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Hit Summary Sheet
SW-846

SDG No.: Q2646

Client: Environmental Restoration, LLC

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID:	FRAC TANK							
Q2646-03	FRAC TANK	TCLP	2-Butanone	1100		4.90	130	ug/L
			Total Voc :	1100				
			Total Concentration:	1100				



SAMPLE DATA

Report of Analysis

Client:	Environmental Restoration, LLC			Date Collected:	07/18/25		
Project:	North Arlington, NJ			Date Received:	07/18/25		
Client Sample ID:	FRAC TANK			SDG No.:	Q2646		
Lab Sample ID:	Q2646-03			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
VN087385.D	5	07/21/25 17:07	VN072125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-01-4	Vinyl Chloride	1.30	U	1.30	25.0	ug/L
75-35-4	1,1-Dichloroethene	1.20	U	1.20	25.0	ug/L
78-93-3	2-Butanone	1100		4.90	130	ug/L
56-23-5	Carbon Tetrachloride	1.30	U	1.30	25.0	ug/L
67-66-3	Chloroform	1.30	U	1.30	25.0	ug/L
71-43-2	Benzene	0.75	U	0.75	25.0	ug/L
107-06-2	1,2-Dichloroethane	1.10	U	1.10	25.0	ug/L
79-01-6	Trichloroethene	0.47	U	0.47	25.0	ug/L
127-18-4	Tetrachloroethene	1.20	U	1.20	25.0	ug/L
108-90-7	Chlorobenzene	0.60	U	0.60	25.0	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	54.8		70 (74) - 130 (125)	110%	SPK: 50
1868-53-7	Dibromofluoromethane	53.5		70 (75) - 130 (124)	107%	SPK: 50
2037-26-5	Toluene-d8	51.3		70 (86) - 130 (113)	103%	SPK: 50
460-00-4	4-Bromofluorobenzene	53.1		70 (77) - 130 (121)	106%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	132000	8.212			
540-36-3	1,4-Difluorobenzene	262000	9.082			
3114-55-4	Chlorobenzene-d5	246000	11.847			
3855-82-1	1,4-Dichlorobenzene-d4	131000	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



QC SUMMARY

Surrogate Summary

SDG No.: Q2646

Client: Environmental Restoration, LLC

Analytical Method: SW8260D

Lab Sample ID	Client ID	Parameter	Spike	Result	Recovery (%)	Qual	Limits (%)	
							Low	High
Q2646-03	FRAC TANK	1,2-Dichloroethane-d4	50	54.8	110		70 (74)	130 (125)
		Dibromofluoromethane	50	53.5	107		70 (75)	130 (124)
		Toluene-d8	50	51.3	103		70 (86)	130 (113)
		4-Bromofluorobenzene	50	53.1	106		70 (77)	130 (121)

Surrogate Summary

SDG No.: Q2646

Client: Environmental Restoration, LLC

Analytical Method: SW8260-Low

Lab Sample ID	Client ID	Parameter	Spike	Result	Recovery (%)	Qual	Limits (%)	
							Low	High
VN0721WBL01	VN0721WBL01	1,2-Dichloroethane-d4	50	54.7	109		70 (74)	130 (125)
		Dibromofluoromethane	50	51.4	103		70 (75)	130 (124)
		Toluene-d8	50	51.0	102		70 (86)	130 (113)
		4-Bromofluorobenzene	50	46.4	93		70 (77)	130 (121)
VN0721WBS01	VN0721WBS01	1,2-Dichloroethane-d4	50	47.3	95		70 (74)	130 (125)
		Dibromofluoromethane	50	48.8	98		70 (75)	130 (124)
		Toluene-d8	50	50.4	101		70 (86)	130 (113)
		4-Bromofluorobenzene	50	49.9	100		70 (77)	130 (121)
VN0721WBSD0	VN0721WBSD01	1,2-Dichloroethane-d4	50	47.2	94		70 (74)	130 (125)
		Dibromofluoromethane	50	50.3	101		70 (75)	130 (124)
		Toluene-d8	50	50.6	101		70 (86)	130 (113)
		4-Bromofluorobenzene	50	50.0	100		70 (77)	130 (121)

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.:	<u>Q2646</u>	Analytical Method:	<u>SW8260-Low</u>
Client:	<u>Environmental Restoration, LLC</u>	Datafile :	<u>VN087371.D</u>

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VN0721WBS01	Vinyl chloride	20	19.0	ug/L	95			70 (65)	130 (117)	
	1,1-Dichloroethene	20	18.1	ug/L	91			70 (74)	130 (110)	
	2-Butanone	100	86.4	ug/L	86			40 (65)	160 (122)	
	Carbon Tetrachloride	20	19.6	ug/L	98			70 (77)	130 (113)	
	Chloroform	20	17.9	ug/L	90			70 (79)	130 (113)	
	Benzene	20	19.4	ug/L	97			70 (82)	130 (109)	
	1,2-Dichloroethane	20	18.3	ug/L	92			70 (80)	130 (115)	
	Trichloroethene	20	18.8	ug/L	94			70 (77)	130 (113)	
	Tetrachloroethene	20	18.3	ug/L	92			70 (67)	130 (123)	
	Chlorobenzene	20	18.6	ug/L	93			70 (82)	130 (109)	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.:	<u>Q2646</u>	Analytical Method:	<u>SW8260-Low</u>
Client:	<u>Environmental Restoration, LLC</u>	Datafile :	<u>VN087372.D</u>

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VN0721WBSD01	Vinyl chloride	20	19.0	ug/L	95	0		70 (65)	130 (117)	20 (19)
	1,1-Dichloroethene	20	17.6	ug/L	88	3		70 (74)	130 (110)	20 (20)
	2-Butanone	100	88.2	ug/L	88	2		40 (65)	160 (122)	20 (26)
	Carbon Tetrachloride	20	19.8	ug/L	99	1		70 (77)	130 (113)	20 (15)
	Chloroform	20	18.4	ug/L	92	2		70 (79)	130 (113)	20 (20)
	Benzene	20	19.2	ug/L	96	1		70 (82)	130 (109)	20 (15)
	1,2-Dichloroethane	20	18.8	ug/L	94	2		70 (80)	130 (115)	20 (20)
	Trichloroethene	20	18.8	ug/L	94	0		70 (77)	130 (113)	20 (15)
	Tetrachloroethene	20	19.3	ug/L	97	5		70 (67)	130 (123)	20 (15)
	Chlorobenzene	20	18.6	ug/L	93	0		70 (82)	130 (109)	20 (15)

VOLATILE METHOD BLANK SUMMARY

Client ID

VN0721WBL01

Lab Name: Alliance

Contract: ENVI60

Lab Code: ACE

SDG NO.: Q2646

Lab File ID: VN087370.D

Lab Sample ID: VN0721WBL01

Date Analyzed: 07/21/2025

Time Analyzed: 11:34

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
VN0721WBS01	VN0721WBS01	VN087371.D	07/21/2025
VN0721WBSD01	VN0721WBSD01	VN087372.D	07/21/2025
FRAC TANK	Q2646-03	VN087385.D	07/21/2025

COMMENTS: _____

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alliance

Contract: ENVI60

Lab Code: ACE

SDG NO.: Q2646

Lab File ID: VN087327.D

BFB Injection Date: 07/16/2025

Instrument ID: MSVOA_N

BFB Injection Time: 16:10

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

Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.8
75	30.0 - 60.0% of mass 95	50.8
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.1
173	Less than 2.0% of mass 174	0.6 (0.8) 1
174	50.0 - 100.0% of mass 95	70.9
175	5.0 - 9.0% of mass 174	3.6 (5.1) 1
176	95.0 - 101.0% of mass 174	68.7 (96.9) 1
177	5.0 - 9.0% of mass 176	4.8 (7) 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	VN087328.D	07/16/2025	17:05
VSTDIC005	VSTDIC005	VN087329.D	07/16/2025	17:27
VSTDIC020	VSTDIC020	VN087330.D	07/16/2025	17:49
VSTDIC050	VSTDIC050	VN087331.D	07/16/2025	18:11
VSTDIC100	VSTDIC100	VN087332.D	07/16/2025	18:32
VSTDIC150	VSTDIC150	VN087333.D	07/16/2025	18:54

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alliance

Contract: ENVI60

Lab Code: ACE

SDG NO.: Q2646

Lab File ID: VN087367.D

BFB Injection Date: 07/21/2025

Instrument ID: MSVOA_N

BFB Injection Time: 10:05

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	21.1
75	30.0 - 60.0% of mass 95	52.1
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.4
173	Less than 2.0% of mass 174	1.5 (1.9) 1
174	50.0 - 100.0% of mass 95	75.2
175	5.0 - 9.0% of mass 174	6 (8) 1
176	95.0 - 101.0% of mass 174	72.4 (96.3) 1
177	5.0 - 9.0% of mass 176	5 (6.9) 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	VN087368.D	07/21/2025	10:38
VN0721WBL01	VN0721WBL01	VN087370.D	07/21/2025	11:34
VN0721WBS01	VN0721WBS01	VN087371.D	07/21/2025	11:55
VN0721WBSD01	VN0721WBSD01	VN087372.D	07/21/2025	12:30
FRAC TANK	Q2646-03	VN087385.D	07/21/2025	17:07

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance Contract: ENVI60
 Lab Code: ACE SDG NO.: Q2646
 Lab File ID: VN087368.D Date Analyzed: 07/21/2025
 Instrument ID: MSVOA_N Time Analyzed: 10:38
 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	202357	8.21	342303	9.08	307825	11.85
UPPER LIMIT	404714	8.706	684606	9.583	615650	12.347
LOWER LIMIT	101179	7.706	171152	8.583	153913	11.347
EPA SAMPLE NO.						
FRAC TANK	132035	8.21	262033	9.08	246052	11.85
VN0721WBL01	164239	8.21	328305	9.08	300772	11.85
VN0721WBS01	195078	8.21	337215	9.09	308523	11.85
VN0721WBSD01	190787	8.21	328848	9.08	296338	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>ENVI60</u>
Lab Code:	<u>ACE</u>	SDG NO.:	<u>Q2646</u>
Lab File ID:	<u>VN087368.D</u>	Date Analyzed:	<u>07/21/2025</u>
Instrument ID:	<u>MSVOA_N</u>	Time Analyzed:	<u>10:38</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	162263	13.77				
UPPER LIMIT	324526	14.27				
LOWER LIMIT	81131.5	13.27				
EPA SAMPLE NO.						
FRAC TANK	131454	13.77				
VN0721WBL01	133337	13.77				
VN0721WBS01	161452	13.77				
VN0721WBSD01	158557	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.



QC SAMPLE DATA

Report of Analysis

Client:	Environmental Restoration, LLC	Date Collected:	
Project:	North Arlington, NJ	Date Received:	
Client Sample ID:	VN0721WBL01	SDG No.:	Q2646
Lab Sample ID:	VN0721WBL01	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
VN087370.D	1	07/21/25 11:34	VN072125

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	54.7		70 (74) - 130 (125)	109%	SPK: 50
1868-53-7	Dibromofluoromethane	51.3		70 (75) - 130 (124)	103%	SPK: 50
2037-26-5	Toluene-d8	51.0		70 (86) - 130 (113)	102%	SPK: 50
460-00-4	4-Bromofluorobenzene	46.4		70 (77) - 130 (121)	93%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	164000	8.212			
540-36-3	1,4-Difluorobenzene	328000	9.083			
3114-55-4	Chlorobenzene-d5	301000	11.847			
3855-82-1	1,4-Dichlorobenzene-d4	133000	13.771			

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

Report of Analysis

Client:	Environmental Restoration, LLC	Date Collected:	
Project:	North Arlington, NJ	Date Received:	
Client Sample ID:	VN0721WBS01	SDG No.:	Q2646
Lab Sample ID:	VN0721WBS01	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
VN087371.D	1	07/21/25 11:55	VN072125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-01-4	Vinyl Chloride	19.0		0.26	1.00	ug/L
75-35-4	1,1-Dichloroethene	18.1		0.23	1.00	ug/L
78-93-3	2-Butanone	86.4		0.98	5.00	ug/L
56-23-5	Carbon Tetrachloride	19.6		0.25	1.00	ug/L
67-66-3	Chloroform	17.9		0.25	1.00	ug/L
71-43-2	Benzene	19.4		0.15	1.00	ug/L
107-06-2	1,2-Dichloroethane	18.3		0.22	1.00	ug/L
79-01-6	Trichloroethene	18.8		0.090	1.00	ug/L
127-18-4	Tetrachloroethene	18.3		0.23	1.00	ug/L
108-90-7	Chlorobenzene	18.6		0.12	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	47.3		70 (74) - 130 (125)	95%	SPK: 50
1868-53-7	Dibromofluoromethane	48.8		70 (75) - 130 (124)	98%	SPK: 50
2037-26-5	Toluene-d8	50.4		70 (86) - 130 (113)	101%	SPK: 50
460-00-4	4-Bromofluorobenzene	49.9		70 (77) - 130 (121)	100%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	195000	8.206			
540-36-3	1,4-Difluorobenzene	337000	9.088			
3114-55-4	Chlorobenzene-d5	309000	11.847			
3855-82-1	1,4-Dichlorobenzene-d4	161000	13.77			

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D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Environmental Restoration, LLC	Date Collected:	
Project:	North Arlington, NJ	Date Received:	
Client Sample ID:	VN0721WBSD01	SDG No.:	Q2646
Lab Sample ID:	VN0721WBSD01	Matrix:	TCLP
Analytical Method:	8260D	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		Test:	TCLP VOA
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VN087372.D	1	07/21/25 12:30	VN072125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-01-4	Vinyl Chloride	19.0		0.26	1.00	ug/L
75-35-4	1,1-Dichloroethene	17.6		0.23	1.00	ug/L
78-93-3	2-Butanone	88.2		0.98	5.00	ug/L
56-23-5	Carbon Tetrachloride	19.8		0.25	1.00	ug/L
67-66-3	Chloroform	18.4		0.25	1.00	ug/L
71-43-2	Benzene	19.2		0.15	1.00	ug/L
107-06-2	1,2-Dichloroethane	18.8		0.22	1.00	ug/L
79-01-6	Trichloroethene	18.8		0.090	1.00	ug/L
127-18-4	Tetrachloroethene	19.3		0.23	1.00	ug/L
108-90-7	Chlorobenzene	18.6		0.12	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	47.2		70 (74) - 130 (125)	94%	SPK: 50
1868-53-7	Dibromofluoromethane	50.3		70 (75) - 130 (124)	101%	SPK: 50
2037-26-5	Toluene-d8	50.6		70 (86) - 130 (113)	101%	SPK: 50
460-00-4	4-Bromofluorobenzene	50.0		70 (77) - 130 (121)	100%	SPK: 50
INTERNAL STANDARDS						
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540-36-3	1,4-Difluorobenzene	329000	9.082			
3114-55-4	Chlorobenzene-d5	296000	11.847			
3855-82-1	1,4-Dichlorobenzene-d4	159000	13.77			

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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



CALIBRATION SUMMARY

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alliance Contract: ENVI60
 Lab Code: ACE SDG No.: Q2646
 Instrument ID: MSVOA_N Calibration Date(s): 07/16/2025 07/16/2025
 Heated Purge: (Y/N) N Calibration Time(s): 17:05 18:54
 GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID:		RRF001 = VN087328.D		RRF005 = VN087329.D		RRF020 = VN087330.D		
		RRF050 = VN087331.D		RRF100 = VN087332.D		RRF150 = VN087333.D		
COMPOUND	RRF001	RRF005	RRF020	RRF050	RRF100	RRF150	RRF	% RSD
Vinyl Chloride	0.554	0.665	0.623	0.728	0.692	0.720	0.664	9.9
1,1-Dichloroethene	0.635	0.641	0.553	0.545	0.514	0.537	0.571	9.4
2-Butanone	0.552	0.608	0.650	0.643	0.617	0.618	0.615	5.7
Carbon Tetrachloride	0.453	0.523	0.498	0.517	0.504	0.518	0.502	5.1
Chloroform	1.181	1.299	1.303	1.279	1.214	1.234	1.251	4
Benzene	1.370	1.430	1.502	1.553	1.483	1.499	1.473	4.3
1,2-Dichloroethane	0.553	0.565	0.569	0.567	0.544	0.552	0.558	1.8
Trichloroethene	0.373	0.330	0.337	0.356	0.339	0.352	0.348	4.5
Tetrachloroethene	0.329	0.338	0.317	0.320	0.310	0.317	0.322	3.2
Chlorobenzene	1.139	1.131	1.133	1.119	1.092	1.122	1.123	1.5
1,2-Dichloroethane-d4		0.939	0.820	0.802	0.818	0.863	0.848	6.6
Dibromofluoromethane		0.347	0.341	0.332	0.348	0.356	0.345	2.6
Toluene-d8		1.180	1.176	1.224	1.255	1.316	1.230	4.7
4-Bromofluorobenzene		0.405	0.433	0.455	0.476	0.505	0.455	8.5

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name:	<u>Alliance</u>	Contract:	<u>ENVI60</u>
Lab Code:	<u>ACE</u>	SDG No.:	<u>Q2646</u>
Instrument ID:	<u>MSVOA_N</u>	Calibration Date/Time:	<u>07/21/2025 10:38</u>
Lab File ID:	<u>VN087368.D</u>	Init. Calib. Date(s):	<u>07/16/2025 07/16/2025</u>
Heated Purge: (Y/N)	<u>N</u>	Init. Calib. Time(s):	<u>17:05 18:54</u>
GC Column:	<u>RXI-624</u>	ID:	<u>0.25</u> (mm)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Vinyl Chloride	0.664	0.725		9.19	20
1,1-Dichloroethene	0.571	0.556		-2.63	20
2-Butanone	0.615	0.586		-4.72	20
Carbon Tetrachloride	0.502	0.596		18.73	20
Chloroform	1.251	1.287		2.88	20
Benzene	1.473	1.638		11.2	20
1,2-Dichloroethane	0.558	0.595		6.63	20
Trichloroethene	0.348	0.383		10.06	20
Tetrachloroethene	0.322	0.364		13.04	20
Chlorobenzene	1.123	1.199	0.3	6.77	20
1,2-Dichloroethane-d4	0.848	0.831		-2.01	20
Dibromofluoromethane	0.345	0.356		3.19	20
Toluene-d8	1.230	1.321		7.4	20
4-Bromofluorobenzene	0.455	0.481		5.71	20

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



SAMPLE RAW DATA

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN072125\
 Data File : VN087385.D
 Acq On : 21 Jul 2025 17:07
 Operator : JC\MD
 Sample : Q2646-03 5X
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 19 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 FRAC TANK

A
B
C
D
E
F
G
H
I
J
K

Quant Time: Jul 22 03:11:02 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 17 02:56:13 2025
 Response via : Initial Calibration

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

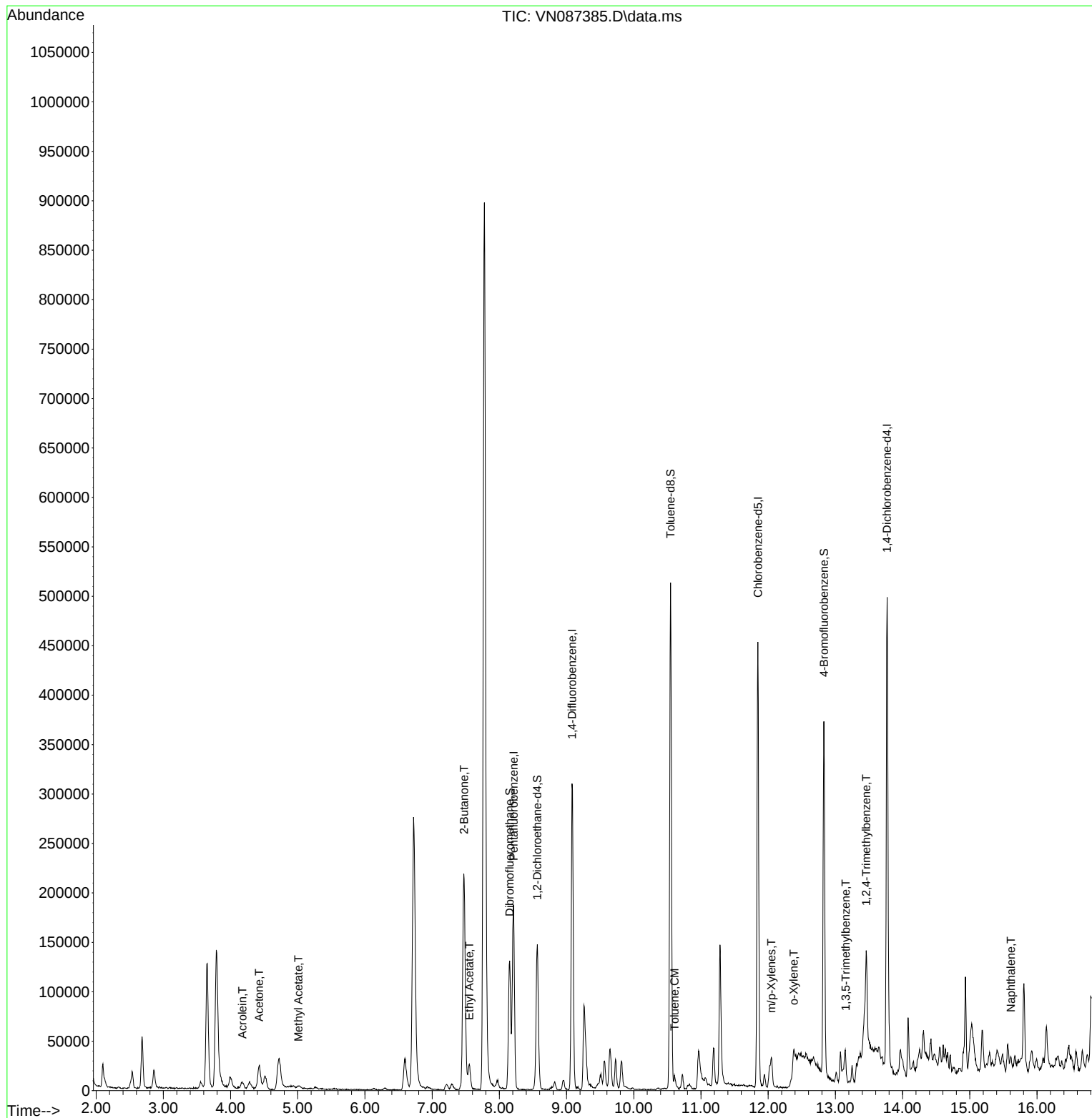
Internal Standards						
1) Pentafluorobenzene	8.212	168	132035	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.082	114	262033	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.847	117	246052	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.770	152	131454	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.565	65	122836	54.829	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery	= 109.660%		
35) Dibromofluoromethane	8.153	113	96675	53.485	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery	= 106.980%		
50) Toluene-d8	10.547	98	330647	51.282	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery	= 102.560%		
62) 4-Bromofluorobenzene	12.829	95	126507	53.108	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery	= 106.220%		
Target Compounds						
						Qvalue
13) Acrolein	4.177	56	7657	22.429	ug/l	93
16) Acetone	4.424	43	45995	43.787	ug/l	96
18) Methyl Acetate	5.012	43	5555	2.105	ug/l #	88
25) 2-Butanone	7.477	43	367990	226.731	ug/l	99
37) Ethyl Acetate	7.553	43	34609	10.035	ug/l	98
52) Toluene	10.606	92	4803	1.024	ug/l	85
68) m/p-Xylenes	12.047	106	7752	2.276	ug/l	99
69) o-Xylene	12.382	106	5115	1.572	ug/l	96
80) 1,3,5-Trimethylbenzene	13.153	105	8852	1.256	ug/l	93
84) 1,2,4-Trimethylbenzene	13.459	105	42638	5.923	ug/l	99
95) Naphthalene	15.611	128	12073	1.454	ug/l #	91

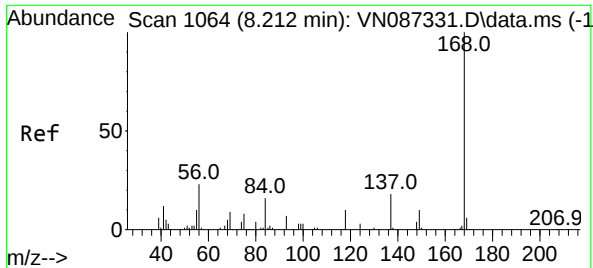
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Data File : VN087385.D
Acq On : 21 Jul 2025 17:07
Operator : JC\MD
Sample : Q2646-03 5X
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 19 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
FRAC TANK

Quant Time: Jul 22 03:11:02 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration

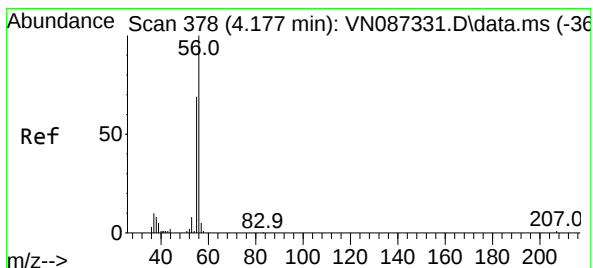
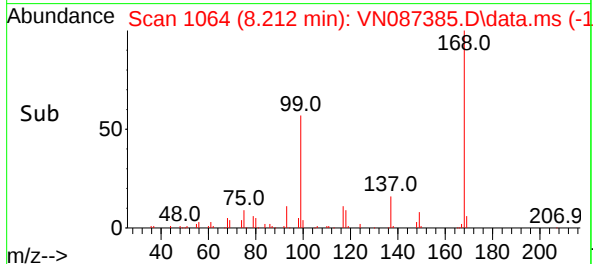
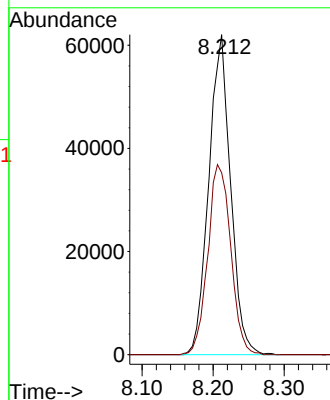
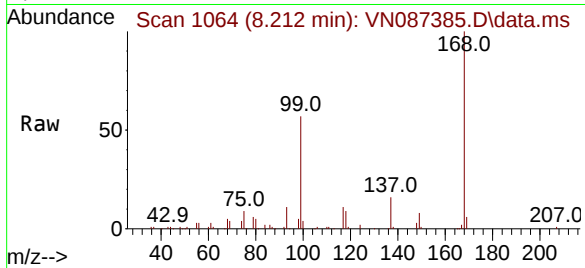




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.212 min Scan# 1064
Delta R.T. -0.000 min
Lab File: VN087385.D
Acq: 21 Jul 2025 17:07

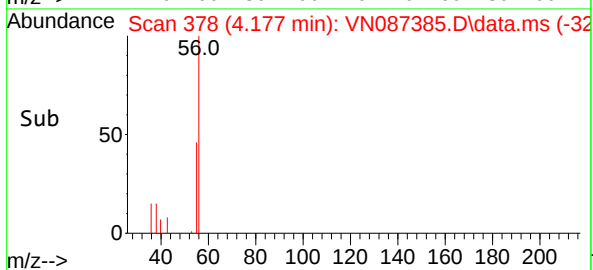
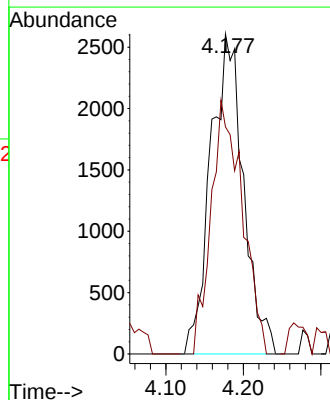
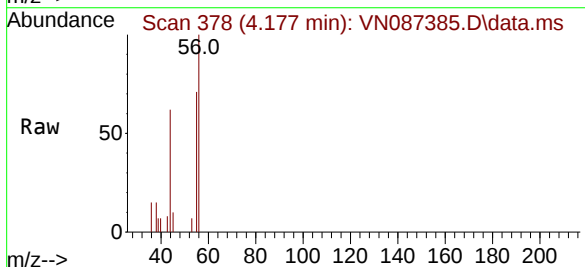
Instrument :
MSVOA_N
ClientSampleId :
FRAC TANK

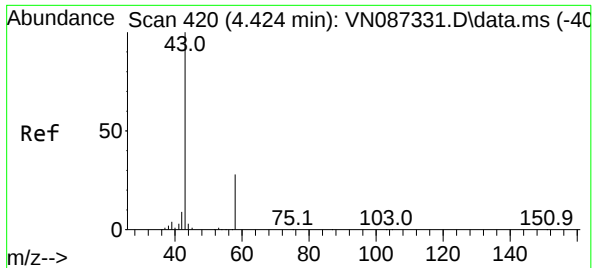
Tgt Ion:168 Resp: 132035
Ion Ratio Lower Upper
168 100
99 56.9 47.9 71.9



#13
Acrolein
Concen: 22.429 ug/l
RT: 4.177 min Scan# 378
Delta R.T. 0.000 min
Lab File: VN087385.D
Acq: 21 Jul 2025 17:07

Tgt Ion: 56 Resp: 7657
Ion Ratio Lower Upper
56 100
55 75.7 56.2 84.4

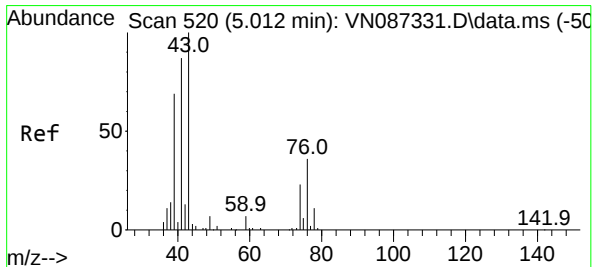
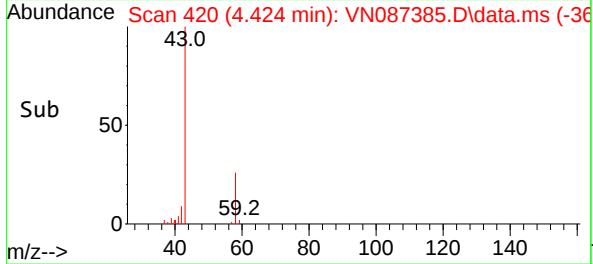
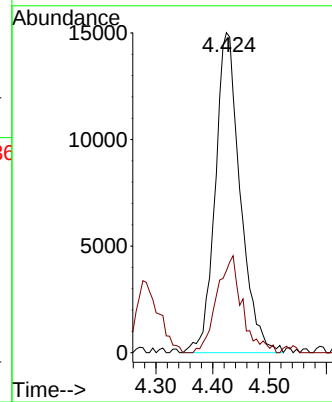
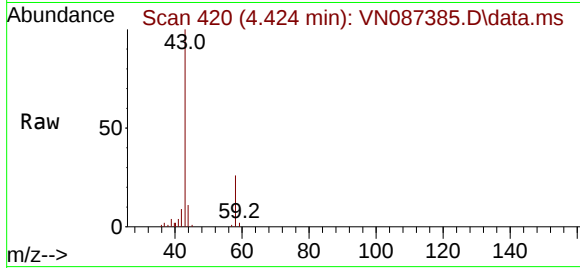




#16
Acetone
Concen: 43.787 ug/l
RT: 4.424 min Scan# 41
Delta R.T. 0.000 min
Lab File: VN087385.D
Acq: 21 Jul 2025 17:07

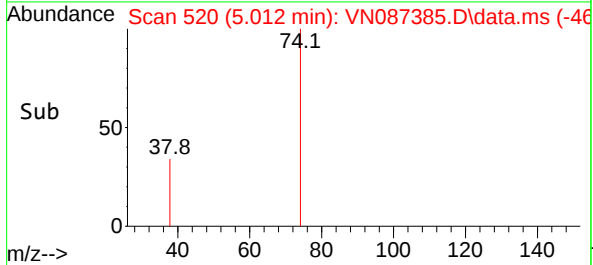
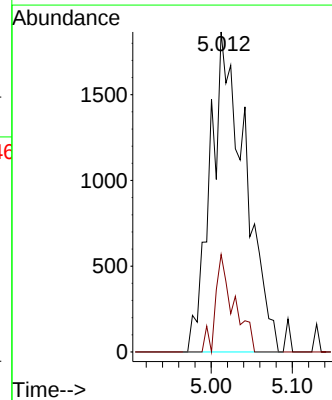
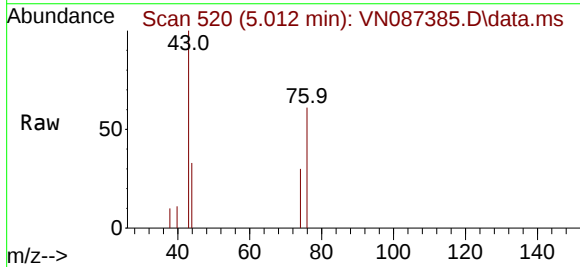
Instrument :
MSVOA_N
ClientSampleId :
FRAC TANK

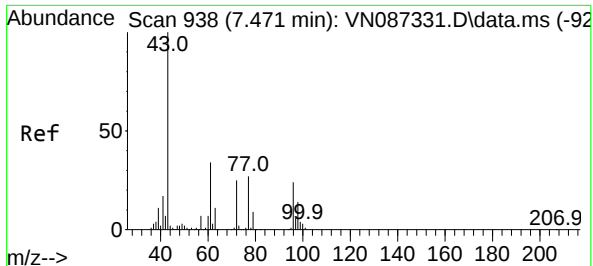
Tgt Ion: 43 Resp: 45995
Ion Ratio Lower Upper
43 100
58 25.6 22.3 33.5



#18
Methyl Acetate
Concen: 2.105 ug/l
RT: 5.012 min Scan# 520
Delta R.T. 0.000 min
Lab File: VN087385.D
Acq: 21 Jul 2025 17:07

Tgt Ion: 43 Resp: 5555
Ion Ratio Lower Upper
43 100
74 16.2 17.8 26.6#

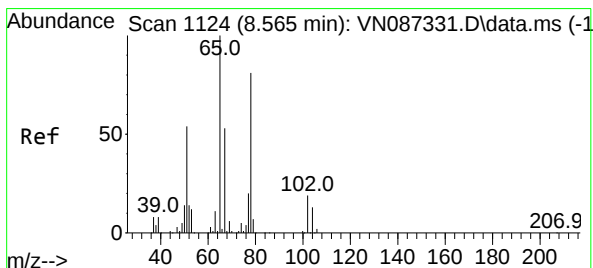
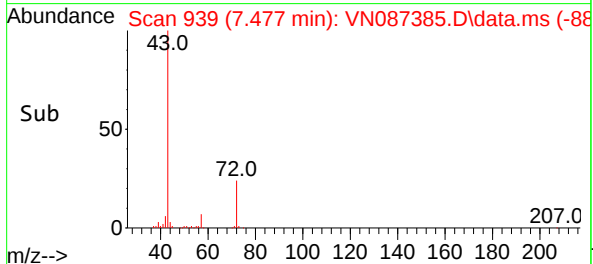
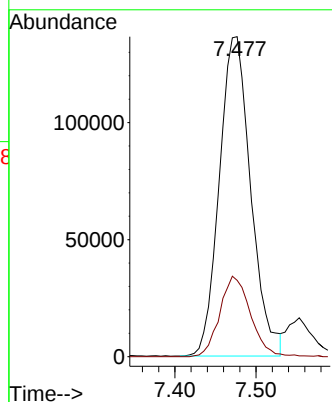
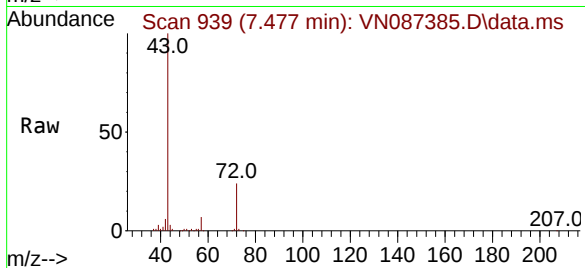




#25
2-Butanone
Concen: 226.731 ug/l
RT: 7.477 min Scan# 91
Delta R.T. 0.006 min
Lab File: VN087385.D
Acq: 21 Jul 2025 17:07

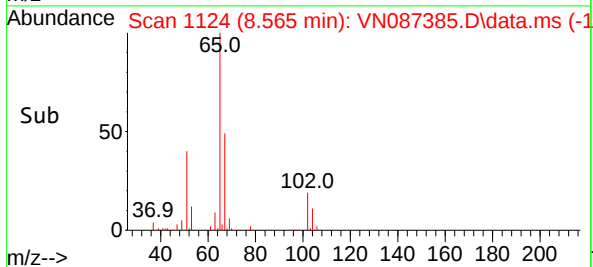
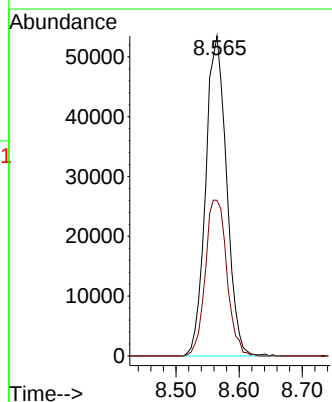
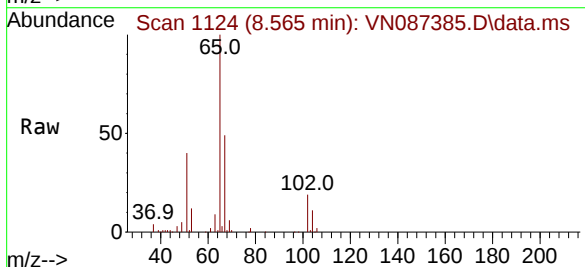
Instrument :
MSVOA_N
ClientSampleId :
FRAC TANK

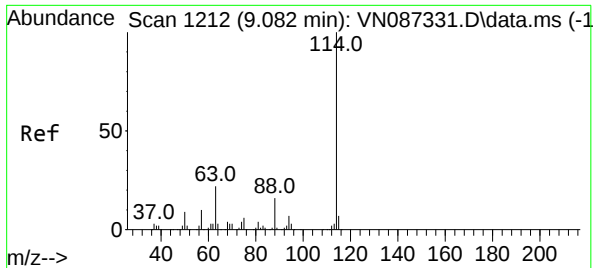
Tgt Ion: 43 Resp: 367990
Ion Ratio Lower Upper
43 100
72 23.9 19.6 29.4



#33
1,2-Dichloroethane-d4
Concen: 54.829 ug/l
RT: 8.565 min Scan# 1124
Delta R.T. 0.000 min
Lab File: VN087385.D
Acq: 21 Jul 2025 17:07

Tgt Ion: 65 Resp: 122836
Ion Ratio Lower Upper
65 100
67 50.3 0.0 104.0





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.082 min Scan# 1

Delta R.T. 0.000 min

Lab File: VN087385.D

Acq: 21 Jul 2025 17:07

Instrument :

MSVOA_N

ClientSampleId :

FRAC TANK

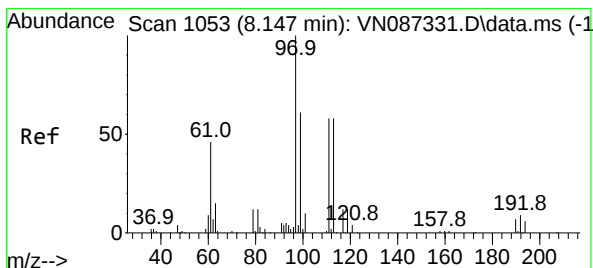
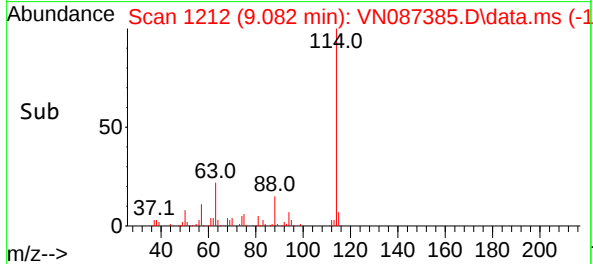
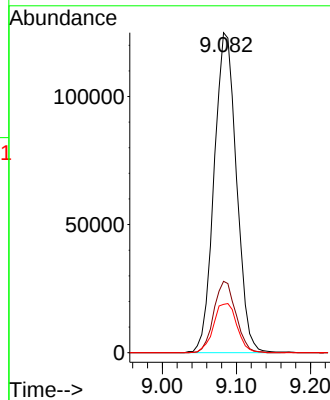
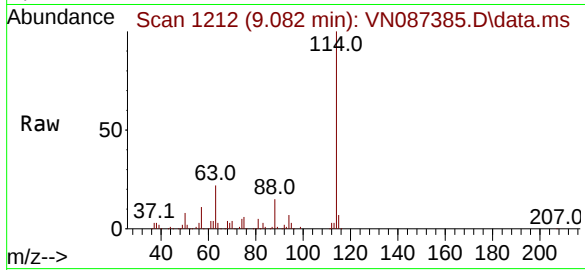
Tgt Ion:114 Resp: 262033

Ion Ratio Lower Upper

114 100

63 22.3 0.0 44.6

88 15.1 0.0 32.8



#35

Dibromofluoromethane

Concen: 53.485 ug/l

RT: 8.153 min Scan# 1054

Delta R.T. 0.006 min

Lab File: VN087385.D

Acq: 21 Jul 2025 17:07

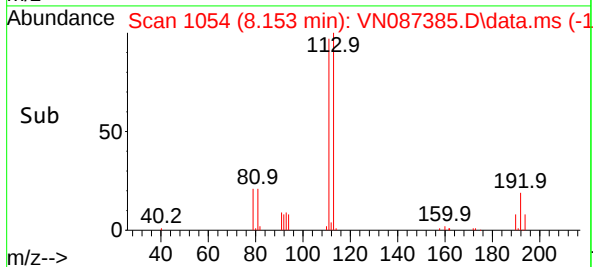
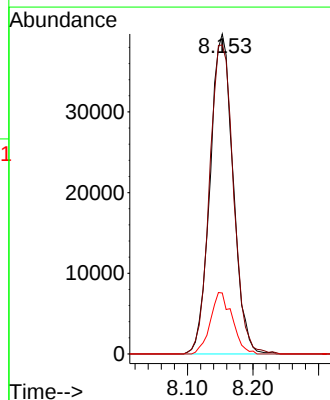
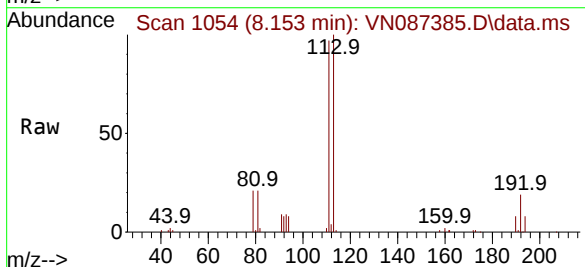
Tgt Ion:113 Resp: 96675

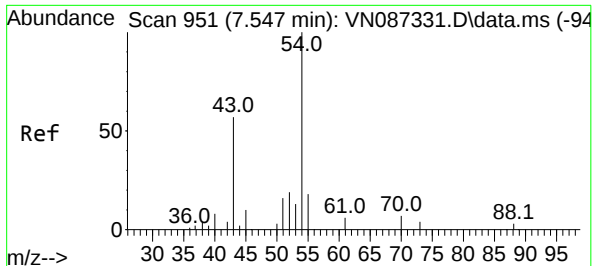
Ion Ratio Lower Upper

113 100

111 100.2 82.5 123.7

192 18.3 13.7 20.5





#37

Ethyl Acetate

Concen: 10.035 ug/l

RT: 7.553 min Scan# 91

Delta R.T. 0.006 min

Lab File: VN087385.D

Acq: 21 Jul 2025 17:07

Instrument :

MSVOA_N

ClientSampleId :

FRAC TANK

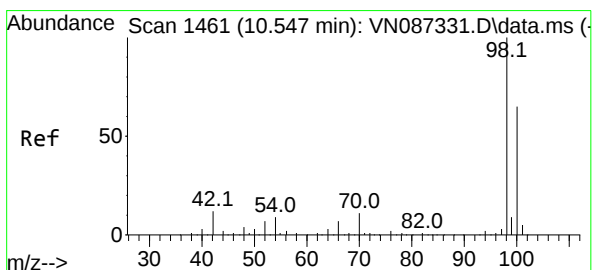
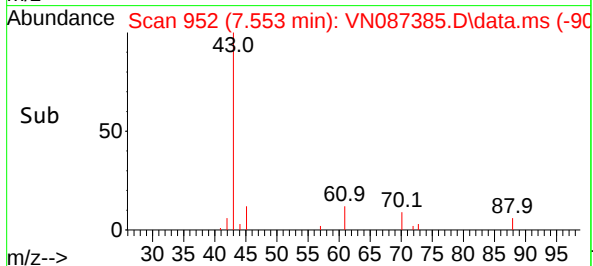
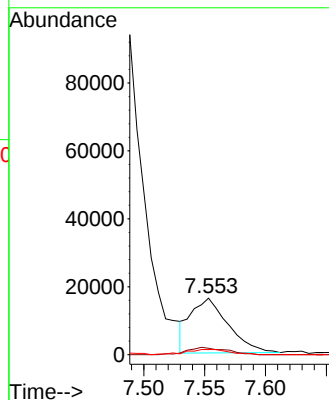
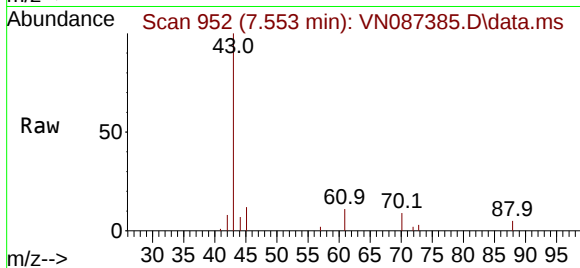
Tgt Ion: 43 Resp: 34609

Ion Ratio Lower Upper

43 100

61 13.8 10.9 16.3

70 11.0 7.4 11.0



#50

Toluene-d8

Concen: 51.282 ug/l

RT: 10.547 min Scan# 1461

Delta R.T. 0.000 min

Lab File: VN087385.D

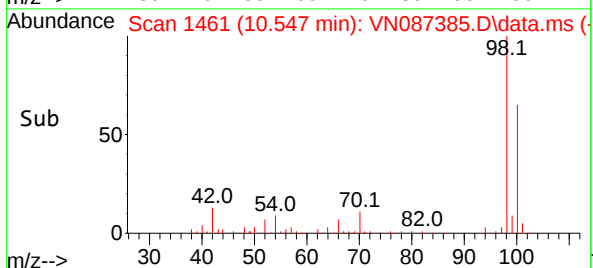
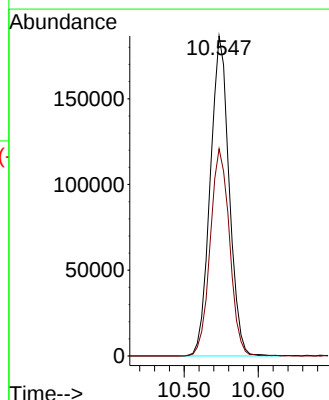
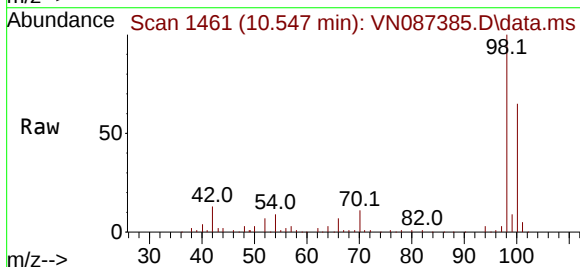
Acq: 21 Jul 2025 17:07

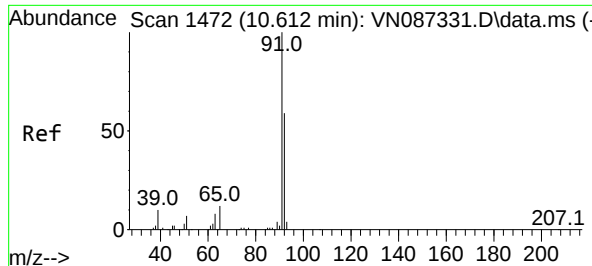
Tgt Ion: 98 Resp: 330647

Ion Ratio Lower Upper

98 100

100 66.0 52.1 78.1

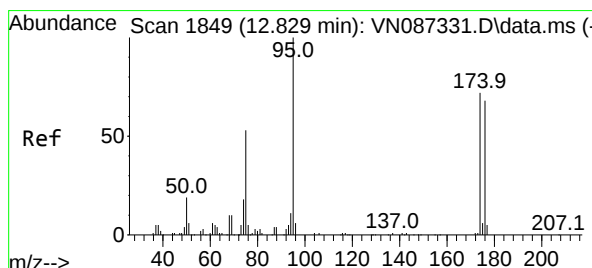
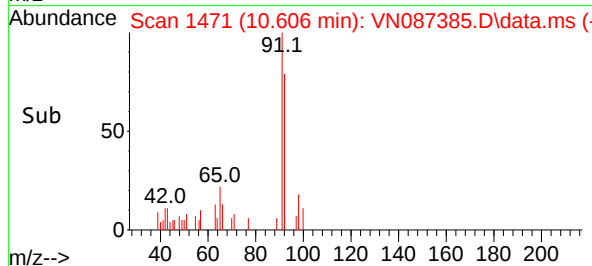
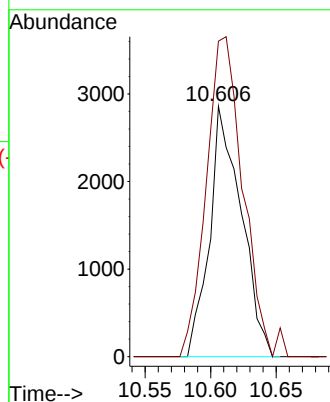
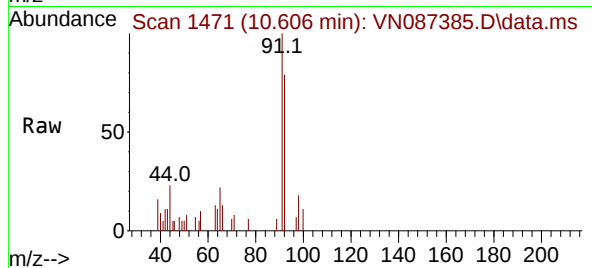




#52
Toluene
Concen: 1.024 ug/l
RT: 10.606 min Scan# 1471
Delta R.T. -0.006 min
Lab File: VN087385.D
Acq: 21 Jul 2025 17:07

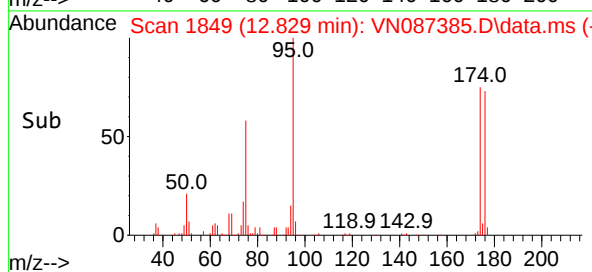
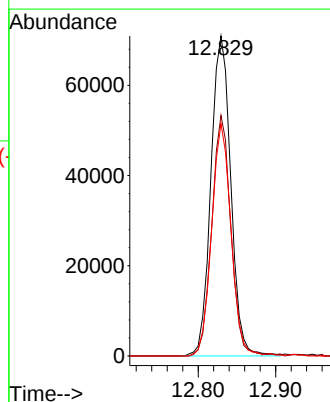
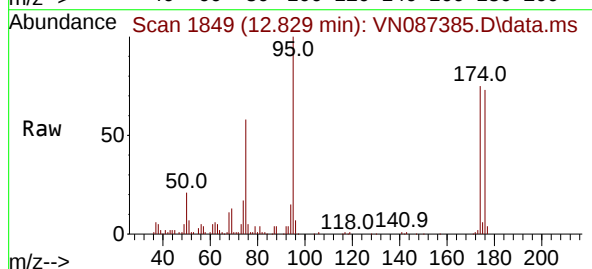
Instrument :
MSVOA_N
ClientSampleId :
FRAC TANK

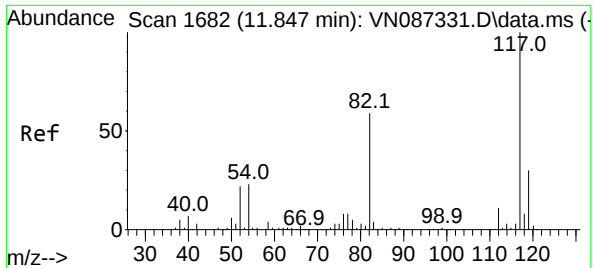
Tgt Ion: 92 Resp: 4803
Ion Ratio Lower Upper
92 100
91 148.6 135.1 202.7



#62
4-Bromofluorobenzene
Concen: 53.108 ug/l
RT: 12.829 min Scan# 1849
Delta R.T. 0.000 min
Lab File: VN087385.D
Acq: 21 Jul 2025 17:07

Tgt Ion: 95 Resp: 126507
Ion Ratio Lower Upper
95 100
174 72.2 0.0 149.4
176 70.8 0.0 141.2





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.847 min Scan# 1

Delta R.T. 0.000 min

Lab File: VN087385.D

Acq: 21 Jul 2025 17:07

Instrument :

MSVOA_N

ClientSampleId :

FRAC TANK

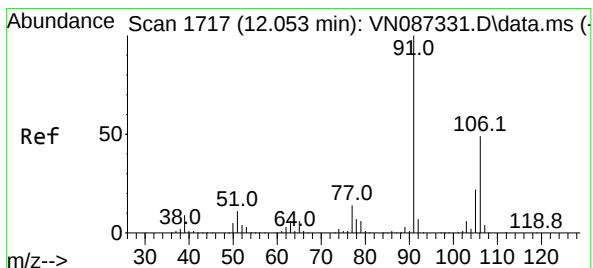
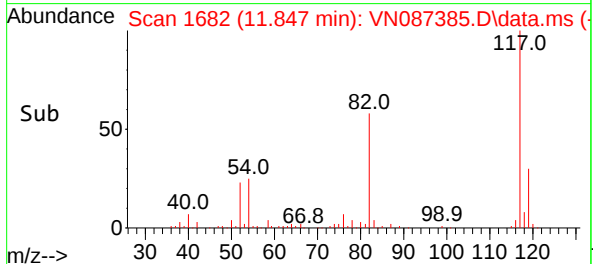
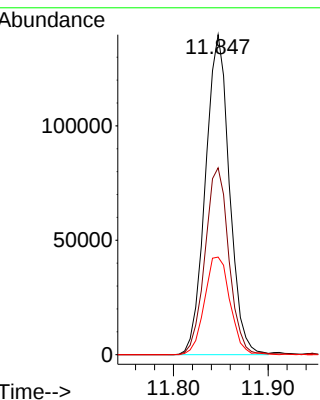
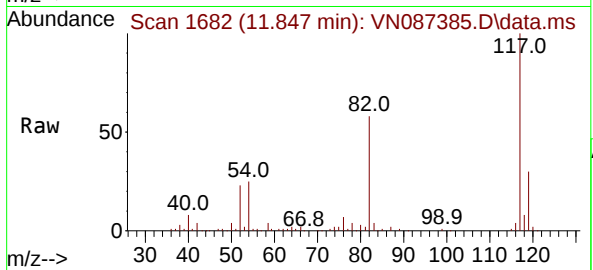
Tgt Ion:117 Resp: 246052

Ion Ratio Lower Upper

117 100

82 58.4 47.4 71.2

119 30.5 23.8 35.8



#68

m/p-Xylenes

Concen: 2.276 ug/l

RT: 12.047 min Scan# 1716

Delta R.T. -0.006 min

Lab File: VN087385.D

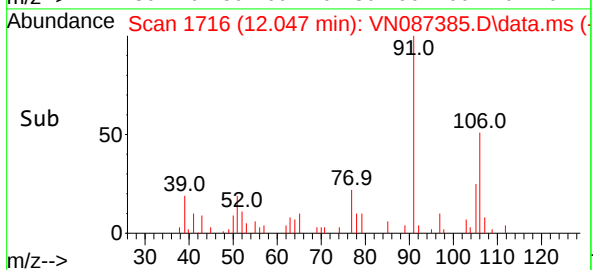
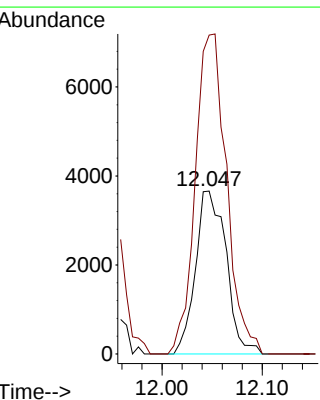
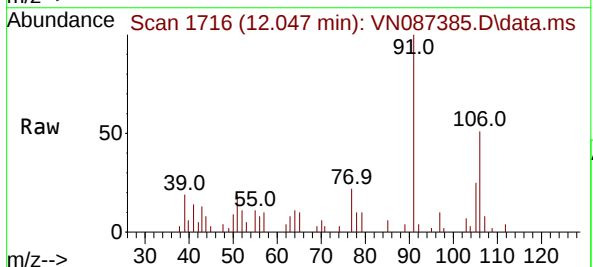
Acq: 21 Jul 2025 17:07

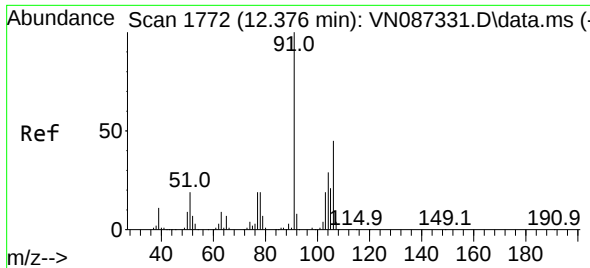
Tgt Ion:106 Resp: 7752

Ion Ratio Lower Upper

106 100

91 200.9 162.0 243.0

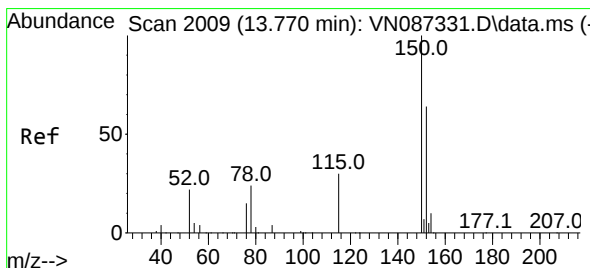
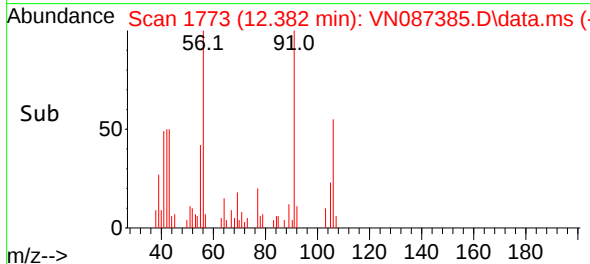
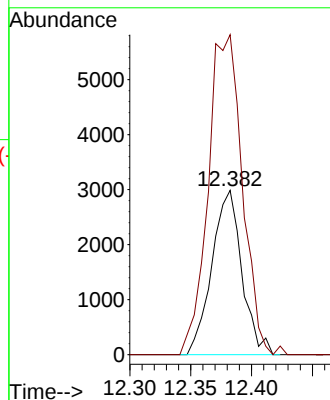
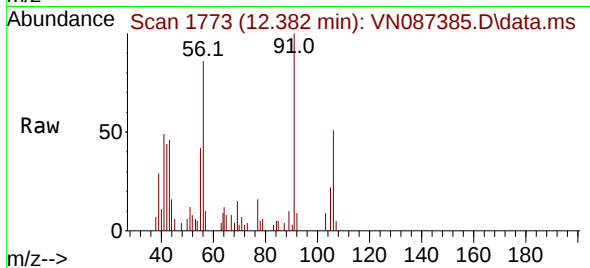




#69
o-Xylene
Concen: 1.572 ug/l
RT: 12.382 min Scan# 11
Delta R.T. 0.006 min
Lab File: VN087385.D
Acq: 21 Jul 2025 17:07

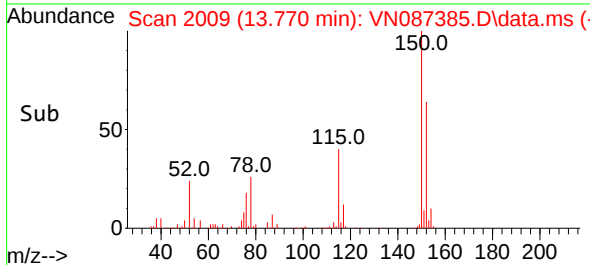
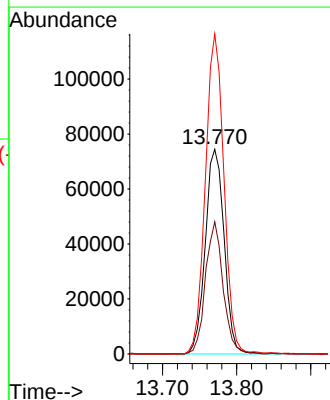
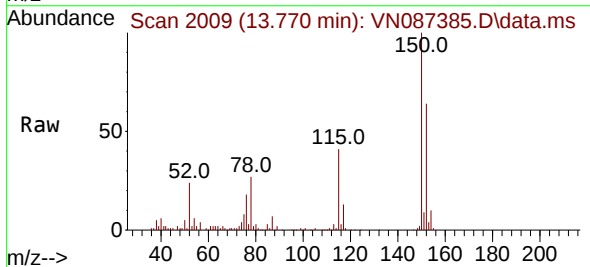
Instrument :
MSVOA_N
ClientSampleId :
FRAC TANK

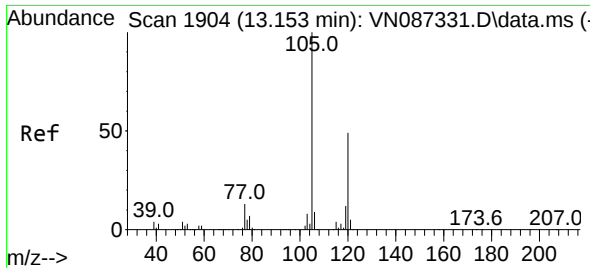
Tgt Ion:106 Resp: 5115
Ion Ratio Lower Upper
106 100
91 222.6 107.7 323.3



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.770 min Scan# 2009
Delta R.T. 0.000 min
Lab File: VN087385.D
Acq: 21 Jul 2025 17:07

Tgt Ion:152 Resp: 131454
Ion Ratio Lower Upper
152 100
115 60.6 31.1 93.5
150 154.0 0.0 349.0

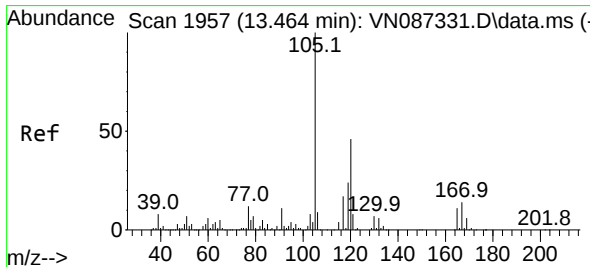
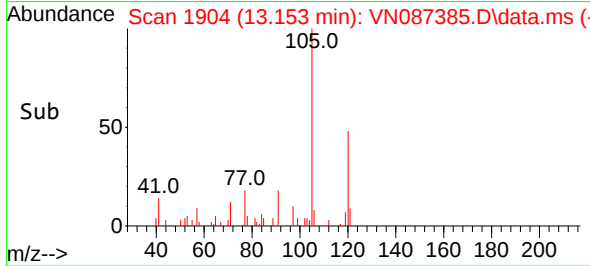
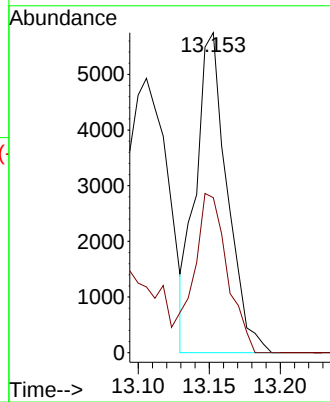
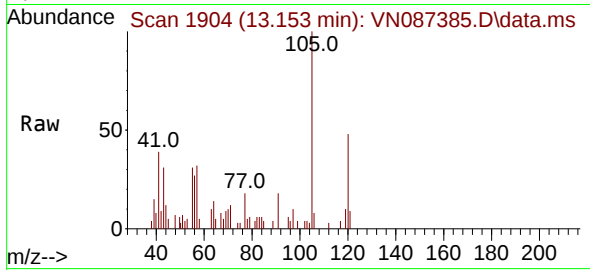




#80
1,3,5-Trimethylbenzene
Concen: 1.256 ug/l
RT: 13.153 min Scan# 1904
Delta R.T. 0.000 min
Lab File: VN087385.D
Acq: 21 Jul 2025 17:07

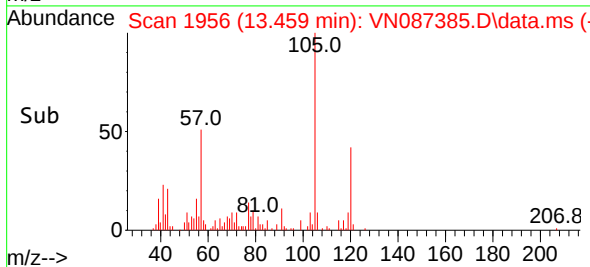
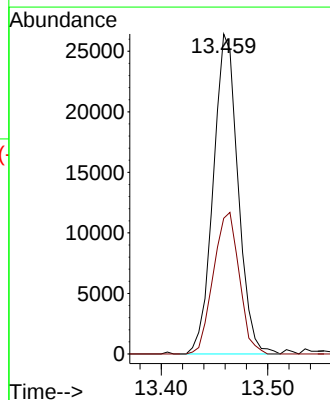
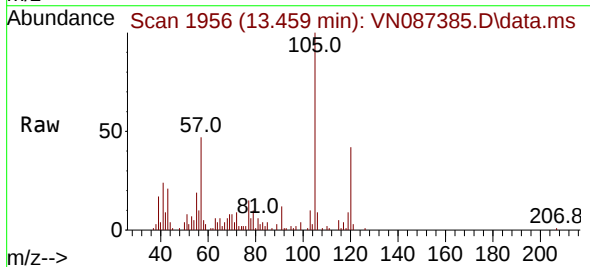
Instrument :
MSVOA_N
ClientSampleId :
FRAC TANK

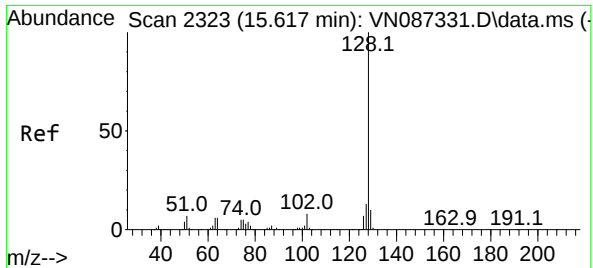
Tgt Ion:105 Resp: 8852
Ion Ratio Lower Upper
105 100
120 53.3 24.3 72.8



#84
1,2,4-Trimethylbenzene
Concen: 5.923 ug/l
RT: 13.459 min Scan# 1956
Delta R.T. -0.006 min
Lab File: VN087385.D
Acq: 21 Jul 2025 17:07

Tgt Ion:105 Resp: 42638
Ion Ratio Lower Upper
105 100
120 46.2 22.8 68.3





#95

Naphthalene

Concen: 1.454 ug/l

RT: 15.611 min Scan# 21

Delta R.T. -0.006 min

Lab File: VN087385.D

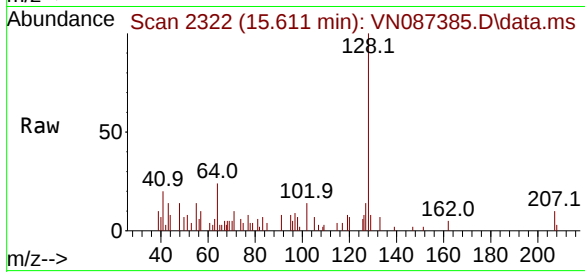
Acq: 21 Jul 2025 17:07

Instrument :

MSVOA_N

ClientSampleId :

FRAC TANK



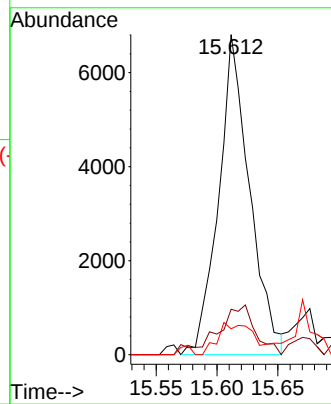
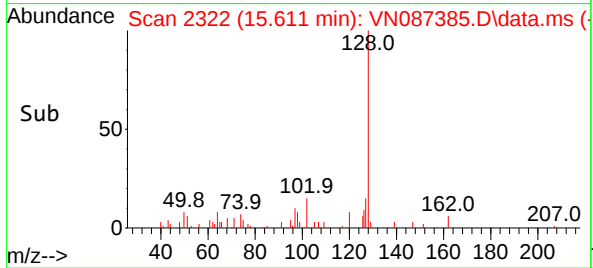
Tgt Ion:128 Resp: 12073

Ion Ratio Lower Upper

128 100

127 18.8 10.5 15.7#

129 11.3 8.4 12.6



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN072125\
 Data File : VN087370.D
 Acq On : 21 Jul 2025 11:34
 Operator : JC\MD
 Sample : VN0721WBL01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN0721WBL01

Quant Time: Jul 22 03:04:14 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 17 02:56:13 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	8.212	168	164239	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.083	114	328305	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.847	117	300772	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.771	152	133337	50.000	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.565	65	152384	54.681	ug/l	0.00
Spiked Amount	50.000	Range	74 - 125	Recovery	=	109.360%
35) Dibromofluoromethane	8.153	113	116283	51.347	ug/l	0.00
Spiked Amount	50.000	Range	75 - 124	Recovery	=	102.700%
50) Toluene-d8	10.547	98	411775	50.973	ug/l	0.00
Spiked Amount	50.000	Range	86 - 113	Recovery	=	101.940%
62) 4-Bromofluorobenzene	12.829	95	138566	46.428	ug/l	0.00
Spiked Amount	50.000	Range	77 - 121	Recovery	=	92.860%

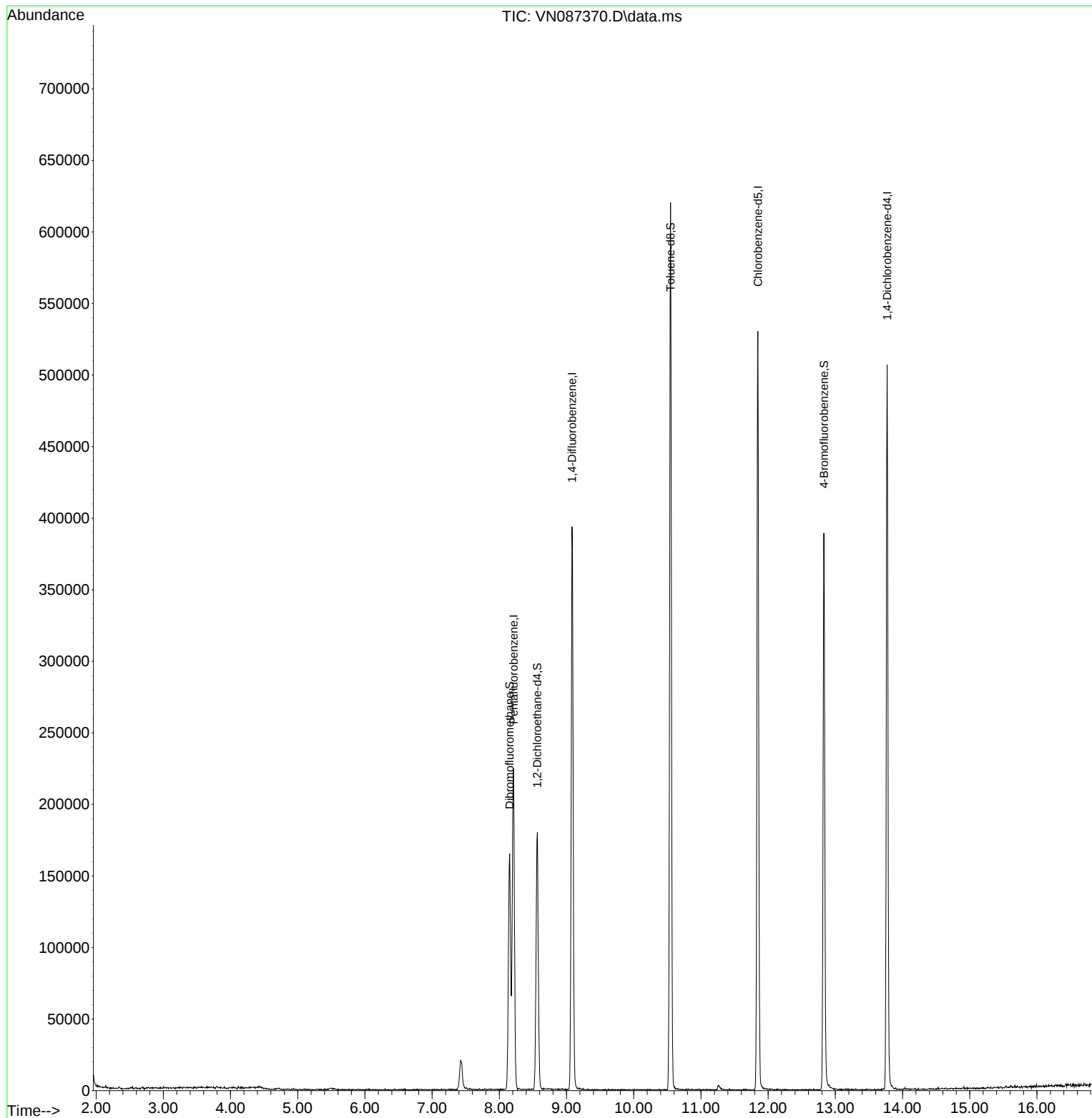
Target Compounds	Qvalue

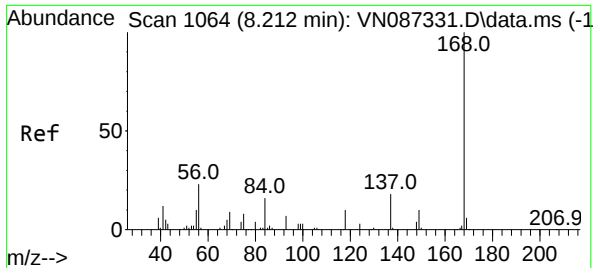
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN072125\
Data File : VN087370.D
Acq On : 21 Jul 2025 11:34
Operator : JC\MD
Sample : VN0721WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0721WBL01

Quant Time: Jul 22 03:04:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration

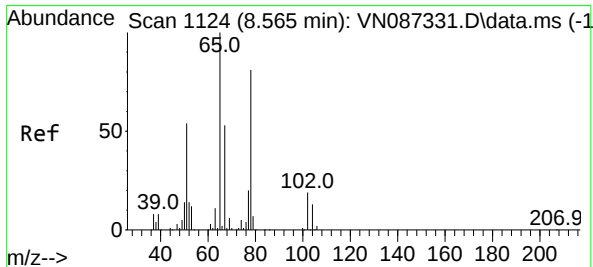
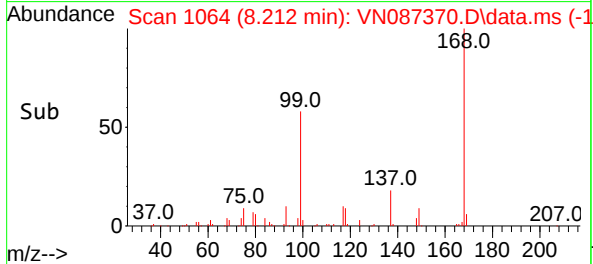
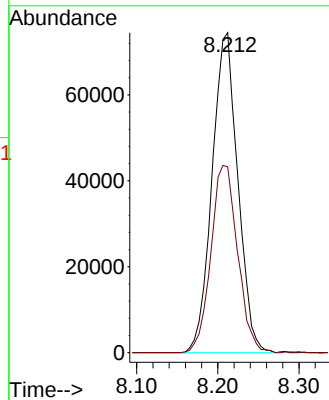
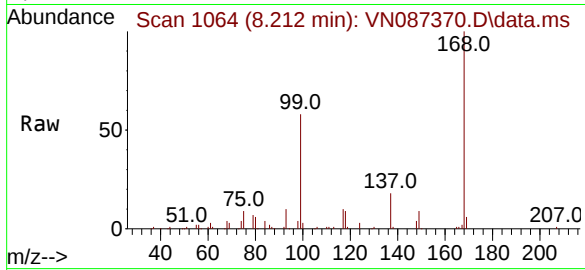




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.212 min Scan# 1064
Delta R.T. 0.000 min
Lab File: VN087370.D
Acq: 21 Jul 2025 11:34

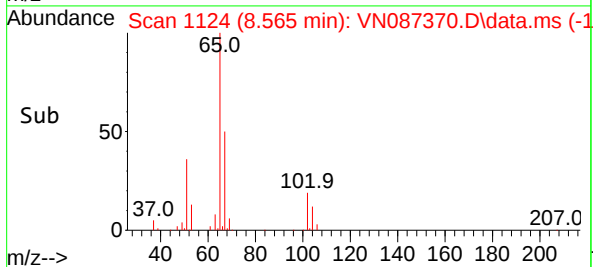
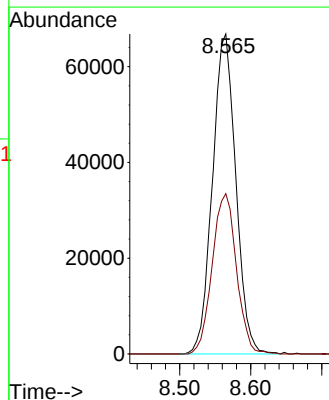
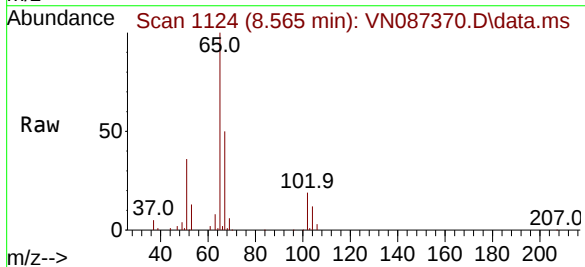
Instrument :
MSVOA_N
ClientSampleId :
VN0721WBL01

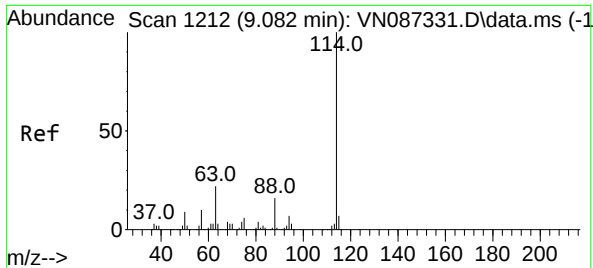
Tgt Ion:168 Resp: 164239
Ion Ratio Lower Upper
168 100
99 58.1 47.9 71.9



#33
1,2-Dichloroethane-d4
Concen: 54.681 ug/l
RT: 8.565 min Scan# 1124
Delta R.T. 0.000 min
Lab File: VN087370.D
Acq: 21 Jul 2025 11:34

Tgt Ion: 65 Resp: 152384
Ion Ratio Lower Upper
65 100
67 52.0 0.0 104.0

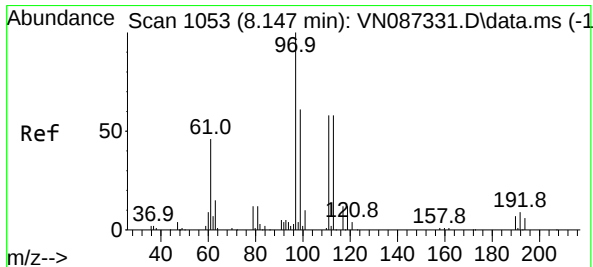
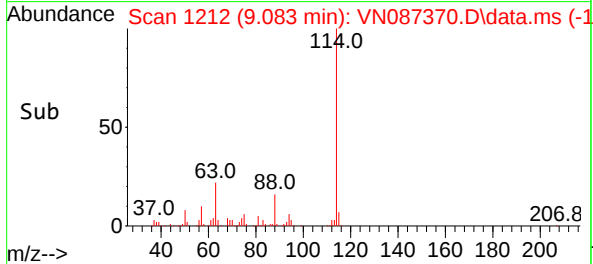
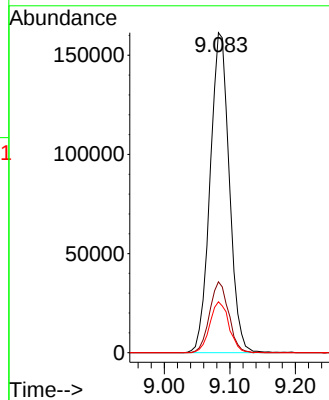
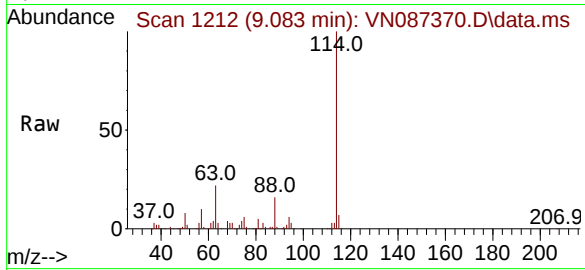




#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.083 min Scan# 11
Delta R.T. 0.001 min
Lab File: VN087370.D
Acq: 21 Jul 2025 11:34

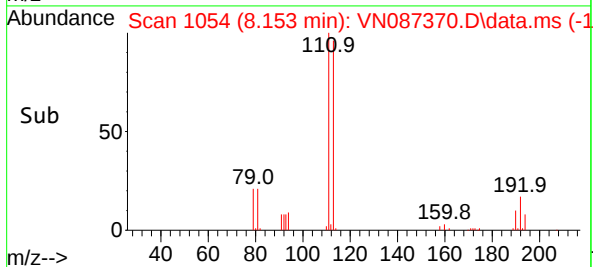
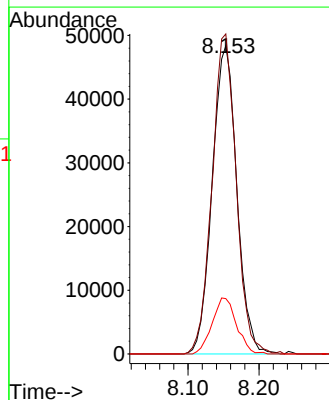
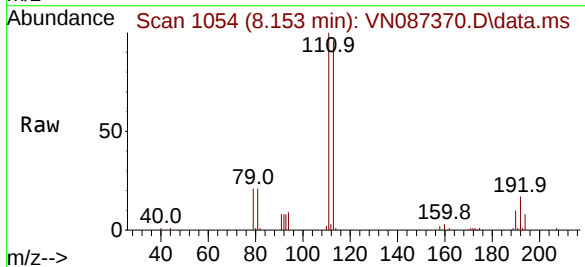
Instrument :
MSVOA_N
ClientSampleId :
VN0721WBL01

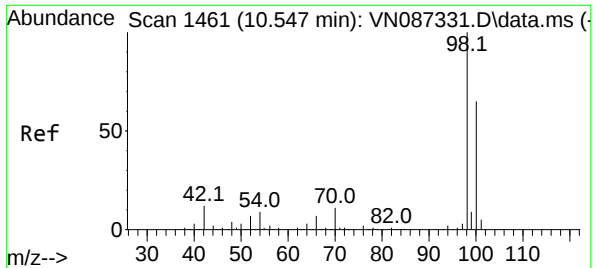
Tgt Ion:	114	Resp:	328305
Ion	Ratio	Lower	Upper
114	100		
63	22.2	0.0	44.6
88	15.9	0.0	32.8



#35
Dibromofluoromethane
Concen: 51.347 ug/l
RT: 8.153 min Scan# 1054
Delta R.T. 0.006 min
Lab File: VN087370.D
Acq: 21 Jul 2025 11:34

Tgt Ion:	113	Resp:	116283
Ion	Ratio	Lower	Upper
113	100		
111	101.7	82.5	123.7
192	18.0	13.7	20.5

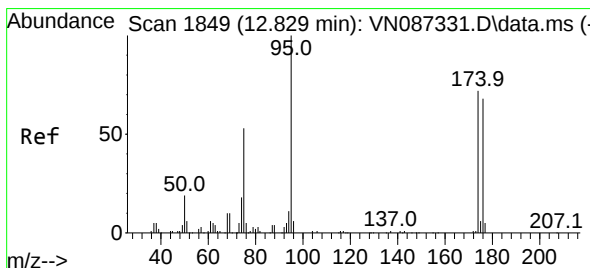
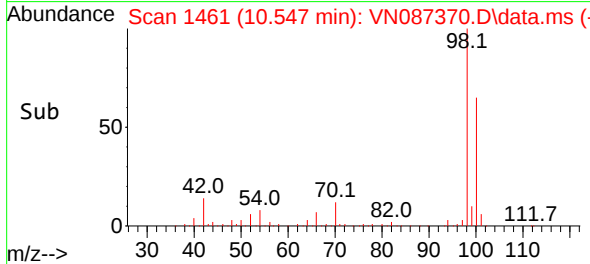
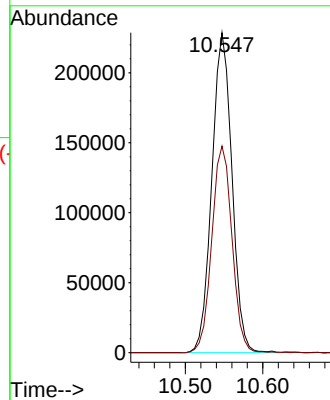
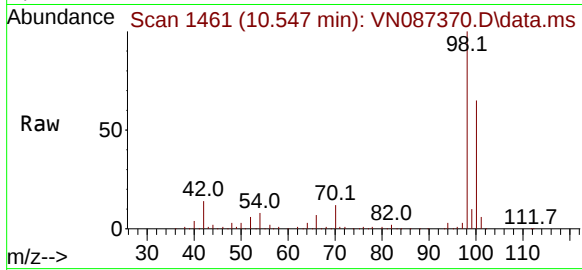




#50
Toluene-d8
Concen: 50.973 ug/l
RT: 10.547 min Scan# 1461
Delta R.T. 0.000 min
Lab File: VN087370.D
Acq: 21 Jul 2025 11:34

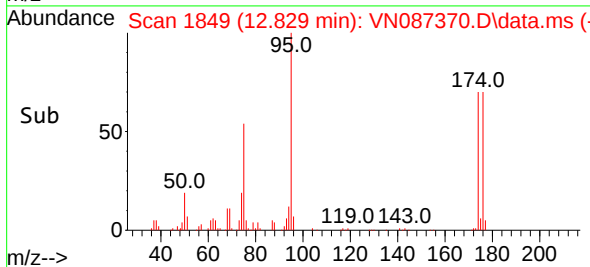
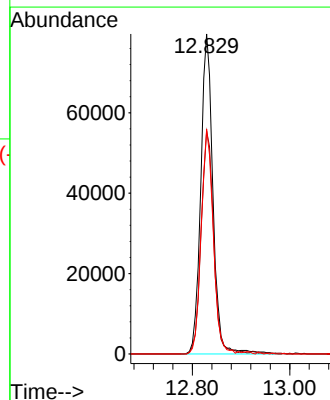
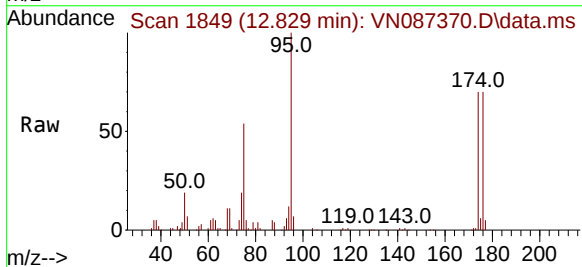
Instrument :
MSVOA_N
ClientSampleId :
VN0721WBL01

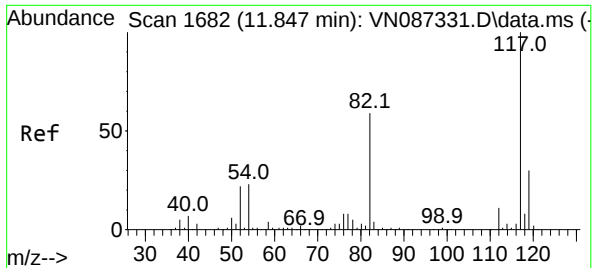
Tgt Ion: 98 Resp: 411775
Ion Ratio Lower Upper
98 100
100 65.0 52.1 78.1



#62
4-Bromofluorobenzene
Concen: 46.428 ug/l
RT: 12.829 min Scan# 1849
Delta R.T. 0.000 min
Lab File: VN087370.D
Acq: 21 Jul 2025 11:34

Tgt Ion: 95 Resp: 138566
Ion Ratio Lower Upper
95 100
174 71.3 0.0 149.4
176 70.0 0.0 141.2

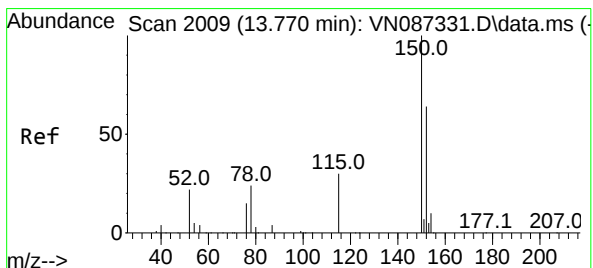
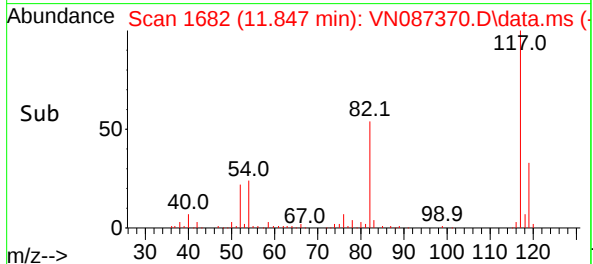
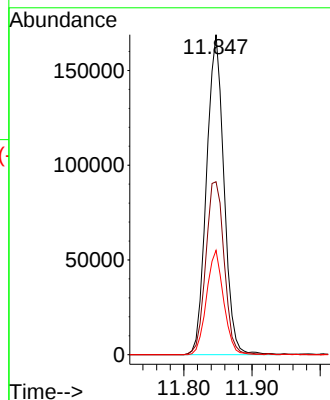
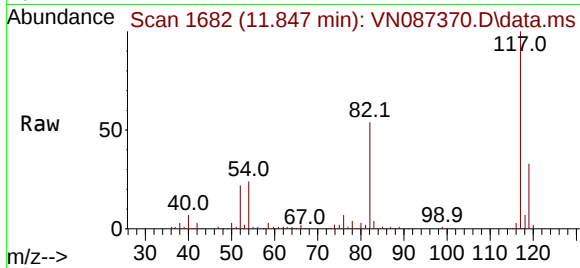




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.847 min Scan# 1184
Delta R.T. 0.000 min
Lab File: VN087370.D
Acq: 21 Jul 2025 11:34

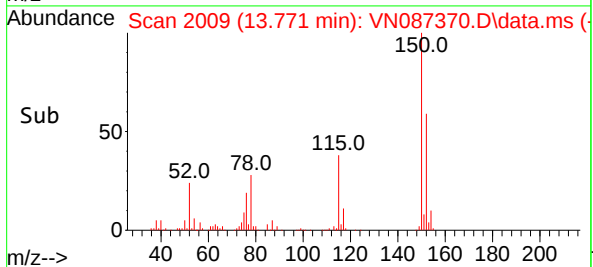
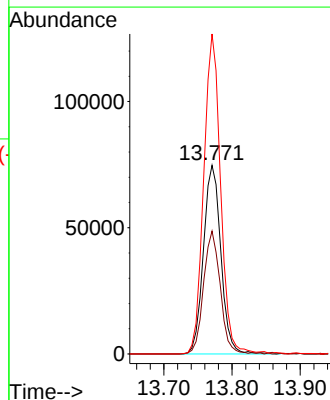
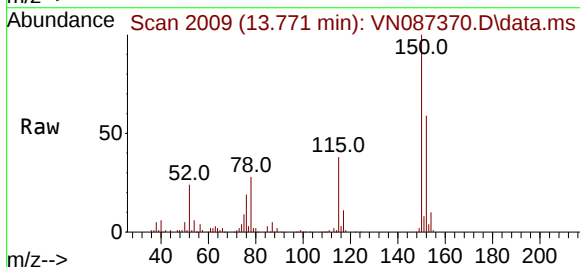
Instrument :
MSVOA_N
ClientSampleId :
VN0721WBL01

Tgt Ion:117 Resp: 300772
Ion Ratio Lower Upper
117 100
82 54.1 47.4 71.2
119 32.6 23.8 35.8



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.771 min Scan# 2009
Delta R.T. 0.000 min
Lab File: VN087370.D
Acq: 21 Jul 2025 11:34

Tgt Ion:152 Resp: 133337
Ion Ratio Lower Upper
152 100
115 62.5 31.1 93.5
150 164.0 0.0 349.0



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN072125\
 Data File : VN087371.D
 Acq On : 21 Jul 2025 11:55
 Operator : JC\MD
 Sample : VN0721WBS01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN0721WBS01

Manual Integrations APPROVED

Reviewed By : John Carlone 07/22/2025
 Supervised By : Mahesh Dadoda 07/22/2025

Quant Time: Jul 22 03:04:34 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 17 02:56:13 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	8.206	168	195078	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.088	114	337215	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.847	117	308523	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.770	152	161452	50.000	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	8.559	65	156616	47.315	ug/l	0.00
Spiked Amount	50.000	Range	74 - 125	Recovery	=	94.640%
35) Dibromofluoromethane	8.153	113	113549	48.815	ug/l	0.00
Spiked Amount	50.000	Range	75 - 124	Recovery	=	97.640%
50) Toluene-d8	10.547	98	418084	50.387	ug/l	0.00
Spiked Amount	50.000	Range	86 - 113	Recovery	=	100.780%
62) 4-Bromofluorobenzene	12.829	95	152963	49.898	ug/l	0.00
Spiked Amount	50.000	Range	77 - 121	Recovery	=	99.800%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	2.142	85	45478	21.949	ug/l	93
3) Chloromethane	2.389	50	49057	18.828	ug/l	96
4) Vinyl Chloride	2.542	62	49167	18.988	ug/l	97
5) Bromomethane	2.983	94	25728	19.187	ug/l	97
6) Chloroethane	3.142	64	30502	18.063	ug/l	92
7) Trichlorofluoromethane	3.512	101	73088	19.089	ug/l	89
8) Diethyl Ether	3.965	74	25832	17.392	ug/l	98
9) 1,1,2-Trichlorotrifluo...	4.365	101	40048	20.375	ug/l	98
10) Methyl Iodide	4.577	142	28199	18.006	ug/l	98
11) Tert butyl alcohol	5.524	59	53952	85.841	ug/l	98
12) 1,1-Dichloroethene	4.336	96	40303	18.095	ug/l	95
13) Acrolein	4.183	56	42192	83.649	ug/l	93
14) Allyl chloride	5.018	41	69156	17.157	ug/l	99
15) Acrylonitrile	5.712	53	142826	83.743	ug/l	99
16) Acetone	4.424	43	133162	85.801	ug/l	99
17) Carbon Disulfide	4.706	76	121611	18.416	ug/l	95
18) Methyl Acetate	5.018	43	68652	17.607	ug/l	98
19) Methyl tert-butyl Ether	5.794	73	140893	17.162	ug/l	97
20) Methylene Chloride	5.271	84	46556	17.327	ug/l	89
21) trans-1,2-Dichloroethene	5.771	96	44578	17.750	ug/l	92
22) Diisopropyl ether	6.659	45	157889	18.674	ug/l	94
23) Vinyl Acetate	6.588	43	694729	93.948	ug/l	99
24) 1,1-Dichloroethane	6.559	63	85653	17.559	ug/l	98
25) 2-Butanone	7.471	43	207099	86.364	ug/l	99
26) 2,2-Dichloropropane	7.477	77	77666	20.479	ug/l	96
27) cis-1,2-Dichloroethene	7.471	96	51900	17.950	ug/l	98
28) Bromochloromethane	7.800	49	41440	17.751	ug/l	99
29) Tetrahydrofuran	7.830	42	131520	84.427	ug/l	99
30) Chloroform	7.947	83	87539	17.929	ug/l	97
31) Cyclohexane	8.241	56	81992	20.149	ug/l	93
32) 1,1,1-Trichloroethane	8.153	97	78792	18.632	ug/l	97
36) 1,1-Dichloropropene	8.359	75	61263	19.935	ug/l	100
37) Ethyl Acetate	7.553	43	78541	17.696	ug/l	96
38) Carbon Tetrachloride	8.347	117	66297	19.583	ug/l	93
39) Methylcyclohexane	9.582	83	69647	20.933	ug/l #	91
40) Benzene	8.588	78	192485	19.379	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN072125\
 Data File : VN087371.D
 Acq On : 21 Jul 2025 11:55
 Operator : JC\MD
 Sample : VN0721WBS01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN0721WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 07/22/2025
 Supervised By :Mahesh Dadoda 07/22/2025

Quant Time: Jul 22 03:04:34 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 17 02:56:13 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.765	41	41272	17.784	ug/l	96
42) 1,2-Dichloroethane	8.653	62	68935	18.301	ug/l	99
43) Isopropyl Acetate	8.677	43	124383	18.053	ug/l	100
44) Trichloroethene	9.335	130	44065	18.776	ug/l	86
45) 1,2-Dichloropropane	9.600	63	48604	19.258	ug/l #	87
46) Dibromomethane	9.694	93	34607	18.314	ug/l	98
47) Bromodichloromethane	9.871	83	69750	18.326	ug/l	94
48) Methyl methacrylate	9.665	41	55452	17.877	ug/l	97
49) 1,4-Dioxane	9.677	88	17060	359.104	ug/l #	97
51) 4-Methyl-2-Pentanone	10.429	43	401014	92.023	ug/l	99
52) Toluene	10.612	92	116138	19.237	ug/l	99
53) t-1,3-Dichloropropene	10.818	75	72070	18.710	ug/l	100
54) cis-1,3-Dichloropropene	10.294	75	74540	18.734	ug/l	96
55) 1,1,2-Trichloroethane	11.000	97	45751	18.718	ug/l #	87
56) Ethyl methacrylate	10.859	69	66938	17.074	ug/l	97
57) 1,3-Dichloropropane	11.141	76	78676	18.617	ug/l	99
58) 2-Chloroethyl Vinyl ether	10.141	63	195869	97.690	ug/l	100
59) 2-Hexanone	11.176	43	264794	91.587	ug/l	99
60) Dibromochloromethane	11.341	129	52477	18.826	ug/l	96
61) 1,2-Dibromoethane	11.453	107	44615	17.360	ug/l	99
64) Tetrachloroethene	11.082	164	36432	18.347	ug/l	97
65) Chlorobenzene	11.871	112	128645	18.573	ug/l	97
66) 1,1,1,2-Tetrachloroethane	11.941	131	44082	18.716	ug/l	99
67) Ethyl Benzene	11.941	91	206561	18.115	ug/l	99
68) m/p-Xylenes	12.053	106	168727	39.515	ug/l	98
69) o-Xylene	12.376	106	75002	18.388	ug/l	100
70) Styrene	12.394	104	132593	19.325	ug/l	99
71) Bromoform	12.559	173	34591	18.179	ug/l #	97
73) Isopropylbenzene	12.676	105	198119	19.497	ug/l	98
74) N-amyl acetate	12.512	43	82883m	19.632	ug/l	
75) 1,1,2,2-Tetrachloroethane	12.918	83	70547	18.451	ug/l	98
76) 1,2,3-Trichloropropane	12.970	75	61699m	17.042	ug/l	
77) Bromobenzene	12.959	156	49824	18.906	ug/l	99
78) n-propylbenzene	13.018	91	256928	20.096	ug/l	100
79) 2-Chlorotoluene	13.106	91	152583	19.419	ug/l	97
80) 1,3,5-Trimethylbenzene	13.153	105	174332	20.136	ug/l	99
81) trans-1,4-Dichloro-2-b...	12.723	75	22951	17.345	ug/l	95
82) 4-Chlorotoluene	13.200	91	154290	18.861	ug/l	99
83) tert-Butylbenzene	13.417	119	146165	20.214	ug/l	97
84) 1,2,4-Trimethylbenzene	13.459	105	177920	20.123	ug/l	100
85) sec-Butylbenzene	13.594	105	220837	20.275	ug/l	99
86) p-Isopropyltoluene	13.706	119	181563	20.801	ug/l	99
87) 1,3-Dichlorobenzene	13.712	146	98893	19.120	ug/l	98
88) 1,4-Dichlorobenzene	13.788	146	99576	18.026	ug/l	95
89) n-Butylbenzene	14.035	91	170515	20.458	ug/l	99
90) Hexachloroethane	14.306	117	36514	19.744	ug/l	96
91) 1,2-Dichlorobenzene	14.082	146	94733	19.334	ug/l	95
92) 1,2-Dibromo-3-Chloropr...	14.694	75	16367	16.304	ug/l	95
93) 1,2,4-Trichlorobenzene	15.370	180	55564	19.305	ug/l	99
94) Hexachlorobutadiene	15.476	225	24726	23.120	ug/l	96
95) Naphthalene	15.617	128	175395	17.202	ug/l	99
96) 1,2,3-Trichlorobenzene	15.811	180	54756	18.966	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN072125\
Data File : VN087371.D
Acq On : 21 Jul 2025 11:55
Operator : JC\MD
Sample : VN0721WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 22 03:04:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0721WBS01

Manual Integrations
APPROVED

Reviewed By :John Carlone 07/22/2025
Supervised By :Mahesh Dadoda 07/22/2025

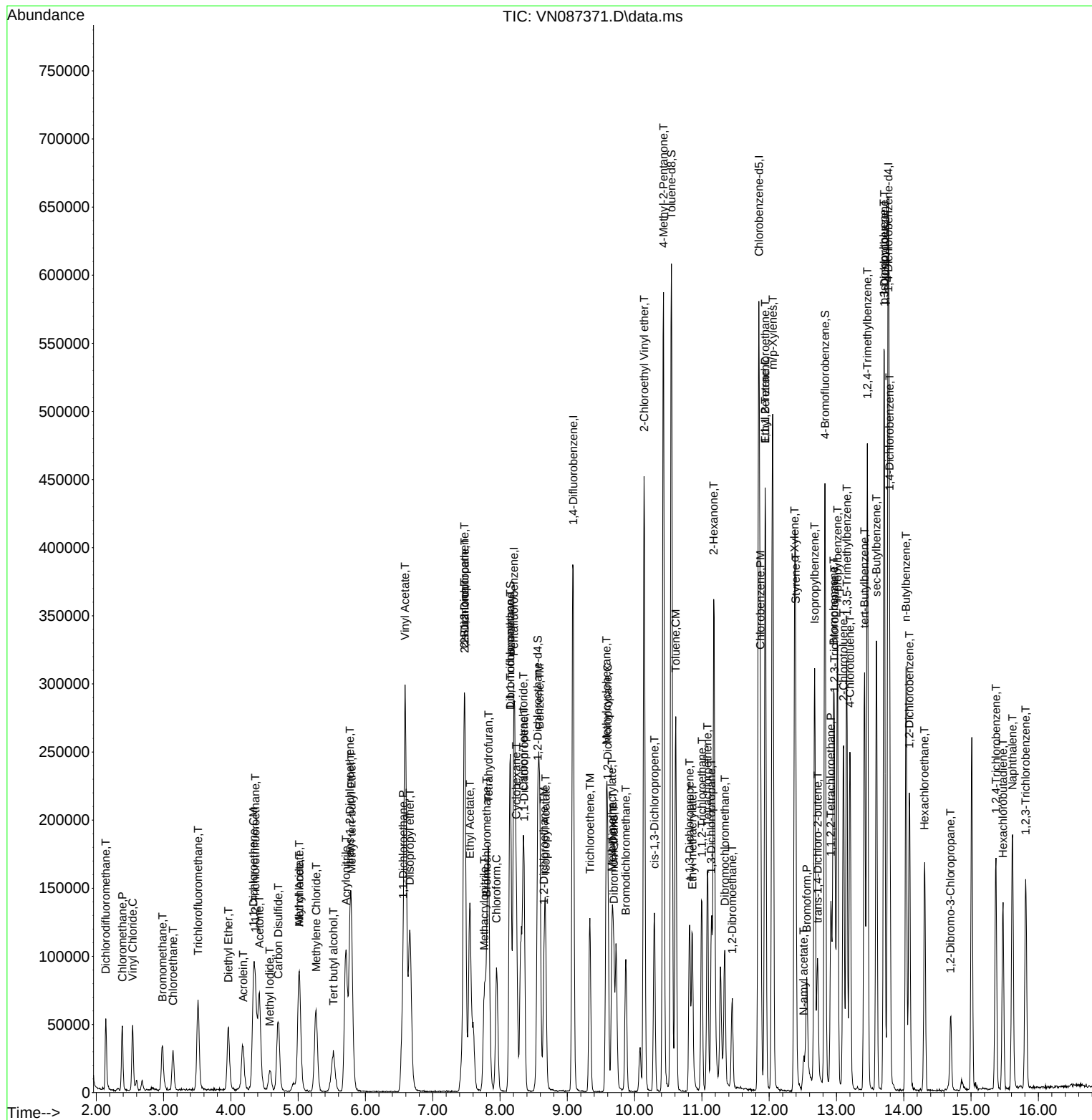
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
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(#) = qualifier out of range (m) = manual integration (+) = signals summed

Instrument :
MSVOA_N
ClientSampleId :
VN0721WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 07/22/2025
Supervised By :Mahesh Dadoda 07/22/2025



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN072125\
 Data File : VN087372.D
 Acq On : 21 Jul 2025 12:30
 Operator : JC\MD
 Sample : VN0721WBSD01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN0721WBSD01

Manual Integrations APPROVED

Reviewed By : John Carlone 07/22/2025
 Supervised By : Semsettin Yesilyurt 07/22/2025

Quant Time: Jul 22 03:05:24 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 17 02:56:13 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.206	168	190787	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.082	114	328848	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.847	117	296338	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.770	152	158557	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.565	65	152790	47.198	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery =	94.400%		
35) Dibromofluoromethane	8.147	113	114140	50.318	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	100.640%		
50) Toluene-d8	10.547	98	409499	50.608	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery =	101.220%		
62) 4-Bromofluorobenzene	12.829	95	149416	49.981	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery =	99.960%		
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.142	85	45407	22.408	ug/l	90
3) Chloromethane	2.383	50	47847	18.776	ug/l	91
4) Vinyl Chloride	2.542	62	48142	19.010	ug/l	92
5) Bromomethane	2.983	94	26007	19.831	ug/l	98
6) Chloroethane	3.136	64	30475	18.453	ug/l	100
7) Trichlorofluoromethane	3.512	101	73764	19.698	ug/l	88
8) Diethyl Ether	3.959	74	25592	17.618	ug/l	89
9) 1,1,2-Trichlorotrifluo...	4.359	101	37700	19.612	ug/l	98
10) Methyl Iodide	4.577	142	30353	19.251	ug/l	98
11) Tert butyl alcohol	5.518	59	56647	92.156	ug/l	99
12) 1,1-Dichloroethene	4.330	96	38399	17.628	ug/l	93
13) Acrolein	4.177	56	42955	87.077	ug/l	98
14) Allyl chloride	5.018	41	65923	16.722	ug/l	98
15) Acrylonitrile	5.706	53	148783	89.198	ug/l	99
16) Acetone	4.430	43	126421	83.289	ug/l	99
17) Carbon Disulfide	4.700	76	119923	18.569	ug/l	96
18) Methyl Acetate	5.018	43	69706	18.279	ug/l	99
19) Methyl tert-butyl Ether	5.789	73	144862	18.042	ug/l	99
20) Methylene Chloride	5.265	84	46355	17.652	ug/l	95
21) trans-1,2-Dichloroethene	5.771	96	43844	17.851	ug/l	86
22) Diisopropyl ether	6.659	45	157443	19.040	ug/l #	95
23) Vinyl Acetate	6.589	43	712495	98.517	ug/l	99
24) 1,1-Dichloroethane	6.547	63	86682	18.170	ug/l	97
25) 2-Butanone	7.471	43	206854	88.202	ug/l	99
26) 2,2-Dichloropropane	7.471	77	75365	20.319	ug/l	98
27) cis-1,2-Dichloroethene	7.471	96	52133	18.436	ug/l	96
28) Bromochloromethane	7.800	49	42566	18.643	ug/l	99
29) Tetrahydrofuran	7.830	42	136575	89.644	ug/l	96
30) Chloroform	7.947	83	87803	18.388	ug/l	99
31) Cyclohexane	8.235	56	78716	19.779	ug/l	98
32) 1,1,1-Trichloroethane	8.153	97	78287	18.929	ug/l	93
36) 1,1-Dichloropropene	8.353	75	59988	20.016	ug/l	99
37) Ethyl Acetate	7.547	43	77704	17.953	ug/l	98
38) Carbon Tetrachloride	8.347	117	65528	19.849	ug/l	99
39) Methylcyclohexane	9.582	83	67946	20.941	ug/l	96
40) Benzene	8.588	78	185496	19.151	ug/l	97

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN072125\
 Data File : VN087372.D
 Acq On : 21 Jul 2025 12:30
 Operator : JC\MD
 Sample : VN0721WBSD01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN0721WBSD01

Manual Integrations APPROVED

Reviewed By : John Carlone 07/22/2025
 Supervised By : Semsettin Yesilyurt 07/22/2025

Quant Time: Jul 22 03:05:24 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 17 02:56:13 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.765	41	40867	18.057	ug/l	95
42) 1,2-Dichloroethane	8.653	62	69079	18.806	ug/l	99
43) Isopropyl Acetate	8.671	43	127752	19.014	ug/l	99
44) Trichloroethene	9.335	130	43070	18.818	ug/l	96
45) 1,2-Dichloropropane	9.606	63	47601	19.341	ug/l	100
46) Dibromomethane	9.694	93	34895	18.937	ug/l	99
47) Bromodichloromethane	9.865	83	69620	18.757	ug/l	98
48) Methyl methacrylate	9.665	41	57104	18.878	ug/l	99
49) 1,4-Dioxane	9.688	88	16301	351.858	ug/l #	93
51) 4-Methyl-2-Pentanone	10.429	43	399338	93.970	ug/l	99
52) Toluene	10.612	92	114736	19.488	ug/l	97
53) t-1,3-Dichloropropene	10.818	75	70010	18.637	ug/l	96
54) cis-1,3-Dichloropropene	10.294	75	75349	19.419	ug/l	97
55) 1,1,2-Trichloroethane	10.994	97	46825	19.645	ug/l	88
56) Ethyl methacrylate	10.859	69	69998	18.249	ug/l	95
57) 1,3-Dichloropropane	11.147	76	78181	18.971	ug/l	97
58) 2-Chloroethyl Vinyl ether	10.141	63	202470	103.552	ug/l	100
59) 2-Hexanone	11.176	43	264149	93.688	ug/l	99
60) Dibromochloromethane	11.341	129	49899	18.357	ug/l	100
61) 1,2-Dibromoethane	11.447	107	47255	18.856	ug/l	95
64) Tetrachloroethene	11.082	164	36839	19.315	ug/l	95
65) Chlorobenzene	11.871	112	123556	18.571	ug/l	94
66) 1,1,1,2-Tetrachloroethane	11.941	131	43600	19.273	ug/l	100
67) Ethyl Benzene	11.941	91	204755	18.695	ug/l	100
68) m/p-Xylenes	12.047	106	159328	38.848	ug/l	100
69) o-Xylene	12.382	106	73560	18.777	ug/l	97
70) Styrene	12.394	104	127855	19.400	ug/l	99
71) Bromoform	12.559	173	34274	18.753	ug/l #	96
73) Isopropylbenzene	12.676	105	192540	19.294	ug/l	100
74) N-amyl acetate	12.518	43	83031m	20.026	ug/l	
75) 1,1,2,2-Tetrachloroethane	12.918	83	71491	19.039	ug/l	99
76) 1,2,3-Trichloropropane	12.976	75	62574m	17.599	ug/l	
77) Bromobenzene	12.959	156	48290	18.659	ug/l	98
78) n-propylbenzene	13.018	91	243308	19.379	ug/l	100
79) 2-Chlorotoluene	13.106	91	143207	18.559	ug/l	97
80) 1,3,5-Trimethylbenzene	13.153	105	162843	19.152	ug/l	96
81) trans-1,4-Dichloro-2-b...	12.718	75	22418	17.252	ug/l	98
82) 4-Chlorotoluene	13.206	91	148212	18.449	ug/l	98
83) tert-Butylbenzene	13.418	119	138461	19.498	ug/l	99
84) 1,2,4-Trimethylbenzene	13.459	105	172373	19.852	ug/l	98
85) sec-Butylbenzene	13.594	105	212425	19.859	ug/l	100
86) p-Isopropyltoluene	13.706	119	175039	20.419	ug/l	99
87) 1,3-Dichlorobenzene	13.712	146	98015	19.297	ug/l	98
88) 1,4-Dichlorobenzene	13.788	146	99611	18.362	ug/l	98
89) n-Butylbenzene	14.035	91	168514	20.587	ug/l	99
90) Hexachloroethane	14.312	117	35162	19.360	ug/l	98
91) 1,2-Dichlorobenzene	14.082	146	94601	19.659	ug/l	94
92) 1,2-Dibromo-3-Chloropr...	14.700	75	16412	16.647	ug/l	98
93) 1,2,4-Trichlorobenzene	15.370	180	52419	18.545	ug/l	99
94) Hexachlorobutadiene	15.476	225	24088	22.935	ug/l	99
95) Naphthalene	15.617	128	172523	17.229	ug/l	99
96) 1,2,3-Trichlorobenzene	15.817	180	52053	18.358	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN072125\
Data File : VN087372.D
Acq On : 21 Jul 2025 12:30
Operator : JC\MD
Sample : VN0721WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 22 03:05:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071625W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 17 02:56:13 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0721WBSD01

Manual Integrations
APPROVED

Reviewed By :John Carlone 07/22/2025
Supervised By :Semsettin Yesilyurt 07/22/2025

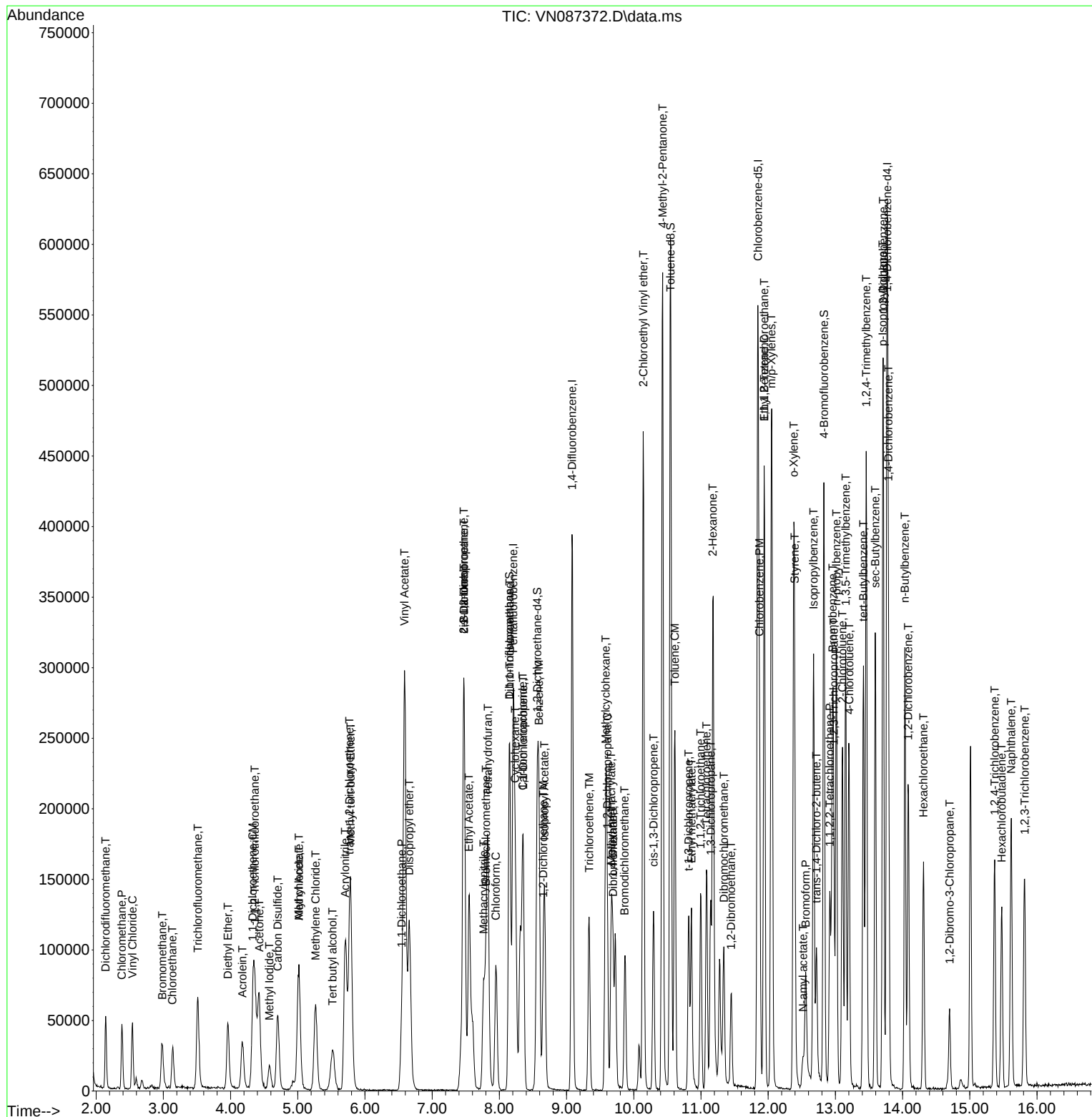
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
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(#) = qualifier out of range (m) = manual integration (+) = signals summed

Instrument :
MSVOA_N
ClientSampleId :
VN0721WBSD01

Manual Integrations APPROVED

Reviewed By :John Carlone 07/22/2025
Supervised By :Semsettin Yesilyurt 07/22/2025



Manual Integration Report

Sequence:	VN071625	Instrument	MSVOA_n
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC001	VN087328.D	1,2,3-Trichloropropane	MMDadod a	7/17/2025 8:19:52 AM	Sam	7/17/2025 8:24:59 AM	Peak Integrated by Software
VSTDICC001	VN087328.D	1,4-Dichlorobenzene	MMDadod a	7/17/2025 8:19:52 AM	Sam	7/17/2025 8:24:59 AM	Peak Integrated by Software
VSTDICC001	VN087328.D	Acetone	MMDadod a	7/17/2025 8:19:52 AM	Sam	7/17/2025 8:24:59 AM	Peak Integrated by Software
VSTDICC001	VN087328.D	Allyl chloride	MMDadod a	7/17/2025 8:19:52 AM	Sam	7/17/2025 8:24:59 AM	Peak Integrated by Software
VSTDICC001	VN087328.D	Methyl tert-butyl Ether	MMDadod a	7/17/2025 8:19:52 AM	Sam	7/17/2025 8:24:59 AM	Peak Integrated by Software
VSTDICC001	VN087328.D	N-amyl acetate	MMDadod a	7/17/2025 8:19:52 AM	Sam	7/17/2025 8:24:59 AM	Peak Integrated by Software
VSTDICC005	VN087329.D	1,2,3-Trichloropropane	MMDadod a	7/17/2025 8:19:53 AM	Sam	7/17/2025 8:24:55 AM	Peak Integrated by Software
VSTDICC005	VN087329.D	Methyl Iodide	MMDadod a	7/17/2025 8:19:53 AM	Sam	7/17/2025 8:24:55 AM	Peak Integrated by Software
VSTDICC005	VN087329.D	N-amyl acetate	MMDadod a	7/17/2025 8:19:53 AM	Sam	7/17/2025 8:24:55 AM	Peak Integrated by Software
VSTDICC020	VN087330.D	1,2,3-Trichloropropane	MMDadod a	7/17/2025 8:19:54 AM	Sam	7/17/2025 8:24:56 AM	Peak Integrated by Software
VSTDICC020	VN087330.D	N-amyl acetate	MMDadod a	7/17/2025 8:19:54 AM	Sam	7/17/2025 8:24:56 AM	Peak Integrated by Software
VSTDICCC050	VN087331.D	1,2,3-Trichloropropane	MMDadod a	7/17/2025 8:19:56 AM	Sam	7/17/2025 8:25:01 AM	Peak Integrated by Software
VSTDICCC050	VN087331.D	N-amyl acetate	MMDadod a	7/17/2025 8:19:56 AM	Sam	7/17/2025 8:25:01 AM	Peak Integrated by Software

Manual Integration Report

Sequence:

VN071625

Instrument

MSVOA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC100	VN087332.D	1,2,3-Trichloropropane	MMDadoda	7/17/2025 8:19:58 AM	Sam	7/17/2025 8:25:00 AM	Peak Integrated by Software
VSTDICC150	VN087333.D	1,2,3-Trichloropropane	MMDadoda	7/17/2025 8:19:59 AM	Sam	7/17/2025 8:25:02 AM	Peak Integrated by Software
VSTDICV050	VN087335.D	1,2,3-Trichloropropane	MMDadoda	7/17/2025 8:20:01 AM	Sam	7/17/2025 8:25:03 AM	Peak Integrated by Software
VSTDICV050	VN087335.D	N-amyl acetate	MMDadoda	7/17/2025 8:20:01 AM	Sam	7/17/2025 8:25:03 AM	Peak Integrated by Software

Manual Integration Report

Sequence:	vn072125	Instrument	MSVOA_n
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC050	VN087368.D	1,2,3-Trichloropropane	JOHN	7/22/2025 9:00:11 AM	MMDadoda	7/22/2025 1:40:43 PM	Peak Integrated by Software
VN0721WBS01	VN087371.D	1,2,3-Trichloropropane	JOHN	7/22/2025 9:00:17 AM	MMDadoda	7/22/2025 1:40:41 PM	Peak Integrated by Software
VN0721WBS01	VN087371.D	N-amyl acetate	JOHN	7/22/2025 9:00:17 AM	MMDadoda	7/22/2025 1:40:41 PM	Peak Integrated by Software
VN0721WBSD0 1	VN087372.D	1,2,3-Trichloropropane	JOHN	7/22/2025 9:00:21 AM	SAM	7/22/2025 1:54:42 PM	Peak Integrated by Software
VN0721WBSD0 1	VN087372.D	N-amyl acetate	JOHN	7/22/2025 9:00:21 AM	SAM	7/22/2025 1:54:42 PM	Peak Integrated by Software
VSTDCCC050	VN087387.D	1,2,3-Trichloropropane	JOHN	7/22/2025 9:00:47 AM	MMDadoda	7/22/2025 1:40:38 PM	Peak Integrated by Software

Instrument ID: **MSVOA_N**

Daily Analysis Runlog For Sequence/QC Batch ID # VN071625

Review By	Maresh Dadoda	Review On	7/17/2025 8:20:05 AM
Supervise By	Semsettin Yesilyurt	Supervise On	7/17/2025 8:25:10 AM
SubDirectory	VN071625	HP Acquire Method	HP Processing Method 82N071625W.M
STD. NAME	STD REF.#		
Tune/Reschk	VP134794		
Initial Calibration Stds	VP134795,VP134796,VP134797,VP134798,VP134799,VP134800		
CCC			
Internal Standard/PEM			
ICV/I.BLK	VP134801		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VN087327.D	16 Jul 2025 16:10	JC\MD	Ok
2	VSTDIC001	VN087328.D	16 Jul 2025 17:05	JC\MD	Ok,M
3	VSTDIC005	VN087329.D	16 Jul 2025 17:27	JC\MD	Ok,M
4	VSTDIC020	VN087330.D	16 Jul 2025 17:49	JC\MD	Ok,M
5	VSTDIC050	VN087331.D	16 Jul 2025 18:11	JC\MD	Ok,M
6	VSTDIC100	VN087332.D	16 Jul 2025 18:32	JC\MD	Ok,M
7	VSTDIC150	VN087333.D	16 Jul 2025 18:54	JC\MD	Ok,M
8	IBLK	VN087334.D	16 Jul 2025 19:16	JC\MD	Ok
9	VSTDICV050	VN087335.D	16 Jul 2025 19:59	JC\MD	Ok,M

M : Manual Integration

Instrument ID: **MSVOA_N**

Daily Analysis Runlog For Sequence/QC Batch ID # VN072125

Review By	John Carlone	Review On	7/22/2025 9:07:37 AM
Supervise By	Maresh Dadoda	Supervise On	7/22/2025 1:40:47 PM
SubDirectory	VN072125	HP Acquire Method	HP Processing Method 82N071625W.M
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	VP134840		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP134841,VP134842		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VN087367.D	21 Jul 2025 10:05	JC\MD	Ok
2	VSTDCCC050	VN087368.D	21 Jul 2025 10:38	JC\MD	Ok,M
3	VN0721MBL01	VN087369.D	21 Jul 2025 11:13	JC\MD	Ok
4	VN0721WBL01	VN087370.D	21 Jul 2025 11:34	JC\MD	Ok
5	VN0721WBS01	VN087371.D	21 Jul 2025 11:55	JC\MD	Ok,M
6	VN0721WBSD01	VN087372.D	21 Jul 2025 12:30	JC\MD	Ok,M
7	Q2646-01	VN087373.D	21 Jul 2025 12:51	JC\MD	Ok
8	IBLK	VN087374.D	21 Jul 2025 13:13	JC\MD	Ok
9	PB168920TB	VN087375.D	21 Jul 2025 13:34	JC\MD	Ok
10	Q2641-02	VN087376.D	21 Jul 2025 13:55	JC\MD	Ok
11	Q2645-03	VN087377.D	21 Jul 2025 14:16	JC\MD	Ok
12	Q2649-04	VN087378.D	21 Jul 2025 14:38	JC\MD	Ok
13	Q2649-08	VN087379.D	21 Jul 2025 14:59	JC\MD	Ok,M
14	Q2649-12	VN087380.D	21 Jul 2025 15:20	JC\MD	Ok
15	Q2649-16	VN087381.D	21 Jul 2025 15:42	JC\MD	Ok
16	Q2649-20	VN087382.D	21 Jul 2025 16:03	JC\MD	Ok
17	Q2649-24	VN087383.D	21 Jul 2025 16:24	JC\MD	Ok
18	PB168921TB	VN087384.D	21 Jul 2025 16:46	JC\MD	Ok
19	Q2646-03	VN087385.D	21 Jul 2025 17:07	JC\MD	Ok
20	Q2664-01	VN087386.D	21 Jul 2025 17:29	JC\MD	Ok
21	VSTDCCC050	VN087387.D	21 Jul 2025 17:50	JC\MD	Ok,M

M : Manual Integration

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QC Batch ID # VN071625

Review By	Maresh Dadoda	Review On	7/17/2025 8:20:05 AM
Supervise By	Semsettin Yesilyurt	Supervise On	7/17/2025 8:25:10 AM
SubDirectory	VN071625	HP Acquire Method	HP Processing Method 82N071625W.M
STD. NAME	STD REF.#		
Tune/Reschk	VP134794		
Initial Calibration Stds	VP134795,VP134796,VP134797,VP134798,VP134799,VP134800		
CCC			
Internal Standard/PEM			
ICV/I.BLK	VP134801		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VN087327.D	16 Jul 2025 16:10		JC\MD	Ok
2	VSTDIC001	VSTDIC001	VN087328.D	16 Jul 2025 17:05		JC\MD	Ok,M
3	VSTDIC005	VSTDIC005	VN087329.D	16 Jul 2025 17:27	% d fail for com.#10 in 5 ppb	JC\MD	Ok,M
4	VSTDIC020	VSTDIC020	VN087330.D	16 Jul 2025 17:49	LR- 10,20	JC\MD	Ok,M
5	VSTDIC050	VSTDIC050	VN087331.D	16 Jul 2025 18:11	QR- 56	JC\MD	Ok,M
6	VSTDIC100	VSTDIC100	VN087332.D	16 Jul 2025 18:32		JC\MD	Ok,M
7	VSTDIC150	VSTDIC150	VN087333.D	16 Jul 2025 18:54		JC\MD	Ok,M
8	IBLK	IBLK	VN087334.D	16 Jul 2025 19:16		JC\MD	Ok
9	VSTDICV050	ICVVN071625	VN087335.D	16 Jul 2025 19:59		JC\MD	Ok,M

M : Manual Integration

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QC Batch ID # VN072125

Review By	John Carlone	Review On	7/22/2025 9:07:37 AM
Supervise By	Maresh Dadoda	Supervise On	7/22/2025 1:40:47 PM
SubDirectory	VN072125	HP Acquire Method	HP Processing Method 82N071625W.M
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	VP134840		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP134841,VP134842		

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VN087367.D	21 Jul 2025 10:05		JC\MD	Ok
2	VSTDCCC050	VSTDCCC050	VN087368.D	21 Jul 2025 10:38	pH#Lot#V12668	JC\MD	Ok,M
3	VN0721MBL01	VN0721MBL01	VN087369.D	21 Jul 2025 11:13		JC\MD	Ok
4	VN0721WBL01	VN0721WBL01	VN087370.D	21 Jul 2025 11:34		JC\MD	Ok
5	VN0721WBS01	VN0721WBS01	VN087371.D	21 Jul 2025 11:55		JC\MD	Ok,M
6	VN0721WBSD01	VN0721WBSD01	VN087372.D	21 Jul 2025 12:30		JC\MD	Ok,M
7	Q2646-01	FRAC TANK	VN087373.D	21 Jul 2025 12:51	vial A pH<2	JC\MD	Ok
8	IBLK	IBLK	VN087374.D	21 Jul 2025 13:13		JC\MD	Ok
9	PB168920TB	PB168920TB	VN087375.D	21 Jul 2025 13:34		JC\MD	Ok
10	Q2641-02	P001-CONCRETE001-	VN087376.D	21 Jul 2025 13:55	vial A pH#5.0	JC\MD	Ok
11	Q2645-03	RW5B-CARBON-20250	VN087377.D	21 Jul 2025 14:16	vial A pH#5.0	JC\MD	Ok
12	Q2649-04	WC-1	VN087378.D	21 Jul 2025 14:38	vial A pH#5.0	JC\MD	Ok
13	Q2649-08	WC-2	VN087379.D	21 Jul 2025 14:59	vial A pH#5.0	JC\MD	Ok,M
14	Q2649-12	WC-3	VN087380.D	21 Jul 2025 15:20	vial A pH#5.0	JC\MD	Ok
15	Q2649-16	WC-4	VN087381.D	21 Jul 2025 15:42	vial A pH#5.0	JC\MD	Ok
16	Q2649-20	WC-5	VN087382.D	21 Jul 2025 16:03	vial A pH#5.0	JC\MD	Ok
17	Q2649-24	WC-6	VN087383.D	21 Jul 2025 16:24	vial A pH#5.0	JC\MD	Ok
18	PB168921TB	PB168921TB	VN087384.D	21 Jul 2025 16:46		JC\MD	Ok

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QC Batch ID # VN072125

Review By	John Carlone	Review On	7/22/2025 9:07:37 AM
Supervise By	Maresh Dadoda	Supervise On	7/22/2025 1:40:47 PM
SubDirectory	VN072125	HP Acquire Method	HP Processing Method 82N071625W.M
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	VP134840		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP134841,VP134842		

19	Q2646-03	FRAC TANK	VN087385.D	21 Jul 2025 17:07	vial A pH#5.0	JC\MD	Ok
20	Q2664-01	GDW3	VN087386.D	21 Jul 2025 17:29	vial A pH<2	JC\MD	Ok
21	VSTDCCC050	VSTDCCC050EC	VN087387.D	21 Jul 2025 17:50		JC\MD	Ok,M

M : Manual Integration

A
B
C
D
E
F
G
H
I
J
K

LAB CHRONICLE

OrderID:	Q2646	OrderDate:	7/18/2025 11:47:00 AM
Client:	Environmental Restoration, LLC	Project:	North Arlington, NJ
Contact:	Steve Motta	Location:	O11,VOA Lab

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2646-01	FRAC TANK	Water	VOC-TCLVOA-10	8260D	07/18/25		07/21/25	07/18/25
Q2646-03	FRAC TANK	TCLP	TCLP VOA	8260D	07/18/25		07/21/25	07/18/25

SOP ID : M1311-TCLP-16
SDG No : N/A
Weigh By : N/A
Balance ID : N/A
pH Meter ID : WC PH METER-1
Extraction By : N/A
Filter By : N/A
Pipette ID : N/A
Tumbler ID : N/A
TCLP Filter ID : N/A

Start Prep Date : N/A Time : N/A
End Prep Date : N/A Time : N/A
Combination Ratio : N/A
ZHE Cleaning Batch : N/A
Initial Room Temperature: N/A
Final Room Temperature: N/A
TCLP Technician Signature : *[Signature]*
Supervisor By : *[Signature]*

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

Chemical Used	ML/SAMPLE U	Lot Number
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
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

We receive water sample in 40 ml vial tr to VOC LAB without filtration and tumbling.

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
07/21/25 11:30	<i>SA</i> <i>Heb Room</i>	<i>MD</i> <i>VOC Lab</i>
	Preparation Group	Analysis Group

TCLP EXTRACTION LOGPAGE

PB168921

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
PB168921TB	LEB921	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Q2646-03	FRAC TANK	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

SampleID	ClientID	Sample Weight (g)	Filter Weight (g)	Filtrate (mL)	Filter + Solid (After 100°C)	% solids	% Dry Solids
PB168921TB	LEB921	N/A	N/A	N/A	N/A	N/A	N/A
Q2646-03	FRAC TANK	N/A	N/A	N/A	N/A	<0.5	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : tclp zhe q e23646

WorkList ID : 190830

Department : TCLP Extraction

Date : 07-18-2025 15:03:34

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2646-03	FRAC TANK	Water	TCLP ZHE Extraction	Cool 4 deg C	ENVI60	O11	07/18/2025	1311 ZHE

A
C
D
E
F
G
H
I
J
K

Date/Time 07/18/25 15:10

Raw Sample Received by: SB WPC

Raw Sample Relinquished by: ASU

Date/Time 07/18/25 18:00

Raw Sample Received by: ASU

Raw Sample Relinquished by: SB WPC