093024W.M
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	VP130658		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP130659,VP130660		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VN084282.D	03 Oct 2024 08:20	JC\MD	Ok
2	VSTDCCC050	VN084283.D	03 Oct 2024 08:43	JC\MD	Ok,M
3	VN1003MBL01	VN084284.D	03 Oct 2024 09:18	JC\MD	Ok
4	VN1003WBL01	VN084285.D	03 Oct 2024 09:42	JC\MD	Ok
5	VN1003WBS01	VN084286.D	03 Oct 2024 10:05	JC\MD	Ok,M
6	VN1003WBSD01	VN084287.D	03 Oct 2024 10:40	JC\MD	Ok,M
7	P4226-09DL	VN084288.D	03 Oct 2024 11:04	JC\MD	Ok
8	P4226-13DL	VN084289.D	03 Oct 2024 11:28	JC\MD	Ok
9	P4226-14	VN084290.D	03 Oct 2024 11:52	JC\MD	Ok
10	P4226-15	VN084291.D	03 Oct 2024 12:16	JC\MD	Ok
11	P4226-29	VN084292.D	03 Oct 2024 12:40	JC\MD	Ok
12	P4226-19	VN084293.D	03 Oct 2024 13:04	JC\MD	Ok
13	P4226-20	VN084294.D	03 Oct 2024 13:28	JC\MD	Ok
14	P4226-27	VN084295.D	03 Oct 2024 13:52	JC\MD	Ok
15	P4226-28	VN084296.D	03 Oct 2024 14:16	JC\MD	Ok
16	P4226-23	VN084297.D	03 Oct 2024 14:39	JC\MD	Dilution
17	P4226-24MS	VN084298.D	03 Oct 2024 15:03	JC\MD	Ok,M
18	P4226-25MSD	VN084299.D	03 Oct 2024 15:27	JC\MD	Ok,M
19	IBLK	VN084300.D	03 Oct 2024 15:51	JC\MD	Ok
20	IBLK	VN084301.D	03 Oct 2024 16:15	JC\MD	Ok
21	P4226-23DL	VN084302.D	03 Oct 2024 16:39	JC\MD	Ok

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QC Batch ID # VN100324

Review By	John Carlone	Review On	10/4/2024 9:52:33 AM
Supervise By	Mahesh Dadoda	Supervise On	10/4/2024 10:16:10 AM
SubDirectory	VN100324	HP Acquire Method	HP Processing Method 82N093024W.M
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	VP130658		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP130659,VP130660		

22	P4285-03	VN084303.D	03 Oct 2024 17:03	JC\MD	Not Ok
23	P4258-04	VN084304.D	03 Oct 2024 17:27	JC\MD	Ok,M
24	VSTDCCC050	VN084305.D	03 Oct 2024 17:51	JC\MD	Ok,M

M : Manual Integration

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QC Batch ID # VN093024

Review By	John Carlone	Review On	10/1/2024 9:40:01 AM
Supervise By	Mahesh Dadoda	Supervise On	10/1/2024 5:34:39 PM
SubDirectory	VN093024	HP Acquire Method	HP Processing Method 82N093024W.M

STD. NAME	STD REF.#
Tune/Reschk	VP130570
Initial Calibration Stds	VP130580,VP130582,VP130583,VP130584,VP130585,VP130586
CCC	VP130571,VP130572
Internal Standard/PEM	
ICV/I.BLK	VP130587
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VN084211.D	30 Sep 2024 09:24		JC\MD	Ok
2	VSTDCCC050	VSTDCCC050	VN084212.D	30 Sep 2024 11:45	Need ICAL	JC\MD	Not Ok
3	VSTDICC100	VSTDICC100	VN084213.D	30 Sep 2024 12:25		JC\MD	Ok,M
4	VSTDICCC050	VSTDICCC050	VN084214.D	30 Sep 2024 12:49		JC\MD	Ok,M
5	VSTDICC020	VSTDICC020	VN084215.D	30 Sep 2024 13:13		JC\MD	Ok,M
6	VSTDICC010	VSTDICC010	VN084216.D	30 Sep 2024 13:37		JC\MD	Ok,M
7	VSTDICC005	VSTDICC005	VN084217.D	30 Sep 2024 14:00		JC\MD	Ok,M
8	VSTDICC001	VSTDICC001	VN084218.D	30 Sep 2024 14:48		JC\MD	Ok,M
9	IBLK	IBLK	VN084219.D	30 Sep 2024 15:12		JC\MD	Ok
10	VSTDICV050	ICVVN093024	VN084220.D	30 Sep 2024 15:36		JC\MD	Ok,M
11	VN0930MBL01	VN0930MBL01	VN084221.D	30 Sep 2024 16:11		JC\MD	Ok
12	VN0930WBL01	VN0930WBL01	VN084222.D	30 Sep 2024 16:35		JC\MD	Ok
13	VN0930WBS01	VN0930WBS01	VN084223.D	30 Sep 2024 17:42		JC\MD	Ok,M
14	VN0930WBSD01	VN0930WBSD01	VN084224.D	30 Sep 2024 18:06		JC\MD	Ok,M
15	P4116-24	RE132D5-20240918	VN084225.D	30 Sep 2024 18:30	vial A pH<2 Need 2x	JC\MD	Dilution
16	P4116-25	RE132D6-20240918	VN084226.D	30 Sep 2024 18:54	vial A pH<2 Need 40X	JC\MD	Dilution
17	P4116-26	RE132D7-20240918	VN084227.D	30 Sep 2024 19:18	vial A pH<2 Need 40X	JC\MD	Dilution
18	P4116-27	DUP05-20240918	VN084228.D	30 Sep 2024 19:42	vial A pH<2 Need 2x	JC\MD	Dilution

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QC Batch ID # VN093024

Review By	John Carlone	Review On	10/1/2024 9:40:01 AM
Supervise By	Mahesh Dadoda	Supervise On	10/1/2024 5:34:39 PM
SubDirectory	VN093024	HP Acquire Method	HP Processing Method 82N093024W.M

STD. NAME	STD REF.#
Tune/Reschk	VP130570
Initial Calibration Stds	VP130580,VP130582,VP130583,VP130584,VP130585,VP130586
CCC	VP130571,VP130572
Internal Standard/PEM	
ICV/I.BLK	VP130587
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

19	VSTDCCC050	VSTDCCC050EC	VN084229.D	30 Sep 2024 20:06		JC\MD	Ok,M
----	------------	--------------	------------	-------------------	--	-------	------

M : Manual Integration

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QC Batch ID # VN100324

Review By	John Carlone	Review On	10/4/2024 9:52:33 AM
Supervise By	Maresh Dadoda	Supervise On	10/4/2024 10:16:10 AM
SubDirectory	VN100324	HP Acquire Method	HP Processing Method 82N093024W.M

STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds	VP130658
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP130659,VP130660

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VN084282.D	03 Oct 2024 08:20		JC\MD	Ok
2	VSTDCCC050	VSTDCCC050	VN084283.D	03 Oct 2024 08:43	V13516	JC\MD	Ok,M
3	VN1003MBL01	VN1003MBL01	VN084284.D	03 Oct 2024 09:18		JC\MD	Ok
4	VN1003WBL01	VN1003WBL01	VN084285.D	03 Oct 2024 09:42		JC\MD	Ok
5	VN1003WBS01	VN1003WBS01	VN084286.D	03 Oct 2024 10:05		JC\MD	Ok,M
6	VN1003WBSD01	VN1003WBSD01	VN084287.D	03 Oct 2024 10:40		JC\MD	Ok,M
7	P4226-09DL	DUP07-20240924DL	VN084288.D	03 Oct 2024 11:04	vial B pH<2	JC\MD	Ok
8	P4226-13DL	TT101D2-20240925DL	VN084289.D	03 Oct 2024 11:28	vial B pH<2	JC\MD	Ok
9	P4226-14	TT205S1-20240925	VN084290.D	03 Oct 2024 11:52	vial B pH<2	JC\MD	Ok
10	P4226-15	RW9-MW-01S-20240925	VN084291.D	03 Oct 2024 12:16	vial B pH<2	JC\MD	Ok
11	P4226-29	TB	VN084292.D	03 Oct 2024 12:40	vial A pH<2 TB	JC\MD	Ok
12	P4226-19	DUP09-20240925	VN084293.D	03 Oct 2024 13:04	vial A pH<2	JC\MD	Ok
13	P4226-20	DUP10-20240925	VN084294.D	03 Oct 2024 13:28	vial A pH<2	JC\MD	Ok
14	P4226-27	BPOW6-9-20240927	VN084295.D	03 Oct 2024 13:52	vial A pH<2	JC\MD	Ok
15	P4226-28	BPOW6-10-20240927	VN084296.D	03 Oct 2024 14:16	vial A pH<2	JC\MD	Ok
16	P4226-23	RW4-20240927	VN084297.D	03 Oct 2024 14:39	vial A pH<2 Need 10X	JC\MD	Dilution
17	P4226-24MS	RW4-20240927MS	VN084298.D	03 Oct 2024 15:03	vial A pH<2	JC\MD	Ok,M
18	P4226-25MSD	RW4-20240927MSD	VN084299.D	03 Oct 2024 15:27	vial A pH<2	JC\MD	Ok,M

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QC Batch ID # VN100324

Review By	John Carlone	Review On	10/4/2024 9:52:33 AM
Supervise By	Maresh Dadoda	Supervise On	10/4/2024 10:16:10 AM
SubDirectory	VN100324	HP Acquire Method	HP Processing Method 82N093024W.M
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	VP130658		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP130659,VP130660		

19	IBLK	IBLK	VN084300.D	03 Oct 2024 15:51		JC\MD	Ok
20	IBLK	IBLK	VN084301.D	03 Oct 2024 16:15		JC\MD	Ok
21	P4226-23DL	RW4-20240927DL	VN084302.D	03 Oct 2024 16:39	vial B pH<2	JC\MD	Ok
22	P4285-03	WATER-TOTES	VN084303.D	03 Oct 2024 17:03	vial A pH<2 Need 10X	JC\MD	Not Ok
23	P4258-04	Chamberlain Ave	VN084304.D	03 Oct 2024 17:27	vial A pH#5.0	JC\MD	Ok,M
24	VSTDCCC050	VSTDCCC050EC	VN084305.D	03 Oct 2024 17:51		JC\MD	Ok,M

M : Manual Integration

SOP ID : M1311-TCLP-14
SDG No : N/A
Weigh By : JP
Balance ID : WC SC-4
pH Meter ID : WC PH METER-1
Extraction By : JP
Filter By : JP
Pipette ID : WC
Tumbler ID : ZHE-1
TCLP Filter ID : 50223706

Start Prep Date : 10/01/2024 **Time :** 15:30
End Prep Date : 10/02/2024 **Time :** 08:45
Combination Ratio : 20
ZHE Clearing Batch : ~~N/A~~ Vx100224
Initial Room Temperature: 23 °C
Final Room Temperature: 21 °C
TCLP Technician Signature : JP
Supervisor By : IR

Standard Name	MLS USED	STD REF. # FROM LOG
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Chemical Used	ML/SAMPLE U	Lot Number
TCLP-FLUID-1	N/A	WP108622
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
40ml VOA Vials	22437	N/A

Extraction Conformance/Non-Conformance Comments:

ALL ZHE samples are extracted and given as vial A & B. Leak checked after 10 mintues of tumbling. Tumbler ZHE-1 checked,30 rpm.

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
10/02/24 10:00	JP 11020 Room	JP 1000 Lab
	Preparation Group	Analysis Group

Sample ID	ClientID	ZHE Vessel ID	Sample Wt (g)	Volume Extraction Fluid #1 (mL)	Multi phasic	Phase Miscible	Phases Combined	Final Leachate PH	Metals Leachate Adj. PH	Prep Pos
P4232-04	TP-R	01	25.02	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
P4236-04	TP4	02	25.03	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
P4236-08	TP3	03	25.01	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
P4236-12	TP1	04	25.03	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
P4236-16	TP2	05	25.04	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
P4242-04	TP-Q	06	25.02	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
P4254-04	MH-147-SLUDGE	07	25.03	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
P4258-04	Chamberlain Ave	08	25.02	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
PB163826TB	LEB826	09	N/A	500	N/A	N/A	N/A	4.93	N/A	ZHE-1

SampleID	ClientID	Sample Weight (g)	Filter Weight (g)	Filtrate (mL)	Filter + Solid (After 100°C)	% solids	% Dry Solids
P4232-04	TP-R	N/A	N/A	N/A	N/A	100	N/A
P4236-04	TP4	N/A	N/A	N/A	N/A	100	N/A
P4236-08	TP3	N/A	N/A	N/A	N/A	100	N/A
P4236-12	TP1	N/A	N/A	N/A	N/A	100	N/A
P4236-16	TP2	N/A	N/A	N/A	N/A	100	N/A
P4242-04	TP-Q	N/A	N/A	N/A	N/A	100	N/A
P4254-04	MH-147-SLUDGE	N/A	N/A	N/A	N/A	100	N/A
P4258-04	Chamberlain Ave	N/A	N/A	N/A	N/A	100	N/A
PB163826TB	LEB826	N/A	N/A	N/A	N/A	N/A	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : tclp zhe p4236 WorkList ID : 183991 Department : TCLP Extraction Date : 10-01-2024 10:09:56

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4232-04	TP-R	Solid	TCLP ZHE Extraction	Cool 4 deg C	PSEG03	J51	09/30/2024	1311 ZHE
P4236-04	TP4	Solid	TCLP ZHE Extraction	Cool 4 deg C	PSEG03	J53	09/30/2024	1311 ZHE
P4236-08	TP3	Solid	TCLP ZHE Extraction	Cool 4 deg C	PSEG03	J53	09/30/2024	1311 ZHE
P4236-12	TP1	Solid	TCLP ZHE Extraction	Cool 4 deg C	PSEG03	J53	09/30/2024	1311 ZHE
P4236-16	TP2	Solid	TCLP ZHE Extraction	Cool 4 deg C	PSEG03	J53	09/30/2024	1311 ZHE
P4242-04	TP-Q	Solid	TCLP ZHE Extraction	Cool 4 deg C	PSEG03	J51	10/01/2024	1311 ZHE
P4254-04	MH-147-SLUDGE	Solid	TCLP ZHE Extraction	Cool 4 deg C	PSEG03	J51	10/01/2024	1311 ZHE
P4258-04	Chamberlain Ave	Solid	TCLP ZHE Extraction	Cool 4 deg C	ROMA02	H11	10/01/2024	1311 ZHE

Date/Time 10/01/24 14:30
 Raw Sample Received by: JTC
 Raw Sample Relinquished by: JTC

Date/Time 10/01/24 16:30
 Raw Sample Received by: JTC
 Raw Sample Relinquished by: JTC



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. P4258/P4261
QUOTE NO.
COC Number 2041986

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: Roman E&G
ADDRESS: 14 Ogden St
CITY: Newark STATE: NJ ZIP: 07104
ATTENTION: Sonny Puzzo
PHONE: 973-482-1123 FAX: 973-482-7154

CLIENT PROJECT INFORMATION

PROJECT NAME: Perth Amboy Undermain
PROJECT NO.: 24-651 LOCATION: Perth Amboy
PROJECT MANAGER: Mark Mathicis
e-mail: engineer@romaneq.com
PHONE: 973-482-1123 FAX: 973-482-7154

CLIENT BILLING INFORMATION

BILL TO: Roman E&G PO#: 24-651
ADDRESS: 14 Ogden St
CITY: Newark STATE: NJ ZIP: 07104
ATTENTION: Frank PHONE: 973-482-1123

ANALYSIS

DATA TURNAROUND INFORMATION

FAX (RUSH) 6 10/17 DAYS*
HARDCOPY (DATA PACKAGE): 6 10/17 DAYS*
EDD: 6 10/17 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 NJ-DEP-SRS

PRESERVATIVES

COMMENTS

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES										← Specify Preservatives A-HCl D-NaOH B-HNO3 E-ICE C-H2SO4 F-OTHER
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9	
1.	<u>Chamberlin Ave</u> ↓	<u>S</u>		<u>X</u>	<u>10/1</u>	<u>11:45</u>	<u>1</u>										
2.		<u>S</u>		<u>X</u>	<u>10/1</u>	<u>11:45</u>	<u>1</u>										
3.		<u>S</u>		<u>X</u>	<u>10/1</u>	<u>11:45</u>	<u>1</u>										
4.		<u>S</u>		<u>X</u>	<u>10/1</u>	<u>11:45</u>	<u>1</u>										
5.		<u>S</u>		<u>X</u>	<u>10/1</u>	<u>11:45</u>	<u>1</u>										
6.		<u>S</u>		<u>X</u>	<u>10/1</u>	<u>11:45</u>	<u>1</u>										
7.		<u>S</u>		<u>X</u>	<u>10/1</u>	<u>11:45</u>	<u>1</u>										
8.		<u>S</u>		<u>X</u>	<u>10/1</u>	<u>11:45</u>	<u>1</u>										
9.																	
10.																	

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

RELINQUISHED BY SAMPLER: 1. <u>Sonny Puzzo</u>	DATE/TIME: <u>10/1 12:54</u>	RECEIVED BY: <u>[Signature]</u>	Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP <u>22.1 °C</u>
RELINQUISHED BY SAMPLER: 2.	DATE/TIME:	RECEIVED BY:	Comments: <u>If Air # 1</u>
RELINQUISHED BY SAMPLER: 3.	DATE/TIME:	RECEIVED BY:	

Page ____ of ____

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

Shipment Complete
☐ YES ☐ NO

Test Group	Analyses	Matrix	Method
METALS-TAL	Mercury	Water	7470A
	TAL ICP Metals	Water	6010D
RCRA CHARACTERIS	Flash Point	Water	1010B
	pH	Water	9040C
	Reactive Cyanide	Water	9012B
	Reactive Sulfide	Water	9034
TCLP METALS	TCLP Extraction	Water	1311
	TCLP ICP Metals	Water	6010D
	TCLP Mercury	Water	7470A
GROWS Concrete	Ammonia	Solid	SM4500-NH3
	Chemical Oxygen Demar	Solid	SM5220 D
	Oil & Grease	Solid	1664A
	Paint Filter Test	Solid	9095B
	PCBs	Solid	8082A
	Percent Solids	Solid	Chemtech -SOP
	pH	Solid	9045D
	Total Solids	Solid	SM2540 B
	Total Volatile Solids	Solid	160.4
GROWS Concrete AS	ASTM Leachate/ Ammon	Solid	SM4500-NH3
	ASTM Leachate/COD	Solid	SM5220 D
	ASTM Leachate Extracti	Solid	ASTM
	ASTM Leachate/Oil & Gr	Solid	1664A
	ASTM Leachate/Total Sol	Solid	SM2540 B
GROWS Concrete-Wa	Corrosivity	Solid	9045D
	Ignitability	Solid	1030
	Reactive Cyanide	Solid	9012B
	Reactive Sulfide	Solid	9034
	TCLP Semivolatiles	Solid	8270E
	TCLP Extraction	Solid	1311
	TCLP Herbicides	Solid	8151A
	TCLP Mercury	Solid	7470A
	TCLP Metals + Cu+Ni+Zr	Solid	6010D
	TCLP Pesticides	Solid	8081B
	TCLP Volatiles	Solid	8260C
	TCLP ZHE Extraction	Solid	1311 ZHE
GROWS Soil	PCBs	Solid	8082A
	Percent Solids	Solid	Chemtech -SOP
	pH	Solid	9045D
	TCL Volatiles+10	Solid	8260D
GROWS Soil-Waste C	Corrosivity	Solid	9045D
	Ignitability	Solid	1030
	Reactive Cyanide	Solid	9012B
	Reactive Sulfide	Solid	9034
	TCLP Semivolatiles	Solid	8270E
	TCLP Extraction	Solid	1311
	TCLP Herbicides	Solid	8151A
	TCLP Mercury	Solid	7470A
	TCLP Metals + Cu+Ni+Zr	Solid	6010D
	TCLP Pesticides	Solid	8081B
	TCLP Volatiles	Solid	8260D
	TCLP ZHE Extraction	Solid	1311 ZHE

Grows Concrete

Grows Concrete ASTM

Grows Soil

Grows Soil-Waste Class

Seperate

Seperate



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 (L-A-B)	L2219
Maine	2024021
Maryland	296
New Hampshire	255423
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488



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

LOGIN REPORT/SAMPLE TRANSFER

18,A,001
Q1218,024
Q863
RN
SS
D15
JE
R25,0
F100
GW0,0,102,121

Order ID : P4258 **ROMA02**
Client Name : Roman E&G Corp
Client Contact : Mark Mattheiss
Invoice Name : Roman E&G Corp
Invoice Contact : Mark Mattheiss

Order Date : 10/1/2024 1:21:00 PM
Project Name : Perth Amboy
Receive DateTime : 10/1/2024 12:54:00 PM
Purchase Order :

Project Mgr : Kiran
Report Type : ~~Level 2~~ NJ Reduced
EDD Type : ~~Excel~~ HAZ/Excel
Hard Copy Date :
Date Signoff : 10/1/2024 3:13:24 PM

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
P4258-03	Chamberlain Ave	Solid	10/01/2024	11:45	VOC-TCLVOA-10	GROWS Soil	8260D		4 Bus. Days
P4258-04	Chamberlain Ave	Solid	10/01/2024	11:45	TCLP VOA	GROWS Soil-Waste Cla	8260C		4 Bus. Days

Relinquished By : 

Date / Time : 10-2-24 8:03

Received By : 

Date / Time :

Storage Area : VOA Refridgerator Room