

Cover Page

Order ID : Q3092

Project ID : PGW Phila. Gas Works

Client : Atlantic Recovery Services, Inc.

Lab Sample Number	Client Sample Number
Q3092-01	291376
Q3092-02	291376
Q3092-03	279182
Q3092-04	279182

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

Signature : _____

Date: 9/19/2025

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 #: Q3092

Completed

For thorough review, the report must have the following:

GENERAL:

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

✓

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

✓

Is the chain of custody signed and complete

✓

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

✓

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

✓

COVER PAGE:

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

✓

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

✓

CHAIN OF CUSTODY:

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

✓

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

✓

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

✓

Were the samples received within hold time

✓

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

✓

ANALYTICAL:

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

QA Review Signature: PRADIP PRAJAPATI

Date: 09/19/2025

LAB CHRONICLE

OrderID:	Q3092	OrderDate:	9/12/2025 12:02:28 PM
Client:	Atlantic Recovery Services, Inc.	Project:	PGW Phila. Gas Works
Contact:	Kenny Pyle	Location:	D41

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q3092-01	291376	TCLP	TCLP VOA	8260D	09/12/25		09/15/25	09/12/25
Q3092-03	279182	TCLP	TCLP VOA	8260D	09/12/25		09/15/25	09/12/25



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Fax : 908 789 8922

Hit Summary Sheet
SW-846

SDG No.: Q3092
Client: Atlantic Recovery Services, Inc.

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID: Q3092-01	291376 291376	TCLP	2-Butanone	9.50	J	0.98	25.0	ug/L
			Total Voc :	9.50				
			Total Concentration:	9.50				
Client ID: Q3092-03	279182 279182	TCLP	2-Butanone	9.10	J	0.98	25.0	ug/L
			Total Voc :	9.10				
			Total Concentration:	9.10				



QC SUMMARY

Surrogate Summary

SDG No.: Q3092

Client: Atlantic Recovery Services, Inc.

Analytical Method: SW8260D

Lab Sample ID	Client ID	Parameter	Spike	Result	Recovery (%)	Qual	Limits (%)	
							Low	High
Q3092-01	291376	1,2-Dichloroethane-d4	50	54.4	109		74	125
		Dibromofluoromethane	50	53.3	106		75	124
		Toluene-d8	50	49.9	100		86	113
		4-Bromofluorobenzene	50	47.5	95		77	121
Q3092-03	279182	1,2-Dichloroethane-d4	50	54.2	108		74	125
		Dibromofluoromethane	50	51.4	103		75	124
		Toluene-d8	50	49.7	99		86	113
		4-Bromofluorobenzene	50	46.3	92		77	121

Surrogate Summary

SDG No.: Q3092

Client: Atlantic Recovery Services, Inc.

Analytical Method: SW8260-Low

Lab Sample ID	Client ID	Parameter	Spike	Result	Recovery (%)	Qual	Limits (%)	
							Low	High
VN0915WBL01	VN0915WBL01	1,2-Dichloroethane-d4	50	52.5	105		74	125
		Dibromofluoromethane	50	50.3	101		75	124
		Toluene-d8	50	47.2	94		86	113
		4-Bromofluorobenzene	50	44.6	89		77	121
VN0915WBS01	VN0915WBS01	1,2-Dichloroethane-d4	50	46.1	92		74	125
		Dibromofluoromethane	50	49.6	99		75	124
		Toluene-d8	50	46.6	93		86	113
		4-Bromofluorobenzene	50	47.7	95		77	121
VN0915WBSD0	VN0915WBSD01	1,2-Dichloroethane-d4	50	44.3	89		74	125
		Dibromofluoromethane	50	48.2	96		75	124
		Toluene-d8	50	46.2	92		86	113
		4-Bromofluorobenzene	50	46.4	93		77	121

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.:	<u>Q3092</u>	Analytical Method:	<u>SW8260-Low</u>
Client:	<u>Atlantic Recovery Services, Inc.</u>	Datafile :	<u>VN087823.D</u>

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VN0915WBS01	Vinyl chloride	20	19.2	ug/L	96			65	117	
	1,1-Dichloroethene	20	19.2	ug/L	96			74	110	
	2-Butanone	100	91.2	ug/L	91			65	122	
	Carbon Tetrachloride	20	19.4	ug/L	97			77	113	
	Chloroform	20	19.3	ug/L	97			79	113	
	Benzene	20	18.9	ug/L	95			82	109	
	1,2-Dichloroethane	20	19.4	ug/L	97			80	115	
	Trichloroethene	20	18.5	ug/L	93			77	113	
	Tetrachloroethene	20	17.6	ug/L	88			67	123	
	Chlorobenzene	20	18.2	ug/L	91			82	109	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.:	<u>Q3092</u>	Analytical Method:	<u>SW8260-Low</u>
Client:	<u>Atlantic Recovery Services, Inc.</u>	Datafile :	<u>VN087824.D</u>

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VN0915WBSD01	Vinyl chloride	20	18.5	ug/L	93	3		65	117	19
	1,1-Dichloroethene	20	17.8	ug/L	89	8		74	110	20
	2-Butanone	100	85.1	ug/L	85	7		65	122	26
	Carbon Tetrachloride	20	19.3	ug/L	97	0		77	113	15
	Chloroform	20	17.6	ug/L	88	10		79	113	20
	Benzene	20	18.5	ug/L	93	2		82	109	15
	1,2-Dichloroethane	20	18.3	ug/L	92	5		80	115	20
	Trichloroethene	20	18.3	ug/L	92	1		77	113	15
	Tetrachloroethene	20	19.3	ug/L	97	10		67	123	15
	Chlorobenzene	20	18.2	ug/L	91	0		82	109	15

VOLATILE METHOD BLANK SUMMARY

Client ID

VN0915WBL01

Lab Name: Alliance

Contract: ATLA10

Lab Code: ACE

SDG NO.: Q3092

Lab File ID: VN087822.D

Lab Sample ID: VN0915WBL01

Date Analyzed: 09/15/2025

Time Analyzed: 09:35

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
VN0915WBS01	VN0915WBS01	VN087823.D	09/15/2025
VN0915WBSD01	VN0915WBSD01	VN087824.D	09/15/2025
291376	Q3092-01	VN087833.D	09/15/2025
279182	Q3092-03	VN087835.D	09/15/2025

COMMENTS: _____



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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alliance

Contract: ATLA10

Lab Code: ACE

SDG NO.: Q3092

Lab File ID: VN087614.D

BFB Injection Date: 08/21/2025

Instrument ID: MSVOA_N

BFB Injection Time: 09:30

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	25.8
75	30.0 - 60.0% of mass 95	58.1
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.3
173	Less than 2.0% of mass 174	1.1 (1.6) 1
174	50.0 - 100.0% of mass 95	69
175	5.0 - 9.0% of mass 174	5.6 (8.1) 1
176	95.0 - 101.0% of mass 174	67.7 (98.1) 1
177	5.0 - 9.0% of mass 176	4.8 (7.1) 2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDIC001	VSTDIC001	VN087619.D	08/21/2025	12:09
VSTDIC005	VSTDIC005	VN087620.D	08/21/2025	13:08
VSTDIC020	VSTDIC020	VN087621.D	08/21/2025	13:41
VSTDIC050	VSTDIC050	VN087622.D	08/21/2025	14:02
VSTDIC100	VSTDIC100	VN087623.D	08/21/2025	14:23
VSTDIC150	VSTDIC150	VN087624.D	08/21/2025	14:44



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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alliance

Contract: ATLA10

Lab Code: ACE

SDG NO.: Q3092

Lab File ID: VN087819.D

BFB Injection Date: 09/15/2025

Instrument ID: MSVOA_N

BFB Injection Time: 08:18

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

Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	23.1
75	30.0 - 60.0% of mass 95	51.9
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.1
173	Less than 2.0% of mass 174	0.9 (1.2) 1
174	50.0 - 100.0% of mass 95	74.1
175	5.0 - 9.0% of mass 174	6.3 (8.5) 1
176	95.0 - 101.0% of mass 174	70.8 (95.4) 1
177	5.0 - 9.0% of mass 176	4.8 (6.8) 2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VN087820.D	09/15/2025	08:39
VN0915WBL01	VN0915WBL01	VN087822.D	09/15/2025	09:35
VN0915WBS01	VN0915WBS01	VN087823.D	09/15/2025	09:56
VN0915WBSD01	VN0915WBSD01	VN087824.D	09/15/2025	10:29
291376	Q3092-01	VN087833.D	09/15/2025	13:38
279182	Q3092-03	VN087835.D	09/15/2025	14:20

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance Contract: ATLA10
 Lab Code: ACE SDG NO.: Q3092
 Lab File ID: VN087820.D Date Analyzed: 09/15/2025
 Instrument ID: MSVOA_N Time Analyzed: 08:39
 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	257288	8.21	490599	9.08	467132	11.84
UPPER LIMIT	514576	8.706	981198	9.582	934264	12.341
LOWER LIMIT	128644	7.706	245300	8.582	233566	11.341
EPA SAMPLE NO.						
291376	169484	8.21	394773	9.08	406404	11.85
279182	170877	8.21	400335	9.08	402622	11.85
VN0915WBL01	194621	8.21	447138	9.08	421003	11.84
VN0915WBS01	212267	8.21	415751	9.08	395901	11.85
VN0915WBSD01	231988	8.21	436544	9.08	400333	11.85

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:	<u>Alliance</u>	Contract:	<u>ATLA10</u>
Lab Code:	<u>ACE</u>	SDG NO.:	<u>Q3092</u>
Lab File ID:	<u>VN087820.D</u>	Date Analyzed:	<u>09/15/2025</u>
Instrument ID:	<u>MSVOA_N</u>	Time Analyzed:	<u>08:39</u>
GC Column:	<u>RXI-624</u>	ID:	<u>0.25</u> (mm)
		Heated Purge:	(Y/N) <u>N</u>

	IS4 AREA #	RT #				
12 HOUR STD	259703	13.765				
UPPER LIMIT	519406	14.265				
LOWER LIMIT	129852	13.265				
EPA SAMPLE NO.						
291376	181401	13.77				
279182	182693	13.77				
VN0915WBL01	194722	13.77				
VN0915WBS01	209334	13.77				
VN0915WBSD01	213781	13.77				

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:	Atlantic Recovery Services, Inc.	Date Collected:	09/12/25
Project:	PGW Phila. Gas Works	Date Received:	09/12/25
Client Sample ID:	291376	SDG No.:	Q3092
Lab Sample ID:	Q3092-01	Matrix:	TCLP
Analytical Method:	8260D	% 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:	Date Analyzed	Prep Batch ID
VN087833.D	1	09/15/25 13:38	VN091525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-01-4	Vinyl Chloride	0.26	U	0.26	5.00	ug/L
75-35-4	1,1-Dichloroethene	0.23	U	0.23	5.00	ug/L
78-93-3	2-Butanone	9.50	J	0.98	25.0	ug/L
56-23-5	Carbon Tetrachloride	0.25	U	0.25	5.00	ug/L
67-66-3	Chloroform	0.25	U	0.25	5.00	ug/L
71-43-2	Benzene	0.15	U	0.15	5.00	ug/L
107-06-2	1,2-Dichloroethane	0.22	U	0.22	5.00	ug/L
79-01-6	Trichloroethene	0.090	U	0.090	5.00	ug/L
127-18-4	Tetrachloroethene	0.23	U	0.23	5.00	ug/L
108-90-7	Chlorobenzene	0.12	U	0.12	5.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	54.4		74 - 125	109%	SPK: 50
1868-53-7	Dibromofluoromethane	53.2		75 - 124	106%	SPK: 50
2037-26-5	Toluene-d8	49.9		86 - 113	100%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.5		77 - 121	95%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	169000	8.206			
540-36-3	1,4-Difluorobenzene	395000	9.083			
3114-55-4	Chlorobenzene-d5	406000	11.847			
3855-82-1	1,4-Dichlorobenzene-d4	181000	13.77			

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\VN091525\
 Data File : VN087833.D
 Acq On : 15 Sep 2025 13:38
 Operator : JC\MD
 Sample : Q3092-01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 16 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 291376

Quant Time: Sep 16 01:36:24 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
 Quant Title : SW846 8260
 QLast Update : Fri Aug 22 02:55:42 2025
 Response via : Initial Calibration

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

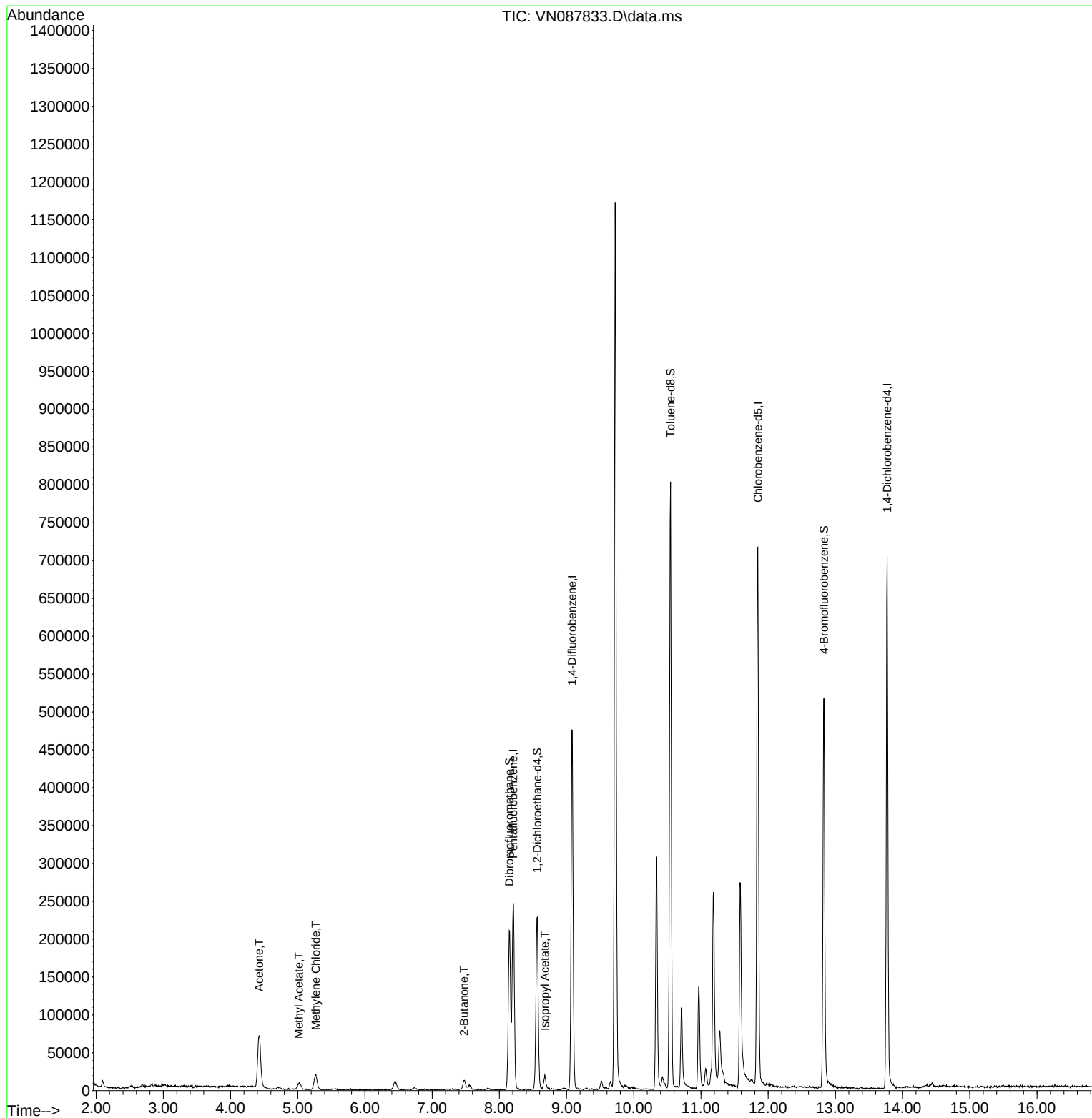
Internal Standards						
1) Pentafluorobenzene	8.206	168	169484	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.083	114	394773	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.847	117	406404	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.770	152	181401	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.565	65	189057	54.444	ug/l	0.00
Spiked Amount	50.000	Range	74 - 125	Recovery	=	108.880%
35) Dibromofluoromethane	8.147	113	151770	53.248	ug/l	0.00
Spiked Amount	50.000	Range	75 - 124	Recovery	=	106.500%
50) Toluene-d8	10.547	98	532119	49.880	ug/l	0.00
Spiked Amount	50.000	Range	86 - 113	Recovery	=	99.760%
62) 4-Bromofluorobenzene	12.829	95	180259	47.513	ug/l	0.00
Spiked Amount	50.000	Range	77 - 121	Recovery	=	95.020%
Target Compounds						
					Qvalue	
16) Acetone	4.424	43	140870	74.521	ug/l	93
18) Methyl Acetate	5.018	43	20985	5.302	ug/l #	74
20) Methylene Chloride	5.271	84	15537	4.554	ug/l #	81
25) 2-Butanone	7.477	43	23531	9.462	ug/l #	84
43) Isopropyl Acetate	8.677	43	21560	2.311	ug/l	95

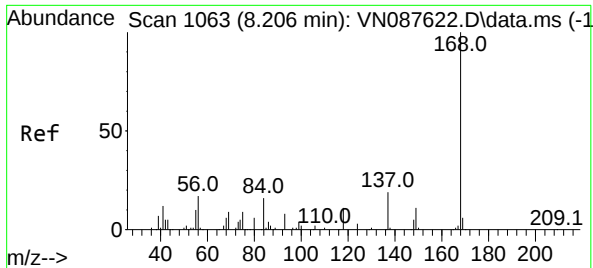
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN091525\
Data File : VN087833.D
Acq On : 15 Sep 2025 13:38
Operator : JC\MD
Sample : Q3092-01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 16 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
291376

Quant Time: Sep 16 01:36:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
Quant Title : SW846 8260
QLast Update : Fri Aug 22 02:55:42 2025
Response via : Initial Calibration

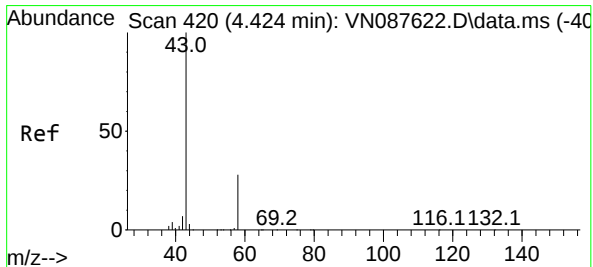
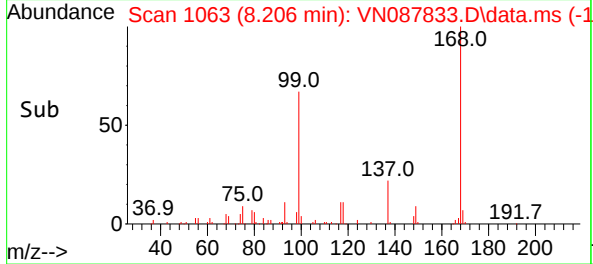
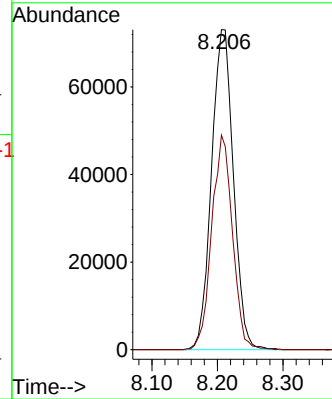
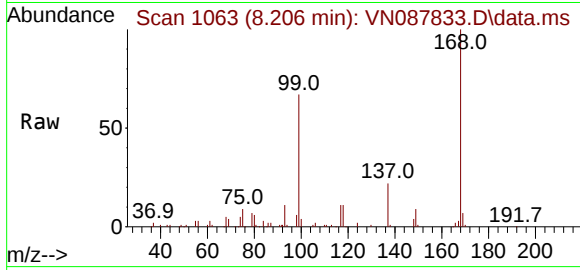




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.206 min Scan# 1063
Delta R.T. 0.000 min
Lab File: VN087833.D
Acq: 15 Sep 2025 13:38

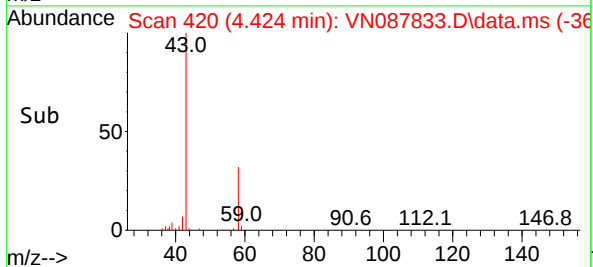
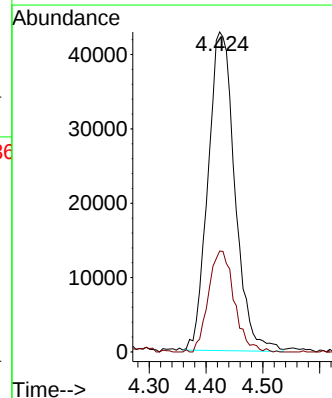
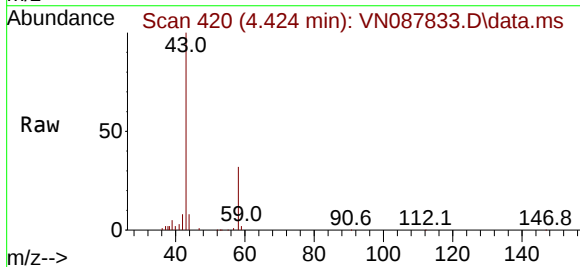
Instrument :
MSVOA_N
ClientSampleId :
291376

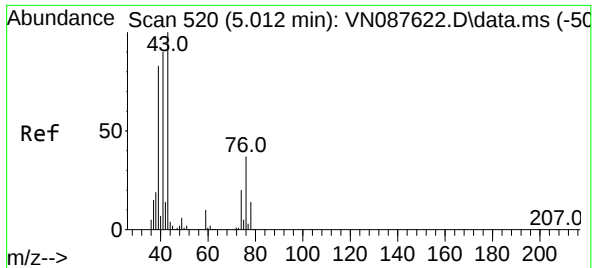
Tgt Ion:168 Resp: 169484
Ion Ratio Lower Upper
168 100
99 67.1 57.2 85.8



#16
Acetone
Concen: 74.521 ug/l
RT: 4.424 min Scan# 420
Delta R.T. -0.000 min
Lab File: VN087833.D
Acq: 15 Sep 2025 13:38

Tgt Ion: 43 Resp: 140870
Ion Ratio Lower Upper
43 100
58 31.8 22.6 33.8





#18

Methyl Acetate

Concen: 5.302 ug/l

RT: 5.018 min Scan# 51

Delta R.T. 0.006 min

Lab File: VN087833.D

Acq: 15 Sep 2025 13:38

Instrument :

MSVOA_N

ClientSampleId :

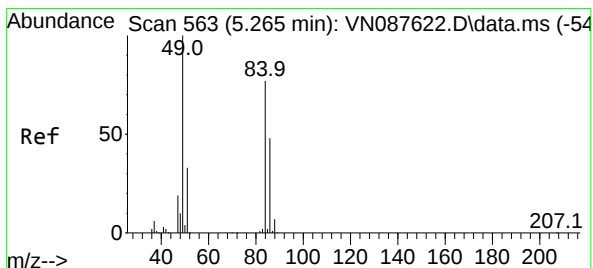
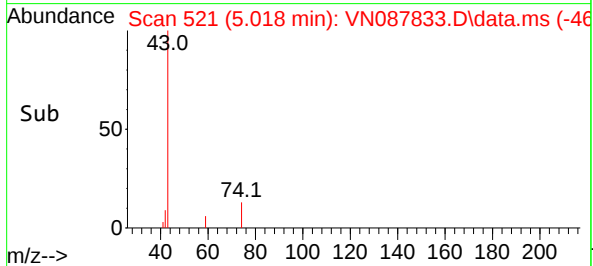
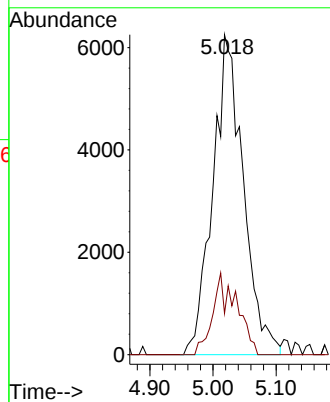
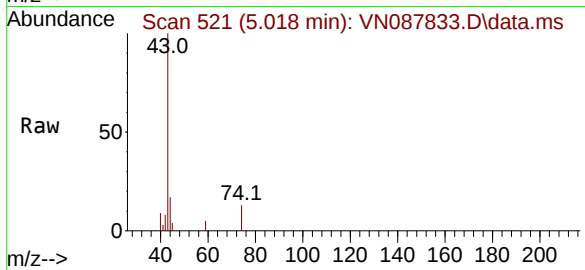
291376

Tgt Ion: 43 Resp: 20985

Ion Ratio Lower Upper

43 100

74 9.7 17.6 26.4#



#20

Methylene Chloride

Concen: 4.554 ug/l

RT: 5.271 min Scan# 564

Delta R.T. 0.006 min

Lab File: VN087833.D

Acq: 15 Sep 2025 13:38

Tgt Ion: 84 Resp: 15537

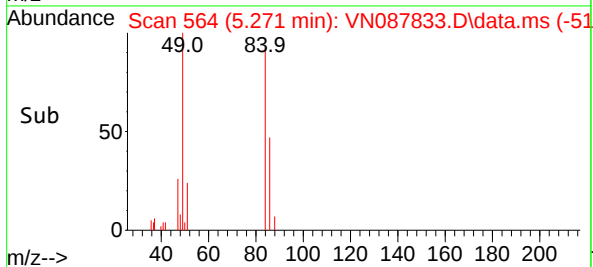
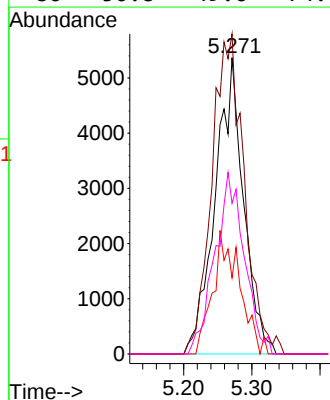
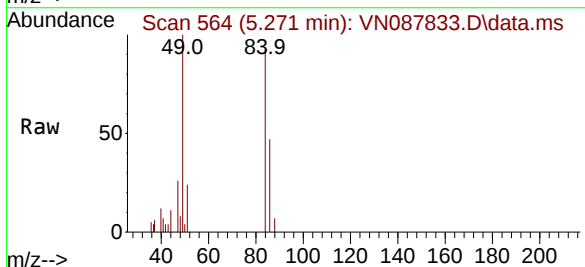
Ion Ratio Lower Upper

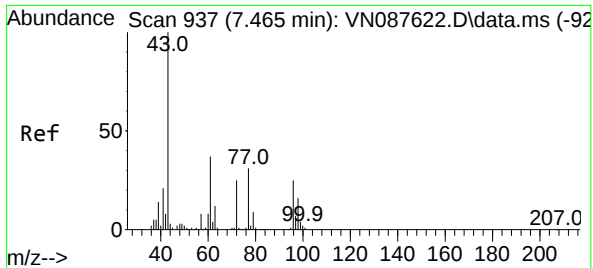
84 100

49 108.0 103.4 155.2

51 25.7 33.8 50.8#

86 50.8 49.6 74.4

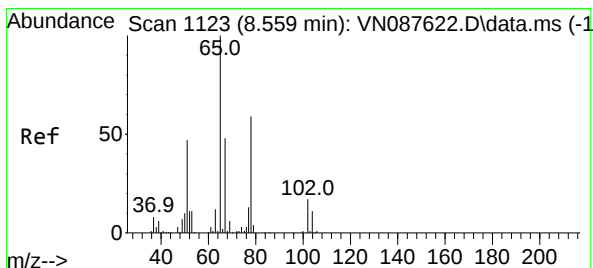
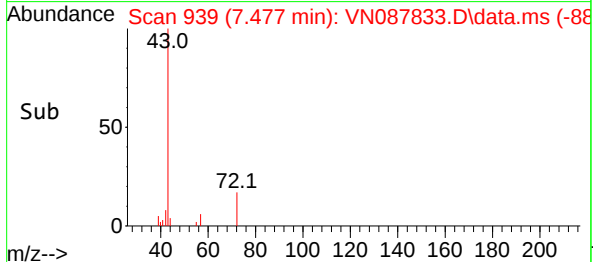
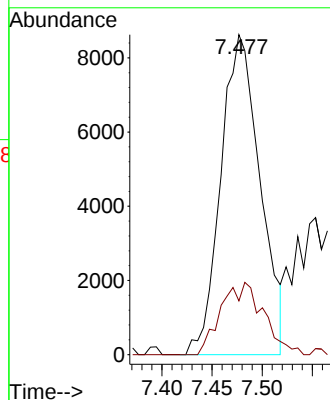
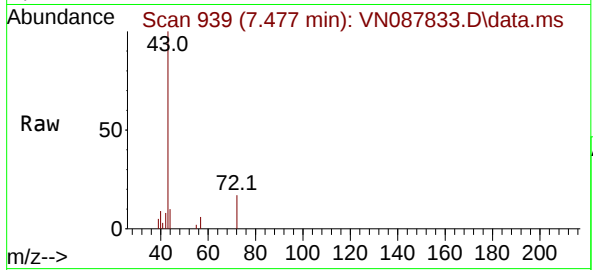




#25
2-Butanone
Concen: 9.462 ug/l
RT: 7.477 min Scan# 91
Delta R.T. 0.012 min
Lab File: VN087833.D
Acq: 15 Sep 2025 13:38

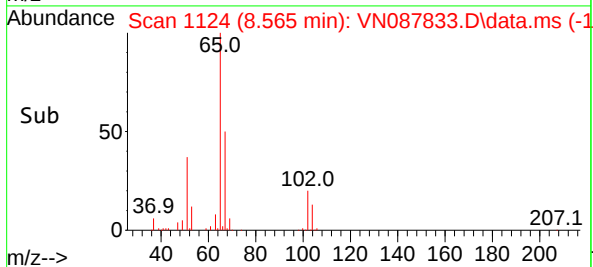
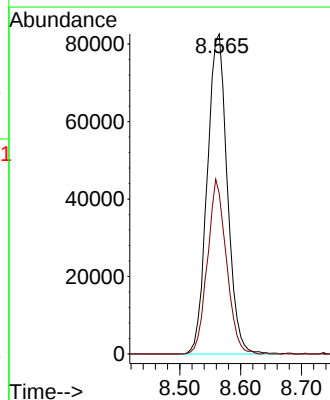
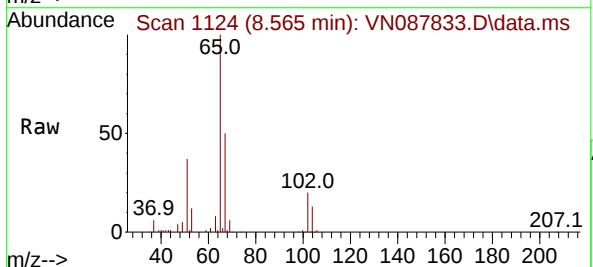
Instrument :
MSVOA_N
ClientSampleId :
291376

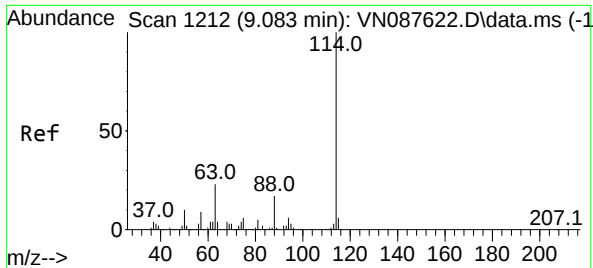
Tgt Ion: 43 Resp: 23531
Ion Ratio Lower Upper
43 100
72 16.8 19.9 29.9#



#33
1,2-Dichloroethane-d4
Concen: 54.444 ug/l
RT: 8.565 min Scan# 1124
Delta R.T. 0.006 min
Lab File: VN087833.D
Acq: 15 Sep 2025 13:38

Tgt Ion: 65 Resp: 189057
Ion Ratio Lower Upper
65 100
67 51.6 0.0 100.0





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.083 min Scan# 11

Delta R.T. -0.000 min

Lab File: VN087833.D

Acq: 15 Sep 2025 13:38

Instrument :

MSVOA_N

ClientSampleId :

291376

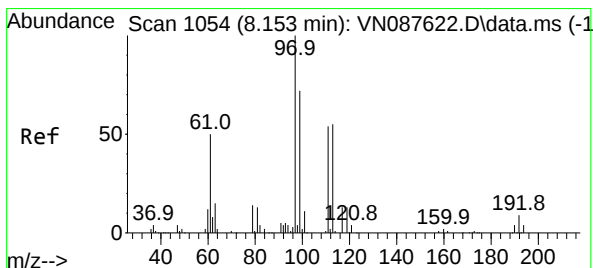
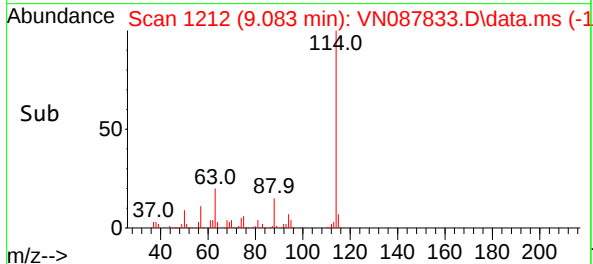
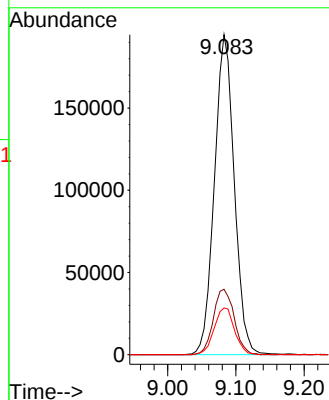
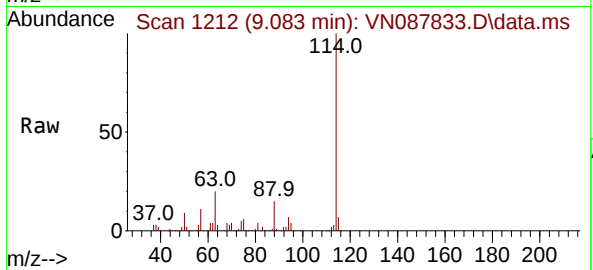
Tgt Ion:114 Resp: 394773

Ion Ratio Lower Upper

114 100

63 20.4 0.0 45.2

88 14.6 0.0 33.4



#35

Dibromofluoromethane

Concen: 53.248 ug/l

RT: 8.147 min Scan# 1053

Delta R.T. -0.006 min

Lab File: VN087833.D

Acq: 15 Sep 2025 13:38

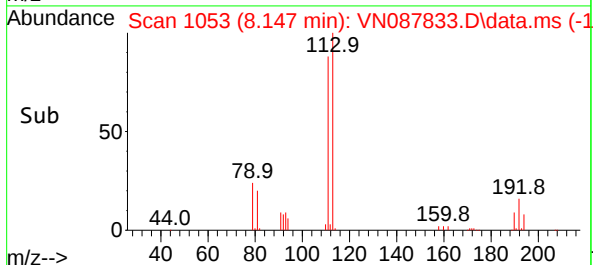
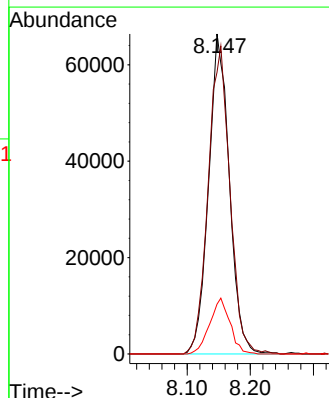
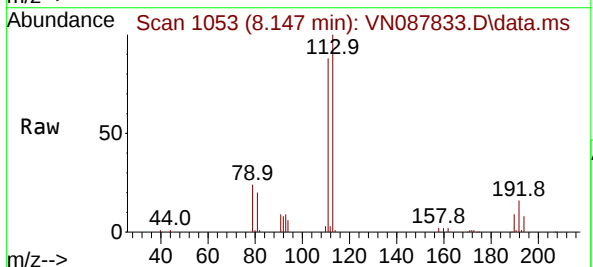
Tgt Ion:113 Resp: 151770

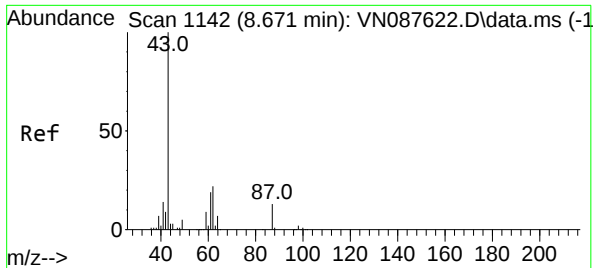
Ion Ratio Lower Upper

113 100

111 100.8 82.8 124.2

192 17.1 12.8 19.2

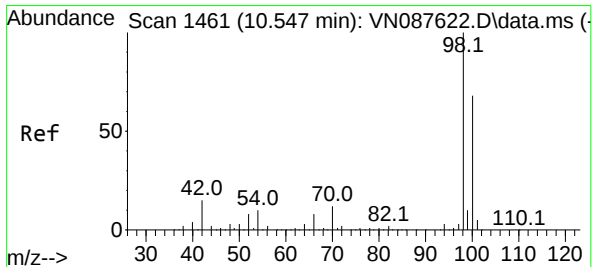
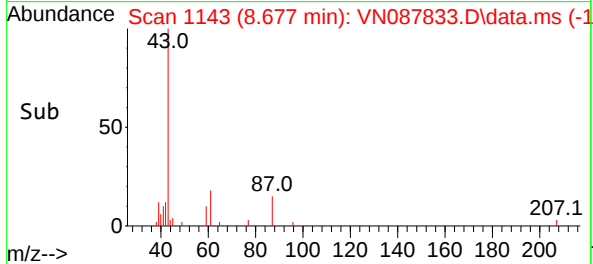
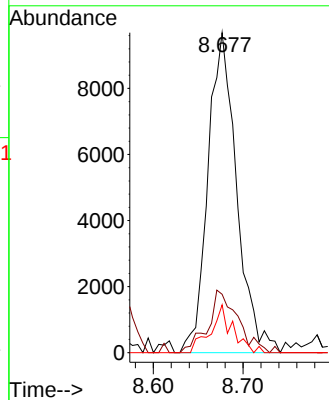
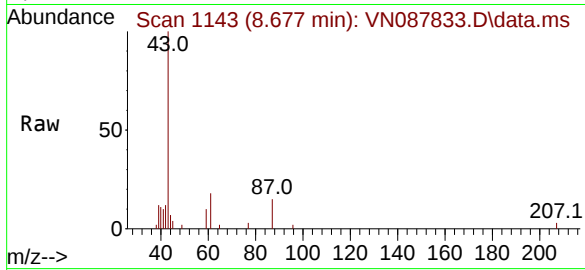




#43
Isopropyl Acetate
Concen: 2.311 ug/l
RT: 8.677 min Scan# 1143
Delta R.T. 0.006 min
Lab File: VN087833.D
Acq: 15 Sep 2025 13:38

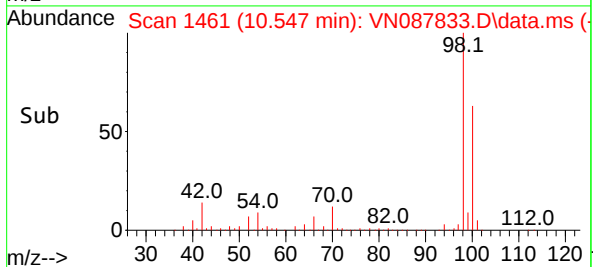
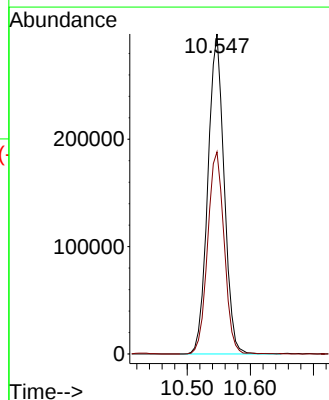
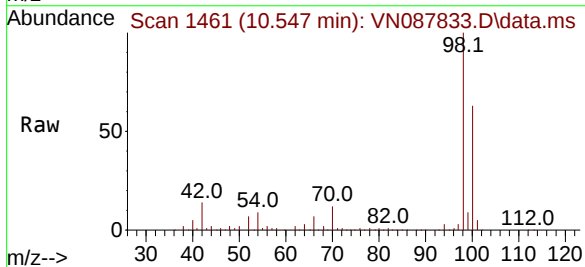
Instrument :
MSVOA_N
ClientSampleId :
291376

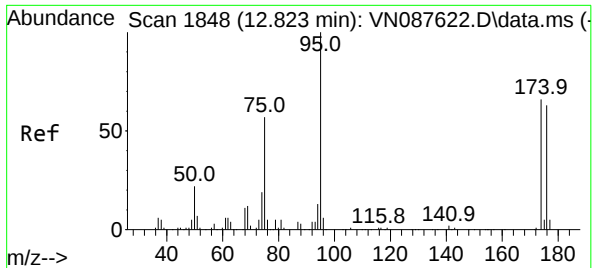
Tgt Ion:	43	Resp:	21560
Ion	Ratio	Lower	Upper
43	100		
61	20.1	18.8	28.2
87	11.5	9.6	14.4



#50
Toluene-d8
Concen: 49.880 ug/l
RT: 10.547 min Scan# 1461
Delta R.T. -0.000 min
Lab File: VN087833.D
Acq: 15 Sep 2025 13:38

Tgt Ion:	98	Resp:	532119
Ion	Ratio	Lower	Upper
98	100		
100	64.2	52.8	79.2

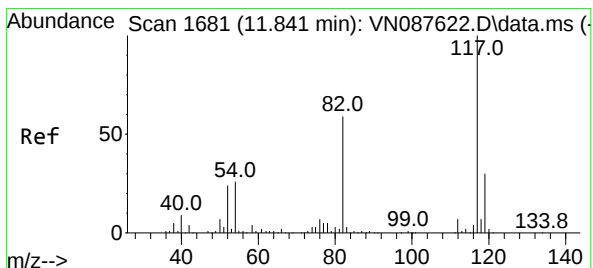
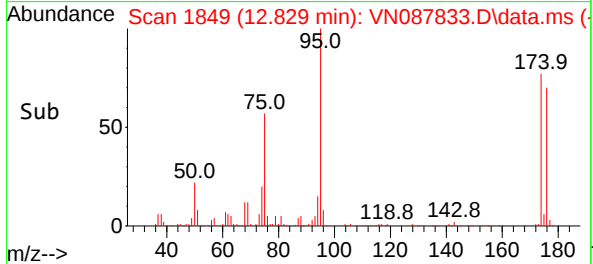
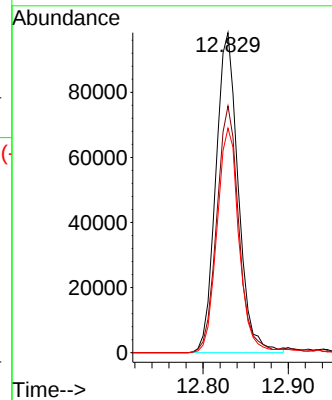
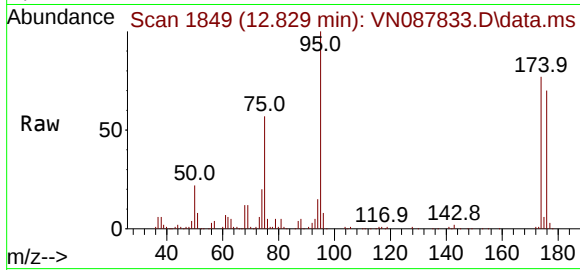




#62
4-Bromofluorobenzene
Concen: 47.513 ug/l
RT: 12.829 min Scan# 1848
Delta R.T. 0.006 min
Lab File: VN087833.D
Acq: 15 Sep 2025 13:38

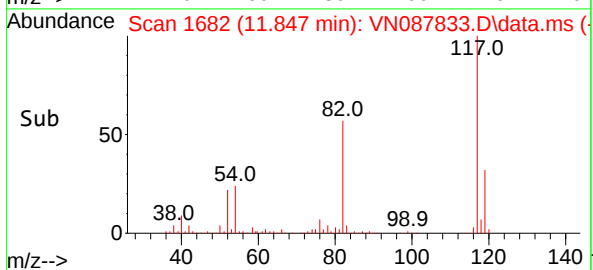
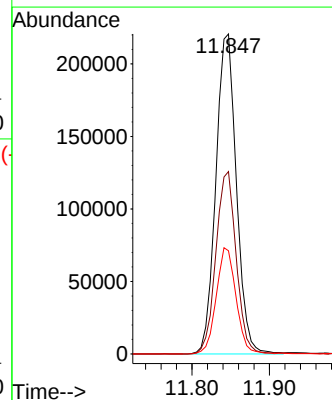
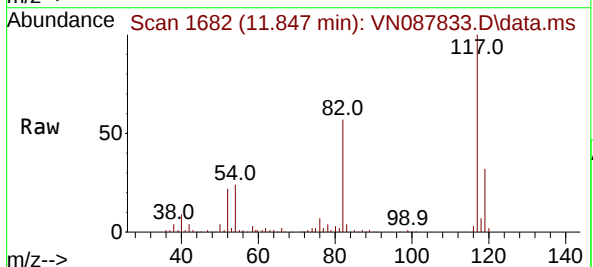
Instrument :
MSVOA_N
ClientSampleId :
291376

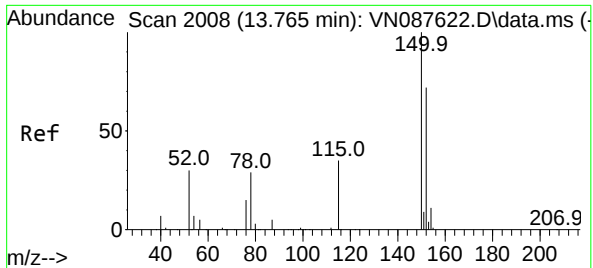
Tgt Ion: 95 Resp: 180259
Ion Ratio Lower Upper
95 100
174 75.7 0.0 138.4
176 69.3 0.0 132.6



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.847 min Scan# 1682
Delta R.T. 0.006 min
Lab File: VN087833.D
Acq: 15 Sep 2025 13:38

Tgt Ion: 117 Resp: 406404
Ion Ratio Lower Upper
117 100
82 57.0 47.4 71.2
119 32.2 24.3 36.5





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.770 min Scan# 20

Delta R.T. 0.006 min

Lab File: VN087833.D

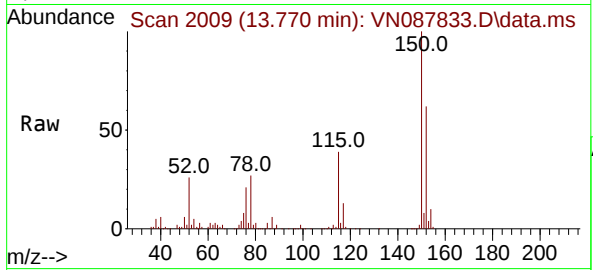
Acq: 15 Sep 2025 13:38

Instrument :

MSVOA_N

ClientSampleId :

291376



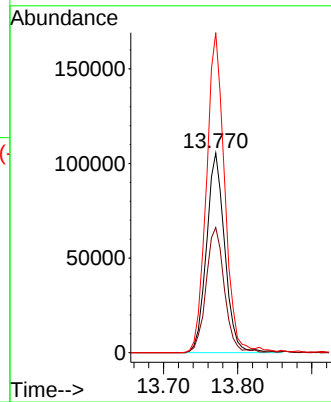
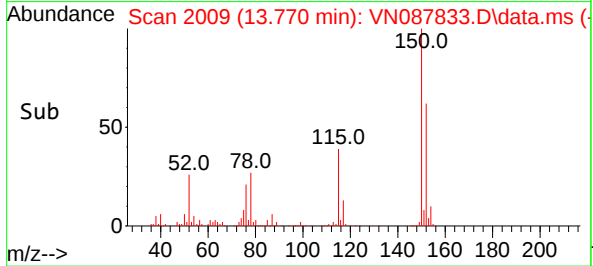
Tgt Ion:152 Resp: 181401

Ion Ratio Lower Upper

152 100

115 62.9 32.3 96.8

150 159.9 0.0 351.0



Report of Analysis

Client:	Atlantic Recovery Services, Inc.	Date Collected:	09/12/25
Project:	PGW Phila. Gas Works	Date Received:	09/12/25
Client Sample ID:	279182	SDG No.:	Q3092
Lab Sample ID:	Q3092-03	Matrix:	TCLP
Analytical Method:	8260D	% 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:	Date Analyzed	Prep Batch ID
VN087835.D	1	09/15/25 14:20	VN091525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-01-4	Vinyl Chloride	0.26	U	0.26	5.00	ug/L
75-35-4	1,1-Dichloroethene	0.23	U	0.23	5.00	ug/L
78-93-3	2-Butanone	9.10	J	0.98	25.0	ug/L
56-23-5	Carbon Tetrachloride	0.25	U	0.25	5.00	ug/L
67-66-3	Chloroform	0.25	U	0.25	5.00	ug/L
71-43-2	Benzene	0.15	U	0.15	5.00	ug/L
107-06-2	1,2-Dichloroethane	0.22	U	0.22	5.00	ug/L
79-01-6	Trichloroethene	0.090	U	0.090	5.00	ug/L
127-18-4	Tetrachloroethene	0.23	U	0.23	5.00	ug/L
108-90-7	Chlorobenzene	0.12	U	0.12	5.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	54.2		74 - 125	108%	SPK: 50
1868-53-7	Dibromofluoromethane	51.4		75 - 124	103%	SPK: 50
2037-26-5	Toluene-d8	49.7		86 - 113	99%	SPK: 50
460-00-4	4-Bromofluorobenzene	46.2		77 - 121	92%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	171000	8.212			
540-36-3	1,4-Difluorobenzene	400000	9.083			
3114-55-4	Chlorobenzene-d5	403000	11.847			
3855-82-1	1,4-Dichlorobenzene-d4	183000	13.77			

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\VN091525\
 Data File : VN087835.D
 Acq On : 15 Sep 2025 14:20
 Operator : JC\MD
 Sample : Q3092-03
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 18 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 279182

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 09/16/2025
 Supervised By :Semsettin Yesilyurt 09/16/2025

Quant Time: Sep 16 01:37:33 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
 Quant Title : SW846 8260
 QLast Update : Fri Aug 22 02:55:42 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	8.212	168	170877	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.083	114	400335	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.847	117	402622	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.770	152	182693	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.559	65	189807	54.214	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 108.420%			
35) Dibromofluoromethane	8.153	113	148459	51.363	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 102.720%			
50) Toluene-d8	10.547	98	537759	49.708	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 99.420%			
62) 4-Bromofluorobenzene	12.829	95	177931	46.248	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 92.500%			
Target Compounds						
16) Acetone	4.418	43	143219	75.146	ug/l	98
18) Methyl Acetate	5.024	43	19489	4.884	ug/l #	79
20) Methylene Chloride	5.265	84	14064m	3.959	ug/l	
25) 2-Butanone	7.477	43	22921	9.141	ug/l #	90
43) Isopropyl Acetate	8.677	43	19452	2.056	ug/l #	91

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

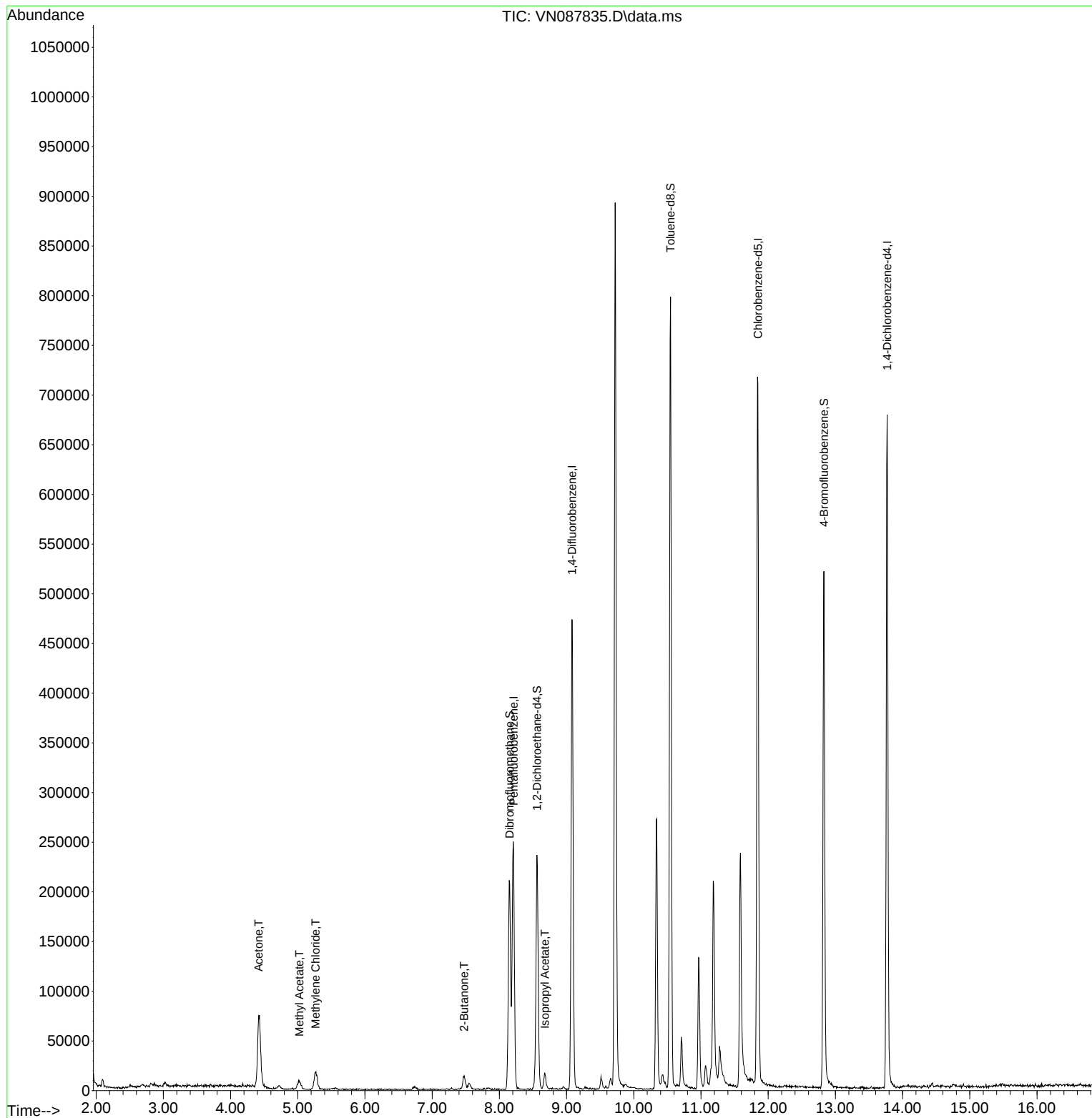
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Data File : VN087835.D
Acq On : 15 Sep 2025 14:20
Operator : JC\MD
Sample : Q3092-03
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 18 Sample Multiplier: 1

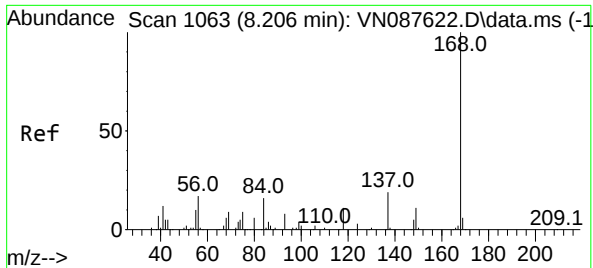
Instrument :
MSVOA_N
ClientSampleId :
279182

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 09/16/2025
Supervised By :Semsettin Yesilyurt 09/16/2025

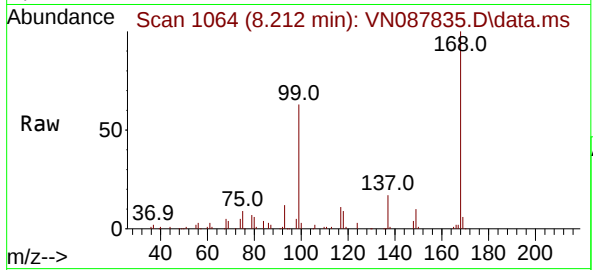
Quant Time: Sep 16 01:37:33 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
Quant Title : SW846 8260
QLast Update : Fri Aug 22 02:55:42 2025
Response via : Initial Calibration





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.212 min Scan# 1064
Delta R.T. 0.006 min
Lab File: VN087835.D
Acq: 15 Sep 2025 14:20

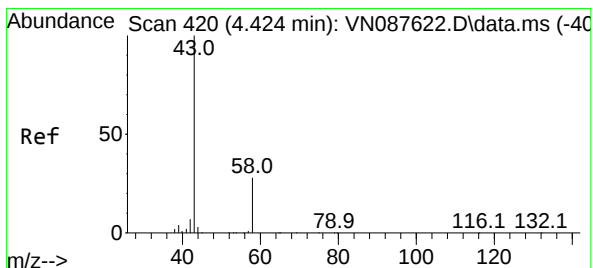
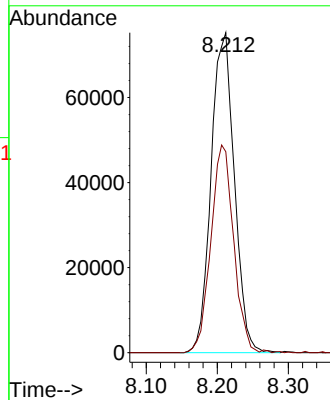
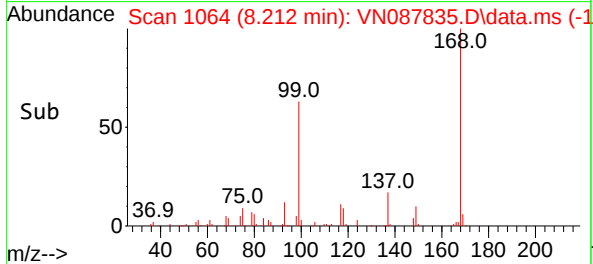
Instrument :
MSVOA_N
ClientSampleId :
279182



Tgt Ion: 168 Resp: 17087
Ion Ratio Lower Upper
168 100
99 62.8 57.2 85.8

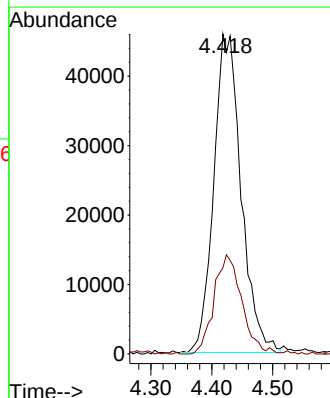
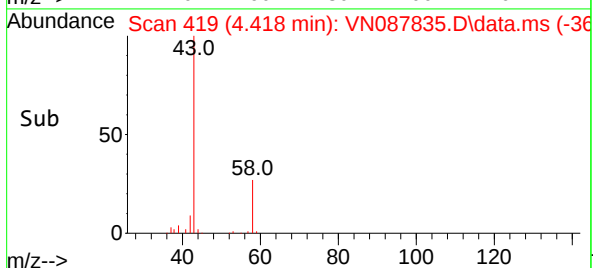
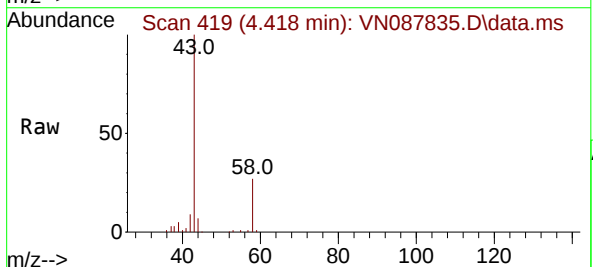
Manual Integrations
APPROVED

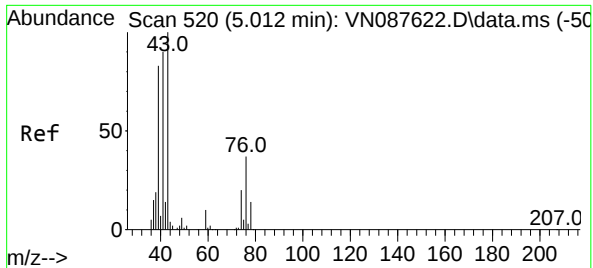
Reviewed By :Mahesh Dadoda 09/16/2025
Supervised By :Semsettin Yesilyurt 09/16/2025



#16
Acetone
Concen: 75.146 ug/l
RT: 4.418 min Scan# 419
Delta R.T. -0.006 min
Lab File: VN087835.D
Acq: 15 Sep 2025 14:20

Tgt Ion: 43 Resp: 143219
Ion Ratio Lower Upper
43 100
58 27.1 22.6 33.8





#18

Methyl Acetate

Concen: 4.884 ug/l

RT: 5.024 min Scan# 51

Delta R.T. 0.012 min

Lab File: VN087835.D

Acq: 15 Sep 2025 14:20

Instrument :

MSVOA_N

ClientSampleId :

279182

Tgt Ion: 43 Resp: 19489

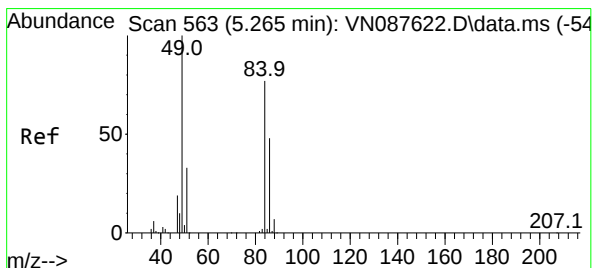
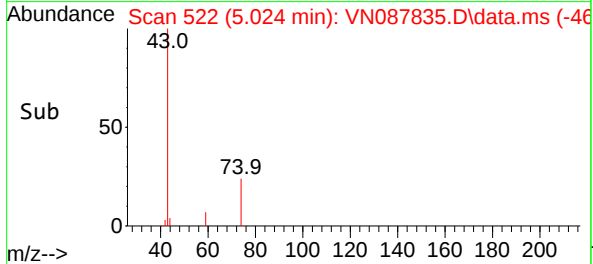
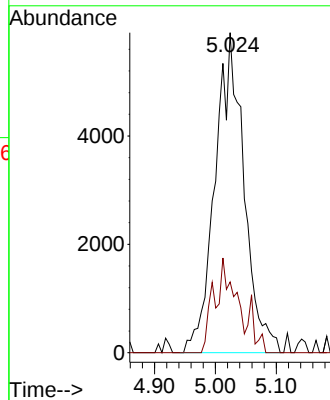
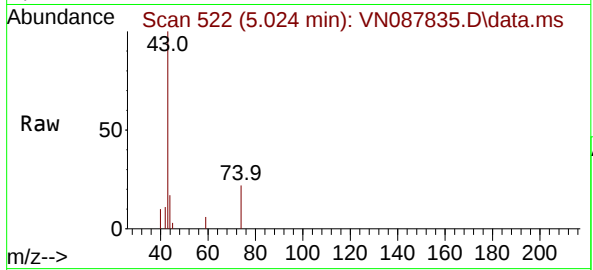
Ion Ratio Lower Upper

43 100

74 11.8 17.6 26.4

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 09/16/2025
Supervised By :Semsettin Yesilyurt 09/16/2025

#20

Methylene Chloride

Concen: 3.959 ug/l m

RT: 5.265 min Scan# 563

Delta R.T. 0.000 min

Lab File: VN087835.D

Acq: 15 Sep 2025 14:20

Tgt Ion: 84 Resp: 14064

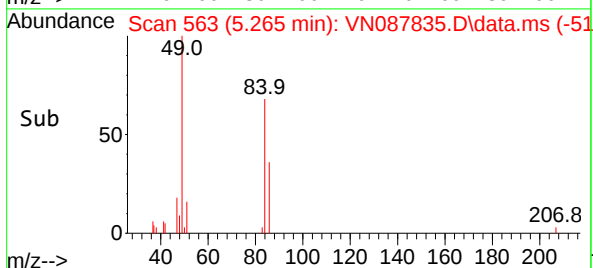
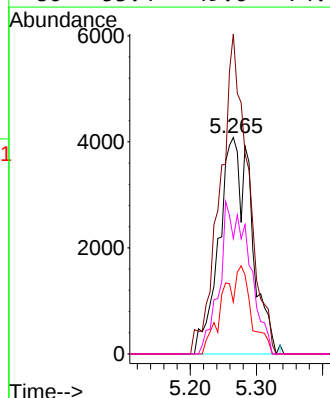
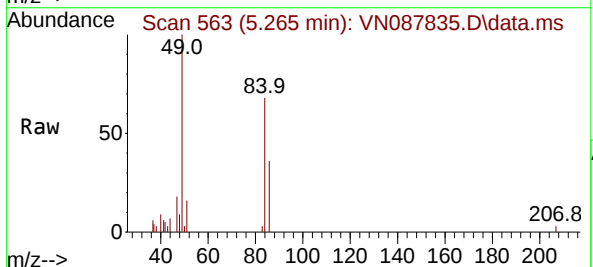
Ion Ratio Lower Upper

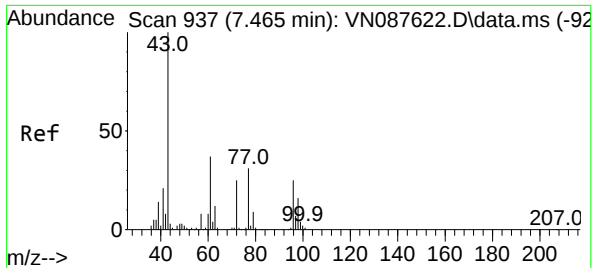
84 100

49 147.8 103.4 155.2

51 24.0 33.8 50.8

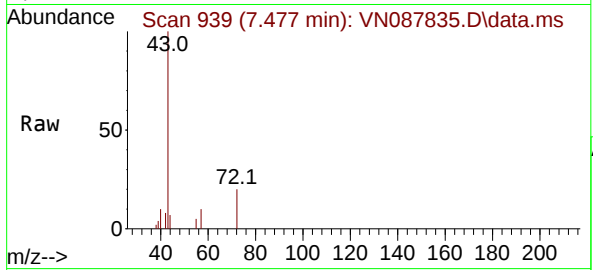
86 53.4 49.6 74.4





#25
2-Butanone
Concen: 9.141 ug/l
RT: 7.477 min Scan# 911
Delta R.T. 0.012 min
Lab File: VN087835.D
Acq: 15 Sep 2025 14:20

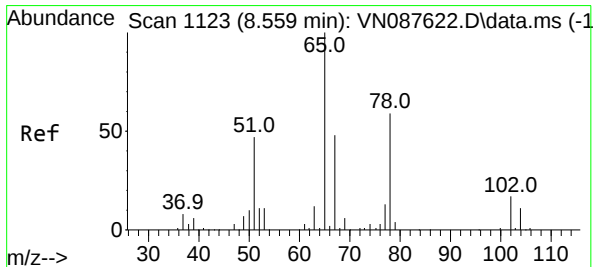
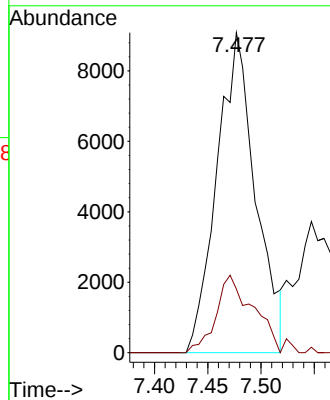
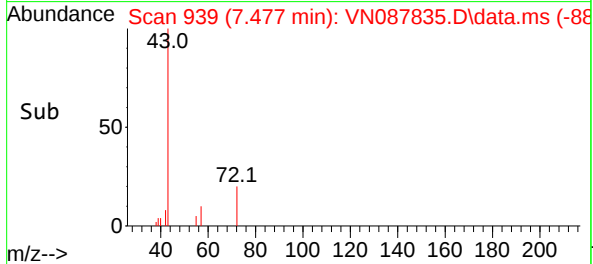
Instrument :
MSVOA_N
ClientSampleId :
279182



Tgt Ion: 43 Resp: 2292
Ion Ratio Lower Upper
43 100
72 19.9 19.9 29.9

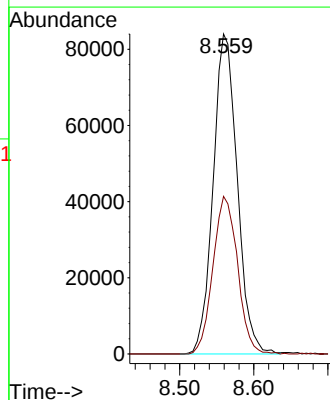
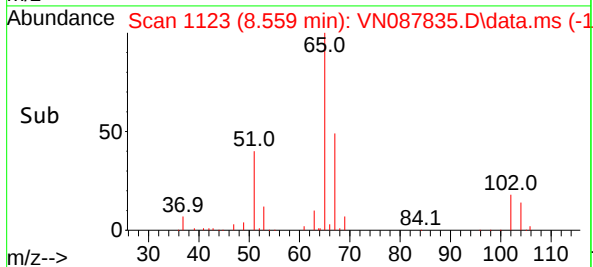
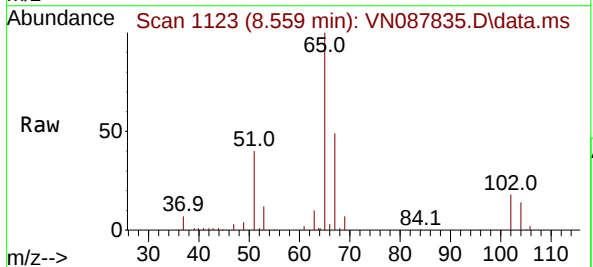
Manual Integrations
APPROVED

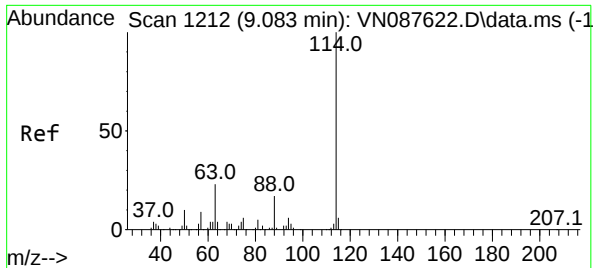
Reviewed By :Mahesh Dadoda 09/16/2025
Supervised By :Semsettin Yesilyurt 09/16/2025



#33
1,2-Dichloroethane-d4
Concen: 54.214 ug/l
RT: 8.559 min Scan# 1123
Delta R.T. -0.000 min
Lab File: VN087835.D
Acq: 15 Sep 2025 14:20

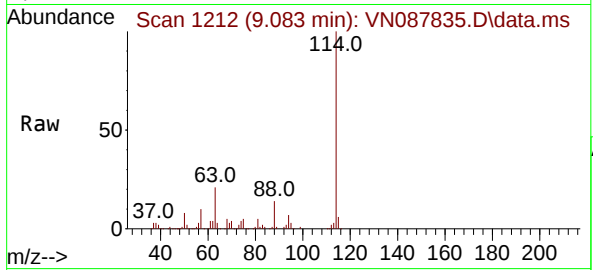
Tgt Ion: 65 Resp: 189807
Ion Ratio Lower Upper
65 100
67 50.3 0.0 100.0





#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.083 min Scan# 1114
Delta R.T. -0.000 min
Lab File: VN087835.D
Acq: 15 Sep 2025 14:20

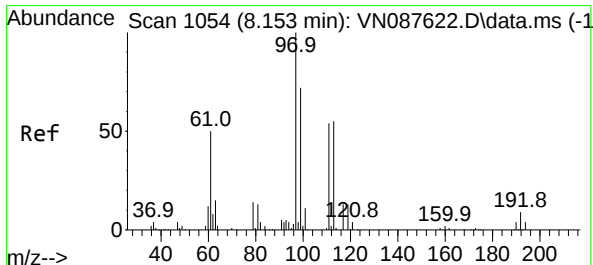
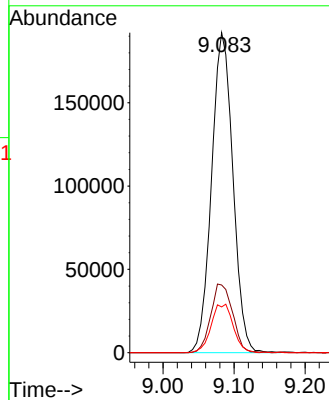
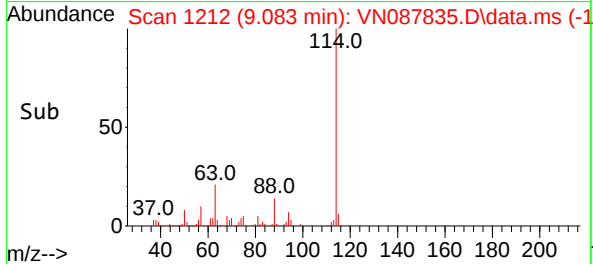
Instrument :
MSVOA_N
ClientSampleId :
279182



Tgt Ion:114 Resp: 400335
Ion Ratio Lower Upper
114 100
63 21.2 0.0 45.2
88 14.3 0.0 33.4

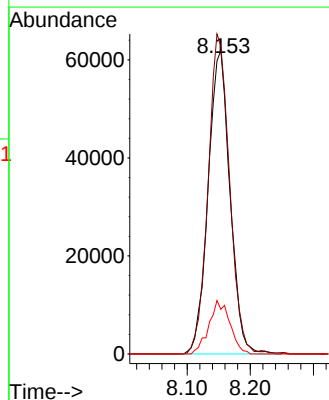
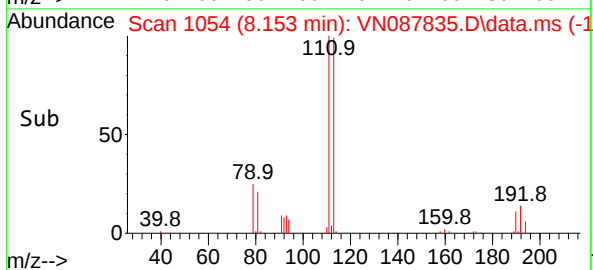
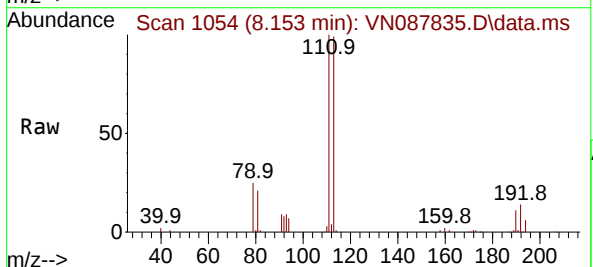
Manual Integrations
APPROVED

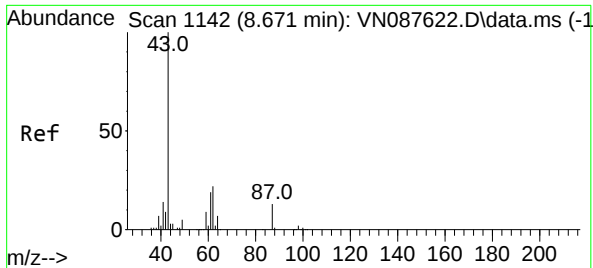
Reviewed By :Mahesh Dadoda 09/16/2025
Supervised By :Semsettin Yesilyurt 09/16/2025



#35
Dibromofluoromethane
Concen: 51.363 ug/l
RT: 8.153 min Scan# 1054
Delta R.T. -0.000 min
Lab File: VN087835.D
Acq: 15 Sep 2025 14:20

Tgt Ion:113 Resp: 148459
Ion Ratio Lower Upper
113 100
111 103.2 82.8 124.2
192 17.0 12.8 19.2





#43

Isopropyl Acetate

Concen: 2.056 ug/l

RT: 8.677 min Scan# 1143

Delta R.T. 0.006 min

Lab File: VN087835.D

Acq: 15 Sep 2025 14:20

Instrument :

MSVOA_N

ClientSampleId :

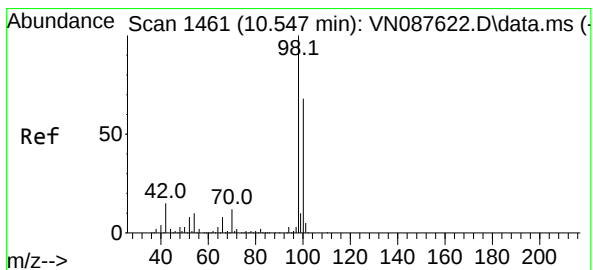
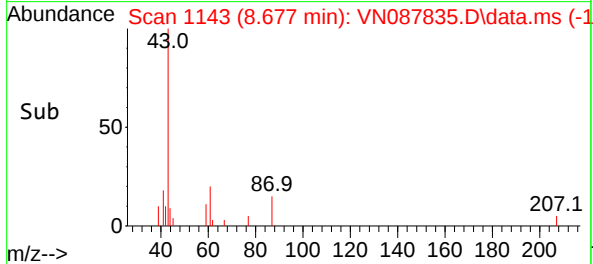
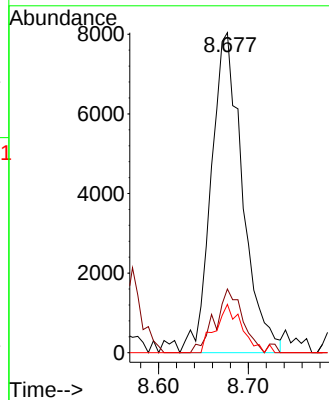
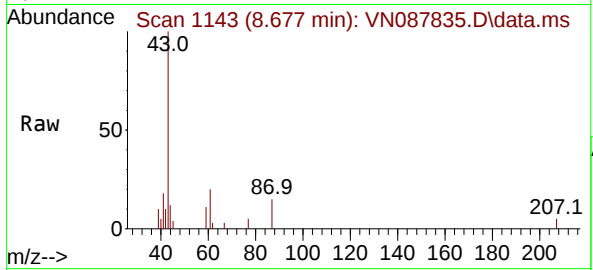
279182

Tgt Ion:	43	Resp:	1945
Ion	Ratio	Lower	Upper
43	100		
61	17.4	18.8	28.2
87	12.8	9.6	14.4

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 09/16/2025
Supervised By :Semsettin Yesilyurt 09/16/2025



#50

Toluene-d8

Concen: 49.708 ug/l

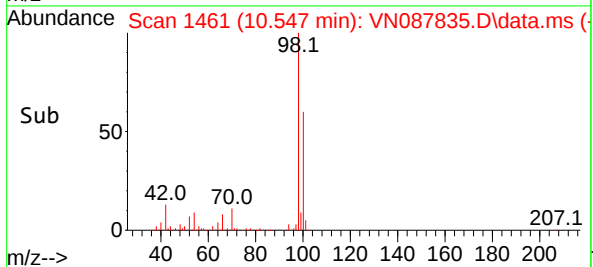
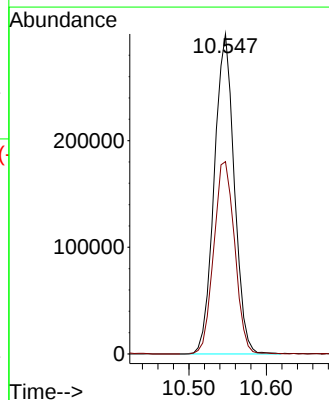
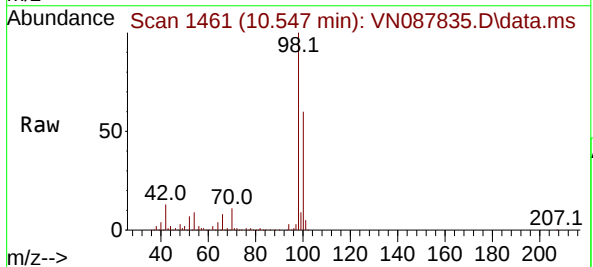
RT: 10.547 min Scan# 1461

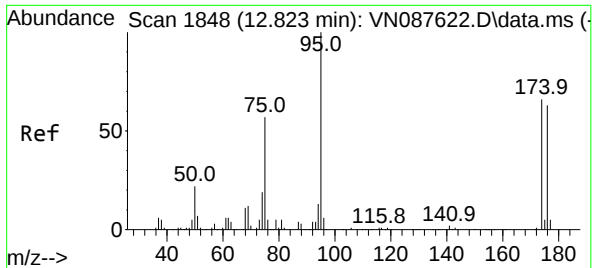
Delta R.T. -0.000 min

Lab File: VN087835.D

Acq: 15 Sep 2025 14:20

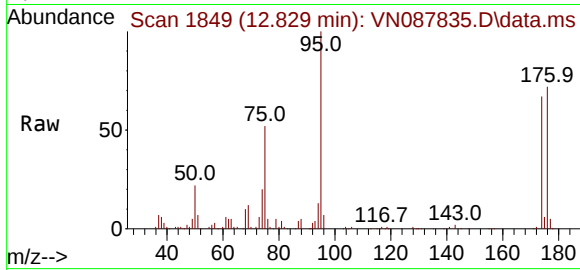
Tgt Ion:	98	Resp:	537759
Ion	Ratio	Lower	Upper
98	100		
100	62.9	52.8	79.2





#62
4-Bromofluorobenzene
Concen: 46.248 ug/l
RT: 12.829 min Scan# 1848
Delta R.T. 0.006 min
Lab File: VN087835.D
Acq: 15 Sep 2025 14:20

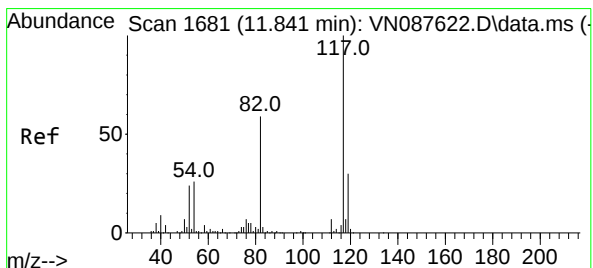
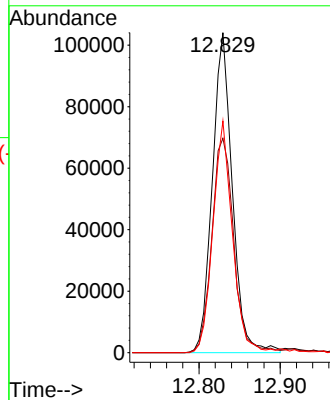
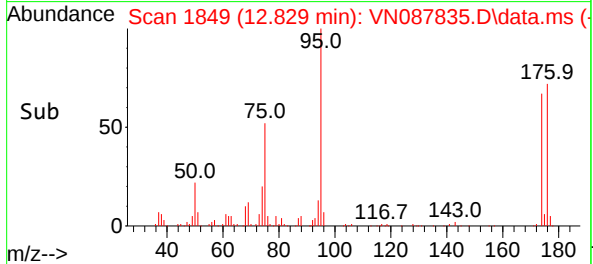
Instrument :
MSVOA_N
ClientSampleId :
279182



Tgt Ion: 95 Resp: 177933
Ion Ratio Lower Upper
95 100
174 73.6 0.0 138.4
176 70.4 0.0 132.6

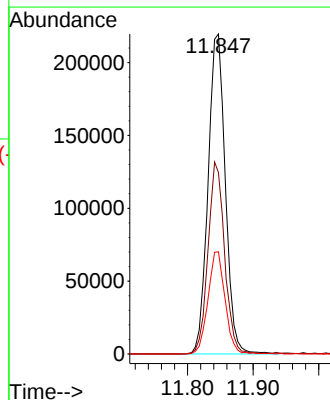
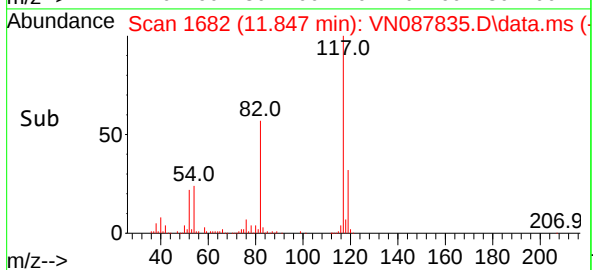
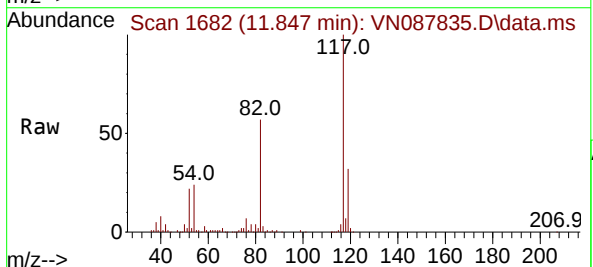
Manual Integrations
APPROVED

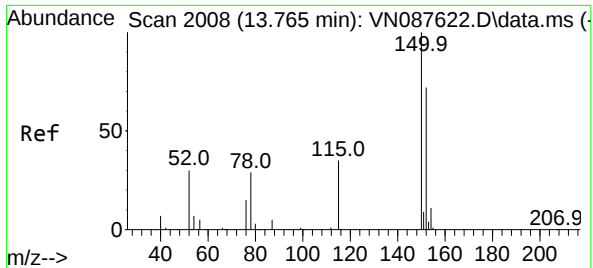
Reviewed By :Mahesh Dadoda 09/16/2025
Supervised By :Semsettin Yesilyurt 09/16/2025



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.847 min Scan# 1682
Delta R.T. 0.006 min
Lab File: VN087835.D
Acq: 15 Sep 2025 14:20

Tgt Ion:117 Resp: 402622
Ion Ratio Lower Upper
117 100
82 56.7 47.4 71.2
119 32.0 24.3 36.5





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.770 min Scan# 20

Delta R.T. 0.006 min

Lab File: VN087835.D

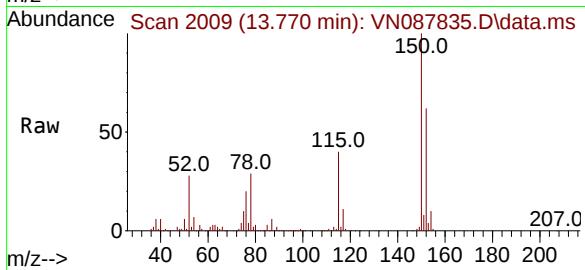
Acq: 15 Sep 2025 14:20

Instrument :

MSVOA_N

ClientSampleId :

279182



Tgt Ion:152 Resp: 18269

Ion Ratio Lower Upper

152 100

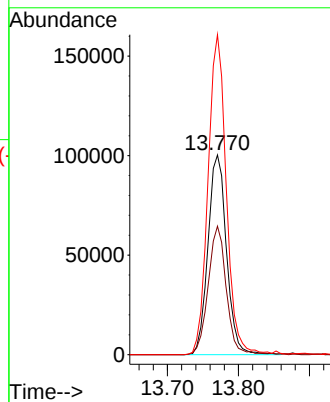
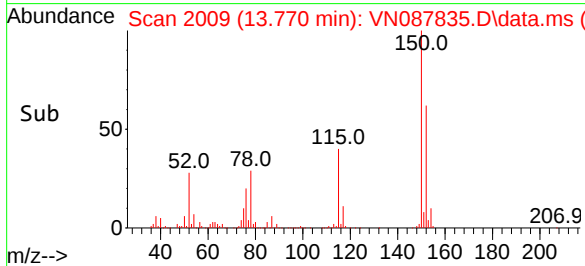
115 62.9 32.3 96.8

150 157.2 0.0 351.0

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 09/16/2025
Supervised By :Semsettin Yesilyurt 09/16/2025





CALIBRATION SUMMARY



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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alliance Contract: ATLA10
 Lab Code: ACE SDG No.: Q3092
 Instrument ID: MSVOA_N Calibration Date(s): 08/21/2025 08/21/2025
 Heated Purge: (Y/N) N Calibration Time(s): 12:09 14:44
 GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID:		RRF001 = VN087619.D		RRF005 = VN087620.D		RRF020 = VN087621.D			
		RRF050 = VN087622.D		RRF100 = VN087623.D		RRF150 = VN087624.D			
COMPOUND	RRF001	RRF005	RRF020	RRF050	RRF100	RRF150	RRF	% RSD	
Vinyl Chloride	0.909	0.739	0.832	0.903	0.847	0.846	0.846	7.3	
1,1-Dichloroethene	0.892	0.649	0.730	0.700	0.667	0.687	0.721	12.3	
2-Butanone	0.783	0.722	0.757	0.732	0.700	0.707	0.734	4.3	
Carbon Tetrachloride	0.571	0.509	0.568	0.542	0.549	0.542	0.547	4.1	
Chloroform	1.677	1.535	1.629	1.579	1.519	1.528	1.578	4	
Benzene	1.853	1.637	1.727	1.684	1.639	1.652	1.699	4.9	
1,2-Dichloroethane	0.714	0.627	0.675	0.650	0.624	0.626	0.653	5.5	
Trichloroethene	0.435	0.387	0.390	0.377	0.367	0.370	0.388	6.5	
Tetrachloroethene	0.447	0.353	0.340	0.313	0.315	0.313	0.347	14.9	
Chlorobenzene	1.408	1.164	1.253	1.210	1.216	1.212	1.244	6.9	
1,2-Dichloroethane-d4		1.025	1.016	0.959	1.035	1.089	1.024	4.5	
Dibromofluoromethane		0.369	0.344	0.334	0.373	0.386	0.361	6	
Toluene-d8		1.384	1.266	1.223	1.408	1.475	1.351	7.7	
4-Bromofluorobenzene		0.446	0.454	0.450	0.514	0.540	0.481	9	

* 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 : 82N082125W.M
 Title : SW846 8260
 Last Update : Fri Aug 22 02:55:42 2025
 Response Via : Initial Calibration

Calibration Files

1 =VN087619.D 5 =VN087620.D 20 =VN087621.D 50 =VN087622.D 100 =VN087623.D 150 =VN087624.D

	Compound	1	5	20	50	100	150	Avg	%RSD
1) I	Pentafluorobenzene	-----ISTD-----							
2) T	Dichlorodifluo...	0.707	0.579	0.606	0.810	0.777	0.782	0.710	13.74
3) P	Chloromethane	0.739	0.637	0.710	0.795	0.752	0.747	0.730	7.27
4) C	Vinyl Chloride	0.909	0.739	0.832	0.903	0.847	0.846	0.846	7.29#
5) T	Bromomethane		0.388	0.393	0.448	0.466	0.488	0.437	10.17
6) T	Chloroethane	0.727	0.528	0.599	0.603	0.558	0.554	0.595	11.88
7) T	Trichlorofluor...	1.323	1.139	1.242	1.274	1.227	1.233	1.240	4.91
8) T	Diethyl Ether	0.637	0.501	0.544	0.529	0.510	0.519	0.540	9.22
9) T	1,1,2-Trichlor...	0.879	0.648	0.677	0.695	0.654	0.656	0.701	12.62
10) T	Methyl Iodide		0.265	0.355	0.481	0.562	0.586	0.450	30.46
11) T	Tert butyl alc...		0.170	0.187	0.184	0.174	0.174	0.178	4.02
12) CM	1,1-Dichloroet...	0.892	0.649	0.730	0.700	0.667	0.687	0.721	12.28#
13) T	Acrolein		0.251	0.198	0.215	0.196	0.233	0.219	10.78
14) T	Allyl chloride	1.577	1.184	1.254	1.240	1.208	1.376	1.306	11.34
15) T	Acrylonitrile	0.555	0.466	0.510	0.498	0.487	0.493	0.502	6.00
16) T	Acetone	0.633	0.634	0.584	0.522	0.484	0.489	0.558	12.34
17) T	Carbon Disulfide	2.272	1.746	1.970	2.003	1.937	1.979	1.985	8.51
18) T	Methyl Acetate	1.450	1.043	1.097	1.157	1.117	1.141	1.168	12.33
19) T	Methyl tert-bu...	2.859	2.508	2.740	2.733	2.643	2.742	2.704	4.37
20) T	Methylene Chlo...	1.494	0.916	0.875	0.823	0.779	0.799	0.948	28.76
21) T	trans-1,2-Dich...	0.952	0.734	0.768	0.750	0.737	0.745	0.781	10.83
22) T	Diisopropyl ether	2.977	2.591	2.903	2.870	2.766	2.807	2.819	4.74
23) T	Vinyl Acetate	2.629	2.379	2.484	2.692	2.576	2.629	2.565	4.46
24) P	1,1-Dichloroet...	1.798	1.500	1.549	1.501	1.454	1.471	1.546	8.28
25) T	2-Butanone	0.783	0.722	0.757	0.732	0.700	0.707	0.734	4.31
26) T	2,2-Dichloropr...	1.500	1.243	1.326	1.317	1.277	1.296	1.327	6.78
27) T	cis-1,2-Dichlo...	0.997	0.916	0.937	0.941	0.908	0.905	0.934	3.67
28) T	Bromochloromet...	0.800	0.781	0.722	0.701	0.748	0.731	0.747	4.95
29) T	Tetrahydrofuran	0.520	0.432	0.479	0.474	0.461	0.468	0.472	6.01
30) C	Chloroform	1.677	1.535	1.629	1.579	1.519	1.528	1.578	4.03#
31) T	Cyclohexane		1.490	1.310	1.234	1.201	1.207	1.289	9.38
32) T	1,1,1-Trichlor...	1.510	1.297	1.359	1.303	1.265	1.288	1.337	6.75
33) S	1,2-Dichloroet...		1.025	1.016	0.959	1.035	1.089	1.024	4.53
34) I	1,4-Difluorobenzene	-----ISTD-----							
35) S	Dibromofluorom...		0.369	0.344	0.334	0.373	0.386	0.361	5.97
36) T	1,1-Dichloropr...	0.700	0.508	0.550	0.528	0.522	0.514	0.554	13.21
37) T	Ethyl Acetate	0.877	0.700	0.761	0.742	0.731	0.731	0.757	8.20
38) T	Carbon Tetrach...	0.571	0.509	0.568	0.542	0.549	0.542	0.547	4.12
39) T	Methylcyclohexane	0.686	0.580	0.610	0.590	0.597	0.596	0.610	6.33
40) TM	Benzene	1.853	1.637	1.727	1.684	1.639	1.652	1.699	4.88
41) T	Methacrylonitrile	0.466	0.346	0.388	0.389	0.384	0.379	0.392	10.06
42) TM	1,2-Dichloroet...	0.714	0.627	0.675	0.650	0.624	0.626	0.653	5.48
43) T	Isopropyl Acetate	1.236	1.076	1.215	1.198	1.187	1.178	1.182	4.71
44) TM	Trichloroethene	0.435	0.387	0.390	0.377	0.367	0.370	0.388	6.46
45) C	1,2-Dichloropr...	0.544	0.435	0.447	0.433	0.415	0.412	0.448	10.96#
46) T	Dibromomethane	0.351	0.294	0.327	0.318	0.310	0.312	0.319	6.06
47) T	Bromodichlorom...	0.686	0.649	0.667	0.638	0.638	0.639	0.653	3.01
48) T	Methyl methacr...	0.598	0.493	0.572	0.558	0.565	0.567	0.559	6.26
49) T	1,4-Dioxane	0.006	0.007	0.008	0.008	0.008	0.007	0.007	11.46
50) S	Toluene-d8		1.384	1.266	1.223	1.408	1.475	1.351	7.68
51) T	4-Methyl-2-Pen...	0.701	0.675	0.744	0.736	0.718	0.704	0.713	3.55
52) CM	Toluene	1.148	0.987	1.062	1.050	1.037	1.033	1.053	5.03#
53) T	t-1,3-Dichloro...	0.620	0.628	0.691	0.703	0.699	0.715	0.676	6.08
54) T	cis-1,3-Dichlo...	0.717	0.640	0.712	0.718	0.714	0.710	0.702	4.32
55) T	1,1,2-Trichlor...	0.439	0.383	0.417	0.408	0.400	0.397	0.407	4.69
56) T	Ethyl methacry...	0.532	0.546	0.681	0.705	0.715	0.727	0.651	13.55

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

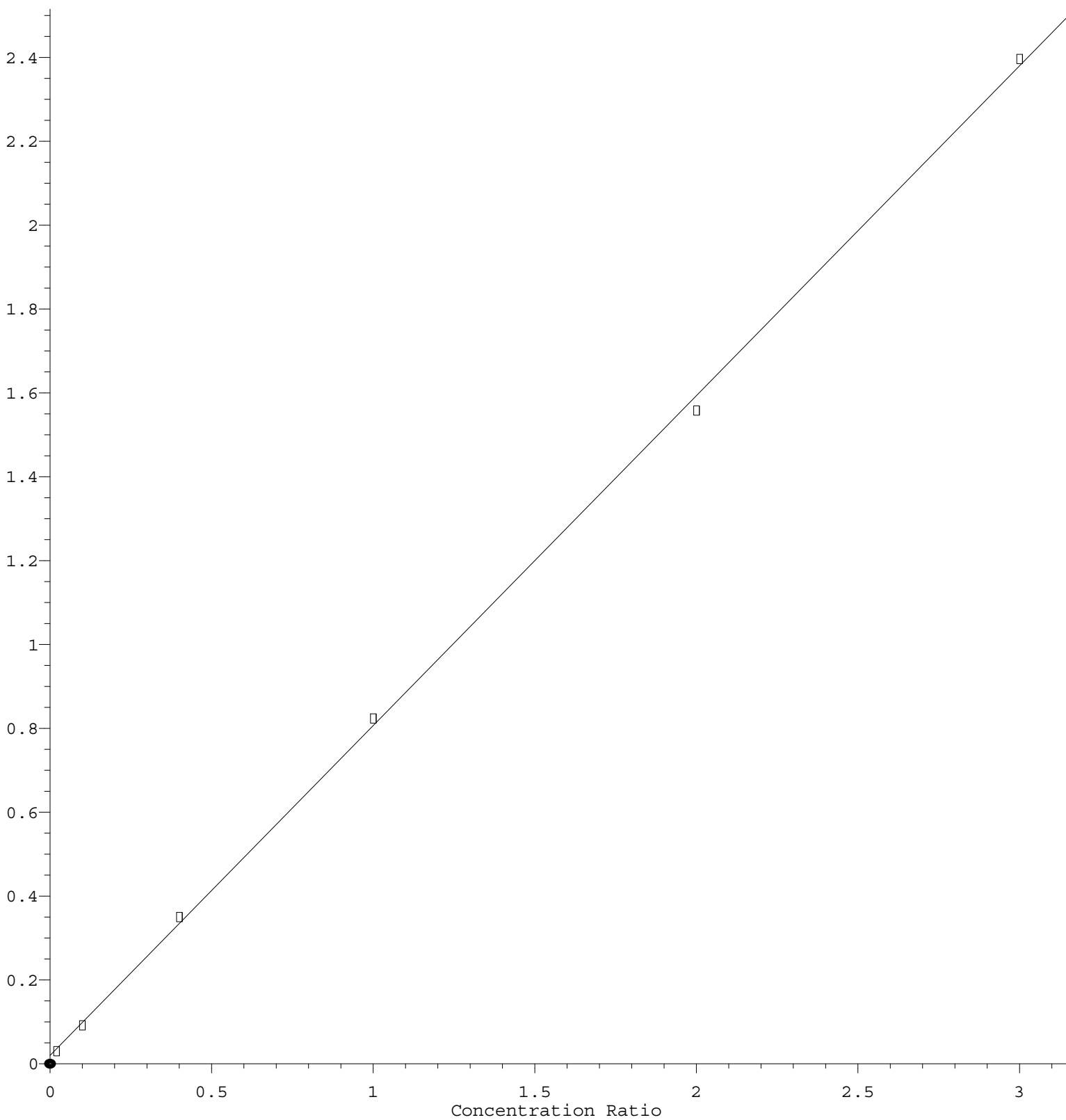
Method File : 82N082125W.M

57)	T	1,3-Dichloropr...	0.781	0.656	0.743	0.731	0.708	0.706	0.721	5.80
58)	T	2-Chloroethyl ...	0.360	0.333	0.305	0.354	0.374	0.388	0.352	8.40
59)	T	2-Hexanone	0.295	0.390	0.493	0.510	0.508	0.507	0.451	19.77
60)	T	Dibromochlorom...	0.535	0.440	0.458	0.466	0.465	0.468	0.472	6.85
61)	T	1,2-Dibromoethane	0.412	0.433	0.444	0.432	0.429	0.427	0.430	2.44
62)	S	4-Bromofluorob...	0.446	0.454	0.450	0.514	0.540	0.481		8.99
63)	I	Chlorobenzene-d5	-----ISTD-----							
64)	T	Tetrachloroethene	0.447	0.353	0.340	0.313	0.315	0.313	0.347	14.89
65)	PM	Chlorobenzene	1.408	1.164	1.253	1.210	1.216	1.212	1.244	6.85
66)	T	1,1,1,2-Tetrac...	0.391	0.404	0.427	0.421	0.416	0.418	0.413	3.14
67)	C	Ethyl Benzene	2.232	1.993	2.224	2.144	2.152	2.178	2.154	4.03#
68)	T	m/p-Xylenes	0.759	0.735	0.811	0.812	0.808	0.814	0.790	4.33
69)	T	o-Xylene	0.777	0.707	0.794	0.796	0.788	0.784	0.774	4.35
70)	T	Styrene	1.142	1.086	1.391	1.382	1.386	1.393	1.297	10.99
71)	P	Bromoform	0.303	0.285	0.320	0.320	0.336	0.336	0.317	6.27
72)	I	1,4-Dichlorobenzen...	-----ISTD-----							
73)	T	Isopropylbenzene	4.328	3.674	4.096	4.026	3.998	4.120	4.040	5.29
74)	T	N-amyl acetate	1.569	1.538	1.265	1.555	1.527	1.733	1.531	9.86
75)	P	1,1,2,2-Tetrac...	1.488	1.381	1.421	1.363	1.322	1.371	1.391	4.12
76)	T	1,2,3-Trichlor...	1.274	1.171	1.188	1.073	1.074	1.256	1.173	7.36
77)	T	Bromobenzene	1.019	0.901	0.988	0.941	0.929	0.938	0.953	4.51
78)	T	n-propylbenzene	5.137	4.545	5.125	5.024	4.965	5.064	4.977	4.44
79)	T	2-Chlorotoluene	2.911	2.953	3.116	2.976	2.975	3.037	2.995	2.41
80)	T	1,3,5-Trimethy...	3.586	3.159	3.498	3.471	3.398	3.452	3.428	4.24
81)	T	trans-1,4-Dich...	0.332	0.416	0.451	0.493	0.523	0.443		16.70
82)	T	4-Chlorotoluene	3.352	3.001	3.225	3.153	3.069	3.093	3.149	3.98
83)	T	tert-Butylbenzene	2.913	2.674	2.899	2.911	2.857	2.884	2.856	3.22
84)	T	1,2,4-Trimethy...	3.502	3.091	3.551	3.496	3.471	3.476	3.431	4.93
85)	T	sec-Butylbenzene	4.464	4.019	4.367	4.225	4.163	4.194	4.239	3.71
86)	T	p-Isopropyltol...	3.656	3.249	3.550	3.530	3.502	3.512	3.500	3.85
87)	T	1,3-Dichlorobe...	2.087	1.770	1.940	1.827	1.806	1.826	1.876	6.29
88)	T	1,4-Dichlorobe...	2.348	1.884	1.956	1.867	1.818	1.841	1.952	10.22
89)	T	n-Butylbenzene	3.764	3.208	3.589	3.461	3.398	3.435	3.476	5.40
90)	T	Hexachloroethane	0.742	0.606	0.680	0.655	0.649	0.669	0.667	6.69
91)	T	1,2-Dichlorobe...	1.942	1.662	1.853	1.755	1.723	1.743	1.780	5.66
92)	T	1,2-Dibromo-3-...	0.370	0.323	0.329	0.317	0.313	0.330	0.330	6.21
93)	T	1,2,4-Trichlor...	1.192	0.995	1.081	1.026	1.040	1.079	1.069	6.43
94)	T	Hexachlorobuta...	0.469	0.371	0.385	0.355	0.346	0.361	0.381	11.80
95)	T	Naphthalene	3.989	3.240	3.724	3.754	3.917	4.089	3.786	7.95
96)	T	1,2,3-Trichlor...	1.140	0.972	1.059	1.006	1.019	1.072	1.045	5.68

(#) = Out of Range

Methylene Chloride

Response Ratio



$$\text{Response} = 7.866\text{e-}001 * \text{Amt} + 2.003\text{e-}002$$

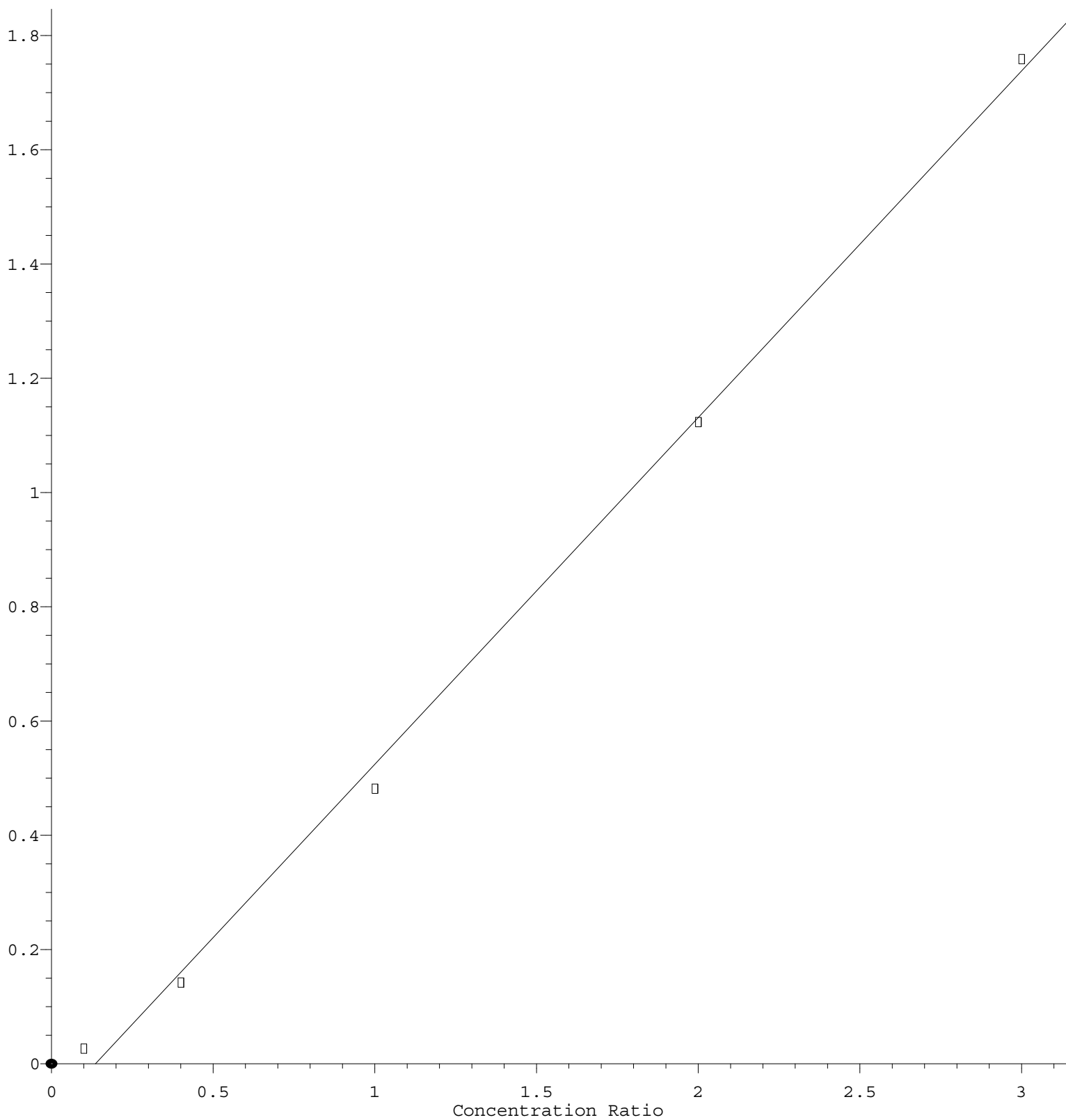
Coef of Det (r^2) = 0.999518 Curve Fit: Linear

Method Name: Z:\voasrv\HPCHEM1\MSVOA N\methods\82N082125W.M

Calibration Table Last Updated: Fri Aug 22 02:55:42 2025

Methyl Iodide

Response Ratio



$$\text{Response} = 6.069\text{e-}001 * \text{Amt} - 8.267\text{e-}002$$

Coef of Det (r^2) = 0.997633 Curve Fit: Linear

Method Name: Z:\voasrv\HPCHEM1\MSVOA N\methods\82N082125W.M

Calibration Table Last Updated: Fri Aug 22 02:55:42 2025

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN082125\
 Data File : VN087619.D
 Acq On : 21 Aug 2025 12:09
 Operator : JC\MD
 Sample : VSTDICC001
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICC001

Manual Integrations
 APPROVED

Reviewed By : John Carlone 08/22/2025
 Supervised By : Mahesh Dadoda 08/25/2025

Quant Time: Aug 22 02:28:55 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
 Quant Title : SW846 8260
 QLast Update : Fri Aug 22 02:09:28 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	8.206	168	214194	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.082	114	425894	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.847	117	384310	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.770	152	174637	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	2.142	85	3030	0.996	ug/l	75
3) Chloromethane	2.389	50	3165	1.012	ug/l #	87
4) Vinyl Chloride	2.542	62	3896	1.075	ug/l	98
6) Chloroethane	3.142	64	3113	1.222	ug/l	89
7) Trichlorofluoromethane	3.518	101	5667	1.067	ug/l	88
8) Diethyl Ether	3.977	74	2728m	1.179	ug/l	
9) 1,1,2-Trichlorotrifluo...	4.371	101	3764	1.253	ug/l #	68
12) 1,1-Dichloroethene	4.353	96	3823	1.238	ug/l #	55
14) Allyl chloride	5.024	41	6754	1.207	ug/l #	70
15) Acrylonitrile	5.706	53	11893	5.535	ug/l #	90
16) Acetone	4.424	43	13568	5.679	ug/l #	75
17) Carbon Disulfide	4.700	76	9734	1.145	ug/l #	90
18) Methyl Acetate	5.012	43	6213m	1.242	ug/l	
19) Methyl tert-butyl Ether	5.794	73	12249	1.057	ug/l	91
20) Methylene Chloride	5.277	84	6402	0.627	ug/l #	57
21) trans-1,2-Dichloroethene	5.777	96	4079	1.219	ug/l	93
22) Diisopropyl ether	6.665	45	12751	1.056	ug/l #	76
23) Vinyl Acetate	6.588	43	56320	5.126	ug/l #	90
24) 1,1-Dichloroethane	6.541	63	7704	1.163	ug/l #	94
25) 2-Butanone	7.471	43	16779	5.338	ug/l	95
26) 2,2-Dichloropropane	7.477	77	6425	1.131	ug/l	77
27) cis-1,2-Dichloroethene	7.477	96	4272	1.068	ug/l	94
28) Bromochloromethane	7.794	49	3426	1.070	ug/l #	91
29) Tetrahydrofuran	7.830	42	11129	5.502	ug/l	98
30) Chloroform	7.953	83	7183	1.063	ug/l	97
32) 1,1,1-Trichloroethane	8.159	97	6468	1.129	ug/l #	52
36) 1,1-Dichloropropene	8.353	75	5965	1.264	ug/l	90
37) Ethyl Acetate	7.547	43	7468m	1.159	ug/l	
38) Carbon Tetrachloride	8.347	117	4866	1.045	ug/l	90
39) Methylcyclohexane	9.582	83	5843	1.125	ug/l #	87
40) Benzene	8.588	78	15783	1.091	ug/l	100
41) Methacrylonitrile	7.771	41	3967	1.188	ug/l #	71
42) 1,2-Dichloroethane	8.659	62	6078	1.093	ug/l	95
43) Isopropyl Acetate	8.677	43	10524	1.046	ug/l #	64
44) Trichloroethene	9.329	130	3709	1.123	ug/l	96
45) 1,2-Dichloropropane	9.594	63	4636	1.216	ug/l	96

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN082125\
 Data File : VN087619.D
 Acq On : 21 Aug 2025 12:09
 Operator : JC\MD
 Sample : VSTDICC001
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICC001

Manual Integrations
 APPROVED

Reviewed By : John Carlone 08/22/2025
 Supervised By : Mahesh Dadoda 08/25/2025

Quant Time: Aug 22 02:28:55 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
 Quant Title : SW846 8260
 QLast Update : Fri Aug 22 02:09:28 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) Dibromomethane	9.694	93	2989	1.101	ug/l	96
47) Bromodichloromethane	9.871	83	5845	1.051	ug/l #	90
48) Methyl methacrylate	9.671	41	5091	1.069	ug/l	94
49) 1,4-Dioxane	9.700	88	1008	16.337	ug/l #	13
51) 4-Methyl-2-Pentanone	10.423	43	29834	4.913	ug/l	99
52) Toluene	10.606	92	9776	1.090	ug/l	92
53) t-1,3-Dichloropropene	10.818	75	5278	0.917	ug/l #	80
54) cis-1,3-Dichloropropene	10.300	75	6105	1.021	ug/l #	80
55) 1,1,2-Trichloroethane	10.994	97	3739	1.078	ug/l #	87
56) Ethyl methacrylate	10.865	69	4529	0.817	ug/l #	89
57) 1,3-Dichloropropane	11.141	76	6652	1.083	ug/l	90
58) 2-Chloroethyl Vinyl ether	10.141	63	15333	5.109	ug/l	100
59) 2-Hexanone	11.200	43	12564	3.274	ug/l	94
60) Dibromochloromethane	11.347	129	4554	1.133	ug/l	93
61) 1,2-Dibromoethane	11.447	107	3511	0.960	ug/l	93
64) Tetrachloroethene	11.076	164	3433	1.288	ug/l #	84
65) Chlorobenzene	11.876	112	10823	1.132	ug/l	98
66) 1,1,1,2-Tetrachloroethane	11.941	131	3009	0.948	ug/l #	64
67) Ethyl Benzene	11.941	91	17159	1.037	ug/l	92
68) m/p-Xylenes	12.047	106	11663	1.921	ug/l	90
69) o-Xylene	12.376	106	5970	1.003	ug/l	100
70) Styrene	12.394	104	8781	0.881	ug/l	97
71) Bromoform	12.559	173	2328	0.956	ug/l #	84
73) Isopropylbenzene	12.676	105	15118	1.071	ug/l	92
74) N-amyl acetate	13.012	43	5481m	1.010	ug/l	
75) 1,1,2,2-Tetrachloroethane	12.917	83	5198	1.070	ug/l	95
76) 1,2,3-Trichloropropane	12.970	75	4451m	1.084	ug/l	
77) Bromobenzene	12.970	156	3560	1.070	ug/l	96
78) n-propylbenzene	13.017	91	17943	1.032	ug/l	98
79) 2-Chlorotoluene	13.112	91	10167	0.972	ug/l	85
80) 1,3,5-Trimethylbenzene	13.147	105	12525	1.046	ug/l	92
82) 4-Chlorotoluene	13.200	91	11708	1.065	ug/l	96
83) tert-Butylbenzene	13.417	119	10175	1.020	ug/l	98
84) 1,2,4-Trimethylbenzene	13.459	105	12231	1.021	ug/l	99
85) sec-Butylbenzene	13.588	105	15591	1.053	ug/l	95
86) p-Isopropyltoluene	13.706	119	12768	1.044	ug/l	98
87) 1,3-Dichlorobenzene	13.717	146	7290	1.113	ug/l	89
88) 1,4-Dichlorobenzene	13.782	146	8201m	1.203	ug/l	
89) n-Butylbenzene	14.029	91	13148	1.083	ug/l	96
90) Hexachloroethane	14.311	117	2591	1.113	ug/l	100
91) 1,2-Dichlorobenzene	14.094	146	6783	1.091	ug/l	93
92) 1,2-Dibromo-3-Chloropr...	14.694	75	1293	1.120	ug/l	83
93) 1,2,4-Trichlorobenzene	15.376	180	4163	1.115	ug/l	88
94) Hexachlorobutadiene	15.470	225	1637	1.230	ug/l	97
95) Naphthalene	15.617	128	13934	1.054	ug/l	98
96) 1,2,3-Trichlorobenzene	15.811	180	3983	1.091	ug/l	89

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

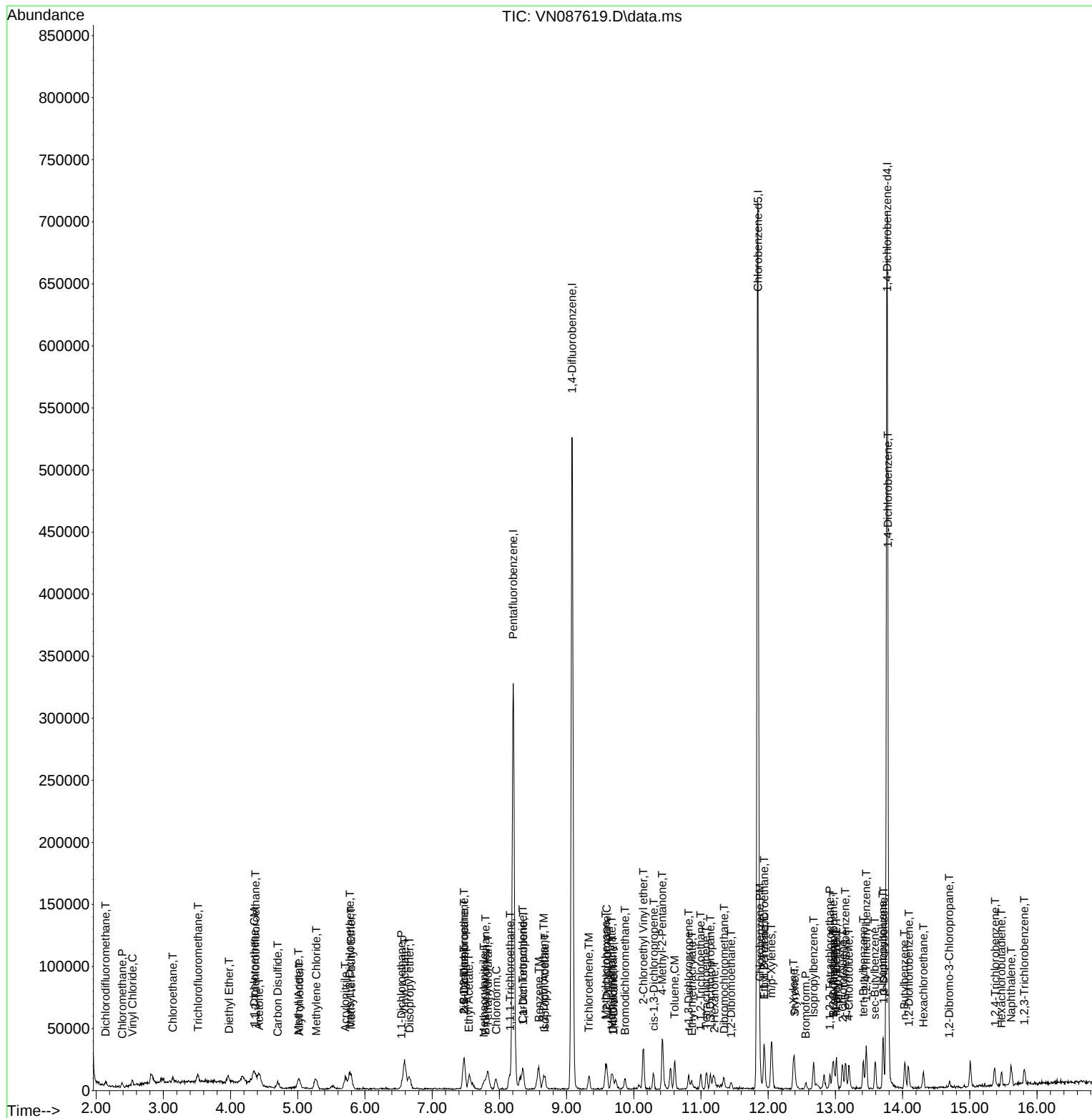
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN082125\
Data File : VN087619.D
Acq On : 21 Aug 2025 12:09
Operator : JC\MD
Sample : VSTDIC001
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :John Carlone 08/22/2025
Supervised By :Mahesh Dadoda 08/25/2025

Quant Time: Aug 22 02:28:55 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
Quant Title : SW846 8260
QLast Update : Fri Aug 22 02:09:28 2025
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN082125\
 Data File : VN087620.D
 Acq On : 21 Aug 2025 13:08
 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 08/22/2025
 Supervised By : Mahesh Dadoda 08/25/2025

Quant Time: Aug 22 02:29:54 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
 Quant Title : SW846 8260
 QLast Update : Fri Aug 22 02:09:28 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	8.206	168	230389	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.082	114	446380	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.841	117	411161	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.770	152	194457	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.559	65	23607	5.001	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery =	10.000%	#	
35) Dibromofluoromethane	8.141	113	16452	5.105	ug/l	-0.01
Spiked Amount 50.000	Range 75 - 124		Recovery =	10.200%	#	
50) Toluene-d8	10.547	98	61777	5.121	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery =	10.240%	#	
62) 4-Bromofluorobenzene	12.829	95	19896	4.638	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery =	9.280%	#	
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.142	85	13341	4.077	ug/l	91
3) Chloromethane	2.383	50	14670	4.363	ug/l #	87
4) Vinyl Chloride	2.542	62	17021	4.366	ug/l	96
5) Bromomethane	2.971	94	8950	4.449	ug/l #	67
6) Chloroethane	3.130	64	12160	4.437	ug/l	99
7) Trichlorofluoromethane	3.512	101	26231	4.592	ug/l #	69
8) Diethyl Ether	3.959	74	11532	4.635	ug/l	91
9) 1,1,2-Trichlorotrifluo...	4.371	101	14929	4.619	ug/l #	85
10) Methyl Iodide	4.583	142	6109	8.995	ug/l	90
11) Tert butyl alcohol	5.530	59	19630	23.954	ug/l #	71
12) 1,1-Dichloroethene	4.336	96	14950	4.501	ug/l	89
13) Acrolein	4.183	56	28918	28.704	ug/l	96
14) Allyl chloride	5.012	41	27277	4.532	ug/l	94
15) Acrylonitrile	5.706	53	53640	23.209	ug/l	99
16) Acetone	4.418	43	73025	28.418	ug/l	97
17) Carbon Disulfide	4.694	76	40223	4.399	ug/l #	94
18) Methyl Acetate	5.012	43	24038	4.468	ug/l #	61
19) Methyl tert-butyl Ether	5.783	73	57783	4.637	ug/l	98
20) Methylene Chloride	5.253	84	21101	4.549	ug/l #	80
21) trans-1,2-Dichloroethene	5.777	96	16922	4.701	ug/l	96
22) Diisopropyl ether	6.653	45	59705	4.596	ug/l	99
23) Vinyl Acetate	6.588	43	274045	23.189	ug/l	98
24) 1,1-Dichloroethane	6.565	63	34563	4.853	ug/l	98
25) 2-Butanone	7.477	43	83189	24.607	ug/l	93
26) 2,2-Dichloropropane	7.482	77	28641	4.685	ug/l	97
27) cis-1,2-Dichloroethene	7.465	96	21105	4.904	ug/l	95
28) Bromochloromethane	7.788	49	17986	5.224	ug/l #	98
29) Tetrahydrofuran	7.830	42	49801	22.890	ug/l	97
30) Chloroform	7.953	83	35366	4.865	ug/l	89
31) Cyclohexane	8.241	56	34337	5.783	ug/l #	96
32) 1,1,1-Trichloroethane	8.147	97	29878	4.850	ug/l	90
36) 1,1-Dichloropropene	8.353	75	22697	4.591	ug/l	96
37) Ethyl Acetate	7.547	43	31230m	4.622	ug/l	
38) Carbon Tetrachloride	8.341	117	22716	4.653	ug/l #	84
39) Methylcyclohexane	9.576	83	25902	4.758	ug/l	91
40) Benzene	8.582	78	73071	4.818	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN082125\
 Data File : VN087620.D
 Acq On : 21 Aug 2025 13:08
 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 08/22/2025
 Supervised By : Mahesh Dadoda 08/25/2025

Quant Time: Aug 22 02:29:54 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
 Quant Title : SW846 8260
 QLast Update : Fri Aug 22 02:09:28 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.759	41	15464	4.419	ug/l #	95
42) 1,2-Dichloroethane	8.653	62	27989	4.803	ug/l	95
43) Isopropyl Acetate	8.671	43	48032	4.554	ug/l	99
44) Trichloroethene	9.329	130	17267	4.987	ug/l	91
45) 1,2-Dichloropropane	9.606	63	19397	4.853	ug/l	95
46) Dibromomethane	9.694	93	13115	4.611	ug/l	91
47) Bromodichloromethane	9.865	83	28992	4.973	ug/l	99
48) Methyl methacrylate	9.659	41	22006	4.411	ug/l	94
49) 1,4-Dioxane	9.682	88	6079	94.002	ug/l #	89
51) 4-Methyl-2-Pentanone	10.423	43	150608	23.665	ug/l	97
52) Toluene	10.606	92	44071	4.688	ug/l	98
53) t-1,3-Dichloropropene	10.812	75	28043	4.647	ug/l	92
54) cis-1,3-Dichloropropene	10.288	75	28580	4.561	ug/l	95
55) 1,1,2-Trichloroethane	10.994	97	17105	4.703	ug/l	96
56) Ethyl methacrylate	10.853	69	24379	4.194	ug/l #	92
57) 1,3-Dichloropropane	11.141	76	29300	4.552	ug/l	96
58) 2-Chloroethyl Vinyl ether	10.141	63	74236	23.598	ug/l	100
59) 2-Hexanone	11.182	43	87097	21.654	ug/l	98
60) Dibromochloromethane	11.335	129	19653	4.664	ug/l	100
61) 1,2-Dibromoethane	11.447	107	19347	5.045	ug/l	93
64) Tetrachloroethene	11.082	164	14530	5.094	ug/l #	82
65) Chlorobenzene	11.870	112	47879	4.681	ug/l	99
66) 1,1,1,2-Tetrachloroethane	11.935	131	16599	4.888	ug/l	88
67) Ethyl Benzene	11.941	91	81935	4.626	ug/l	98
68) m/p-Xylenes	12.053	106	60444	9.306	ug/l	96
69) o-Xylene	12.376	106	29064	4.566	ug/l	98
70) Styrene	12.388	104	44658	4.188	ug/l	93
71) Bromoform	12.559	173	11710	4.496	ug/l #	92
73) Isopropylbenzene	12.670	105	71448	4.547	ug/l	98
74) N-amyl acetate	12.670	43	29903m	4.946	ug/l	
75) 1,1,2,2-Tetrachloroethane	12.917	83	26850	4.963	ug/l	95
76) 1,2,3-Trichloropropane	12.976	75	22762m	4.980	ug/l	
77) Bromobenzene	12.959	156	17527	4.731	ug/l	97
78) n-propylbenzene	13.012	91	88388	4.567	ug/l	99
79) 2-Chlorotoluene	13.100	91	57432	4.931	ug/l	94
80) 1,3,5-Trimethylbenzene	13.153	105	61434	4.609	ug/l	99
81) trans-1,4-Dichloro-2-b...	12.717	75	6458	3.749	ug/l	87
82) 4-Chlorotoluene	13.200	91	58355	4.765	ug/l	96
83) tert-Butylbenzene	13.417	119	51989	4.680	ug/l	98
84) 1,2,4-Trimethylbenzene	13.464	105	60099	4.504	ug/l	98
85) sec-Butylbenzene	13.594	105	78154	4.741	ug/l	98
86) p-Isopropyltoluene	13.706	119	63187	4.642	ug/l	98
87) 1,3-Dichlorobenzene	13.711	146	34424	4.718	ug/l	100
88) 1,4-Dichlorobenzene	13.788	146	36629	4.824	ug/l	95
89) n-Butylbenzene	14.035	91	62374	4.614	ug/l	99
90) Hexachloroethane	14.306	117	11787	4.545	ug/l	98
91) 1,2-Dichlorobenzene	14.088	146	32320	4.669	ug/l	98
92) 1,2-Dibromo-3-Chloropr...	14.694	75	6280	4.887	ug/l	86
93) 1,2,4-Trichlorobenzene	15.364	180	19345	4.654	ug/l	97
94) Hexachlorobutadiene	15.470	225	7207	4.864	ug/l	96
95) Naphthalene	15.611	128	63009	4.280	ug/l	99
96) 1,2,3-Trichlorobenzene	15.811	180	18896	4.650	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN082125\
Data File : VN087620.D
Acq On : 21 Aug 2025 13:08
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 08/22/2025
Supervised By :Mahesh Dadoda 08/25/2025

Quant Time: Aug 22 02:29:54 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
Quant Title : SW846 8260
QLast Update : Fri Aug 22 02:09:28 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
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(#) = qualifier out of range (m) = manual integration (+) = signals summed

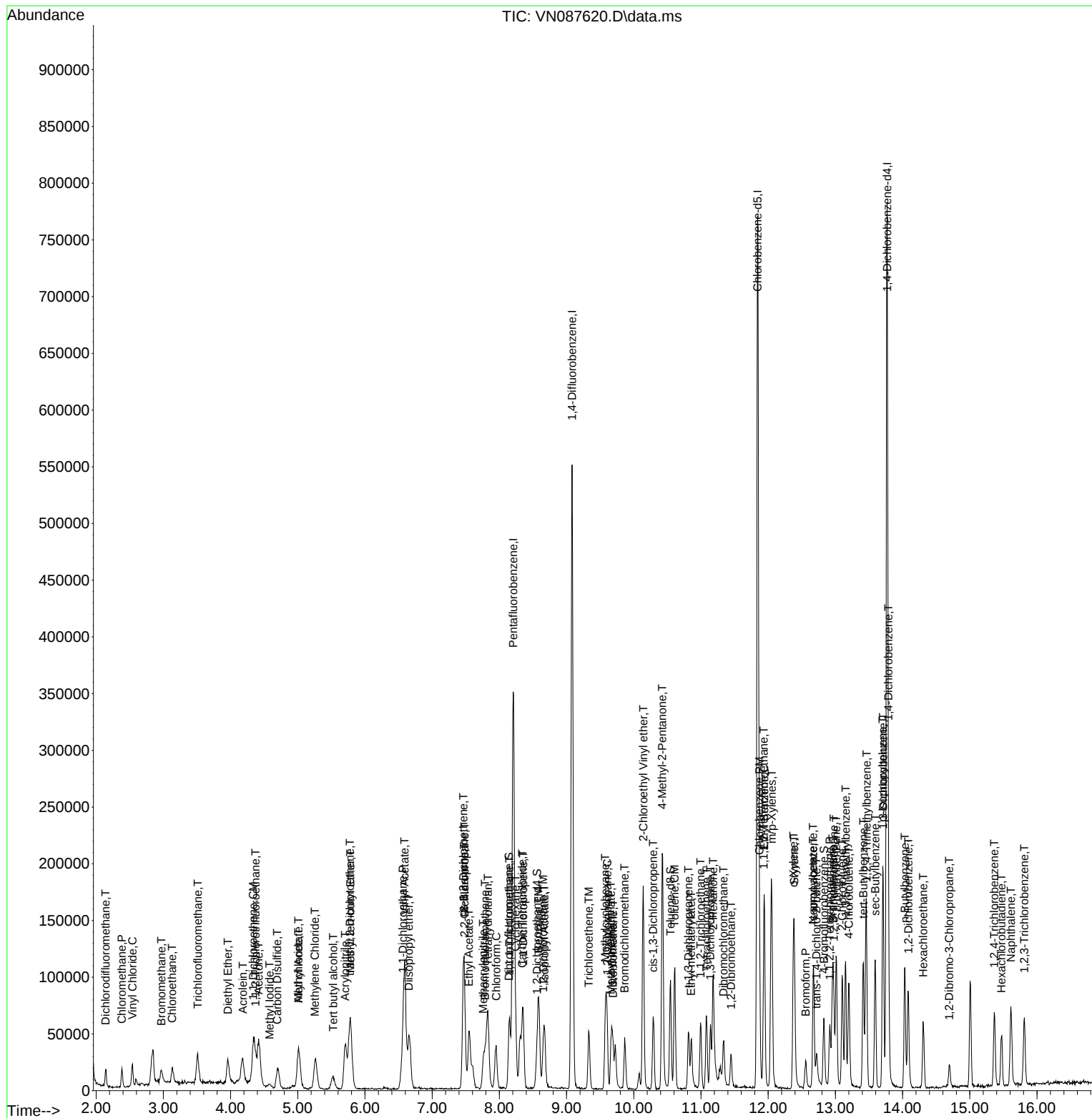
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Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN082125\  
Data File : VN087620.D  
Acq On    : 21 Aug 2025  13:08  
Operator  : JC\MD  
Sample    : VSTDIC005  
Misc      : 5.0mL/MSVOA_N/WATER  
ALS Vial  : 8    Sample Multiplier: 1
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Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :John Carlone 08/22/2025
Supervised By :Mahesh Dadoda 08/25/2025

Quant Time: Aug 22 02:29:54 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
Quant Title : SW846 8260
QLast Update : Fri Aug 22 02:09:28 2025
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN082125\
 Data File : VN087621.D
 Acq On : 21 Aug 2025 13:41
 Operator : JC\MD
 Sample : VSTDIC020
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDIC020

Quant Time: Aug 22 02:30:54 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
 Quant Title : SW846 8260
 QLast Update : Fri Aug 22 02:09:28 2025
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By :John Carlone 08/22/2025
 Supervised By :Mahesh Dadoda 08/25/2025

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

Internal Standards						
1) Pentafluorobenzene	8.206	168	225514	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.083	114	446006	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.841	117	409187	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.771	152	204594	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.559	65	91607	19.826	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery =	39.660%#		
35) Dibromofluoromethane	8.153	113	61315	19.041	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	38.080%#		
50) Toluene-d8	10.547	98	225931	18.746	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery =	37.500%#		
62) 4-Bromofluorobenzene	12.829	95	80936	18.883	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery =	37.760%#		
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.142	85	54651	17.063	ug/l	96
3) Chloromethane	2.383	50	64072	19.466	ug/l	95
4) Vinyl Chloride	2.536	62	75059	19.667	ug/l	99
5) Bromomethane	2.971	94	35415	17.984	ug/l	90
6) Chloroethane	3.136	64	54039	20.146	ug/l	98
7) Trichlorofluoromethane	3.506	101	112067	20.042	ug/l	92
8) Diethyl Ether	3.954	74	49068	20.150	ug/l	97
9) 1,1,2-Trichlorotrifluo...	4.365	101	61080	19.305	ug/l	96
10) Methyl Iodide	4.583	142	32047	18.518	ug/l #	97
11) Tert butyl alcohol	5.524	59	84156	104.914	ug/l	98
12) 1,1-Dichloroethene	4.336	96	65870	20.259	ug/l	93
13) Acrolein	4.171	56	89266	90.522	ug/l	99
14) Allyl chloride	5.012	41	113139	19.202	ug/l	96
15) Acrylonitrile	5.706	53	230008	101.673	ug/l	99
16) Acetone	4.418	43	263348	104.700	ug/l	97
17) Carbon Disulfide	4.701	76	177734	19.857	ug/l	100
18) Methyl Acetate	5.012	43	98949	18.789	ug/l	97
19) Methyl tert-butyl Ether	5.789	73	247157	20.264	ug/l	99
20) Methylene Chloride	5.265	84	78920	20.972	ug/l	96
21) trans-1,2-Dichloroethene	5.777	96	69321	19.672	ug/l	95
22) Diisopropyl ether	6.653	45	261888	20.597	ug/l	97
23) Vinyl Acetate	6.589	43	1120284	96.845	ug/l	99
24) 1,1-Dichloroethane	6.553	63	139765	20.048	ug/l	99
25) 2-Butanone	7.465	43	341538	103.210	ug/l	99
26) 2,2-Dichloropropane	7.477	77	119616	19.991	ug/l	99
27) cis-1,2-Dichloroethene	7.471	96	84502	20.059	ug/l	97
28) Bromochloromethane	7.800	49	65173	19.338	ug/l	97
29) Tetrahydrofuran	7.830	42	215847	101.354	ug/l	98
30) Chloroform	7.947	83	146915	20.647	ug/l	99
31) Cyclohexane	8.241	56	118194	20.337	ug/l	98
32) 1,1,1-Trichloroethane	8.147	97	122634	20.336	ug/l	99
36) 1,1-Dichloropropene	8.353	75	98127	19.863	ug/l	98
37) Ethyl Acetate	7.547	43	135691	20.101	ug/l	97
38) Carbon Tetrachloride	8.341	117	101311	20.771	ug/l	92
39) Methylcyclohexane	9.577	83	108801	20.005	ug/l	97
40) Benzene	8.588	78	308160	20.338	ug/l	95

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN082125\
 Data File : VN087621.D
 Acq On : 21 Aug 2025 13:41
 Operator : JC\MD
 Sample : VSTDICC020
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 9 Sample Multiplier: 1

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC020

Manual Integrations

APPROVED

Reviewed By :John Carlone 08/22/2025

Supervised By :Mahesh Dadoda 08/25/2025

Quant Time: Aug 22 02:30:54 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M

Quant Title : SW846 8260

QLast Update : Fri Aug 22 02:09:28 2025

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.765	41	69274	19.811	ug/l	98
42) 1,2-Dichloroethane	8.653	62	120495	20.694	ug/l	98
43) Isopropyl Acetate	8.671	43	216674	20.559	ug/l	99
44) Trichloroethene	9.336	130	69650	20.134	ug/l	92
45) 1,2-Dichloropropane	9.600	63	79779	19.975	ug/l	99
46) Dibromomethane	9.688	93	58410	20.551	ug/l	99
47) Bromodichloromethane	9.871	83	118959	20.423	ug/l	90
48) Methyl methacrylate	9.665	41	101988	20.458	ug/l	99
49) 1,4-Dioxane	9.688	88	29266	452.929	ug/l #	99
51) 4-Methyl-2-Pentanone	10.424	43	663566	104.353	ug/l	100
52) Toluene	10.612	92	189511	20.175	ug/l	100
53) t-1,3-Dichloropropene	10.818	75	123317	20.453	ug/l	98
54) cis-1,3-Dichloropropene	10.294	75	127086	20.300	ug/l	97
55) 1,1,2-Trichloroethane	10.994	97	74360	20.463	ug/l	96
56) Ethyl methacrylate	10.859	69	121534	20.928	ug/l	97
57) 1,3-Dichloropropane	11.141	76	132575	20.615	ug/l	99
58) 2-Chloroethyl Vinyl ether	10.141	63	272481	86.689	ug/l	100
59) 2-Hexanone	11.177	43	439624	109.392	ug/l	99
60) Dibromochloromethane	11.335	129	81730	19.411	ug/l	99
61) 1,2-Dibromoethane	11.447	107	79247	20.682	ug/l	97
64) Tetrachloroethene	11.082	164	55688	19.616	ug/l	97
65) Chlorobenzene	11.871	112	205088	20.146	ug/l	92
66) 1,1,1,2-Tetrachloroethane	11.935	131	69837	20.664	ug/l	99
67) Ethyl Benzene	11.941	91	364023	20.653	ug/l	98
68) m/p-Xylenes	12.053	106	265461	41.067	ug/l	99
69) o-Xylene	12.377	106	129958	20.515	ug/l	99
70) Styrene	12.388	104	227729	21.458	ug/l	100
71) Bromoform	12.559	173	52443	20.233	ug/l #	98
73) Isopropylbenzene	12.676	105	335219	20.276	ug/l	99
74) N-amyl acetate	12.547	43	103508m	16.273	ug/l	
75) 1,1,2,2-Tetrachloroethane	12.918	83	116302	20.433	ug/l	99
76) 1,2,3-Trichloropropane	12.976	75	97260m	20.223	ug/l	
77) Bromobenzene	12.959	156	80835	20.737	ug/l	98
78) n-propylbenzene	13.012	91	419422	20.596	ug/l	99
79) 2-Chlorotoluene	13.106	91	255043	20.812	ug/l	99
80) 1,3,5-Trimethylbenzene	13.153	105	286272	20.412	ug/l	99
81) trans-1,4-Dichloro-2-b...	12.718	75	34072	18.801	ug/l	88
82) 4-Chlorotoluene	13.200	91	263916	20.483	ug/l	99
83) tert-Butylbenzene	13.418	119	237268	20.302	ug/l	99
84) 1,2,4-Trimethylbenzene	13.459	105	290636	20.701	ug/l	99
85) sec-Butylbenzene	13.594	105	357394	20.607	ug/l	99
86) p-Isopropyltoluene	13.706	119	290561	20.288	ug/l	99
87) 1,3-Dichlorobenzene	13.712	146	158749	20.680	ug/l	97
88) 1,4-Dichlorobenzene	13.788	146	160067	20.037	ug/l	98
89) n-Butylbenzene	14.035	91	293738	20.652	ug/l	99
90) Hexachloroethane	14.312	117	55637	20.391	ug/l	98
91) 1,2-Dichlorobenzene	14.082	146	151644	20.823	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.694	75	26895	19.891	ug/l	96
93) 1,2,4-Trichlorobenzene	15.365	180	88494	20.236	ug/l	97
94) Hexachlorobutadiene	15.476	225	31498	20.203	ug/l	97
95) Naphthalene	15.612	128	304789	19.677	ug/l	99
96) 1,2,3-Trichlorobenzene	15.812	180	86694	20.278	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN082125\
Data File : VN087621.D
Acq On : 21 Aug 2025 13:41
Operator : JC\MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

Reviewed By :John Carlone 08/22/2025
Supervised By :Mahesh Dadoda 08/25/2025

Quant Time: Aug 22 02:30:54 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
Quant Title : SW846 8260
QLast Update : Fri Aug 22 02:09:28 2025
Response via : Initial Calibration

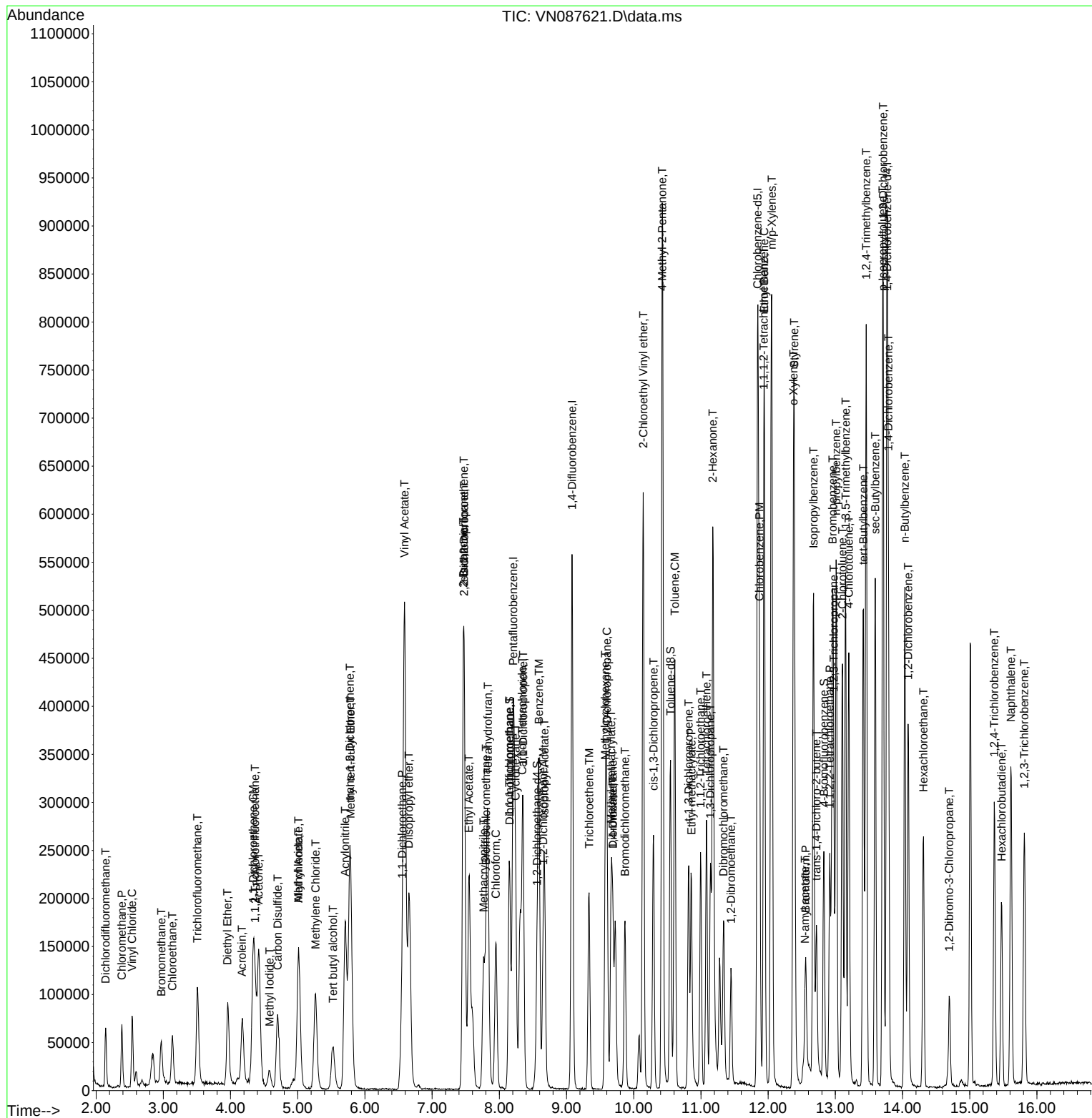
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
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(#) = qualifier out of range (m) = manual integration (+) = signals summed

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations

Reviewed By :John Carlone 08/22/2025
Supervised By :Mahesh Dadoda 08/25/2025



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN082125\
 Data File : VN087622.D
 Acq On : 21 Aug 2025 14:02
 Operator : JC\MD
 Sample : VSTDICCC050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICCC050

Quant Time: Aug 22 02:32:41 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
 Quant Title : SW846 8260
 QLast Update : Fri Aug 22 02:09:28 2025
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By : John Carlone 08/22/2025
 Supervised By : Mahesh Dadoda 08/25/2025

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

Internal Standards						
1) Pentafluorobenzene	8.206	168	234546	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.083	114	468145	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.841	117	438262	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.765	152	220862	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.559	65	224856	46.791	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery =	93.580%		
35) Dibromofluoromethane	8.153	113	156332	46.252	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	92.500%		
50) Toluene-d8	10.547	98	572648	45.266	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery =	90.540%		
62) 4-Bromofluorobenzene	12.823	95	210592	46.809	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery =	93.620%		
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	2.142	85	189901	57.007	ug/l	100
3) Chloromethane	2.383	50	186373	54.441	ug/l	100
4) Vinyl Chloride	2.542	62	211909	53.387	ug/l	100
5) Bromomethane	2.971	94	105105	51.318	ug/l	100
6) Chloroethane	3.136	64	141335	50.661	ug/l	100
7) Trichlorofluoromethane	3.512	101	298853	51.389	ug/l	100
8) Diethyl Ether	3.953	74	124074	48.989	ug/l	100
9) 1,1,2-Trichlorotrifluo...	4.365	101	162971	49.526	ug/l	100
10) Methyl Iodide	4.577	142	112901	46.467	ug/l	100
11) Tert butyl alcohol	5.518	59	216189	259.137	ug/l	100
12) 1,1-Dichloroethene	4.336	96	164165	48.547	ug/l	100
13) Acrolein	4.171	56	251949	245.655	ug/l	100
14) Allyl chloride	5.006	41	290757	47.448	ug/l	100
15) Acrylonitrile	5.706	53	584519	248.432	ug/l	100
16) Acetone	4.424	43	612147	234.001	ug/l	100
17) Carbon Disulfide	4.700	76	469891	50.475	ug/l	100
18) Methyl Acetate	5.012	43	271363	49.542	ug/l	100
19) Methyl tert-butyl Ether	5.789	73	641051	50.534	ug/l	100
20) Methylene Chloride	5.265	84	193144	51.071	ug/l	100
21) trans-1,2-Dichloroethene	5.777	96	175989	48.020	ug/l	100
22) Diisopropyl ether	6.659	45	673069	50.897	ug/l	100
23) Vinyl Acetate	6.589	43	3156445	262.358	ug/l	100
24) 1,1-Dichloroethane	6.547	63	352088	48.560	ug/l	100
25) 2-Butanone	7.465	43	858584	249.467	ug/l	100
26) 2,2-Dichloropropane	7.477	77	308944	49.645	ug/l	100
27) cis-1,2-Dichloroethene	7.465	96	220668	50.366	ug/l	100
28) Bromochloromethane	7.800	49	164506	46.931	ug/l	100
29) Tetrahydrofuran	7.824	42	555506	250.802	ug/l	100
30) Chloroform	7.947	83	370301	50.036	ug/l	100
31) Cyclohexane	8.236	56	289400	47.878	ug/l	100
32) 1,1,1-Trichloroethane	8.153	97	305533	48.715	ug/l	100
36) 1,1-Dichloropropene	8.353	75	247135	47.660	ug/l	100
37) Ethyl Acetate	7.547	43	347439	49.034	ug/l	100
38) Carbon Tetrachloride	8.341	117	253643	49.543	ug/l	100
39) Methylcyclohexane	9.583	83	276006	48.348	ug/l	100
40) Benzene	8.588	78	788238	49.562	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN082125\
 Data File : VN087622.D
 Acq On : 21 Aug 2025 14:02
 Operator : JC\MD
 Sample : VSTDICCC050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICCC050

Manual Integrations
 APPROVED

Reviewed By : John Carlone 08/22/2025
 Supervised By : Mahesh Dadoda 08/25/2025

Quant Time: Aug 22 02:32:41 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
 Quant Title : SW846 8260
 QLast Update : Fri Aug 22 02:09:28 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.759	41	182028	49.594	ug/l	100
42) 1,2-Dichloroethane	8.653	62	304323	49.794	ug/l	100
43) Isopropyl Acetate	8.671	43	560899	50.703	ug/l	100
44) Trichloroethene	9.330	130	176493	48.607	ug/l	100
45) 1,2-Dichloropropane	9.600	63	202893	48.398	ug/l	100
46) Dibromomethane	9.688	93	148909	49.915	ug/l	100
47) Bromodichloromethane	9.871	83	298888	48.886	ug/l	100
48) Methyl methacrylate	9.665	41	261445	49.964	ug/l	100
49) 1,4-Dioxane	9.683	88	72780	1073.097	ug/l #	100
51) 4-Methyl-2-Pentanone	10.424	43	1722397	258.056	ug/l	100
52) Toluene	10.606	92	491725	49.872	ug/l	100
53) t-1,3-Dichloropropene	10.818	75	329003	51.987	ug/l	100
54) cis-1,3-Dichloropropene	10.288	75	335961	51.127	ug/l	100
55) 1,1,2-Trichloroethane	10.994	97	190842	50.035	ug/l	100
56) Ethyl methacrylate	10.853	69	330271	54.182	ug/l	100
57) 1,3-Dichloropropane	11.141	76	342170	50.690	ug/l	100
58) 2-Chloroethyl Vinyl ether	10.141	63	829191	251.329	ug/l	100
59) 2-Hexanone	11.177	43	1194193	283.100	ug/l	100
60) Dibromochloromethane	11.335	129	218275	49.389	ug/l	100
61) 1,2-Dibromoethane	11.447	107	202283	50.296	ug/l	100
64) Tetrachloroethene	11.082	164	137281	45.149	ug/l	100
65) Chlorobenzene	11.871	112	530421	48.648	ug/l	100
66) 1,1,1,2-Tetrachloroethane	11.941	131	184496	50.970	ug/l	100
67) Ethyl Benzene	11.941	91	939520	49.767	ug/l	100
68) m/p-Xylenes	12.047	106	711871	102.820	ug/l	100
69) o-Xylene	12.376	106	348655	51.386	ug/l	100
70) Styrene	12.388	104	605599	53.277	ug/l	100
71) Bromoform	12.559	173	140399	50.575	ug/l	100
73) Isopropylbenzene	12.671	105	889165	49.821	ug/l	100
74) N-amyl acetate	12.500	43	343435m	50.016	ug/l	
75) 1,1,2,2-Tetrachloroethane	12.918	83	301018	48.990	ug/l	100
76) 1,2,3-Trichloropropane	12.971	75	236877m	45.626	ug/l	
77) Bromobenzene	12.959	156	207789	49.379	ug/l	100
78) n-propylbenzene	13.012	91	1109533	50.472	ug/l	100
79) 2-Chlorotoluene	13.100	91	657210	49.679	ug/l	100
80) 1,3,5-Trimethylbenzene	13.153	105	766722	50.642	ug/l	100
81) trans-1,4-Dichloro-2-b...	12.718	75	99551	50.885	ug/l	100
82) 4-Chlorotoluene	13.200	91	696270	50.059	ug/l	100
83) tert-Butylbenzene	13.418	119	642869	50.955	ug/l	100
84) 1,2,4-Trimethylbenzene	13.459	105	772176	50.948	ug/l	100
85) sec-Butylbenzene	13.594	105	933105	49.838	ug/l	100
86) p-Isopropyltoluene	13.706	119	779657	50.430	ug/l	100
87) 1,3-Dichlorobenzene	13.712	146	403466	48.688	ug/l	100
88) 1,4-Dichlorobenzene	13.788	146	412346	47.815	ug/l	100
89) n-Butylbenzene	14.029	91	764482	49.789	ug/l	100
90) Hexachloroethane	14.312	117	144635	49.105	ug/l	100
91) 1,2-Dichlorobenzene	14.082	146	387612	49.303	ug/l	100
92) 1,2-Dibromo-3-Chloropr...	14.700	75	70059	47.997	ug/l	100
93) 1,2,4-Trichlorobenzene	15.365	180	226580	47.995	ug/l	100
94) Hexachlorobutadiene	15.476	225	78424	46.597	ug/l	100
95) Naphthalene	15.612	128	829102	49.583	ug/l	100
96) 1,2,3-Trichlorobenzene	15.812	180	222211	48.148	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN082125\
Data File : VN087622.D
Acq On : 21 Aug 2025 14:02
Operator : JC\MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

Reviewed By :John Carlone 08/22/2025
Supervised By :Mahesh Dadoda 08/25/2025

Quant Time: Aug 22 02:32:41 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
Quant Title : SW846 8260
QLast Update : Fri Aug 22 02:09:28 2025
Response via : Initial Calibration

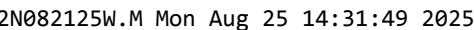
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
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(#) = qualifier out of range (m) = manual integration (+) = signals summed

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations

Reviewed By :John Carlone 08/22/2025
Supervised By :Mahesh Dadoda 08/25/2025



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN082125\
 Data File : VN087623.D
 Acq On : 21 Aug 2025 14:23
 Operator : JC\MD
 Sample : VSTDICC100
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICC100

Manual Integrations
 APPROVED

Reviewed By : John Carlone 08/22/2025
 Supervised By : Mahesh Dadoda 08/25/2025

Quant Time: Aug 22 02:33:40 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
 Quant Title : SW846 8260
 QLast Update : Fri Aug 22 02:09:28 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	8.206	168	247255	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.082	114	481199	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.841	117	447994	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.770	152	226864	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.559	65	511669	101.001	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 202.000%#			
35) Dibromofluoromethane	8.147	113	358663	103.235	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 206.460%#			
50) Toluene-d8	10.547	98	1354664	104.177	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 208.360%#			
62) 4-Bromofluorobenzene	12.829	95	494494	106.930	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 213.860%#			
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	2.142	85	384461	109.480	ug/l	97
3) Chloromethane	2.383	50	371688	102.992	ug/l	99
4) Vinyl Chloride	2.536	62	418975	100.128	ug/l	97
5) Bromomethane	2.959	94	230328	106.679	ug/l	97
6) Chloroethane	3.124	64	276071	93.871	ug/l	99
7) Trichlorofluoromethane	3.506	101	606894	98.995	ug/l	100
8) Diethyl Ether	3.959	74	252092	94.419	ug/l	98
9) 1,1,2-Trichlorotrifluo...	4.365	101	323480	93.250	ug/l	99
10) Methyl Iodide	4.577	142	277692	99.335	ug/l	96
11) Tert butyl alcohol	5.530	59	430345	489.322	ug/l	99
12) 1,1-Dichloroethene	4.330	96	329881	92.539	ug/l	95
13) Acrolein	4.171	56	484654	448.258	ug/l	100
14) Allyl chloride	5.012	41	597335	92.467	ug/l	99
15) Acrylonitrile	5.706	53	1204622	485.671	ug/l	99
16) Acetone	4.424	43	1195609	433.545	ug/l	99
17) Carbon Disulfide	4.700	76	957812	97.598	ug/l	98
18) Methyl Acetate	5.012	43	552409	95.669	ug/l	98
19) Methyl tert-butyl Ether	5.783	73	1306892	97.726	ug/l	98
20) Methylene Chloride	5.259	84	385191	97.752	ug/l	97
21) trans-1,2-Dichloroethene	5.777	96	364392	94.317	ug/l	95
22) Diisopropyl ether	6.659	45	1368059	98.135	ug/l	98
23) Vinyl Acetate	6.588	43	6369332	502.195	ug/l	98
24) 1,1-Dichloroethane	6.553	63	719127	94.084	ug/l	98
25) 2-Butanone	7.471	43	1730205	476.881	ug/l	98
26) 2,2-Dichloropropane	7.471	77	631604	96.278	ug/l	98
27) cis-1,2-Dichloroethene	7.471	96	449130	97.241	ug/l	100
28) Bromochloromethane	7.794	49	369878	100.097	ug/l	99
29) Tetrahydrofuran	7.824	42	1140137	488.295	ug/l	100
30) Chloroform	7.947	83	751186	96.286	ug/l	97
31) Cyclohexane	8.235	56	593829	93.193	ug/l	98
32) 1,1,1-Trichloroethane	8.153	97	625473	94.602	ug/l	98
36) 1,1-Dichloropropene	8.353	75	502476	94.275	ug/l	99
37) Ethyl Acetate	7.547	43	703230	96.555	ug/l	99
38) Carbon Tetrachloride	8.341	117	528406	100.412	ug/l	93
39) Methylcyclohexane	9.582	83	574374	97.883	ug/l	98
40) Benzene	8.588	78	1577387	96.490	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN082125\
 Data File : VN087623.D
 Acq On : 21 Aug 2025 14:23
 Operator : JC\MD
 Sample : VSTDICC100
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICC100

Manual Integrations
 APPROVED

Reviewed By : John Carlone 08/22/2025
 Supervised By : Mahesh Dadoda 08/25/2025

Quant Time: Aug 22 02:33:40 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
 Quant Title : SW846 8260
 QLast Update : Fri Aug 22 02:09:28 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.765	41	369145	97.845	ug/l	99
42) 1,2-Dichloroethane	8.653	62	600726	95.625	ug/l	99
43) Isopropyl Acetate	8.671	43	1142494	100.474	ug/l	99
44) Trichloroethene	9.329	130	353426	94.694	ug/l	99
45) 1,2-Dichloropropane	9.600	63	399209	92.644	ug/l	99
46) Dibromomethane	9.688	93	298076	97.207	ug/l	99
47) Bromodichloromethane	9.871	83	613683	97.651	ug/l	95
48) Methyl methacrylate	9.665	41	543991	101.141	ug/l	99
49) 1,4-Dioxane	9.682	88	148991	2137.188	ug/l #	99
51) 4-Methyl-2-Pentanone	10.423	43	3455510	503.673	ug/l	99
52) Toluene	10.612	92	998331	98.507	ug/l	100
53) t-1,3-Dichloropropene	10.818	75	672690	103.410	ug/l	99
54) cis-1,3-Dichloropropene	10.294	75	686982	101.709	ug/l	98
55) 1,1,2-Trichloroethane	10.994	97	385129	98.234	ug/l	96
56) Ethyl methacrylate	10.853	69	688119	109.827	ug/l	99
57) 1,3-Dichloropropane	11.141	76	681646	98.241	ug/l	100
58) 2-Chloroethyl Vinyl ether	10.141	63	1799387	530.602	ug/l	99
59) 2-Hexanone	11.176	43	2445031	563.903	ug/l	100
60) Dibromochloromethane	11.335	129	447781	98.572	ug/l	100
61) 1,2-Dibromoethane	11.447	107	412721	99.836	ug/l	98
64) Tetrachloroethene	11.082	164	282055	90.747	ug/l	95
65) Chlorobenzene	11.870	112	1089532	97.756	ug/l	97
66) 1,1,1,2-Tetrachloroethane	11.935	131	373160	100.851	ug/l	99
67) Ethyl Benzene	11.941	91	1928084	99.914	ug/l	99
68) m/p-Xylenes	12.047	106	1448543	204.677	ug/l	100
69) o-Xylene	12.376	106	705872	101.775	ug/l	99
70) Styrene	12.388	104	1242271	106.913	ug/l	99
71) Bromoform	12.559	173	300919	106.042	ug/l #	98
73) Isopropylbenzene	12.670	105	1813905	98.947	ug/l	99
74) N-amyl acetate	12.488	43	692783	98.225	ug/l #	92
75) 1,1,2,2-Tetrachloroethane	12.917	83	599955	95.058	ug/l	100
76) 1,2,3-Trichloropropane	12.970	75	487205m	91.360	ug/l	
77) Bromobenzene	12.959	156	421382	97.488	ug/l	100
78) n-propylbenzene	13.011	91	2252725	99.764	ug/l	100
79) 2-Chlorotoluene	13.100	91	1350026	99.349	ug/l	99
80) 1,3,5-Trimethylbenzene	13.153	105	1541753	99.138	ug/l	98
81) trans-1,4-Dichloro-2-b...	12.717	75	223478	111.207	ug/l	85
82) 4-Chlorotoluene	13.200	91	1392464	97.464	ug/l	98
83) tert-Butylbenzene	13.417	119	1296218	100.022	ug/l	100
84) 1,2,4-Trimethylbenzene	13.459	105	1574771	101.155	ug/l	100
85) sec-Butylbenzene	13.594	105	1888785	98.213	ug/l	100
86) p-Isopropyltoluene	13.706	119	1589055	100.064	ug/l	99
87) 1,3-Dichlorobenzene	13.711	146	819384	96.262	ug/l	98
88) 1,4-Dichlorobenzene	13.788	146	824944	93.128	ug/l	99
89) n-Butylbenzene	14.029	91	1541853	97.761	ug/l	99
90) Hexachloroethane	14.306	117	294494	97.338	ug/l	97
91) 1,2-Dichlorobenzene	14.082	146	781928	96.828	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.700	75	142185	94.833	ug/l	96
93) 1,2,4-Trichlorobenzene	15.364	180	471693	97.272	ug/l	99
94) Hexachlorobutadiene	15.476	225	157139	90.896	ug/l	99
95) Naphthalene	15.611	128	1777069	103.462	ug/l	100
96) 1,2,3-Trichlorobenzene	15.811	180	462335	97.526	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN082125\
Data File : VN087623.D
Acq On : 21 Aug 2025 14:23
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

Reviewed By :John Carlone 08/22/2025
Supervised By :Mahesh Dadoda 08/25/2025

Quant Time: Aug 22 02:33:40 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
Quant Title : SW846 8260
QLast Update : Fri Aug 22 02:09:28 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
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(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN082125\
 Data File : VN087623.D
 Acq On : 21 Aug 2025 14:23
 Operator : JC\MD
 Sample : VSTDICC100
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 11 Sample Multiplier: 1

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

Manual Integrations

APPROVED

Reviewed By :John Carlone 08/22/2025

Supervised By :Mahesh Dadoda 08/25/2025

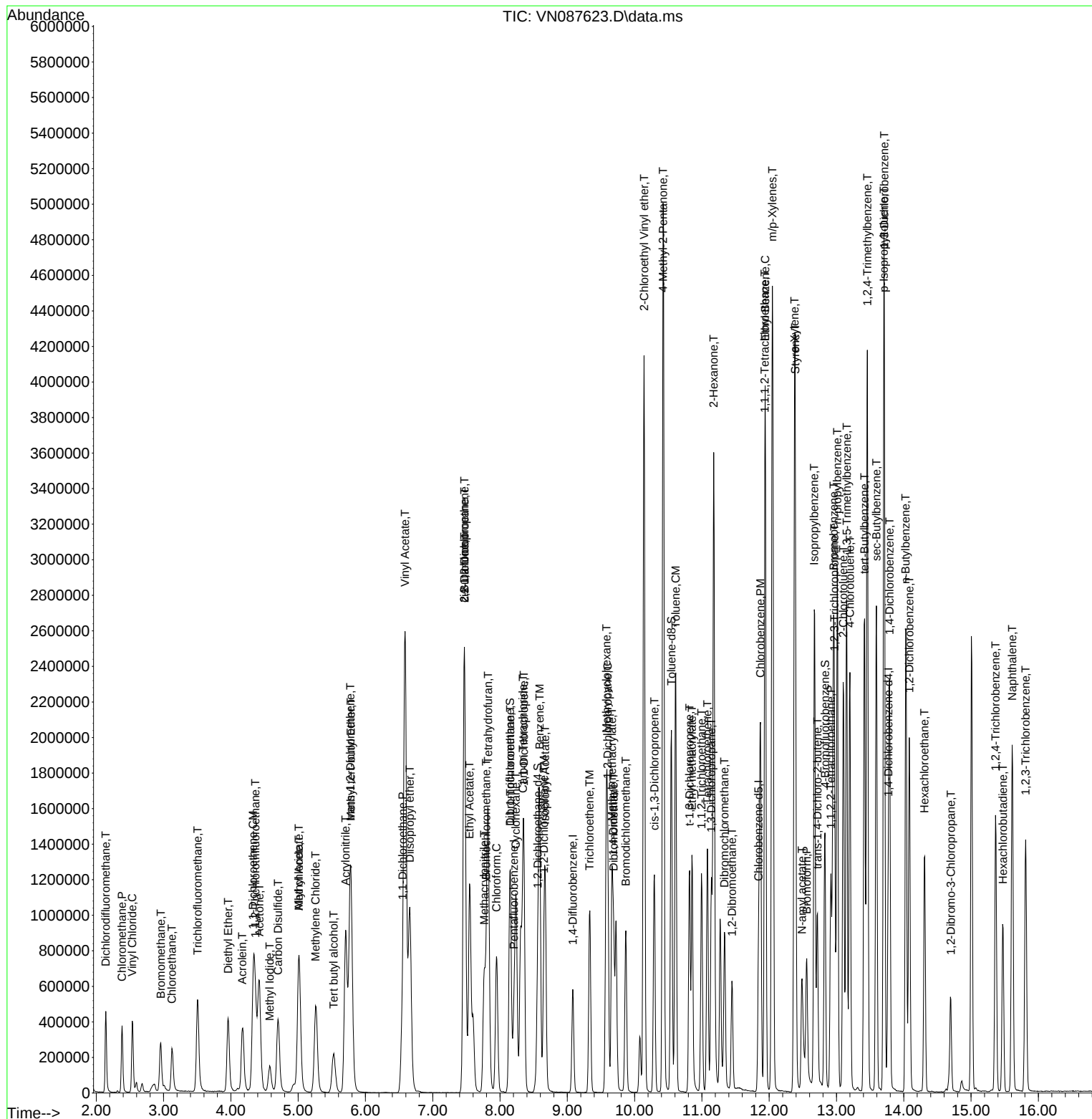
Quant Time: Aug 22 02:33:40 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M

Quant Title : SW846 8260

QLast Update : Fri Aug 22 02:09:28 2025

Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN082125\
 Data File : VN087624.D
 Acq On : 21 Aug 2025 14:44
 Operator : JC\MD
 Sample : VSTDICC150
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICC150

Quant Time: Aug 22 02:36:21 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
 Quant Title : SW846 8260
 QLast Update : Fri Aug 22 02:09:28 2025
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By : John Carlone 08/22/2025
 Supervised By : Mahesh Dadoda 08/25/2025

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

Internal Standards						
1) Pentafluorobenzene	8.206	168	245979	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.083	114	485482	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.841	117	448278	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.771	152	220585	50.000	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.559	65	803343	159.399	ug/l	0.00
Spiked Amount	50.000	Range	74 - 125	Recovery	= 318.800%#	
35) Dibromofluoromethane	8.147	113	562370	160.440	ug/l	0.00
Spiked Amount	50.000	Range	75 - 124	Recovery	= 320.880%#	
50) Toluene-d8	10.547	98	2147647	163.702	ug/l	0.00
Spiked Amount	50.000	Range	86 - 113	Recovery	= 327.400%#	
62) 4-Bromofluorobenzene	12.823	95	785776	168.419	ug/l	0.00
Spiked Amount	50.000	Range	77 - 121	Recovery	= 336.840%#	

Target Compounds					Qvalue	
2) Dichlorodifluoromethane	2.142	85	576704	165.075	ug/l	97
3) Chloromethane	2.383	50	550985	153.466	ug/l	98
4) Vinyl Chloride	2.536	62	624259	149.961	ug/l	96
5) Bromomethane	2.942	94	360172	167.683	ug/l	96
6) Chloroethane	3.124	64	408766	139.711	ug/l	99
7) Trichlorofluoromethane	3.506	101	909991	149.205	ug/l	94
8) Diethyl Ether	3.959	74	383278	144.299	ug/l	98
9) 1,1,2-Trichlorotrifluo...	4.365	101	484239	140.317	ug/l	98
10) Methyl Iodide	4.577	142	432564	151.685	ug/l	97
11) Tert butyl alcohol	5.530	59	641433	733.123	ug/l	98
12) 1,1-Dichloroethene	4.336	96	506728	142.886	ug/l	97
13) Acrolein	4.171	56	861137	800.600	ug/l	99
14) Allyl chloride	5.012	41	1015124	157.956	ug/l	93
15) Acrylonitrile	5.706	53	1818844	737.113	ug/l	99
16) Acetone	4.424	43	1805178	657.978	ug/l	98
17) Carbon Disulfide	4.700	76	1460081	149.550	ug/l	100
18) Methyl Acetate	5.012	43	842183	146.610	ug/l	99
19) Methyl tert-butyl Ether	5.783	73	2023752	152.117	ug/l	97
20) Methylene Chloride	5.259	84	589373	151.029	ug/l	99
21) trans-1,2-Dichloroethene	5.771	96	549970	143.089	ug/l	98
22) Diisopropyl ether	6.659	45	2071435	149.361	ug/l	99
23) Vinyl Acetate	6.589	43	9699326	768.719	ug/l	100
24) 1,1-Dichloroethane	6.553	63	1085255	142.721	ug/l	98
25) 2-Butanone	7.471	43	2610414	723.217	ug/l	99
26) 2,2-Dichloropropane	7.471	77	956513	146.562	ug/l	99
27) cis-1,2-Dichloroethene	7.471	96	667748	145.324	ug/l	98
28) Bromochloromethane	7.794	49	539576	146.779	ug/l	99
29) Tetrahydrofuran	7.824	42	1725889	742.994	ug/l	100
30) Chloroform	7.947	83	1127250	145.239	ug/l	98
31) Cyclohexane	8.241	56	890974	140.551	ug/l	98
32) 1,1,1-Trichloroethane	8.153	97	950731	144.543	ug/l	97
36) 1,1-Dichloropropene	8.353	75	748756	139.242	ug/l	99
37) Ethyl Acetate	7.547	43	1064446	144.861	ug/l	98
38) Carbon Tetrachloride	8.341	117	789246	148.656	ug/l	98
39) Methylcyclohexane	9.583	83	867837	146.589	ug/l	98
40) Benzene	8.588	78	2405823	145.868	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN082125\
 Data File : VN087624.D
 Acq On : 21 Aug 2025 14:44
 Operator : JC\MD
 Sample : VSTDICC150
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICC150

Manual Integrations
 APPROVED

Reviewed By :John Carlone 08/22/2025
 Supervised By :Mahesh Dadoda 08/25/2025

Quant Time: Aug 22 02:36:21 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
 Quant Title : SW846 8260
 QLast Update : Fri Aug 22 02:09:28 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.765	41	552329	145.108	ug/l	97
42) 1,2-Dichloroethane	8.653	62	912127	143.914	ug/l	99
43) Isopropyl Acetate	8.671	43	1715458	149.531	ug/l	98
44) Trichloroethene	9.335	130	538839	143.098	ug/l	99
45) 1,2-Dichloropropane	9.600	63	600437	138.113	ug/l	100
46) Dibromomethane	9.688	93	454128	146.791	ug/l	99
47) Bromodichloromethane	9.865	83	931257	146.876	ug/l	96
48) Methyl methacrylate	9.665	41	826047	152.226	ug/l	99
49) 1,4-Dioxane	9.683	88	204489	2907.396	ug/l #	99
51) 4-Methyl-2-Pentanone	10.424	43	5127143	740.736	ug/l	99
52) Toluene	10.612	92	1505069	147.197	ug/l	100
53) t-1,3-Dichloropropene	10.818	75	1040899	158.602	ug/l	99
54) cis-1,3-Dichloropropene	10.294	75	1034308	151.780	ug/l	99
55) 1,1,2-Trichloroethane	10.994	97	578828	146.338	ug/l	97
56) Ethyl methacrylate	10.853	69	1058252	167.411	ug/l	99
57) 1,3-Dichloropropane	11.141	76	1028391	146.908	ug/l	99
58) 2-Chloroethyl Vinyl ether	10.141	63	2825105	825.716	ug/l	99
59) 2-Hexanone	11.177	43	3690702	843.686	ug/l	100
60) Dibromochloromethane	11.335	129	680951	148.578	ug/l	100
61) 1,2-Dibromoethane	11.447	107	621238	148.950	ug/l	98
64) Tetrachloroethene	11.082	164	421013	135.369	ug/l	96
65) Chlorobenzene	11.871	112	1629434	146.105	ug/l	98
66) 1,1,1,2-Tetrachloroethane	11.941	131	562761	151.997	ug/l	99
67) Ethyl Benzene	11.941	91	2928525	151.661	ug/l	98
68) m/p-Xylenes	12.047	106	2189611	309.193	ug/l	99
69) o-Xylene	12.376	106	1053696	151.829	ug/l	99
70) Styrene	12.388	104	1873074	161.099	ug/l	99
71) Bromoform	12.559	173	451851	159.129	ug/l #	98
73) Isopropylbenzene	12.671	105	2726116	152.940	ug/l	100
74) N-amyl acetate	12.482	43	1146975	167.250	ug/l #	90
75) 1,1,2,2-Tetrachloroethane	12.918	83	907151	147.822	ug/l	100
76) 1,2,3-Trichloropropane	12.971	75	830843m	160.233	ug/l	
77) Bromobenzene	12.959	156	620711	147.691	ug/l	98
78) n-propylbenzene	13.012	91	3351021	152.627	ug/l	100
79) 2-Chlorotoluene	13.100	91	2010067	152.133	ug/l	99
80) 1,3,5-Trimethylbenzene	13.153	105	2284564	151.084	ug/l	100
81) trans-1,4-Dichloro-2-b...	12.712	75	345953	177.054	ug/l	84
82) 4-Chlorotoluene	13.200	91	2047130	147.365	ug/l	98
83) tert-Butylbenzene	13.418	119	1908253	151.441	ug/l	99
84) 1,2,4-Trimethylbenzene	13.459	105	2300224	151.960	ug/l	100
85) sec-Butylbenzene	13.594	105	2775113	148.408	ug/l	100
86) p-Isopropyltoluene	13.706	119	2324153	150.520	ug/l	99
87) 1,3-Dichlorobenzene	13.712	146	1208472	146.014	ug/l	98
88) 1,4-Dichlorobenzene	13.788	146	1218359	141.456	ug/l	99
89) n-Butylbenzene	14.035	91	2273344	148.244	ug/l	99
90) Hexachloroethane	14.312	117	442763	150.511	ug/l	97
91) 1,2-Dichlorobenzene	14.082	146	1153653	146.927	ug/l	98
92) 1,2-Dibromo-3-Chloropr...	14.694	75	218577	149.934	ug/l	97
93) 1,2,4-Trichlorobenzene	15.365	180	714001	151.432	ug/l	99
94) Hexachlorobutadiene	15.476	225	238563	141.923	ug/l	99
95) Naphthalene	15.612	128	2705715	162.013	ug/l	100
96) 1,2,3-Trichlorobenzene	15.812	180	709644	153.956	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN082125\
Data File : VN087624.D
Acq On : 21 Aug 2025 14:44
Operator : JC\MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

Reviewed By :John Carlone 08/22/2025
Supervised By :Mahesh Dadoda 08/25/2025

Quant Time: Aug 22 02:36:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
Quant Title : SW846 8260
QLast Update : Fri Aug 22 02:09:28 2025
Response via : Initial Calibration

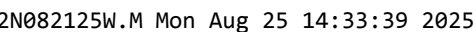
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
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(#) = qualifier out of range (m) = manual integration (+) = signals summed

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :John Carlone 08/22/2025
Supervised By :Mahesh Dadoda 08/25/2025



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN082125\
 Data File : VN087626.D
 Acq On : 21 Aug 2025 15:47
 Operator : JC\MD
 Sample : VSTDICV050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 15 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 ICVVN082125

Manual Integrations
 APPROVED

Reviewed By : John Carlone 08/22/2025
 Supervised By : Mahesh Dadoda 08/25/2025

Quant Time: Aug 22 02:59:20 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
 Quant Title : SW846 8260
 QLast Update : Fri Aug 22 02:54:13 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	8.206	168	236538	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.082	114	462145	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.847	117	426678	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.770	152	215492	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.565	65	211874	43.718	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery =	87.440%		
35) Dibromofluoromethane	8.153	113	144206	43.218	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	86.440%		
50) Toluene-d8	10.547	98	538430	43.114	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery =	86.220%		
62) 4-Bromofluorobenzene	12.829	95	197985	44.578	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery =	89.160%		
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.142	85	166005	49.414	ug/l	98
3) Chloromethane	2.383	50	164410	47.621	ug/l	99
4) Vinyl Chloride	2.536	62	181981	45.461	ug/l	97
5) Bromomethane	2.971	94	104036	50.369	ug/l	90
6) Chloroethane	3.136	64	119563	42.496	ug/l	99
7) Trichlorofluoromethane	3.512	101	258055	44.000	ug/l	99
8) Diethyl Ether	3.959	74	106479	41.688	ug/l	99
9) 1,1,2-Trichlorotrifluo...	4.365	101	138202	41.645	ug/l	99
10) Methyl Iodide	4.577	142	101477	42.154	ug/l	96
11) Tert butyl alcohol	5.518	59	188337	223.850	ug/l	99
12) 1,1-Dichloroethene	4.342	96	143630	42.117	ug/l	94
13) Acrolein	4.177	56	214366	207.251	ug/l	99
14) Allyl chloride	5.012	41	251818	40.748	ug/l	98
15) Acrylonitrile	5.712	53	512416	215.953	ug/l	98
16) Acetone	4.424	43	534765	202.699	ug/l	100
17) Carbon Disulfide	4.700	76	403340	42.961	ug/l	99
18) Methyl Acetate	5.012	43	239686	43.391	ug/l	99
19) Methyl tert-butyl Ether	5.783	73	554938	43.377	ug/l	95
20) Methylene Chloride	5.259	84	171230	44.741	ug/l	99
21) trans-1,2-Dichloroethene	5.771	96	155031	41.945	ug/l	95
22) Diisopropyl ether	6.659	45	570242	42.758	ug/l	98
23) Vinyl Acetate	6.588	43	2684129	221.221	ug/l	100
24) 1,1-Dichloroethane	6.553	63	308870	42.240	ug/l	97
25) 2-Butanone	7.471	43	748996	215.792	ug/l	98
26) 2,2-Dichloropropane	7.471	77	266418	42.451	ug/l	98
27) cis-1,2-Dichloroethene	7.477	96	187583	42.454	ug/l	98
28) Bromochloromethane	7.794	49	162438	45.951	ug/l	98
29) Tetrahydrofuran	7.824	42	468943	209.937	ug/l	99
30) Chloroform	7.947	83	321565	43.085	ug/l	99
31) Cyclohexane	8.241	56	255575	41.926	ug/l	99
32) 1,1,1-Trichloroethane	8.153	97	268667	42.477	ug/l	98
36) 1,1-Dichloropropene	8.353	75	213398	41.688	ug/l	99
37) Ethyl Acetate	7.547	43	286649	40.980	ug/l	97
38) Carbon Tetrachloride	8.341	117	220428	43.614	ug/l	96
39) Methylcyclohexane	9.582	83	234965	41.693	ug/l	99
40) Benzene	8.588	78	677138	43.129	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN082125\
 Data File : VN087626.D
 Acq On : 21 Aug 2025 15:47
 Operator : JC\MD
 Sample : VSTDICV050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 15 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 ICVVN082125

Manual Integrations
 APPROVED

Reviewed By :John Carlone 08/22/2025
 Supervised By :Mahesh Dadoda 08/25/2025

Quant Time: Aug 22 02:59:20 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
 Quant Title : SW846 8260
 QLast Update : Fri Aug 22 02:54:13 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.765	41	154175	42.550	ug/l	97
42) 1,2-Dichloroethane	8.653	62	260576	43.189	ug/l	98
43) Isopropyl Acetate	8.671	43	475910	43.578	ug/l	98
44) Trichloroethene	9.329	130	150412	41.962	ug/l	98
45) 1,2-Dichloropropane	9.600	63	170592	41.221	ug/l	97
46) Dibromomethane	9.688	93	127636	43.340	ug/l	99
47) Bromodichloromethane	9.871	83	260671	43.189	ug/l	95
48) Methyl methacrylate	9.665	41	224953	43.548	ug/l	99
49) 1,4-Dioxane	9.682	88	62435	932.518	ug/l #	98
51) 4-Methyl-2-Pentanone	10.423	43	1463763	222.154	ug/l	100
52) Toluene	10.612	92	421282	43.282	ug/l	99
53) t-1,3-Dichloropropene	10.818	75	278049	44.506	ug/l	95
54) cis-1,3-Dichloropropene	10.294	75	284560	43.867	ug/l	96
55) 1,1,2-Trichloroethane	10.994	97	165061	43.838	ug/l	99
56) Ethyl methacrylate	10.853	69	283473	47.109	ug/l	98
57) 1,3-Dichloropropane	11.141	76	287664	43.169	ug/l	99
58) 2-Chloroethyl Vinyl ether	10.141	63	842734	258.751	ug/l	100
59) 2-Hexanone	11.176	43	1001252	240.442	ug/l	100
60) Dibromochloromethane	11.335	129	187315	42.934	ug/l	98
61) 1,2-Dibromoethane	11.447	107	173643	43.736	ug/l	99
64) Tetrachloroethene	11.082	164	117611	39.730	ug/l	94
65) Chlorobenzene	11.870	112	449967	42.389	ug/l	98
66) 1,1,1,2-Tetrachloroethane	11.941	131	156161	44.313	ug/l	100
67) Ethyl Benzene	11.941	91	803704	43.729	ug/l	100
68) m/p-Xylenes	12.047	106	605035	89.762	ug/l	100
69) o-Xylene	12.376	106	289138	43.771	ug/l	96
70) Styrene	12.388	104	506439	45.763	ug/l	99
71) Bromoform	12.559	173	121336	44.894	ug/l #	98
73) Isopropylbenzene	12.670	105	761746	43.745	ug/l	98
74) N-amyl acetate	12.500	43	294763m	44.668	ug/l	
75) 1,1,2,2-Tetrachloroethane	12.917	83	264712	44.155	ug/l	99
76) 1,2,3-Trichloropropane	12.970	75	246217m	48.723	ug/l	
77) Bromobenzene	12.959	156	177807	43.307	ug/l	98
78) n-propylbenzene	13.012	91	946175	44.113	ug/l	99
79) 2-Chlorotoluene	13.100	91	559855	43.374	ug/l	99
80) 1,3,5-Trimethylbenzene	13.153	105	645684	43.710	ug/l	99
81) trans-1,4-Dichloro-2-b...	12.717	75	85496	44.790	ug/l	86
82) 4-Chlorotoluene	13.200	91	598781	44.123	ug/l	99
83) tert-Butylbenzene	13.417	119	547166	44.450	ug/l	98
84) 1,2,4-Trimethylbenzene	13.459	105	666050	45.041	ug/l	98
85) sec-Butylbenzene	13.594	105	802373	43.924	ug/l	99
86) p-Isopropyltoluene	13.706	119	658963	43.685	ug/l	99
87) 1,3-Dichlorobenzene	13.711	146	346038	42.798	ug/l	99
88) 1,4-Dichlorobenzene	13.788	146	359327	42.705	ug/l	99
89) n-Butylbenzene	14.035	91	654734	43.704	ug/l	100
90) Hexachloroethane	14.311	117	119987	41.752	ug/l	96
91) 1,2-Dichlorobenzene	14.082	146	329254	42.924	ug/l	100
92) 1,2-Dibromo-3-Chloropr...	14.694	75	60532	42.504	ug/l	98
93) 1,2,4-Trichlorobenzene	15.364	180	197383	42.852	ug/l	99
94) Hexachlorobutadiene	15.476	225	67769	41.269	ug/l	99
95) Naphthalene	15.611	128	706917	43.329	ug/l	99
96) 1,2,3-Trichlorobenzene	15.811	180	191126	42.444	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN082125\
Data File : VN087626.D
Acq On : 21 Aug 2025 15:47
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 15 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN082125

Manual Integrations
APPROVED

Reviewed By :John Carlone 08/22/2025
Supervised By :Mahesh Dadoda 08/25/2025

Quant Time: Aug 22 02:59:20 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
Quant Title : SW846 8260
QLast Update : Fri Aug 22 02:54:13 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
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(#) = qualifier out of range (m) = manual integration (+) = signals summed

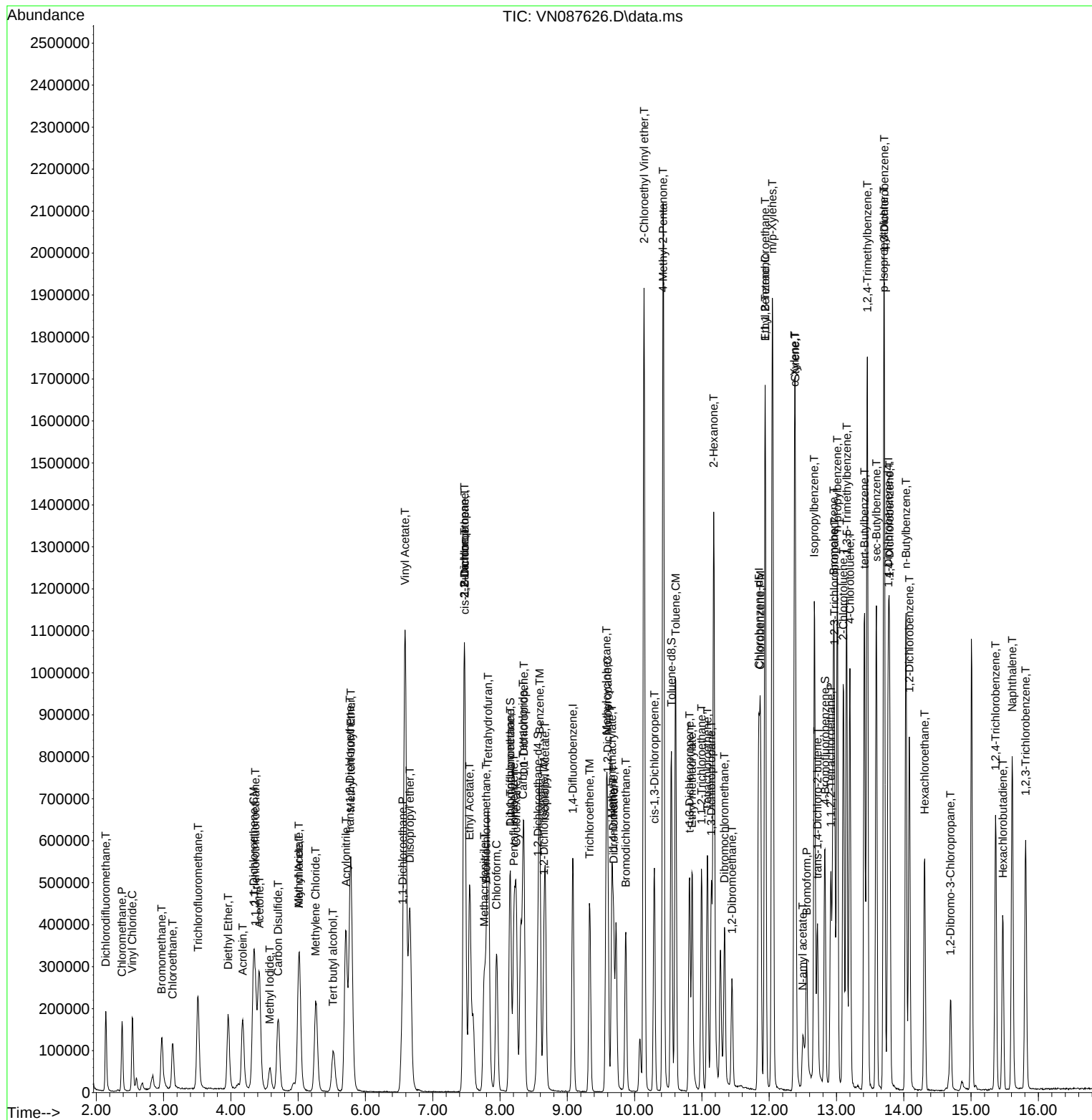
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Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN082125\  
Data File : VN087626.D  
Acq On    : 21 Aug 2025   15:47  
Operator  : JC\MD  
Sample    : VSTDICV050  
Misc      : 5.0mL/MSVOA_N/WATER  
ALS Vial  : 15   Sample Multiplier: 1
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Instrument :
MSVOA_N
ClientSampleId :
ICVVN082125

Manual Integrations APPROVED

Reviewed By :John Carlone 08/22/2025
Supervised By :Mahesh Dadoda 08/25/2025

Quant Time: Aug 22 02:59:20 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
Quant Title : SW846 8260
QLast Update : Fri Aug 22 02:54:13 2025
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN082125\
 Data File : VN087626.D
 Acq On : 21 Aug 2025 15:47
 Operator : JC\MD
 Sample : VSTDICV050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 15 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 ICVVN082125

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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	101	0.00
2 T	Dichlorodifluoromethane	0.710	0.702	1.1	87	0.00
3 P	Chloromethane	0.730	0.695	4.8	88	0.00
4 C	Vinyl Chloride	0.846	0.769	9.1#	86	0.00
5 T	Bromomethane	0.437	0.440	-0.7	99	0.00
6 T	Chloroethane	0.595	0.505	15.1	85	0.00
7 T	Trichlorofluoromethane	1.240	1.091	12.0	86	0.00
8 T	Diethyl Ether	0.540	0.450	16.7	86	0.00
9 T	1,1,2-Trichlorotrifluoroeth	0.701	0.584	16.7	85	0.00
10 T	Methyl Iodide	0.450	0.429	4.7	90	0.00
11 T	Tert butyl alcohol	0.178	0.159	10.7	87	0.00
12 CM	1,1-Dichloroethene	0.721	0.607	15.8#	87	0.00
13 T	Acrolein	0.219	0.181	17.4	85	0.00
14 T	Allyl chloride	1.306	1.065	18.5	87	0.00
15 T	Acrylonitrile	0.502	0.433	13.7	88	0.00
16 T	Acetone	0.558	0.452	19.0	87	0.00
17 T	Carbon Disulfide	1.985	1.705	14.1	86	0.00
18 T	Methyl Acetate	1.168	1.013	13.3	88	0.00
19 T	Methyl tert-butyl Ether	2.704	2.346	13.2	87	0.00
20 T	Methylene Chloride	0.948	0.724	23.6	89	0.00
21 T	trans-1,2-Dichloroethene	0.781	0.655	16.1	88	0.00
22 T	Diisopropyl ether	2.819	2.411	14.5	85	0.00
23 T	Vinyl Acetate	2.565	2.270	11.5	85	0.00
24 P	1,1-Dichloroethane	1.546	1.306	15.5	88	0.00
25 T	2-Butanone	0.734	0.633	13.8	87	0.00
26 T	2,2-Dichloropropane	1.327	1.126	15.1	86	0.00
27 T	cis-1,2-Dichloroethene	0.934	0.793	15.1	85	0.01
28 T	Bromochloromethane	0.747	0.687	8.0	99	0.00
29 T	Tetrahydrofuran	0.472	0.397	15.9	84	0.00
30 C	Chloroform	1.578	1.359	13.9#	87	0.00
31 T	Cyclohexane	1.289	1.080	16.2	88	0.00
32 T	1,1,1-Trichloroethane	1.337	1.136	15.0	88	0.00
33 S	1,2-Dichloroethane-d4	1.024	0.896	12.5	94	0.00
34 I	1,4-Difluorobenzene	1.000	1.000	0.0	99	0.00
35 S	Dibromofluoromethane	0.361	0.312	13.6	92	0.00
36 T	1,1-Dichloropropene	0.554	0.462	16.6	86	0.00
37 T	Ethyl Acetate	0.757	0.620	18.1	83	0.00
38 T	Carbon Tetrachloride	0.547	0.477	12.8	87	0.00
39 T	Methylcyclohexane	0.610	0.508	16.7	85	0.00
40 TM	Benzene	1.699	1.465	13.8	86	0.00
41 T	Methacrylonitrile	0.392	0.334	14.8	85	0.00
42 TM	1,2-Dichloroethane	0.653	0.564	13.6	86	0.00
43 T	Isopropyl Acetate	1.182	1.030	12.9	85	0.00
44 TM	Trichloroethene	0.388	0.325	16.2	85	0.00
45 C	1,2-Dichloropropane	0.448	0.369	17.6#	84	0.00
46 T	Dibromomethane	0.319	0.276	13.5	86	0.00
47 T	Bromodichloromethane	0.653	0.564	13.6	87	0.00
48 T	Methyl methacrylate	0.559	0.487	12.9	86	0.00

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 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 15 Sample Multiplier: 1

Instrument :
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 ClientSampleId :
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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	86	0.00
50 S	Toluene-d8	1.351	1.165	13.8	94	0.00
51 T	4-Methyl-2-Pentanone	0.713	0.633	11.2	85	0.00
52 CM	Toluene	1.053	0.912	13.4#	86	0.00
53 T	t-1,3-Dichloropropene	0.676	0.602	10.9	85	0.00
54 T	cis-1,3-Dichloropropene	0.702	0.616	12.3	85	0.00
55 T	1,1,2-Trichloroethane	0.407	0.357	12.3	86	0.00
56 T	Ethyl methacrylate	0.651	0.613	5.8	86	0.00
57 T	1,3-Dichloropropane	0.721	0.622	13.7	84	0.00
58 T	2-Chloroethyl Vinyl ether	0.352	0.365	-3.7	102	0.00
59 T	2-Hexanone	0.451	0.433	4.0	84	0.00
60 T	Dibromochloromethane	0.472	0.405	14.2	86	0.00
61 T	1,2-Dibromoethane	0.430	0.376	12.6	86	0.00
62 S	4-Bromofluorobenzene	0.481	0.428	11.0	94	0.00
63 I	Chlorobenzene-d5	1.000	1.000	0.0	97	0.00
64 T	Tetrachloroethene	0.347	0.276	20.5	86	0.00
65 PM	Chlorobenzene	1.244	1.055	15.2	85	0.00
66 T	1,1,1,2-Tetrachloroethane	0.413	0.366	11.4	85	0.00
67 C	Ethyl Benzene	2.154	1.884	12.5#	86	0.00
68 T	m/p-Xylenes	0.790	0.709	10.3	85	0.00
69 T	o-Xylene	0.774	0.678	12.4	83	0.00
70 T	Styrene	1.297	1.187	8.5	84	0.00
71 P	Bromoform	0.317	0.284	10.4	86	0.00
72 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	98	0.00
73 T	Isopropylbenzene	4.040	3.535	12.5	86	0.00
74 T	N-amyl acetate	1.531	1.368	10.6	86	0.00
75 P	1,1,2,2-Tetrachloroethane	1.391	1.228	11.7	88	0.00
76 T	1,2,3-Trichloropropane	1.173	1.143	2.6	104	0.00
77 T	Bromobenzene	0.953	0.825	13.4	86	0.00
78 T	n-propylbenzene	4.977	4.391	11.8	85	0.00
79 T	2-Chlorotoluene	2.995	2.598	13.3	85	0.00
80 T	1,3,5-Trimethylbenzene	3.428	2.996	12.6	84	0.00
81 T	trans-1,4-Dichloro-2-butene	0.443	0.397	10.4	86	0.00
82 T	4-Chlorotoluene	3.149	2.779	11.7	86	0.00
83 T	tert-Butylbenzene	2.856	2.539	11.1	85	0.00
84 T	1,2,4-Trimethylbenzene	3.431	3.091	9.9	86	0.00
85 T	sec-Butylbenzene	4.239	3.723	12.2	86	0.00
86 T	p-Isopropyltoluene	3.500	3.058	12.6	85	0.00
87 T	1,3-Dichlorobenzene	1.876	1.606	14.4	86	0.00
88 T	1,4-Dichlorobenzene	1.952	1.667	14.6	87	0.00
89 T	n-Butylbenzene	3.476	3.038	12.6	86	0.00
90 T	Hexachloroethane	0.667	0.557	16.5	83	0.00
91 T	1,2-Dichlorobenzene	1.780	1.528	14.2	85	0.00
92 T	1,2-Dibromo-3-Chloropropane	0.330	0.281	14.8	86	0.00
93 T	1,2,4-Trichlorobenzene	1.069	0.916	14.3	87	0.00
94 T	Hexachlorobutadiene	0.381	0.314	17.6	86	0.00
95 T	Naphthalene	3.786	3.280	13.4	85	0.00

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Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	1.045	0.887	15.1	86	0.00

(#) = Out of Range

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

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 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 I	Pentafluorobenzene	50.000	50.000	0.0	101	0.00
2 T	Dichlorodifluoromethane	50.000	49.414	1.2	87	0.00
3 P	Chloromethane	50.000	47.621	4.8	88	0.00
4 C	Vinyl Chloride	50.000	45.461	9.1#	86	0.00
5 T	Bromomethane	50.000	50.369	-0.7	99	0.00
6 T	Chloroethane	50.000	42.496	15.0	85	0.00
7 T	Trichlorofluoromethane	50.000	44.000	12.0	86	0.00
8 T	Diethyl Ether	50.000	41.688	16.6	86	0.00
9 T	1,1,2-Trichlorotrifluoroeth	50.000	41.645	16.7	85	0.00
10 T	Methyl Iodide	50.000	42.154	15.7	90	0.00
11 T	Tert butyl alcohol	250.000	223.850	10.5	87	0.00
12 CM	1,1-Dichloroethene	50.000	42.117	15.8#	87	0.00
13 T	Acrolein	250.000	207.251	17.1	85	0.00
14 T	Allyl chloride	50.000	40.748	18.5	87	0.00
15 T	Acrylonitrile	250.000	215.953	13.6	88	0.00
16 T	Acetone	250.000	202.699	18.9	87	0.00
17 T	Carbon Disulfide	50.000	42.961	14.1	86	0.00
18 T	Methyl Acetate	50.000	43.391	13.2	88	0.00
19 T	Methyl tert-butyl Ether	50.000	43.377	13.2	87	0.00
20 T	Methylene Chloride	50.000	44.741	10.5	89	0.00
21 T	trans-1,2-Dichloroethene	50.000	41.945	16.1	88	0.00
22 T	Diisopropyl ether	50.000	42.758	14.5	85	0.00
23 T	Vinyl Acetate	250.000	221.221	11.5	85	0.00
24 P	1,1-Dichloroethane	50.000	42.240	15.5	88	0.00
25 T	2-Butanone	250.000	215.792	13.7	87	0.00
26 T	2,2-Dichloropropane	50.000	42.451	15.1	86	0.00
27 T	cis-1,2-Dichloroethene	50.000	42.454	15.1	85	0.01
28 T	Bromochloromethane	50.000	45.951	8.1	99	0.00
29 T	Tetrahydrofuran	250.000	209.937	16.0	84	0.00
30 C	Chloroform	50.000	43.085	13.8#	87	0.00
31 T	Cyclohexane	50.000	41.926	16.1	88	0.00
32 T	1,1,1-Trichloroethane	50.000	42.477	15.0	88	0.00
33 S	1,2-Dichloroethane-d4	50.000	43.718	12.6	94	0.00
34 I	1,4-Difluorobenzene	50.000	50.000	0.0	99	0.00
35 S	Dibromofluoromethane	50.000	43.218	13.6	92	0.00
36 T	1,1-Dichloropropene	50.000	41.688	16.6	86	0.00
37 T	Ethyl Acetate	50.000	40.980	18.0	83	0.00
38 T	Carbon Tetrachloride	50.000	43.614	12.8	87	0.00
39 T	Methylcyclohexane	50.000	41.693	16.6	85	0.00
40 TM	Benzene	50.000	43.129	13.7	86	0.00
41 T	Methacrylonitrile	50.000	42.550	14.9	85	0.00
42 TM	1,2-Dichloroethane	50.000	43.189	13.6	86	0.00
43 T	Isopropyl Acetate	50.000	43.578	12.8	85	0.00
44 TM	Trichloroethene	50.000	41.962	16.1	85	0.00
45 C	1,2-Dichloropropane	50.000	41.221	17.6#	84	0.00
46 T	Dibromomethane	50.000	43.340	13.3	86	0.00
47 T	Bromodichloromethane	50.000	43.189	13.6	87	0.00
48 T	Methyl methacrylate	50.000	43.548	12.9	86	0.00

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 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
49 T	1,4-Dioxane	1000.000	932.518	6.7	86	0.00
50 S	Toluene-d8	50.000	43.114	13.8	94	0.00
51 T	4-Methyl-2-Pentanone	250.000	222.154	11.1	85	0.00
52 CM	Toluene	50.000	43.282	13.4#	86	0.00
53 T	t-1,3-Dichloropropene	50.000	44.506	11.0	85	0.00
54 T	cis-1,3-Dichloropropene	50.000	43.867	12.3	85	0.00
55 T	1,1,2-Trichloroethane	50.000	43.838	12.3	86	0.00
56 T	Ethyl methacrylate	50.000	47.109	5.8	86	0.00
57 T	1,3-Dichloropropane	50.000	43.169	13.7	84	0.00
58 T	2-Chloroethyl Vinyl ether	250.000	258.751	-3.5	102	0.00
59 T	2-Hexanone	250.000	240.442	3.8	84	0.00
60 T	Dibromochloromethane	50.000	42.934	14.1	86	0.00
61 T	1,2-Dibromoethane	50.000	43.736	12.5	86	0.00
62 S	4-Bromofluorobenzene	50.000	44.578	10.8	94	0.00
63 I	Chlorobenzene-d5	50.000	50.000	0.0	97	0.00
64 T	Tetrachloroethene	50.000	39.730	20.5	86	0.00
65 PM	Chlorobenzene	50.000	42.389	15.2	85	0.00
66 T	1,1,1,2-Tetrachloroethane	50.000	44.313	11.4	85	0.00
67 C	Ethyl Benzene	50.000	43.729	12.5#	86	0.00
68 T	m/p-Xylenes	100.000	89.762	10.2	85	0.00
69 T	o-Xylene	50.000	43.771	12.5	83	0.00
70 T	Styrene	50.000	45.763	8.5	84	0.00
71 P	Bromoform	50.000	44.894	10.2	86	0.00
72 I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	98	0.00
73 T	Isopropylbenzene	50.000	43.745	12.5	86	0.00
74 T	N-amyl acetate	50.000	44.668	10.7	86	0.00
75 P	1,1,2,2-Tetrachloroethane	50.000	44.155	11.7	88	0.00
76 T	1,2,3-Trichloropropane	50.000	48.723	2.6	104	0.00
77 T	Bromobenzene	50.000	43.307	13.4	86	0.00
78 T	n-propylbenzene	50.000	44.113	11.8	85	0.00
79 T	2-Chlorotoluene	50.000	43.374	13.3	85	0.00
80 T	1,3,5-Trimethylbenzene	50.000	43.710	12.6	84	0.00
81 T	trans-1,4-Dichloro-2-butene	50.000	44.790	10.4	86	0.00
82 T	4-Chlorotoluene	50.000	44.123	11.8	86	0.00
83 T	tert-Butylbenzene	50.000	44.450	11.1	85	0.00
84 T	1,2,4-Trimethylbenzene	50.000	45.041	9.9	86	0.00
85 T	sec-Butylbenzene	50.000	43.924	12.2	86	0.00
86 T	p-Isopropyltoluene	50.000	43.685	12.6	85	0.00
87 T	1,3-Dichlorobenzene	50.000	42.798	14.4	86	0.00
88 T	1,4-Dichlorobenzene	50.000	42.705	14.6	87	0.00
89 T	n-Butylbenzene	50.000	43.704	12.6	86	0.00
90 T	Hexachloroethane	50.000	41.752	16.5	83	0.00
91 T	1,2-Dichlorobenzene	50.000	42.924	14.2	85	0.00
92 T	1,2-Dibromo-3-Chloropropane	50.000	42.504	15.0	86	0.00
93 T	1,2,4-Trichlorobenzene	50.000	42.852	14.3	87	0.00
94 T	Hexachlorobutadiene	50.000	41.269	17.5	86	0.00
95 T	Naphthalene	50.000	43.329	13.3	85	0.00

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	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	50.000	42.444	15.1	86	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:	<u>Alliance</u>	Contract:	<u>ATLA10</u>
Lab Code:	<u>ACE</u>	SDG No.:	<u>Q3092</u>
Instrument ID:	<u>MSVOA_N</u>	Calibration Date/Time:	<u>09/15/2025 08:39</u>
Lab File ID:	<u>VN087820.D</u>	Init. Calib. Date(s):	<u>08/21/2025 08/21/2025</u>
Heated Purge: (Y/N)	<u>N</u>	Init. Calib. Time(s):	<u>12:09 14:44</u>
GC Column:	<u>RXI-624</u>	ID:	<u>0.25</u> (mm)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Vinyl Chloride	0.846	0.784		-7.33	20
1,1-Dichloroethene	0.721	0.665		-7.77	20
2-Butanone	0.734	0.692		-5.72	20
Carbon Tetrachloride	0.547	0.551		0.73	20
Chloroform	1.578	1.540		-2.41	20
Benzene	1.699	1.692		-0.41	20
1,2-Dichloroethane	0.653	0.615		-5.82	20
Trichloroethene	0.388	0.380		-2.06	20
Tetrachloroethene	0.347	0.329		-5.19	20
Chlorobenzene	1.244	1.210	0.3	-2.73	20
1,2-Dichloroethane-d4	1.024	1.010		-1.37	20
Dibromofluoromethane	0.361	0.390		8.03	20
Toluene-d8	1.351	1.382		2.3	20
4-Bromofluorobenzene	0.481	0.505		4.99	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\VN091525\
 Data File : VN087820.D
 Acq On : 15 Sep 2025 08:39
 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 09/16/2025
 Supervised By : Mahesh Dadoda 09/16/2025

Quant Time: Sep 16 01:26:53 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
 Quant Title : SW846 8260
 QLast Update : Fri Aug 22 02:55:42 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	8.206	168	257288	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.082	114	490599	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.841	117	467132	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.765	152	259703	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.559	65	259753	49.275	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery =	98.540%		
35) Dibromofluoromethane	8.147	113	191463	54.053	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	108.100%		
50) Toluene-d8	10.547	98	678041	51.144	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery =	102.280%		
62) 4-Bromofluorobenzene	12.829	95	247940	52.588	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery =	105.180%		
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	2.142	85	173403	47.453	ug/l	95
3) Chloromethane	2.383	50	176368	46.965	ug/l	95
4) Vinyl Chloride	2.536	62	201781	46.342	ug/l	100
5) Bromomethane	2.965	94	91040m	40.522	ug/l	
6) Chloroethane	3.130	64	137038	44.779	ug/l	94
7) Trichlorofluoromethane	3.506	101	305464	47.883	ug/l	99
8) Diethyl Ether	3.959	74	123432	44.428	ug/l	99
9) 1,1,2-Trichlorotrifluo...	4.365	101	167406	46.377	ug/l	97
10) Methyl Iodide	4.577	142	83558	33.566	ug/l	99
11) Tert butyl alcohol	5.524	59	205030	224.038	ug/l	99
12) 1,1-Dichloroethene	4.336	96	171103	46.126	ug/l	93
13) Acrolein	4.171	56	152385	135.445	ug/l	98
14) Allyl chloride	5.012	41	272082	40.476	ug/l	95
15) Acrylonitrile	5.706	53	614236	237.986	ug/l	97
16) Acetone	4.424	43	657984	229.290	ug/l	97
17) Carbon Disulfide	4.700	76	503365	49.291	ug/l	98
18) Methyl Acetate	5.018	43	286214	47.635	ug/l	97
19) Methyl tert-butyl Ether	5.783	73	658634	47.331	ug/l	99
20) Methylene Chloride	5.265	84	204926	49.355	ug/l	99
21) trans-1,2-Dichloroethene	5.771	96	190202	47.311	ug/l	92
22) Diisopropyl ether	6.653	45	679356	46.832	ug/l	99
23) Vinyl Acetate	6.589	43	3153095	238.914	ug/l	99
24) 1,1-Dichloroethane	6.553	63	365304	45.929	ug/l	100
25) 2-Butanone	7.471	43	890750	235.936	ug/l	96
26) 2,2-Dichloropropane	7.471	77	320312	46.923	ug/l	99
27) cis-1,2-Dichloroethene	7.471	96	228371	47.516	ug/l	98
28) Bromochloromethane	7.794	49	188026	48.900	ug/l	94
29) Tetrahydrofuran	7.824	42	571156	235.075	ug/l	99
30) Chloroform	7.947	83	396129	48.795	ug/l	99
31) Cyclohexane	8.241	56	287417	43.347	ug/l	96
32) 1,1,1-Trichloroethane	8.147	97	326672	47.482	ug/l	95
36) 1,1-Dichloropropene	8.353	75	246433	45.350	ug/l	97
37) Ethyl Acetate	7.547	43	353098	47.552	ug/l	98
38) Carbon Tetrachloride	8.341	117	270542	50.425	ug/l	100
39) Methylcyclohexane	9.582	83	278202	46.502	ug/l	96
40) Benzene	8.588	78	830170	49.809	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN091525\
 Data File : VN087820.D
 Acq On : 15 Sep 2025 08:39
 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 09/16/2025
 Supervised By : Mahesh Dadoda 09/16/2025

Quant Time: Sep 16 01:26:53 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
 Quant Title : SW846 8260
 QLast Update : Fri Aug 22 02:55:42 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.765	41	181385	47.157	ug/l	98
42) 1,2-Dichloroethane	8.647	62	301666	47.100	ug/l	99
43) Isopropyl Acetate	8.671	43	554047	47.791	ug/l	97
44) Trichloroethene	9.330	130	186497	49.011	ug/l	97
45) 1,2-Dichloropropane	9.600	63	209352	47.653	ug/l	93
46) Dibromomethane	9.688	93	160753	51.419	ug/l	96
47) Bromodichloromethane	9.871	83	316122	49.338	ug/l	99
48) Methyl methacrylate	9.665	41	258185	47.083	ug/l	96
49) 1,4-Dioxane	9.682	88	77024	1083.694	ug/l #	99
51) 4-Methyl-2-Pentanone	10.424	43	1752626	250.567	ug/l	99
52) Toluene	10.606	92	512854	49.635	ug/l	99
53) t-1,3-Dichloropropene	10.818	75	334076	50.372	ug/l	99
54) cis-1,3-Dichloropropene	10.294	75	346167	50.269	ug/l	96
55) 1,1,2-Trichloroethane	10.994	97	207693	51.961	ug/l	97
56) Ethyl methacrylate	10.853	69	331028	51.821	ug/l	98
57) 1,3-Dichloropropane	11.141	76	355846	50.303	ug/l	99
58) 2-Chloroethyl Vinyl ether	10.141	63	852425	246.546	ug/l	98
59) 2-Hexanone	11.176	43	1209028	273.498	ug/l	99
60) Dibromochloromethane	11.335	129	242457	52.350	ug/l	98
61) 1,2-Dibromoethane	11.447	107	218321	51.799	ug/l	99
64) Tetrachloroethene	11.082	164	153572	47.385	ug/l	93
65) Chlorobenzene	11.871	112	565162	48.631	ug/l	97
66) 1,1,1,2-Tetrachloroethane	11.935	131	201155	52.137	ug/l	99
67) Ethyl Benzene	11.941	91	979088	48.658	ug/l	99
68) m/p-Xylenes	12.047	106	747062	101.234	ug/l	98
69) o-Xylene	12.376	106	354897	49.074	ug/l	99
70) Styrene	12.388	104	631680	52.137	ug/l	98
71) Bromoform	12.559	173	165576	55.958	ug/l #	98
73) Isopropylbenzene	12.670	105	914828	43.593	ug/l	100
74) N-amyl acetate	12.494	43	333440m	41.927	ug/l	
75) 1,1,2,2-Tetrachloroethane	12.918	83	329699	45.633	ug/l	99
76) 1,2,3-Trichloropropane	12.970	75	295392m	48.503	ug/l	
77) Bromobenzene	12.959	156	226244	45.724	ug/l	97
78) n-propylbenzene	13.012	91	1147934	44.409	ug/l	98
79) 2-Chlorotoluene	13.100	91	687042	44.167	ug/l	99
80) 1,3,5-Trimethylbenzene	13.147	105	799940	44.934	ug/l	97
81) trans-1,4-Dichloro-2-b...	12.718	75	102362	44.497	ug/l #	81
82) 4-Chlorotoluene	13.200	91	710251	43.427	ug/l	96
83) tert-Butylbenzene	13.412	119	680028	45.839	ug/l	96
84) 1,2,4-Trimethylbenzene	13.459	105	820092	46.017	ug/l	99
85) sec-Butylbenzene	13.594	105	978347	44.440	ug/l	98
86) p-Isopropyltoluene	13.706	119	839446	46.177	ug/l	99
87) 1,3-Dichlorobenzene	13.712	146	452382	46.426	ug/l	98
88) 1,4-Dichlorobenzene	13.788	146	461916	45.552	ug/l	99
89) n-Butylbenzene	14.029	91	815888	45.190	ug/l	98
90) Hexachloroethane	14.306	117	155823	44.991	ug/l	92
91) 1,2-Dichlorobenzene	14.082	146	439994	47.596	ug/l	97
92) 1,2-Dibromo-3-Chloropr...	14.700	75	73390	42.759	ug/l	94
93) 1,2,4-Trichlorobenzene	15.364	180	264396	47.629	ug/l	98
94) Hexachlorobutadiene	15.470	225	97333	49.182	ug/l	97
95) Naphthalene	15.611	128	904396	45.996	ug/l	99
96) 1,2,3-Trichlorobenzene	15.811	180	255766	47.130	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN091525\
Data File : VN087820.D
Acq On : 15 Sep 2025 08:39
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 09/16/2025
Supervised By :Mahesh Dadoda 09/16/2025

Quant Time: Sep 16 01:26:53 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
Quant Title : SW846 8260
QLast Update : Fri Aug 22 02:55:42 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
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(#) = qualifier out of range (m) = manual integration (+) = signals summed

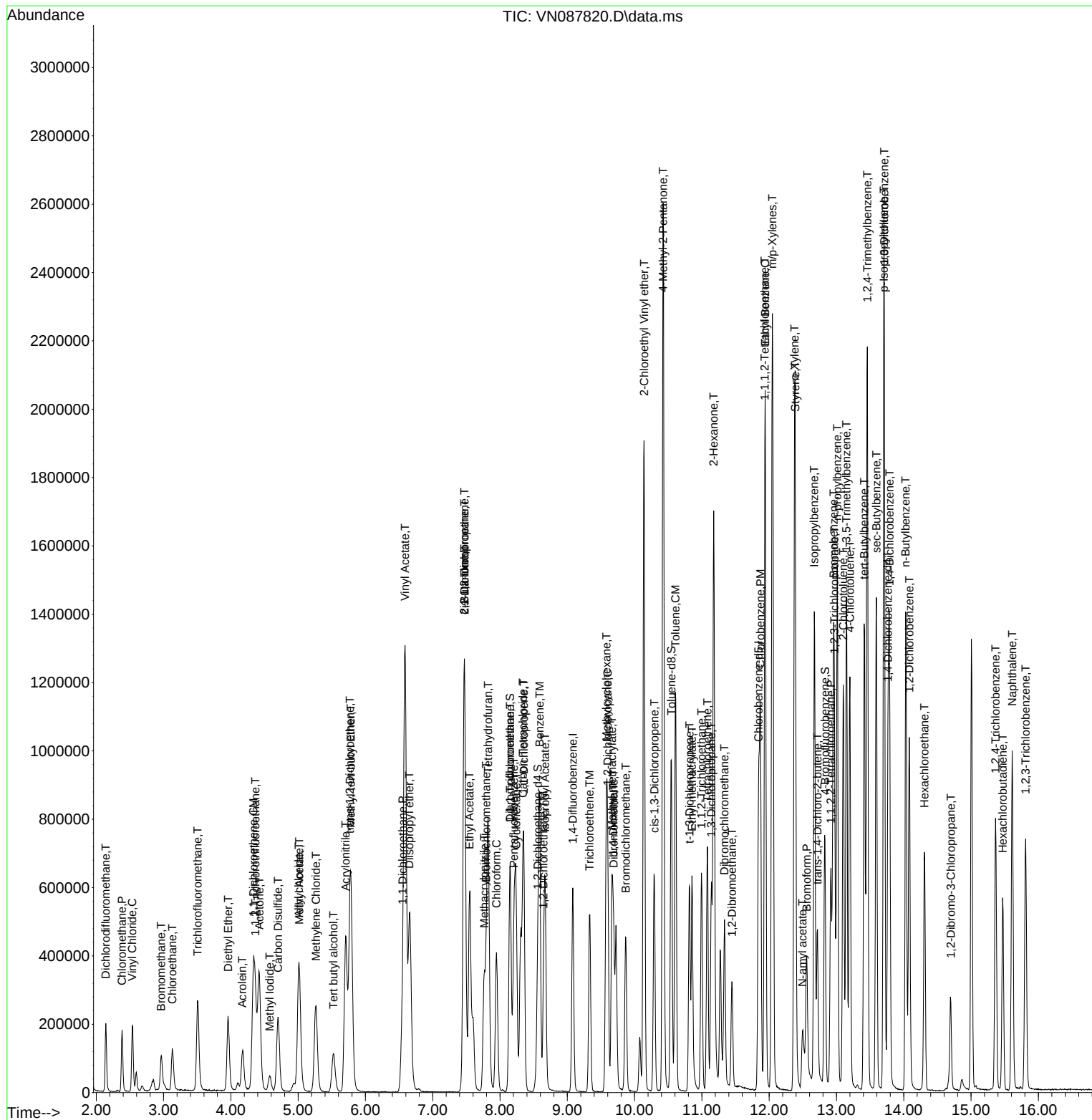
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Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN091525\  
Data File : VN087820.D  
Acq On    : 15 Sep 2025  08:39  
Operator  : JC\MD  
Sample    : VSTDCCC050  
Misc      : 5.0mL/MSVOA_N/WATER  
ALS Vial  : 3    Sample Multiplier: 1
```

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 09/16/2025
Supervised By :Mahesh Dadoda 09/16/2025

Quant Time: Sep 16 01:26:53 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
Quant Title : SW846 8260
QLast Update : Fri Aug 22 02:55:42 2025
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Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN091525\
Data File : VN087820.D
Acq On : 15 Sep 2025 08:39
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Sep 16 01:26:53 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
Quant Title : SW846 8260
QLast Update : Fri Aug 22 02:55:42 2025
Response via : Initial Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Pentafluorobenzene	1.000	1.000	0.0	110	0.00
2 T	Dichlorodifluoromethane	0.710	0.674	5.1	91	0.00
3 P	Chloromethane	0.730	0.685	6.2	95	0.00
4 C	Vinyl Chloride	0.846	0.784	7.3#	95	0.00
5 T	Bromomethane	0.437	0.354	19.0	87	0.00
6 T	Chloroethane	0.595	0.533	10.4	97	0.00
7 T	Trichlorofluoromethane	1.240	1.187	4.3	102	0.00
8 T	Diethyl Ether	0.540	0.480	11.1	99	0.00
9 T	1,1,2-Trichlorotrifluoroeth	0.701	0.651	7.1	103	0.00
10 T	Methyl Iodide	0.450	0.325	27.8#	74	0.00
11 T	Tert butyl alcohol	0.178	0.159	10.7	95	0.00
12 CM	1,1-Dichloroethene	0.721	0.665	7.8#	104	0.00
13 T	Acrolein	0.219	0.118	46.1#	60	0.00
14 T	Allyl chloride	1.306	1.057	19.1	94	0.00
15 T	Acrylonitrile	0.502	0.477	5.0	105	0.00
16 T	Acetone	0.558	0.511	8.4	107	0.00
17 T	Carbon Disulfide	1.985	1.956	1.5	107	0.00
18 T	Methyl Acetate	1.168	1.112	4.8	105	0.00
19 T	Methyl tert-butyl Ether	2.704	2.560	5.3	103	0.00
20 T	Methylene Chloride	0.948	0.796	16.0	106	0.00
21 T	trans-1,2-Dichloroethene	0.781	0.739	5.4	108	0.00
22 T	Diisopropyl ether	2.819	2.640	6.3	101	0.00
23 T	Vinyl Acetate	2.565	2.451	4.4	100	0.00
24 P	1,1-Dichloroethane	1.546	1.420	8.2	104	0.00
25 T	2-Butanone	0.734	0.692	5.7	104	0.00
26 T	2,2-Dichloropropane	1.327	1.245	6.2	104	0.00
27 T	cis-1,2-Dichloroethene	0.934	0.888	4.9	103	0.00
28 T	Bromochloromethane	0.747	0.731	2.1	114	0.00
29 T	Tetrahydrofuran	0.472	0.444	5.9	103	0.00
30 C	Chloroform	1.578	1.540	2.4#	107	0.00
31 T	Cyclohexane	1.289	1.117	13.3	99	0.00
32 T	1,1,1-Trichloroethane	1.337	1.270	5.0	107	0.00
33 S	1,2-Dichloroethane-d4	1.024	1.010	1.4	116	0.00
34 I	1,4-Difluorobenzene	1.000	1.000	0.0	105	0.00
35 S	Dibromofluoromethane	0.361	0.390	-8.0	122	0.00
36 T	1,1-Dichloropropene	0.554	0.502	9.4	100	0.00
37 T	Ethyl Acetate	0.757	0.720	4.9	102	0.00
38 T	Carbon Tetrachloride	0.547	0.551	-0.7	107	0.00
39 T	Methylcyclohexane	0.610	0.567	7.0	101	0.00
40 TM	Benzene	1.699	1.692	0.4	105	0.00
41 T	Methacrylonitrile	0.392	0.370	5.6	100	0.00
42 TM	1,2-Dichloroethane	0.653	0.615	5.8	99	0.00
43 T	Isopropyl Acetate	1.182	1.129	4.5	99	0.00
44 TM	Trichloroethene	0.388	0.380	2.1	106	0.00
45 C	1,2-Dichloropropane	0.448	0.427	4.7#	103	0.00
46 T	Dibromomethane	0.319	0.328	-2.8	108	0.00
47 T	Bromodichloromethane	0.653	0.644	1.4	106	0.00
48 T	Methyl methacrylate	0.559	0.526	5.9	99	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN091525\
 Data File : VN087820.D
 Acq On : 15 Sep 2025 08:39
 Operator : JC\MD
 Sample : VSTDCCC050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_N
 LabSampleId :
 VSTDCCC050

Quant Time: Sep 16 01:26:53 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
 Quant Title : SW846 8260
 QLast Update : Fri Aug 22 02:55:42 2025
 Response via : Initial Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49 T	1,4-Dioxane	0.007	0.008	-14.3	106	0.00
50 S	Toluene-d8	1.351	1.382	-2.3	118	0.00
51 T	4-Methyl-2-Pentanone	0.713	0.714	-0.1	102	0.00
52 CM	Toluene	1.053	1.045	0.8#	104	0.00
53 T	t-1,3-Dichloropropene	0.676	0.681	-0.7	102	0.00
54 T	cis-1,3-Dichloropropene	0.702	0.706	-0.6	103	0.00
55 T	1,1,2-Trichloroethane	0.407	0.423	-3.9	109	0.00
56 T	Ethyl methacrylate	0.651	0.675	-3.7	100	0.00
57 T	1,3-Dichloropropane	0.721	0.725	-0.6	104	0.00
58 T	2-Chloroethyl Vinyl ether	0.352	0.348	1.1	103	0.00
59 T	2-Hexanone	0.451	0.493	-9.3	101	0.00
60 T	Dibromochloromethane	0.472	0.494	-4.7	111	0.00
61 T	1,2-Dibromoethane	0.430	0.445	-3.5	108	0.00
62 S	4-Bromofluorobenzene	0.481	0.505	-5.0	118	0.00
63 I	Chlorobenzene-d5	1.000	1.000	0.0	107	0.00
64 T	Tetrachloroethene	0.347	0.329	5.2	112	0.00
65 PM	Chlorobenzene	1.244	1.210	2.7	107	0.00
66 T	1,1,1,2-Tetrachloroethane	0.413	0.431	-4.4	109	0.00
67 C	Ethyl Benzene	2.154	2.096	2.7#	104	0.00
68 T	m/p-Xylenes	0.790	0.800	-1.3	105	0.00
69 T	o-Xylene	0.774	0.760	1.8	102	0.00
70 T	Styrene	1.297	1.352	-4.2	104	0.00
71 P	Bromoform	0.317	0.354	-11.7	118	0.00
72 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	118	0.00
73 T	Isopropylbenzene	4.040	3.523	12.8	103	0.00
74 T	N-amyl acetate	1.531	1.284	16.1	97	0.00
75 P	1,1,2,2-Tetrachloroethane	1.391	1.270	8.7	110	0.00
76 T	1,2,3-Trichloropropane	1.173	1.137	3.1	125	0.00
77 T	Bromobenzene	0.953	0.871	8.6	109	0.00
78 T	n-propylbenzene	4.977	4.420	11.2	103	0.00
79 T	2-Chlorotoluene	2.995	2.645	11.7	105	0.00
80 T	1,3,5-Trimethylbenzene	3.428	3.080	10.2	104	0.00
81 T	trans-1,4-Dichloro-2-butene	0.443	0.394	11.1	103	0.00
82 T	4-Chlorotoluene	3.149	2.735	13.1	102	0.00
83 T	tert-Butylbenzene	2.856	2.618	8.3	106	0.00
84 T	1,2,4-Trimethylbenzene	3.431	3.158	8.0	106	0.00
85 T	sec-Butylbenzene	4.239	3.767	11.1	105	0.00
86 T	p-Isopropyltoluene	3.500	3.232	7.7	108	0.00
87 T	1,3-Dichlorobenzene	1.876	1.742	7.1	112	0.00
88 T	1,4-Dichlorobenzene	1.952	1.779	8.9	112	0.00
89 T	n-Butylbenzene	3.476	3.142	9.6	107	0.00
90 T	Hexachloroethane	0.667	0.600	10.0	108	0.00
91 T	1,2-Dichlorobenzene	1.780	1.694	4.8	114	0.00
92 T	1,2-Dibromo-3-Chloropropane	0.330	0.283	14.2	105	0.00
93 T	1,2,4-Trichlorobenzene	1.069	1.018	4.8	117	0.00
94 T	Hexachlorobutadiene	0.381	0.375	1.6	124	0.00
95 T	Naphthalene	3.786	3.482	8.0	109	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN091525\
Data File : VN087820.D
Acq On : 15 Sep 2025 08:39
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Sep 16 01:26:53 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
Quant Title : SW846 8260
QLast Update : Fri Aug 22 02:55:42 2025
Response via : Initial Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	1.045	0.985	5.7	115	0.00

(#) = Out of Range

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN091525\
 Data File : VN087820.D
 Acq On : 15 Sep 2025 08:39
 Operator : JC\MD
 Sample : VSTDCCC050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_N
 LabSampleId :
 VSTDCCC050

Quant Time: Sep 16 01:26:53 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
 Quant Title : SW846 8260
 QLast Update : Fri Aug 22 02:55:42 2025
 Response via : Initial Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 I	Pentafluorobenzene	50.000	50.000	0.0	110	0.00
2 T	Dichlorodifluoromethane	50.000	47.453	5.1	91	0.00
3 P	Chloromethane	50.000	46.965	6.1	95	0.00
4 C	Vinyl Chloride	50.000	46.342	7.3#	95	0.00
5 T	Bromomethane	50.000	40.522	19.0	87	0.00
6 T	Chloroethane	50.000	44.779	10.4	97	0.00
7 T	Trichlorofluoromethane	50.000	47.883	4.2	102	0.00
8 T	Diethyl Ether	50.000	44.428	11.1	99	0.00
9 T	1,1,2-Trichlorotrifluoroeth	50.000	46.377	7.2	103	0.00
10 T	Methyl Iodide	50.000	33.566	32.9#	74	0.00
11 T	Tert butyl alcohol	250.000	224.038	10.4	95	0.00
12 CM	1,1-Dichloroethene	50.000	46.126	7.7#	104	0.00
13 T	Acrolein	250.000	135.445	45.8#	60	0.00
14 T	Allyl chloride	50.000	40.476	19.0	94	0.00
15 T	Acrylonitrile	250.000	237.986	4.8	105	0.00
16 T	Acetone	250.000	229.290	8.3	107	0.00
17 T	Carbon Disulfide	50.000	49.291	1.4	107	0.00
18 T	Methyl Acetate	50.000	47.635	4.7	105	0.00
19 T	Methyl tert-butyl Ether	50.000	47.331	5.3	103	0.00
20 T	Methylene Chloride	50.000	49.355	1.3	106	0.00
21 T	trans-1,2-Dichloroethene	50.000	47.311	5.4	108	0.00
22 T	Diisopropyl ether	50.000	46.832	6.3	101	0.00
23 T	Vinyl Acetate	250.000	238.914	4.4	100	0.00
24 P	1,1-Dichloroethane	50.000	45.929	8.1	104	0.00
25 T	2-Butanone	250.000	235.936	5.6	104	0.00
26 T	2,2-Dichloropropane	50.000	46.923	6.2	104	0.00
27 T	cis-1,2-Dichloroethene	50.000	47.516	5.0	103	0.00
28 T	Bromochloromethane	50.000	48.900	2.2	114	0.00
29 T	Tetrahydrofuran	250.000	235.075	6.0	103	0.00
30 C	Chloroform	50.000	48.795	2.4#	107	0.00
31 T	Cyclohexane	50.000	43.347	13.3	99	0.00
32 T	1,1,1-Trichloroethane	50.000	47.482	5.0	107	0.00
33 S	1,2-Dichloroethane-d4	50.000	49.275	1.5	116	0.00
34 I	1,4-Difluorobenzene	50.000	50.000	0.0	105	0.00
35 S	Dibromofluoromethane	50.000	54.053	-8.1	122	0.00
36 T	1,1-Dichloropropene	50.000	45.350	9.3	100	0.00
37 T	Ethyl Acetate	50.000	47.552	4.9	102	0.00
38 T	Carbon Tetrachloride	50.000	50.425	-0.8	107	0.00
39 T	Methylcyclohexane	50.000	46.502	7.0	101	0.00
40 TM	Benzene	50.000	49.809	0.4	105	0.00
41 T	Methacrylonitrile	50.000	47.157	5.7	100	0.00
42 TM	1,2-Dichloroethane	50.000	47.100	5.8	99	0.00
43 T	Isopropyl Acetate	50.000	47.791	4.4	99	0.00
44 TM	Trichloroethene	50.000	49.011	2.0	106	0.00
45 C	1,2-Dichloropropane	50.000	47.653	4.7#	103	0.00
46 T	Dibromomethane	50.000	51.419	-2.8	108	0.00
47 T	Bromodichloromethane	50.000	49.338	1.3	106	0.00
48 T	Methyl methacrylate	50.000	47.083	5.8	99	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN091525\
 Data File : VN087820.D
 Acq On : 15 Sep 2025 08:39
 Operator : JC\MD
 Sample : VSTDCCC050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_N
 LabSampleId :
 VSTDCCC050

Quant Time: Sep 16 01:26:53 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
 Quant Title : SW846 8260
 QLast Update : Fri Aug 22 02:55:42 2025
 Response via : Initial Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
49 T	1,4-Dioxane	1000.000	1083.694	-8.4	106	0.00
50 S	Toluene-d8	50.000	51.144	-2.3	118	0.00
51 T	4-Methyl-2-Pentanone	250.000	250.567	-0.2	102	0.00
52 CM	Toluene	50.000	49.635	0.7#	104	0.00
53 T	t-1,3-Dichloropropene	50.000	50.372	-0.7	102	0.00
54 T	cis-1,3-Dichloropropene	50.000	50.269	-0.5	103	0.00
55 T	1,1,2-Trichloroethane	50.000	51.961	-3.9	109	0.00
56 T	Ethyl methacrylate	50.000	51.821	-3.6	100	0.00
57 T	1,3-Dichloropropane	50.000	50.303	-0.6	104	0.00
58 T	2-Chloroethyl Vinyl ether	250.000	246.546	1.4	103	0.00
59 T	2-Hexanone	250.000	273.498	-9.4	101	0.00
60 T	Dibromochloromethane	50.000	52.350	-4.7	111	0.00
61 T	1,2-Dibromoethane	50.000	51.799	-3.6	108	0.00
62 S	4-Bromofluorobenzene	50.000	52.588	-5.2	118	0.00
63 I	Chlorobenzene-d5	50.000	50.000	0.0	107	0.00
64 T	Tetrachloroethene	50.000	47.385	5.2	112	0.00
65 PM	Chlorobenzene	50.000	48.631	2.7	107	0.00
66 T	1,1,1,2-Tetrachloroethane	50.000	52.137	-4.3	109	0.00
67 C	Ethyl Benzene	50.000	48.658	2.7#	104	0.00
68 T	m/p-Xylenes	100.000	101.234	-1.2	105	0.00
69 T	o-Xylene	50.000	49.074	1.9	102	0.00
70 T	Styrene	50.000	52.137	-4.3	104	0.00
71 P	Bromoform	50.000	55.958	-11.9	118	0.00
72 I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	118	0.00
73 T	Isopropylbenzene	50.000	43.593	12.8	103	0.00
74 T	N-amyl acetate	50.000	41.927	16.1	97	0.00
75 P	1,1,2,2-Tetrachloroethane	50.000	45.633	8.7	110	0.00
76 T	1,2,3-Trichloropropane	50.000	48.503	3.0	125	0.00
77 T	Bromobenzene	50.000	45.724	8.6	109	0.00
78 T	n-propylbenzene	50.000	44.409	11.2	103	0.00
79 T	2-Chlorotoluene	50.000	44.167	11.7	105	0.00
80 T	1,3,5-Trimethylbenzene	50.000	44.934	10.1	104	0.00
81 T	trans-1,4-Dichloro-2-butene	50.000	44.497	11.0	103	0.00
82 T	4-Chlorotoluene	50.000	43.427	13.1	102	0.00
83 T	tert-Butylbenzene	50.000	45.839	8.3	106	0.00
84 T	1,2,4-Trimethylbenzene	50.000	46.017	8.0	106	0.00
85 T	sec-Butylbenzene	50.000	44.440	11.1	105	0.00
86 T	p-Isopropyltoluene	50.000	46.177	7.6	108	0.00
87 T	1,3-Dichlorobenzene	50.000	46.426	7.1	112	0.00
88 T	1,4-Dichlorobenzene	50.000	45.552	8.9	112	0.00
89 T	n-Butylbenzene	50.000	45.190	9.6	107	0.00
90 T	Hexachloroethane	50.000	44.991	10.0	108	0.00
91 T	1,2-Dichlorobenzene	50.000	47.596	4.8	114	0.00
92 T	1,2-Dibromo-3-Chloropropane	50.000	42.759	14.5	105	0.00
93 T	1,2,4-Trichlorobenzene	50.000	47.629	4.7	117	0.00
94 T	Hexachlorobutadiene	50.000	49.182	1.6	124	0.00
95 T	Naphthalene	50.000	45.996	8.0	109	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN091525\
Data File : VN087820.D
Acq On : 15 Sep 2025 08:39
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Sep 16 01:26:53 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
Quant Title : SW846 8260
QLast Update : Fri Aug 22 02:55:42 2025
Response via : Initial Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	50.000	47.130	5.7	115	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 6



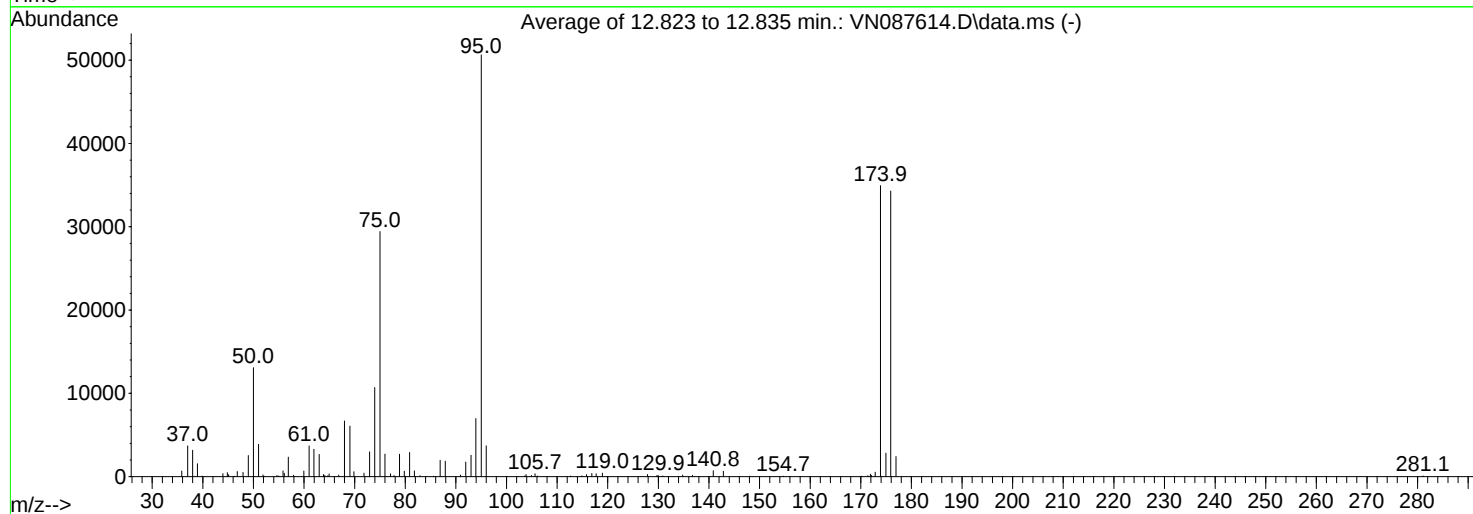
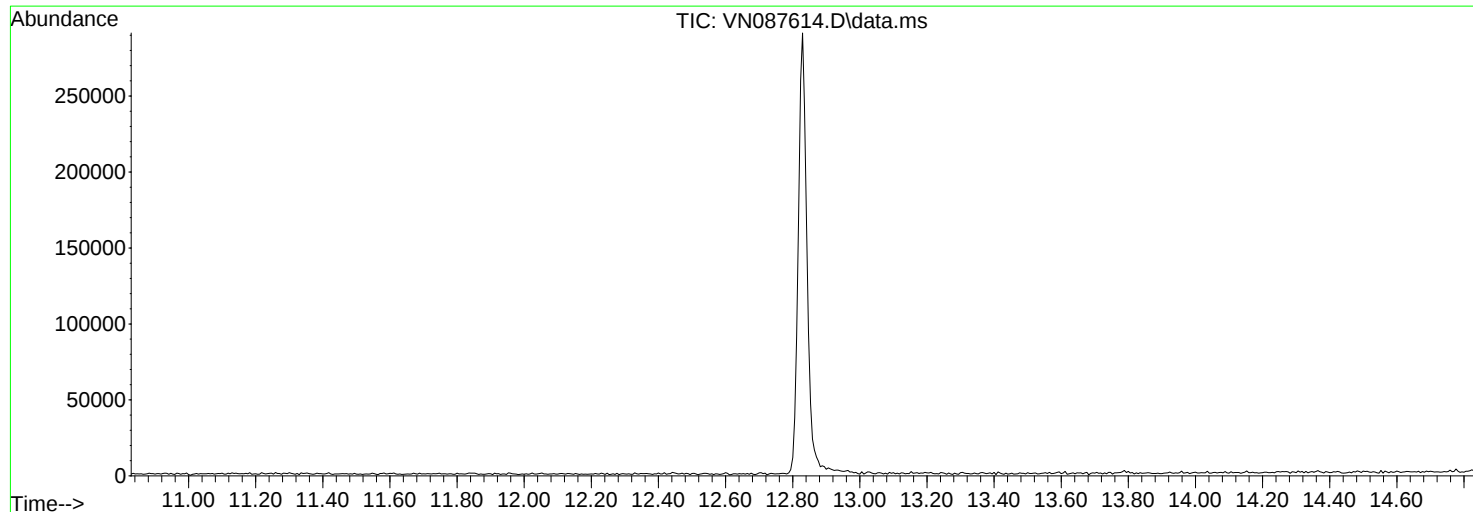
QC SAMPLE DATA

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN082125\
Data File : VN087614.D
Acq On : 21 Aug 2025 09:30
Operator : JC\MD
Sample : BFB
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
Title : SW846 8260
Last Update : Fri Aug 22 02:55:42 2025



AutoFind: Scans 1848, 1849, 1850; Background Corrected with Scan 1840

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	25.8	13089	PASS
75	95	30	60	58.1	29435	PASS
95	95	100	100	100.0	50640	PASS
96	95	5	9	7.3	3712	PASS
173	174	0.00	2	1.6	548	PASS
174	95	50	100	69.0	34952	PASS
175	174	5	9	8.1	2829	PASS
176	174	95	101	98.1	34291	PASS
177	176	5	9	7.1	2426	PASS

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.85	675	49.00	2529	59.95	672	69.85	591
37.00	3688	50.00	13089	61.00	3695	71.85	411
38.00	3178	51.00	3882	61.95	3294	72.95	297
38.95	1555	51.90	219	63.00	2681	73.95	1069
39.85	60	52.10	64	63.85	251	75.00	29435
43.95	374	54.65	128	64.10	153	76.00	2714
44.85	476	55.00	70	64.70	121	77.10	352
45.10	237	55.85	685	64.95	324	77.80	133
46.20	55	56.10	397	66.85	193	78.85	2691
46.80	616	56.90	2340	68.00	6681	79.80	662
47.95	526	57.95	176	69.05	6065	80.85	2901

Average of 12.823 to 12.835 min.: VN087614.D\data.ms

BFB

Modified:subtracted

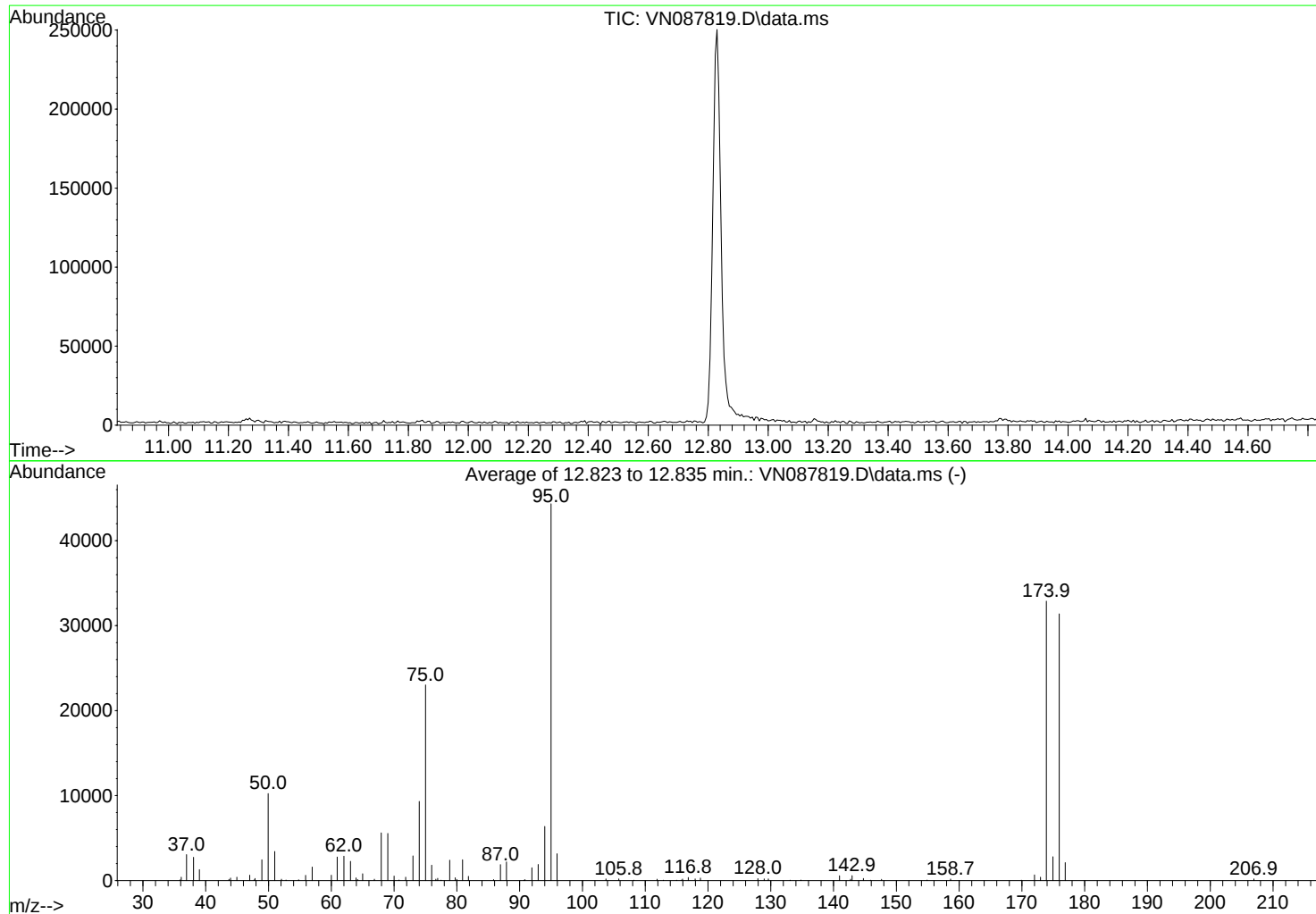
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
81.80	684	103.60	98	127.85	257	171.40	114
82.90	109	103.85	252	129.70	113	171.90	297
85.60	55	104.95	136	129.95	176	172.10	131
86.90	1959	105.65	343	130.90	79	172.85	548
87.90	1858	106.10	71	134.80	197	173.90	34952
90.90	194	112.70	85	136.75	152	174.95	2829
91.95	1755	114.90	88	140.85	705	175.90	34291
93.00	2573	115.80	249	142.85	649	176.95	2426
93.95	6967	116.85	391	148.10	51	281.10	79
95.00	50640	117.70	342	154.70	64		
96.00	3712	118.95	421	170.20	52		

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN091525\
Data File : VN087819.D
Acq On : 15 Sep 2025 08:18
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\82N082125W.M
Title : SW846 8260
Last Update : Fri Aug 22 02:55:42 2025



AutoFind: Scans 1848, 1849, 1850; Background Corrected with Scan 1840

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.1	10243	PASS
75	95	30	60	51.9	23024	PASS
95	95	100	100	100.0	44339	PASS
96	95	5	9	7.1	3168	PASS
173	174	0.00	2	1.2	405	PASS
174	95	50	100	74.1	32877	PASS
175	174	5	9	8.5	2808	PASS
176	174	95	101	95.4	31381	PASS
177	176	5	9	6.8	2122	PASS

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.90	85	48.95	2452	63.05	2268	74.00	931
36.10	401	49.95	10243	63.95	318	75.00	2302
36.95	3064	51.00	3429	64.20	140	76.00	182
38.05	2743	52.05	165	65.00	815	76.65	17
39.00	1294	52.80	61	66.85	171	76.95	278
43.70	155	54.80	94	67.95	5622	77.50	52
43.95	302	55.90	617	69.00	5557	78.85	2406
44.95	398	56.95	1607	70.00	534	79.75	330
47.00	637	60.00	647	70.80	75	80.00	138
47.70	91	60.95	2784	71.85	404	80.90	2464
47.85	257	62.00	2871	73.00	2919	81.85	506

Average of 12.823 to 12.835 min.: VN087819.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
85.85	122	105.80	204	128.95	205	158.65	191
86.95	1883	108.20	55	129.60	198	169.90	50
87.90	2213	111.90	176	133.10	57	172.00	677
90.70	57	112.90	58	134.80	73	172.95	405
90.85	121	115.00	56	140.95	568	173.90	32877
91.95	1506	115.80	66	142.70	166	174.95	2808
92.95	1901	115.95	191	142.95	596	175.95	31381
94.00	6372	116.85	378	144.75	247	176.90	2122
95.00	44339	117.95	207	145.90	53	206.95	199
95.95	3168	118.80	310	147.65	155		
103.75	200	127.95	244	154.90	64		

Instrument :

MSVOA_N

ClientSampleId :

BFB



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

Report of Analysis

Client:	Atlantic Recovery Services, Inc.		Date Collected:	
Project:	PGW Phila. Gas Works		Date Received:	
Client Sample ID:	VN0915WBL01		SDG No.:	Q3092
Lab Sample ID:	VN0915WBL01		Matrix:	TCLP
Analytical Method:	8260D		% 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:	Date Analyzed	Prep Batch ID
VN087822.D	1	09/15/25 09:35	VN091525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-01-4	Vinyl Chloride	0.26	U	0.26	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.23	U	0.23	1.00	ug/L
78-93-3	2-Butanone	0.98	U	0.98	5.00	ug/L
56-23-5	Carbon Tetrachloride	0.25	U	0.25	1.00	ug/L
67-66-3	Chloroform	0.25	U	0.25	1.00	ug/L
71-43-2	Benzene	0.15	U	0.15	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.22	U	0.22	1.00	ug/L
79-01-6	Trichloroethene	0.090	U	0.090	1.00	ug/L
127-18-4	Tetrachloroethene	0.23	U	0.23	1.00	ug/L
108-90-7	Chlorobenzene	0.12	U	0.12	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	52.5		74 - 125	105%	SPK: 50
1868-53-7	Dibromofluoromethane	50.3		75 - 124	101%	SPK: 50
2037-26-5	Toluene-d8	47.2		86 - 113	94%	SPK: 50
460-00-4	4-Bromofluorobenzene	44.6		77 - 121	89%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	195000	8.206			
540-36-3	1,4-Difluorobenzene	447000	9.082			
3114-55-4	Chlorobenzene-d5	421000	11.841			
3855-82-1	1,4-Dichlorobenzene-d4	195000	13.77			

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\VN091525\
 Data File : VN087822.D
 Acq On : 15 Sep 2025 09:35
 Operator : JC\MD
 Sample : VN0915WBL01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN0915WBL01

Quant Time: Sep 16 01:29:06 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
 Quant Title : SW846 8260
 QLast Update : Fri Aug 22 02:55:42 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	8.206	168	194621	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.082	114	447138	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.841	117	421003	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.770	152	194722	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.559	65	209394	52.512	ug/l	0.00
Spiked Amount	50.000	Range	74 - 125	Recovery	= 105.020%	
35) Dibromofluoromethane	8.147	113	162528	50.344	ug/l	0.00
Spiked Amount	50.000	Range	75 - 124	Recovery	= 100.680%	
50) Toluene-d8	10.547	98	570772	47.237	ug/l	0.00
Spiked Amount	50.000	Range	86 - 113	Recovery	= 94.480%	
62) 4-Bromofluorobenzene	12.829	95	191658	44.602	ug/l	0.00
Spiked Amount	50.000	Range	77 - 121	Recovery	= 89.200%	

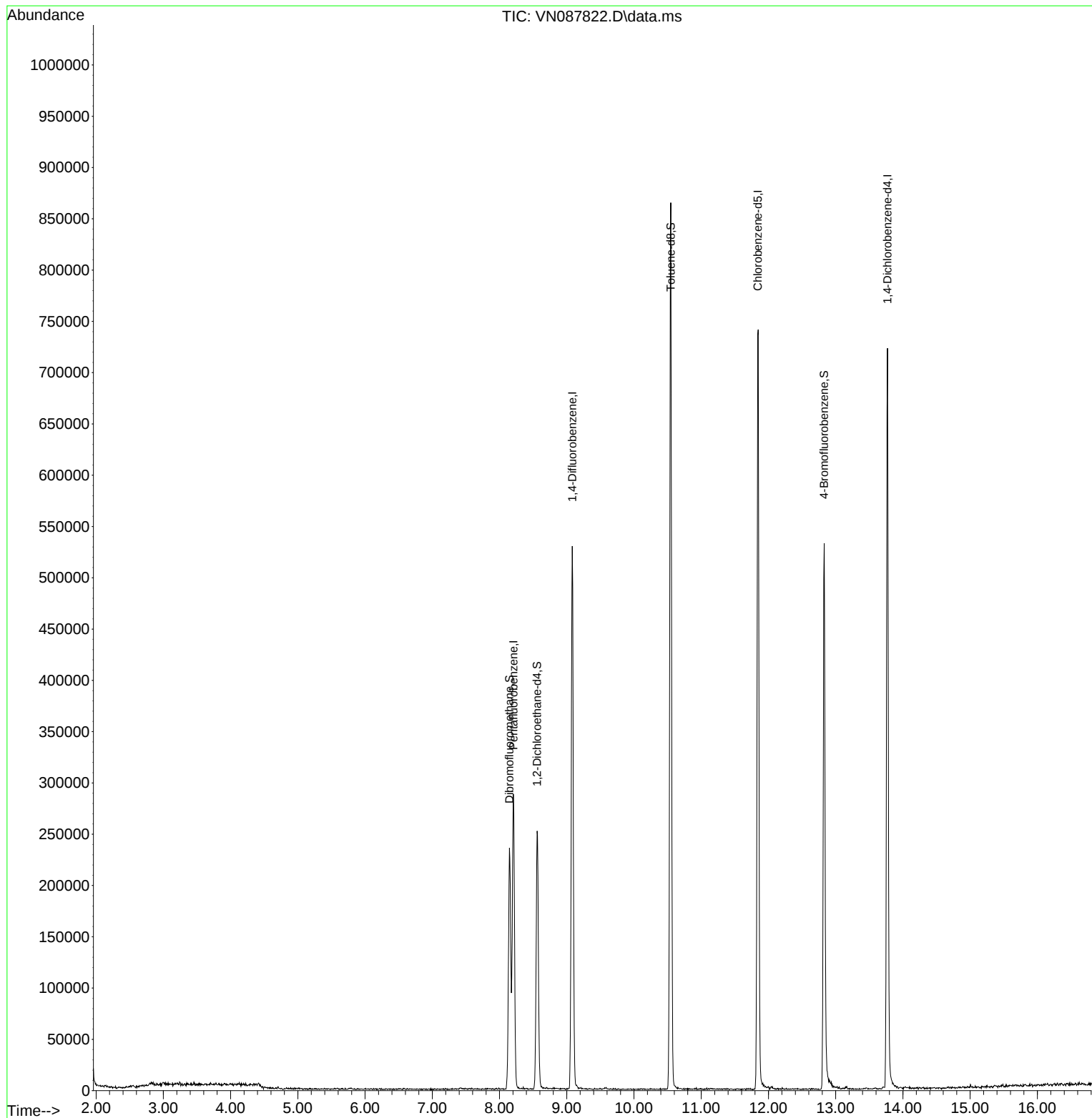
Target Compounds	Qvalue

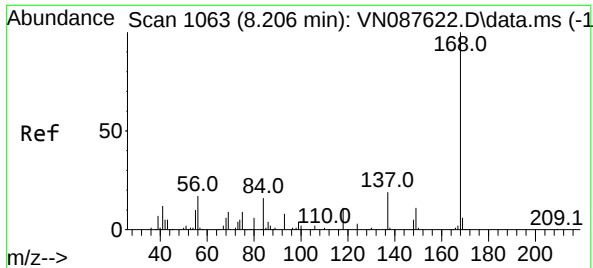
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN091525\
Data File : VN087822.D
Acq On : 15 Sep 2025 09:35
Operator : JC\MD
Sample : VN0915WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0915WBL01

Quant Time: Sep 16 01:29:06 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
Quant Title : SW846 8260
QLast Update : Fri Aug 22 02:55:42 2025
Response via : Initial Calibration

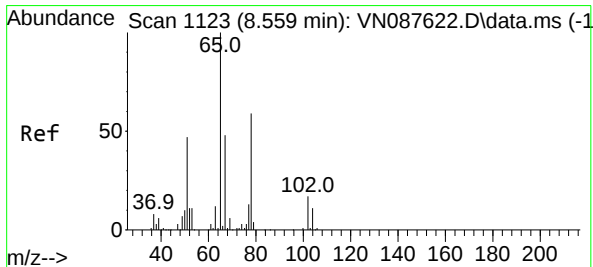
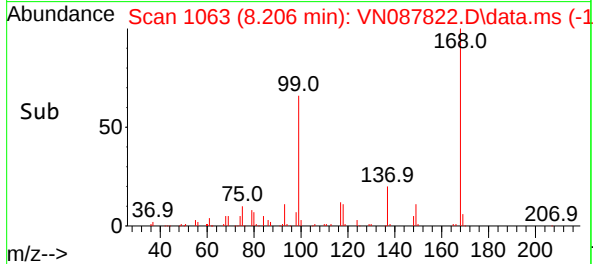
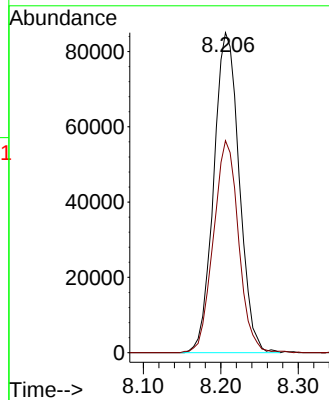
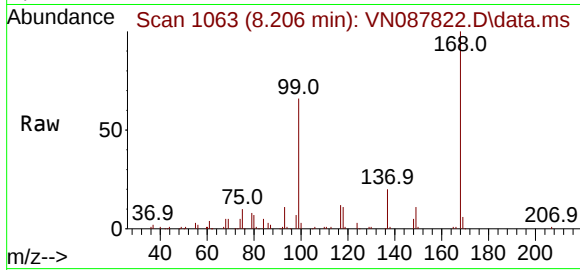




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.206 min Scan# 1063
Delta R.T. -0.000 min
Lab File: VN087822.D
Acq: 15 Sep 2025 09:35

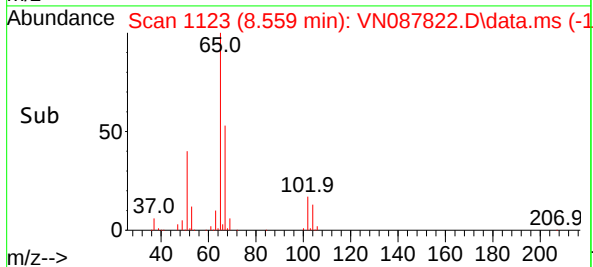
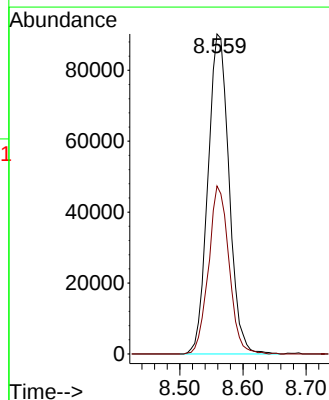
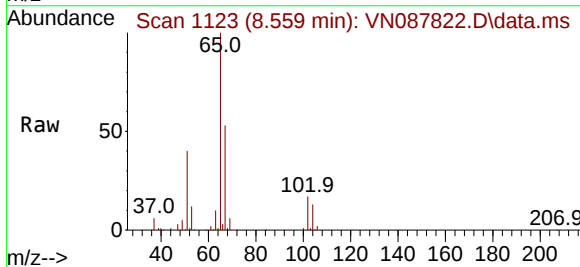
Instrument :
MSVOA_N
ClientSampleId :
VN0915WBL01

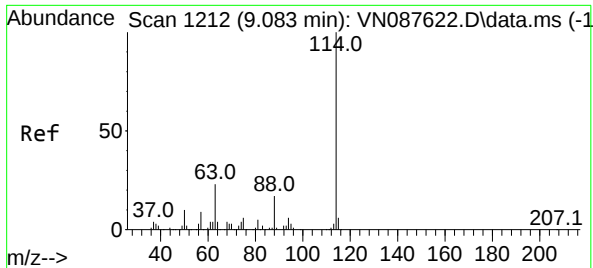
Tgt Ion:168 Resp: 194621
Ion Ratio Lower Upper
168 100
99 66.2 57.2 85.8



#33
1,2-Dichloroethane-d4
Concen: 52.512 ug/l
RT: 8.559 min Scan# 1123
Delta R.T. -0.000 min
Lab File: VN087822.D
Acq: 15 Sep 2025 09:35

Tgt Ion: 65 Resp: 209394
Ion Ratio Lower Upper
65 100
67 50.8 0.0 100.0





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.082 min Scan# 1

Delta R.T. -0.000 min

Lab File: VN087822.D

Acq: 15 Sep 2025 09:35

Instrument :

MSVOA_N

ClientSampleId :

VN0915WBL01

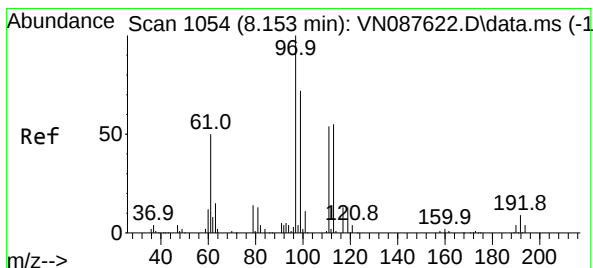
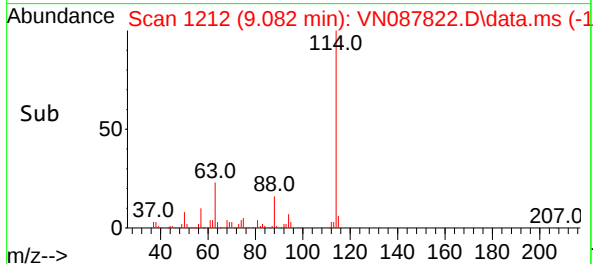
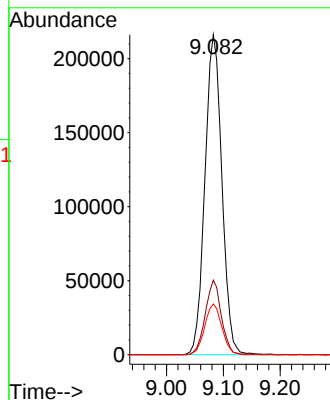
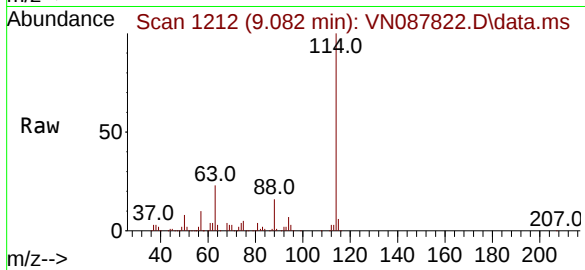
Tgt Ion:114 Resp: 447138

Ion Ratio Lower Upper

114 100

63 23.3 0.0 45.2

88 15.8 0.0 33.4



#35

Dibromofluoromethane

Concen: 50.344 ug/l

RT: 8.147 min Scan# 1053

Delta R.T. -0.006 min

Lab File: VN087822.D

Acq: 15 Sep 2025 09:35

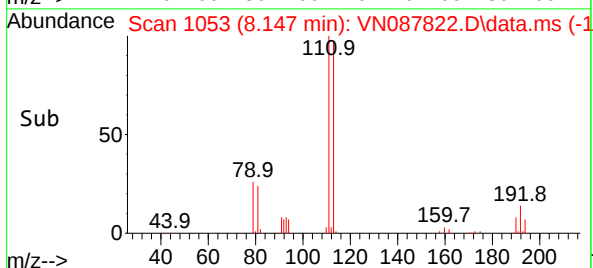
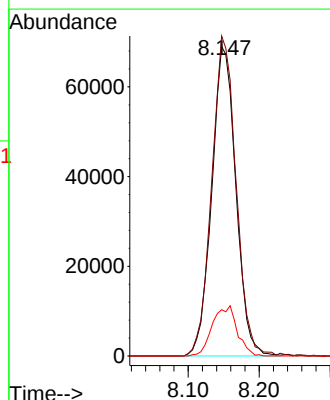
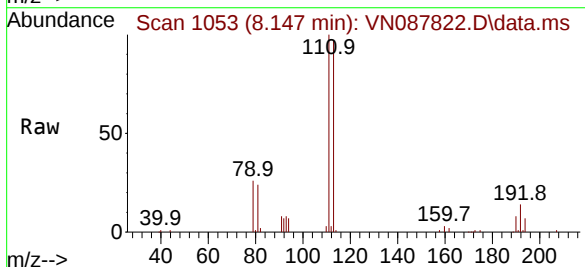
Tgt Ion:113 Resp: 162528

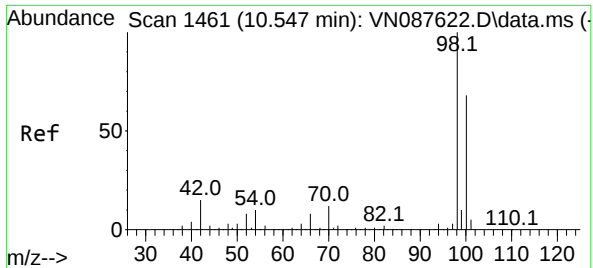
Ion Ratio Lower Upper

113 100

111 104.5 82.8 124.2

192 16.6 12.8 19.2

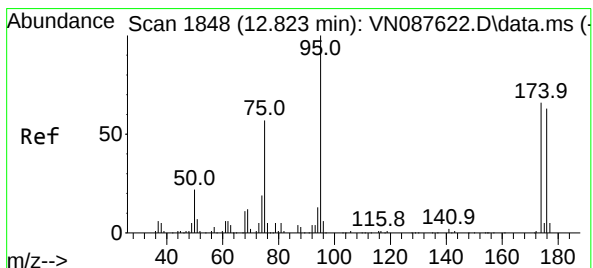
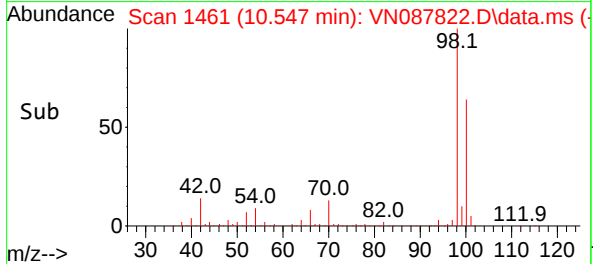
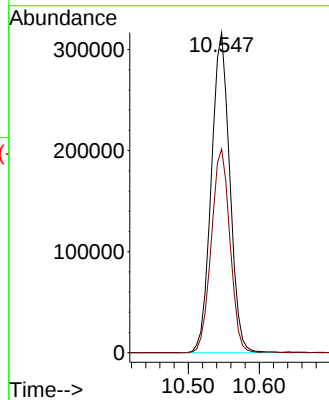
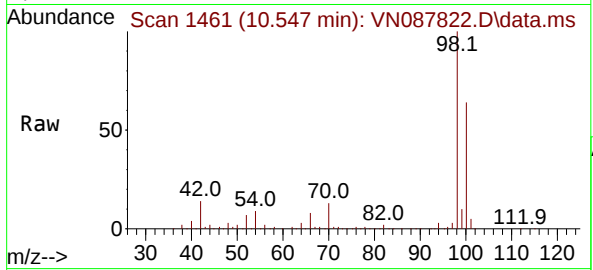




#50
Toluene-d8
Concen: 47.237 ug/l
RT: 10.547 min Scan# 1461
Delta R.T. -0.000 min
Lab File: VN087822.D
Acq: 15 Sep 2025 09:35

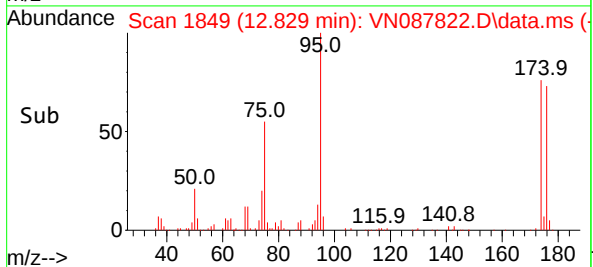
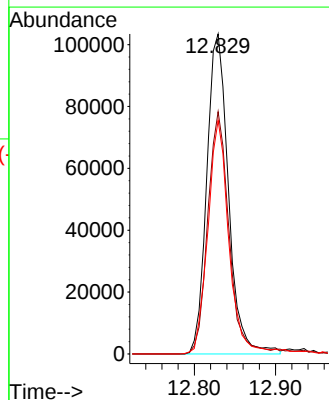
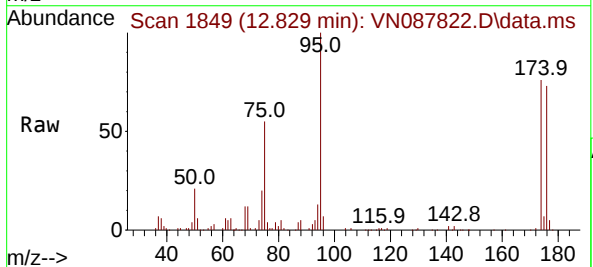
Instrument :
MSVOA_N
ClientSampleId :
VN0915WBL01

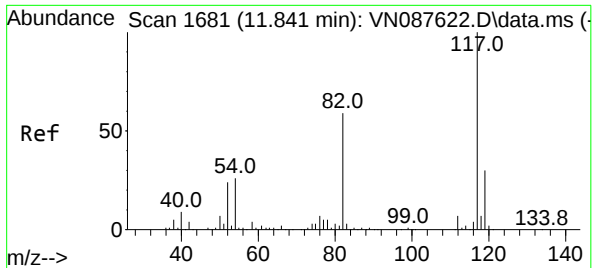
Tgt Ion: 98 Resp: 570772
Ion Ratio Lower Upper
98 100
100 64.2 52.8 79.2



#62
4-Bromofluorobenzene
Concen: 44.602 ug/l
RT: 12.829 min Scan# 1849
Delta R.T. 0.006 min
Lab File: VN087822.D
Acq: 15 Sep 2025 09:35

Tgt Ion: 95 Resp: 191658
Ion Ratio Lower Upper
95 100
174 73.8 0.0 138.4
176 71.3 0.0 132.6

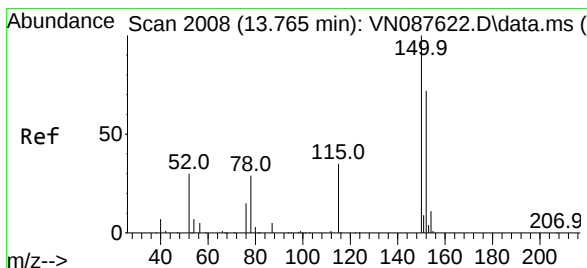
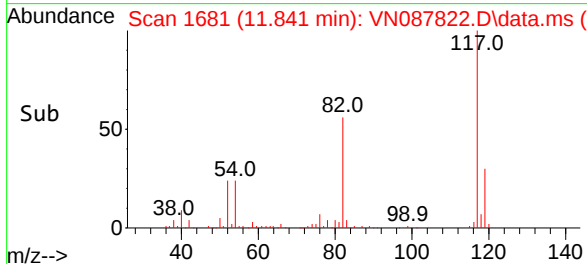
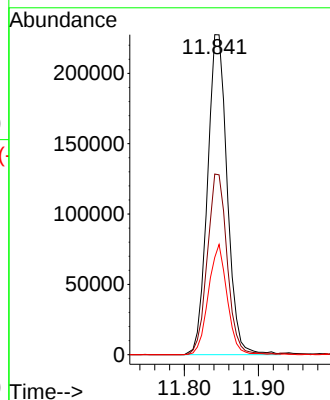
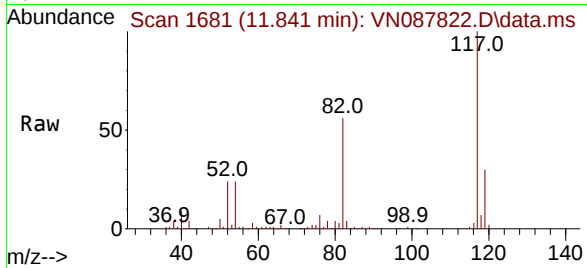




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.841 min Scan# 11
Delta R.T. -0.000 min
Lab File: VN087822.D
Acq: 15 Sep 2025 09:35

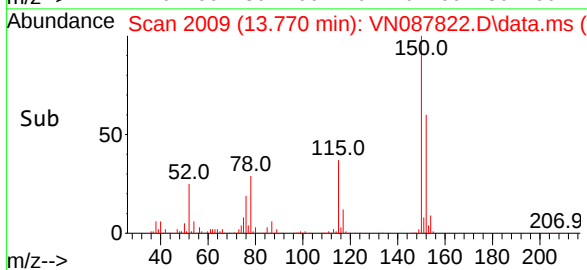
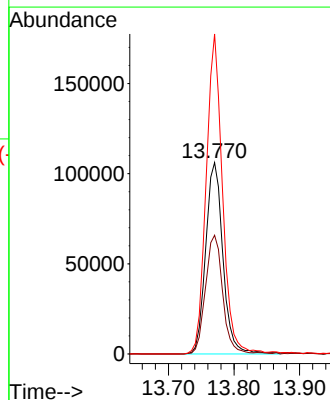
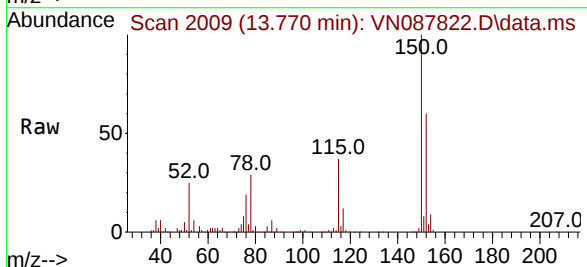
Instrument :
MSVOA_N
ClientSampleId :
VN0915WBL01

Tgt Ion:117 Resp: 421003
Ion Ratio Lower Upper
117 100
82 56.4 47.4 71.2
119 30.4 24.3 36.5



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.770 min Scan# 2009
Delta R.T. 0.006 min
Lab File: VN087822.D
Acq: 15 Sep 2025 09:35

Tgt Ion:152 Resp: 194722
Ion Ratio Lower Upper
152 100
115 61.7 32.3 96.8
150 157.6 0.0 351.0



Report of Analysis

Client:	Atlantic Recovery Services, Inc.			Date Collected:	
Project:	PGW Phila. Gas Works			Date Received:	
Client Sample ID:	VN0915WBS01			SDG No.:	Q3092
Lab Sample ID:	VN0915WBS01			Matrix:	TCLP
Analytical Method:	8260D			% 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:	Date Analyzed	Prep Batch ID
VN087823.D	1	09/15/25 09:56	VN091525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-01-4	Vinyl Chloride	19.2		0.26	1.00	ug/L
75-35-4	1,1-Dichloroethene	19.2		0.23	1.00	ug/L
78-93-3	2-Butanone	91.2		0.98	5.00	ug/L
56-23-5	Carbon Tetrachloride	19.4		0.25	1.00	ug/L
67-66-3	Chloroform	19.3		0.25	1.00	ug/L
71-43-2	Benzene	18.9		0.15	1.00	ug/L
107-06-2	1,2-Dichloroethane	19.4		0.22	1.00	ug/L
79-01-6	Trichloroethene	18.5		0.090	1.00	ug/L
127-18-4	Tetrachloroethene	17.6		0.23	1.00	ug/L
108-90-7	Chlorobenzene	18.2		0.12	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	46.1		74 - 125	92%	SPK: 50
1868-53-7	Dibromofluoromethane	49.6		75 - 124	99%	SPK: 50
2037-26-5	Toluene-d8	46.6		86 - 113	93%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.7		77 - 121	95%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	212000	8.206			
540-36-3	1,4-Difluorobenzene	416000	9.082			
3114-55-4	Chlorobenzene-d5	396000	11.847			
3855-82-1	1,4-Dichlorobenzene-d4	209000	13.77			

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\VN091525\
 Data File : VN087823.D
 Acq On : 15 Sep 2025 09:56
 Operator : JC\MD
 Sample : VN0915WBS01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN0915WBS01

Manual Integrations
 APPROVED

Reviewed By :John Carlone 09/16/2025
 Supervised By :Semsettin Yesilyurt 09/16/2025

Quant Time: Sep 16 01:29:32 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
 Quant Title : SW846 8260
 QLast Update : Fri Aug 22 02:55:42 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	8.206	168	212267	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.082	114	415751	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.847	117	395901	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.770	152	209334	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.565	65	200656	46.137	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery =	92.280%		
35) Dibromofluoromethane	8.153	113	148808	49.574	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	99.140%		
50) Toluene-d8	10.547	98	523783	46.621	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery =	93.240%		
62) 4-Bromofluorobenzene	12.829	95	190651	47.717	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery =	95.440%		
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	2.148	85	57092	18.937	ug/l	98
3) Chloromethane	2.383	50	59512	19.208	ug/l	93
4) Vinyl Chloride	2.536	62	68875	19.173	ug/l	96
5) Bromomethane	2.977	94	29286	15.800	ug/l	96
6) Chloroethane	3.136	64	44871	17.772	ug/l	92
7) Trichlorofluoromethane	3.512	101	100527	19.100	ug/l	95
8) Diethyl Ether	3.965	74	40203	17.540	ug/l	99
9) 1,1,2-Trichlorotrifluo...	4.365	101	55081	18.496	ug/l	92
10) Methyl Iodide	4.577	142	20900	14.922	ug/l	92
11) Tert butyl alcohol	5.524	59	70617	93.530	ug/l	99
12) 1,1-Dichloroethene	4.336	96	58798	19.213	ug/l	90
13) Acrolein	4.183	56	78642	84.725	ug/l	99
14) Allyl chloride	5.012	41	103155m	18.600	ug/l	
15) Acrylonitrile	5.712	53	195219	91.680	ug/l	99
16) Acetone	4.424	43	205672	86.873	ug/l	97
17) Carbon Disulfide	4.694	76	170264	20.209	ug/l #	94
18) Methyl Acetate	5.012	43	96049	19.376	ug/l	99
19) Methyl tert-butyl Ether	5.788	73	205025	17.858	ug/l	97
20) Methylene Chloride	5.259	84	68651	19.285	ug/l	92
21) trans-1,2-Dichloroethene	5.771	96	60273	18.172	ug/l	92
22) Diisopropyl ether	6.659	45	218960	18.296	ug/l	98
23) Vinyl Acetate	6.594	43	989533	90.881	ug/l	97
24) 1,1-Dichloroethane	6.553	63	120379	18.345	ug/l	98
25) 2-Butanone	7.471	43	283954	91.164	ug/l	99
26) 2,2-Dichloropropane	7.471	77	103360	18.353	ug/l	99
27) cis-1,2-Dichloroethene	7.471	96	71240	17.967	ug/l	94
28) Bromochloromethane	7.794	49	69154	21.799	ug/l	97
29) Tetrahydrofuran	7.829	42	179766	89.680	ug/l	98
30) Chloroform	7.947	83	129281	19.302	ug/l	99
31) Cyclohexane	8.241	56	93467	17.086	ug/l	99
32) 1,1,1-Trichloroethane	8.147	97	107369	18.916	ug/l	92
36) 1,1-Dichloropropene	8.347	75	79870	17.344	ug/l	98
37) Ethyl Acetate	7.547	43	113551	18.045	ug/l	97
38) Carbon Tetrachloride	8.341	117	88352	19.432	ug/l	98
39) Methylcyclohexane	9.576	83	83939	16.556	ug/l	95
40) Benzene	8.588	78	266523	18.870	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN091525\
 Data File : VN087823.D
 Acq On : 15 Sep 2025 09:56
 Operator : JC\MD
 Sample : VN0915WBS01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN0915WBS01

Manual Integrations
 APPROVED

Reviewed By :John Carlone 09/16/2025
 Supervised By :Semsettin Yesilyurt 09/16/2025

Quant Time: Sep 16 01:29:32 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
 Quant Title : SW846 8260
 QLast Update : Fri Aug 22 02:55:42 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.759	41	54809	16.815	ug/l	96
42) 1,2-Dichloroethane	8.653	62	105061	19.357	ug/l	100
43) Isopropyl Acetate	8.676	43	175694	17.883	ug/l	98
44) Trichloroethene	9.329	130	59748	18.528	ug/l	98
45) 1,2-Dichloropropane	9.606	63	69942	18.786	ug/l	93
46) Dibromomethane	9.694	93	51625	19.486	ug/l	95
47) Bromodichloromethane	9.871	83	105630	19.454	ug/l	100
48) Methyl methacrylate	9.665	41	81295	17.494	ug/l	98
49) 1,4-Dioxane	9.682	88	25119	417.039	ug/l #	92
51) 4-Methyl-2-Pentanone	10.423	43	555651	93.741	ug/l	99
52) Toluene	10.606	92	163321	18.652	ug/l	100
53) t-1,3-Dichloropropene	10.818	75	109528	19.488	ug/l	96
54) cis-1,3-Dichloropropene	10.288	75	110168	18.878	ug/l	91
55) 1,1,2-Trichloroethane	10.994	97	67130	19.818	ug/l	95
56) Ethyl methacrylate	10.859	69	97174	17.951	ug/l	95
57) 1,3-Dichloropropane	11.141	76	115692	19.299	ug/l	98
58) 2-Chloroethyl Vinyl ether	10.141	63	277833	94.824	ug/l	97
59) 2-Hexanone	11.176	43	350869	93.661	ug/l	99
60) Dibromochloromethane	11.335	129	75990	19.361	ug/l	99
61) 1,2-Dibromoethane	11.447	107	69960	19.587	ug/l	99
64) Tetrachloroethene	11.082	164	48297	17.584	ug/l	97
65) Chlorobenzene	11.870	112	179549	18.229	ug/l	96
66) 1,1,1,2-Tetrachloroethane	11.935	131	63703	19.482	ug/l	97
67) Ethyl Benzene	11.941	91	298893	17.527	ug/l	100
68) m/p-Xylenes	12.047	106	232869	37.234	ug/l	94
69) o-Xylene	12.376	106	108163	17.647	ug/l	99
70) Styrene	12.394	104	190127	18.516	ug/l	99
71) Bromoform	12.559	173	50471	20.126	ug/l #	97
73) Isopropylbenzene	12.676	105	278533	16.466	ug/l	99
74) N-amyl acetate	12.670	43	110795m	17.284	ug/l	
75) 1,1,2,2-Tetrachloroethane	12.917	83	112530	19.322	ug/l	95
76) 1,2,3-Trichloropropane	12.970	75	99885m	20.347	ug/l	
77) Bromobenzene	12.959	156	74393	18.652	ug/l	90
78) n-propylbenzene	13.012	91	352826	16.934	ug/l	99
79) 2-Chlorotoluene	13.106	91	210831	16.814	ug/l	100
80) 1,3,5-Trimethylbenzene	13.153	105	243779	16.988	ug/l	99
81) trans-1,4-Dichloro-2-b...	12.717	75	30640m	16.524	ug/l	
82) 4-Chlorotoluene	13.200	91	222078	16.846	ug/l	97
83) tert-Butylbenzene	13.411	119	202356	16.922	ug/l	98
84) 1,2,4-Trimethylbenzene	13.459	105	248994	17.333	ug/l	99
85) sec-Butylbenzene	13.594	105	298460	16.819	ug/l	99
86) p-Isopropyltoluene	13.706	119	248772	16.977	ug/l	100
87) 1,3-Dichlorobenzene	13.711	146	140831	17.930	ug/l	98
88) 1,4-Dichlorobenzene	13.788	146	141565	17.320	ug/l	97
89) n-Butylbenzene	14.035	91	243010	16.698	ug/l	99
90) Hexachloroethane	14.306	117	47397	16.978	ug/l	91
91) 1,2-Dichlorobenzene	14.082	146	135243	18.150	ug/l	98
92) 1,2-Dibromo-3-Chloropr...	14.700	75	23715	17.142	ug/l	96
93) 1,2,4-Trichlorobenzene	15.370	180	77667	17.358	ug/l	100
94) Hexachlorobutadiene	15.470	225	31275	19.606	ug/l	95
95) Naphthalene	15.611	128	260485	16.436	ug/l	98
96) 1,2,3-Trichlorobenzene	15.811	180	74831	17.107	ug/l	96

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN091525\
Data File : VN087823.D
Acq On : 15 Sep 2025 09:56
Operator : JC\MD
Sample : VN0915WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0915WBS01

Manual Integrations
APPROVED

Reviewed By :John Carlone 09/16/2025
Supervised By :Semsettin Yesilyurt 09/16/2025

Quant Time: Sep 16 01:29:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
Quant Title : SW846 8260
QLast Update : Fri Aug 22 02:55:42 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
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(#) = qualifier out of range (m) = manual integration (+) = signals summed

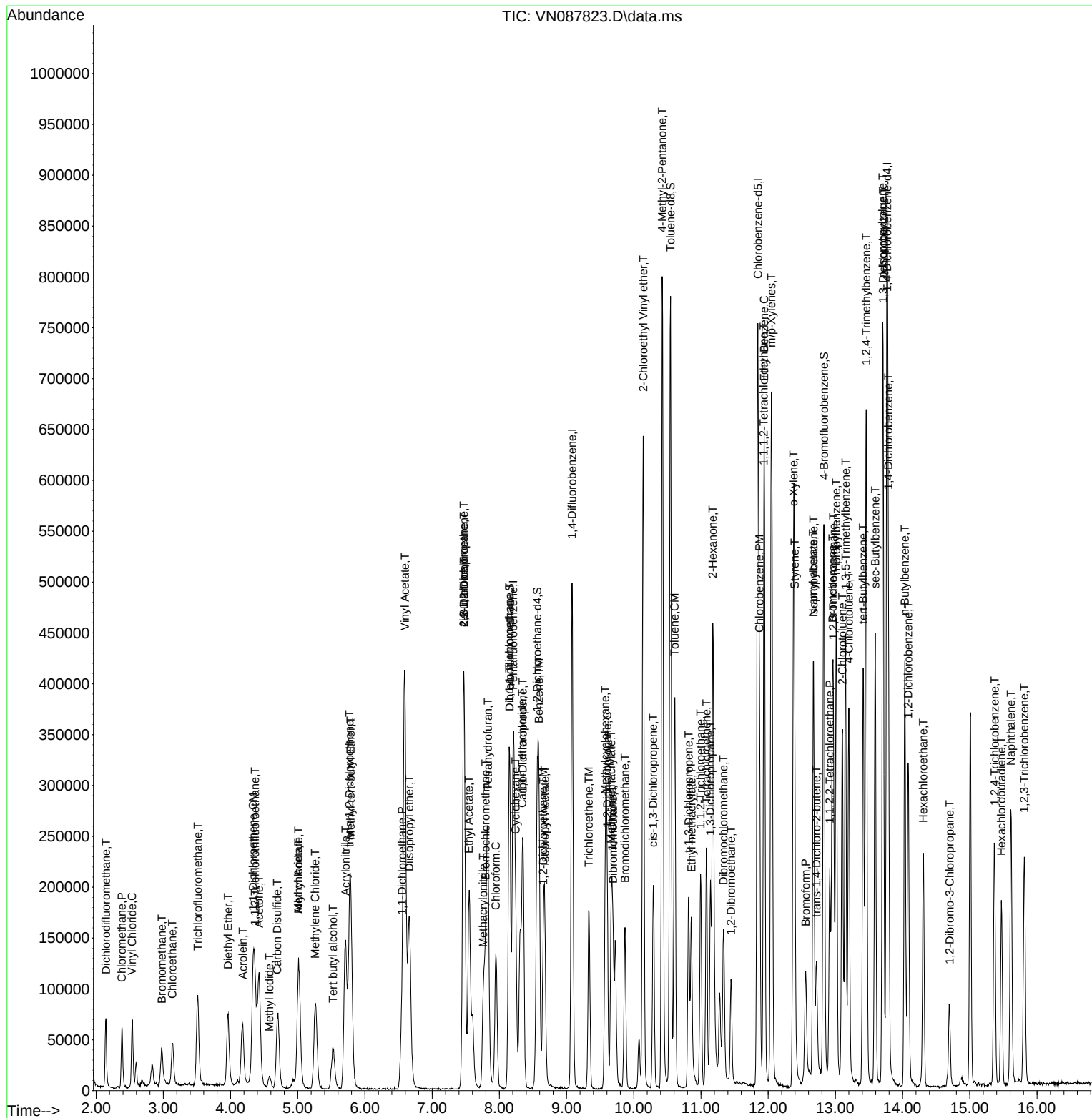
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN091525\
Data File : VN087823.D
Acq On : 15 Sep 2025 09:56
Operator : JC\MD
Sample : VN0915WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0915WBS01

Manual Integrations

Reviewed By :John Carlone 09/16/2025
Supervised By :Semsettin Yesilyurt 09/16/2025

Quant Time: Sep 16 01:29:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
Quant Title : SW846 8260
QLast Update : Fri Aug 22 02:55:42 2025
Response via : Initial Calibration



Report of Analysis

Client:	Atlantic Recovery Services, Inc.			Date Collected:	
Project:	PGW Phila. Gas Works			Date Received:	
Client Sample ID:	VN0915WBSD01			SDG No.:	Q3092
Lab Sample ID:	VN0915WBSD01			Matrix:	TCLP
Analytical Method:	8260D			% 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:	Date Analyzed	Prep Batch ID
VN087824.D	1	09/15/25 10:29	VN091525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-01-4	Vinyl Chloride	18.5		0.26	1.00	ug/L
75-35-4	1,1-Dichloroethene	17.8		0.23	1.00	ug/L
78-93-3	2-Butanone	85.1		0.98	5.00	ug/L
56-23-5	Carbon Tetrachloride	19.3		0.25	1.00	ug/L
67-66-3	Chloroform	17.6		0.25	1.00	ug/L
71-43-2	Benzene	18.5		0.15	1.00	ug/L
107-06-2	1,2-Dichloroethane	18.3		0.22	1.00	ug/L
79-01-6	Trichloroethene	18.3		0.090	1.00	ug/L
127-18-4	Tetrachloroethene	19.3		0.23	1.00	ug/L
108-90-7	Chlorobenzene	18.2		0.12	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	44.3		74 - 125	89%	SPK: 50
1868-53-7	Dibromofluoromethane	48.2		75 - 124	96%	SPK: 50
2037-26-5	Toluene-d8	46.2		86 - 113	92%	SPK: 50
460-00-4	4-Bromofluorobenzene	46.4		77 - 121	93%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	232000	8.206			
540-36-3	1,4-Difluorobenzene	437000	9.082			
3114-55-4	Chlorobenzene-d5	400000	11.847			
3855-82-1	1,4-Dichlorobenzene-d4	214000	13.77			

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\VN091525\
 Data File : VN087824.D
 Acq On : 15 Sep 2025 10:29
 Operator : JC\MD
 Sample : VN0915WBSD01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN0915WBSD01

Manual Integrations
 APPROVED

Reviewed By : John Carlone 09/16/2025
 Supervised By : Semsettin Yesilyurt 09/16/2025

Quant Time: Sep 16 01:30:41 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
 Quant Title : SW846 8260
 QLast Update : Fri Aug 22 02:55:42 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	8.206	168	231988	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.082	114	436544	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.847	117	400333	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.770	152	213781	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.565	65	210644	44.317	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery =	88.640%		
35) Dibromofluoromethane	8.153	113	151903	48.195	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	96.400%		
50) Toluene-d8	10.547	98	544705	46.174	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery =	92.340%		
62) 4-Bromofluorobenzene	12.829	95	194787	46.430	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery =	92.860%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.142	85	63480	19.266	ug/l	93
3) Chloromethane	2.383	50	63174	18.657	ug/l	98
4) Vinyl Chloride	2.542	62	72776	18.537	ug/l	99
5) Bromomethane	2.977	94	33141	16.360	ug/l	96
6) Chloroethane	3.136	64	46236	16.756	ug/l	97
7) Trichlorofluoromethane	3.518	101	113902	19.802	ug/l	95
8) Diethyl Ether	3.965	74	43695	17.443	ug/l	99
9) 1,1,2-Trichlorotrifluo...	4.365	101	60632	18.629	ug/l	95
10) Methyl Iodide	4.571	142	25147	15.741	ug/l #	86
11) Tert butyl alcohol	5.524	59	73516	89.092	ug/l	99
12) 1,1-Dichloroethene	4.330	96	59695	17.848	ug/l	96
13) Acrolein	4.177	56	82202	81.032	ug/l	99
14) Allyl chloride	5.006	41	107794m	17.785	ug/l	
15) Acrylonitrile	5.706	53	200485	86.150	ug/l	100
16) Acetone	4.424	43	205774	79.527	ug/l	96
17) Carbon Disulfide	4.700	76	176544	19.173	ug/l	99
18) Methyl Acetate	5.018	43	102186	18.862	ug/l	99
19) Methyl tert-butyl Ether	5.783	73	209230	16.675	ug/l	94
20) Methylene Chloride	5.259	84	69594	17.796	ug/l	98
21) trans-1,2-Dichloroethene	5.765	96	63543	17.529	ug/l	91
22) Diisopropyl ether	6.659	45	220658	16.870	ug/l	96
23) Vinyl Acetate	6.588	43	1014690	85.269	ug/l	99
24) 1,1-Dichloroethane	6.547	63	124386	17.344	ug/l	97
25) 2-Butanone	7.471	43	289819	85.137	ug/l	98
26) 2,2-Dichloropropane	7.471	77	106342	17.277	ug/l	99
27) cis-1,2-Dichloroethene	7.471	96	74418	17.173	ug/l	98
28) Bromochloromethane	7.794	49	70660	20.381	ug/l	97
29) Tetrahydrofuran	7.830	42	190022	86.738	ug/l	99
30) Chloroform	7.947	83	128971	17.619	ug/l	99
31) Cyclohexane	8.235	56	102115	17.080	ug/l	96
32) 1,1,1-Trichloroethane	8.147	97	108789	17.537	ug/l	93
36) 1,1-Dichloropropene	8.347	75	85601	17.703	ug/l	99
37) Ethyl Acetate	7.541	43	109212	16.529	ug/l #	94
38) Carbon Tetrachloride	8.341	117	92204	19.314	ug/l	92
39) Methylcyclohexane	9.582	83	97768	18.366	ug/l	93
40) Benzene	8.588	78	273946	18.472	ug/l	95

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN091525\
 Data File : VN087824.D
 Acq On : 15 Sep 2025 10:29
 Operator : JC\MD
 Sample : VN0915WBSD01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN0915WBSD01

Manual Integrations
 APPROVED

Reviewed By :John Carlone 09/16/2025
 Supervised By :Semsettin Yesilyurt 09/16/2025

Quant Time: Sep 16 01:30:41 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
 Quant Title : SW846 8260
 QLast Update : Fri Aug 22 02:55:42 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.765	41	62537	18.272	ug/l	98
42) 1,2-Dichloroethane	8.653	62	104448	18.327	ug/l	99
43) Isopropyl Acetate	8.677	43	185883	18.019	ug/l	99
44) Trichloroethene	9.329	130	61995	18.309	ug/l	93
45) 1,2-Dichloropropane	9.600	63	70103	17.933	ug/l	94
46) Dibromomethane	9.688	93	53930	19.386	ug/l	95
47) Bromodichloromethane	9.865	83	107078	18.781	ug/l	92
48) Methyl methacrylate	9.665	41	81257	16.653	ug/l	95
49) 1,4-Dioxane	9.682	88	25086	396.653	ug/l #	88
51) 4-Methyl-2-Pentanone	10.423	43	574954	92.378	ug/l	98
52) Toluene	10.612	92	170204	18.512	ug/l	99
53) t-1,3-Dichloropropene	10.818	75	109070	18.482	ug/l	97
54) cis-1,3-Dichloropropene	10.294	75	112626	18.380	ug/l	95
55) 1,1,2-Trichloroethane	10.994	97	69080	19.423	ug/l	94
56) Ethyl methacrylate	10.859	69	97814	17.208	ug/l	98
57) 1,3-Dichloropropane	11.141	76	116257	18.469	ug/l	99
58) 2-Chloroethyl Vinyl ether	10.141	63	291427	94.726	ug/l	97
59) 2-Hexanone	11.182	43	343614	87.355	ug/l	98
60) Dibromochloromethane	11.341	129	78737	19.106	ug/l	100
61) 1,2-Dibromoethane	11.447	107	70048	18.678	ug/l	96
64) Tetrachloroethene	11.082	164	53679	19.327	ug/l	86
65) Chlorobenzene	11.870	112	180898	18.163	ug/l	98
66) 1,1,1,2-Tetrachloroethane	11.941	131	67833	20.515	ug/l	96
67) Ethyl Benzene	11.941	91	310381	17.999	ug/l	96
68) m/p-Xylenes	12.053	106	230739	36.485	ug/l	99
69) o-Xylene	12.382	106	111781	18.036	ug/l	95
70) Styrene	12.388	104	190167	18.315	ug/l	98
71) Bromoform	12.559	173	49546	19.538	ug/l #	97
73) Isopropylbenzene	12.676	105	289592	16.764	ug/l	99
74) N-amyl acetate	12.553	43	120140m	18.351	ug/l	
75) 1,1,2,2-Tetrachloroethane	12.917	83	105537	17.745	ug/l	99
76) 1,2,3-Trichloropropane	12.970	75	89053m	17.763	ug/l	
77) Bromobenzene	12.959	156	72309	17.753	ug/l	94
78) n-propylbenzene	13.012	91	367078	17.251	ug/l	98
79) 2-Chlorotoluene	13.106	91	218445	17.059	ug/l	99
80) 1,3,5-Trimethylbenzene	13.153	105	249808	17.046	ug/l	96
81) trans-1,4-Dichloro-2-b...	12.717	75	29974m	15.829	ug/l	
82) 4-Chlorotoluene	13.200	91	227849	16.924	ug/l	96
83) tert-Butylbenzene	13.417	119	213721	17.501	ug/l	98
84) 1,2,4-Trimethylbenzene	13.459	105	259452	17.686	ug/l	98
85) sec-Butylbenzene	13.594	105	325238	17.947	ug/l	100
86) p-Isopropyltoluene	13.706	119	262843	17.564	ug/l	98
87) 1,3-Dichlorobenzene	13.712	146	140920	17.569	ug/l	98
88) 1,4-Dichlorobenzene	13.788	146	146108	17.504	ug/l	97
89) n-Butylbenzene	14.035	91	260046	17.497	ug/l	100
90) Hexachloroethane	14.306	117	51692	18.131	ug/l	90
91) 1,2-Dichlorobenzene	14.082	146	139704	18.359	ug/l	97
92) 1,2-Dibromo-3-Chloropr...	14.694	75	23882	16.903	ug/l	97
93) 1,2,4-Trichlorobenzene	15.364	180	77696	17.003	ug/l	96
94) Hexachlorobutadiene	15.476	225	34676	21.286	ug/l	97
95) Naphthalene	15.617	128	271079	16.748	ug/l	99
96) 1,2,3-Trichlorobenzene	15.817	180	78857	17.652	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN091525\
Data File : VN087824.D
Acq On : 15 Sep 2025 10:29
Operator : JC\MD
Sample : VN0915WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0915WBSD01

Manual Integrations
APPROVED

Reviewed By :John Carlone 09/16/2025
Supervised By :Semsettin Yesilyurt 09/16/2025

Quant Time: Sep 16 01:30:41 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
Quant Title : SW846 8260
QLast Update : Fri Aug 22 02:55:42 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
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(#) = qualifier out of range (m) = manual integration (+) = signals summed

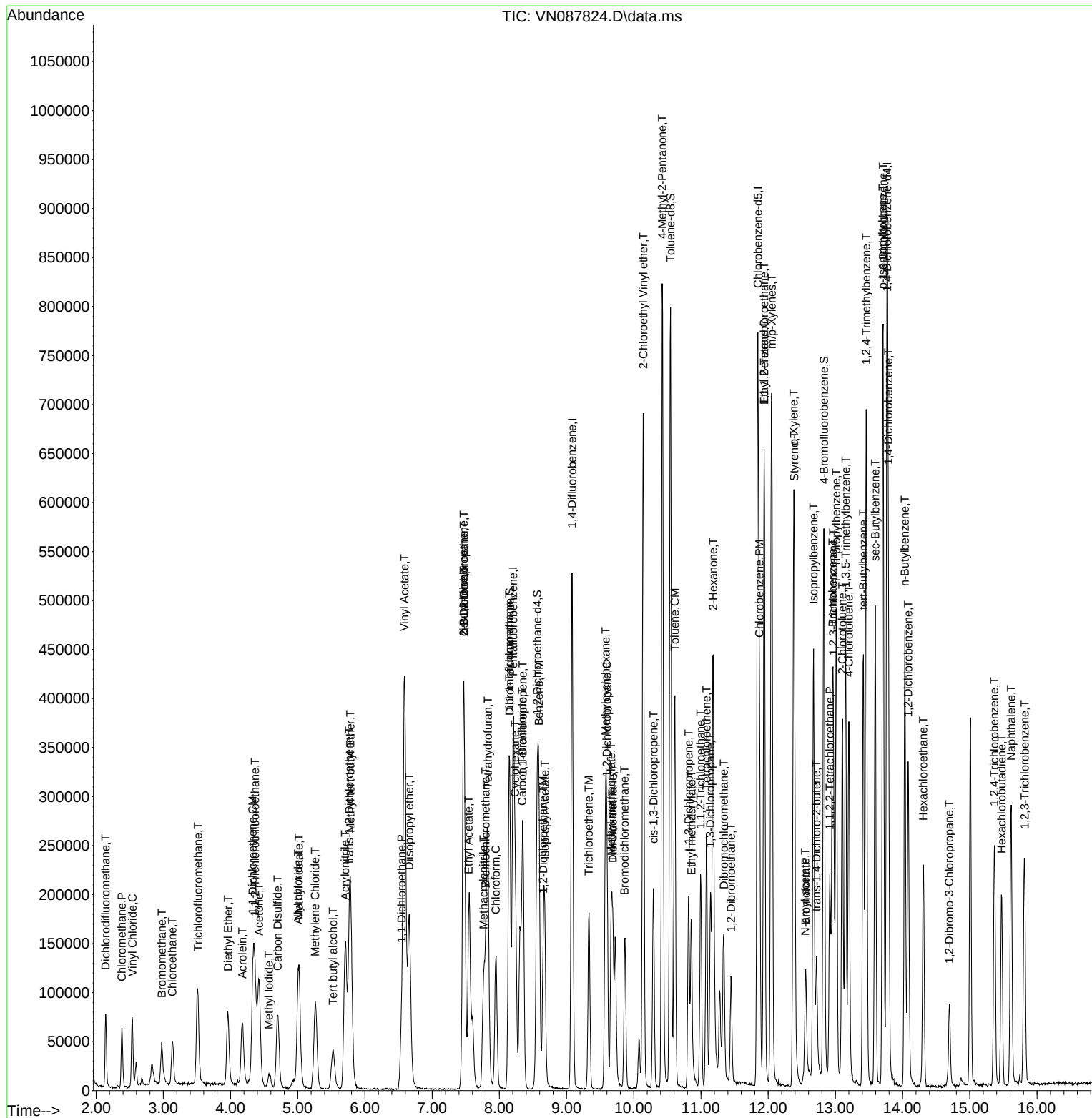
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN091525\
Data File : VN087824.D
Acq On : 15 Sep 2025 10:29
Operator : JC\MD
Sample : VN0915WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0915WBSD01

Manual Integrations APPROVED

Reviewed By :John Carlone 09/16/2025
Supervised By :Semsettin Yesilyurt 09/16/2025

Quant Time: Sep 16 01:30:41 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
Quant Title : SW846 8260
QLast Update : Fri Aug 22 02:55:42 2025
Response via : Initial Calibration



Manual Integration Report

Sequence:	VN082125	Instrument	MSVOA_n
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC001	VN087619.D	1,2,3-Trichloropropane	JOHN	8/22/2025 9:16:40 AM	MMDadoda	8/25/2025 8:11:19 AM	Peak Integrated by Software
VSTDICC001	VN087619.D	1,4-Dichlorobenzene	JOHN	8/22/2025 9:16:40 AM	MMDadoda	8/25/2025 8:11:19 AM	Peak Integrated by Software
VSTDICC001	VN087619.D	Diethyl Ether	JOHN	8/22/2025 9:16:40 AM	MMDadoda	8/25/2025 8:11:19 AM	Peak Integrated by Software
VSTDICC001	VN087619.D	Ethyl Acetate	JOHN	8/22/2025 9:16:40 AM	MMDadoda	8/25/2025 8:11:19 AM	Peak Integrated by Software
VSTDICC001	VN087619.D	Methyl Acetate	JOHN	8/22/2025 9:16:40 AM	MMDadoda	8/25/2025 8:11:19 AM	Peak Integrated by Software
VSTDICC001	VN087619.D	N-amyl acetate	JOHN	8/22/2025 9:16:40 AM	MMDadoda	8/25/2025 8:11:19 AM	Peak Integrated by Software
VSTDICC005	VN087620.D	1,2,3-Trichloropropane	JOHN	8/22/2025 9:16:49 AM	MMDadoda	8/25/2025 8:11:20 AM	Peak Integrated by Software
VSTDICC005	VN087620.D	Ethyl Acetate	JOHN	8/22/2025 9:16:49 AM	MMDadoda	8/25/2025 8:11:20 AM	Peak Integrated by Software
VSTDICC005	VN087620.D	N-amyl acetate	JOHN	8/22/2025 9:16:49 AM	MMDadoda	8/25/2025 8:11:20 AM	Peak Integrated by Software
VSTDICC020	VN087621.D	1,2,3-Trichloropropane	JOHN	8/22/2025 9:17:20 AM	MMDadoda	8/25/2025 8:11:22 AM	Peak Integrated by Software
VSTDICC020	VN087621.D	N-amyl acetate	JOHN	8/22/2025 9:17:20 AM	MMDadoda	8/25/2025 8:11:22 AM	Peak Integrated by Software
VSTDICCC050	VN087622.D	1,2,3-Trichloropropane	JOHN	8/22/2025 9:17:24 AM	MMDadoda	8/25/2025 8:11:23 AM	Peak Integrated by Software
VSTDICCC050	VN087622.D	N-amyl acetate	JOHN	8/22/2025 9:17:24 AM	MMDadoda	8/25/2025 8:11:23 AM	Peak Integrated by Software

Manual Integration Report

Sequence:

VN082125

Instrument

MSVOA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC100	VN087623.D	1,2,3-Trichloropropane	JOHN	8/22/2025 9:17:28 AM	MMDadoda	8/25/2025 8:11:24 AM	Peak Integrated by Software
VSTDICC150	VN087624.D	1,2,3-Trichloropropane	JOHN	8/22/2025 9:17:33 AM	MMDadoda	8/25/2025 8:11:26 AM	Peak Integrated by Software
VSTDICV050	VN087626.D	1,2,3-Trichloropropane	JOHN	8/22/2025 9:17:37 AM	MMDadoda	8/25/2025 8:11:28 AM	Peak Integrated by Software
VSTDICV050	VN087626.D	N-amyl acetate	JOHN	8/22/2025 9:17:37 AM	MMDadoda	8/25/2025 8:11:28 AM	Peak Integrated by Software

Manual Integration Report

Sequence:	VN091525	Instrument	MSVOA_n
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC050	VN087820.D	1,2,3-Trichloropropane	JOHN	9/16/2025 8:01:03 AM	MMDadoda	9/16/2025 8:01:46 AM	Peak Integrated by Software
VSTDCCC050	VN087820.D	Bromomethane	JOHN	9/16/2025 8:01:03 AM	MMDadoda	9/16/2025 8:01:46 AM	Peak Integrated by Software
VSTDCCC050	VN087820.D	N-amyl acetate	JOHN	9/16/2025 8:01:03 AM	MMDadoda	9/16/2025 8:01:46 AM	Peak Integrated by Software
VN0915WBS01	VN087823.D	1,2,3-Trichloropropane	JOHN	9/16/2025 8:03:46 AM	Sam	9/16/2025 8:05:33 AM	Peak Integrated by Software
VN0915WBS01	VN087823.D	Allyl chloride	JOHN	9/16/2025 8:03:46 AM	Sam	9/16/2025 8:05:33 AM	Peak Integrated by Software
VN0915WBS01	VN087823.D	N-amyl acetate	JOHN	9/16/2025 8:03:46 AM	Sam	9/16/2025 8:05:33 AM	Peak Integrated by Software
VN0915WBS01	VN087823.D	trans-1,4-Dichloro-2-but ene	JOHN	9/16/2025 8:03:46 AM	Sam	9/16/2025 8:05:33 AM	Peak Integrated by Software
VN0915WBSD01	VN087824.D	1,2,3-Trichloropropane	JOHN	9/16/2025 8:03:51 AM	Sam	9/16/2025 8:05:34 AM	Peak Integrated by Software
VN0915WBSD01	VN087824.D	Allyl chloride	JOHN	9/16/2025 8:03:51 AM	Sam	9/16/2025 8:05:34 AM	Peak Integrated by Software
VN0915WBSD01	VN087824.D	N-amyl acetate	JOHN	9/16/2025 8:03:51 AM	Sam	9/16/2025 8:05:34 AM	Peak Integrated by Software
VN0915WBSD01	VN087824.D	trans-1,4-Dichloro-2-but ene	JOHN	9/16/2025 8:03:51 AM	Sam	9/16/2025 8:05:34 AM	Peak Integrated by Software
Q3092-03	VN087835.D	Methylene Chloride	MMDadoda	9/16/2025 8:02:09 AM	Sam	9/16/2025 8:05:38 AM	Peak Integrated by Software
VSTDCCC050	VN087845.D	1,2,3-Trichloropropane	MMDadoda	9/16/2025 8:02:14 AM	Sam	9/16/2025 8:05:44 AM	Peak Integrated by Software



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

Manual Integration Report

Sequence:	VN091525	Instrument	MSVOA_n
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC050	VN087845.D	N-amyl acetate	MMDadoda	9/16/2025 8:02:14 AM	Sam	9/16/2025 8:05:44 AM	Peak Integrated by Software

Instrument ID: **MSVOA_N**

Daily Analysis Runlog For Sequence/QC Batch ID # VN082125

Review By	John Carlone	Review On	8/22/2025 9:17:52 AM
Supervise By	Mahesh Dadoda	Supervise On	8/25/2025 8:11:38 AM
SubDirectory	VN082125	HP Acquire Method	HP Processing Method 82N082125W.M
STD. NAME	STD REF.#		
Tune/Reschk	VP135214		
Initial Calibration Stds	VP135215,VP135216,VP135217,VP135218,VP135219,VP135220		
CCC			
Internal Standard/PEM			
ICV/I.BLK	VP135221		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VN087614.D	21 Aug 2025 09:30	JC\MD	Ok
2	VSTDCCC020	VN087615.D	21 Aug 2025 10:04	JC\MD	Not Ok
3	VN0821WBS01	VN087616.D	21 Aug 2025 10:37	JC\MD	Not Ok
4	VN0821WBSD01	VN087617.D	21 Aug 2025 11:11	JC\MD	Not Ok
5	VN0821WBL01	VN087618.D	21 Aug 2025 11:36	JC\MD	Not Ok
6	VSTDICC001	VN087619.D	21 Aug 2025 12:09	JC\MD	Ok,M
7	VSTDICC005	VN087620.D	21 Aug 2025 13:08	JC\MD	Ok,M
8	VSTDICC020	VN087621.D	21 Aug 2025 13:41	JC\MD	Ok,M
9	VSTDICCC050	VN087622.D	21 Aug 2025 14:02	JC\MD	Ok,M
10	VSTDICC100	VN087623.D	21 Aug 2025 14:23	JC\MD	Ok,M
11	VSTDICC150	VN087624.D	21 Aug 2025 14:44	JC\MD	Ok,M
12	IBLK	VN087625.D	21 Aug 2025 15:05	JC\MD	Ok
13	VSTDICV050	VN087626.D	21 Aug 2025 15:47	JC\MD	Ok,M

M : Manual Integration

Instrument ID: **MSVOA_N**

Daily Analysis Runlog For Sequence/QC Batch ID # VN091525

Review By	Mahesh Dadoda	Review On	9/16/2025 7:59:53 AM
Supervise By	Semsettin Yesilyurt	Supervise On	9/16/2025 8:03:28 AM
SubDirectory	VN091525	HP Acquire Method	HP Processing Method 82N082125W.M
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	VP135447		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP135448,VP135449		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VN087819.D	15 Sep 2025 08:18	JC\MD	Ok
2	VSTDCCC050	VN087820.D	15 Sep 2025 08:39	JC\MD	Ok,M
3	VN0915MBL01	VN087821.D	15 Sep 2025 09:14	JC\MD	Ok
4	VN0915WBL01	VN087822.D	15 Sep 2025 09:35	JC\MD	Ok
5	VN0915WBS01	VN087823.D	15 Sep 2025 09:56	JC\MD	Ok,M
6	VN0915WBSD01	VN087824.D	15 Sep 2025 10:29	JC\MD	Ok,M
7	Q3083-01	VN087825.D	15 Sep 2025 10:50	JC\MD	Ok
8	Q3088-02	VN087826.D	15 Sep 2025 11:11	JC\MD	Ok
9	PB169678TB	VN087827.D	15 Sep 2025 11:32	JC\MD	Ok
10	Q3082-02	VN087828.D	15 Sep 2025 11:53	JC\MD	Ok
11	Q3082-04	VN087829.D	15 Sep 2025 12:14	JC\MD	Ok,M
12	Q3082-06	VN087830.D	15 Sep 2025 12:35	JC\MD	Ok
13	Q3082-08	VN087831.D	15 Sep 2025 12:56	JC\MD	Ok
14	Q3082-10	VN087832.D	15 Sep 2025 13:17	JC\MD	Ok,M
15	Q3092-01	VN087833.D	15 Sep 2025 13:38	JC\MD	Ok
16	Q3092-02	VN087834.D	15 Sep 2025 13:59	JC\MD	Ok
17	Q3092-03	VN087835.D	15 Sep 2025 14:20	JC\MD	Ok,M
18	Q3092-04	VN087836.D	15 Sep 2025 14:41	JC\MD	Ok
19	VN0915MBS01	VN087837.D	15 Sep 2025 15:02	JC\MD	Ok,M
20	VN0915MBSD01	VN087838.D	15 Sep 2025 15:22	JC\MD	Ok,M
21	Q3058-01ME	VN087839.D	15 Sep 2025 15:43	JC\MD	Ok

Instrument ID: **MSVOA_N**

Daily Analysis Runlog For Sequence/QC Batch ID # VN091525

Review By	Mahesh Dadoda	Review On	9/16/2025 7:59:53 AM
Supervise By	Semsettin Yesilyurt	Supervise On	9/16/2025 8:03:28 AM
SubDirectory	VN091525	HP Acquire Method	HP Processing Method 82N082125W.M
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	VP135447		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP135448,VP135449		

22	Q3075-04	VN087840.D	15 Sep 2025 16:04	JC\MD	Ok
23	Q3074-01	VN087841.D	15 Sep 2025 16:25	JC\MD	Ok
24	Q3073-02	VN087842.D	15 Sep 2025 16:46	JC\MD	Ok
25	Q3075-06	VN087843.D	15 Sep 2025 17:06	JC\MD	Ok
26	Q3077-01	VN087844.D	15 Sep 2025 17:27	JC\MD	Not Ok
27	VSTDCCC050	VN087845.D	15 Sep 2025 18:09	JC\MD	Ok,M

M : Manual Integration

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QC Batch ID # VN082125

Review By	John Carlone	Review On	8/22/2025 9:17:52 AM
Supervise By	Maresh Dadoda	Supervise On	8/25/2025 8:11:38 AM
SubDirectory	VN082125	HP Acquire Method	HP Processing Method 82N082125W.M
STD. NAME	STD REF.#		
Tune/Reschk	VP135214		
Initial Calibration Stds	VP135215,VP135216,VP135217,VP135218,VP135219,VP135220		
CCC			
Internal Standard/PEM			
ICV/I.BLK	VP135221		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VN087614.D	21 Aug 2025 09:30		JC\MD	Ok
2	VSTDCCC020	VSTDCCC020	VN087615.D	21 Aug 2025 10:04	Need ICAL	JC\MD	Not Ok
3	VN0821WBS01	VN0821WBS01	VN087616.D	21 Aug 2025 10:37		JC\MD	Not Ok
4	VN0821WBSD01	VN0821WBSD01	VN087617.D	21 Aug 2025 11:11		JC\MD	Not Ok
5	VN0821WBL01	VN0821WBL01	VN087618.D	21 Aug 2025 11:36		JC\MD	Not Ok
6	VSTDICC001	VSTDICC001	VN087619.D	21 Aug 2025 12:09	LR-10,20	JC\MD	Ok,M
7	VSTDICC005	VSTDICC005	VN087620.D	21 Aug 2025 13:08		JC\MD	Ok,M
8	VSTDICC020	VSTDICC020	VN087621.D	21 Aug 2025 13:41	method not used for #N-amyle Acetate	JC\MD	Ok,M
9	VSTDICCC050	VSTDICCC050	VN087622.D	21 Aug 2025 14:02		JC\MD	Ok,M
10	VSTDICC100	VSTDICC100	VN087623.D	21 Aug 2025 14:23		JC\MD	Ok,M
11	VSTDICC150	VSTDICC150	VN087624.D	21 Aug 2025 14:44		JC\MD	Ok,M
12	IBLK	IBLK	VN087625.D	21 Aug 2025 15:05		JC\MD	Ok
13	VSTDICV050	ICVVN082125	VN087626.D	21 Aug 2025 15:47	Icv Failed for Com.# 64 for DOD	JC\MD	Ok,M

M : Manual Integration

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QC Batch ID # VN091525

Review By	Mahesh Dadoda	Review On	9/16/2025 7:59:53 AM
Supervise By	Semsettin Yesilyurt	Supervise On	9/16/2025 8:03:28 AM
SubDirectory	VN091525	HP Acquire Method	HP Processing Method 82N082125W.M

STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds	VP135447
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP135448,VP135449

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VN087819.D	15 Sep 2025 08:18		JC\MD	Ok
2	VSTDCCC050	VSTDCCC050	VN087820.D	15 Sep 2025 08:39	pH#Lot#V12668	JC\MD	Ok,M
3	VN0915MBL01	VN0915MBL01	VN087821.D	15 Sep 2025 09:14		JC\MD	Ok
4	VN0915WBL01	VN0915WBL01	VN087822.D	15 Sep 2025 09:35		JC\MD	Ok
5	VN0915WBS01	VN0915WBS01	VN087823.D	15 Sep 2025 09:56		JC\MD	Ok,M
6	VN0915WBSD01	VN0915WBSD01	VN087824.D	15 Sep 2025 10:29		JC\MD	Ok,M
7	Q3083-01	MW4S	VN087825.D	15 Sep 2025 10:50	vial B pH<2	JC\MD	Ok
8	Q3088-02	90525-LQ	VN087826.D	15 Sep 2025 11:11	vial A pH<2 brown/ turbid sample	JC\MD	Ok
9	PB169678TB	PB169678TB	VN087827.D	15 Sep 2025 11:32		JC\MD	Ok
10	Q3082-02	WC-29	VN087828.D	15 Sep 2025 11:53	vial A pH#5.0	JC\MD	Ok
11	Q3082-04	WC-30	VN087829.D	15 Sep 2025 12:14	vial A pH#5.0	JC\MD	Ok,M
12	Q3082-06	WC-31	VN087830.D	15 Sep 2025 12:35	vial A pH#5.0	JC\MD	Ok
13	Q3082-08	WC-32	VN087831.D	15 Sep 2025 12:56	vial A pH#5.0	JC\MD	Ok
14	Q3082-10	WC-33	VN087832.D	15 Sep 2025 13:17	vial A pH#5.0	JC\MD	Ok,M
15	Q3092-01	291376	VN087833.D	15 Sep 2025 13:38	vial A pH#5.0	JC\MD	Ok
16	Q3092-02	291376	VN087834.D	15 Sep 2025 13:59	vial A pH#5.0	JC\MD	Ok
17	Q3092-03	279182	VN087835.D	15 Sep 2025 14:20	vial A pH#5.0	JC\MD	Ok,M

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QC Batch ID # VN091525

Review By	Maresh Dadoda	Review On	9/16/2025 7:59:53 AM
Supervise By	Semsettin Yesilyurt	Supervise On	9/16/2025 8:03:28 AM
SubDirectory	VN091525	HP Acquire Method	HP Processing Method 82N082125W.M
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	VP135447		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP135448,VP135449		

18	Q3092-04	279182	VN087836.D	15 Sep 2025 14:41	vial A pH#5.0	JC\MD	Ok
19	VN0915MBS01	VN0915MBS01	VN087837.D	15 Sep 2025 15:02		JC\MD	Ok,M
20	VN0915MBSD01	VN0915MBSD01	VN087838.D	15 Sep 2025 15:22		JC\MD	Ok,M
21	Q3058-01ME	RPXY5ME	VN087839.D	15 Sep 2025 15:43		JC\MD	Ok
22	Q3075-04	MOO-25-0258	VN087840.D	15 Sep 2025 16:04	cloth material	JC\MD	Ok
23	Q3074-01	MOO-25-0141	VN087841.D	15 Sep 2025 16:25	cloth material	JC\MD	Ok
24	Q3073-02	BEL-25-0023	VN087842.D	15 Sep 2025 16:46	cloth material	JC\MD	Ok
25	Q3075-06	MOO-25-0259	VN087843.D	15 Sep 2025 17:06	cloth material	JC\MD	Ok
26	Q3077-01	LAW-25-0137	VN087844.D	15 Sep 2025 17:27	cloth material run straight MEOH	JC\MD	Not Ok
27	VSTDCCC050	VSTDCCC050EC	VN087845.D	15 Sep 2025 18:09		JC\MD	Ok,M

M : Manual Integration

SOP ID : M1311-TCLP-16		
SDG No : N/A		Start Prep Date : 09/12/2025 Time : 17:00
Weigh By : JP		End Prep Date : 09/13/2025 Time : 10:40
Balance ID : WC SC-7		Combination Ratio : 20
pH Meter ID : WC PH METER-1		ZHE Cleaning Batch : <u>70</u> N/A
Extraction By : JP		Initial Room Temperature: 24 °C
Filter By : JP		Final Room Temperature: 22 °C
Pipette ID : WC		TCLP Technician Signature : <u>JP</u>
Tumbler ID : ZHE-1		Supervisor By : <u>12</u>
TCLP Filter ID : 60828725		

Standarded 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	WP114525
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	4127	N/A

Extraction Conformance/Non-Conformance Comments:

ALL ZHE samples are extracted and given as vial A & B. Leck checked after 10 minutes of tumbling. TUMBLER ZHE-1 checked, 30 rpm.

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
09/15/25 10:00	<u>JP</u> <u>1 VOC LAB</u>	<u>JP</u> <u>1 VOC LAB</u>
	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
PB169678TB	LEB678	10	N/A	500	N/A	N/A	N/A	4.94	N/A	ZHE-1
Q3082-02	WC-29	01	25.02	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
Q3082-04	WC-30	02	25.01	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
Q3082-06	WC-31	03	25.02	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
Q3082-08	WC-32	04	25.03	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
Q3082-10	WC-33	05	25.02	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
Q3092-01	291376	06	25.02	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
Q3092-02	291376	07	25.03	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
Q3092-03	279182	08	25.02	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
Q3092-04	279182	09	25.03	500	N/A	N/A	N/A	N/A	N/A	ZHE-1

SampleID	ClientID	Sample Weight (g)	Filter Weight (g)	Filtrate (mL)	Filter + Solid (After 100°C)	% solids	% Dry Solids
PB169678TB	LEB678	N/A	N/A	N/A	N/A	N/A	N/A
Q3082-02	WC-29	N/A	N/A	N/A	N/A	100	N/A
Q3082-04	WC-30	N/A	N/A	N/A	N/A	100	N/A
Q3082-06	WC-31	N/A	N/A	N/A	N/A	100	N/A
Q3082-08	WC-32	N/A	N/A	N/A	N/A	100	N/A
Q3082-10	WC-33	N/A	N/A	N/A	N/A	100	N/A
Q3092-01	291376	N/A	N/A	N/A	N/A	100	N/A
Q3092-02	291376	N/A	N/A	N/A	N/A	100	N/A
Q3092-03	279182	N/A	N/A	N/A	N/A	100	N/A
Q3092-04	279182	N/A	N/A	N/A	N/A	100	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : tcip zhe q3082 WorkList ID : 191841 Department : TCLP Extraction Date : 09-12-2025 09:17:14

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3082-02	WC-29	Solid	TCLP ZHE Extraction	Cool 4 deg C	PSEG03	D31	09/11/2025	1311 ZHE
Q3082-04	WC-30	Solid	TCLP ZHE Extraction	Cool 4 deg C	PSEG03	D31	09/11/2025	1311 ZHE
Q3082-06	WC-31	Solid	TCLP ZHE Extraction	Cool 4 deg C	PSEG03	D31	09/11/2025	1311 ZHE
Q3082-08	WC-32	Solid	TCLP ZHE Extraction	Cool 4 deg C	PSEG03	D31	09/11/2025	1311 ZHE
Q3082-10	WC-33	Solid	TCLP ZHE Extraction	Cool 4 deg C	PSEG03	D31	09/11/2025	1311 ZHE
Q3092-01	291376	Solid	TCLP ZHE Extraction	Cool 4 deg C	ATLA10	D41	09/12/2025	1311 ZHE
Q3092-02	291376	Solid	TCLP ZHE Extraction	Cool 4 deg C	ATLA10	D41	09/12/2025	1311 ZHE
Q3092-03	279182	Solid	TCLP ZHE Extraction	Cool 4 deg C	ATLA10	D41	09/12/2025	1311 ZHE
Q3092-04	279182	Solid	TCLP ZHE Extraction	Cool 4 deg C	ATLA10	D41	09/12/2025	1311 ZHE

Date/Time09-12-25 14:20

Raw Sample Received by: [Signature]

Raw Sample Relinquished by: [Signature]

Date/Time09-12-25

Raw Sample Received by: [Signature]

Raw Sample Relinquished by: [Signature]



SHIPPING DOCUMENTS

CLIENT INFORMATION

COMPANY: **PGW / ATLANTIC**
ADDRESS: **3100 E. Venango**
CITY: **Philadelphia** STATE: **PA** ZIP:
ATTENTION: **Kenny Pyle**
PHONE: FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: **Atlantic Recovery Services**
PROJECT NO.: LOCATION:
PROJECT MANAGER: **Kenny Pyle**
e-mail:
PHONE: FAX:

CLIENT BILLING INFORMATION

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

ANALYSIS

DATA TURNAROUND INFORMATION

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

DATA DELIVERABLE INFORMATION

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

1. **TCLP VOA**
2. **TCLP ZHE Extra**
3. **TCLP BNA**
4. **TCLP Herbicide**
5. **TCLP ICP Metals**
6. **TCLP Mercury**
7. **TCLP Pesticide**
8.
9.

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS	
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9	← Specify Preservatives A-HCl D-NaOH B-HNO3 E-ICE C-H2SO4 F-OTHER	
1.	291376	Soil		X	9-12-25	1111	2	X									0.2ppm	
2.	291376		X			1122	4		X	X	X	X	X	X				
3.	279182			X		1131	2	X									0.0ppm	
4.	279182		X			1143	4		X	X	X	X	X	X				
5.																		
6.																		
7.																		
8.																		
9.																		
10.																		

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

RELINQUISHED BY SAMPLER: 1. JT	DATE/TIME: 1200 9-12-25	RECEIVED BY: 1.	Conditions of bottles or coolers at receipt: ☒ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 3.7 °C Comments:
RELINQUISHED BY SAMPLER: 2.	DATE/TIME:	RECEIVED BY: 2.	
RELINQUISHED BY SAMPLER: 3. JT	DATE/TIME: 1340 9-12-25	RECEIVED BY: 3.	

Page ____ of CLIENT: ☐ Hand Delivered ☐ Other Shipment Complete ☐ YES ☐ NO



Environmental Laboratory

www.chemtech.net | EMAIL: PM@chemtech.net

Project Name: Atlantic Recovery Services

Services

Service Order #:

Work Order #:

Labor WBS #:

Facility/Site:

Site Address:

Philadelphia PA

Sampler Name:

Client Project Coordinator & Phone:

Kenny Pile/Amiel DiBano

Page #: 1 of 1

Date: 9.12.25

Arrive Time: 1100

Depart Time: 1200

Waste Stream (circle one): oil-oil / soil pile / in-situ / linear construction / frac-tank

Sample Matrices (circle all that apply): Water / Soil / NAPL / Concrete / Wipe

Collection Depths: N/A

Temp (range): °C PID Readings (range): 0.0-0.2 PPM

Dimensions/CY: N/A

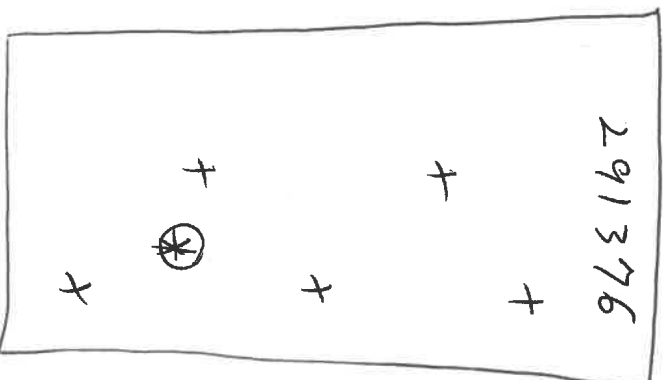
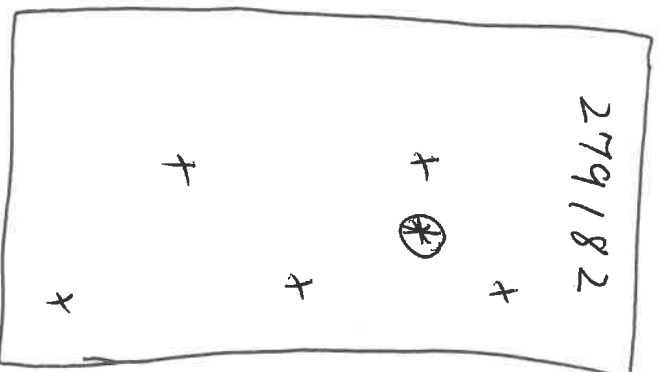
Sample Description: wet well silt

Odor: Y / N Color: Y Q

Field Observations: 2 Roll-offs

Grid/Area Composite Map:

QA Control # A3041134



PGW Venango Location

Sampler Signature: JT

Client Signature:

Supervisor Review/Date:

Date/Time Arrived at Lab:

Laboratory Certification

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