284 Sheffield Street, Mountainside NJ 07092 Tel. 908-789-8900 Fax: 908-789-8922

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 is 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

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LAB CHRONICLE

OrderID:	Q3368	**OrderDate:**	10/16/2025 2:05:00 PM
Client:	Aramark Uniforms	**Project:**	Monthly 2025
Contact:	Tom Dikos	**Location:**	D41

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q3368-06	**OUTSIDE-DUMPSTER**	**TCLP**			**10/16/25**			**10/16/25**
			TCLP VOA	8260D			10/22/25	
Q3368-07	**PRESS-SLUDGE**	**TCLP**			**10/16/25**			**10/16/25**
			TCLP VOA	8260D			10/22/25	

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Hit Summary Sheet
SW-846

SDG No.: Q3368

Client: Aramark Uniforms

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID:	**OUTSIDE-DUMPSTER**							
Q3368-06	OUTSIDE-DUMPS	TCLP	2-Butanone	11.8	J	0.98	25.0	ug/L
			Total Voc :	11.8				
			Total Concentration:	11.8				
Client ID:	**PRESS-SLUDGE**							
Q3368-07	PRESS-SLUDGE	TCLP	2-Butanone	180	J	49.0	1300	ug/L
			Total Voc :	180				
			Total Concentration:	180				

QC SUMMARY

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Surrogate Summary

SDG No.: Q3368

Client: Aramark Uniforms

Analytical Method: SW8260D

Lab Sample ID	Client ID	Parameter	Spike	Result	Recovery (%)	Qual	Limits (%) Low	Limits (%) High
Q3368-06	OUTSIDE-DUMPSTER	1,2-Dichloroethane-d4	50	51.5	103		74	125
		Dibromofluoromethane	50	45.5	91		75	124
		Toluene-d8	50	44.8	90		86	113
		4-Bromofluorobenzene	50	50.6	101		77	121
Q3368-07	PRESS-SLUDGE	1,2-Dichloroethane-d4	50	53.8	108		74	125
		Dibromofluoromethane	50	45.1	90		75	124
		Toluene-d8	50	47.8	96		86	113
		4-Bromofluorobenzene	50	59.3	119		77	121

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Surrogate Summary

SDG No.: Q3368

Client: Aramark Uniforms

Analytical Method: SW8260-Low

Lab Sample ID	Client ID	Parameter	Spike	Result	Recovery (%)	Qual	Limits (%) Low	Limits (%) High
VX1022WBL01	VX1022WBL01	1,2-Dichloroethane-d4	50	50.7	101		74	125
		Dibromofluoromethane	50	49.1	98		75	124
		Toluene-d8	50	47.7	95		86	113
		4-Bromofluorobenzene	50	54.5	109		77	121
VX1022WBS01	VX1022WBS01	1,2-Dichloroethane-d4	50	50.2	100		74	125
		Dibromofluoromethane	50	50.9	102		75	124
		Toluene-d8	50	50.7	101		86	113
		4-Bromofluorobenzene	50	52.4	105		77	121
VX1022WBSD0	VX1022WBSD01	1,2-Dichloroethane-d4	50	49.3	99		74	125
		Dibromofluoromethane	50	49.3	99		75	124
		Toluene-d8	50	49.2	98		86	113
		4-Bromofluorobenzene	50	49.4	99		77	121

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q3368 **Analytical Method:** SW8260-Low

Client: Aramark Uniforms **Datafile :** VX048283.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VX1022WBS01	Vinyl chloride	20	16.4	ug/L	82			65	117	
	1,1-Dichloroethene	20	18.3	ug/L	92			74	110	
	2-Butanone	100	88.7	ug/L	89			65	122	
	Carbon Tetrachloride	20	18.9	ug/L	95			77	113	
	Chloroform	20	19.4	ug/L	97			79	113	
	Benzene	20	18.9	ug/L	95			82	109	
	1,2-Dichloroethane	20	20.4	ug/L	102			80	115	
	Trichloroethene	20	19.3	ug/L	97			77	113	
	Tetrachloroethene	20	17.9	ug/L	90			67	123	
	Chlorobenzene	20	19.3	ug/L	97			82	109	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q3368 **Analytical Method:** SW8260-Low

Client: Aramark Uniforms **Datafile :** VX048284.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VX1022WBSD01	Vinyl chloride	20	17.8	ug/L	89	8		65	117	19
	1,1-Dichloroethene	20	17.0	ug/L	85	8		74	110	20
	2-Butanone	100	88.8	ug/L	89	0		65	122	26
	Carbon Tetrachloride	20	18.3	ug/L	92	3		77	113	15
	Chloroform	20	19.2	ug/L	96	1		79	113	20
	Benzene	20	18.6	ug/L	93	2		82	109	15
	1,2-Dichloroethane	20	19.6	ug/L	98	4		80	115	20
	Trichloroethene	20	18.8	ug/L	94	3		77	113	15
	Tetrachloroethene	20	18.3	ug/L	92	2		67	123	15
	Chlorobenzene	20	19.1	ug/L	96	1		82	109	15

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VOLATILE METHOD BLANK SUMMARY

Client ID: VX1022WBL01

Lab Name: Alliance Contract: ARAM01

Lab Code: ACE SDG NO.: Q3368

Lab File ID: VX048282.D Lab Sample ID: VX1022WBL01

Date Analyzed: 10/22/2025 Time Analyzed: 09:26

GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: (Y/N) N

Instrument ID: MSVOA_X

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VX1022WBS01	VX1022WBS01	VX048283.D	10/22/2025
VX1022WBSD01	VX1022WBSD01	VX048284.D	10/22/2025
OUTSIDE-DUMPSTER	Q3368-06	VX048285.D	10/22/2025
PRESS-SLUDGE	Q3368-07	VX048288.D	10/22/2025

COMMENTS:

Raw Data: **VX048226.D**

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alliance
Contract: ARAM01
Lab Code: ACE
SDG NO.: Q3368
Lab File ID: VX048226.D
BFB Injection Date: 10/20/2025
Instrument ID: MSVOA_X
BFB Injection Time: 08:15
GC Column: DB-624UI ID: 0.18 (mm)
Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.7
75	30.0 - 60.0% of mass 95	50.7
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.3 (0.4) 1
174	50.0 - 100.0% of mass 95	76.5
175	5.0 - 9.0% of mass 174	5.8 (7.5) 1
176	95.0 - 101.0% of mass 174	73.8 (96.4) 1
177	5.0 - 9.0% of mass 176	4.8 (6.5) 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
VSTDICC001	VSTDICC001	VX048229.D	10/20/2025	10:59
VSTDICC020	VSTDICC020	VX048231.D	10/20/2025	11:40
VSTDICCC050	VSTDICCC050	VX048232.D	10/20/2025	12:01
VSTDICC100	VSTDICC100	VX048233.D	10/20/2025	12:22
VSTDICC150	VSTDICC150	VX048234.D	10/20/2025	12:43
VSTDICC005	VSTDICC005	VX048236.D	10/20/2025	13:49

Raw Data: **VX048279.D**

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alliance
Contract: ARAM01
Lab Code: ACE
SDG NO.: Q3368
Lab File ID: VX048279.D
BFB Injection Date: 10/22/2025
Instrument ID: MSVOA_X
BFB Injection Time: 08:07
GC Column: DB-624UI ID: 0.18 (mm)
Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.4
75	30.0 - 60.0% of mass 95	53.3
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.4 (0.5) 1
174	50.0 - 100.0% of mass 95	77.5
175	5.0 - 9.0% of mass 174	6.4 (8.3) 1
176	95.0 - 101.0% of mass 174	73.9 (95.4) 1
177	5.0 - 9.0% of mass 176	4.7 (6.4) 2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VX048280.D	10/22/2025	08:37
VX1022WBL01	VX1022WBL01	VX048282.D	10/22/2025	09:26
VX1022WBS01	VX1022WBS01	VX048283.D	10/22/2025	09:53
VX1022WBSD01	VX1022WBSD01	VX048284.D	10/22/2025	10:18
OUTSIDE-DUMPSTER	Q3368-06	VX048285.D	10/22/2025	10:39
PRESS-SLUDGE	Q3368-07	VX048288.D	10/22/2025	11:41

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance Contract: ARAM01

Lab Code: ACE SDG NO.: Q3368

Lab File ID: VX048280.D Date Analyzed: 10/22/2025

Instrument ID: MSVOA_X Time Analyzed: 08:37

GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	112883	5.53	171616	6.74	151325	10.04
UPPER LIMIT	225766	6.031	343232	7.239	302650	10.537
LOWER LIMIT	56441.5	5.031	85808	6.239	75662.5	9.537
EPA SAMPLE NO.						
OUTSIDE-DUMPSTER	101261	5.54	194156	6.75	190163	10.04
PRESS-SLUDGE	96420	5.54	193055	6.75	220019	10.04
VX1022WBL01	97887	5.54	185129	6.75	199062	10.04
VX1022WBS01	115938	5.54	185153	6.75	172449	10.04
VX1022WBSD01	120104	5.53	195961	6.75	180624	10.04

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.

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance Contract: ARAM01

Lab Code: ACE SDG NO.: Q3368

Lab File ID: VX048280.D Date Analyzed: 10/22/2025

Instrument ID: MSVOA_X Time Analyzed: 08:37

GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	76595	12				
UPPER LIMIT	153190	12.5				
LOWER LIMIT	38297.5	11.5				
EPA SAMPLE NO.						
OUTSIDE-DUMPSTER	98385	12.01				
PRESS-SLUDGE	121001	12.01				
VX1022WBL01	99844	12.01				
VX1022WBS01	91086	12.01				
VX1022WBSD01	92297	12.01				

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

Raw Data: **VX048285.D**

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

Report of Analysis

Client:	Aramark Uniforms	Date Collected:	10/16/25
Project:	Monthly 2025	Date Received:	10/16/25
Client Sample ID:	OUTSIDE-DUMPSTER	SDG No.:	Q3368
Lab Sample ID:	Q3368-06	Matrix:	TCLP
Analytical Method:	8260D	Level : LOW	% Solid: 0
Sample Wt/Vol:	5 mL	Final Vol: 5000 uL	Test: TCLP VOA

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
TARGETS									
75-01-4	Vinyl Chloride	0.26	U	1	0.26	5.00	ug/L	10/22/25 10:39	VX102225
75-35-4	1,1-Dichloroethene	0.23	U	1	0.23	5.00	ug/L	10/22/25 10:39	VX102225
78-93-3	2-Butanone	11.8	J	1	0.98	25.0	ug/L	10/22/25 10:39	VX102225
56-23-5	Carbon Tetrachloride	0.25	U	1	0.25	5.00	ug/L	10/22/25 10:39	VX102225
67-66-3	Chloroform	0.25	U	1	0.25	5.00	ug/L	10/22/25 10:39	VX102225
71-43-2	Benzene	0.15	U	1	0.15	5.00	ug/L	10/22/25 10:39	VX102225
107-06-2	1,2-Dichloroethane	0.22	U	1	0.22	5.00	ug/L	10/22/25 10:39	VX102225
79-01-6	Trichloroethene	0.090	U	1	0.090	5.00	ug/L	10/22/25 10:39	VX102225
127-18-4	Tetrachloroethene	0.23	U	1	0.23	5.00	ug/L	10/22/25 10:39	VX102225
108-90-7	Chlorobenzene	0.12	U	1	0.12	5.00	ug/L	10/22/25 10:39	VX102225
SURROGATES									
17060-07-0	1,2-Dichloroethane-d4	51.5			74 - 125	103%	SPK: 50		
1868-53-7	Dibromofluoromethane	45.5			75 - 124	91%	SPK: 50		
2037-26-5	Toluene-d8	44.8			86 - 113	90%	SPK: 50		
460-00-4	4-Bromofluorobenzene	50.6			77 - 121	101%	SPK: 50		
INTERNAL STANDARDS		**Area Count**							
363-72-4	Pentafluorobenzene	101000							
540-36-3	1,4-Difluorobenzene	194000							
3114-55-4	Chlorobenzene-d5	190000							
3855-82-1	1,4-Dichlorobenzene-d4	98400							

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_X\Data\VX102225\
Data File : VX048285.D
Acq On : 22 Oct 2025 10:39
Operator : JC/MD
Sample : Q3368-06
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
OUTSIDE-DUMPSTER

Quant Time: Oct 22 10:56:46 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 14:13:59 2025
Response via : Initial Calibration

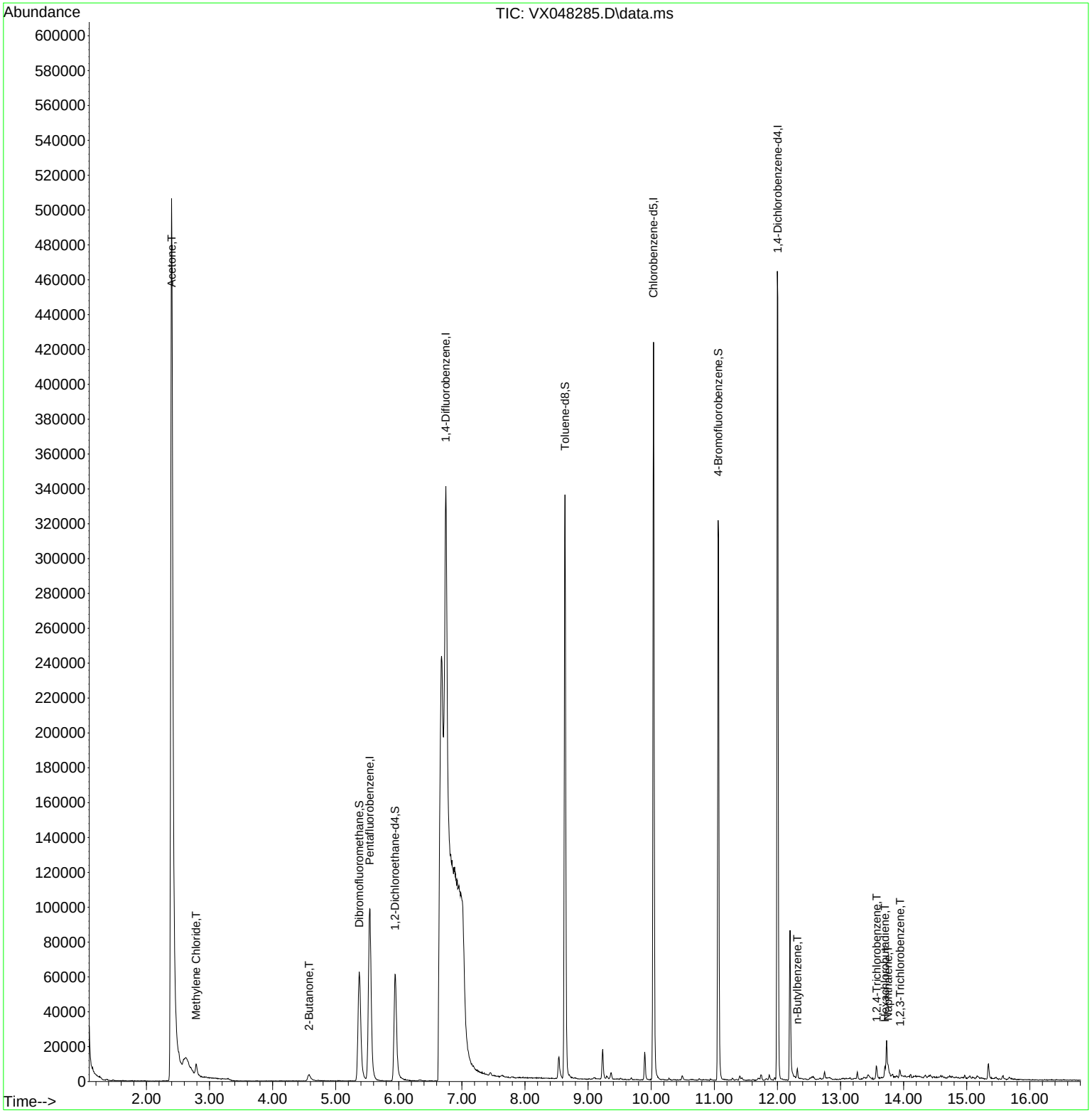
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.538	168	101261	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.745	114	194156	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.037	117	190163	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.006	152	98385	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.940	65	73076	51.471	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 102.940%			
35) Dibromofluoromethane	5.373	113	60358	45.536	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 91.080%			
50) Toluene-d8	8.635	98	207986	44.767	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery = 89.540%#			
62) 4-Bromofluorobenzene	11.061	95	89496	50.635	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery = 101.280%			
Target Compounds						Qvalue
16) Acetone	2.398	43	904576	1857.231	ug/l	99
20) Methylene Chloride	2.788	84	3150	2.654	ug/l	87
25) 2-Butanone	4.574	43	7286	11.819	ug/l	98
89) n-Butylbenzene	12.317	91	1853	0.320	ug/l	91
93) 1,2,4-Trichlorobenzene	13.573	180	1000	0.464	ug/l	96
94) Hexachlorobutadiene	13.707	225	1038	1.349	ug/l	96
95) Naphthalene	13.756	128	2821	0.494	ug/l #	94
96) 1,2,3-Trichlorobenzene	13.945	180	1189	0.601	ug/l	91

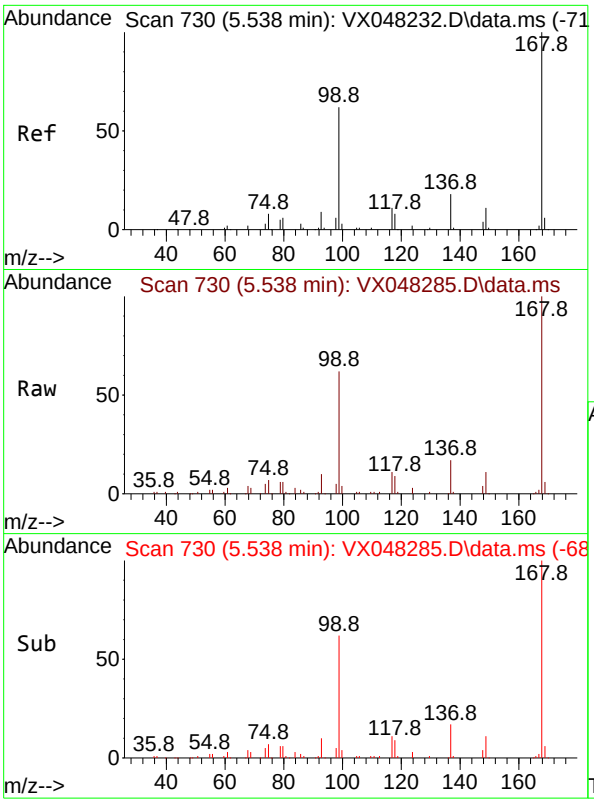
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102225\
Data File : VX048285.D
Acq On : 22 Oct 2025 10:39
Operator : JC/MD
Sample : Q3368-06
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
OUTSIDE-DUMPSTER

Quant Time: Oct 22 10:56:46 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 14:13:59 2025
Response via : Initial Calibration



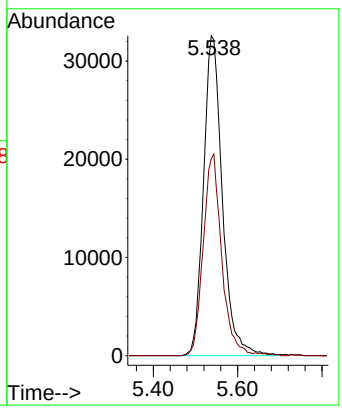


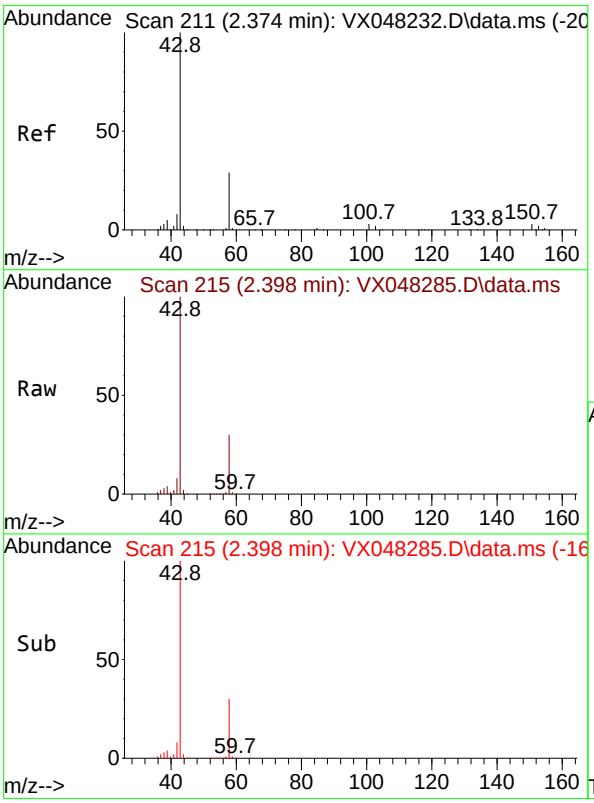
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.538 min Scan# 7
Delta R.T. -0.006 min
Lab File: VX048285.D
Acq: 22 Oct 2025 10:39

Instrument :
MSVOA_X
ClientSampleId :
OUTSIDE-DUMPSTER

Tgt Ion:168 Resp: 101261

Ion	Ratio	Lower	Upper
168	100		
99	61.5	46.4	69.6

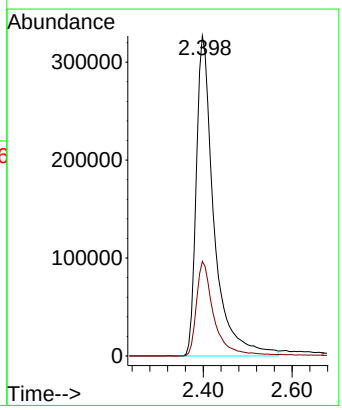


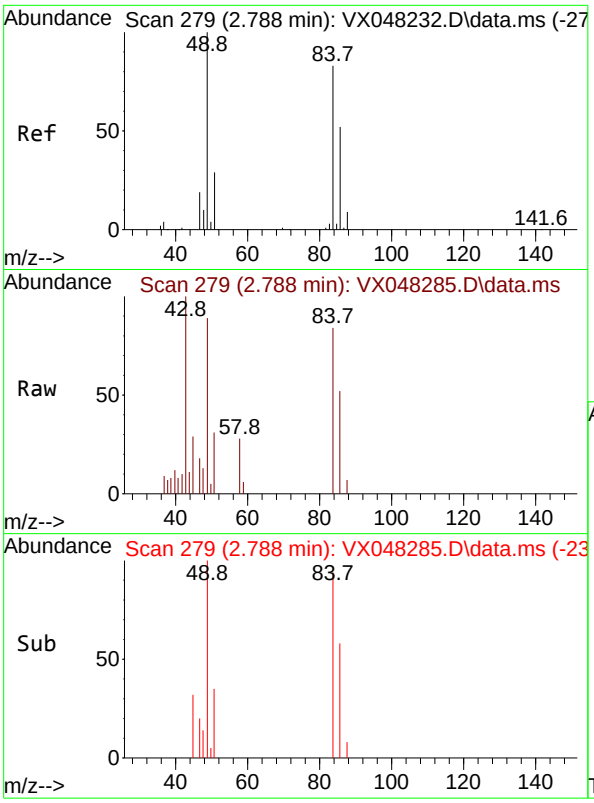


#16
Acetone
Concen: 1857.231 ug/l
RT: 2.398 min Scan# 215
Delta R.T. 0.024 min
Lab File: VX048285.D
Acq: 22 Oct 2025 10:39

Tgt Ion: 43 Resp: 904576

Ion	Ratio	Lower	Upper
43	100		
58	29.6	23.4	35.2



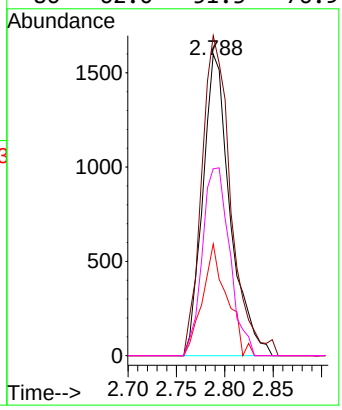


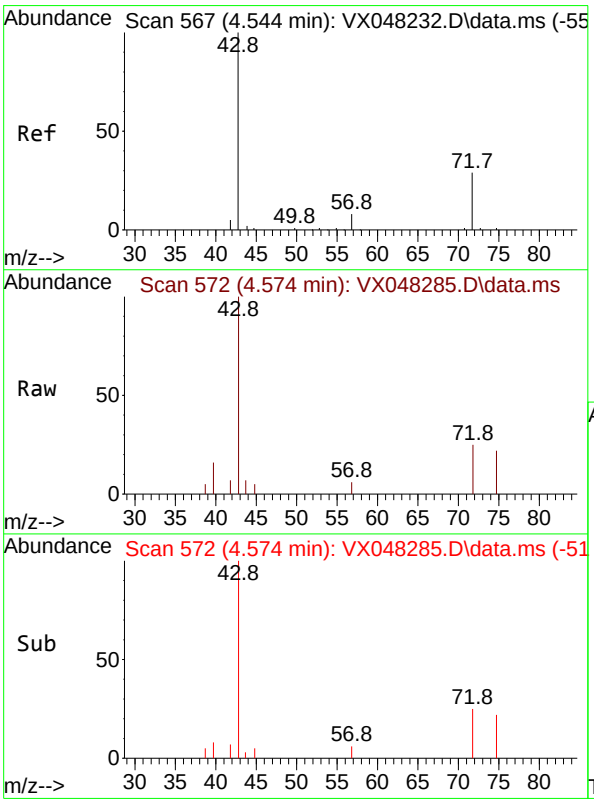
#20
Methylene Chloride
Concen: 2.654 ug/l
RT: 2.788 min Scan# 2
Delta R.T. -0.000 min
Lab File: VX048285.D
Acq: 22 Oct 2025 10:39

Instrument :
MSVOA_X
ClientSampleId :
OUTSIDE-DUMPSTER

Tgt Ion: 84 Resp: 3150

Ion	Ratio	Lower	Upper
84	100		
49	106.1	104.1	156.1
51	37.0	31.3	46.9
86	62.0	51.3	76.9

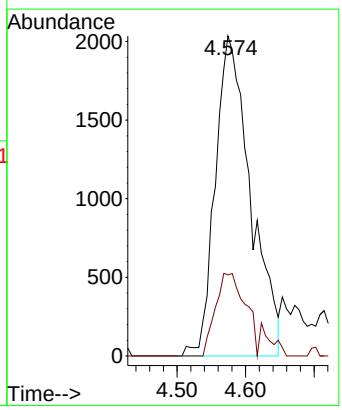


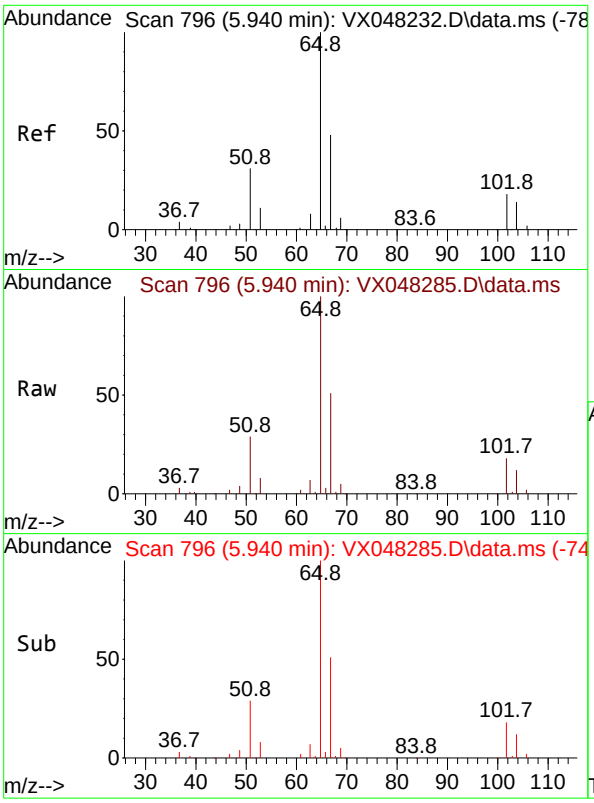


#25
2-Butanone
Concen: 11.819 ug/l
RT: 4.574 min Scan# 572
Delta R.T. 0.037 min
Lab File: VX048285.D
Acq: 22 Oct 2025 10:39

Tgt Ion: 43 Resp: 7286

Ion	Ratio	Lower	Upper
43	100		
72	23.7	19.9	29.9



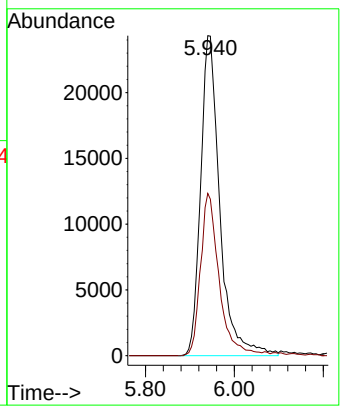


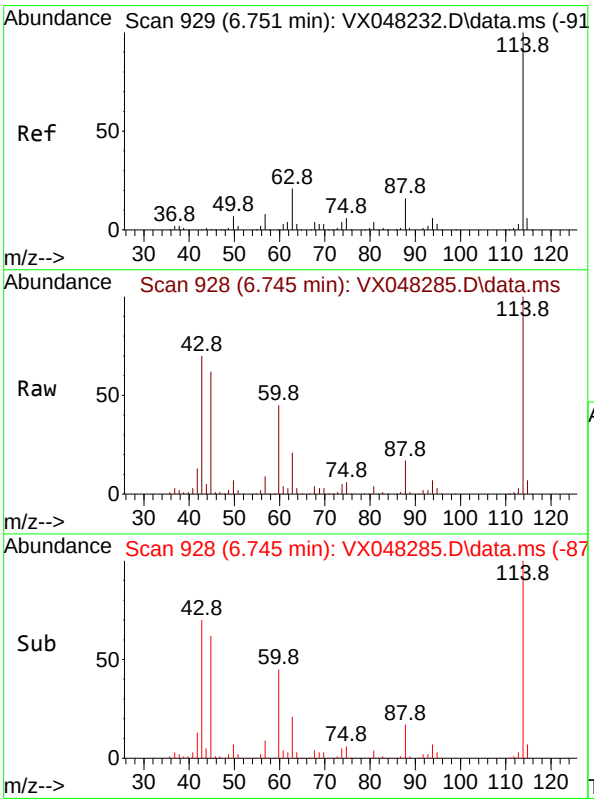
#33
1,2-Dichloroethane-d4
Concen: 51.471 ug/l
RT: 5.940 min Scan# 7
Delta R.T. -0.000 min
Lab File: VX048285.D
Acq: 22 Oct 2025 10:39

Instrument :
MSVOA_X
ClientSampleId :
OUTSIDE-DUMPSTER

Tgt Ion: 65 Resp: 73076

Ion	Ratio	Lower	Upper
65	100		
67	49.1	0.0	105.0

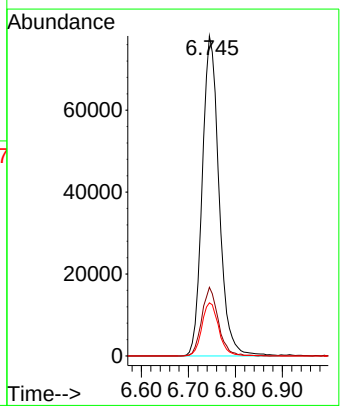


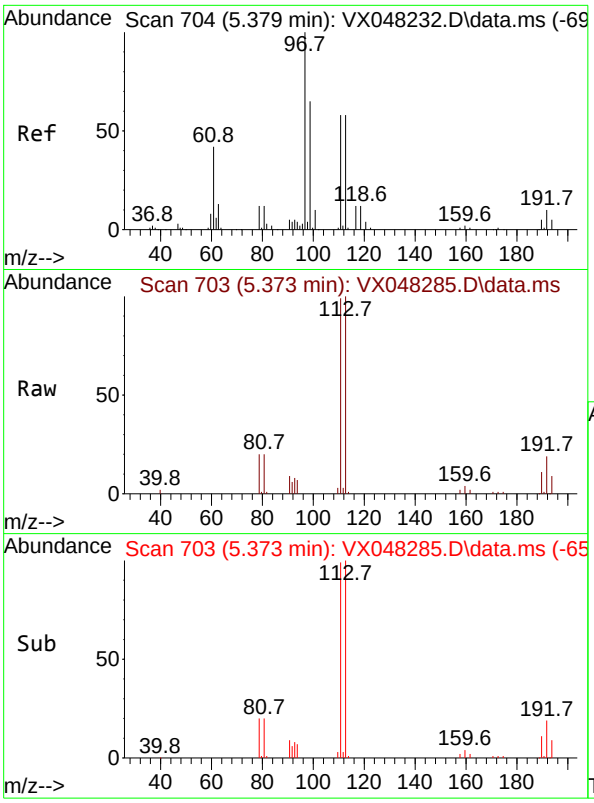


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.745 min Scan# 928
Delta R.T. -0.000 min
Lab File: VX048285.D
Acq: 22 Oct 2025 10:39

Tgt Ion:114 Resp: 194156

Ion	Ratio	Lower	Upper
114	100		
63	21.4	0.0	43.2
88	16.6	0.0	33.6



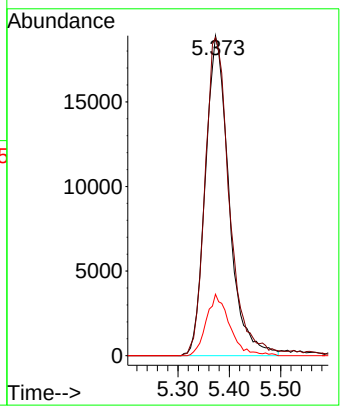


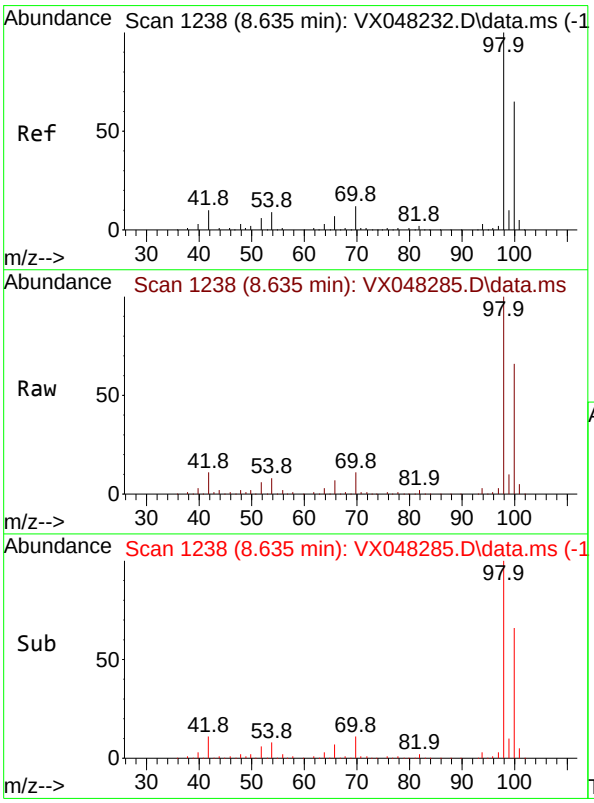
#35
Dibromofluoromethane
Concen: 45.536 ug/l
RT: 5.373 min Scan# 7
Delta R.T. -0.000 min
Lab File: VX048285.D
Acq: 22 Oct 2025 10:39

Instrument :
MSVOA_X
ClientSampleId :
OUTSIDE-DUMPSTER

Tgt Ion:113 Resp: 60358

Ion	Ratio	Lower	Upper
113	100		
111	102.7	82.2	123.4
192	18.7	15.1	22.7

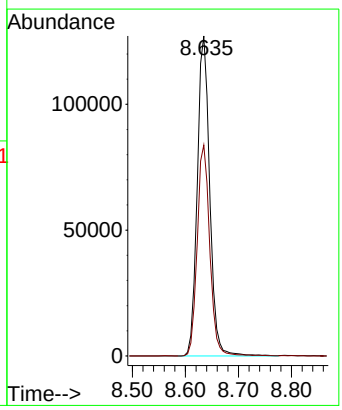


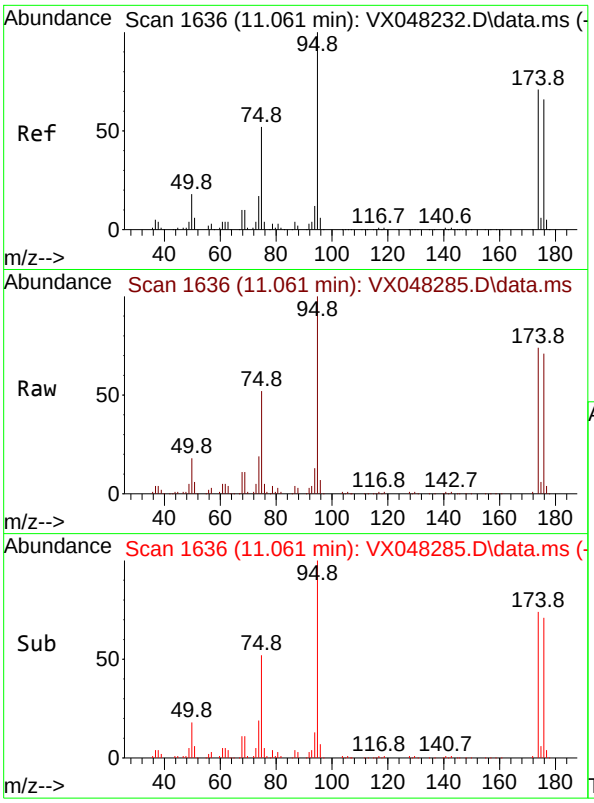


#50
Toluene-d8
Concen: 44.767 ug/l
RT: 8.635 min Scan# 1238
Delta R.T. -0.000 min
Lab File: VX048285.D
Acq: 22 Oct 2025 10:39

Tgt Ion: 98 Resp: 207986

Ion	Ratio	Lower	Upper
98	100		
100	66.3	53.0	79.4



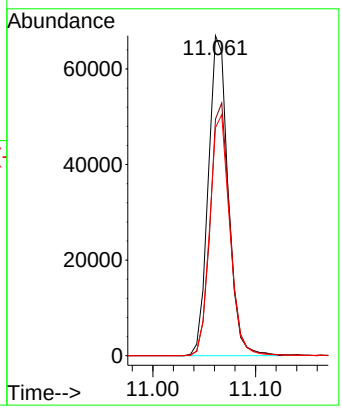


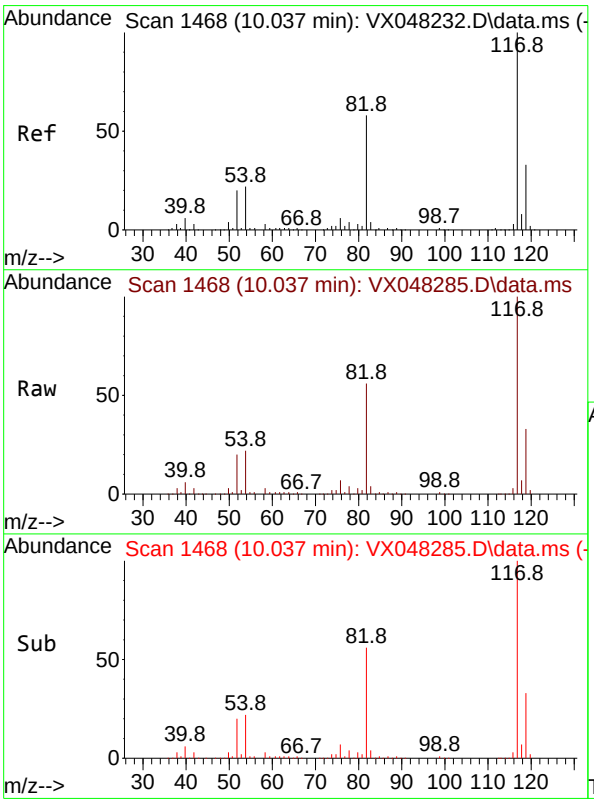
#62
4-Bromofluorobenzene
Concen: 50.635 ug/l
RT: 11.061 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX048285.D
Acq: 22 Oct 2025 10:39

Instrument :
MSVOA_X
ClientSampleId :
OUTSIDE-DUMPSTER

Tgt Ion: 95 Resp: 89496

Ion	Ratio	Lower	Upper
95	100		
174	79.2	0.0	147.8
176	76.3	0.0	142.8

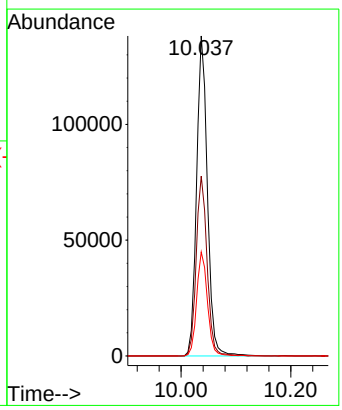


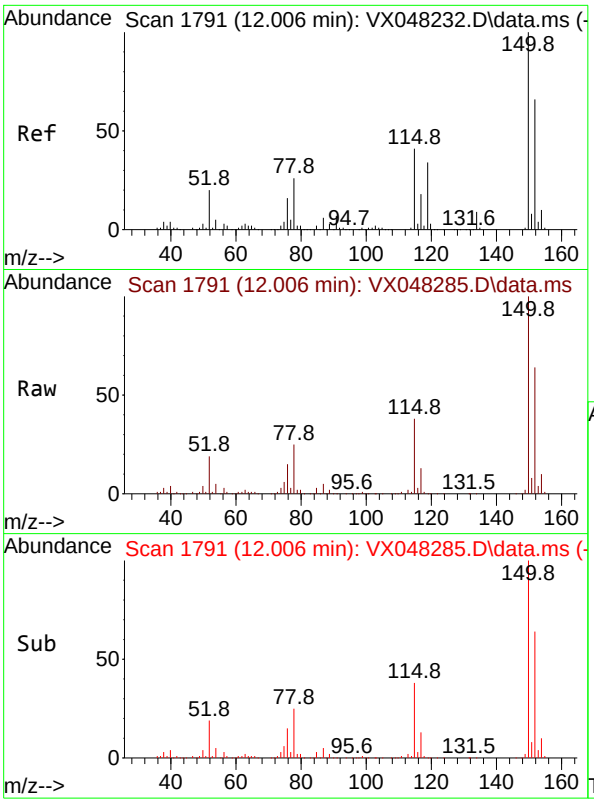


#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.037 min Scan# 1468
Delta R.T. -0.000 min
Lab File: VX048285.D
Acq: 22 Oct 2025 10:39

Tgt Ion:117 Resp: 190163

Ion	Ratio	Lower	Upper
117	100		
82	56.2	46.5	69.7
119	32.5	25.9	38.9



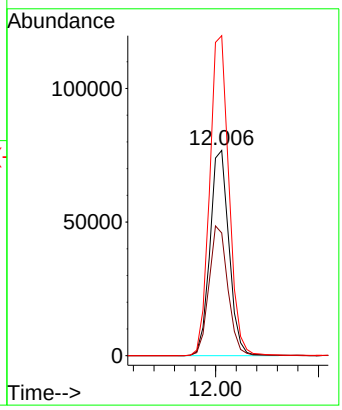


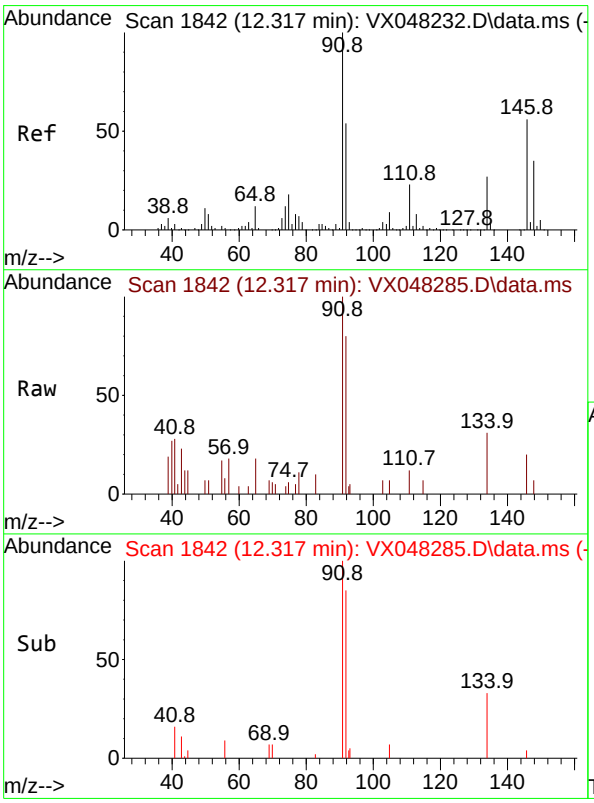
#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.006 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX048285.D
Acq: 22 Oct 2025 10:39

Instrument :
MSVOA_X
ClientSampleId :
OUTSIDE-DUMPSTER

Tgt Ion:152 Resp: 98385

Ion	Ratio	Lower	Upper
152	100		
115	63.1	43.1	129.4
150	158.3	0.0	353.0

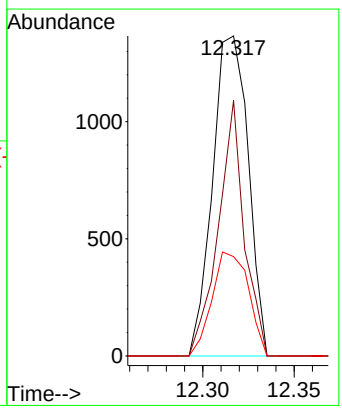


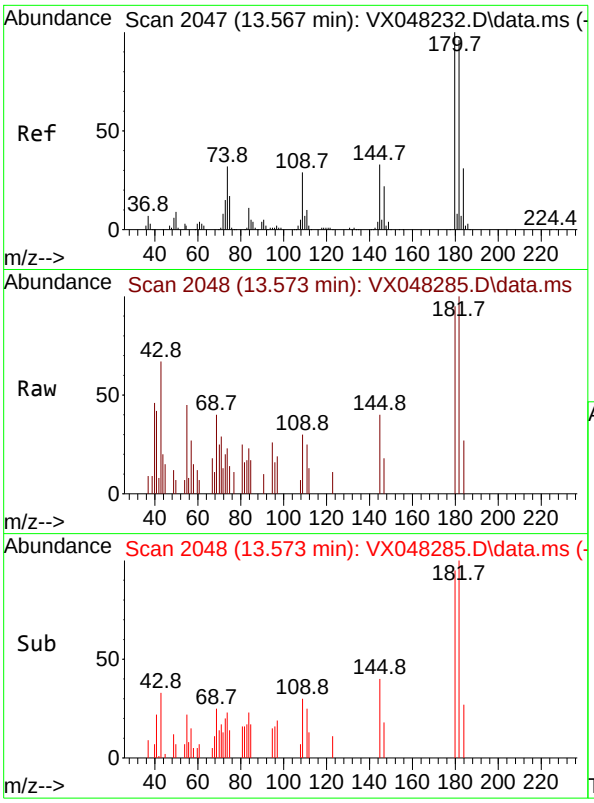


#89
n-Butylbenzene
Concen: 0.320 ug/l
RT: 12.317 min Scan# 1842
Delta R.T. 0.006 min
Lab File: VX048285.D
Acq: 22 Oct 2025 10:39

Tgt Ion: 91 Resp: 1853

Ion	Ratio	Lower	Upper
91	100		
92	58.1	26.9	80.6
134	33.1	12.7	38.1



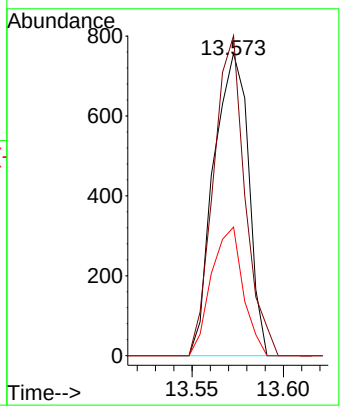


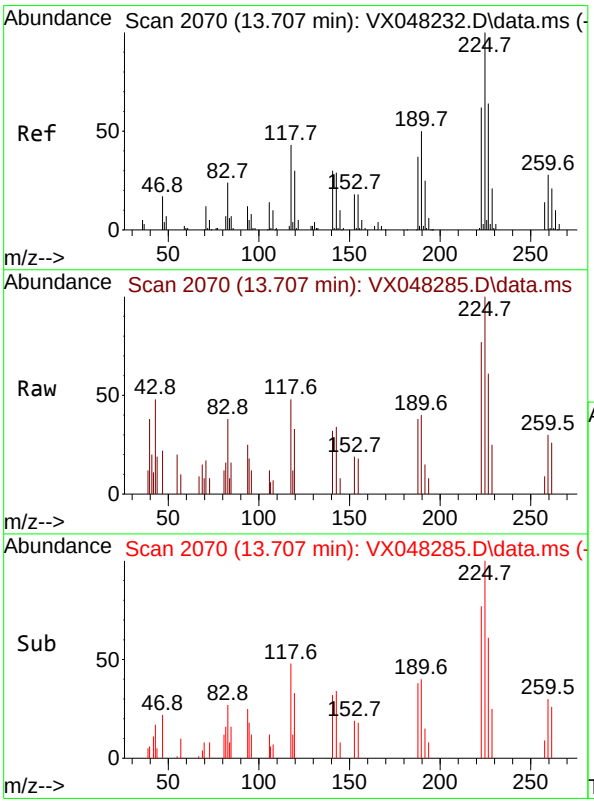
#93
1,2,4-Trichlorobenzene
Concen: 0.464 ug/l
RT: 13.573 min Scan# 2
Delta R.T. 0.006 min
Lab File: VX048285.D
Acq: 22 Oct 2025 10:39

Instrument :
MSVOA_X
ClientSampleId :
OUTSIDE-DUMPSTER

Tgt Ion:180 Resp: 1000

Ion	Ratio	Lower	Upper
180	100		
182	96.0	47.3	142.0
145	38.8	16.3	48.9

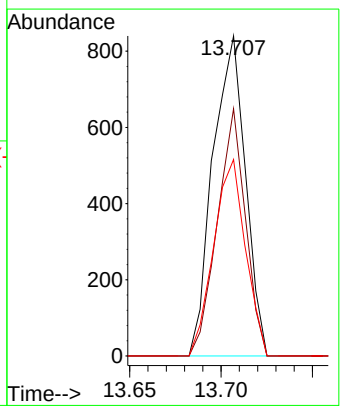


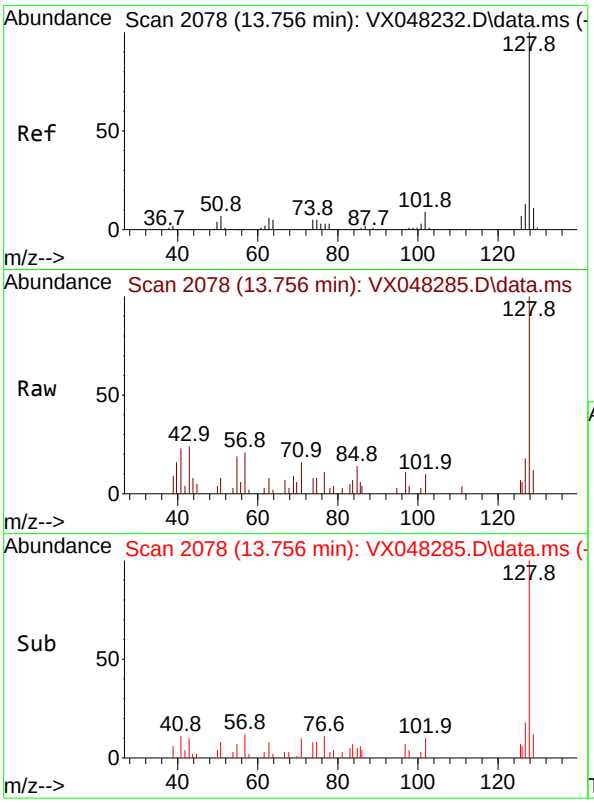


#94
Hexachlorobutadiene
Concen: 1.349 ug/l
RT: 13.707 min Scan# 2070
Delta R.T. 0.006 min
Lab File: VX048285.D
Acq: 22 Oct 2025 10:39

Tgt Ion:225 Resp: 1038

Ion	Ratio	Lower	Upper
225	100		
223	67.1	32.6	97.7
227	60.1	32.5	97.4



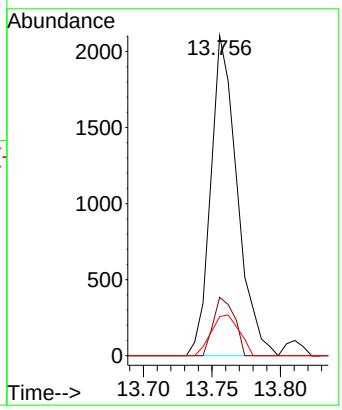


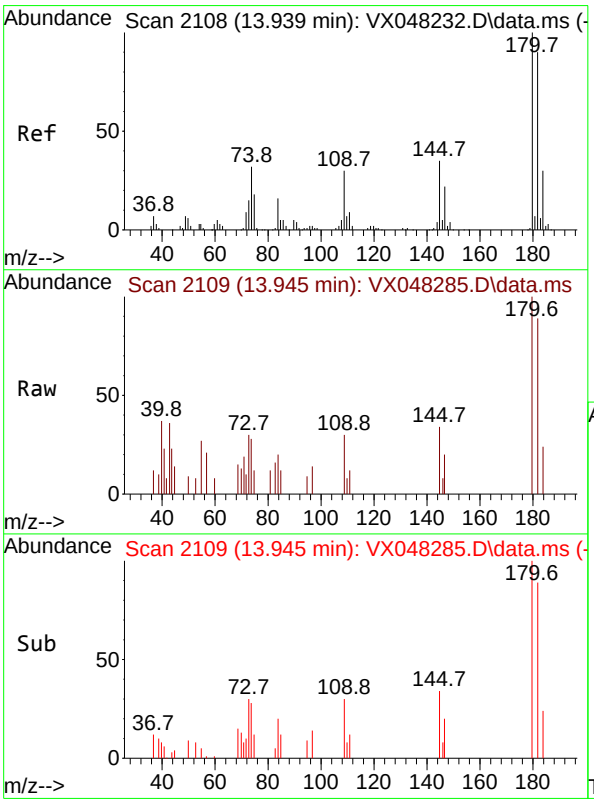
#95
Naphthalene
Concen: 0.494 ug/l
RT: 13.756 min Scan# 2
Delta R.T. -0.000 min
Lab File: VX048285.D
Acq: 22 Oct 2025 10:39

Instrument :
MSVOA_X
ClientSampleId :
OUTSIDE-DUMPSTER

Tgt Ion:128 Resp: 2821

Ion	Ratio	Lower	Upper
128	100		
127	14.6	10.2	15.4
129	13.5	8.6	12.8#

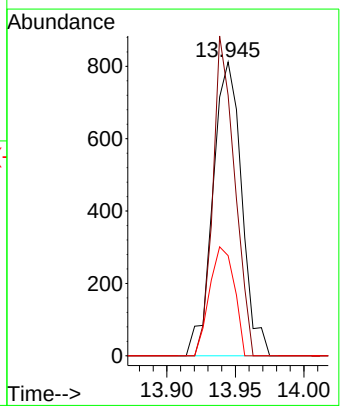




#96
1,2,3-Trichlorobenzene
Concen: 0.601 ug/l
RT: 13.945 min Scan# 2109
Delta R.T. 0.006 min
Lab File: VX048285.D
Acq: 22 Oct 2025 10:39

Tgt Ion:180 Resp: 1189

Ion	Ratio	Lower	Upper
180	100		
182	82.2	46.6	139.7
145	31.7	16.9	50.7



Raw Data: **VX048288.D**

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

Report of Analysis

Client:	Aramark Uniforms	Date Collected:	10/16/25
Project:	Monthly 2025	Date Received:	10/16/25
Client Sample ID:	PRESS-SLUDGE	SDG No.:	Q3368
Lab Sample ID:	Q3368-07	Matrix:	TCLP
Analytical Method:	8260D	Level : LOW	% Solid: 0
Sample Wt/Vol:	5 mL	Final Vol: 5000 uL	Test: TCLP VOA

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
TARGETS									
75-01-4	Vinyl Chloride	13.0	U	50	13.0	250	ug/L	10/22/25 11:41	VX102225
75-35-4	1,1-Dichloroethene	11.5	U	50	11.5	250	ug/L	10/22/25 11:41	VX102225
78-93-3	2-Butanone	180	J	50	49.0	1300	ug/L	10/22/25 11:41	VX102225
56-23-5	Carbon Tetrachloride	12.5	U	50	12.5	250	ug/L	10/22/25 11:41	VX102225
67-66-3	Chloroform	12.5	U	50	12.5	250	ug/L	10/22/25 11:41	VX102225
71-43-2	Benzene	7.50	U	50	7.50	250	ug/L	10/22/25 11:41	VX102225
107-06-2	1,2-Dichloroethane	11.0	U	50	11.0	250	ug/L	10/22/25 11:41	VX102225
79-01-6	Trichloroethene	4.70	U	50	4.70	250	ug/L	10/22/25 11:41	VX102225
127-18-4	Tetrachloroethene	11.5	U	50	11.5	250	ug/L	10/22/25 11:41	VX102225
108-90-7	Chlorobenzene	6.00	U	50	6.00	250	ug/L	10/22/25 11:41	VX102225
SURROGATES									
17060-07-0	1,2-Dichloroethane-d4	53.8			74 - 125	108%	SPK: 50		
1868-53-7	Dibromofluoromethane	45.1			75 - 124	90%	SPK: 50		
2037-26-5	Toluene-d8	47.8			86 - 113	96%	SPK: 50		
460-00-4	4-Bromofluorobenzene	59.3			77 - 121	119%	SPK: 50		
INTERNAL STANDARDS		**Area Count**							
363-72-4	Pentafluorobenzene	96400							
540-36-3	1,4-Difluorobenzene	193000							
3114-55-4	Chlorobenzene-d5	220000							
3855-82-1	1,4-Dichlorobenzene-d4	121000							

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

Sample Results: **VX048288.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102225\
Data File : VX048288.D
Acq On : 22 Oct 2025 11:41
Operator : JC/MD
Sample : Q3368-07 50X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
PRESS-SLUDGE

Quant Time: Oct 22 12:00:07 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 14:13:59 2025
Response via : Initial Calibration

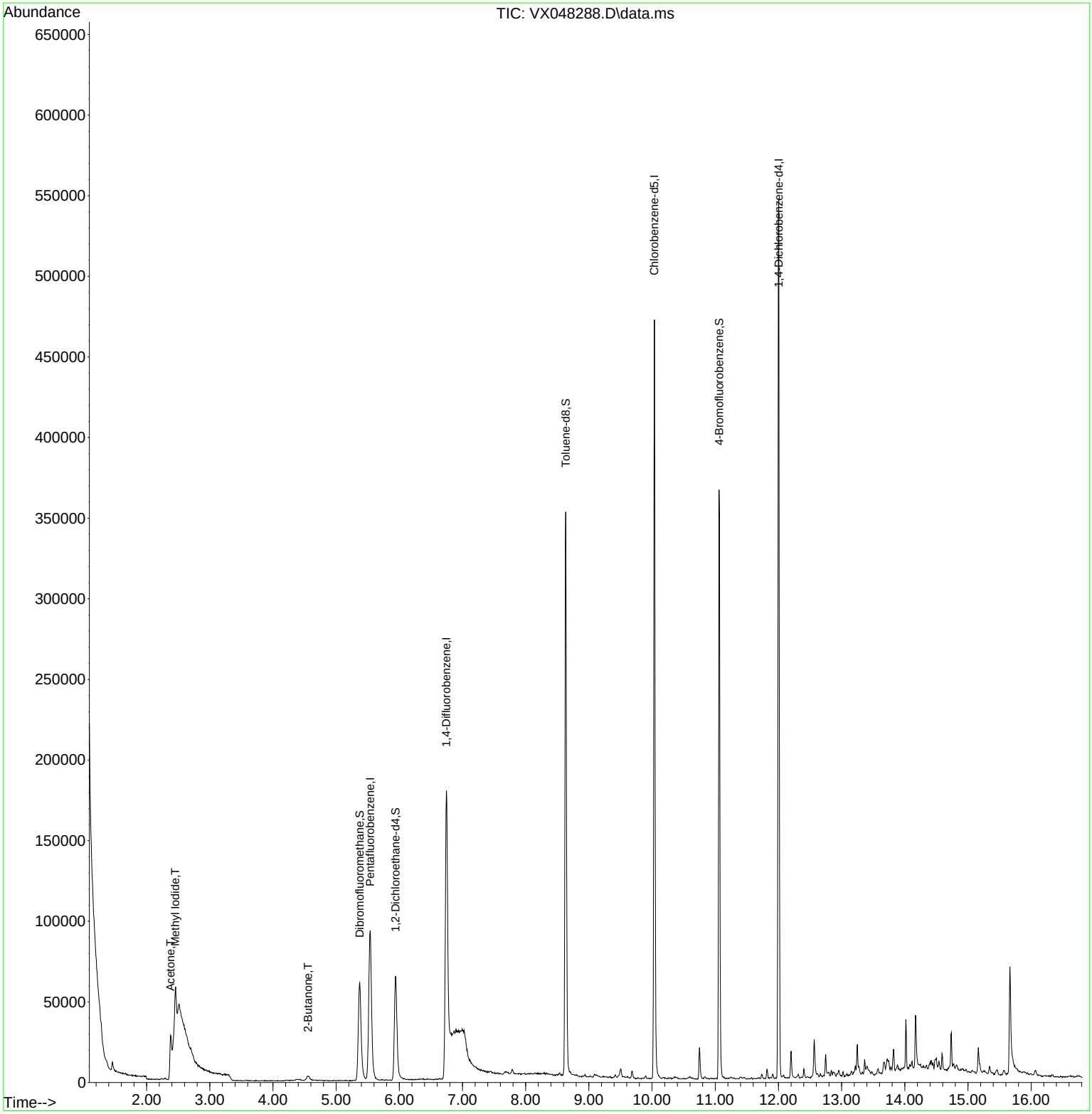
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.538	168	96420	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.745	114	193055	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.037	117	220019	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.006	152	121001	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.940	65	72767	53.827	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 107.660%			
35) Dibromofluoromethane	5.373	113	59418	45.083	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 90.160%			
50) Toluene-d8	8.635	98	220804	47.797	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery = 95.600%			
62) 4-Bromofluorobenzene	11.061	95	104157	59.266	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery = 118.540%			
Target Compounds						Qvalue
10) Methyl Iodide	2.453	142	29419	22.491	ug/l	99
16) Acetone	2.380	43	37840	81.592	ug/l	100
25) 2-Butanone	4.556	43	2128	3.625	ug/l #	83

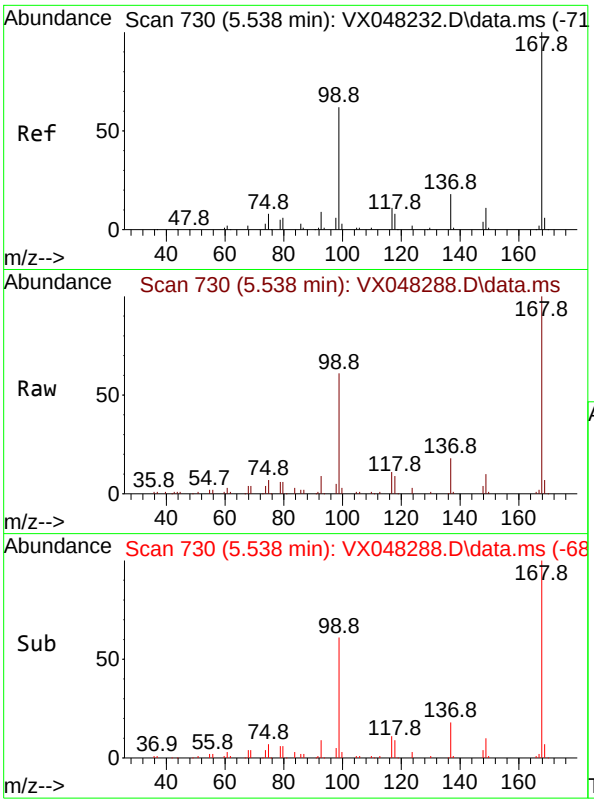
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102225\
Data File : VX048288.D
Acq On : 22 Oct 2025 11:41
Operator : JC/MD
Sample : Q3368-07 50X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
PRESS-SLUDGE

Quant Time: Oct 22 12:00:07 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 14:13:59 2025
Response via : Initial Calibration



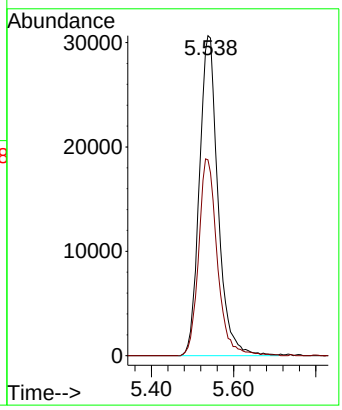


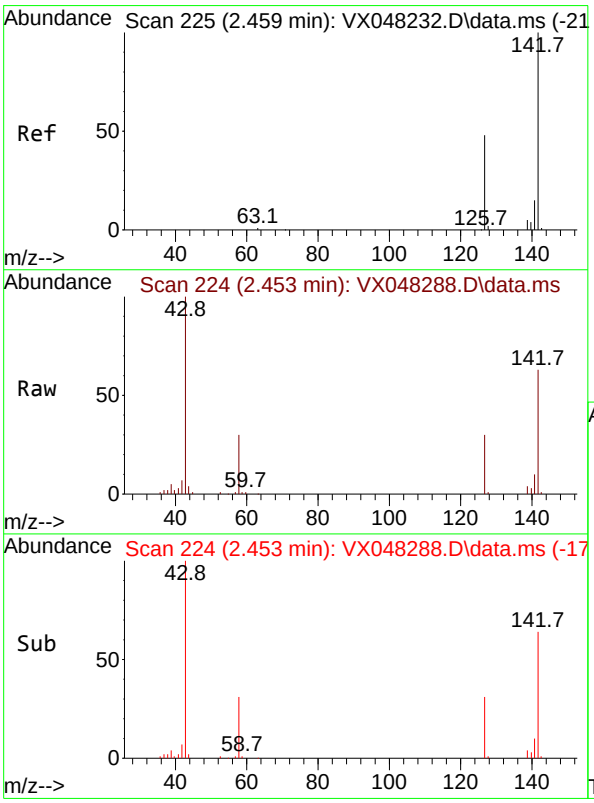
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.538 min Scan# 7
Delta R.T. -0.006 min
Lab File: VX048288.D
Acq: 22 Oct 2025 11:41

Instrument :
MSVOA_X
ClientSampleId :
PRESS-SLUDGE

Tgt Ion:168 Resp: 96420

Ion	Ratio	Lower	Upper
168	100		
99	61.2	46.4	69.6

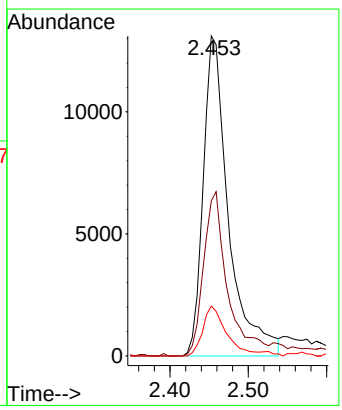


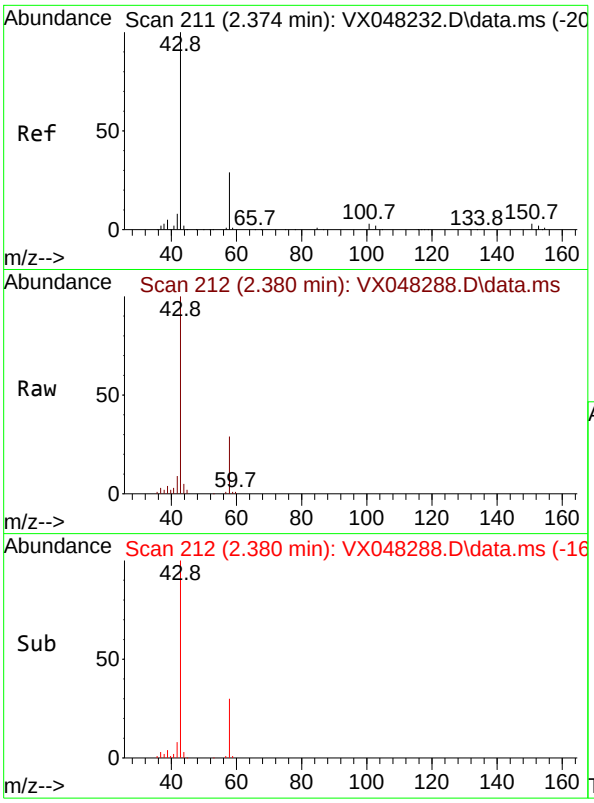


#10
Methyl Iodide
Concen: 22.491 ug/l
RT: 2.453 min Scan# 224
Delta R.T. -0.006 min
Lab File: VX048288.D
Acq: 22 Oct 2025 11:41

Tgt Ion:142 Resp: 29419

Ion	Ratio	Lower	Upper
142	100		
127	48.7	38.5	57.7
141	15.2	11.6	17.4



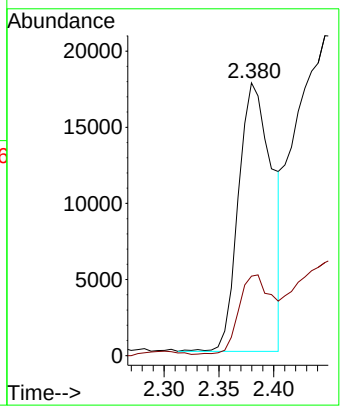


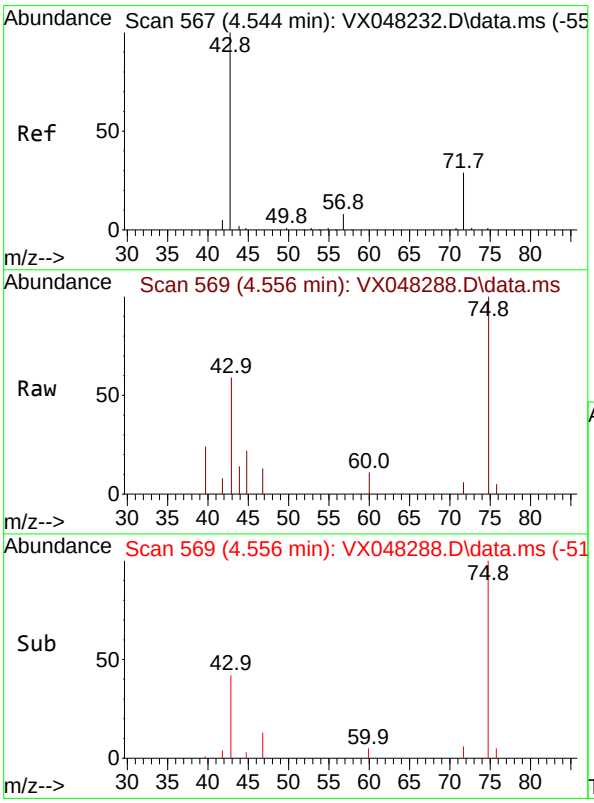
#16
Acetone
Concen: 81.592 ug/l
RT: 2.380 min Scan# 2
Delta R.T. 0.006 min
Lab File: VX048288.D
Acq: 22 Oct 2025 11:41

Instrument :
MSVOA_X
ClientSampleId :
PRESS-SLUDGE

Tgt Ion: 43 Resp: 37840

Ion	Ratio	Lower	Upper
43	100		
58	29.1	23.4	35.2

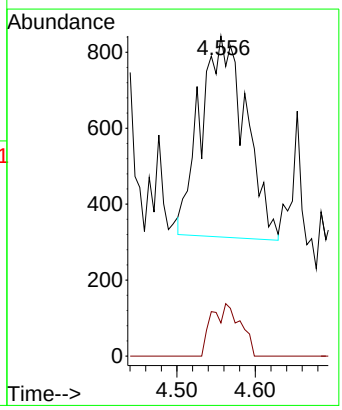


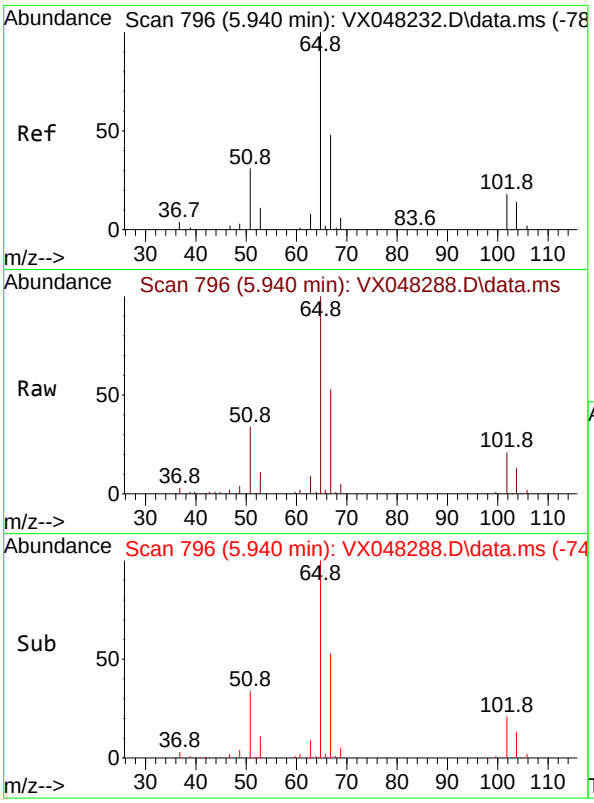


#25
2-Butanone
Concen: 3.625 ug/l
RT: 4.556 min Scan# 569
Delta R.T. 0.018 min
Lab File: VX048288.D
Acq: 22 Oct 2025 11:41

Tgt Ion: 43 Resp: 2128

Ion	Ratio	Lower	Upper
43	100		
72	16.6	19.9	29.9#



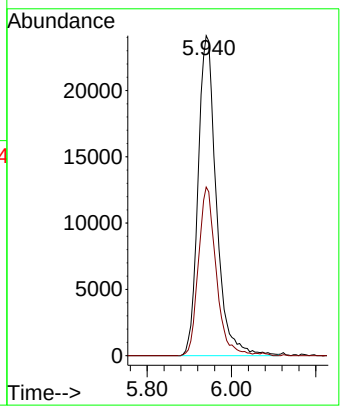


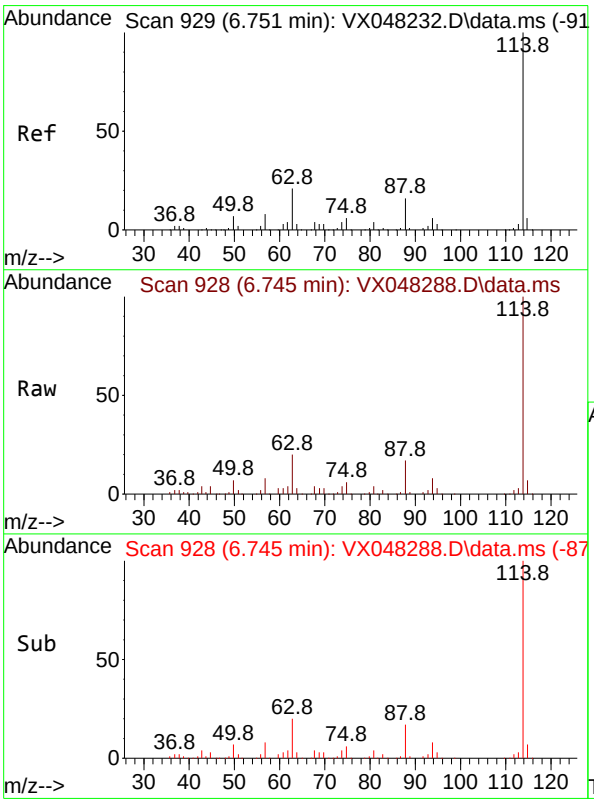
#33
1,2-Dichloroethane-d4
Concen: 53.827 ug/l
RT: 5.940 min Scan# 7
Delta R.T. -0.000 min
Lab File: VX048288.D
Acq: 22 Oct 2025 11:41

Instrument :
MSVOA_X
ClientSampleId :
PRESS-SLUDGE

Tgt Ion: 65 Resp: 72767

Ion	Ratio	Lower	Upper
65	100		
67	51.1	0.0	105.0

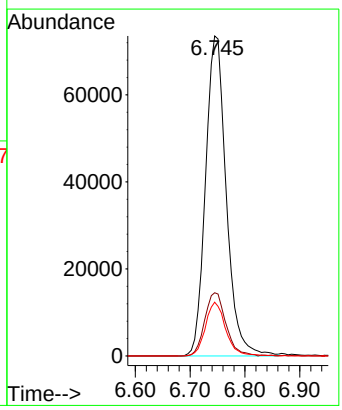


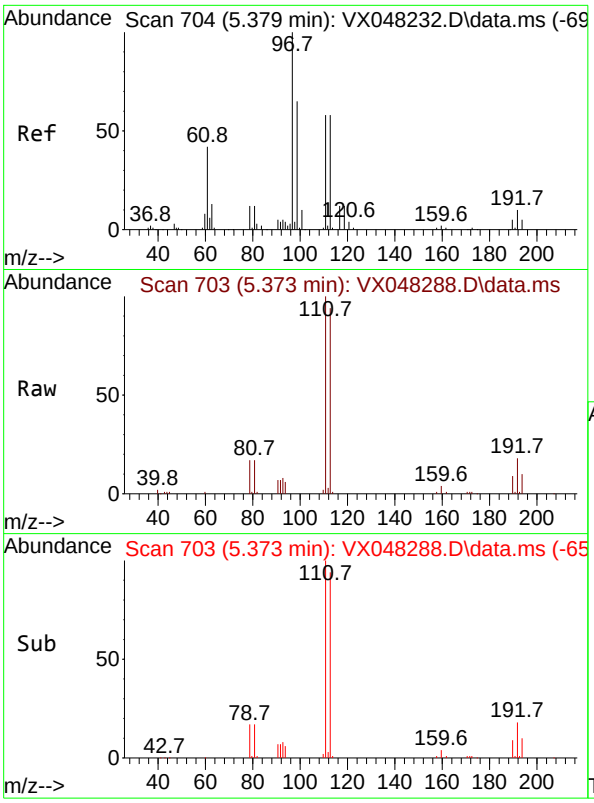


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.745 min Scan# 928
Delta R.T. -0.000 min
Lab File: VX048288.D
Acq: 22 Oct 2025 11:41

Tgt Ion:114 Resp: 193055

Ion	Ratio	Lower	Upper
114	100		
63	19.8	0.0	43.2
88	16.8	0.0	33.6



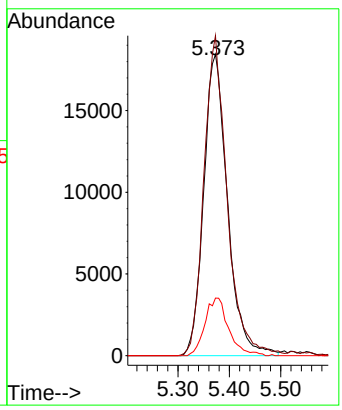


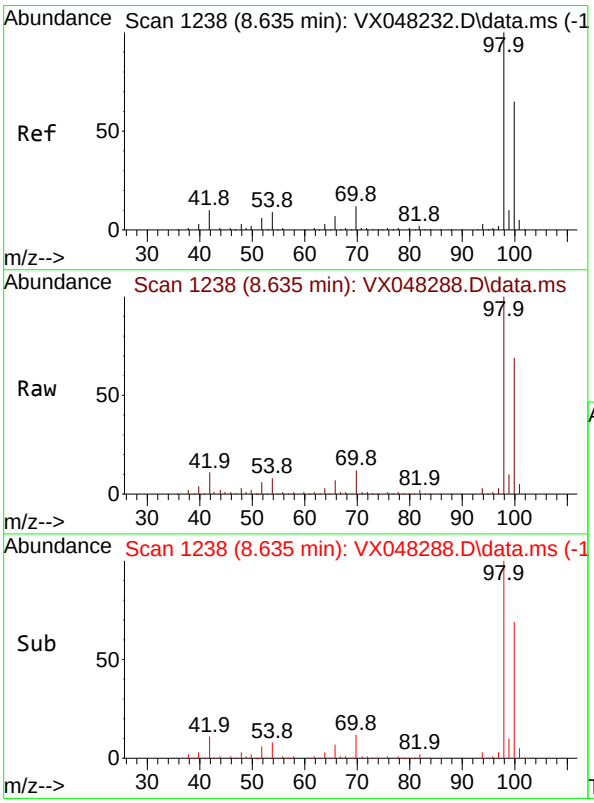
#35
Dibromofluoromethane
Concen: 45.083 ug/l
RT: 5.373 min Scan# 7
Delta R.T. -0.000 min
Lab File: VX048288.D
Acq: 22 Oct 2025 11:41

Instrument :
MSVOA_X
ClientSampleId :
PRESS-SLUDGE

Tgt Ion:113 Resp: 59418

Ion	Ratio	Lower	Upper
113	100		
111	103.1	82.2	123.4
192	19.0	15.1	22.7

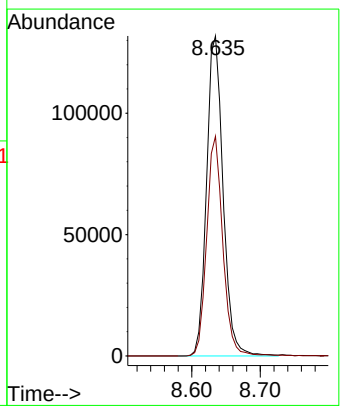


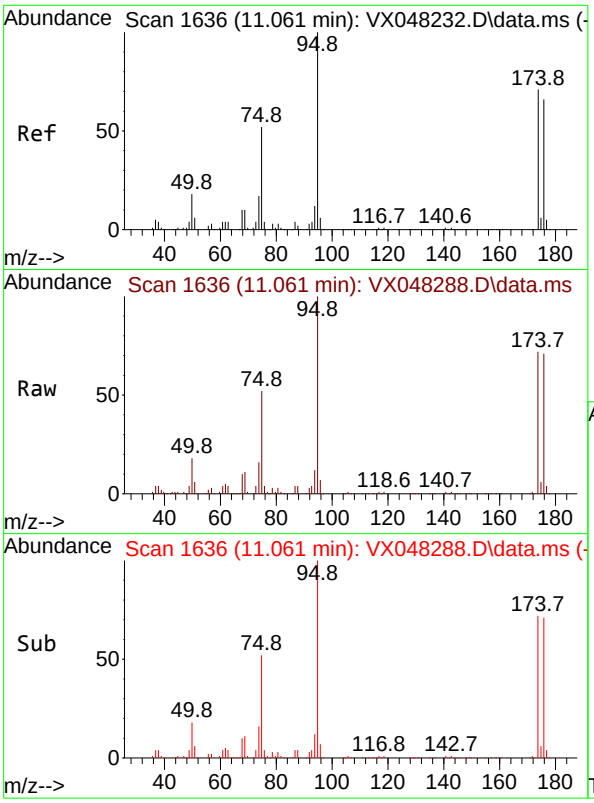


#50
Toluene-d8
Concen: 47.797 ug/l
RT: 8.635 min Scan# 1238
Delta R.T. -0.000 min
Lab File: VX048288.D
Acq: 22 Oct 2025 11:41

Tgt Ion: 98 Resp: 220804

Ion	Ratio	Lower	Upper
98	100		
100	67.0	53.0	79.4



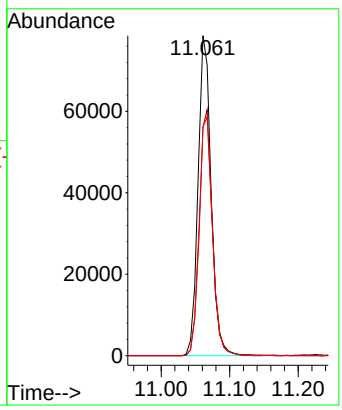


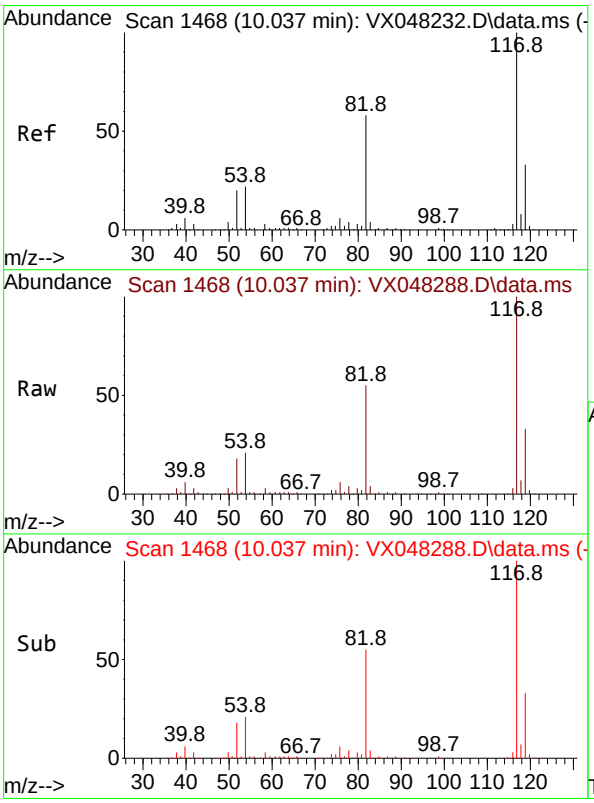
#62
4-Bromofluorobenzene
Concen: 59.266 ug/l
RT: 11.061 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX048288.D
Acq: 22 Oct 2025 11:41

Instrument :
MSVOA_X
ClientSampleId :
PRESS-SLUDGE

Tgt Ion: 95 Resp: 104157

Ion	Ratio	Lower	Upper
95	100		
174	77.6	0.0	147.8
176	75.8	0.0	142.8

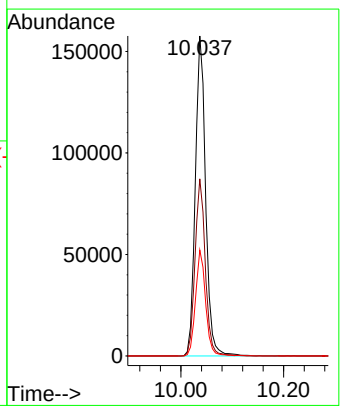


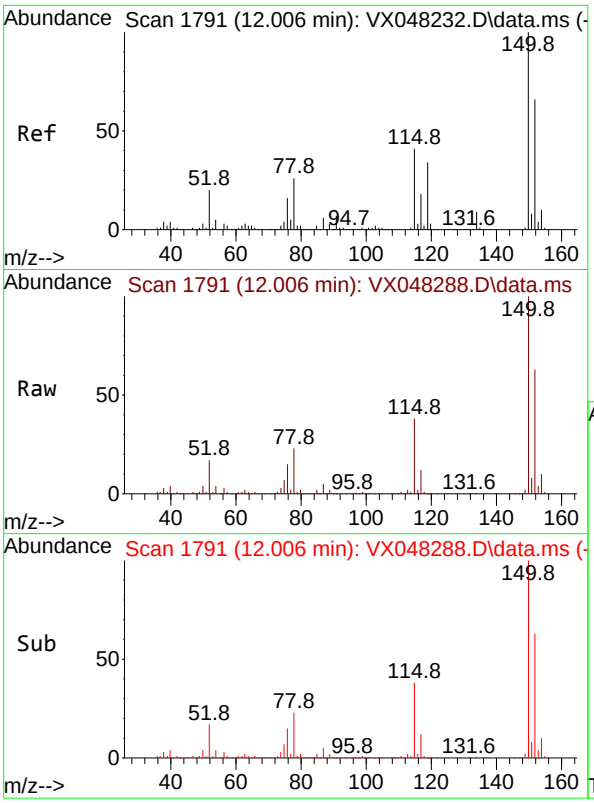


#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.037 min Scan# 1468
Delta R.T. -0.000 min
Lab File: VX048288.D
Acq: 22 Oct 2025 11:41

Tgt Ion:117 Resp: 220019

Ion	Ratio	Lower	Upper
117	100		
82	55.3	46.5	69.7
119	33.1	25.9	38.9



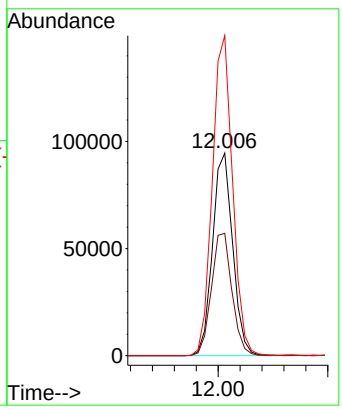


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.006 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX048288.D
Acq: 22 Oct 2025 11:41

Instrument :
MSVOA_X
ClientSampleId :
PRESS-SLUDGE

Tgt Ion:152 Resp: 121001

Ion	Ratio	Lower	Upper
152	100		
115	61.7	43.1	129.4
150	158.0	0.0	353.0



CALIBRATION SUMMARY

Raw Data

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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alliance Contract: ARAM01

Lab Code: ACE SDG No.: Q3368

Instrument ID: MSVOA_X Calibration Date(s): 10/20/2025 10/20/2025

Heated Purge: (Y/N) N Calibration Time(s): 10:59 13:49

GC Column: DB-624UI ID: 0.18 (mm)

LAB FILE ID: RRF001 = VX048229.D RRF020 = VX048231.D RRF050 = VX048232.D
RRF100 = VX048233.D RRF150 = VX048234.D RRF005 = VX048236.D

COMPOUND	RRF001	RRF020	RRF050	RRF100	RRF150	RRF005	$\overline{RRF}$	% RSD
Vinyl Chloride	0.447	0.437	0.416	0.462	0.445	0.458	0.444	3.7
1,1-Dichloroethene	0.515	0.548	0.485	0.558	0.531	0.514	0.525	5
2-Butanone	0.311	0.329	0.281	0.301	0.290	0.315	0.304	5.7
Carbon Tetrachloride	0.650	0.594	0.553	0.604	0.567	0.622	0.599	5.9
Chloroform	1.147	1.208	1.046	1.127	1.067	1.143	1.123	5.2
Benzene	1.493	1.480	1.301	1.426	1.347	1.405	1.409	5.3
1,2-Dichloroethane	0.529	0.566	0.500	0.528	0.496	0.499	0.520	5.2
Trichloroethene	0.400	0.373	0.348	0.380	0.363	0.366	0.372	4.7
Tetrachloroethene	0.418	0.378	0.328	0.370	0.361	0.385	0.373	7.9
Chlorobenzene	1.149	1.159	1.045	1.148	1.102	1.145	1.125	3.9
1,2-Dichloroethane-d4		0.709	0.682	0.690	0.698	0.725	0.701	2.4
Dibromofluoromethane		0.345	0.330	0.346	0.348	0.338	0.341	2.2
Toluene-d8		1.185	1.185	1.196	1.195	1.221	1.196	1.2
4-Bromofluorobenzene		0.445	0.444	0.446	0.441	0.500	0.455	5.5

* 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.

Response Factor Report MSVOA_X2

Method Path : Z:\voasrv\HPCHEM1\MSVOA_X\Method\
Method File : 82X102025W.M
Title : SW846 8260
Last Update : Mon Oct 20 14:13:59 2025
Response Via : Initial Calibration

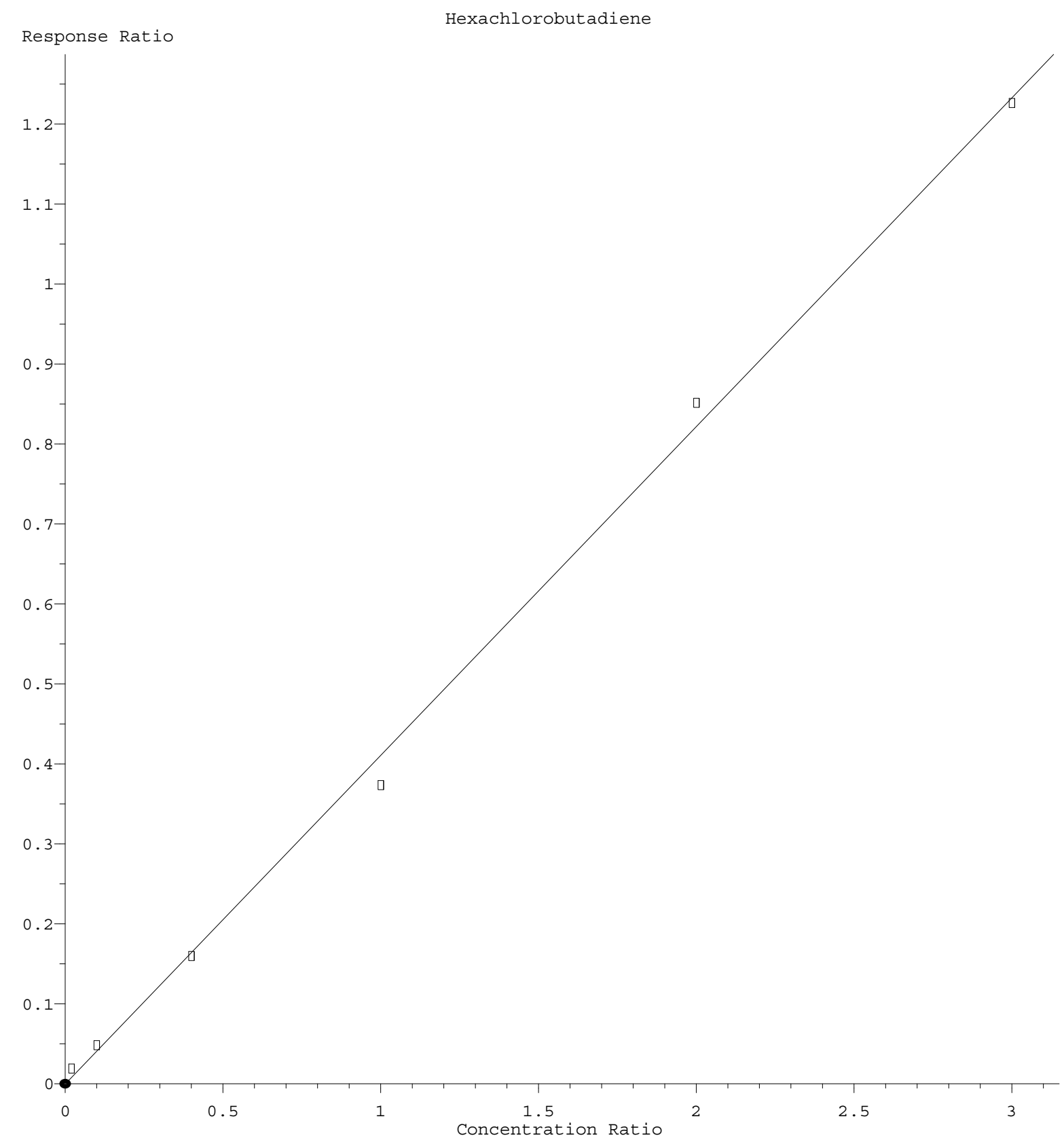
Calibration Files
1 =VX048229.D 5 =VX048236.D 20 =VX048231.D 50 =VX048232.D 100 =VX048233.D 150 =VX048234.D

		Compound	1	5	20	50	100	150	Avg	%RSD
1)	I	Pentafluorobenzene	----------ISTD----------							
2)	T	Dichlorodifluo...	0.522	0.522	0.513	0.483	0.540	0.504	0.514	3.74
3)	P	Chloromethane	0.506	0.508	0.468	0.449	0.476	0.471	0.480	4.81
4)	C	Vinyl Chloride	0.447	0.458	0.437	0.416	0.462	0.445	0.444	3.69#
5)	T	Bromomethane		0.346	0.323	0.282	0.280	0.276	0.302	10.42
6)	T	Chloroethane	0.233	0.261	0.277	0.247	0.282	0.267	0.261	7.16
7)	T	Trichlorofluor...	0.776	0.880	0.874	0.807	0.907	0.869	0.852	5.83
8)	T	Diethyl Ether	0.231	0.237	0.257	0.223	0.248	0.242	0.240	5.06
9)	T	1,1,2-Trichlor...	0.512	0.553	0.540	0.501	0.583	0.549	0.540	5.48
10)	T	Methyl Iodide		0.569	0.636	0.663	0.781	0.742	0.678	12.47
11)	T	Tert butyl alc...		0.087	0.069	0.062	0.067	0.064	0.070	14.22
12)	CM	1,1-Dichloroet...	0.515	0.514	0.548	0.485	0.558	0.531	0.525	5.03#
13)	T	Acrolein		0.079	0.063	0.065	0.074	0.073	0.071	9.21
14)	T	Allyl chloride	0.897	0.833	0.909	0.805	0.911	0.874	0.872	5.00
15)	T	Acrylonitrile	0.255	0.245	0.267	0.239	0.254	0.246	0.251	3.89
16)	T	Acetone	0.300	0.262	0.250	0.202	0.221	0.206	0.240	15.70
17)	T	Carbon Disulfide	2.034	1.689	1.612	1.442	1.617	1.532	1.654	12.36
18)	T	Methyl Acetate	0.514	0.464	0.551	0.466	0.514	0.504	0.502	6.56
19)	T	Methyl tert-bu...	1.894	1.657	1.909	1.704	1.817	1.764	1.791	5.66
20)	T	Methylene Chlo...	0.555	0.595	0.651	0.552	0.597	0.567	0.586	6.36
21)	T	trans-1,2-Dich...	0.587	0.603	0.585	0.535	0.592	0.558	0.577	4.38
22)	T	Diisopropyl ether	1.697	1.701	1.881	1.662	1.787	1.701	1.738	4.69
23)	T	Vinyl Acetate	1.261	1.326	1.521	1.348	1.466	1.408	1.389	6.90
24)	P	1,1-Dichloroet...	1.116	1.054	1.085	0.977	1.055	1.019	1.051	4.64
25)	T	2-Butanone	0.311	0.315	0.329	0.281	0.301	0.290	0.304	5.70
26)	T	2,2-Dichloropr...	1.002	0.945	0.973	0.876	0.973	0.924	0.949	4.69
27)	T	cis-1,2-Dichlo...	0.682	0.673	0.700	0.626	0.695	0.661	0.673	4.03
28)	T	Bromochloromet...	0.388	0.469	0.404	0.441	0.462	0.452	0.436	7.52
29)	T	Tetrahydrofuran	0.178	0.183	0.198	0.171	0.184	0.180	0.182	5.00
30)	C	Chloroform	1.147	1.143	1.208	1.046	1.127	1.067	1.123	5.22#
31)	T	Cyclohexane		0.843	0.894	0.821	0.926	0.866	0.870	4.76
32)	T	1,1,1-Trichlor...	1.049	1.041	1.085	0.973	1.055	1.007	1.035	3.83
33)	S	1,2-Dichloroet...		0.725	0.709	0.682	0.690	0.698	0.701	2.40
34)	I	1,4-Difluorobenzene	----------ISTD----------							
35)	S	Dibromofluorom...		0.338	0.345	0.330	0.346	0.348	0.341	2.17
36)	T	1,1-Dichloropr...	0.562	0.475	0.491	0.433	0.490	0.460	0.485	8.96
37)	T	Ethyl Acetate	0.459	0.396	0.396	0.368	0.410	0.384	0.402	7.71
38)	T	Carbon Tetrach...	0.650	0.622	0.594	0.553	0.604	0.567	0.599	5.95
39)	T	Methylcyclohexane	0.551	0.590	0.548	0.540	0.626	0.582	0.573	5.73
40)	TM	Benzene	1.493	1.405	1.480	1.301	1.426	1.347	1.409	5.30
41)	T	Methacrylonitrile	0.192	0.198	0.237	0.205	0.223	0.213	0.211	7.85
42)	TM	1,2-Dichloroet...	0.529	0.499	0.566	0.500	0.528	0.496	0.520	5.23
43)	T	Isopropyl Acetate	0.659	0.612	0.709	0.635	0.682	0.665	0.661	5.16
44)	TM	Trichloroethene	0.400	0.366	0.373	0.348	0.380	0.363	0.372	4.73
45)	C	1,2-Dichloropr...	0.309	0.337	0.362	0.321	0.347	0.333	0.335	5.54#
46)	T	Dibromomethane	0.267	0.264	0.277	0.247	0.261	0.249	0.261	4.35
47)	T	Bromodichlorom...	0.570	0.567	0.592	0.538	0.573	0.538	0.563	3.79
48)	T	Methyl methacr...	0.332	0.300	0.356	0.322	0.350	0.340	0.333	6.07
49)	T	1,4-Dioxane	0.003	0.004	0.005	0.004	0.005	0.005	0.004	12.99
50)	S	Toluene-d8		1.221	1.185	1.185	1.195	1.195	1.196	1.22
51)	T	4-Methyl-2-Pen...	0.366	0.374	0.422	0.377	0.384	0.362	0.381	5.71
52)	CM	Toluene	0.881	0.925	0.944	0.861	0.910	0.849	0.895	4.15#
53)	T	t-1,3-Dichloro...	0.477	0.526	0.582	0.545	0.574	0.553	0.543	7.02
54)	T	cis-1,3-Dichlo...	0.582	0.556	0.604	0.572	0.615	0.585	0.586	3.67
55)	T	1,1,2-Trichlor...	0.318	0.355	0.357	0.321	0.333	0.313	0.333	5.78
56)	T	Ethyl methacry...	0.418	0.451	0.536	0.490	0.524	0.502	0.487	9.17

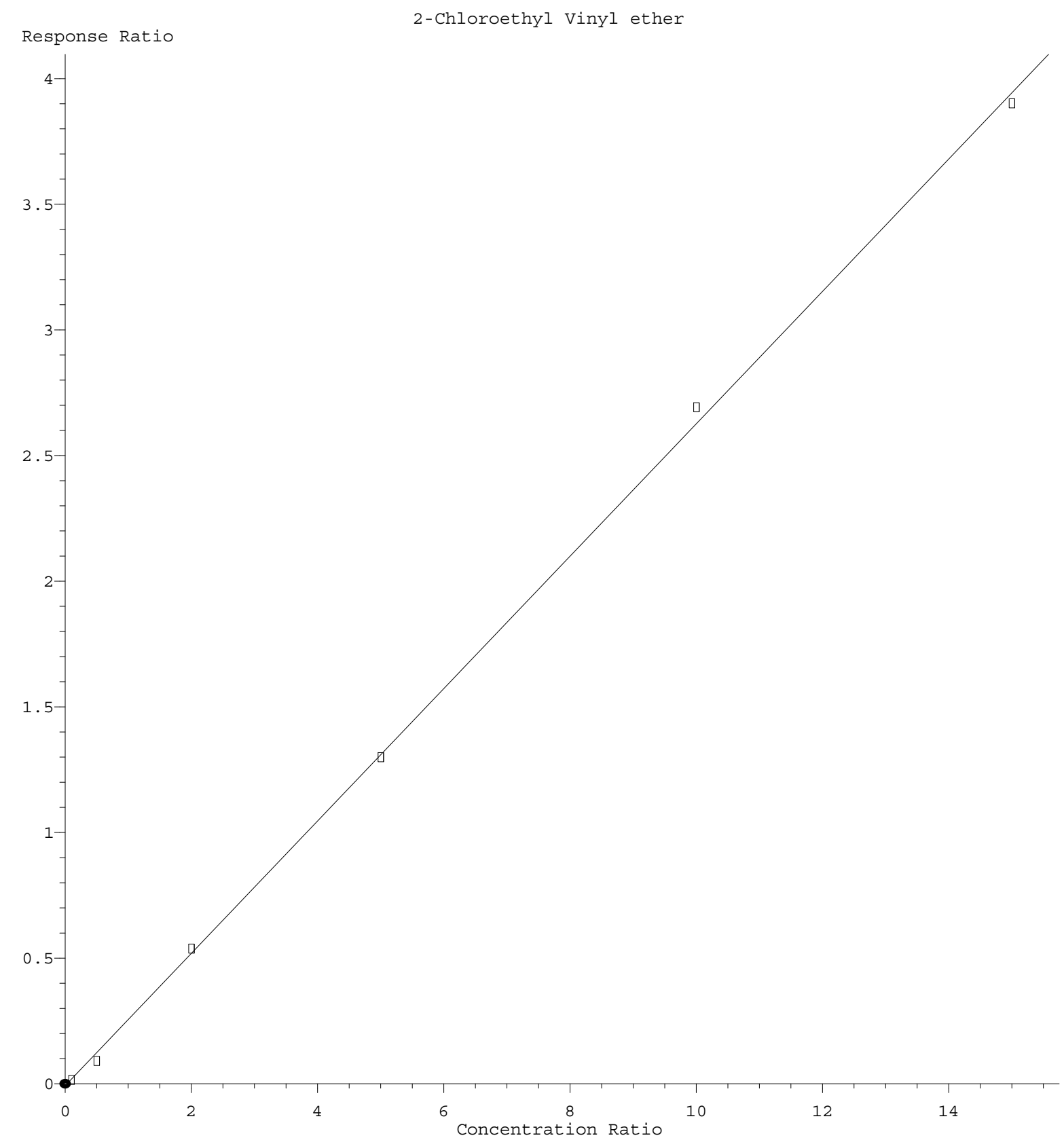
Method Path : Z:\voasrv\HPCHEM1\MSVOA_X\Method\
Method File : 82X102025W.M

57)	T	1,3-Dichloropr...	0.563	0.572	0.614	0.548	0.572	0.541	0.568	4.51
58)	T	2-Chloroethyl ...	0.154	0.182	0.269	0.260	0.269	0.260	0.232	21.93
59)	T	2-Hexanone	0.231	0.271	0.298	0.267	0.271	0.256	0.266	8.30
60)	T	Dibromochlorom...	0.482	0.441	0.476	0.425	0.442	0.418	0.447	5.89
61)	T	1,2-Dibromoethane	0.346	0.353	0.393	0.342	0.359	0.336	0.355	5.72
62)	S	4-Bromofluorob...		0.500	0.445	0.444	0.446	0.441	0.455	5.51
63)	I	Chlorobenzene-d5	----------ISTD----------							
64)	T	Tetrachloroethene	0.418	0.385	0.378	0.328	0.370	0.361	0.373	7.92
65)	PM	Chlorobenzene	1.149	1.145	1.159	1.045	1.148	1.102	1.125	3.89
66)	T	1,1,1,2-Tetrac...	0.422	0.405	0.423	0.390	0.430	0.409	0.413	3.53
67)	C	Ethyl Benzene	1.905	1.876	1.954	1.825	2.008	1.922	1.915	3.30#
68)	T	m/p-Xylenes	0.647	0.727	0.750	0.687	0.750	0.707	0.712	5.60
69)	T	o-Xylene	0.652	0.684	0.712	0.664	0.723	0.686	0.687	3.93
70)	T	Styrene	1.054	1.165	1.236	1.143	1.247	1.173	1.170	5.98
71)	P	Bromoform	0.338	0.325	0.350	0.308	0.335	0.326	0.330	4.27
72)	I	1,4-Dichlorobenzen...	----------ISTD----------							
73)	T	Isopropylbenzene	3.618	3.579	3.656	3.430	3.875	3.754	3.652	4.17
74)	T	N-amyl acetate	1.229	1.150	1.339	1.248	1.415	1.392	1.295	7.97
75)	P	1,1,2,2-Tetrac...	0.988	0.974	1.065	0.946	1.018	0.992	0.997	4.08
76)	T	1,2,3-Trichlor...	0.929	0.767	0.822	0.735	0.810	0.802	0.811	8.14
77)	T	Bromobenzene	0.940	0.897	0.930	0.858	0.953	0.916	0.916	3.73
78)	T	n-propylbenzene	4.000	4.169	4.255	4.017	4.544	4.385	4.228	5.02
79)	T	2-Chlorotoluene	2.575	2.512	2.615	2.397	2.693	2.590	2.564	3.92
80)	T	1,3,5-Trimethy...	2.988	2.889	3.079	2.861	3.222	3.094	3.022	4.53
81)	T	trans-1,4-Dich...		0.287	0.330	0.316	0.366	0.368	0.333	10.35
82)	T	4-Chlorotoluene	3.097	2.958	3.119	2.883	3.143	3.059	3.043	3.34
83)	T	tert-Butylbenzene	3.128	3.047	3.086	2.915	3.282	3.173	3.105	3.98
84)	T	1,2,4-Trimethy...	2.791	2.991	3.077	2.864	3.247	3.126	3.016	5.61
85)	T	sec-Butylbenzene	3.789	3.690	3.683	3.476	3.969	3.809	3.736	4.39
86)	T	p-Isopropyltol...	3.342	3.222	3.159	2.986	3.399	3.265	3.229	4.53
87)	T	1,3-Dichlorobe...	1.863	1.750	1.742	1.550	1.747	1.707	1.726	5.86
88)	T	1,4-Dichlorobe...	2.143	1.772	1.803	1.577	1.724	1.710	1.788	10.65
89)	T	n-Butylbenzene	3.328	2.869	2.807	2.622	3.073	2.936	2.939	8.22
90)	T	Hexachloroethane	0.680	0.647	0.621	0.569	0.664	0.645	0.638	6.11
91)	T	1,2-Dichlorobe...	1.803	1.590	1.631	1.494	1.619	1.588	1.621	6.25
92)	T	1,2-Dibromo-3-...	0.167	0.187	0.219	0.195	0.224	0.223	0.202	11.51
93)	T	1,2,4-Trichlor...	1.441	0.994	0.975	0.959	1.114	1.094	1.096	16.47
94)	T	Hexachlorobuta...	0.953	0.482	0.399	0.373	0.426	0.409	0.507	43.70
95)	T	Naphthalene	2.942	2.473	2.880	2.776	3.171	3.181	2.904	9.14
96)	T	1,2,3-Trichlor...	1.154	0.947	0.942	0.909	1.050	1.033	1.006	9.04

(#) = Out of Range



Response = 4.113e-001 * Amt - 5.482e-004
Coef of Det (r^2) = 0.997907 Curve Fit: Linear
Method Name: Z:\voasrv\HPCHEM1\MSVOA X\Method\82X102025W.M
Calibration Table Last Updated: Mon Oct 20 14:13:59 2025



Response = 2.635e-001 * Amt - 8.946e-003
Coef of Det (r^2) = 0.999382 Curve Fit: Linear
Method Name: Z:\voasrv\HPCHEM1\MSVOA X\Method\82X102025W.M
Calibration Table Last Updated: Mon Oct 20 14:13:59 2025

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102025\
Data File : VX048229.D
Acq On : 20 Oct 2025 10:59
Operator : JC/MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :John Carlone 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

Quant Time: Oct 20 12:42:04 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 12:35:14 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.544	168	117157	50.000	ug/l		0.00
34) 1,4-Difluorobenzene	6.745	114	193186	50.000	ug/l		0.00
63) Chlorobenzene-d5	10.037	117	177252	50.000	ug/l		0.00
72) 1,4-Dichlorobenzene-d4	12.006	152	86943	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 78 - 117		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 92 - 112		Recovery =	0.000%#			
62) 4-Bromofluorobenzene	0.000	95	0d	0.000	ug/l		
Spiked Amount 50.000	Range 83 - 123		Recovery =	0.000%#			
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.173	85	1223	0.995	ug/l		82
3) Chloromethane	1.301	50	1186	0.796	ug/l	#	62
4) Vinyl Chloride	1.380	62	1048	0.668	ug/l		92
6) Chloroethane	1.697	64	545	0.546	ug/l		91
7) Trichlorofluoromethane	1.898	101	1819	0.738	ug/l		98
8) Diethyl Ether	2.142	74	542	0.645	ug/l		81
9) 1,1,2-Trichlorotrifluo...	2.337	101	1199	0.864	ug/l		89
12) 1,1-Dichloroethene	2.325	96	1207	0.889	ug/l		88
14) Allyl chloride	2.666	41	2101	0.860	ug/l		96
15) Acrylonitrile	3.069	53	2984	5.171	ug/l		97
16) Acetone	2.380	43	3519	5.684	ug/l		98
17) Carbon Disulfide	2.520	76	4767	1.141	ug/l	#	92
18) Methyl Acetate	2.703	43	1204	0.955	ug/l	#	85
19) Methyl tert-butyl Ether	3.111	73	4437	1.085	ug/l		100
20) Methylene Chloride	2.794	84	1301	0.863	ug/l	#	76
21) trans-1,2-Dichloroethene	3.099	96	1376	0.980	ug/l		96
22) Diisopropyl ether	3.745	45	3977	0.832	ug/l	#	26
23) Vinyl Acetate	3.727	43	14769	4.131	ug/l		95
24) 1,1-Dichloroethane	3.611	63	2615	0.964	ug/l		97
25) 2-Butanone	4.574	43	3638	5.043	ug/l		98
26) 2,2-Dichloropropane	4.465	77	2347	1.012	ug/l		84
27) cis-1,2-Dichloroethene	4.489	96	1598	0.959	ug/l		94
28) Bromochloromethane	4.879	49	908	0.726	ug/l	#	69
29) Tetrahydrofuran	5.007	42	2088	4.929	ug/l	#	73
30) Chloroform	5.093	83	2688	0.941	ug/l		97
32) 1,1,1-Trichloroethane	5.379	97	2459	1.048	ug/l	#	50
36) 1,1-Dichloropropene	5.696	75	2173	1.151	ug/l	#	62
37) Ethyl Acetate	4.727	43	1772m	1.174	ug/l		
38) Carbon Tetrachloride	5.672	117	2513m	1.159	ug/l		
39) Methylcyclohexane	7.373	83	2128	0.999	ug/l		94
40) Benzene	6.032	78	5767	1.028	ug/l	#	89
41) Methacrylonitrile	4.916	41	741m	0.917	ug/l		
42) 1,2-Dichloroethane	6.080	62	2044	1.017	ug/l		87
43) Isopropyl Acetate	6.336	43	2548	1.006	ug/l	#	85
44) Trichloroethene	7.117	130	1547	1.094	ug/l		83
45) 1,2-Dichloropropane	7.422	63	1195	0.842	ug/l		96

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102025\
Data File : VX048229.D
Acq On : 20 Oct 2025 10:59
Operator : JC/MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 20 12:42:04 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 12:35:14 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :John Carlone 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) Dibromomethane	7.574	93	1032	1.011	ug/l		95
47) Bromodichloromethane	7.812	83	2204	0.999	ug/l	#	79
48) Methyl methacrylate	7.684	41	1283	0.989	ug/l		95
49) 1,4-Dioxane	7.665	88	255	21.840	ug/l	#	34
51) 4-Methyl-2-Pentanone	8.562	43	7066	5.011	ug/l		91
52) Toluene	8.708	92	3403	1.010	ug/l		95
53) t-1,3-Dichloropropene	8.970	75	1844	0.892	ug/l	#	74
54) cis-1,3-Dichloropropene	8.360	75	2250	0.998	ug/l		90
55) 1,1,2-Trichloroethane	9.147	97	1229	0.977	ug/l	#	85
56) Ethyl methacrylate	9.104	69	1616	0.945	ug/l		96
57) 1,3-Dichloropropane	9.299	76	2174	0.989	ug/l		93
58) 2-Chloroethyl Vinyl ether	8.232	63	2970	3.381	ug/l		100
59) 2-Hexanone	9.421	43	4456	4.518	ug/l		92
60) Dibromochloromethane	9.507	129	1862	1.183	ug/l		95
61) 1,2-Dibromoethane	9.598	107	1338	1.037	ug/l		98
64) Tetrachloroethene	9.257	164	1482	1.192	ug/l		92
65) Chlorobenzene	10.067	112	4073	1.051	ug/l		90
66) 1,1,1,2-Tetrachloroethane	10.147	131	1495	1.070	ug/l	#	66
67) Ethyl Benzene	10.177	91	6752	1.016	ug/l		97
68) m/p-Xylenes	10.287	106	4589	1.854	ug/l		90
69) o-Xylene	10.628	106	2313	0.993	ug/l		99
70) Styrene	10.640	104	3737	0.932	ug/l		96
71) Bromoform	10.787	173	1198	1.168	ug/l	#	99
73) Isopropylbenzene	10.945	105	6291	1.040	ug/l		93
74) N-amyl acetate	10.829	43	2137	0.947	ug/l	#	90
75) 1,1,2,2-Tetrachloroethane	11.195	83	1718	1.003	ug/l		90
76) 1,2,3-Trichloropropane	11.220	75	1615m	1.216	ug/l		
77) Bromobenzene	11.183	156	1635	1.080	ug/l		91
78) n-propylbenzene	11.287	91	6956	0.949	ug/l		94
79) 2-Chlorotoluene	11.348	91	4477	1.010	ug/l		97
80) 1,3,5-Trimethylbenzene	11.433	105	5196	1.047	ug/l		97
82) 4-Chlorotoluene	11.439	91	5385	1.034	ug/l		99
83) tert-Butylbenzene	11.695	119	5439	1.085	ug/l		91
84) 1,2,4-Trimethylbenzene	11.738	105	4854	0.982	ug/l		99
85) sec-Butylbenzene	11.872	105	6589	1.075	ug/l		99
86) p-Isopropyltoluene	11.994	119	5812	1.125	ug/l		91
87) 1,3-Dichlorobenzene	11.951	146	3239	1.145	ug/l		96
88) 1,4-Dichlorobenzene	12.024	146	3727m	1.270	ug/l		
89) n-Butylbenzene	12.317	91	5787	1.202	ug/l		98
90) Hexachloroethane	12.518	117	1182	1.084	ug/l		77
91) 1,2-Dichlorobenzene	12.317	146	3135	1.172	ug/l		96
92) 1,2-Dibromo-3-Chloropr...	12.933	75	290	0.926	ug/l		79
93) 1,2,4-Trichlorobenzene	13.573	180	2505	1.587	ug/l		90
94) Hexachlorobutadiene	13.707	225	1658	2.724	ug/l		97
95) Naphthalene	13.762	128	5116	1.230	ug/l		98
96) 1,2,3-Trichlorobenzene	13.945	180	2006	1.377	ug/l		100

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

ICAL Form

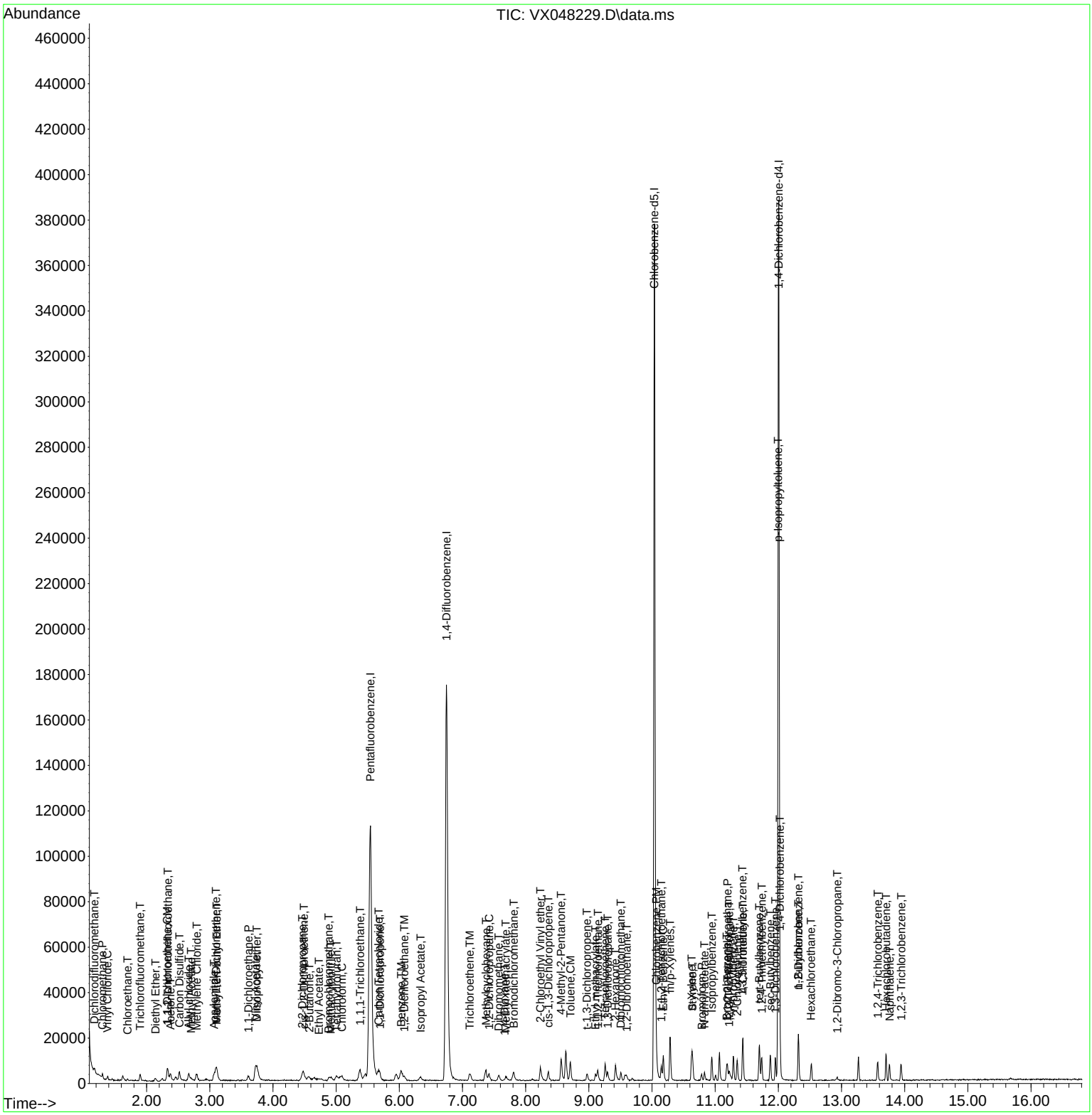
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102025\
Data File : VX048229.D
Acq On : 20 Oct 2025 10:59
Operator : JC/MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 20 12:42:04 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 12:35:14 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :John Carlone 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102025\
Data File : VX048231.D
Acq On : 20 Oct 2025 11:40
Operator : JC/MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :John Carlone 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

Quant Time: Oct 20 12:37:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 12:35:14 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.538	168	119626	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.745	114	195028	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.037	117	178975	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.006	152	90972	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.946	65	33936	18.312	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery =	36.620%#		
35) Dibromofluoromethane	5.373	113	26897	19.872	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	39.740%#		
50) Toluene-d8	8.635	98	92476	18.965	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery =	37.920%#		
62) 4-Bromofluorobenzene	11.061	95	34724	19.551	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery =	39.100%#		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.179	85	24524	19.532	ug/l	98
3) Chloromethane	1.300	50	22401	14.727	ug/l	100
4) Vinyl Chloride	1.380	62	20913	13.048	ug/l	94
5) Bromomethane	1.617	94	15473	14.517	ug/l	100
6) Chloroethane	1.697	64	13249	12.990	ug/l	93
7) Trichlorofluoromethane	1.898	101	41824	16.625	ug/l	98
8) Diethyl Ether	2.136	74	12293	14.325	ug/l	87
9) 1,1,2-Trichlorotrifluo...	2.337	101	25843	18.229	ug/l	96
10) Methyl Iodide	2.459	142	30452	17.934	ug/l	99
11) Tert butyl alcohol	2.947	59	16521	134.353	ug/l	100
12) 1,1-Dichloroethene	2.325	96	26209	18.907	ug/l	92
13) Acrolein	2.239	56	15157	58.651	ug/l	99
14) Allyl chloride	2.666	41	43494	17.443	ug/l	98
15) Acrylonitrile	3.056	53	63931	108.499	ug/l	97
16) Acetone	2.373	43	59884	94.723	ug/l	96
17) Carbon Disulfide	2.520	76	77142	18.087	ug/l	98
18) Methyl Acetate	2.703	43	26374	20.482	ug/l	92
19) Methyl tert-butyl Ether	3.111	73	91349	21.877	ug/l	100
20) Methylene Chloride	2.794	84	31157	20.231	ug/l	88
21) trans-1,2-Dichloroethene	3.093	96	28001	19.525	ug/l	94
22) Diisopropyl ether	3.751	45	90030	18.439	ug/l	87
23) Vinyl Acetate	3.715	43	364009	99.706	ug/l	98
24) 1,1-Dichloroethane	3.605	63	51927	18.746	ug/l	98
25) 2-Butanone	4.544	43	78643	106.774	ug/l	95
26) 2,2-Dichloropropane	4.465	77	46568	19.669	ug/l	99
27) cis-1,2-Dichloroethene	4.483	96	33508	19.688	ug/l	98
28) Bromochloromethane	4.891	49	19339	15.146	ug/l	90
29) Tetrahydrofuran	4.995	42	47457	109.718	ug/l	94
30) Chloroform	5.080	83	57780	19.813	ug/l	99
31) Cyclohexane	5.464	56	42796	18.882	ug/l	95
32) 1,1,1-Trichloroethane	5.373	97	51929	21.672	ug/l	98
36) 1,1-Dichloropropene	5.684	75	38270	20.071	ug/l	99
37) Ethyl Acetate	4.702	43	30904	20.280	ug/l #	95
38) Carbon Tetrachloride	5.666	117	46323	21.166	ug/l	98
39) Methylcyclohexane	7.366	83	42776	19.897	ug/l	94
40) Benzene	6.025	78	115488	20.398	ug/l	99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102025\
Data File : VX048231.D
Acq On : 20 Oct 2025 11:40
Operator : JC/MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :John Carlone 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

Quant Time: Oct 20 12:37:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 12:35:14 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	4.916	41	18461	22.621	ug/l		97
42) 1,2-Dichloroethane	6.074	62	44176	21.778	ug/l		100
43) Isopropyl Acetate	6.324	43	55317	21.625	ug/l		96
44) Trichloroethene	7.110	130	29108	20.399	ug/l		90
45) 1,2-Dichloropropane	7.421	63	28242	19.709	ug/l		97
46) Dibromomethane	7.568	93	21605	20.955	ug/l		92
47) Bromodichloromethane	7.805	83	46221	20.743	ug/l		100
48) Methyl methacrylate	7.677	41	27751	21.193	ug/l		94
49) 1,4-Dioxane	7.647	88	7620	646.470	ug/l		91
51) 4-Methyl-2-Pentanone	8.555	43	164708	115.713	ug/l		94
52) Toluene	8.702	92	73623	21.635	ug/l		98
53) t-1,3-Dichloropropene	8.964	75	45416	21.756	ug/l		99
54) cis-1,3-Dichloropropene	8.354	75	47130	20.713	ug/l		96
55) 1,1,2-Trichloroethane	9.134	97	27884	21.961	ug/l		98
56) Ethyl methacrylate	9.104	69	41809	24.210	ug/l		93
57) 1,3-Dichloropropane	9.293	76	47896	21.591	ug/l		100
58) 2-Chloroethyl Vinyl ether	8.226	63	104883	118.278	ug/l		96
59) 2-Hexanone	9.415	43	116268	116.777	ug/l		95
60) Dibromochloromethane	9.506	129	37127	23.361	ug/l		98
61) 1,2-Dibromoethane	9.598	107	30639	23.533	ug/l		96
64) Tetrachloroethene	9.256	164	27043	21.550	ug/l		89
65) Chlorobenzene	10.061	112	83004	21.211	ug/l		99
66) 1,1,1,2-Tetrachloroethane	10.146	131	30278	21.471	ug/l		98
67) Ethyl Benzene	10.177	91	139895	20.852	ug/l		98
68) m/p-Xylenes	10.287	106	107377	42.962	ug/l		100
69) o-Xylene	10.622	106	50950	21.655	ug/l		98
70) Styrene	10.640	104	88481	21.848	ug/l		99
71) Bromoform	10.780	173	25027	24.168	ug/l	#	100
73) Isopropylbenzene	10.945	105	133034	21.025	ug/l		99
74) N-amyl acetate	10.829	43	48726	20.642	ug/l		96
75) 1,1,2,2-Tetrachloroethane	11.195	83	38748	21.616	ug/l		98
76) 1,2,3-Trichloropropane	11.219	75	29913m	21.533	ug/l		
77) Bromobenzene	11.183	156	33843	21.374	ug/l		95
78) n-propylbenzene	11.286	91	154839	20.180	ug/l		98
79) 2-Chlorotoluene	11.347	91	95156	20.526	ug/l		99
80) 1,3,5-Trimethylbenzene	11.433	105	112057	21.575	ug/l		100
81) trans-1,4-Dichloro-2-b...	11.000	75	12001	21.154	ug/l		94
82) 4-Chlorotoluene	11.439	91	113495	20.833	ug/l		98
83) tert-Butylbenzene	11.695	119	112305	21.403	ug/l		97
84) 1,2,4-Trimethylbenzene	11.732	105	111976	21.652	ug/l		100
85) sec-Butylbenzene	11.872	105	134014	20.891	ug/l		100
86) p-Isopropyltoluene	11.994	119	114969	21.263	ug/l		99
87) 1,3-Dichlorobenzene	11.951	146	63377	21.403	ug/l		99
88) 1,4-Dichlorobenzene	12.024	146	65612	21.375	ug/l		99
89) n-Butylbenzene	12.317	91	102140	20.281	ug/l		99
90) Hexachloroethane	12.518	117	22609	19.811	ug/l		94
91) 1,2-Dichlorobenzene	12.317	146	59345	21.212	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	12.920	75	7983	24.372	ug/l		94
93) 1,2,4-Trichlorobenzene	13.567	180	35465	21.473	ug/l		98
94) Hexachlorobutadiene	13.707	225	14529	22.810	ug/l		98
95) Naphthalene	13.756	128	104803	24.073	ug/l		99
96) 1,2,3-Trichlorobenzene	13.945	180	34276	22.493	ug/l		99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102025\
Data File : VX048231.D
Acq On : 20 Oct 2025 11:40
Operator : JC/MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :John Carlone 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

Quant Time: Oct 20 12:37:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 12:35:14 2025
Response via : Initial Calibration

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

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

ICAL Form

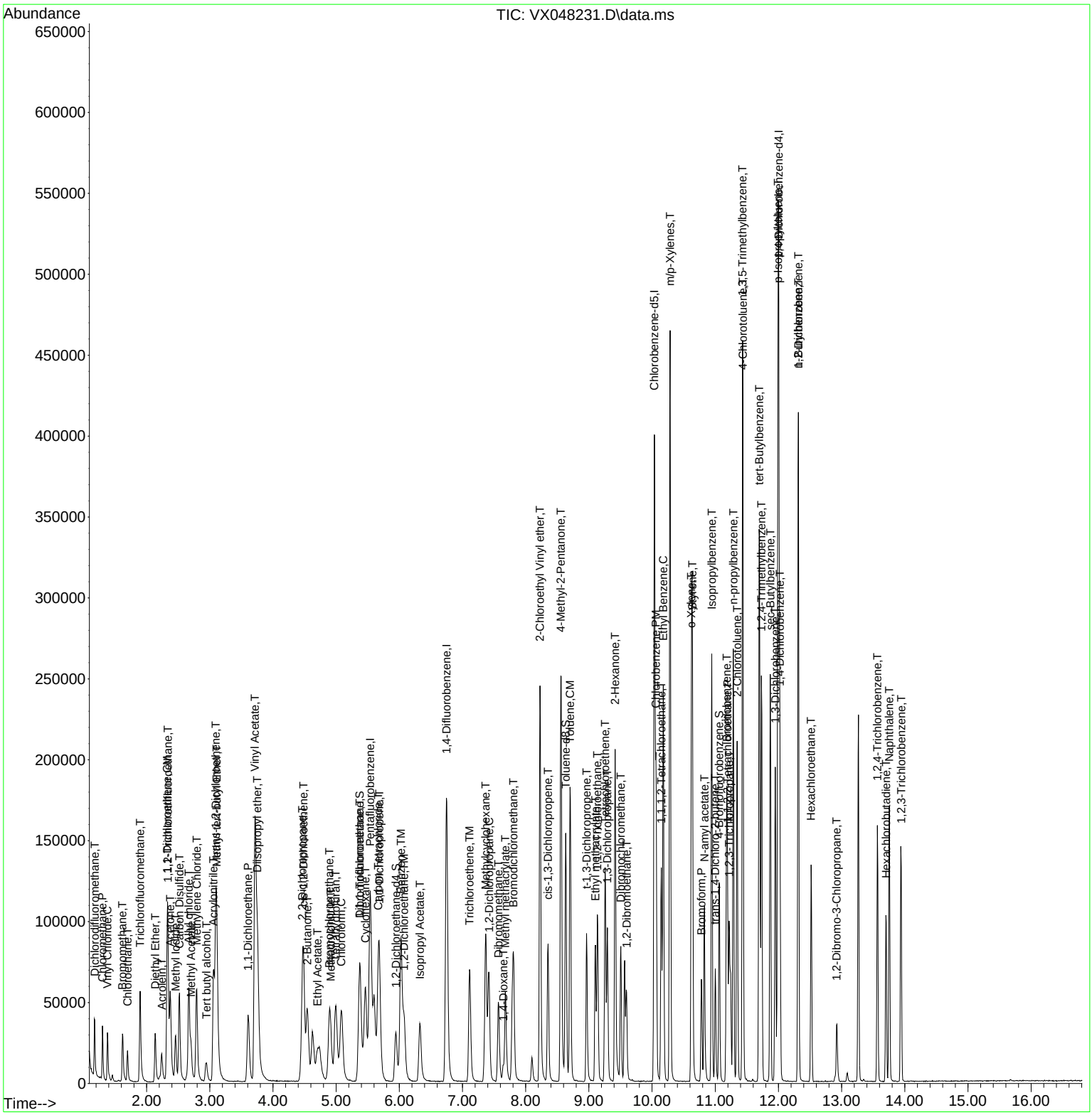
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102025\
Data File : VX048231.D
Acq On : 20 Oct 2025 11:40
Operator : JC/MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 20 12:37:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 12:35:14 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :John Carlone 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102025\
Data File : VX048232.D
Acq On : 20 Oct 2025 12:01
Operator : JC/MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

Quant Time: Oct 20 12:35:48 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 12:35:14 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.538	168	124491	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.751	114	201906	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.037	117	184494	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.006	152	92693	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.940	65	84951	44.048	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 88.100%			
35) Dibromofluoromethane	5.379	113	66593	47.523	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 95.040%			
50) Toluene-d8	8.635	98	239295	47.402	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery = 94.800%			
62) 4-Bromofluorobenzene	11.061	95	89579	48.719	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery = 97.440%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.173	85	60172	46.052	ug/l	98
3) Chloromethane	1.301	50	55934	35.336	ug/l	100
4) Vinyl Chloride	1.380	62	51819	31.067	ug/l	99
5) Bromomethane	1.618	94	35101	31.646	ug/l	98
6) Chloroethane	1.697	64	30718	28.940	ug/l	95
7) Trichlorofluoromethane	1.898	101	100423	38.358	ug/l	99
8) Diethyl Ether	2.136	74	27723	31.044	ug/l	87
9) 1,1,2-Trichlorotrifluo...	2.337	101	62391	42.290	ug/l	95
10) Methyl Iodide	2.459	142	82552	46.716	ug/l	99
11) Tert butyl alcohol	2.947	59	38534	301.123	ug/l	99
12) 1,1-Dichloroethene	2.325	96	60330	41.821	ug/l	94
13) Acrolein	2.239	56	40536	150.726	ug/l	100
14) Allyl chloride	2.666	41	100234	38.627	ug/l	97
15) Acrylonitrile	3.056	53	149009	243.004	ug/l	100
16) Acetone	2.374	43	126003	191.520	ug/l	100
17) Carbon Disulfide	2.514	76	179492	40.440	ug/l	99
18) Methyl Acetate	2.703	43	58071	43.336	ug/l	91
19) Methyl tert-butyl Ether	3.111	73	212092	48.809	ug/l	96
20) Methylene Chloride	2.788	84	68663	42.841	ug/l	94
21) trans-1,2-Dichloroethene	3.093	96	66608	44.631	ug/l	96
22) Diisopropyl ether	3.757	45	206901	40.720	ug/l	91
23) Vinyl Acetate	3.715	43	839370	220.927	ug/l	97
24) 1,1-Dichloroethane	3.611	63	121657	42.204	ug/l	99
25) 2-Butanone	4.544	43	175075	228.411	ug/l	93
26) 2,2-Dichloropropane	4.471	77	109062	44.264	ug/l	99
27) cis-1,2-Dichloroethene	4.483	96	77911	43.988	ug/l	98
28) Bromochloromethane	4.885	49	54919	41.331	ug/l	85
29) Tetrahydrofuran	4.989	42	106381	236.335	ug/l	93
30) Chloroform	5.087	83	130274	42.925	ug/l	96
31) Cyclohexane	5.465	56	102251	43.351	ug/l	92
32) 1,1,1-Trichloroethane	5.373	97	121090	48.560	ug/l	99
36) 1,1-Dichloropropene	5.684	75	87493	44.323	ug/l	98
37) Ethyl Acetate	4.702	43	74261	47.073	ug/l	97
38) Carbon Tetrachloride	5.666	117	111708	49.302	ug/l	98
39) Methylcyclohexane	7.367	83	109077	49.008	ug/l	94
40) Benzene	6.025	78	262745	44.825	ug/l	98

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102025\
Data File : VX048232.D
Acq On : 20 Oct 2025 12:01
Operator : JC/MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 20 12:35:48 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 12:35:14 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	4.904	41	41293	48.874	ug/l		96
42) 1,2-Dichloroethane	6.074	62	100937	48.064	ug/l		99
43) Isopropyl Acetate	6.324	43	128290	48.444	ug/l		96
44) Trichloroethene	7.111	130	70313	47.597	ug/l		98
45) 1,2-Dichloropropane	7.415	63	64895	43.746	ug/l		99
46) Dibromomethane	7.568	93	49874	46.726	ug/l		94
47) Bromodichloromethane	7.806	83	108671	47.107	ug/l		97
48) Methyl methacrylate	7.678	41	65057	47.990	ug/l		94
49) 1,4-Dioxane	7.647	88	17905	1467.288	ug/l		90
51) 4-Methyl-2-Pentanone	8.555	43	380665	258.320	ug/l		95
52) Toluene	8.702	92	173942	49.373	ug/l		100
53) t-1,3-Dichloropropene	8.964	75	109960	50.880	ug/l		99
54) cis-1,3-Dichloropropene	8.354	75	115534	49.046	ug/l		93
55) 1,1,2-Trichloroethane	9.135	97	64737	49.248	ug/l		96
56) Ethyl methacrylate	9.104	69	98851	55.290	ug/l		94
57) 1,3-Dichloropropane	9.293	76	110709	48.206	ug/l		99
58) 2-Chloroethyl Vinyl ether	8.226	63	262387	285.817	ug/l		95
59) 2-Hexanone	9.415	43	269143	261.113	ug/l		96
60) Dibromochloromethane	9.506	129	85760	52.123	ug/l		98
61) 1,2-Dibromoethane	9.592	107	69022	51.208	ug/l		99
64) Tetrachloroethene	9.257	164	60510	46.776	ug/l		96
65) Chlorobenzene	10.061	112	192841	47.805	ug/l		99
66) 1,1,1,2-Tetrachloroethane	10.147	131	71930	49.482	ug/l		98
67) Ethyl Benzene	10.177	91	336660	48.680	ug/l		99
68) m/p-Xylenes	10.287	106	253662	98.455	ug/l		100
69) o-Xylene	10.622	106	122582	50.542	ug/l		98
70) Styrene	10.640	104	210861	50.508	ug/l		100
71) Bromoform	10.781	173	56874	53.279	ug/l	#	100
73) Isopropylbenzene	10.945	105	317974	49.321	ug/l		100
74) N-amyl acetate	10.823	43	115683	48.098	ug/l		96
75) 1,1,2,2-Tetrachloroethane	11.195	83	87705	48.020	ug/l		99
76) 1,2,3-Trichloropropane	11.220	75	68104m	48.115	ug/l		
77) Bromobenzene	11.183	156	79543	49.303	ug/l		94
78) n-propylbenzene	11.287	91	372312	47.621	ug/l		98
79) 2-Chlorotoluene	11.348	91	222217	47.045	ug/l		98
80) 1,3,5-Trimethylbenzene	11.433	105	265174	50.108	ug/l		100
81) trans-1,4-Dichloro-2-b...	11.000	75	29295	50.678	ug/l		98
82) 4-Chlorotoluene	11.439	91	267236	48.142	ug/l		98
83) tert-Butylbenzene	11.695	119	270202	50.539	ug/l		96
84) 1,2,4-Trimethylbenzene	11.732	105	265485	50.381	ug/l		99
85) sec-Butylbenzene	11.872	105	322219	49.298	ug/l		100
86) p-Isopropyltoluene	11.994	119	276821	50.246	ug/l		99
87) 1,3-Dichlorobenzene	11.951	146	143699	47.627	ug/l		99
88) 1,4-Dichlorobenzene	12.024	146	146196	46.744	ug/l		99
89) n-Butylbenzene	12.317	91	243063	47.367	ug/l		99
90) Hexachloroethane	12.518	117	52735	45.350	ug/l		96
91) 1,2-Dichlorobenzene	12.317	146	138489	48.582	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	12.927	75	18059	54.111	ug/l		99
93) 1,2,4-Trichlorobenzene	13.567	180	88920	52.839	ug/l		99
94) Hexachlorobutadiene	13.707	225	34615	53.334	ug/l		97
95) Naphthalene	13.756	128	257281	57.999	ug/l		100
96) 1,2,3-Trichlorobenzene	13.939	180	84279	54.281	ug/l		98

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102025\
Data File : VX048232.D
Acq On : 20 Oct 2025 12:01
Operator : JC/MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

Quant Time: Oct 20 12:35:48 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 12:35:14 2025
Response via : Initial Calibration

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

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

ICAL Form

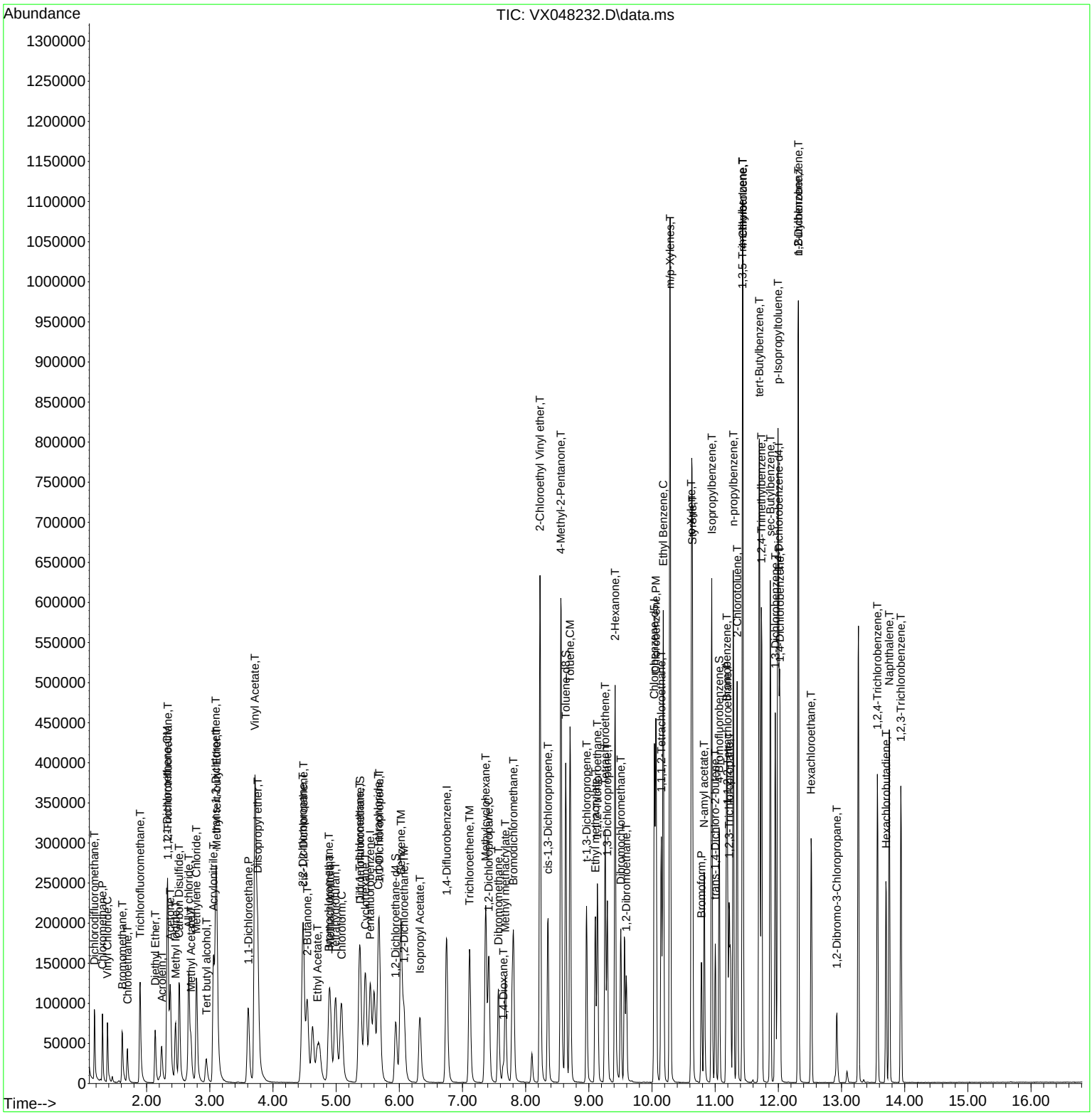
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102025\
Data File : VX048232.D
Acq On : 20 Oct 2025 12:01
Operator : JC/MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 20 12:35:48 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 12:35:14 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102025\
Data File : VX048233.D
Acq On : 20 Oct 2025 12:22
Operator : JC/MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :John Carlone 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

Quant Time: Oct 20 12:46:16 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 12:35:14 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.537	168	117551	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.750	114	187766	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.036	117	163588	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.006	152	80621	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.940	65	162188	89.060	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 178.120%#			
35) Dibromofluoromethane	5.373	113	129919	99.697	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 199.400%#			
50) Toluene-d8	8.634	98	448948	95.629	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery = 191.260%#			
62) 4-Bromofluorobenzene	11.061	95	167565	97.996	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery = 196.000%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.172	85	127029	102.960	ug/l	97
3) Chloromethane	1.300	50	111895	74.863	ug/l	100
4) Vinyl Chloride	1.379	62	108564	68.931	ug/l	100
5) Bromomethane	1.605	94	65752	62.780	ug/l	99
6) Chloroethane	1.690	64	66332	66.181	ug/l	92
7) Trichlorofluoromethane	1.892	101	213301	86.283	ug/l	98
8) Diethyl Ether	2.135	74	58302	69.141	ug/l	88
9) 1,1,2-Trichlorotrifluo...	2.337	101	136951	98.309	ug/l	96
10) Methyl Iodide	2.452	142	183697	110.092	ug/l	99
11) Tert butyl alcohol	2.952	59	78284	647.864	ug/l	99
12) 1,1-Dichloroethene	2.324	96	131152	96.282	ug/l	93
13) Acrolein	2.239	56	87244	343.554	ug/l	100
14) Allyl chloride	2.666	41	214290	87.456	ug/l	98
15) Acrylonitrile	3.056	53	298022	514.707	ug/l	100
16) Acetone	2.373	43	260058	418.616	ug/l	99
17) Carbon Disulfide	2.513	76	380127	90.700	ug/l	99
18) Methyl Acetate	2.702	43	120920	95.565	ug/l	93
19) Methyl tert-butyl Ether	3.111	73	427254	104.130	ug/l	97
20) Methylene Chloride	2.788	84	140317	92.718	ug/l	93
21) trans-1,2-Dichloroethene	3.093	96	139080	98.694	ug/l	96
22) Diisopropyl ether	3.751	45	420126	87.566	ug/l	89
23) Vinyl Acetate	3.714	43	1723170	480.325	ug/l	96
24) 1,1-Dichloroethane	3.605	63	248141	91.164	ug/l	99
25) 2-Butanone	4.543	43	353741	488.753	ug/l	98
26) 2,2-Dichloropropane	4.470	77	228643	98.275	ug/l	100
27) cis-1,2-Dichloroethene	4.483	96	163444	97.727	ug/l	98
28) Bromochloromethane	4.885	49	108536	86.505	ug/l	86
29) Tetrahydrofuran	4.989	42	216543	509.471	ug/l	93
30) Chloroform	5.080	83	264966	92.461	ug/l	98
31) Cyclohexane	5.464	56	217717	97.754	ug/l	91
32) 1,1,1-Trichloroethane	5.373	97	248018	105.334	ug/l	98
36) 1,1-Dichloropropene	5.684	75	183932	100.194	ug/l	99
37) Ethyl Acetate	4.702	43	153844	104.863	ug/l	99
38) Carbon Tetrachloride	5.665	117	226976	107.719	ug/l	99
39) Methylcyclohexane	7.366	83	235208	113.637	ug/l	95
40) Benzene	6.025	78	535407	98.221	ug/l	99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102025\
Data File : VX048233.D
Acq On : 20 Oct 2025 12:22
Operator : JC/MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 20 12:46:16 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 12:35:14 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :John Carlone 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
41) Methacrylonitrile	4.909	41	83790	106.641 ug/l		97
42) 1,2-Dichloroethane	6.074	62	198348	101.562 ug/l		99
43) Isopropyl Acetate	6.324	43	256067	103.976 ug/l		95
44) Trichloroethene	7.110	130	142779	103.931 ug/l		99
45) 1,2-Dichloropropane	7.415	63	130188	94.368 ug/l		96
46) Dibromomethane	7.567	93	98105	98.835 ug/l		94
47) Bromodichloromethane	7.805	83	215302	100.358 ug/l		99
48) Methyl methacrylate	7.677	41	131454	104.272 ug/l		95
49) 1,4-Dioxane	7.647	88	35972	3169.845 ug/l		89
51) 4-Methyl-2-Pentanone	8.561	43	720980	526.103 ug/l		94
52) Toluene	8.701	92	341597	104.263 ug/l		99
53) t-1,3-Dichloropropene	8.963	75	215736	107.341 ug/l		99
54) cis-1,3-Dichloropropene	8.354	75	231037	105.465 ug/l		94
55) 1,1,2-Trichloroethane	9.134	97	124910	102.180 ug/l		98
56) Ethyl methacrylate	9.104	69	196699	118.305 ug/l		94
57) 1,3-Dichloropropane	9.293	76	214853	100.598 ug/l		100
58) 2-Chloroethyl Vinyl ether	8.226	63	505448	592.044 ug/l		96
59) 2-Hexanone	9.415	43	509398	531.416 ug/l		95
60) Dibromochloromethane	9.506	129	166167	108.598 ug/l		100
61) 1,2-Dibromoethane	9.591	107	134662	107.431 ug/l		97
64) Tetrachloroethene	9.256	164	121163	105.633 ug/l		97
65) Chlorobenzene	10.061	112	375532	104.990 ug/l		99
66) 1,1,1,2-Tetrachloroethane	10.146	131	140599	109.080 ug/l		97
67) Ethyl Benzene	10.177	91	656925	107.128 ug/l		98
68) m/p-Xylenes	10.286	106	490879	214.875 ug/l		100
69) o-Xylene	10.622	106	236648	110.042 ug/l		100
70) Styrene	10.640	104	407916	110.197 ug/l		99
71) Bromoform	10.780	173	109613	115.806 ug/l	#	98
73) Isopropylbenzene	10.945	105	624767	111.418 ug/l		99
74) N-amyl acetate	10.829	43	228080	109.030 ug/l		95
75) 1,1,2,2-Tetrachloroethane	11.195	83	164207	103.367 ug/l		99
76) 1,2,3-Trichloropropane	11.219	75	130599m	106.083 ug/l		
77) Bromobenzene	11.183	156	153619	109.475 ug/l		93
78) n-propylbenzene	11.286	91	732684	107.747 ug/l		98
79) 2-Chlorotoluene	11.347	91	434217	105.691 ug/l		100
80) 1,3,5-Trimethylbenzene	11.432	105	519549	112.876 ug/l		99
81) trans-1,4-Dichloro-2-b...	11.000	75	59059	117.466 ug/l		98
82) 4-Chlorotoluene	11.439	91	506861	104.983 ug/l		98
83) tert-Butylbenzene	11.695	119	529264	113.817 ug/l		98
84) 1,2,4-Trimethylbenzene	11.731	105	523474	114.214 ug/l		99
85) sec-Butylbenzene	11.871	105	639904	112.562 ug/l		100
86) p-Isopropyltoluene	11.987	119	548119	114.386 ug/l		98
87) 1,3-Dichlorobenzene	11.951	146	281617	107.314 ug/l		99
88) 1,4-Dichlorobenzene	12.024	146	277908	102.163 ug/l		98
89) n-Butylbenzene	12.316	91	495486	111.016 ug/l		99
90) Hexachloroethane	12.518	117	107057	105.851 ug/l		93
91) 1,2-Dichlorobenzene	12.316	146	261022	105.277 ug/l		99
92) 1,2-Dibromo-3-Chloropr...	12.920	75	36087	124.320 ug/l		97
93) 1,2,4-Trichlorobenzene	13.566	180	179562	122.679 ug/l		100
94) Hexachlorobutadiene	13.706	225	68645	121.605 ug/l		98
95) Naphthalene	13.755	128	511355	132.536 ug/l		99
96) 1,2,3-Trichlorobenzene	13.944	180	169248	125.328 ug/l		98

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102025\
Data File : VX048233.D
Acq On : 20 Oct 2025 12:22
Operator : JC/MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :John Carlone 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

Quant Time: Oct 20 12:46:16 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 12:35:14 2025
Response via : Initial Calibration

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

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

ICAL Form

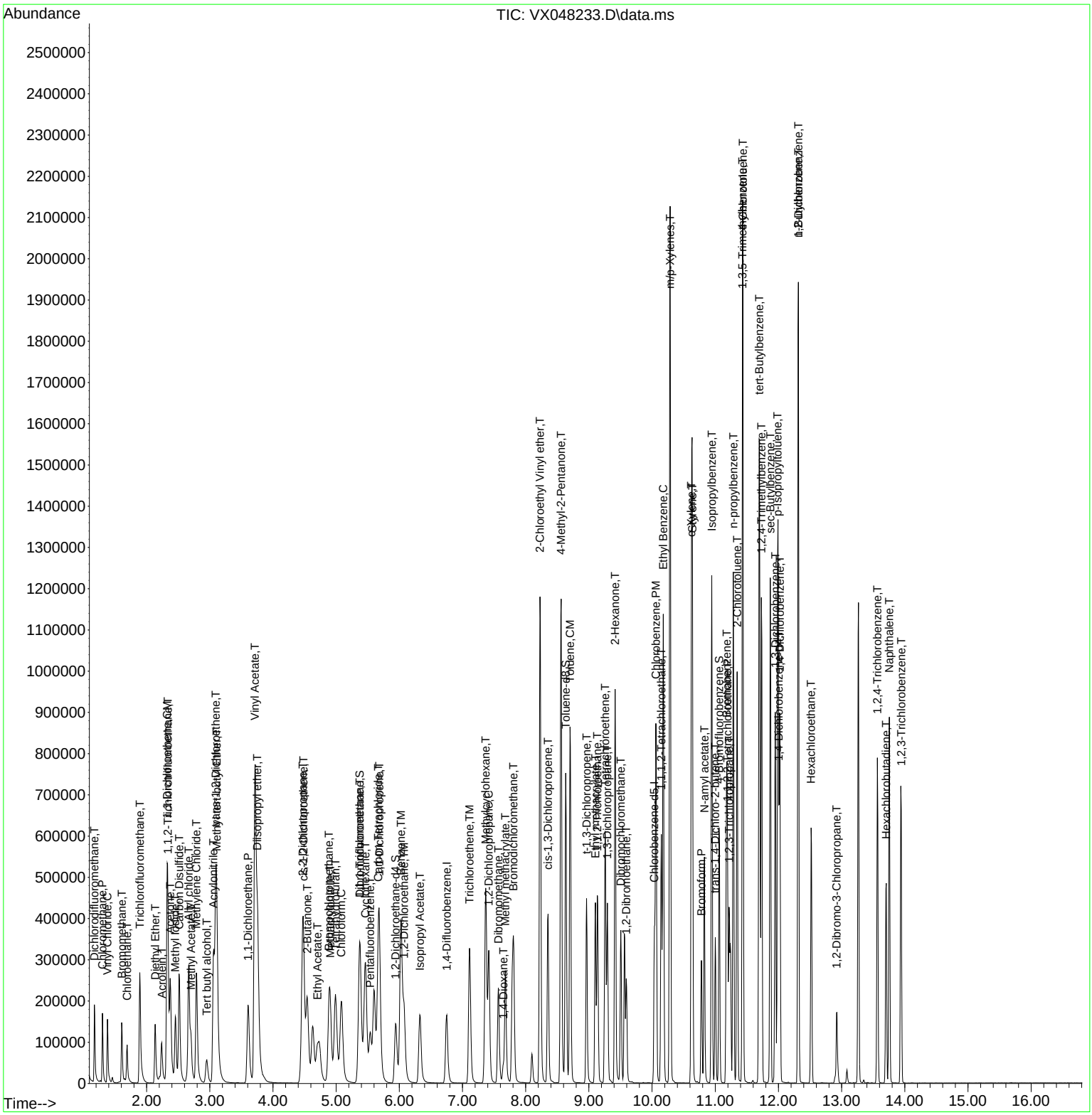
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102025\
Data File : VX048233.D
Acq On : 20 Oct 2025 12:22
Operator : JC/MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 20 12:46:16 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 12:35:14 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :John Carlone 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102025\
Data File : VX048234.D
Acq On : 20 Oct 2025 12:43
Operator : JC/MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :John Carlone 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

Quant Time: Oct 20 13:01:04 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 12:35:14 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.538	168	112063	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.751	114	180904	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.037	117	155759	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.006	152	75397	50.000	ug/l	# 0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.946	65	234807	135.251	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 270.500%#			
35) Dibromofluoromethane	5.373	113	188821	150.393	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 300.780%#			
50) Toluene-d8	8.635	98	648652	143.408	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery = 286.820%#			
62) 4-Bromofluorobenzene	11.061	95	239298	145.255	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery = 290.520%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.173	85	169514	144.124	ug/l	95
3) Chloromethane	1.301	50	158322	111.112	ug/l	99
4) Vinyl Chloride	1.380	62	149708	99.710	ug/l	99
5) Bromomethane	1.605	94	92946	93.091	ug/l	97
6) Chloroethane	1.685	64	89813	93.997	ug/l	96
7) Trichlorofluoromethane	1.892	101	292007	123.905	ug/l	99
8) Diethyl Ether	2.136	74	81474	101.352	ug/l	88
9) 1,1,2-Trichlorotrifluo...	2.331	101	184438	138.880	ug/l	96
10) Methyl Iodide	2.453	142	249395	156.785	ug/l	100
11) Tert butyl alcohol	2.959	59	107295	931.439	ug/l	100
12) 1,1-Dichloroethene	2.325	96	178408	137.389	ug/l	95
13) Acrolein	2.239	56	123365	509.584	ug/l	99
14) Allyl chloride	2.666	41	293697	125.734	ug/l	98
15) Acrylonitrile	3.062	53	412892	748.019	ug/l	100
16) Acetone	2.380	43	347029	585.970	ug/l	99
17) Carbon Disulfide	2.514	76	515144	128.936	ug/l	100
18) Methyl Acetate	2.697	43	169402	140.438	ug/l	93
19) Methyl tert-butyl Ether	3.111	73	593033	151.611	ug/l	97
20) Methylene Chloride	2.788	84	190483	132.030	ug/l	94
21) trans-1,2-Dichloroethene	3.093	96	187495	139.566	ug/l	98
22) Diisopropyl ether	3.757	45	571951	125.048	ug/l	93
23) Vinyl Acetate	3.715	43	2367511	692.251	ug/l	96
24) 1,1-Dichloroethane	3.605	63	342500	131.992	ug/l	99
25) 2-Butanone	4.544	43	487152	706.046	ug/l	96
26) 2,2-Dichloropropane	4.465	77	310572	140.027	ug/l	100
27) cis-1,2-Dichloroethene	4.483	96	222359	139.465	ug/l	98
28) Bromochloromethane	4.891	49	151812	126.922	ug/l	87
29) Tetrahydrofuran	4.989	42	301745	744.697	ug/l	94
30) Chloroform	5.080	83	358626	131.272	ug/l	98
31) Cyclohexane	5.464	56	291302	137.199	ug/l	91
32) 1,1,1-Trichloroethane	5.373	97	338462	150.785	ug/l	98
36) 1,1-Dichloropropene	5.684	75	249688	141.173	ug/l	99
37) Ethyl Acetate	4.702	43	208614	147.588	ug/l	97
38) Carbon Tetrachloride	5.666	117	307892	151.663	ug/l	100
39) Methylcyclohexane	7.367	83	315911	158.416	ug/l	95
40) Benzene	6.025	78	730908	139.172	ug/l	97

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102025\
Data File : VX048234.D
Acq On : 20 Oct 2025 12:43
Operator : JC/MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 20 13:01:04 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 12:35:14 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :John Carlone 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	4.910	41	115351	152.378	ug/l		97
42) 1,2-Dichloroethane	6.074	62	269245	143.093	ug/l		99
43) Isopropyl Acetate	6.324	43	361084	152.180	ug/l		96
44) Trichloroethene	7.110	130	197244	149.022	ug/l		98
45) 1,2-Dichloropropane	7.415	63	180619	135.890	ug/l		99
46) Dibromomethane	7.568	93	135105	141.273	ug/l		94
47) Bromodichloromethane	7.805	83	292063	141.302	ug/l		97
48) Methyl methacrylate	7.677	41	184354	151.780	ug/l		95
49) 1,4-Dioxane	7.647	88	49895	4563.512	ug/l		88
51) 4-Methyl-2-Pentanone	8.561	43	983125	744.604	ug/l		94
52) Toluene	8.702	92	460742	145.964	ug/l		99
53) t-1,3-Dichloropropene	8.964	75	300251	155.059	ug/l		99
54) cis-1,3-Dichloropropene	8.354	75	317375	150.373	ug/l		94
55) 1,1,2-Trichloroethane	9.135	97	169894	144.250	ug/l		98
56) Ethyl methacrylate	9.104	69	272177	169.911	ug/l		94
57) 1,3-Dichloropropane	9.293	76	293650	142.707	ug/l		99
58) 2-Chloroethyl Vinyl ether	8.232	63	705780	858.056	ug/l		95
59) 2-Hexanone	9.415	43	694736	752.256	ug/l		96
60) Dibromochloromethane	9.506	129	226642	153.740	ug/l		99
61) 1,2-Dibromoethane	9.592	107	182208	150.876	ug/l		99
64) Tetrachloroethene	9.263	164	168581	154.361	ug/l		91
65) Chlorobenzene	10.061	112	514967	151.209	ug/l		99
66) 1,1,1,2-Tetrachloroethane	10.147	131	191186	155.782	ug/l		98
67) Ethyl Benzene	10.177	91	898137	153.825	ug/l		99
68) m/p-Xylenes	10.287	106	661019	303.896	ug/l		99
69) o-Xylene	10.622	106	320334	156.444	ug/l		99
70) Styrene	10.640	104	548149	155.523	ug/l		98
71) Bromoform	10.781	173	152209	168.892	ug/l	#	99
73) Isopropylbenzene	10.945	105	849183	161.931	ug/l		100
74) N-amyl acetate	10.829	43	314879	160.952	ug/l		95
75) 1,1,2,2-Tetrachloroethane	11.195	83	224486	151.104	ug/l		99
76) 1,2,3-Trichloropropane	11.220	75	181434m	157.586	ug/l		
77) Bromobenzene	11.183	156	207212	157.899	ug/l		94
78) n-propylbenzene	11.287	91	991960	155.984	ug/l		98
79) 2-Chlorotoluene	11.348	91	585792	152.465	ug/l		99
80) 1,3,5-Trimethylbenzene	11.433	105	699885	162.591	ug/l		100
81) trans-1,4-Dichloro-2-b...	11.000	75	83158	176.858	ug/l		97
82) 4-Chlorotoluene	11.439	91	691903	153.240	ug/l		99
83) tert-Butylbenzene	11.695	119	717642	165.020	ug/l		98
84) 1,2,4-Trimethylbenzene	11.732	105	707074	164.961	ug/l		99
85) sec-Butylbenzene	11.872	105	861466	162.035	ug/l		100
86) p-Isopropyltoluene	11.994	119	738496	164.794	ug/l		99
87) 1,3-Dichlorobenzene	11.951	146	386062	157.307	ug/l		99
88) 1,4-Dichlorobenzene	12.024	146	386885	152.078	ug/l		100
89) n-Butylbenzene	12.311	91	664071	159.098	ug/l		99
90) Hexachloroethane	12.518	117	145813	154.159	ug/l		94
91) 1,2-Dichlorobenzene	12.317	146	359278	154.946	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	12.920	75	50367	185.536	ug/l		98
93) 1,2,4-Trichlorobenzene	13.567	180	247472	180.791	ug/l		100
94) Hexachlorobutadiene	13.707	225	92458	175.138	ug/l		100
95) Naphthalene	13.756	128	719433	199.386	ug/l		100
96) 1,2,3-Trichlorobenzene	13.939	180	233671	185.022	ug/l		97

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102025\
Data File : VX048234.D
Acq On : 20 Oct 2025 12:43
Operator : JC/MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :John Carlone 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

Quant Time: Oct 20 13:01:04 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 12:35:14 2025
Response via : Initial Calibration

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

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

ICAL Form

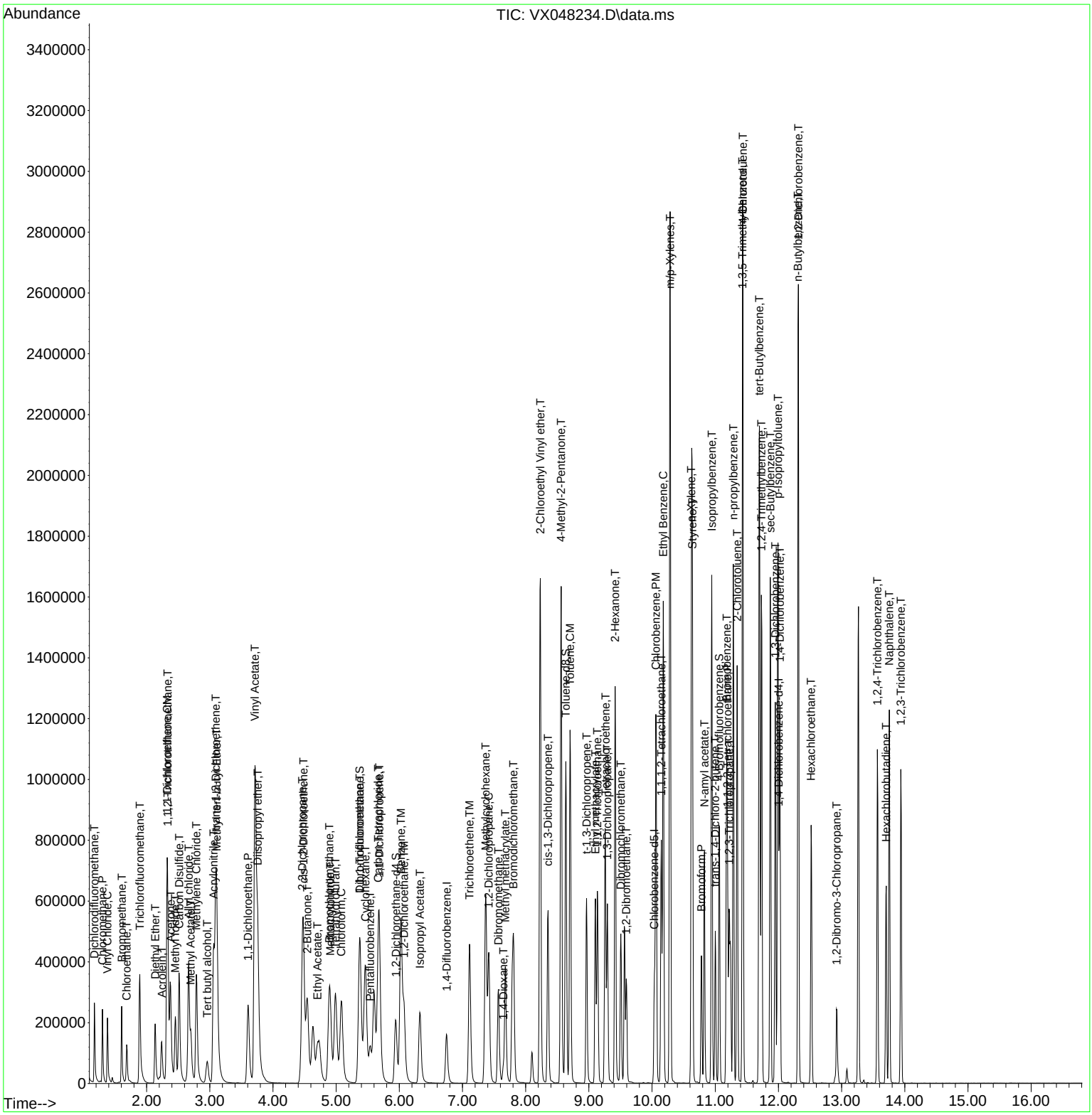
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102025\
Data File : VX048234.D
Acq On : 20 Oct 2025 12:43
Operator : JC/MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 20 13:01:04 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 12:35:14 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :John Carlone 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102025\
Data File : VX048236.D
Acq On : 20 Oct 2025 13:49
Operator : JC/MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :John Carlone 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

Quant Time: Oct 20 14:07:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 13:10:39 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.537	168	138374	50.000	ug/l		0.00
34) 1,4-Difluorobenzene	6.751	114	228619	50.000	ug/l		0.00
63) Chlorobenzene-d5	10.037	117	208481	50.000	ug/l		0.00
72) 1,4-Dichlorobenzene-d4	12.006	152	105998	50.000	ug/l		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4	5.940	65	10036	4.008	ug/l		0.00
Spiked Amount 50.000	Range 78 - 117		Recovery =	8.020%#			
35) Dibromofluoromethane	5.379	113	7733	3.839	ug/l		0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	7.680%#			
50) Toluene-d8	8.634	98	27914	3.999	ug/l		0.00
Spiked Amount 50.000	Range 92 - 112		Recovery =	8.000%#			
62) 4-Bromofluorobenzene	11.067	95	11429	4.042	ug/l		0.00
Spiked Amount 50.000	Range 83 - 123		Recovery =	8.080%#			
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.172	85	7219	5.194	ug/l		93
3) Chloromethane	1.300	50	7032	5.531	ug/l		95
4) Vinyl Chloride	1.380	62	6338	5.341	ug/l		98
5) Bromomethane	1.611	94	4789	5.918	ug/l		99
6) Chloroethane	1.691	64	3610	5.085	ug/l		99
7) Trichlorofluoromethane	1.898	101	12170	5.319	ug/l		96
8) Diethyl Ether	2.136	74	3283	5.035	ug/l		87
9) 1,1,2-Trichlorotrifluo...	2.337	101	7656	5.264	ug/l		92
10) Methyl Iodide	2.453	142	7871	4.284	ug/l		98
11) Tert butyl alcohol	2.940	59	5994	33.503	ug/l	#	80
12) 1,1-Dichloroethene	2.325	96	7107	4.991	ug/l		91
13) Acrolein	2.233	56	5456	27.637	ug/l		96
14) Allyl chloride	2.666	41	11531	4.839	ug/l		96
15) Acrylonitrile	3.062	53	16982	24.912	ug/l		97
16) Acetone	2.373	43	18141	27.636	ug/l		100
17) Carbon Disulfide	2.520	76	23369	5.270	ug/l		96
18) Methyl Acetate	2.703	43	6418	4.639	ug/l		98
19) Methyl tert-butyl Ether	3.111	73	22931	4.663	ug/l		97
20) Methylene Chloride	2.788	84	8228	5.163	ug/l	#	81
21) trans-1,2-Dichloroethene	3.093	96	8343	5.393	ug/l		94
22) Diisopropyl ether	3.757	45	23533	4.984	ug/l	#	97
23) Vinyl Acetate	3.721	43	91771	24.336	ug/l	#	90
24) 1,1-Dichloroethane	3.605	63	14582	5.126	ug/l	#	97
25) 2-Butanone	4.550	43	21808	26.293	ug/l	#	89
26) 2,2-Dichloropropane	4.471	77	13077	5.066	ug/l		99
27) cis-1,2-Dichloroethene	4.483	96	9312	5.084	ug/l		96
28) Bromochloromethane	4.885	49	6488	5.474	ug/l	#	89
29) Tetrahydrofuran	4.995	42	12637	25.353	ug/l		98
30) Chloroform	5.086	83	15814	5.159	ug/l		96
31) Cyclohexane	5.458	56	11661	4.943	ug/l		98
32) 1,1,1-Trichloroethane	5.367	97	14399	5.115	ug/l		98
36) 1,1-Dichloropropene	5.684	75	10855	5.001	ug/l		99
37) Ethyl Acetate	4.702	43	9058m	4.970	ug/l		
38) Carbon Tetrachloride	5.672	117	14225	5.323	ug/l	#	81
39) Methylcyclohexane	7.366	83	13491	5.318	ug/l		97
40) Benzene	6.031	78	32115	5.103	ug/l		99

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102025\
Data File : VX048236.D
Acq On : 20 Oct 2025 13:49
Operator : JC/MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 20 14:07:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 13:10:39 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :John Carlone 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	4.922	41	4538m	4.817	ug/l		
42) 1,2-Dichloroethane	6.074	62	11412	4.870	ug/l		100
43) Isopropyl Acetate	6.330	43	13996	4.656	ug/l	#	93
44) Trichloroethene	7.110	130	8373	5.009	ug/l		93
45) 1,2-Dichloropropane	7.415	63	7709	5.129	ug/l		99
46) Dibromomethane	7.568	93	6041	5.181	ug/l		91
47) Bromodichloromethane	7.811	83	12974	5.126	ug/l		97
48) Methyl methacrylate	7.683	41	6863	4.542	ug/l		94
49) 1,4-Dioxane	7.659	88	2020	103.402	ug/l		97
51) 4-Methyl-2-Pentanone	8.555	43	42725	24.936	ug/l		97
52) Toluene	8.708	92	21137	5.296	ug/l		97
53) t-1,3-Dichloropropene	8.964	75	12015	4.914	ug/l		98
54) cis-1,3-Dichloropropene	8.354	75	12702	4.820	ug/l		90
55) 1,1,2-Trichloroethane	9.140	97	8113	5.453	ug/l		91
56) Ethyl methacrylate	9.104	69	10320	4.713	ug/l		94
57) 1,3-Dichloropropane	9.293	76	13087	5.112	ug/l		99
58) 2-Chloroethyl Vinyl ether	8.232	63	20764	19.525	ug/l		98
59) 2-Hexanone	9.415	43	30949	25.896	ug/l		96
60) Dibromochloromethane	9.506	129	10082	5.028	ug/l		99
61) 1,2-Dibromoethane	9.592	107	8079	5.075	ug/l		100
64) Tetrachloroethene	9.256	164	8020	5.341	ug/l		92
65) Chlorobenzene	10.061	112	23873	5.236	ug/l		97
66) 1,1,1,2-Tetrachloroethane	10.146	131	8450	5.012	ug/l		98
67) Ethyl Benzene	10.177	91	39121	5.044	ug/l		96
68) m/p-Xylenes	10.287	106	30310	10.586	ug/l		97
69) o-Xylene	10.628	106	14262	5.128	ug/l		98
70) Styrene	10.640	104	24289	5.138	ug/l		98
71) Bromoform	10.780	173	6766	5.031	ug/l	#	96
73) Isopropylbenzene	10.945	105	37935	5.082	ug/l		99
74) N-amyl acetate	10.829	43	12188	4.544	ug/l		97
75) 1,1,2,2-Tetrachloroethane	11.195	83	10324	4.992	ug/l		98
76) 1,2,3-Trichloropropane	11.225	75	8134m	4.889	ug/l		
77) Bromobenzene	11.183	156	9508	5.027	ug/l		94
78) n-propylbenzene	11.286	91	44189	5.097	ug/l		99
79) 2-Chlorotoluene	11.347	91	26627	5.032	ug/l		98
80) 1,3,5-Trimethylbenzene	11.433	105	30618	4.910	ug/l		99
81) trans-1,4-Dichloro-2-b...	11.000	75	3038	4.387	ug/l		96
82) 4-Chlorotoluene	11.439	91	31357	5.017	ug/l		97
83) tert-Butylbenzene	11.695	119	32297	5.086	ug/l		96
84) 1,2,4-Trimethylbenzene	11.731	105	31709	5.129	ug/l		100
85) sec-Butylbenzene	11.872	105	39113	5.118	ug/l		99
86) p-Isopropyltoluene	11.994	119	34155	5.185	ug/l		99
87) 1,3-Dichlorobenzene	11.951	146	18546	5.256	ug/l		99
88) 1,4-Dichlorobenzene	12.024	146	18787	5.081	ug/l		91
89) n-Butylbenzene	12.317	91	30409	5.069	ug/l		99
90) Hexachloroethane	12.518	117	6863	5.210	ug/l		98
91) 1,2-Dichlorobenzene	12.317	146	16849	5.076	ug/l		98
92) 1,2-Dibromo-3-Chloropr...	12.926	75	1984	4.680	ug/l		98
93) 1,2,4-Trichlorobenzene	13.573	180	10538	4.693	ug/l		98
94) Hexachlorobutadiene	13.707	225	5113	4.948	ug/l		96
95) Naphthalene	13.756	128	26218	4.374	ug/l		98
96) 1,2,3-Trichlorobenzene	13.944	180	10040	4.906	ug/l		97

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102025\
Data File : VX048236.D
Acq On : 20 Oct 2025 13:49
Operator : JC/MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :John Carlone 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

Quant Time: Oct 20 14:07:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 13:10:39 2025
Response via : Initial Calibration

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

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

ICAL Form

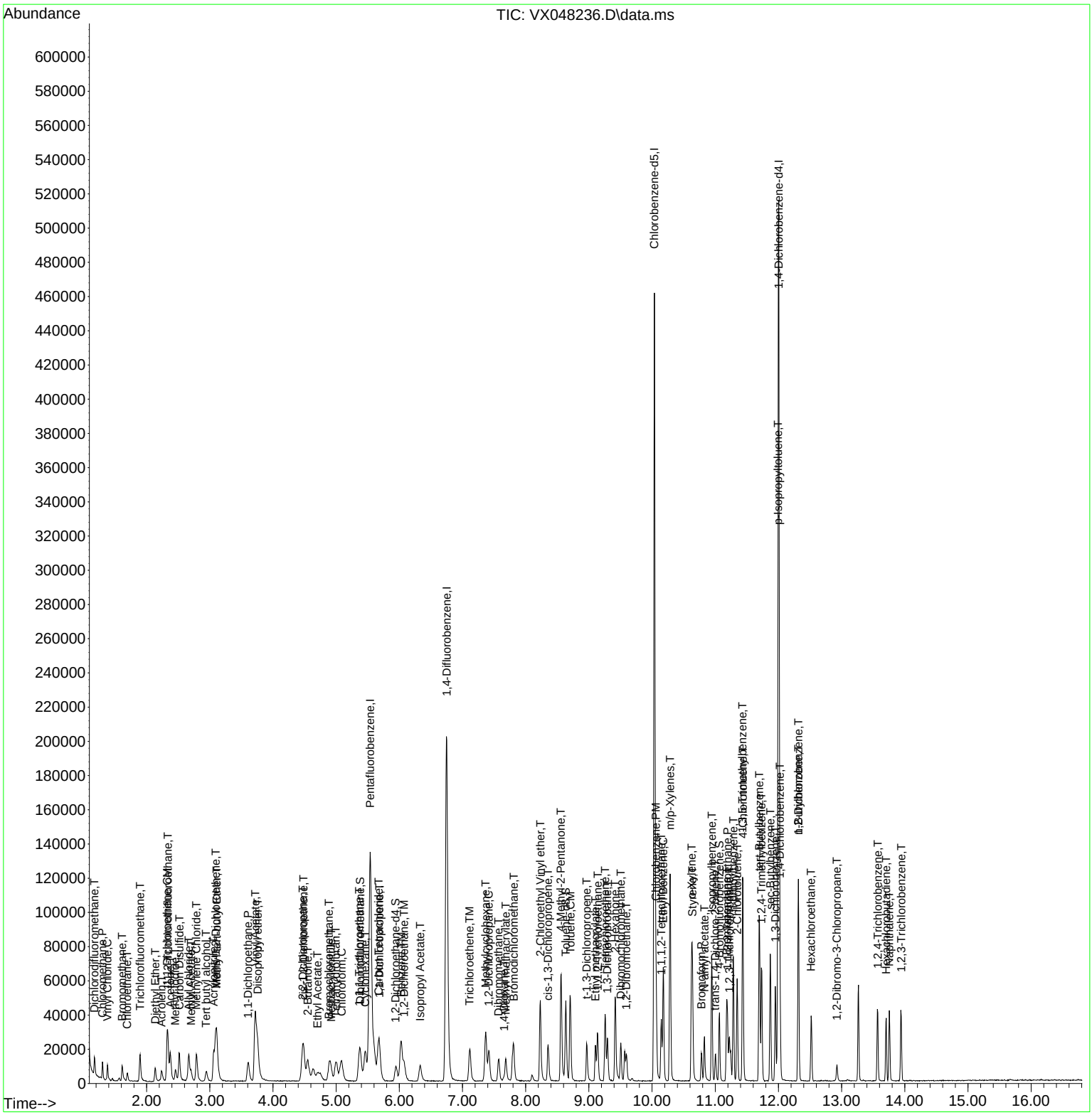
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102025\
Data File : VX048236.D
Acq On : 20 Oct 2025 13:49
Operator : JC/MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 20 14:07:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 13:10:39 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :John Carlone 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102025\
Data File : VX048237.D
Acq On : 20 Oct 2025 14:28
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 13 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX102025

Manual Integrations APPROVED

Reviewed By :John Carlone 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

Quant Time: Oct 20 16:37:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 14:13:59 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.531	168	144715	50.000	ug/l	-0.01
34) 1,4-Difluorobenzene	6.739	114	229650	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.037	117	201397	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.000	152	99108	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.934	65	92700	45.687	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 91.380%			
35) Dibromofluoromethane	5.367	113	76746	48.951	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 97.900%			
50) Toluene-d8	8.628	98	265898	48.386	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery = 96.780%			
62) 4-Bromofluorobenzene	11.061	95	97828	46.795	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery = 93.580%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.172	85	76365	51.331	ug/l	99
3) Chloromethane	1.301	50	74279	53.491	ug/l	99
4) Vinyl Chloride	1.380	62	71290	55.441	ug/l	99
5) Bromomethane	1.611	94	47863	54.847	ug/l	96
6) Chloroethane	1.691	64	42556	56.320	ug/l	95
7) Trichlorofluoromethane	1.892	101	128754	52.209	ug/l	97
8) Diethyl Ether	2.136	74	37292	53.742	ug/l	89
9) 1,1,2-Trichlorotrifluo...	2.331	101	83688	53.589	ug/l	96
10) Methyl Iodide	2.453	142	94222	47.994	ug/l	99
11) Tert butyl alcohol	2.934	59	45064	223.693	ug/l	98
12) 1,1-Dichloroethene	2.319	96	79070	52.043	ug/l	92
13) Acrolein	2.233	56	51257	249.473	ug/l	98
14) Allyl chloride	2.660	41	128896	51.099	ug/l	97
15) Acrylonitrile	3.050	53	182260	250.900	ug/l	100
16) Acetone	2.373	43	152988	219.789	ug/l	96
17) Carbon Disulfide	2.514	76	233630	48.792	ug/l	99
18) Methyl Acetate	2.697	43	71506	49.190	ug/l	94
19) Methyl tert-butyl Ether	3.105	73	254812	49.162	ug/l	98
20) Methylene Chloride	2.782	84	86610	51.066	ug/l	92
21) trans-1,2-Dichloroethene	3.087	96	85000	50.932	ug/l	96
22) Diisopropyl ether	3.745	45	259934	51.665	ug/l	99
23) Vinyl Acetate	3.709	43	1045584	260.168	ug/l	97
24) 1,1-Dichloroethane	3.599	63	150557	49.490	ug/l	99
25) 2-Butanone	4.532	43	209999	238.354	ug/l	97
26) 2,2-Dichloropropane	4.458	77	132433	48.230	ug/l	100
27) cis-1,2-Dichloroethene	4.471	96	98066	50.350	ug/l	96
28) Bromochloromethane	4.879	49	58764	46.587	ug/l	87
29) Tetrahydrofuran	4.977	42	127995	242.572	ug/l	95
30) Chloroform	5.074	83	157397	48.427	ug/l	99
31) Cyclohexane	5.458	56	132594	52.646	ug/l	92
32) 1,1,1-Trichloroethane	5.361	97	144706	48.309	ug/l	98
36) 1,1-Dichloropropene	5.672	75	109957	49.344	ug/l	100
37) Ethyl Acetate	4.690	43	88074	47.684	ug/l	98
38) Carbon Tetrachloride	5.659	117	132590	48.228	ug/l	99
39) Methylcyclohexane	7.360	83	138611	52.670	ug/l	94
40) Benzene	6.019	78	325041	50.241	ug/l	99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102025\
Data File : VX048237.D
Acq On : 20 Oct 2025 14:28
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 13 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX102025

Manual Integrations APPROVED

Reviewed By :John Carlone 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

Quant Time: Oct 20 16:37:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 14:13:59 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	4.891	41	48846	50.358	ug/l		95
42) 1,2-Dichloroethane	6.068	62	116893	48.963	ug/l		98
43) Isopropyl Acetate	6.318	43	151140	49.816	ug/l		95
44) Trichloroethene	7.104	130	86410	50.582	ug/l		96
45) 1,2-Dichloropropane	7.409	63	78439	50.994	ug/l		98
46) Dibromomethane	7.562	93	58616	48.913	ug/l		94
47) Bromodichloromethane	7.799	83	125388	48.459	ug/l		99
48) Methyl methacrylate	7.671	41	75812	49.519	ug/l		94
49) 1,4-Dioxane	7.635	88	20230	1000.197	ug/l		90
51) 4-Methyl-2-Pentanone	8.555	43	428393	244.897	ug/l		95
52) Toluene	8.702	92	205867	50.088	ug/l		99
53) t-1,3-Dichloropropene	8.958	75	124683	50.004	ug/l		100
54) cis-1,3-Dichloropropene	8.348	75	134360	49.944	ug/l		93
55) 1,1,2-Trichloroethane	9.134	97	75808	49.597	ug/l		98
56) Ethyl methacrylate	9.098	69	111702	49.964	ug/l		94
57) 1,3-Dichloropropane	9.287	76	128519	49.226	ug/l		99
58) 2-Chloroethyl Vinyl ether	8.220	63	290992	242.124	ug/l		96
59) 2-Hexanone	9.409	43	300183	246.102	ug/l		96
60) Dibromochloromethane	9.500	129	97643	47.530	ug/l		99
61) 1,2-Dibromoethane	9.592	107	80363	49.319	ug/l		97
64) Tetrachloroethene	9.256	164	73198	48.686	ug/l		95
65) Chlorobenzene	10.061	112	226953	50.095	ug/l		100
66) 1,1,1,2-Tetrachloroethane	10.140	131	81561	49.014	ug/l		99
67) Ethyl Benzene	10.177	91	391830	50.798	ug/l		99
68) m/p-Xylenes	10.281	106	293516	102.416	ug/l		99
69) o-Xylene	10.622	106	139515	50.424	ug/l		99
70) Styrene	10.634	104	243341	51.651	ug/l		100
71) Bromoform	10.781	173	64170	48.250	ug/l	#	99
73) Isopropylbenzene	10.945	105	373948	51.658	ug/l		100
74) N-amyl acetate	10.823	43	131979	51.399	ug/l		96
75) 1,1,2,2-Tetrachloroethane	11.195	83	98715	49.936	ug/l		98
76) 1,2,3-Trichloropropane	11.219	75	81093m	50.456	ug/l		
77) Bromobenzene	11.177	156	91000	50.135	ug/l		94
78) n-propylbenzene	11.287	91	435662	51.980	ug/l		99
79) 2-Chlorotoluene	11.341	91	257936	50.760	ug/l		99
80) 1,3,5-Trimethylbenzene	11.433	105	305027	50.918	ug/l		99
81) trans-1,4-Dichloro-2-b...	11.000	75	33027	49.995	ug/l		96
82) 4-Chlorotoluene	11.433	91	304670	50.507	ug/l		98
83) tert-Butylbenzene	11.695	119	309524	50.288	ug/l		99
84) 1,2,4-Trimethylbenzene	11.732	105	308529	51.607	ug/l		100
85) sec-Butylbenzene	11.872	105	379368	51.230	ug/l		100
86) p-Isopropyltoluene	11.988	119	324425	50.686	ug/l		100
87) 1,3-Dichlorobenzene	11.951	146	165027	48.229	ug/l		98
88) 1,4-Dichlorobenzene	12.024	146	168102	47.423	ug/l		99
89) n-Butylbenzene	12.311	91	289706	49.728	ug/l		99
90) Hexachloroethane	12.518	117	61223	48.437	ug/l		95
91) 1,2-Dichlorobenzene	12.317	146	157812	49.123	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	12.920	75	19691	49.072	ug/l		98
93) 1,2,4-Trichlorobenzene	13.567	180	101983	46.941	ug/l		99
94) Hexachlorobutadiene	13.707	225	39299	48.274	ug/l		99
95) Naphthalene	13.756	128	289882	50.362	ug/l		100
96) 1,2,3-Trichlorobenzene	13.938	180	96139	48.223	ug/l		97

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102025\
Data File : VX048237.D
Acq On : 20 Oct 2025 14:28
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 13 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX102025

Manual Integrations APPROVED

Reviewed By :John Carlone 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025

Quant Time: Oct 20 16:37:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 14:13:59 2025
Response via : Initial Calibration

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

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

ICAL Form

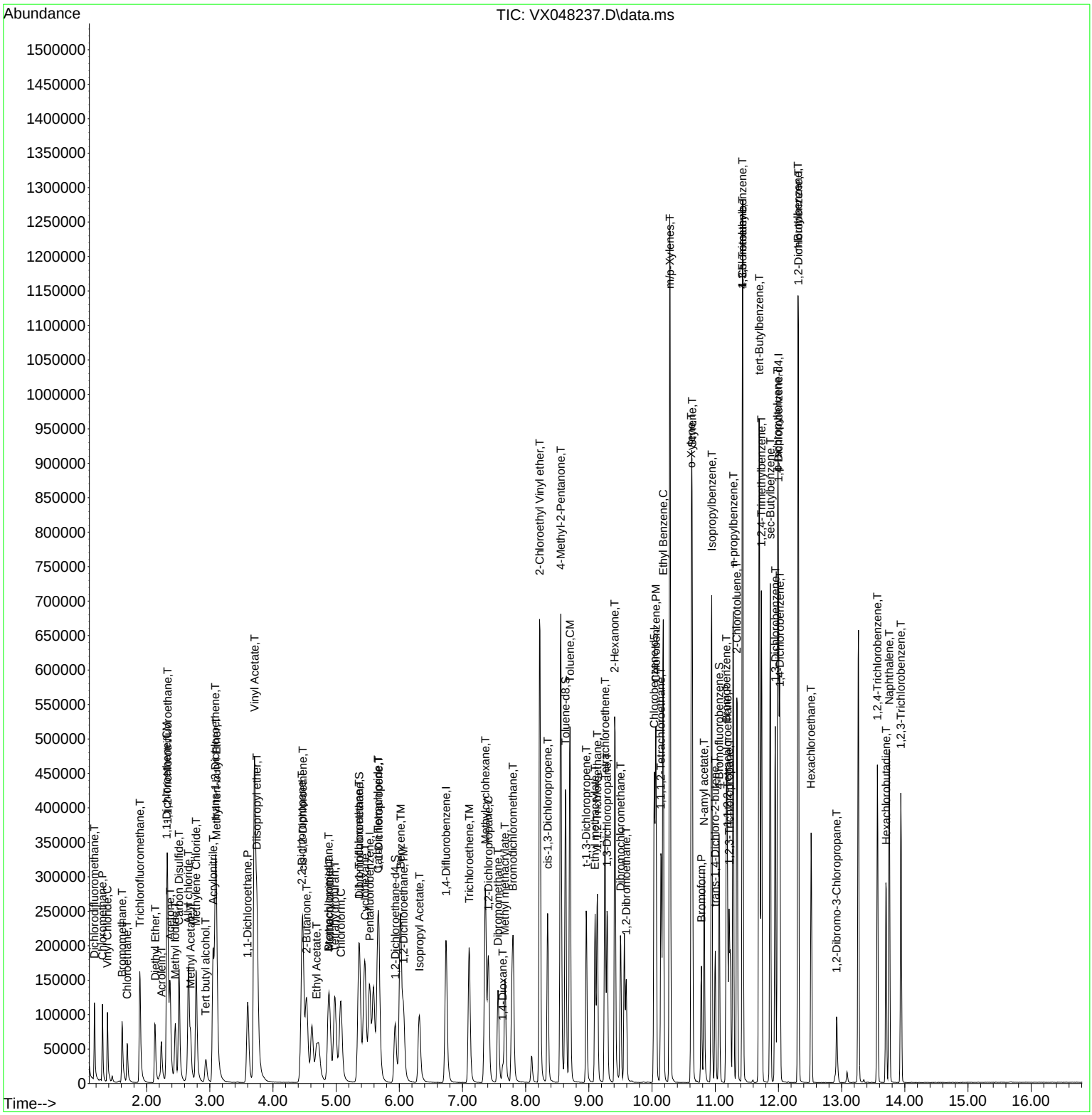
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102025\
Data File : VX048237.D
Acq On : 20 Oct 2025 14:28
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 20 16:37:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 14:13:59 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
ICVVX102025

Manual Integrations APPROVED

Reviewed By :John Carlone 10/21/2025
Supervised By :Semsettin Yesilyurt 10/21/2025



Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102025\
Data File : VX048237.D
Acq On : 20 Oct 2025 14:28
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 13 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX102025

Quant Time: Oct 20 16:37:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 14:13:59 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	116	-0.01
2	T	Dichlorodifluoromethane	0.514	0.528	-2.7	127	0.00
3	P	Chloromethane	0.480	0.513	-6.9	133	0.00
4	C	Vinyl Chloride	0.444	0.493	-11.0#	138	0.00
5	T	Bromomethane	0.302	0.331	-9.6	136	0.00
6	T	Chloroethane	0.261	0.294	-12.6	139	0.00
7	T	Trichlorofluoromethane	0.852	0.890	-4.5	128	0.00
8	T	Diethyl Ether	0.240	0.258	-7.5	135	0.00
9	T	1,1,2-Trichlorotrifluoroeth	0.540	0.578	-7.0	134	0.00
10	T	Methyl Iodide	0.678	0.651	4.0	114	0.00
11	T	Tert butyl alcohol	0.070	0.062	11.4	117	0.00
12	CM	1,1-Dichloroethene	0.525	0.546	-4.0#	131	0.00
13	T	Acrolein	0.071	0.071	0.0	126	0.00
14	T	Allyl chloride	0.872	0.891	-2.2	129	0.00
15	T	Acrylonitrile	0.251	0.252	-0.4	122	0.00
16	T	Acetone	0.240	0.211	12.1	121	0.00
17	T	Carbon Disulfide	1.654	1.614	2.4	130	0.00
18	T	Methyl Acetate	0.502	0.494	1.6	123	0.00
19	T	Methyl tert-butyl Ether	1.791	1.761	1.7	120	0.00
20	T	Methylene Chloride	0.586	0.598	-2.0	126	0.00
21	T	trans-1,2-Dichloroethene	0.577	0.587	-1.7	128	0.00
22	T	Diisopropyl ether	1.738	1.796	-3.3	126	0.00
23	T	Vinyl Acetate	1.389	1.445	-4.0	125	0.00
24	P	1,1-Dichloroethane	1.051	1.040	1.0	124	0.00
25	T	2-Butanone	0.304	0.290	4.6	120	0.00
26	T	2,2-Dichloropropane	0.949	0.915	3.6	121	0.00
27	T	cis-1,2-Dichloroethene	0.673	0.678	-0.7	126	-0.01
28	T	Bromochloromethane	0.436	0.406	6.9	107	0.00
29	T	Tetrahydrofuran	0.182	0.177	2.7	120	-0.01
30	C	Chloroform	1.123	1.088	3.1#	121	0.00
31	T	Cyclohexane	0.870	0.916	-5.3	130	0.00
32	T	1,1,1-Trichloroethane	1.035	1.000	3.4	120	-0.01
33	S	1,2-Dichloroethane-d4	0.701	0.641	8.6	109	0.00
34	I	1,4-Difluorobenzene	1.000	1.000	0.0	114	0.00
35	S	Dibromofluoromethane	0.341	0.334	2.1	115	0.00
36	T	1,1-Dichloropropene	0.485	0.479	1.2	126	-0.01
37	T	Ethyl Acetate	0.402	0.384	4.5	119	0.00
38	T	Carbon Tetrachloride	0.599	0.577	3.7	119	0.00
39	T	Methylcyclohexane	0.573	0.604	-5.4	127	0.00
40	TM	Benzene	1.409	1.415	-0.4	124	0.00
41	T	Methacrylonitrile	0.211	0.213	-0.9	118	-0.01
42	TM	1,2-Dichloroethane	0.520	0.509	2.1	116	0.00
43	T	Isopropyl Acetate	0.661	0.658	0.5	118	0.00
44	TM	Trichloroethene	0.372	0.376	-1.1	123	0.00
45	C	1,2-Dichloropropane	0.335	0.342	-2.1#	121	0.00
46	T	Dibromomethane	0.261	0.255	2.3	118	0.00
47	T	Bromodichloromethane	0.563	0.546	3.0	115	0.00
48	T	Methyl methacrylate	0.333	0.330	0.9	117	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102025\
Data File : VX048237.D
Acq On : 20 Oct 2025 14:28
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 13 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX102025

Quant Time: Oct 20 16:37:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 14:13:59 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	0.004	0.004	0.0	113	0.00
50	S	Toluene-d8	1.196	1.158	3.2	111	0.00
51	T	4-Methyl-2-Pentanone	0.381	0.373	2.1	113	0.00
52	CM	Toluene	0.895	0.896	-0.1#	118	0.00
53	T	t-1,3-Dichloropropene	0.543	0.543	0.0	113	0.00
54	T	cis-1,3-Dichloropropene	0.586	0.585	0.2	116	0.00
55	T	1,1,2-Trichloroethane	0.333	0.330	0.9	117	0.00
56	T	Ethyl methacrylate	0.487	0.486	0.2	113	0.00
57	T	1,3-Dichloropropane	0.568	0.560	1.4	116	0.00
58	T	2-Chloroethyl Vinyl ether	0.232	0.253	-9.1	111	0.00
59	T	2-Hexanone	0.266	0.261	1.9	112	0.00
60	T	Dibromochloromethane	0.447	0.425	4.9	114	0.00
61	T	1,2-Dibromoethane	0.355	0.350	1.4	116	0.00
62	S	4-Bromofluorobenzene	0.455	0.426	6.4	109	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	109	0.00
64	T	Tetrachloroethene	0.373	0.363	2.7	121	0.00
65	PM	Chlorobenzene	1.125	1.127	-0.2	118	0.00
66	T	1,1,1,2-Tetrachloroethane	0.413	0.405	1.9	113	0.00
67	C	Ethyl Benzene	1.915	1.946	-1.6#	116	0.00
68	T	m/p-Xylenes	0.712	0.729	-2.4	116	0.00
69	T	o-Xylene	0.687	0.693	-0.9	114	0.00
70	T	Styrene	1.170	1.208	-3.2	115	0.00
71	P	Bromoform	0.330	0.319	3.3	113	0.00
72	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	107	0.00
73	T	Isopropylbenzene	3.652	3.773	-3.3	118	0.00
74	T	N-amyl acetate	1.295	1.332	-2.9	114	0.00
75	P	1,1,2,2-Tetrachloroethane	0.997	0.996	0.1	113	0.00
76	T	1,2,3-Trichloropropane	0.811	0.818	-0.9	119	0.00
77	T	Bromobenzene	0.916	0.918	-0.2	114	0.00
78	T	n-propylbenzene	4.228	4.396	-4.0	117	0.00
79	T	2-Chlorotoluene	2.564	2.603	-1.5	116	0.00
80	T	1,3,5-Trimethylbenzene	3.022	3.078	-1.9	115	0.00
81	T	trans-1,4-Dichloro-2-butene	0.333	0.333	0.0	113	0.00
82	T	4-Chlorotoluene	3.043	3.074	-1.0	114	0.00
83	T	tert-Butylbenzene	3.105	3.123	-0.6	115	0.00
84	T	1,2,4-Trimethylbenzene	3.016	3.113	-3.2	116	0.00
85	T	sec-Butylbenzene	3.736	3.828	-2.5	118	0.00
86	T	p-Isopropyltoluene	3.229	3.273	-1.4	117	0.00
87	T	1,3-Dichlorobenzene	1.726	1.665	3.5	115	0.00
88	T	1,4-Dichlorobenzene	1.788	1.696	5.1	115	0.00
89	T	n-Butylbenzene	2.939	2.923	0.5	119	0.00
90	T	Hexachloroethane	0.638	0.618	3.1	116	0.00
91	T	1,2-Dichlorobenzene	1.621	1.592	1.8	114	0.00
92	T	1,2-Dibromo-3-Chloropropane	0.202	0.199	1.5	109	0.00
93	T	1,2,4-Trichlorobenzene	1.096	1.029	6.1	115	0.00
94	T	Hexachlorobutadiene	0.507	0.397	21.7	114	0.00
95	T	Naphthalene	2.904	2.925	-0.7	113	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102025\
Data File : VX048237.D
Acq On : 20 Oct 2025 14:28
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 13 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX102025

Quant Time: Oct 20 16:37:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 14:13:59 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	1.006	0.970	3.6	114	0.00

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

Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102025\
Data File : VX048237.D
Acq On : 20 Oct 2025 14:28
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 13 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX102025

Quant Time: Oct 20 16:37:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 14:13:59 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	116	-0.01
2	T	Dichlorodifluoromethane	50.000	51.331	-2.7	127	0.00
3	P	Chloromethane	50.000	53.491	-7.0	133	0.00
4	C	Vinyl Chloride	50.000	55.441	-10.9#	138	0.00
5	T	Bromomethane	50.000	54.847	-9.7	136	0.00
6	T	Chloroethane	50.000	56.320	-12.6	139	0.00
7	T	Trichlorofluoromethane	50.000	52.209	-4.4	128	0.00
8	T	Diethyl Ether	50.000	53.742	-7.5	135	0.00
9	T	1,1,2-Trichlorotrifluoroeth	50.000	53.589	-7.2	134	0.00
10	T	Methyl Iodide	50.000	47.994	4.0	114	0.00
11	T	Tert butyl alcohol	250.000	223.693	10.5	117	0.00
12	CM	1,1-Dichloroethene	50.000	52.043	-4.1#	131	0.00
13	T	Acrolein	250.000	249.473	0.2	126	0.00
14	T	Allyl chloride	50.000	51.099	-2.2	129	0.00
15	T	Acrylonitrile	250.000	250.900	-0.4	122	0.00
16	T	Acetone	250.000	219.789	12.1	121	0.00
17	T	Carbon Disulfide	50.000	48.792	2.4	130	0.00
18	T	Methyl Acetate	50.000	49.190	1.6	123	0.00
19	T	Methyl tert-butyl Ether	50.000	49.162	1.7	120	0.00
20	T	Methylene Chloride	50.000	51.066	-2.1	126	0.00
21	T	trans-1,2-Dichloroethene	50.000	50.932	-1.9	128	0.00
22	T	Diisopropyl ether	50.000	51.665	-3.3	126	0.00
23	T	Vinyl Acetate	250.000	260.168	-4.1	125	0.00
24	P	1,1-Dichloroethane	50.000	49.490	1.0	124	0.00
25	T	2-Butanone	250.000	238.354	4.7	120	0.00
26	T	2,2-Dichloropropane	50.000	48.230	3.5	121	0.00
27	T	cis-1,2-Dichloroethene	50.000	50.350	-0.7	126	-0.01
28	T	Bromochloromethane	50.000	46.587	6.8	107	0.00
29	T	Tetrahydrofuran	250.000	242.572	3.0	120	-0.01
30	C	Chloroform	50.000	48.427	3.1#	121	0.00
31	T	Cyclohexane	50.000	52.646	-5.3	130	0.00
32	T	1,1,1-Trichloroethane	50.000	48.309	3.4	120	-0.01
33	S	1,2-Dichloroethane-d4	50.000	45.687	8.6	109	0.00
34	I	1,4-Difluorobenzene	50.000	50.000	0.0	114	0.00
35	S	Dibromofluoromethane	50.000	48.951	2.1	115	0.00
36	T	1,1-Dichloropropene	50.000	49.344	1.3	126	-0.01
37	T	Ethyl Acetate	50.000	47.684	4.6	119	0.00
38	T	Carbon Tetrachloride	50.000	48.228	3.5	119	0.00
39	T	Methylcyclohexane	50.000	52.670	-5.3	127	0.00
40	TM	Benzene	50.000	50.241	-0.5	124	0.00
41	T	Methacrylonitrile	50.000	50.358	-0.7	118	-0.01
42	TM	1,2-Dichloroethane	50.000	48.963	2.1	116	0.00
43	T	Isopropyl Acetate	50.000	49.816	0.4	118	0.00
44	TM	Trichloroethene	50.000	50.582	-1.2	123	0.00
45	C	1,2-Dichloropropane	50.000	50.994	-2.0#	121	0.00
46	T	Dibromomethane	50.000	48.913	2.2	118	0.00
47	T	Bromodichloromethane	50.000	48.459	3.1	115	0.00
48	T	Methyl methacrylate	50.000	49.519	1.0	117	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102025\
Data File : VX048237.D
Acq On : 20 Oct 2025 14:28
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 13 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX102025

Quant Time: Oct 20 16:37:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 14:13:59 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	1000.197	-0.0	113	0.00
50	S	Toluene-d8	50.000	48.386	3.2	111	0.00
51	T	4-Methyl-2-Pentanone	250.000	244.897	2.0	113	0.00
52	CM	Toluene	50.000	50.088	-0.2#	118	0.00
53	T	t-1,3-Dichloropropene	50.000	50.004	-0.0	113	0.00
54	T	cis-1,3-Dichloropropene	50.000	49.944	0.1	116	0.00
55	T	1,1,2-Trichloroethane	50.000	49.597	0.8	117	0.00
56	T	Ethyl methacrylate	50.000	49.964	0.1	113	0.00
57	T	1,3-Dichloropropane	50.000	49.226	1.5	116	0.00
58	T	2-Chloroethyl Vinyl ether	250.000	242.124	3.2	111	0.00
59	T	2-Hexanone	250.000	246.102	1.6	112	0.00
60	T	Dibromochloromethane	50.000	47.530	4.9	114	0.00
61	T	1,2-Dibromoethane	50.000	49.319	1.4	116	0.00
62	S	4-Bromofluorobenzene	50.000	46.795	6.4	109	0.00
63	I	Chlorobenzene-d5	50.000	50.000	0.0	109	0.00
64	T	Tetrachloroethene	50.000	48.686	2.6	121	0.00
65	PM	Chlorobenzene	50.000	50.095	-0.2	118	0.00
66	T	1,1,1,2-Tetrachloroethane	50.000	49.014	2.0	113	0.00
67	C	Ethyl Benzene	50.000	50.798	-1.6#	116	0.00
68	T	m/p-Xylenes	100.000	102.416	-2.4	116	0.00
69	T	o-Xylene	50.000	50.424	-0.8	114	0.00
70	T	Styrene	50.000	51.651	-3.3	115	0.00
71	P	Bromoform	50.000	48.250	3.5	113	0.00
72	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	107	0.00
73	T	Isopropylbenzene	50.000	51.658	-3.3	118	0.00
74	T	N-amyl acetate	50.000	51.399	-2.8	114	0.00
75	P	1,1,2,2-Tetrachloroethane	50.000	49.936	0.1	113	0.00
76	T	1,2,3-Trichloropropane	50.000	50.456	-0.9	119	0.00
77	T	Bromobenzene	50.000	50.135	-0.3	114	0.00
78	T	n-propylbenzene	50.000	51.980	-4.0	117	0.00
79	T	2-Chlorotoluene	50.000	50.760	-1.5	116	0.00
80	T	1,3,5-Trimethylbenzene	50.000	50.918	-1.8	115	0.00
81	T	trans-1,4-Dichloro-2-butene	50.000	49.995	0.0	113	0.00
82	T	4-Chlorotoluene	50.000	50.507	-1.0	114	0.00
83	T	tert-Butylbenzene	50.000	50.288	-0.6	115	0.00
84	T	1,2,4-Trimethylbenzene	50.000	51.607	-3.2	116	0.00
85	T	sec-Butylbenzene	50.000	51.230	-2.5	118	0.00
86	T	p-Isopropyltoluene	50.000	50.686	-1.4	117	0.00
87	T	1,3-Dichlorobenzene	50.000	48.229	3.5	115	0.00
88	T	1,4-Dichlorobenzene	50.000	47.423	5.2	115	0.00
89	T	n-Butylbenzene	50.000	49.728	0.5	119	0.00
90	T	Hexachloroethane	50.000	48.437	3.1	116	0.00
91	T	1,2-Dichlorobenzene	50.000	49.123	1.8	114	0.00
92	T	1,2-Dibromo-3-Chloropropane	50.000	49.072	1.9	109	0.00
93	T	1,2,4-Trichlorobenzene	50.000	46.941	6.1	115	0.00
94	T	Hexachlorobutadiene	50.000	48.274	3.5	114	0.00
95	T	Naphthalene	50.000	50.362	-0.7	113	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102025\
Data File : VX048237.D
Acq On : 20 Oct 2025 14:28
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 13 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX102025

Quant Time: Oct 20 16:37:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 14:13:59 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	48.223	3.6	114	0.00

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

Raw Data: **VX048280.D**

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Alliance
Contract: ARAM01
Lab Code: ACE
SDG No.: Q3368
Instrument ID: MSVOA_X
Calibration Date/Time: 10/22/2025 08:37
Lab File ID: VX048280.D
Init. Calib. Date(s): 10/20/2025 10/20/2025
Heated Purge: (Y/N) N
Init. Calib. Time(s): 10:59 13:49
GC Column: DB-624UI ID: 0.18 (mm)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Vinyl Chloride	0.444	0.420		-5.41	20
1,1-Dichloroethene	0.525	0.556		5.91	20
2-Butanone	0.304	0.297		-2.3	20
Carbon Tetrachloride	0.599	0.685		14.36	20
Chloroform	1.123	1.158		3.12	20
Benzene	1.409	1.476		4.76	20
1,2-Dichloroethane	0.520	0.586		12.69	20
Trichloroethene	0.372	0.403		8.33	20
Tetrachloroethene	0.373	0.399		6.97	20
Chlorobenzene	1.125	1.207	0.3	7.29	20
1,2-Dichloroethane-d4	0.701	0.677		-3.42	20
Dibromofluoromethane	0.341	0.353		3.52	20
Toluene-d8	1.196	1.188		-0.67	20
4-Bromofluorobenzene	0.455	0.440		-3.3	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_X\Data\VX102225\
Data File : VX048280.D
Acq On : 22 Oct 2025 08:37
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 24 05:49:00 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 14:13:59 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 10/24/2025
Supervised By :Mahesh Dadoda 10/24/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.531	168	112883	50.000	ug/l	-0.01
34) 1,4-Difluorobenzene	6.739	114	171616	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.037	117	151325	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.000	152	76595	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.934	65	76366	48.250	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 96.500%			
35) Dibromofluoromethane	5.367	113	60534	51.667	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 103.340%			
50) Toluene-d8	8.628	98	203851	49.640	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery = 99.280%			
62) 4-Bromofluorobenzene	11.061	95	75540	48.352	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery = 96.700%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.172	85	65265	56.241	ug/l	99
3) Chloromethane	1.300	50	49425	45.630	ug/l	99
4) Vinyl Chloride	1.380	62	47382	47.239	ug/l	100
5) Bromomethane	1.611	94	33539	49.271	ug/l	97
6) Chloroethane	1.691	64	28903	49.038	ug/l	95
7) Trichlorofluoromethane	1.892	101	107357	55.808	ug/l	97
8) Diethyl Ether	2.136	74	26023	48.077	ug/l	83
9) 1,1,2-Trichlorotrifluo...	2.331	101	68490	56.225	ug/l	96
10) Methyl Iodide	2.453	142	87087	56.868	ug/l	98
11) Tert butyl alcohol	2.940	59	35785	227.724	ug/l	100
12) 1,1-Dichloroethene	2.319	96	62744	52.943	ug/l	94
13) Acrolein	2.233	56	48081	300.005	ug/l	99
14) Allyl chloride	2.660	41	94077	47.813	ug/l	91
15) Acrylonitrile	3.050	53	131715	232.450	ug/l	98
16) Acetone	2.373	43	154383	284.337	ug/l	99
17) Carbon Disulfide	2.514	76	177992	47.654	ug/l	99
18) Methyl Acetate	2.697	43	51668	45.566	ug/l	93
19) Methyl tert-butyl Ether	3.105	73	209570	51.835	ug/l	93
20) Methylene Chloride	2.788	84	68678	51.912	ug/l	88
21) trans-1,2-Dichloroethene	3.087	96	68104	52.315	ug/l	99
22) Diisopropyl ether	3.745	45	196556	50.085	ug/l #	96
23) Vinyl Acetate	3.709	43	777072	247.880	ug/l	96
24) 1,1-Dichloroethane	3.599	63	120039	50.586	ug/l	100
25) 2-Butanone	4.532	43	167713	244.037	ug/l	97
26) 2,2-Dichloropropane	4.458	77	115554	53.950	ug/l	98
27) cis-1,2-Dichloroethene	4.471	96	77266	50.857	ug/l	100
28) Bromochloromethane	4.879	49	50491	51.316	ug/l #	80
29) Tetrahydrofuran	4.983	42	90001	218.666	ug/l	91
30) Chloroform	5.074	83	130715	51.559	ug/l	94
31) Cyclohexane	5.452	56	98916	50.349	ug/l	86
32) 1,1,1-Trichloroethane	5.361	97	128292	54.907	ug/l	97
36) 1,1-Dichloropropene	5.672	75	89311	53.632	ug/l	99
37) Ethyl Acetate	4.696	43	64504	46.733	ug/l	95
38) Carbon Tetrachloride	5.659	117	117550	57.216	ug/l	96
39) Methylcyclohexane	7.360	83	108726	55.285	ug/l	93
40) Benzene	6.013	78	253259	52.383	ug/l	96

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102225\
Data File : VX048280.D
Acq On : 22 Oct 2025 08:37
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 24 05:49:00 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 14:13:59 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 10/24/2025
Supervised By :Mahesh Dadoda 10/24/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	4.897	41	35771	49.349	ug/l		93
42) 1,2-Dichloroethane	6.068	62	100501	56.333	ug/l		100
43) Isopropyl Acetate	6.312	43	108948	48.053	ug/l	#	95
44) Trichloroethene	7.104	130	69227	54.227	ug/l		95
45) 1,2-Dichloropropane	7.409	63	59904	52.114	ug/l		97
46) Dibromomethane	7.562	93	47300	52.817	ug/l		93
47) Bromodichloromethane	7.799	83	106527	55.092	ug/l		96
48) Methyl methacrylate	7.671	41	56901	49.735	ug/l		94
49) 1,4-Dioxane	7.641	88	14380	951.387	ug/l		92
51) 4-Methyl-2-Pentanone	8.555	43	310242	237.329	ug/l		94
52) Toluene	8.702	92	163729	53.307	ug/l		99
53) t-1,3-Dichloropropene	8.958	75	101924	54.699	ug/l		99
54) cis-1,3-Dichloropropene	8.348	75	107258	53.352	ug/l		94
55) 1,1,2-Trichloroethane	9.134	97	59586	52.167	ug/l		98
56) Ethyl methacrylate	9.098	69	84986	50.869	ug/l		95
57) 1,3-Dichloropropane	9.287	76	101491	52.019	ug/l		100
58) 2-Chloroethyl Vinyl ether	8.220	63	229383	255.311	ug/l		94
59) 2-Hexanone	9.409	43	240369	263.703	ug/l		95
60) Dibromochloromethane	9.500	129	80645	52.530	ug/l		98
61) 1,2-Dibromoethane	9.592	107	64007	52.565	ug/l		96
64) Tetrachloroethene	9.256	164	60402	53.469	ug/l		95
65) Chlorobenzene	10.061	112	182674	53.663	ug/l		97
66) 1,1,1,2-Tetrachloroethane	10.146	131	68462	54.756	ug/l		98
67) Ethyl Benzene	10.177	91	314516	54.267	ug/l		96
68) m/p-Xylenes	10.281	106	236784	109.959	ug/l		98
69) o-Xylene	10.622	106	113014	54.361	ug/l		100
70) Styrene	10.634	104	197941	55.916	ug/l		99
71) Bromoform	10.780	173	53116	53.153	ug/l	#	100
73) Isopropylbenzene	10.945	105	304903	54.500	ug/l		100
74) N-amyl acetate	10.823	43	96095	48.424	ug/l		94
75) 1,1,2,2-Tetrachloroethane	11.195	83	75307	49.292	ug/l		98
76) 1,2,3-Trichloropropane	11.219	75	63201m	50.882	ug/l		
77) Bromobenzene	11.177	156	75059	53.507	ug/l		93
78) n-propylbenzene	11.286	91	356264	55.000	ug/l		98
79) 2-Chlorotoluene	11.347	91	212434	54.093	ug/l		100
80) 1,3,5-Trimethylbenzene	11.433	105	253794	54.818	ug/l		99
81) trans-1,4-Dichloro-2-b...	11.000	75	25680	50.299	ug/l		96
82) 4-Chlorotoluene	11.433	91	250734	53.783	ug/l		99
83) tert-Butylbenzene	11.695	119	254160	53.430	ug/l		99
84) 1,2,4-Trimethylbenzene	11.732	105	252256	54.596	ug/l		99
85) sec-Butylbenzene	11.872	105	309120	54.013	ug/l		100
86) p-Isopropyltoluene	11.988	119	269139	54.408	ug/l		98
87) 1,3-Dichlorobenzene	11.951	146	137722	52.079	ug/l		99
88) 1,4-Dichlorobenzene	12.018	146	139405	50.886	ug/l		99
89) n-Butylbenzene	12.311	91	235632	52.334	ug/l		99
90) Hexachloroethane	12.518	117	49234	50.400	ug/l		92
91) 1,2-Dichlorobenzene	12.317	146	129743	52.256	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	12.920	75	15838	51.071	ug/l		96
93) 1,2,4-Trichlorobenzene	13.567	180	85647	51.009	ug/l		97
94) Hexachlorobutadiene	13.707	225	34001	54.034	ug/l		99
95) Naphthalene	13.756	128	226945	51.017	ug/l		100
96) 1,2,3-Trichlorobenzene	13.938	180	78971	51.255	ug/l		98

Sample Results: **VX048280.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102225\
Data File : VX048280.D
Acq On : 22 Oct 2025 08:37
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 10/24/2025
Supervised By :Mahesh Dadoda 10/24/2025

Quant Time: Oct 24 05:49:00 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 14:13:59 2025
Response via : Initial Calibration

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

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

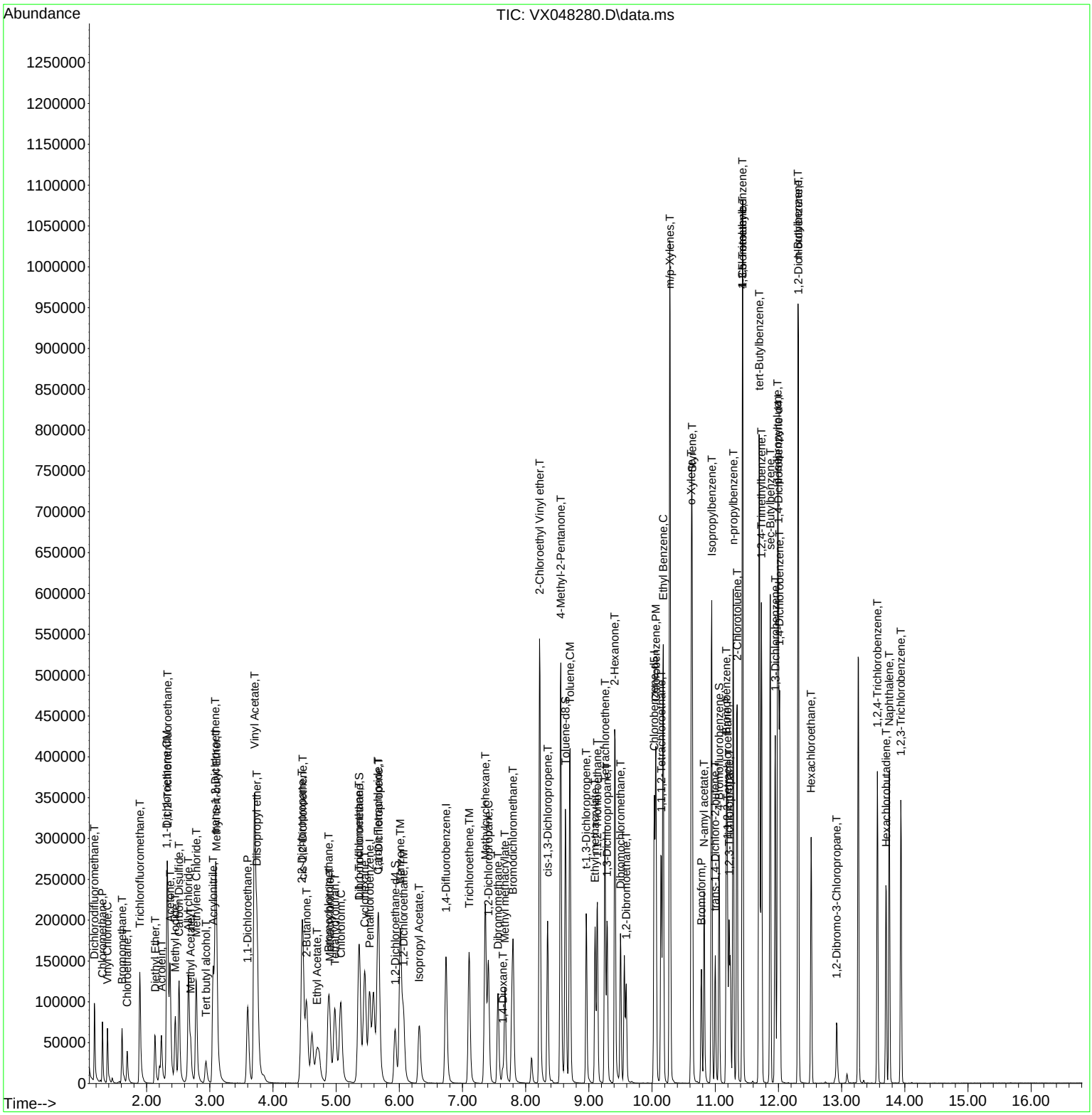
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102225\
Data File : VX048280.D
Acq On : 22 Oct 2025 08:37
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 24 05:49:00 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 14:13:59 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 10/24/2025
Supervised By :Mahesh Dadoda 10/24/2025



Sample Results: **VX048280.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102225\
Data File : VX048280.D
Acq On : 22 Oct 2025 08:37
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Oct 24 05:49:00 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 14:13:59 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	91	-0.01
2	T	Dichlorodifluoromethane	0.514	0.578	-12.5	108	0.00
3	P	Chloromethane	0.480	0.438	8.7	88	0.00
4	C	Vinyl Chloride	0.444	0.420	5.4#	91	0.00
5	T	Bromomethane	0.302	0.297	1.7	96	0.00
6	T	Chloroethane	0.261	0.256	1.9	94	0.00
7	T	Trichlorofluoromethane	0.852	0.951	-11.6	107	0.00
8	T	Diethyl Ether	0.240	0.231	3.7	94	0.00
9	T	1,1,2-Trichlorotrifluoroeth	0.540	0.607	-12.4	110	0.00
10	T	Methyl Iodide	0.678	0.771	-13.7	105	0.00
11	T	Tert butyl alcohol	0.070	0.063	10.0	93	0.00
12	CM	1,1-Dichloroethene	0.525	0.556	-5.9#	104	0.00
13	T	Acrolein	0.071	0.085	-19.7	119	0.00
14	T	Allyl chloride	0.872	0.833	4.5	94	0.00
15	T	Acrylonitrile	0.251	0.233	7.2	88	0.00
16	T	Acetone	0.240	0.274	-14.2	123	0.00
17	T	Carbon Disulfide	1.654	1.577	4.7	99	0.00
18	T	Methyl Acetate	0.502	0.458	8.8	89	0.00
19	T	Methyl tert-butyl Ether	1.791	1.857	-3.7	99	0.00
20	T	Methylene Chloride	0.586	0.608	-3.8	100	0.00
21	T	trans-1,2-Dichloroethene	0.577	0.603	-4.5	102	0.00
22	T	Diisopropyl ether	1.738	1.741	-0.2	95	0.00
23	T	Vinyl Acetate	1.389	1.377	0.9	93	0.00
24	P	1,1-Dichloroethane	1.051	1.063	-1.1	99	0.00
25	T	2-Butanone	0.304	0.297	2.3	96	0.00
26	T	2,2-Dichloropropane	0.949	1.024	-7.9	106	0.00
27	T	cis-1,2-Dichloroethene	0.673	0.684	-1.6	99	-0.01
28	T	Bromochloromethane	0.436	0.447	-2.5	92	0.00
29	T	Tetrahydrofuran	0.182	0.159	12.6	85	0.00
30	C	Chloroform	1.123	1.158	-3.1#	100	0.00
31	T	Cyclohexane	0.870	0.876	-0.7	97	0.00
32	T	1,1,1-Trichloroethane	1.035	1.137	-9.9	106	-0.01
33	S	1,2-Dichloroethane-d4	0.701	0.677	3.4	90	0.00
34	I	1,4-Difluorobenzene	1.000	1.000	0.0	85	0.00
35	S	Dibromofluoromethane	0.341	0.353	-3.5	91	0.00
36	T	1,1-Dichloropropene	0.485	0.520	-7.2	102	-0.01
37	T	Ethyl Acetate	0.402	0.376	6.5	87	0.00
38	T	Carbon Tetrachloride	0.599	0.685	-14.4	105	0.00
39	T	Methylcyclohexane	0.573	0.634	-10.6	100	0.00
40	TM	Benzene	1.409	1.476	-4.8	96	-0.01
41	T	Methacrylonitrile	0.211	0.208	1.4	87	0.00
42	TM	1,2-Dichloroethane	0.520	0.586	-12.7	100	0.00
43	T	Isopropyl Acetate	0.661	0.635	3.9	85	-0.01
44	TM	Trichloroethene	0.372	0.403	-8.3	98	0.00
45	C	1,2-Dichloropropane	0.335	0.349	-4.2#	92	0.00
46	T	Dibromomethane	0.261	0.276	-5.7	95	0.00
47	T	Bromodichloromethane	0.563	0.621	-10.3	98	0.00
48	T	Methyl methacrylate	0.333	0.332	0.3	87	0.00

Sample Results: **VX048280.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102225\
Data File : VX048280.D
Acq On : 22 Oct 2025 08:37
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Oct 24 05:49:00 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 14:13:59 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	0.004	0.004	0.0	80	0.00
50	S	Toluene-d8	1.196	1.188	0.7	85	0.00
51	T	4-Methyl-2-Pentanone	0.381	0.362	5.0	82	0.00
52	CM	Toluene	0.895	0.954	-6.6#	94	0.00
53	T	t-1,3-Dichloropropene	0.543	0.594	-9.4	93	0.00
54	T	cis-1,3-Dichloropropene	0.586	0.625	-6.7	93	0.00
55	T	1,1,2-Trichloroethane	0.333	0.347	-4.2	92	0.00
56	T	Ethyl methacrylate	0.487	0.495	-1.6	86	0.00
57	T	1,3-Dichloropropane	0.568	0.591	-4.0	92	0.00
58	T	2-Chloroethyl Vinyl ether	0.232	0.267	-15.1	87	0.00
59	T	2-Hexanone	0.266	0.280	-5.3	89	0.00
60	T	Dibromochloromethane	0.447	0.470	-5.1	94	0.00
61	T	1,2-Dibromoethane	0.355	0.373	-5.1	93	0.00
62	S	4-Bromofluorobenzene	0.455	0.440	3.3	84	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	82	0.00
64	T	Tetrachloroethene	0.373	0.399	-7.0	100	0.00
65	PM	Chlorobenzene	1.125	1.207	-7.3	95	0.00
66	T	1,1,1,2-Tetrachloroethane	0.413	0.452	-9.4	95	0.00
67	C	Ethyl Benzene	1.915	2.078	-8.5#	93	0.00
68	T	m/p-Xylenes	0.712	0.782	-9.8	93	0.00
69	T	o-Xylene	0.687	0.747	-8.7	92	0.00
70	T	Styrene	1.170	1.308	-11.8	94	0.00
71	P	Bromoform	0.330	0.351	-6.4	93	0.00
72	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	83	0.00
73	T	Isopropylbenzene	3.652	3.981	-9.0	96	0.00
74	T	N-amyl acetate	1.295	1.255	3.1	83	0.00
75	P	1,1,2,2-Tetrachloroethane	0.997	0.983	1.4	86	0.00
76	T	1,2,3-Trichloropropane	0.811	0.825	-1.7	93	0.00
77	T	Bromobenzene	0.916	0.980	-7.0	94	0.00
78	T	n-propylbenzene	4.228	4.651	-10.0	96	0.00
79	T	2-Chlorotoluene	2.564	2.773	-8.2	96	0.00
80	T	1,3,5-Trimethylbenzene	3.022	3.313	-9.6	96	0.00
81	T	trans-1,4-Dichloro-2-butene	0.333	0.335	-0.6	88	0.00
82	T	4-Chlorotoluene	3.043	3.274	-7.6	94	0.00
83	T	tert-Butylbenzene	3.105	3.318	-6.9	94	0.00
84	T	1,2,4-Trimethylbenzene	3.016	3.293	-9.2	95	0.00
85	T	sec-Butylbenzene	3.736	4.036	-8.0	96	0.00
86	T	p-Isopropyltoluene	3.229	3.514	-8.8	97	0.00
87	T	1,3-Dichlorobenzene	1.726	1.798	-4.2	96	0.00
88	T	1,4-Dichlorobenzene	1.788	1.820	-1.8	95	0.00
89	T	n-Butylbenzene	2.939	3.076	-4.7	97	0.00
90	T	Hexachloroethane	0.638	0.643	-0.8	93	0.00
91	T	1,2-Dichlorobenzene	1.621	1.694	-4.5	94	0.00
92	T	1,2-Dibromo-3-Chloropropane	0.202	0.207	-2.5	88	0.00
93	T	1,2,4-Trichlorobenzene	1.096	1.118	-2.0	96	0.00
94	T	Hexachlorobutadiene	0.507	0.444	12.4	98	0.00
95	T	Naphthalene	2.904	2.963	-2.0	88	0.00

Sample Results: **VX048280.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102225\
Data File : VX048280.D
Acq On : 22 Oct 2025 08:37
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Oct 24 05:49:00 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 14:13:59 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	1.006	1.031	-2.5	94	0.00

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

Sample Results: **VX048280.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102225\
Data File : VX048280.D
Acq On : 22 Oct 2025 08:37
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Oct 24 05:49:00 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 14:13:59 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	91	-0.01
2	T	Dichlorodifluoromethane	50.000	56.241	-12.5	108	0.00
3	P	Chloromethane	50.000	45.630	8.7	88	0.00
4	C	Vinyl Chloride	50.000	47.239	5.5#	91	0.00
5	T	Bromomethane	50.000	49.271	1.5	96	0.00
6	T	Chloroethane	50.000	49.038	1.9	94	0.00
7	T	Trichlorofluoromethane	50.000	55.808	-11.6	107	0.00
8	T	Diethyl Ether	50.000	48.077	3.8	94	0.00
9	T	1,1,2-Trichlorotrifluoroeth	50.000	56.225	-12.5	110	0.00
10	T	Methyl Iodide	50.000	56.868	-13.7	105	0.00
11	T	Tert butyl alcohol	250.000	227.724	8.9	93	0.00
12	CM	1,1-Dichloroethene	50.000	52.943	-5.9#	104	0.00
13	T	Acrolein	250.000	300.005	-20.0	119	0.00
14	T	Allyl chloride	50.000	47.813	4.4	94	0.00
15	T	Acrylonitrile	250.000	232.450	7.0	88	0.00
16	T	Acetone	250.000	284.337	-13.7	123	0.00
17	T	Carbon Disulfide	50.000	47.654	4.7	99	0.00
18	T	Methyl Acetate	50.000	45.566	8.9	89	0.00
19	T	Methyl tert-butyl Ether	50.000	51.835	-3.7	99	0.00
20	T	Methylene Chloride	50.000	51.912	-3.8	100	0.00
21	T	trans-1,2-Dichloroethene	50.000	52.315	-4.6	102	0.00
22	T	Diisopropyl ether	50.000	50.085	-0.2	95	0.00
23	T	Vinyl Acetate	250.000	247.880	0.8	93	0.00
24	P	1,1-Dichloroethane	50.000	50.586	-1.2	99	0.00
25	T	2-Butanone	250.000	244.037	2.4	96	0.00
26	T	2,2-Dichloropropane	50.000	53.950	-7.9	106	0.00
27	T	cis-1,2-Dichloroethene	50.000	50.857	-1.7	99	-0.01
28	T	Bromochloromethane	50.000	51.316	-2.6	92	0.00
29	T	Tetrahydrofuran	250.000	218.666	12.5	85	0.00
30	C	Chloroform	50.000	51.559	-3.1#	100	0.00
31	T	Cyclohexane	50.000	50.349	-0.7	97	0.00
32	T	1,1,1-Trichloroethane	50.000	54.907	-9.8	106	-0.01
33	S	1,2-Dichloroethane-d4	50.000	48.250	3.5	90	0.00
34	I	1,4-Difluorobenzene	50.000	50.000	0.0	85	0.00
35	S	Dibromofluoromethane	50.000	51.667	-3.3	91	0.00
36	T	1,1-Dichloropropene	50.000	53.632	-7.3	102	-0.01
37	T	Ethyl Acetate	50.000	46.733	6.5	87	0.00
38	T	Carbon Tetrachloride	50.000	57.216	-14.4	105	0.00
39	T	Methylcyclohexane	50.000	55.285	-10.6	100	0.00
40	TM	Benzene	50.000	52.383	-4.8	96	-0.01
41	T	Methacrylonitrile	50.000	49.349	1.3	87	0.00
42	TM	1,2-Dichloroethane	50.000	56.333	-12.7	100	0.00
43	T	Isopropyl Acetate	50.000	48.053	3.9	85	-0.01
44	TM	Trichloroethene	50.000	54.227	-8.5	98	0.00
45	C	1,2-Dichloropropane	50.000	52.114	-4.2#	92	0.00
46	T	Dibromomethane	50.000	52.817	-5.6	95	0.00
47	T	Bromodichloromethane	50.000	55.092	-10.2	98	0.00
48	T	Methyl methacrylate	50.000	49.735	0.5	87	0.00

Sample Results: **VX048280.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102225\
Data File : VX048280.D
Acq On : 22 Oct 2025 08:37
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Oct 24 05:49:00 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 14:13:59 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	951.387	4.9	80	0.00
50	S	Toluene-d8	50.000	49.640	0.7	85	0.00
51	T	4-Methyl-2-Pentanone	250.000	237.329	5.1	82	0.00
52	CM	Toluene	50.000	53.307	-6.6#	94	0.00
53	T	t-1,3-Dichloropropene	50.000	54.699	-9.4	93	0.00
54	T	cis-1,3-Dichloropropene	50.000	53.352	-6.7	93	0.00
55	T	1,1,2-Trichloroethane	50.000	52.167	-4.3	92	0.00
56	T	Ethyl methacrylate	50.000	50.869	-1.7	86	0.00
57	T	1,3-Dichloropropane	50.000	52.019	-4.0	92	0.00
58	T	2-Chloroethyl Vinyl ether	250.000	255.311	-2.1	87	0.00
59	T	2-Hexanone	250.000	263.703	-5.5	89	0.00
60	T	Dibromochloromethane	50.000	52.530	-5.1	94	0.00
61	T	1,2-Dibromoethane	50.000	52.565	-5.1	93	0.00
62	S	4-Bromofluorobenzene	50.000	48.352	3.3	84	0.00
63	I	Chlorobenzene-d5	50.000	50.000	0.0	82	0.00
64	T	Tetrachloroethene	50.000	53.469	-6.9	100	0.00
65	PM	Chlorobenzene	50.000	53.663	-7.3	95	0.00
66	T	1,1,1,2-Tetrachloroethane	50.000	54.756	-9.5	95	0.00
67	C	Ethyl Benzene	50.000	54.267	-8.5#	93	0.00
68	T	m/p-Xylenes	100.000	109.959	-10.0	93	0.00
69	T	o-Xylene	50.000	54.361	-8.7	92	0.00
70	T	Styrene	50.000	55.916	-11.8	94	0.00
71	P	Bromoform	50.000	53.153	-6.3	93	0.00
72	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	83	0.00
73	T	Isopropylbenzene	50.000	54.500	-9.0	96	0.00
74	T	N-amyl acetate	50.000	48.424	3.2	83	0.00
75	P	1,1,2,2-Tetrachloroethane	50.000	49.292	1.4	86	0.00
76	T	1,2,3-Trichloropropane	50.000	50.882	-1.8	93	0.00
77	T	Bromobenzene	50.000	53.507	-7.0	94	0.00
78	T	n-propylbenzene	50.000	55.000	-10.0	96	0.00
79	T	2-Chlorotoluene	50.000	54.093	-8.2	96	0.00
80	T	1,3,5-Trimethylbenzene	50.000	54.818	-9.6	96	0.00
81	T	trans-1,4-Dichloro-2-butene	50.000	50.299	-0.6	88	0.00
82	T	4-Chlorotoluene	50.000	53.783	-7.6	94	0.00
83	T	tert-Butylbenzene	50.000	53.430	-6.9	94	0.00
84	T	1,2,4-Trimethylbenzene	50.000	54.596	-9.2	95	0.00
85	T	sec-Butylbenzene	50.000	54.013	-8.0	96	0.00
86	T	p-Isopropyltoluene	50.000	54.408	-8.8	97	0.00
87	T	1,3-Dichlorobenzene	50.000	52.079	-4.2	96	0.00
88	T	1,4-Dichlorobenzene	50.000	50.886	-1.8	95	0.00
89	T	n-Butylbenzene	50.000	52.334	-4.7	97	0.00
90	T	Hexachloroethane	50.000	50.400	-0.8	93	0.00
91	T	1,2-Dichlorobenzene	50.000	52.256	-4.5	94	0.00
92	T	1,2-Dibromo-3-Chloropropane	50.000	51.071	-2.1	88	0.00
93	T	1,2,4-Trichlorobenzene	50.000	51.009	-2.0	96	0.00
94	T	Hexachlorobutadiene	50.000	54.034	-8.1	98	0.00
95	T	Naphthalene	50.000	51.017	-2.0	88	0.00

Sample Results: **VX048280.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102225\
Data File : VX048280.D
Acq On : 22 Oct 2025 08:37
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Oct 24 05:49:00 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 14:13:59 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	51.255	-2.5	94	0.00

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

QC SAMPLE DATA

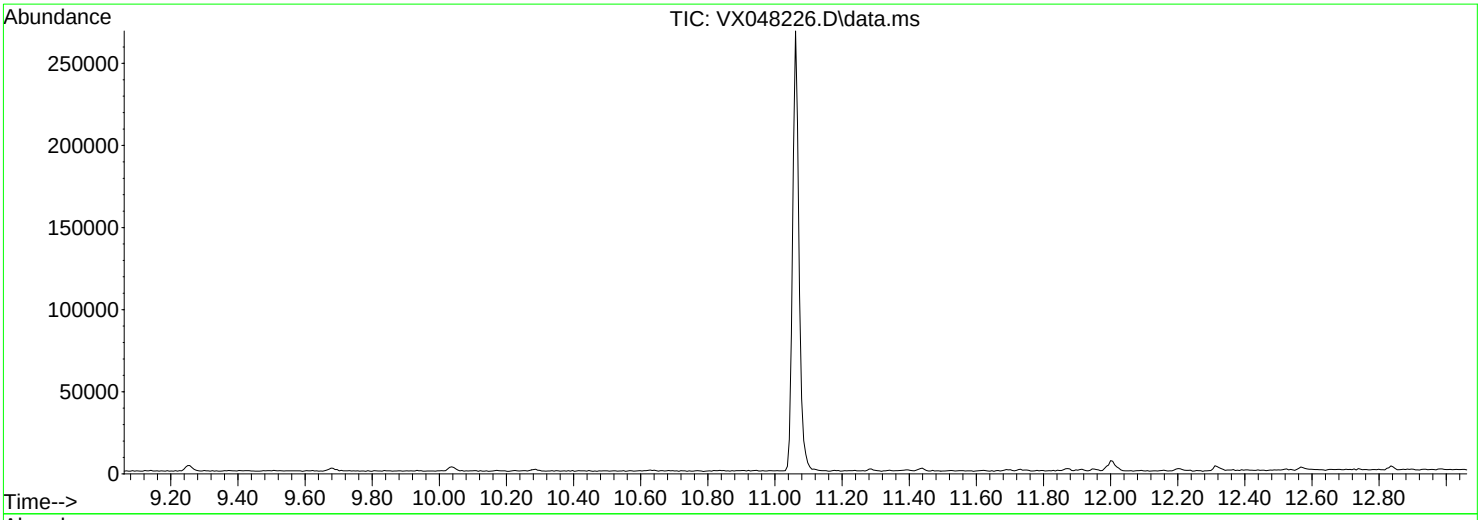
Sample Results: **VX048226.D**

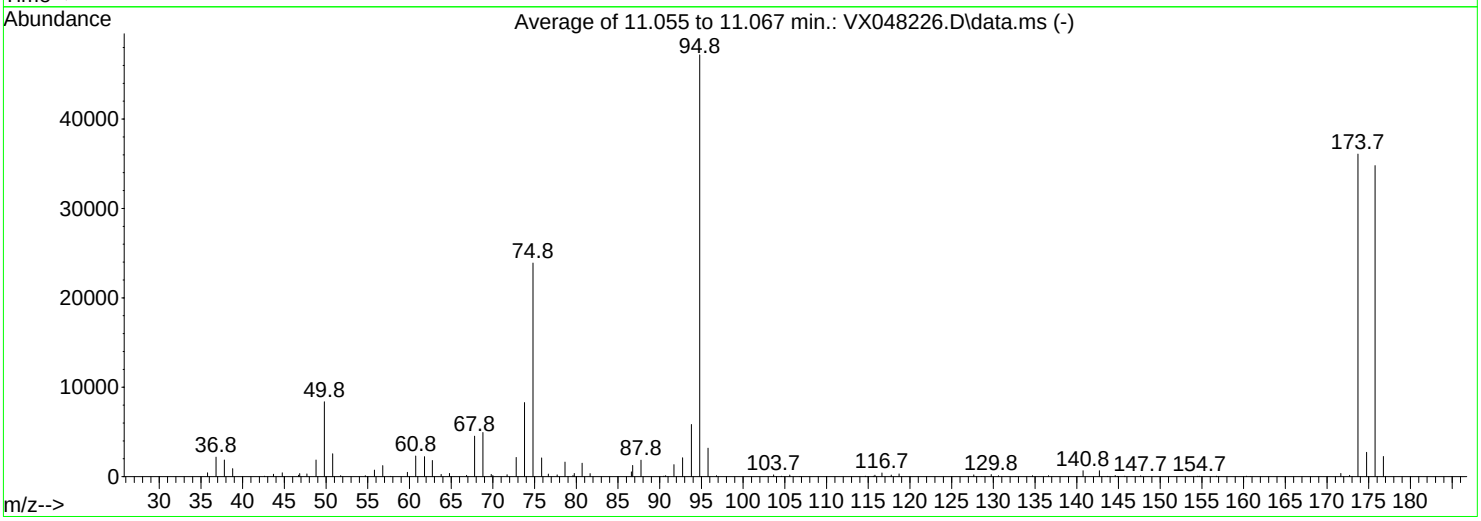
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102025\
Data File : VX048226.D
Acq On : 20 Oct 2025 08:15
Operator : JC/MD
Sample : BFB
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Title : SW846 8260
Last Update : Mon Oct 20 14:13:59 2025





AutoFind: Scans 1635, 1636, 1637; Background Corrected with Scan 1629

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.7	8374	PASS
75	95	30	60	50.7	23901	PASS
95	95	100	100	100.0	47184	PASS
96	95	5	9	6.8	3185	PASS
173	174	0.00	2	0.4	138	PASS
174	95	50	100	76.5	36091	PASS
175	174	5	9	7.5	2719	PASS
176	174	95	101	96.4	34800	PASS
177	176	5	9	6.5	2253	PASS

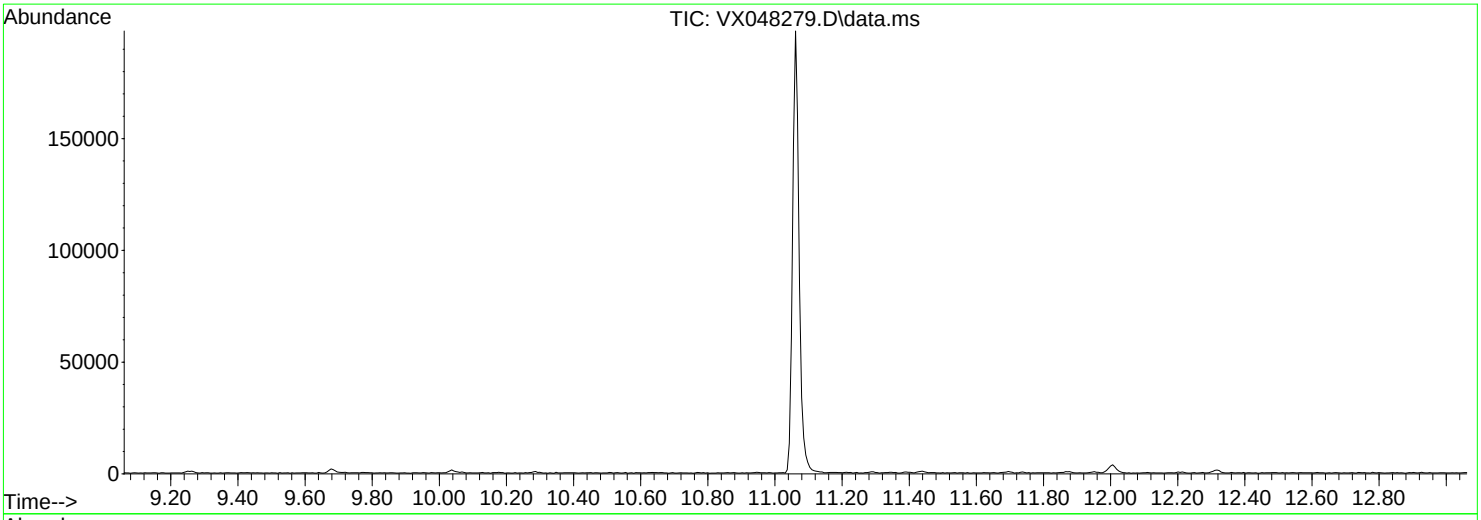
Sample Results: **VX048279.D**

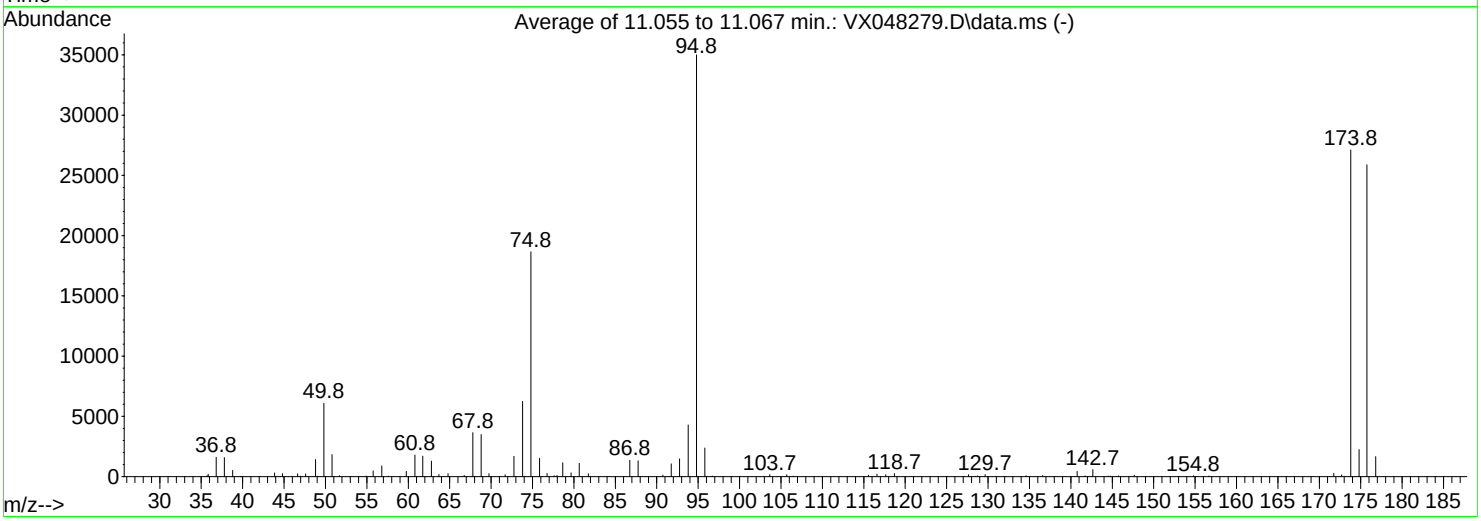
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102225\
Data File : VX048279.D
Acq On : 22 Oct 2025 08:07
Operator : JC/MD
Sample : BFB
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Title : SW846 8260
Last Update : Mon Oct 20 14:13:59 2025





AutoFind: Scans 1635, 1636, 1637; Background Corrected with Scan 1629

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.4	6085	PASS
75	95	30	60	53.3	18653	PASS
95	95	100	100	100.0	35005	PASS
96	95	5	9	6.8	2374	PASS
173	174	0.00	2	0.5	144	PASS
174	95	50	100	77.5	27120	PASS
175	174	5	9	8.3	2250	PASS
176	174	95	101	95.4	25885	PASS
177	176	5	9	6.4	1654	PASS

Raw Data: **VX048282.D**

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

Report of Analysis

Client:	Aramark Uniforms			Date Collected:	
Project:	Monthly 2025			Date Received:	
Client Sample ID:	VX1022WBL01			SDG No.:	Q3368
Lab Sample ID:	VX1022WBL01			Matrix:	TCLP
Analytical Method:	8260D	Level : LOW		% Solid:	0
Sample Wt/Vol:	5 mL	Final Vol: 5000 uL		Test:	TCLP VOA

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
TARGETS									
75-01-4	Vinyl Chloride	0.26	U	1	0.26	1.00	ug/L	10/22/25 09:26	VX102225
75-35-4	1,1-Dichloroethene	0.23	U	1	0.23	1.00	ug/L	10/22/25 09:26	VX102225
78-93-3	2-Butanone	0.98	U	1	0.98	5.00	ug/L	10/22/25 09:26	VX102225
56-23-5	Carbon Tetrachloride	0.25	U	1	0.25	1.00	ug/L	10/22/25 09:26	VX102225
67-66-3	Chloroform	0.25	U	1	0.25	1.00	ug/L	10/22/25 09:26	VX102225
71-43-2	Benzene	0.15	U	1	0.15	1.00	ug/L	10/22/25 09:26	VX102225
107-06-2	1,2-Dichloroethane	0.22	U	1	0.22	1.00	ug/L	10/22/25 09:26	VX102225
79-01-6	Trichloroethene	0.090	U	1	0.090	1.00	ug/L	10/22/25 09:26	VX102225
127-18-4	Tetrachloroethene	0.23	U	1	0.23	1.00	ug/L	10/22/25 09:26	VX102225
108-90-7	Chlorobenzene	0.12	U	1	0.12	1.00	ug/L	10/22/25 09:26	VX102225
SURROGATES									
17060-07-0	1,2-Dichloroethane-d4	50.7			74 - 125	101%	SPK: 50		
1868-53-7	Dibromofluoromethane	49.1			75 - 124	98%	SPK: 50		
2037-26-5	Toluene-d8	47.7			86 - 113	95%	SPK: 50		
460-00-4	4-Bromofluorobenzene	54.5			77 - 121	109%	SPK: 50		
INTERNAL STANDARDS		**Area Count**							
363-72-4	Pentafluorobenzene	97900							
540-36-3	1,4-Difluorobenzene	185000							
3114-55-4	Chlorobenzene-d5	199000							
3855-82-1	1,4-Dichlorobenzene-d4	99800							

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

Sample Results: **VX048282.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102225\
Data File : VX048282.D
Acq On : 22 Oct 2025 09:26
Operator : JC/MD
Sample : VX1022WBL01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VX1022WBL01

Quant Time: Oct 24 05:50:55 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 14:13:59 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.538	168	97887	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.745	114	185129	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.037	117	199062	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.006	152	99844	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.940	65	69611	50.720	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 101.440%			
35) Dibromofluoromethane	5.373	113	62055	49.099	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 98.200%			
50) Toluene-d8	8.635	98	211132	47.660	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery = 95.320%			
62) 4-Bromofluorobenzene	11.061	95	91904	54.533	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery = 109.060%			

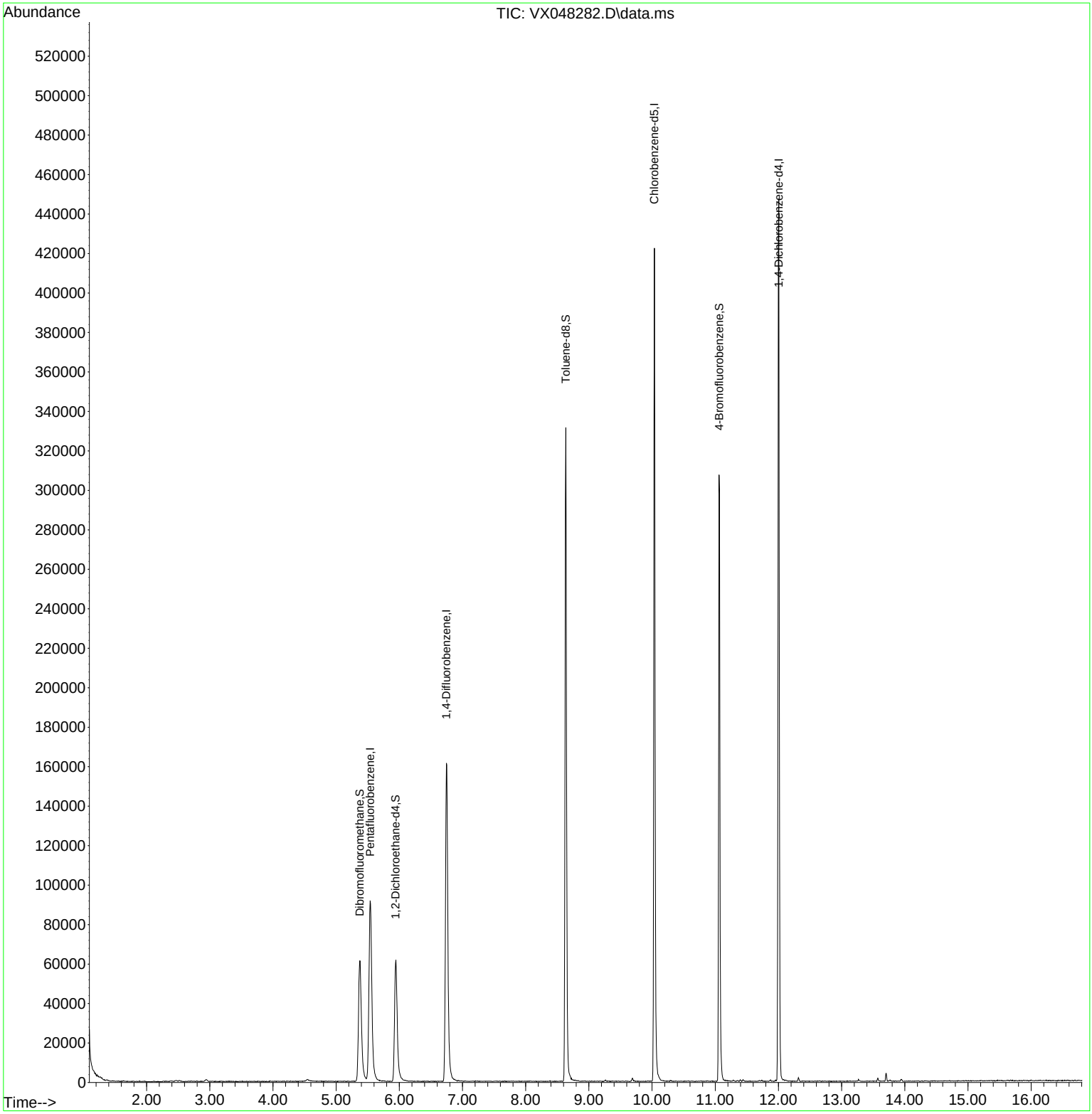
Target Compounds Qvalue

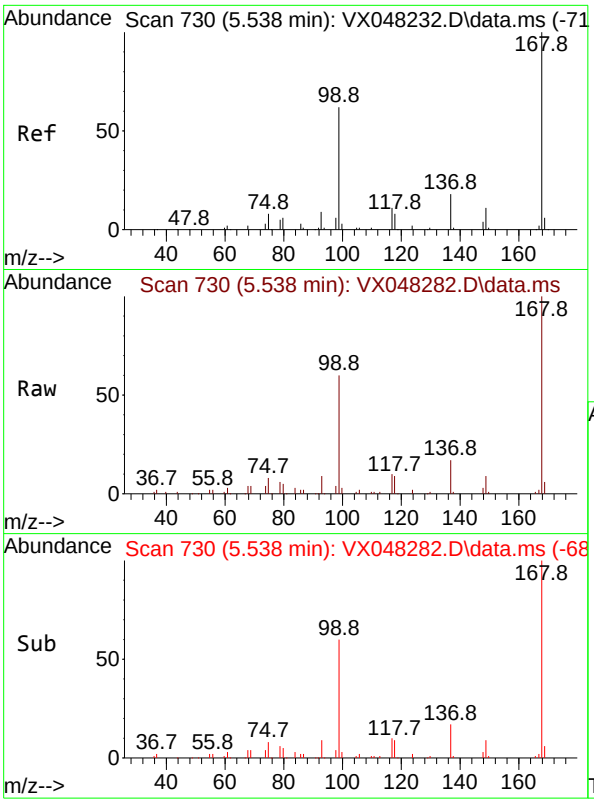
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102225\
Data File : VX048282.D
Acq On : 22 Oct 2025 09:26
Operator : JC/MD
Sample : VX1022WBL01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VX1022WBL01

Quant Time: Oct 24 05:50:55 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 14:13:59 2025
Response via : Initial Calibration



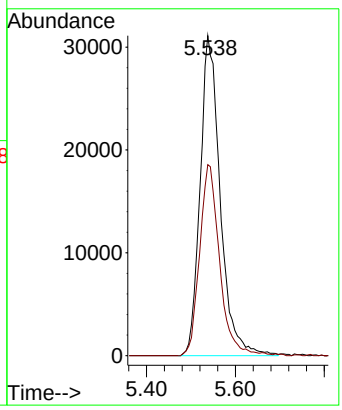


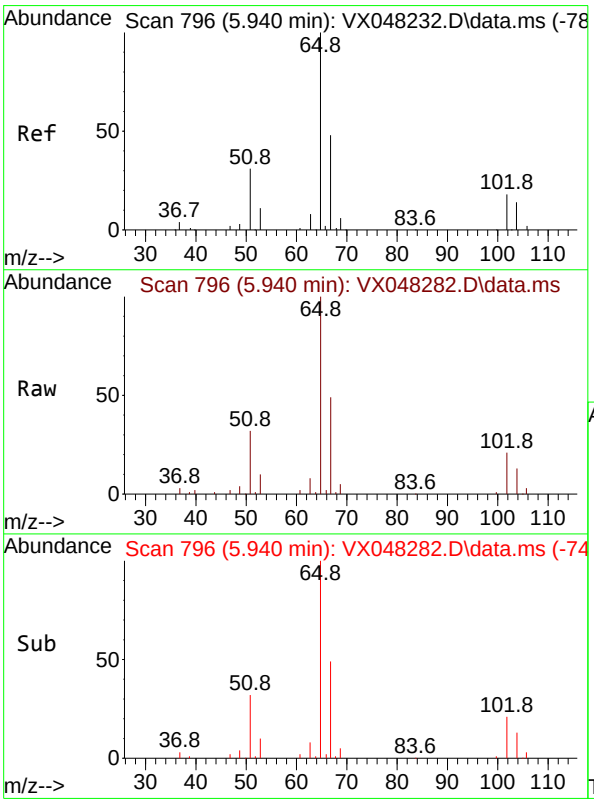
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.538 min Scan# 7
Delta R.T. -0.006 min
Lab File: VX048282.D
Acq: 22 Oct 2025 09:26

Instrument :
MSVOA_X
ClientSampleId :
VX1022WBL01

Tgt Ion:168 Resp: 97887

Ion	Ratio	Lower	Upper
168	100		
99	59.7	46.4	69.6

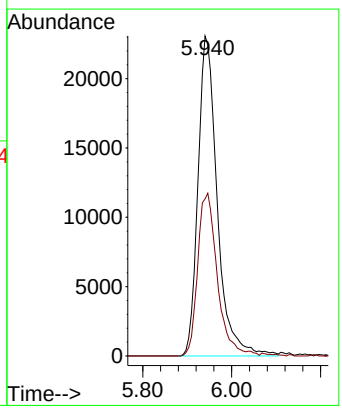


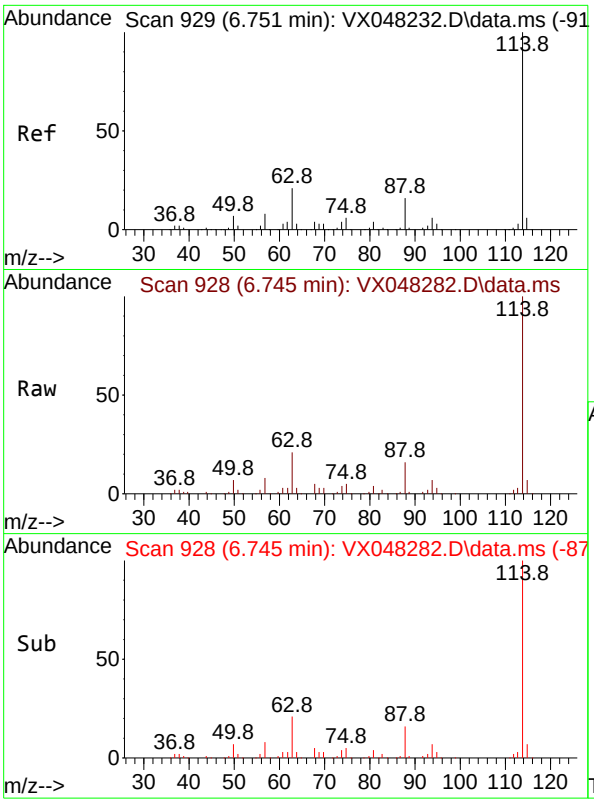


#33
1,2-Dichloroethane-d4
Concen: 50.720 ug/l
RT: 5.940 min Scan# 796
Delta R.T. -0.000 min
Lab File: VX048282.D
Acq: 22 Oct 2025 09:26

Tgt Ion: 65 Resp: 69611

Ion	Ratio	Lower	Upper
65	100		
67	51.8	0.0	105.0



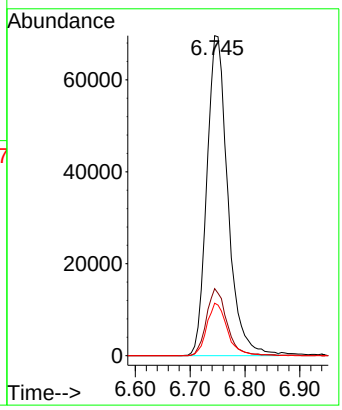


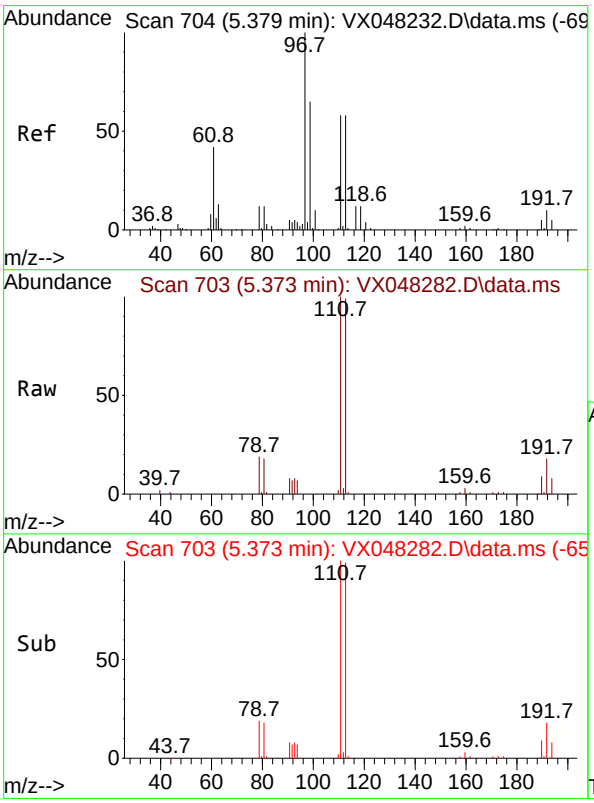
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.745 min Scan# 9
Delta R.T. -0.000 min
Lab File: VX048282.D
Acq: 22 Oct 2025 09:26

Instrument :
MSVOA_X
ClientSampleId :
VX1022WBL01

Tgt Ion:114 Resp: 185129

Ion	Ratio	Lower	Upper
114	100		
63	21.0	0.0	43.2
88	16.4	0.0	33.6

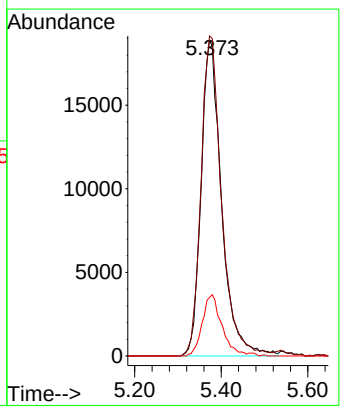


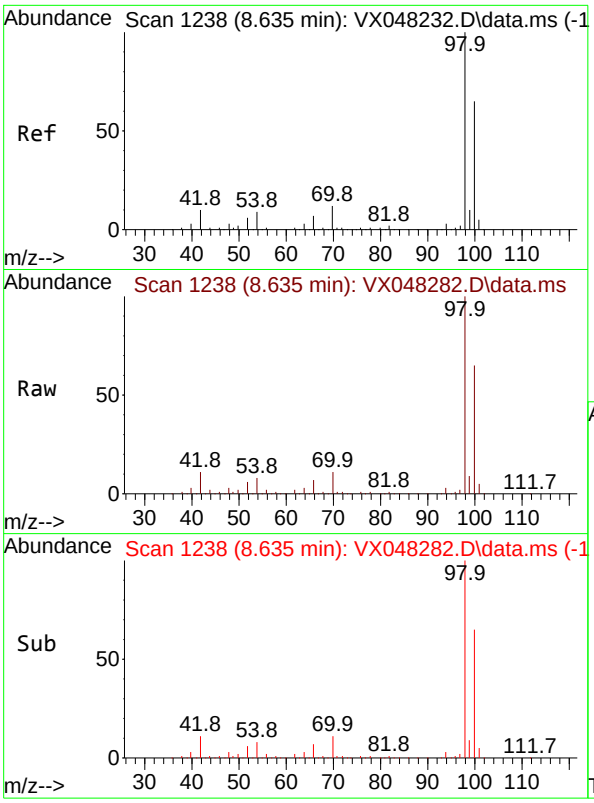


#35
Dibromofluoromethane
Concen: 49.099 ug/l
RT: 5.373 min Scan# 703
Delta R.T. -0.000 min
Lab File: VX048282.D
Acq: 22 Oct 2025 09:26

Tgt Ion:113 Resp: 62055

Ion	Ratio	Lower	Upper
113	100		
111	101.9	82.2	123.4
192	18.4	15.1	22.7



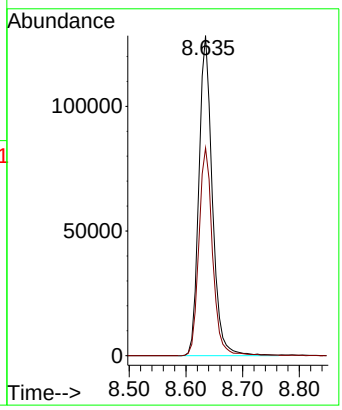


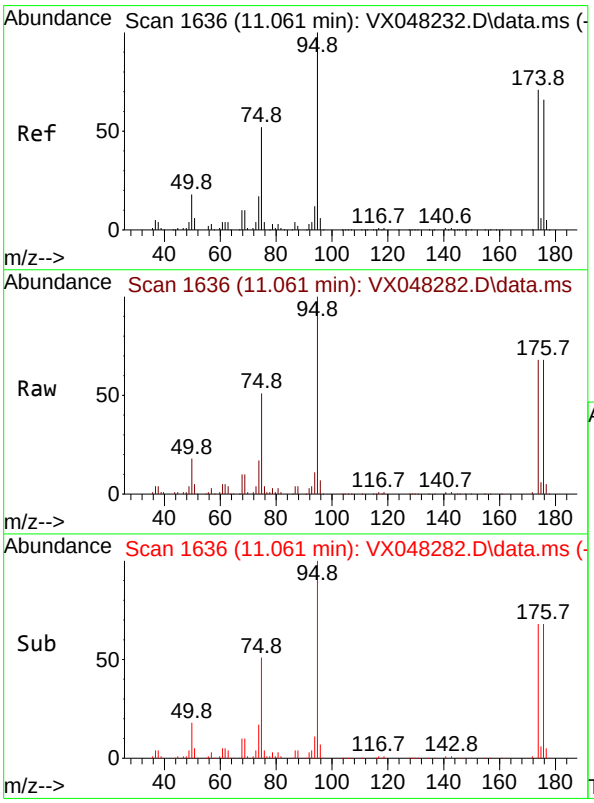
#50
Toluene-d8
Concen: 47.660 ug/l
RT: 8.635 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX048282.D
Acq: 22 Oct 2025 09:26

Instrument :
MSVOA_X
ClientSampleId :
VX1022WBL01

Tgt Ion: 98 Resp: 211132

Ion	Ratio	Lower	Upper
98	100		
100	66.3	53.0	79.4

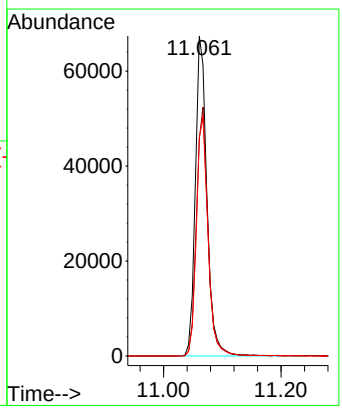


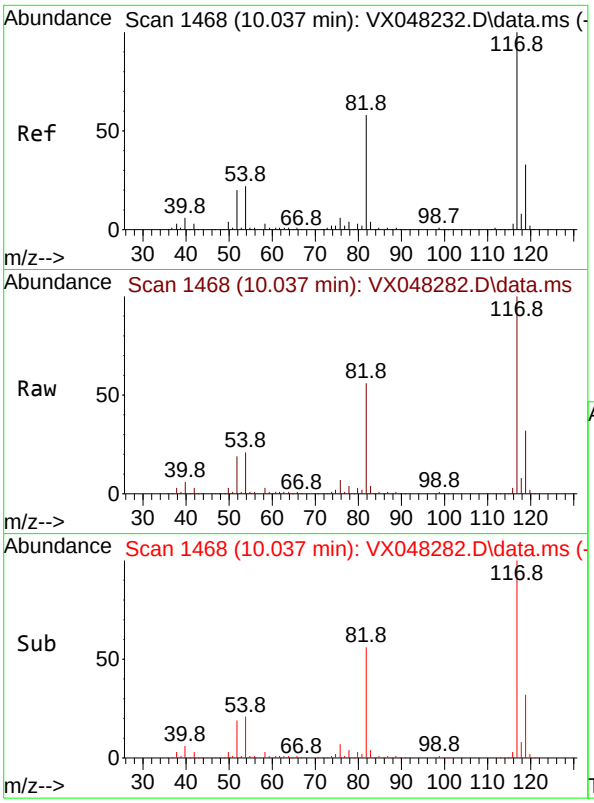


#62
4-Bromofluorobenzene
Concen: 54.533 ug/l
RT: 11.061 min Scan# 1636
Delta R.T. -0.000 min
Lab File: VX048282.D
Acq: 22 Oct 2025 09:26

Tgt Ion: 95 Resp: 91904

Ion	Ratio	Lower	Upper
95	100		
174	77.8	0.0	147.8
176	75.2	0.0	142.8



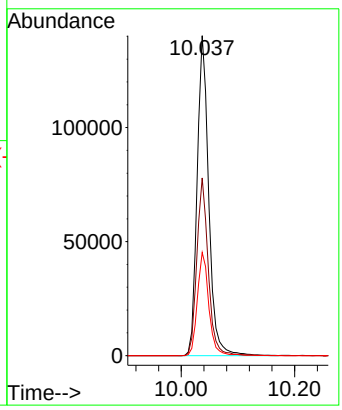


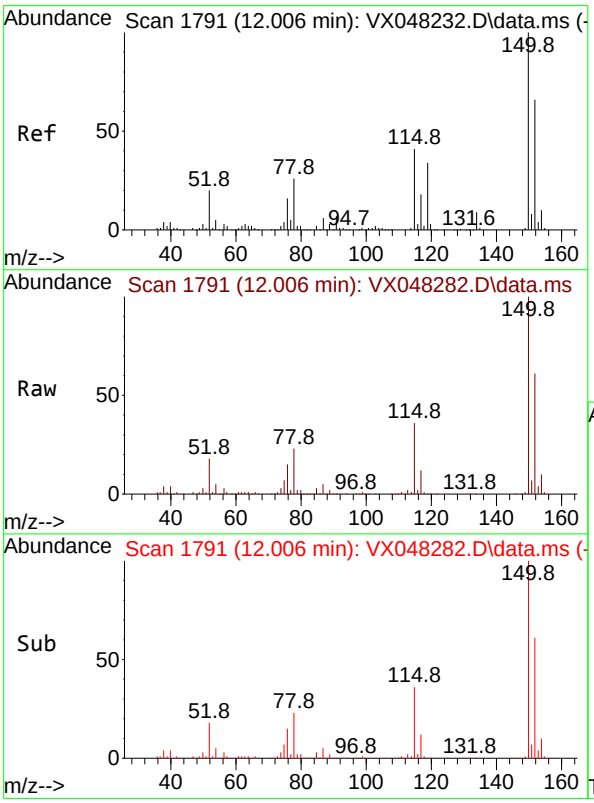
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.037 min Scan# 14
Delta R.T. -0.000 min
Lab File: VX048282.D
Acq: 22 Oct 2025 09:26

Instrument :
MSVOA_X
ClientSampleId :
VX1022WBL01

Tgt Ion:117 Resp: 199062

Ion	Ratio	Lower	Upper
117	100		
82	55.6	46.5	69.7
119	32.2	25.9	38.9

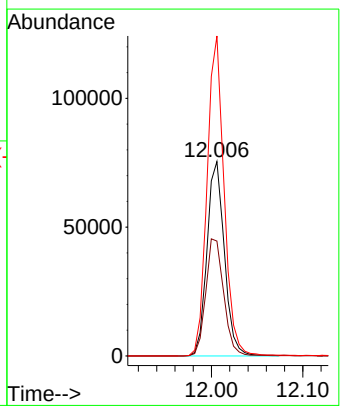




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.006 min Scan# 1791
Delta R.T. -0.000 min
Lab File: VX048282.D
Acq: 22 Oct 2025 09:26

Tgt Ion:152 Resp: 99844

Ion	Ratio	Lower	Upper
152	100		
115	62.1	43.1	129.4
150	160.7	0.0	353.0



Raw Data: **VX048283.D**

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

Report of Analysis

Client:	Aramark Uniforms			Date Collected:	
Project:	Monthly 2025			Date Received:	
Client Sample ID:	VX1022WBS01			SDG No.:	Q3368
Lab Sample ID:	VX1022WBS01			Matrix:	TCLP
Analytical Method:	8260D	Level : LOW		% Solid:	0
Sample Wt/Vol:	5 mL	Final Vol: 5000 uL		Test:	TCLP VOA

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
TARGETS									
75-01-4	Vinyl Chloride	16.4		1	0.26	1.00	ug/L	10/22/25 09:53	VX102225
75-35-4	1,1-Dichloroethene	18.3		1	0.23	1.00	ug/L	10/22/25 09:53	VX102225
78-93-3	2-Butanone	88.7		1	0.98	5.00	ug/L	10/22/25 09:53	VX102225
56-23-5	Carbon Tetrachloride	18.9		1	0.25	1.00	ug/L	10/22/25 09:53	VX102225
67-66-3	Chloroform	19.4		1	0.25	1.00	ug/L	10/22/25 09:53	VX102225
71-43-2	Benzene	18.9		1	0.15	1.00	ug/L	10/22/25 09:53	VX102225
107-06-2	1,2-Dichloroethane	20.4		1	0.22	1.00	ug/L	10/22/25 09:53	VX102225
79-01-6	Trichloroethene	19.3		1	0.090	1.00	ug/L	10/22/25 09:53	VX102225
127-18-4	Tetrachloroethene	17.9		1	0.23	1.00	ug/L	10/22/25 09:53	VX102225
108-90-7	Chlorobenzene	19.3		1	0.12	1.00	ug/L	10/22/25 09:53	VX102225
SURROGATES									
17060-07-0	1,2-Dichloroethane-d4	50.2			74 - 125	100%	SPK: 50		
1868-53-7	Dibromofluoromethane	50.9			75 - 124	102%	SPK: 50		
2037-26-5	Toluene-d8	50.7			86 - 113	101%	SPK: 50		
460-00-4	4-Bromofluorobenzene	52.4			77 - 121	105%	SPK: 50		
INTERNAL STANDARDS		**Area Count**							
363-72-4	Pentafluorobenzene	116000							
540-36-3	1,4-Difluorobenzene	185000							
3114-55-4	Chlorobenzene-d5	172000							
3855-82-1	1,4-Dichlorobenzene-d4	91100							

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_X\Data\VX102225\
Data File : VX048283.D
Acq On : 22 Oct 2025 09:53
Operator : JC/MD
Sample : VX1022WBS01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 24 05:51:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 14:13:59 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX1022WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 10/24/2025
Supervised By :Mahesh Dadoda 10/24/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.538	168	115938	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.745	114	185153	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.037	117	172449	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.006	152	91086	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.934	65	81572	50.182	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 100.360%			
35) Dibromofluoromethane	5.373	113	64382	50.934	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 101.860%			
50) Toluene-d8	8.629	98	224820	50.743	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery = 101.480%			
62) 4-Bromofluorobenzene	11.061	95	88327	52.404	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery = 104.800%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.173	85	22868	19.187	ug/l	95
3) Chloromethane	1.301	50	18787	16.887	ug/l	97
4) Vinyl Chloride	1.380	62	16907	16.412	ug/l	100
5) Bromomethane	1.618	94	12759	18.250	ug/l	92
6) Chloroethane	1.697	64	10602	17.514	ug/l	94
7) Trichlorofluoromethane	1.892	101	36946	18.700	ug/l	98
8) Diethyl Ether	2.130	74	9583	17.238	ug/l	81
9) 1,1,2-Trichlorotrifluo...	2.337	101	22281	17.809	ug/l	93
10) Methyl Iodide	2.453	142	29719	18.895	ug/l	98
11) Tert butyl alcohol	2.934	59	13125	81.322	ug/l	98
12) 1,1-Dichloroethene	2.325	96	22236	18.268	ug/l	89
13) Acrolein	2.233	56	18404	111.807	ug/l	100
14) Allyl chloride	2.666	41	34300	16.973	ug/l	94
15) Acrylonitrile	3.056	53	51470	88.440	ug/l	98
16) Acetone	2.374	43	49714	89.149	ug/l	94
17) Carbon Disulfide	2.514	76	61537	16.041	ug/l	98
18) Methyl Acetate	2.697	43	19682	16.900	ug/l #	90
19) Methyl tert-butyl Ether	3.105	73	76499	18.423	ug/l	98
20) Methylene Chloride	2.788	84	25627	18.860	ug/l	90
21) trans-1,2-Dichloroethene	3.087	96	24665	18.448	ug/l	97
22) Diisopropyl ether	3.745	45	74217	18.413	ug/l #	82
23) Vinyl Acetate	3.709	43	293391	91.123	ug/l	95
24) 1,1-Dichloroethane	3.605	63	44644	18.318	ug/l	98
25) 2-Butanone	4.538	43	62637	88.741	ug/l	94
26) 2,2-Dichloropropane	4.459	77	42168	19.169	ug/l	99
27) cis-1,2-Dichloroethene	4.477	96	29422	18.855	ug/l	97
28) Bromochloromethane	4.885	49	18103	17.914	ug/l #	80
29) Tetrahydrofuran	4.983	42	35783	84.647	ug/l	90
30) Chloroform	5.074	83	50484	19.388	ug/l	96
31) Cyclohexane	5.452	56	36067	17.875	ug/l	89
32) 1,1,1-Trichloroethane	5.367	97	45607	19.005	ug/l	98
36) 1,1-Dichloropropene	5.678	75	32884	18.304	ug/l	99
37) Ethyl Acetate	4.702	43	25793	17.321	ug/l	96
38) Carbon Tetrachloride	5.660	117	41818	18.866	ug/l	97
39) Methylcyclohexane	7.367	83	37971	17.896	ug/l	93
40) Benzene	6.019	78	98700	18.922	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102225\
Data File : VX048283.D
Acq On : 22 Oct 2025 09:53
Operator : JC/MD
Sample : VX1022WBS01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 24 05:51:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 14:13:59 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX1022WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 10/24/2025
Supervised By :Mahesh Dadoda 10/24/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	4.904	41	13641	17.443	ug/l		95
42) 1,2-Dichloroethane	6.068	62	39202	20.367	ug/l		99
43) Isopropyl Acetate	6.318	43	43873	17.936	ug/l		97
44) Trichloroethene	7.111	130	26617	19.325	ug/l		99
45) 1,2-Dichloropropane	7.415	63	23590	19.022	ug/l		93
46) Dibromomethane	7.568	93	18429	19.074	ug/l		92
47) Bromodichloromethane	7.799	83	40507	19.417	ug/l		96
48) Methyl methacrylate	7.677	41	21757	17.627	ug/l		93
49) 1,4-Dioxane	7.641	88	5789	355.001	ug/l		91
51) 4-Methyl-2-Pentanone	8.555	43	128509	91.119	ug/l		96
52) Toluene	8.702	92	64846	19.569	ug/l		98
53) t-1,3-Dichloropropene	8.964	75	39352	19.575	ug/l		97
54) cis-1,3-Dichloropropene	8.348	75	41608	19.183	ug/l		95
55) 1,1,2-Trichloroethane	9.135	97	24236	19.667	ug/l		96
56) Ethyl methacrylate	9.098	69	32337	17.941	ug/l		98
57) 1,3-Dichloropropane	9.293	76	40790	19.378	ug/l		97
58) 2-Chloroethyl Vinyl ether	8.226	63	82301	86.039	ug/l		96
59) 2-Hexanone	9.415	43	91212	92.750	ug/l		95
60) Dibromochloromethane	9.500	129	32118	19.391	ug/l		98
61) 1,2-Dibromoethane	9.592	107	25567	19.461	ug/l		100
64) Tetrachloroethene	9.256	164	23106	17.948	ug/l		96
65) Chlorobenzene	10.061	112	74866	19.299	ug/l		100
66) 1,1,1,2-Tetrachloroethane	10.147	131	27221	19.105	ug/l		99
67) Ethyl Benzene	10.177	91	123704	18.730	ug/l		95
68) m/p-Xylenes	10.287	106	96187	39.196	ug/l		99
69) o-Xylene	10.622	106	45915	19.380	ug/l		100
70) Styrene	10.640	104	81400	20.178	ug/l		99
71) Bromoform	10.781	173	21486	18.867	ug/l	#	97
73) Isopropylbenzene	10.945	105	121492	18.261	ug/l		98
74) N-amyl acetate	10.823	43	39294	16.651	ug/l		94
75) 1,1,2,2-Tetrachloroethane	11.195	83	32943	18.132	ug/l		97
76) 1,2,3-Trichloropropane	11.220	75	30421m	20.595	ug/l		
77) Bromobenzene	11.183	156	30904	18.526	ug/l		91
78) n-propylbenzene	11.287	91	142548	18.506	ug/l		98
79) 2-Chlorotoluene	11.348	91	87720	18.783	ug/l		99
80) 1,3,5-Trimethylbenzene	11.433	105	102516	18.620	ug/l		100
81) trans-1,4-Dichloro-2-b...	11.000	75	10045	16.545	ug/l		92
82) 4-Chlorotoluene	11.439	91	104284	18.810	ug/l		97
83) tert-Butylbenzene	11.695	119	105858	18.713	ug/l		98
84) 1,2,4-Trimethylbenzene	11.732	105	105149	19.137	ug/l		99
85) sec-Butylbenzene	11.872	105	122676	18.025	ug/l		100
86) p-Isopropyltoluene	11.988	119	107570	18.286	ug/l		98
87) 1,3-Dichlorobenzene	11.951	146	58833	18.708	ug/l		99
88) 1,4-Dichlorobenzene	12.024	146	60010	18.420	ug/l		98
89) n-Butylbenzene	12.317	91	93913	17.540	ug/l		99
90) Hexachloroethane	12.518	117	20129	17.328	ug/l		91
91) 1,2-Dichlorobenzene	12.317	146	55576	18.823	ug/l		100
92) 1,2-Dibromo-3-Chloropr...	12.920	75	6490	17.598	ug/l		95
93) 1,2,4-Trichlorobenzene	13.567	180	35339	17.699	ug/l		99
94) Hexachlorobutadiene	13.707	225	13881	18.594	ug/l		97
95) Naphthalene	13.756	128	96835	18.305	ug/l		100
96) 1,2,3-Trichlorobenzene	13.939	180	33930	18.518	ug/l		97

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102225\
Data File : VX048283.D
Acq On : 22 Oct 2025 09:53
Operator : JC/MD
Sample : VX1022WBS01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VX1022WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 10/24/2025
Supervised By :Mahesh Dadoda 10/24/2025

Quant Time: Oct 24 05:51:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 14:13:59 2025
Response via : Initial Calibration

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

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

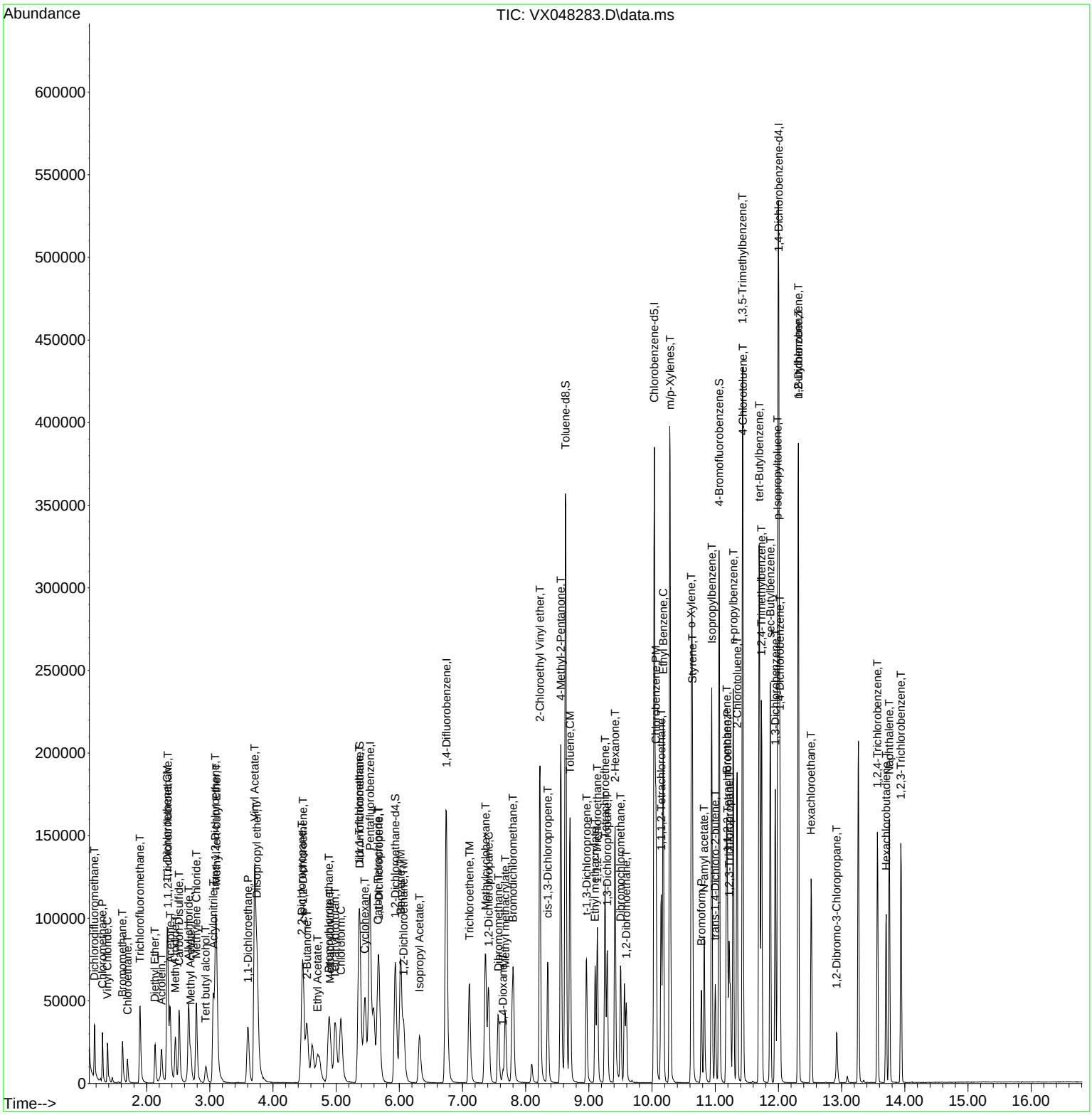
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102225\
Data File : VX048283.D
Acq On : 22 Oct 2025 09:53
Operator : JC/MD
Sample : VX1022WBS01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 24 05:51:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 14:13:59 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX1022WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 10/24/2025
Supervised By :Mahesh Dadoda 10/24/2025



Raw Data: **VX048284.D**

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

Report of Analysis

Client:	Aramark Uniforms			Date Collected:	
Project:	Monthly 2025			Date Received:	
Client Sample ID:	VX1022WBSD01			SDG No.:	Q3368
Lab Sample ID:	VX1022WBSD01			Matrix:	TCLP
Analytical Method:	8260D	Level : LOW		% Solid:	0
Sample Wt/Vol:	5 mL	Final Vol: 5000 uL		Test:	TCLP VOA

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
TARGETS									
75-01-4	Vinyl Chloride	17.8		1	0.26	1.00	ug/L	10/22/25 10:18	VX102225
75-35-4	1,1-Dichloroethene	17.0		1	0.23	1.00	ug/L	10/22/25 10:18	VX102225
78-93-3	2-Butanone	88.8		1	0.98	5.00	ug/L	10/22/25 10:18	VX102225
56-23-5	Carbon Tetrachloride	18.3		1	0.25	1.00	ug/L	10/22/25 10:18	VX102225
67-66-3	Chloroform	19.2		1	0.25	1.00	ug/L	10/22/25 10:18	VX102225
71-43-2	Benzene	18.6		1	0.15	1.00	ug/L	10/22/25 10:18	VX102225
107-06-2	1,2-Dichloroethane	19.6		1	0.22	1.00	ug/L	10/22/25 10:18	VX102225
79-01-6	Trichloroethene	18.8		1	0.090	1.00	ug/L	10/22/25 10:18	VX102225
127-18-4	Tetrachloroethene	18.3		1	0.23	1.00	ug/L	10/22/25 10:18	VX102225
108-90-7	Chlorobenzene	19.1		1	0.12	1.00	ug/L	10/22/25 10:18	VX102225
SURROGATES									
17060-07-0	1,2-Dichloroethane-d4	49.3			74 - 125	99%	SPK: 50		
1868-53-7	Dibromofluoromethane	49.3			75 - 124	99%	SPK: 50		
2037-26-5	Toluene-d8	49.2			86 - 113	98%	SPK: 50		
460-00-4	4-Bromofluorobenzene	49.4			77 - 121	99%	SPK: 50		
INTERNAL STANDARDS		**Area Count**							
363-72-4	Pentafluorobenzene	120000							
540-36-3	1,4-Difluorobenzene	196000							
3114-55-4	Chlorobenzene-d5	181000							
3855-82-1	1,4-Dichlorobenzene-d4	92300							

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_X\Data\VX102225\
Data File : VX048284.D
Acq On : 22 Oct 2025 10:18
Operator : JC/MD
Sample : VX1022WBSD01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 24 05:52:18 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 14:13:59 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX1022WBSD01

Manual Integrations APPROVED

Reviewed By :John Carlone 10/24/2025
Supervised By :Mahesh Dadoda 10/24/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.532	168	120104	50.000	ug/l	-0.01
34) 1,4-Difluorobenzene	6.745	114	195961	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.037	117	180624	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.006	152	92297	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.934	65	82990	49.283	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 98.560%			
35) Dibromofluoromethane	5.367	113	65947	49.295	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 98.580%			
50) Toluene-d8	8.629	98	230741	49.207	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery = 98.420%			
62) 4-Bromofluorobenzene	11.061	95	88101	49.387	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery = 98.780%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.173	85	23340	18.904	ug/l	96
3) Chloromethane	1.301	50	22183	19.248	ug/l	98
4) Vinyl Chloride	1.380	62	18991	17.795	ug/l	99
5) Bromomethane	1.618	94	12429	17.161	ug/l	99
6) Chloroethane	1.697	64	10355	16.512	ug/l #	86
7) Trichlorofluoromethane	1.898	101	36108	17.642	ug/l	96
8) Diethyl Ether	2.136	74	9485	16.470	ug/l	90
9) 1,1,2-Trichlorotrifluo...	2.337	101	23134	17.849	ug/l	95
10) Methyl Iodide	2.453	142	29973	18.396	ug/l	97
11) Tert butyl alcohol	2.941	59	12474	74.608	ug/l	98
12) 1,1-Dichloroethene	2.325	96	21375	16.952	ug/l	89
13) Acrolein	2.233	56	17626	103.366	ug/l	94
14) Allyl chloride	2.666	41	34578	16.517	ug/l	95
15) Acrylonitrile	3.056	53	51590	85.572	ug/l	99
16) Acetone	2.374	43	48392	83.768	ug/l	95
17) Carbon Disulfide	2.514	76	60156	15.137	ug/l	96
18) Methyl Acetate	2.697	43	20120	16.677	ug/l	96
19) Methyl tert-butyl Ether	3.105	73	76922	17.882	ug/l	95
20) Methylene Chloride	2.788	84	25251	17.939	ug/l	92
21) trans-1,2-Dichloroethene	3.087	96	23986	17.318	ug/l	97
22) Diisopropyl ether	3.751	45	76447	18.308	ug/l	95
23) Vinyl Acetate	3.709	43	296196	88.804	ug/l	95
24) 1,1-Dichloroethane	3.605	63	44297	17.545	ug/l	99
25) 2-Butanone	4.538	43	64935	88.805	ug/l	96
26) 2,2-Dichloropropane	4.459	77	41209	18.083	ug/l	97
27) cis-1,2-Dichloroethene	4.477	96	29677	18.359	ug/l	99
28) Bromochloromethane	4.885	49	19339	18.473	ug/l	85
29) Tetrahydrofuran	4.983	42	38740	88.463	ug/l	92
30) Chloroform	5.074	83	51696	19.165	ug/l	99
31) Cyclohexane	5.458	56	38986	18.651	ug/l	93
32) 1,1,1-Trichloroethane	5.367	97	46741	18.802	ug/l	99
36) 1,1-Dichloropropene	5.678	75	34395	18.089	ug/l	99
37) Ethyl Acetate	4.696	43	26522	16.828	ug/l #	95
38) Carbon Tetrachloride	5.666	117	42819	18.252	ug/l	98
39) Methylcyclohexane	7.367	83	40011	17.817	ug/l	93
40) Benzene	6.019	78	102728	18.608	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102225\
Data File : VX048284.D
Acq On : 22 Oct 2025 10:18
Operator : JC/MD
Sample : VX1022WBSD01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 24 05:52:18 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 14:13:59 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX1022WBSD01

Manual Integrations APPROVED

Reviewed By :John Carlone 10/24/2025
Supervised By :Mahesh Dadoda 10/24/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	4.904	41	15325	18.516	ug/l		97
42) 1,2-Dichloroethane	6.068	62	39959	19.615	ug/l		100
43) Isopropyl Acetate	6.324	43	47991	18.537	ug/l	#	94
44) Trichloroethene	7.111	130	27345	18.759	ug/l		89
45) 1,2-Dichloropropane	7.415	63	25354	19.317	ug/l		97
46) Dibromomethane	7.568	93	20155	19.710	ug/l		93
47) Bromodichloromethane	7.806	83	43009	19.480	ug/l		97
48) Methyl methacrylate	7.678	41	24768	18.959	ug/l		95
49) 1,4-Dioxane	7.647	88	6857	397.302	ug/l		93
51) 4-Methyl-2-Pentanone	8.555	43	143580	96.190	ug/l		98
52) Toluene	8.702	92	68859	19.634	ug/l		99
53) t-1,3-Dichloropropene	8.964	75	42100	19.787	ug/l		100
54) cis-1,3-Dichloropropene	8.348	75	43961	19.150	ug/l		91
55) 1,1,2-Trichloroethane	9.135	97	26128	20.033	ug/l		96
56) Ethyl methacrylate	9.098	69	37038	19.415	ug/l		94
57) 1,3-Dichloropropane	9.293	76	44479	19.965	ug/l		98
58) 2-Chloroethyl Vinyl ether	8.226	63	87997	86.903	ug/l		95
59) 2-Hexanone	9.415	43	100647	96.700	ug/l		96
60) Dibromochloromethane	9.500	129	33589	19.161	ug/l		99
61) 1,2-Dibromoethane	9.592	107	28498	20.496	ug/l		93
64) Tetrachloroethene	9.257	164	24658	18.287	ug/l		91
65) Chlorobenzene	10.061	112	77769	19.140	ug/l		99
66) 1,1,1,2-Tetrachloroethane	10.147	131	28328	18.982	ug/l		99
67) Ethyl Benzene	10.177	91	129701	18.749	ug/l		99
68) m/p-Xylenes	10.287	106	99982	38.899	ug/l		99
69) o-Xylene	10.622	106	47318	19.068	ug/l		100
70) Styrene	10.634	104	82638	19.558	ug/l		100
71) Bromoform	10.781	173	22550	18.905	ug/l	#	99
73) Isopropylbenzene	10.945	105	124929	18.532	ug/l		100
74) N-amyl acetate	10.823	43	42802	17.899	ug/l		96
75) 1,1,2,2-Tetrachloroethane	11.195	83	34771	18.887	ug/l		97
76) 1,2,3-Trichloropropane	11.220	75	31727m	21.197	ug/l		
77) Bromobenzene	11.177	156	31977	18.917	ug/l		93
78) n-propylbenzene	11.287	91	146740	18.800	ug/l		98
79) 2-Chlorotoluene	11.348	91	90136	19.047	ug/l		100
80) 1,3,5-Trimethylbenzene	11.433	105	105222	18.861	ug/l		99
81) trans-1,4-Dichloro-2-b...	11.000	75	10645	17.303	ug/l		96
82) 4-Chlorotoluene	11.433	91	105630	18.803	ug/l		96
83) tert-Butylbenzene	11.695	119	107485	18.752	ug/l		97
84) 1,2,4-Trimethylbenzene	11.732	105	107910	19.382	ug/l		99
85) sec-Butylbenzene	11.872	105	126036	18.276	ug/l		100
86) p-Isopropyltoluene	11.988	119	109030	18.291	ug/l		99
87) 1,3-Dichlorobenzene	11.951	146	58821	18.459	ug/l		99
88) 1,4-Dichlorobenzene	12.024	146	60184	18.231	ug/l		98
89) n-Butylbenzene	12.317	91	93633	17.258	ug/l		98
90) Hexachloroethane	12.518	117	19578	16.632	ug/l		94
91) 1,2-Dichlorobenzene	12.317	146	54904	18.351	ug/l		98
92) 1,2-Dibromo-3-Chloropr...	12.920	75	6427	17.199	ug/l		98
93) 1,2,4-Trichlorobenzene	13.567	180	33681	16.647	ug/l		97
94) Hexachlorobutadiene	13.707	225	13822	18.273	ug/l		97
95) Naphthalene	13.756	128	92069	17.176	ug/l		99
96) 1,2,3-Trichlorobenzene	13.939	180	33036	17.794	ug/l		98

Sample Results: **VX048284.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102225\
Data File : VX048284.D
Acq On : 22 Oct 2025 10:18
Operator : JC/MD
Sample : VX1022WBSD01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 24 05:52:18 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 14:13:59 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX1022WBSD01

Manual Integrations APPROVED

Reviewed By :John Carlone 10/24/2025
Supervised By :Mahesh Dadoda 10/24/2025

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

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

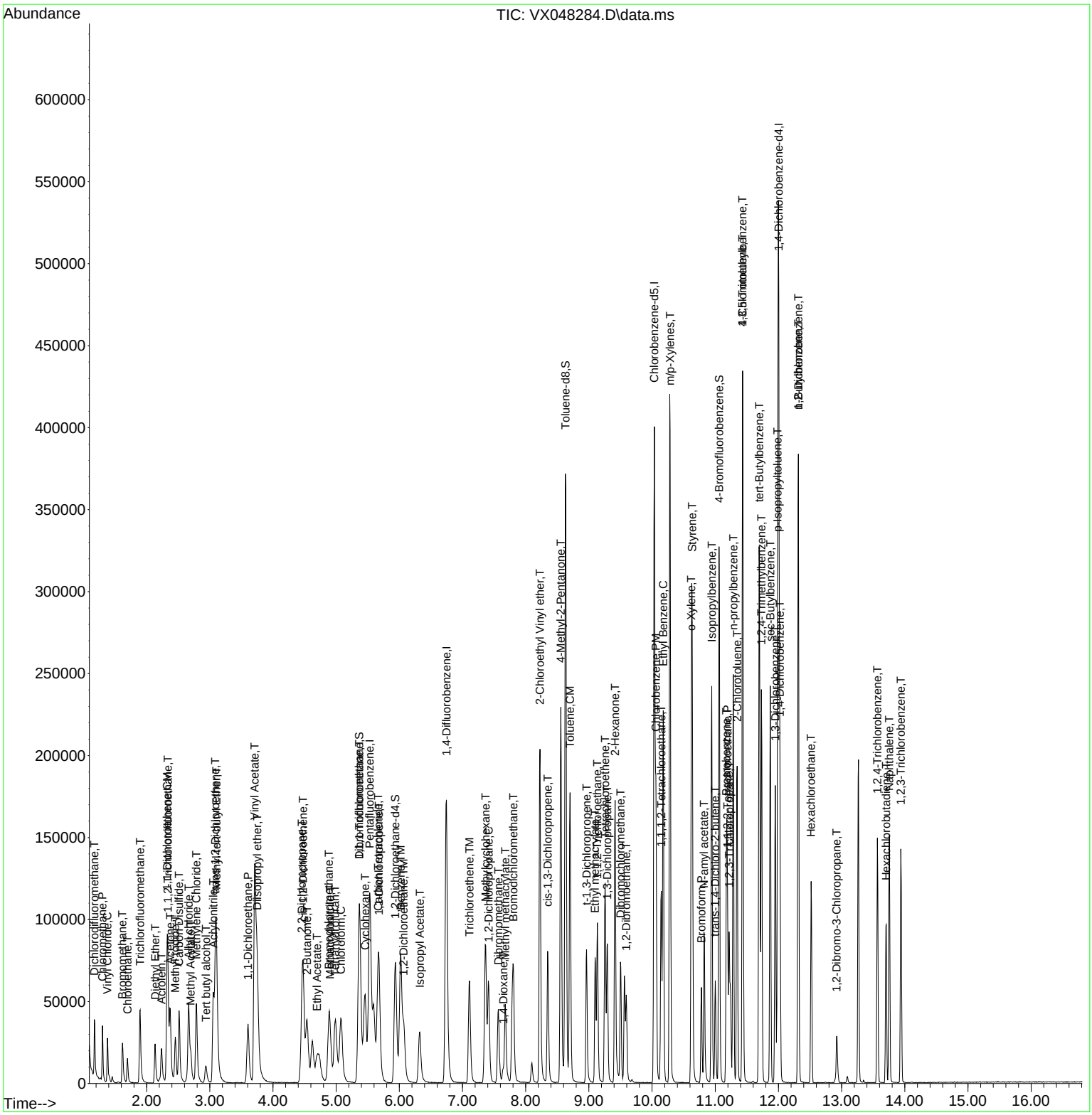
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX102225\
Data File : VX048284.D
Acq On : 22 Oct 2025 10:18
Operator : JC/MD
Sample : VX1022WBSD01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 24 05:52:18 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102025W.M
Quant Title : SW846 8260
QLast Update : Mon Oct 20 14:13:59 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX1022WBSD01

Manual Integrations APPROVED

Reviewed By :John Carlone 10/24/2025
Supervised By :Mahesh Dadoda 10/24/2025



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

Manual Integration Report

Sequence:	VX102025	Instrument	MSVOA_x

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC001	VX048229.D	1,2,3-Trichloropropane	JOHN	10/21/2025 8:03:22 AM	sam	10/21/2025 10:41:22 AM	Peak Integrated by Software
VSTDICC001	VX048229.D	1,4-Dichlorobenzene	JOHN	10/21/2025 8:03:22 AM	sam	10/21/2025 10:41:22 AM	Peak Integrated by Software
VSTDICC001	VX048229.D	Carbon Tetrachloride	JOHN	10/21/2025 8:03:22 AM	sam	10/21/2025 10:41:22 AM	Peak Integrated by Software
VSTDICC001	VX048229.D	Ethyl Acetate	JOHN	10/21/2025 8:03:22 AM	sam	10/21/2025 10:41:22 AM	Peak Integrated by Software
VSTDICC001	VX048229.D	Methacrylonitrile	JOHN	10/21/2025 8:03:22 AM	sam	10/21/2025 10:41:22 AM	Peak Integrated by Software
VSTDICC020	VX048231.D	1,2,3-Trichloropropane	JOHN	10/21/2025 8:03:30 AM	sam	10/21/2025 10:41:32 AM	Peak Integrated by Software
VSTDICCC050	VX048232.D	1,2,3-Trichloropropane	JOHN	10/21/2025 8:03:35 AM	sam	10/21/2025 10:41:38 AM	Peak Integrated by Software
VSTDICC100	VX048233.D	1,2,3-Trichloropropane	JOHN	10/21/2025 8:03:40 AM	sam	10/21/2025 10:42:36 AM	Peak Integrated by Software
VSTDICC150	VX048234.D	1,2,3-Trichloropropane	JOHN	10/21/2025 8:03:49 AM	sam	10/21/2025 10:43:04 AM	Peak Integrated by Software
VSTDICC005	VX048236.D	1,2,3-Trichloropropane	JOHN	10/21/2025 8:03:55 AM	sam	10/21/2025 10:41:42 AM	Peak Integrated by Software
VSTDICC005	VX048236.D	Ethyl Acetate	JOHN	10/21/2025 8:03:55 AM	sam	10/21/2025 10:41:42 AM	Peak Integrated by Software
VSTDICC005	VX048236.D	Methacrylonitrile	JOHN	10/21/2025 8:03:55 AM	sam	10/21/2025 10:41:42 AM	Peak Integrated by Software
VSTDICV050	VX048237.D	1,2,3-Trichloropropane	JOHN	10/21/2025 8:03:59 AM	sam	10/21/2025 10:41:51 AM	Peak Integrated by Software

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

Manual Integration Report

Sequence:	VX102025	Instrument	MSVOA_x

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC050	VX048250.D	1,2,3-Trichloropropane	JOHN	10/21/2025 8:04:26 AM	sam	10/21/2025 10:42:06 AM	Peak Integrated by Software

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

Manual Integration Report

Sequence:	Vx102225	Instrument	MSVOA_x

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC050	VX048280.D	1,2,3-Trichloropropane	JOHN	10/24/2025 8:20:32 AM	MMDadoda	10/24/2025 2:35:08 PM	Peak Integrated by Software
VX1022WBS01	VX048283.D	1,2,3-Trichloropropane	JOHN	10/24/2025 8:20:36 AM	MMDadoda	10/24/2025 2:35:13 PM	Peak Integrated by Software
VX1022WBSD01	VX048284.D	1,2,3-Trichloropropane	JOHN	10/24/2025 8:20:45 AM	MMDadoda	10/24/2025 2:35:19 PM	Peak Integrated by Software
VSTDCCC050	VX048308.D	1,2,3-Trichloropropane	JOHN	10/24/2025 8:22:52 AM	MMDadoda	10/24/2025 2:35:30 PM	Peak Integrated by Software

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

Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QCBatch ID # VX102025

Review By	John Carlone	Review On	10/21/2025 8:15:04 AM		
Supervise By	Semsettin Yesilyurt	Supervise On	10/21/2025 10:44:02 AM		
SubDirectory	VX102025	HP Acquire Method		HP Processing Method	82X102025W.M

STD. NAME	STD REF.#
Tune/Reschk	VP135849
Initial Calibration Stds	VP135851,VP135852,VP135853,VP135854,VP135855,VP135856
CCC	VP135850
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VX048226.D	20 Oct 2025 08:15	JC/MD	Ok
2	VSTDCCC050	VX048227.D	20 Oct 2025 10:13	JC/MD	Ok
3	IBLK	VX048228.D	20 Oct 2025 10:38	JC/MD	Not Ok
4	VSTDICC001	VX048229.D	20 Oct 2025 10:59	JC/MD	Ok,M
5	VSTDICC005	VX048230.D	20 Oct 2025 11:20	JC/MD	Not Ok
6	VSTDICC020	VX048231.D	20 Oct 2025 11:40	JC/MD	Ok,M
7	VSTDICCC050	VX048232.D	20 Oct 2025 12:01	JC/MD	Ok,M
8	VSTDICC100	VX048233.D	20 Oct 2025 12:22	JC/MD	Ok,M
9	VSTDICC150	VX048234.D	20 Oct 2025 12:43	JC/MD	Ok,M
10	IBLK	VX048235.D	20 Oct 2025 13:04	JC/MD	Ok
11	VSTDICC005	VX048236.D	20 Oct 2025 13:49	JC/MD	Ok,M
12	VSTDICV050	VX048237.D	20 Oct 2025 14:28	JC/MD	Ok,M
13	VX1020MBL01	VX048238.D	20 Oct 2025 14:56	JC/MD	Ok
14	VX1020WBL01	VX048239.D	20 Oct 2025 15:23	JC/MD	Ok
15	VX1020WBS01	VX048240.D	20 Oct 2025 15:50	JC/MD	Ok,M
16	Q3371-03	VX048241.D	20 Oct 2025 16:18	JC/MD	ReRun
17	Q3371-06	VX048242.D	20 Oct 2025 16:38	JC/MD	ReRun
18	Q3371-01	VX048243.D	20 Oct 2025 16:59	JC/MD	ReRun
19	Q3371-02	VX048244.D	20 Oct 2025 17:20	JC/MD	ReRun
20	Q3371-04	VX048245.D	20 Oct 2025 17:41	JC/MD	Ok
21	Q3371-05	VX048246.D	20 Oct 2025 18:02	JC/MD	Ok

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

Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QCBatch ID # VX102025

Review By	John Carlone	Review On	10/21/2025 8:15:04 AM		
Supervise By	Semsettin Yesilyurt	Supervise On	10/21/2025 10:44:02 AM		
SubDirectory	VX102025	HP Acquire Method		HP Processing Method	82X102025W.M

STD. NAME	STD REF.#
Tune/Reschk	VP135849
Initial Calibration Stds	VP135851,VP135852,VP135853,VP135854,VP135855,VP135856
CCC	VP135850
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

22	VX1020WBSD01	VX048247.D	20 Oct 2025 18:22	JC/MD	Ok,M
23	VX1020MBS01	VX048248.D	20 Oct 2025 18:43	JC/MD	Ok,M
24	Q3390-01	VX048249.D	20 Oct 2025 19:04	JC/MD	Ok
25	VSTDCCC050	VX048250.D	20 Oct 2025 19:25	JC/MD	Ok,M

M : Manual Integration

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

Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QCBatch ID # VX102225

Review By	John Carlone	Review On	10/24/2025 8:33:44 AM		
Supervise By	Mahesh Dadoda	Supervise On	10/24/2025 2:35:38 PM		
SubDirectory	VX102225	HP Acquire Method		HP Processing Method	82X102025W.M

STD. NAME	STD REF.#
Tune/Reschk	VP135885
Initial Calibration Stds	
CCC	VP135886,VP135887
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VX048279.D	22 Oct 2025 08:07	JC/MD	Ok
2	VSTDCCC050	VX048280.D	22 Oct 2025 08:37	JC/MD	Ok,M
3	VX1022MBL01	VX048281.D	22 Oct 2025 09:05	JC/MD	Ok
4	VX1022WBL01	VX048282.D	22 Oct 2025 09:26	JC/MD	Ok
5	VX1022WBS01	VX048283.D	22 Oct 2025 09:53	JC/MD	Ok,M
6	VX1022WBSD01	VX048284.D	22 Oct 2025 10:18	JC/MD	Ok,M
7	Q3368-06	VX048285.D	22 Oct 2025 10:39	JC/MD	Ok
8	Q3368-07	VX048286.D	22 Oct 2025 11:00	JC/MD	Not Ok
9	Q3397-04	VX048287.D	22 Oct 2025 11:20	JC/MD	Ok,M
10	Q3368-07	VX048288.D	22 Oct 2025 11:41	JC/MD	Ok
11	Q3402-03	VX048289.D	22 Oct 2025 12:02	JC/MD	Ok
12	Q3402-06	VX048290.D	22 Oct 2025 12:23	JC/MD	ReRun
13	Q3402-09	VX048291.D	22 Oct 2025 12:43	JC/MD	ReRun
14	Q3402-12	VX048292.D	22 Oct 2025 13:04	JC/MD	ReRun
15	Q3403-04	VX048293.D	22 Oct 2025 13:25	JC/MD	ReRun
16	Q3412-04	VX048294.D	22 Oct 2025 13:46	JC/MD	ReRun
17	PB170173TB	VX048295.D	22 Oct 2025 14:06	JC/MD	Ok
18	Q3373-01	VX048296.D	22 Oct 2025 14:27	JC/MD	ReRun
19	Q3373-02	VX048297.D	22 Oct 2025 14:48	JC/MD	ReRun
20	Q3373-03	VX048298.D	22 Oct 2025 15:09	JC/MD	ReRun
21	Q3373-04	VX048299.D	22 Oct 2025 15:29	JC/MD	ReRun

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Fax : 908 789 8922

Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QCBatch ID # VX102225

Review By	John Carlone	Review On	10/24/2025 8:33:44 AM		
Supervise By	Mahesh Dadoda	Supervise On	10/24/2025 2:35:38 PM		
SubDirectory	VX102225	HP Acquire Method		HP Processing Method	82X102025W.M

STD. NAME	STD REF.#
Tune/Reschk	VP135885
Initial Calibration Stds	
CCC	VP135886,VP135887
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

22	Q3399-04	VX048300.D	22 Oct 2025 15:50	JC/MD	ReRun
23	Q3402-06RE	VX048301.D	22 Oct 2025 16:11	JC/MD	Confirms
24	Q3402-09	VX048302.D	22 Oct 2025 16:32	JC/MD	Ok
25	Q3402-12RE	VX048303.D	22 Oct 2025 16:53	JC/MD	Confirms
26	Q3426-01	VX048304.D	22 Oct 2025 17:13	JC/MD	Not Ok
27	Q3426-02	VX048305.D	22 Oct 2025 17:34	JC/MD	Not Ok
28	Q3426-03	VX048306.D	22 Oct 2025 17:55	JC/MD	Not Ok
29	Q3426-04	VX048307.D	22 Oct 2025 18:16	JC/MD	Not Ok
30	VSTDCCC050	VX048308.D	22 Oct 2025 18:36	JC/MD	Ok,M

M : Manual Integration

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Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QCBatch ID # VX102025

Review By	John Carlone	Review On	10/21/2025 8:15:04 AM		
Supervise By	Semsettin Yesilyurt	Supervise On	10/21/2025 10:44:02 AM		
SubDirectory	VX102025	HP Acquire Method		HP Processing Method	82X102025W.M

STD. NAME	STD REF.#
Tune/Reschk	VP135849
Initial Calibration Stds	VP135851,VP135852,VP135853,VP135854,VP135855,VP135856
CCC	VP135850
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VX048226.D	20 Oct 2025 08:15		JC/MD	Ok
2	VSTDCCC050	VSTDCCC050	VX048227.D	20 Oct 2025 10:13		JC/MD	Ok
3	IBLK	IBLK	VX048228.D	20 Oct 2025 10:38		JC/MD	Not Ok
4	VSTDICC001	VSTDICC001	VX048229.D	20 Oct 2025 10:59	LR-58,94	JC/MD	Ok,M
5	VSTDICC005	VSTDICC005	VX048230.D	20 Oct 2025 11:20		JC/MD	Not Ok
6	VSTDICC020	VSTDICC020	VX048231.D	20 Oct 2025 11:40		JC/MD	Ok,M
7	VSTDICCC050	VSTDICCC050	VX048232.D	20 Oct 2025 12:01		JC/MD	Ok,M
8	VSTDICC100	VSTDICC100	VX048233.D	20 Oct 2025 12:22		JC/MD	Ok,M
9	VSTDICC150	VSTDICC150	VX048234.D	20 Oct 2025 12:43		JC/MD	Ok,M
10	IBLK	IBLK	VX048235.D	20 Oct 2025 13:04		JC/MD	Ok
11	VSTDICC005	VSTDICC005	VX048236.D	20 Oct 2025 13:49		JC/MD	Ok,M
12	VSTDICV050	ICVVX102025	VX048237.D	20 Oct 2025 14:28	pH#Lot#V12668	JC/MD	Ok,M
13	VX1020MBL01	VX1020MBL01	VX048238.D	20 Oct 2025 14:56		JC/MD	Ok
14	VX1020WBL01	VX1020WBL01	VX048239.D	20 Oct 2025 15:23		JC/MD	Ok
15	VX1020WBS01	VX1020WBS01	VX048240.D	20 Oct 2025 15:50		JC/MD	Ok,M
16	Q3371-03	VPB184-HYD-2025101	VX048241.D	20 Oct 2025 16:18	vial A pH<2 Surrogate Fail	JC/MD	ReRun
17	Q3371-06	VPB184-HYD-2025101	VX048242.D	20 Oct 2025 16:38	vial A pH<2 Surrogate Fail	JC/MD	ReRun
18	Q3371-01	BP-VPB-184-TB-20251	VX048243.D	20 Oct 2025 16:59	vial A pH<2 TB; Surrogate Fail	JC/MD	ReRun

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Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QCBatch ID # VX102025

Review By	John Carlone	Review On	10/21/2025 8:15:04 AM		
Supervise By	Semsettin Yesilyurt	Supervise On	10/21/2025 10:44:02 AM		
SubDirectory	VX102025	HP Acquire Method		HP Processing Method	82X102025W.M

STD. NAME	STD REF.#
Tune/Reschk	VP135849
Initial Calibration Stds	VP135851,VP135852,VP135853,VP135854,VP135855,VP135856
CCC	VP135850
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

19	Q3371-02	BP-VPB-184-EB-20251	VX048244.D	20 Oct 2025 17:20	vial A pH<2 EB; Surrogate Fail; Hit of com.#16	JC/MD	ReRun
20	Q3371-04	BP-VPB-184-GW-915-9	VX048245.D	20 Oct 2025 17:41	vial A pH<2	JC/MD	Ok
21	Q3371-05	BP-VPB-184-GW-920-9	VX048246.D	20 Oct 2025 18:02	vial A pH<2	JC/MD	Ok
22	VX1020WBSD01	VX1020WBSD01	VX048247.D	20 Oct 2025 18:22		JC/MD	Ok,M
23	VX1020MBS01	VX1020MBS01	VX048248.D	20 Oct 2025 18:43		JC/MD	Ok,M
24	Q3390-01	4174	VX048249.D	20 Oct 2025 19:04	cloth material	JC/MD	Ok
25	VSTDCCC050	VSTDCCC050EC	VX048250.D	20 Oct 2025 19:25		JC/MD	Ok,M

M : Manual Integration

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Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QCBatch ID # VX102225

Review By	John Carlone	Review On	10/24/2025 8:33:44 AM		
Supervise By	Mahesh Dadoda	Supervise On	10/24/2025 2:35:38 PM		
SubDirectory	VX102225	HP Acquire Method		HP Processing Method	82X102025W.M

STD. NAME	STD REF.#
Tune/Reschk	VP135885
Initial Calibration Stds	
CCC	VP135886,VP135887
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VX048279.D	22 Oct 2025 08:07		JC/MD	Ok
2	VSTDCCC050	VSTDCCC050	VX048280.D	22 Oct 2025 08:37	pH#Lot#V12668	JC/MD	Ok,M
3	VX1022MBL01	VX1022MBL01	VX048281.D	22 Oct 2025 09:05		JC/MD	Ok
4	VX1022WBL01	VX1022WBL01	VX048282.D	22 Oct 2025 09:26		JC/MD	Ok
5	VX1022WBS01	VX1022WBS01	VX048283.D	22 Oct 2025 09:53		JC/MD	Ok,M
6	VX1022WBSD01	VX1022WBSD01	VX048284.D	22 Oct 2025 10:18		JC/MD	Ok,M
7	Q3368-06	OUTSIDE-DUMPSTER	VX048285.D	22 Oct 2025 10:39	vial A pH#5.0	JC/MD	Ok
8	Q3368-07	PRESS-SLUDGE	VX048286.D	22 Oct 2025 11:00	not purge; RT Shifted	JC/MD	Not Ok
9	Q3397-04	TP-7-WC	VX048287.D	22 Oct 2025 11:20	vial A pH#5.0	JC/MD	Ok,M
10	Q3368-07	PRESS-SLUDGE	VX048288.D	22 Oct 2025 11:41	vial A pH#5.0 foamy sample	JC/MD	Ok
11	Q3402-03	41-LA	VX048289.D	22 Oct 2025 12:02	vial A pH#5.0	JC/MD	Ok
12	Q3402-06	41-RA	VX048290.D	22 Oct 2025 12:23	vial A pH#5.0 Surrogate fail	JC/MD	ReRun
13	Q3402-09	41-LB	VX048291.D	22 Oct 2025 12:43	vial A pH#5.0 Surrogate fail	JC/MD	ReRun
14	Q3402-12	41-RB	VX048292.D	22 Oct 2025 13:04	vial A pH#5.0 Surrogate fail	JC/MD	ReRun
15	Q3403-04	MH-18	VX048293.D	22 Oct 2025 13:25	vial A pH#5.0 Surrogate fail	JC/MD	ReRun
16	Q3412-04	TP-6	VX048294.D	22 Oct 2025 13:46	vial A pH#5.0 Surrogate fail	JC/MD	ReRun
17	PB170173TB	PB170173TB	VX048295.D	22 Oct 2025 14:06		JC/MD	Ok
18	Q3373-01	STORAGE-BLANK-SO	VX048296.D	22 Oct 2025 14:27	vial A pH<2 Surrogate fail	JC/MD	ReRun

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Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QCBatch ID # VX102225

Review By	John Carlone	Review On	10/24/2025 8:33:44 AM		
Supervise By	Mahesh Dadoda	Supervise On	10/24/2025 2:35:38 PM		
SubDirectory	VX102225	HP Acquire Method		HP Processing Method	82X102025W.M

STD. NAME	STD REF.#
Tune/Reschk	VP135885
Initial Calibration Stds	
CCC	VP135886,VP135887
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

19	Q3373-02	STORAGE-BLANK-WA	VX048297.D	22 Oct 2025 14:48	vial A pH<2 Surrogate fail	JC/MD	ReRun
20	Q3373-03	STORAGE-BLANK-WA	VX048298.D	22 Oct 2025 15:09	vial A pH<2 Surrogate fail	JC/MD	ReRun
21	Q3373-04	STORAGE-BLANK-SA	VX048299.D	22 Oct 2025 15:29	vial A pH<2 Surrogate fail	JC/MD	ReRun
22	Q3399-04	COMP-ROLLOFF	VX048300.D	22 Oct 2025 15:50	vial A pH#5.0 Surrogate fail	JC/MD	ReRun
23	Q3402-06RE	41-RARE	VX048301.D	22 Oct 2025 16:11	vial B pH#5.0 Surrogate fail	JC/MD	Confirms
24	Q3402-09	41-LB	VX048302.D	22 Oct 2025 16:32	vial B pH#5.0	JC/MD	Ok
25	Q3402-12RE	41-RBRE	VX048303.D	22 Oct 2025 16:53	vial B pH#5.0 Surrogate fail	JC/MD	Confirms
26	Q3426-01	TWP2	VX048304.D	22 Oct 2025 17:13	Run @ Lower Dilution	JC/MD	Not Ok
27	Q3426-02	TWP3	VX048305.D	22 Oct 2025 17:34	Run @ Lower Dilution; Surrogate Fail	JC/MD	Not Ok
28	Q3426-03	TWP5	VX048306.D	22 Oct 2025 17:55	Run @ Lower Dilution; Surrogate Fail	JC/MD	Not Ok
29	Q3426-04	MW2	VX048307.D	22 Oct 2025 18:16	Run @ Lower Dilution	JC/MD	Not Ok
30	VSTDCCC050	VSTDCCC050EC	VX048308.D	22 Oct 2025 18:36		JC/MD	Ok,M

M : Manual Integration

Alliance TECHNICAL GROUP

TCLP EXTRACTION LOGPAGE

PB170173

SOP ID : M1311-TCLP-16

SDG No : N/A

Weigh By : JP

Balance ID : WC SC-7

pH Meter ID : WC PH METER-1

Extraction By : JP

Filter By : JP

Pippete ID : WC

Tumbler ID : ZHE-1 / ZHE-2

TCLP Filter ID : 60828725

Start Prep Date : 10/21/2025 **Time :** 14:00

End Prep Date : 10/22/2025 **Time :** 07:20

Combination Ratio : 20

ZHE Cleaning Batch : ~~N/A~~ 18

Initial Room Temperature: 22 °C

Final Room Temperature: 21 °C

TCLP Technician Signature : JP

Supervisor By : JC

Standared 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 ZHE1- /ZHE-2 checked,30 rpm.

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
10/22/25 09:30	JP Prep Room	R VOC Lab
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

TCLP EXTRACTION LOGPAGE

PB170173

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
PB170173TB	LEB173	11	N/A	500	N/A	N/A	N/A	N/A	N/A	ZHE-2
Q3368-06	OUTSIDE-DUMPSTER	01	25.02	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
Q3368-07	PRESS-SLUDGE	02	25.03	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
Q3397-04	TP-7-WC	03	25.01	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
Q3399-04	COMP-ROLLOFF	04	25.02	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
Q3402-03	41-LA	05	25.02	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
Q3402-06	41-RA	06	25.03	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
Q3402-09	41-LB	07	25.02	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
Q3402-12	41-RB	08	25.03	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
Q3403-04	MH-18	09	25.02	500	N/A	N/A	N/A	N/A	N/A	ZHE-1
Q3412-04	TP-6	10	25.03	500	N/A	N/A	N/A	N/A	N/A	ZHE-1

Alliance TECHNICAL GROUP

TCLP Solid Determination

PB170173

SampleID	ClientID	Sample Weight (g)	Filter Weight (g)	Filtrate (mL)	Filter + Solid (After 100°C)	% solids	% Dry Solids
PB170173TB	LEB173	N/A	N/A	N/A	N/A	N/A	N/A
Q3368-06	OUTSIDE-DUMPSTER	N/A	N/A	N/A	N/A	100	N/A
Q3368-07	PRESS-SLUDGE	N/A	N/A	N/A	N/A	100	N/A
Q3397-04	TP-7-WC	N/A	N/A	N/A	N/A	100	N/A
Q3399-04	COMP-ROLLOFF	N/A	N/A	N/A	N/A	100	N/A
Q3402-03	41-LA	N/A	N/A	N/A	N/A	100	N/A
Q3402-06	41-RA	N/A	N/A	N/A	N/A	100	N/A
Q3402-09	41-LB	N/A	N/A	N/A	N/A	100	N/A
Q3402-12	41-RB	N/A	N/A	N/A	N/A	100	N/A
Q3403-04	MH-18	N/A	N/A	N/A	N/A	100	N/A
Q3412-04	TP-6	N/A	N/A	N/A	N/A	100	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : TCLP ZHE Q3406 **WorkList ID :** 192577 **Department :** TCLP Extraction **Date :** 10-21-2025 09:35:20

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3368-06	OUTSIDE-DUMPSTER	Solid	TCLP ZHE Extraction	Cool 4 deg C	ARAM01	D41	10/16/2025	1311 ZHE
Q3368-07	PRESS-SLUDGE	Solid	TCLP ZHE Extraction	Cool 4 deg C	ARAM01	D41	10/16/2025	1311 ZHE
Q3397-04	TP-7-WC	Solid	TCLP ZHE Extraction	Cool 4 deg C	PSEG03	D31	10/18/2025	1311 ZHE
Q3399-04	COMP-ROLLOFF	Solid	TCLP ZHE Extraction	Cool 4 deg C	ICES02	D41	10/20/2025	1311 ZHE
Q3402-03	41-LA	Solid	TCLP ZHE Extraction	Cool 4 deg C	PSEG03	D31	10/20/2025	1311 ZHE
Q3402-06	41-RA	Solid	TCLP ZHE Extraction	Cool 4 deg C	PSEG03	D31	10/20/2025	1311 ZHE
Q3402-09	41-LB	Solid	TCLP ZHE Extraction	Cool 4 deg C	PSEG03	D31	10/20/2025	1311 ZHE
Q3402-12	41-RB	Solid	TCLP ZHE Extraction	Cool 4 deg C	PSEG03	D31	10/20/2025	1311 ZHE
Q3403-04	MH-18	Solid	TCLP ZHE Extraction	Cool 4 deg C	PSEG03	D41	10/20/2025	1311 ZHE
Q3412-04	TP-6	Solid	TCLP ZHE Extraction	Cool 4 deg C	PSEG03	D31	10/20/2025	1311 ZHE

Date/Time 10/21/25 12:00
Raw Sample Received by:
Raw Sample Relinquished by:

Date/Time 10/21/25 15:30
Raw Sample Received by:
Raw Sample Relinquished by:

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Prep Standard - Chemical Standard Summary

Order ID : Q3368

Test : TCLP VOA

Prepbatch ID :

Sequence ID/Qc Batch ID: Vx102225,

Standard ID :
VP134142,VP134149,VP134956,VP134957,VP135552,VP135834,VP135878,VP135885,VP135886,VP135887,

Chemical ID :
V13391,V14200,V14204,V14205,V14290,V14509,V14510,V14531,V14532,V14625,V14626,V14636,V14637,V14638,V14639,V14668,V14671,V14673,V14675,V14727,V14728,V14803,V14815,V14844,V14909,V14926,V14928,V14929,V14951,V14952,V15073,V15074,V15075,W3112,

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
719	8260 Working STD (BCM)-First source, 400PPM	VP134142	06/06/2025	12/06/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 06/10/2025

FROM 1.00000ml of V14668 + 1.00000ml of V14671 + 1.00000ml of V14673 + 1.00000ml of V14675 + 16.00000ml of V14929 = Final Quantity: 20.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1810	8260 Working Std(2-CVE)-800ppm	VP134149	06/06/2025	12/06/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 06/10/2025

FROM 1.00000ml of V14636 + 1.00000ml of V14637 + 1.00000ml of V14638 + 1.00000ml of V14639 + 46.00000ml of V14929 = Final Quantity: 50.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
247	8260 Internal Standard, 250PPM	VP134956	08/01/2025	11/09/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 08/06/2025

FROM 0.25000ml of V14290 + 24.75000ml of V14626 = Final Quantity: 25.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
218	BFB, 25PPM	VP134957	08/01/2025	11/22/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 08/06/2025

FROM 0.50000ml of V13391 + 49.50000ml of V14625 = Final Quantity: 50.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
257	8260 Calibration Working STD Mix-First source, 160PPM	VP135552	09/22/2025	11/03/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 09/26/2025

FROM 0.40000ml of V14844 + 1.00000ml of V14200 + 1.00000ml of V14509 + 1.00000ml of V14510 + 1.00000ml of V14531 + 1.00000ml of V14532 + 1.00000ml of V14727 + 1.00000ml of V14728 + 1.00000ml of V14803 + 1.00000ml of V14815 + 1.00000ml of V14951 + 1.00000ml of V14952 + 1.50000ml of V14204 + 1.50000ml of V14205 + 10.60000ml of V14928 = Final Quantity: 25.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
51	8260 Working STD (Acrolein) -first source, 800PPM	VP135834	10/17/2025	11/16/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 10/17/2025

FROM 1.00000ml of V15073 + 1.50000ml of V15074 + 1.50000ml of V15075 + 21.00000ml of V14928 = Final Quantity: 25.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
617	8260 Surrogate, 400PPM	VP135878	10/22/2025	04/20/2026	Semsettin Yesilyurt	None	None	Mahesh Dadoda 10/23/2025

FROM 0.40000ml of V14909 + 24.60000ml of V14926 = Final Quantity: 25.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
589	BFB TUNE CHECK	VP135885	10/22/2025	10/23/2025	John Carlone	None	None	Mahesh Dadoda 10/23/2025

FROM 39.98400ml of W3112 + 0.01600ml of VP134957 = Final Quantity: 40.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
620	50 PPB CCC, 8260-Water	VP135886	10/22/2025	10/23/2025	John Carlone	None	None	Mahesh Dadoda 10/23/2025

FROM 39.94450ml of W3112 + 0.00500ml of VP134142 + 0.00500ml of VP135878 + 0.00800ml of VP134956 + 0.01250ml of VP134149 + 0.01250ml of VP135552 + 0.01250ml of VP135834 = Final Quantity: 40.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
620	50 PPB CCC, 8260-Water	VP135887	10/22/2025	10/23/2025	John Carlone	None	None	Mahesh Dadoda 10/23/2025

FROM 39.94450ml of W3112 + 0.00500ml of VP134142 + 0.00500ml of VP135878 + 0.00800ml of VP134956 + 0.01250ml of VP134149 + 0.01250ml of VP135552 + 0.01250ml of VP135834 = Final Quantity: 40.000 ml

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30067 / BFB tuneing solution	A0191805	11/22/2025	11/22/2024 / SAM	01/13/2023 / SAM	V13391

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml	A0200785	03/22/2026	09/22/2025 / sam	02/28/2024 / SAM	V14200

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml	A0200785	03/22/2026	09/22/2025 / sam	02/28/2024 / SAM	V14204

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml	A0200785	03/22/2026	09/22/2025 / sam	02/28/2024 / SAM	V14205

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555581 / Custom Standard, 8260 Internal Std [CS 5179-1]	A0210184	12/12/2025	12/12/2024 / SAM	04/15/2024 / SAM	V14290

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95317 / Universal VOA Mega Mix (Min order = 5)	021624	03/22/2026	09/22/2025 / sam	09/17/2024 / SAM	V14509

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95317 / Universal VOA Mega Mix (Min order = 5)	021624	03/22/2026	09/22/2025 / sam	09/17/2024 / SAM	V14510

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95319 / Revised Additions Mix (Min = 5)	091724	03/22/2026	09/22/2025 / sam	09/18/2024 / SAM	V14531

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95319 / Revised Additions Mix (Min = 5)	091724	03/22/2026	09/22/2025 / sam	09/18/2024 / SAM	V14532

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	23I0762004	01/29/2026	07/29/2025 / SAM	11/26/2024 / SAM	V14625

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	23I0762004	11/09/2025	05/09/2025 / SAM	11/26/2024 / SAM	V14626

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	12/06/2025	06/06/2025 / SAM	12/06/2024 / SAM	V14636

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	12/06/2025	06/06/2025 / SAM	12/06/2024 / SAM	V14637

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	12/06/2025	06/06/2025 / SAM	12/06/2024 / SAM	V14638

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	12/06/2025	06/06/2025 / SAM	12/06/2024 / SAM	V14639

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul	A0214960	12/06/2025	06/06/2025 / SAM	12/09/2024 / SAM	V14668

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul	A0214960	12/06/2025	06/06/2025 / SAM	12/09/2024 / SAM	V14671

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul	A0214960	12/06/2025	06/06/2025 / SAM	12/09/2024 / SAM	V14673

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul	A0214960	12/06/2025	06/06/2025 / SAM	12/09/2024 / SAM	V14675

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30042 / VOA Mix,500 series method 502.2 Calibration Std #1 gases, 2000uq/ml, PTM, 1ml	A0216826	03/22/2026	09/22/2025 / sam	12/17/2024 / SAM	V14727

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30042 / VOA Mix,500 series method 502.2 Calibration Std #1 gases, 2000uq/ml, PTM, 1ml	A0216826	03/22/2026	09/22/2025 / sam	12/17/2024 / SAM	V14728

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555408 / Custom Standard, Vinyl Acetate Standard w/ Grav [CS 5066-6] TWO SEPARATE LOTS	A0220471	03/22/2026	09/22/2025 / sam	01/08/2025 / SAM	V14803

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555408 / Custom Standard, Vinyl Acetate Standard w/ Grav [CS 5066-6] TWO SEPARATE LOTS	A0220471	03/22/2026	09/22/2025 / sam	01/08/2025 / SAM	V14815

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30470 / VOA Stock Solution, tert-butanol std, 1mL, P&TM	A0217535	03/22/2026	09/22/2025 / sam	01/21/2025 / SAM	V14844

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555582 / Custom Mixture, 8260 A/B Surrogate Mix [CS 5179-2]	A0223904	04/22/2026	10/22/2025 / sam	03/24/2025 / SAM	V14909

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	24G0262002	04/20/2026	10/20/2025 / sam	05/09/2025 / SAM	V14926

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	24G0262002	03/22/2026	09/22/2025 / sam	05/09/2025 / SAM	V14928

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	24G0262002	12/06/2025	06/06/2025 / SAM	05/09/2025 / SAM	V14929

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30489 / VOA Mix, 8260B Acetates Mix, P&TM, 1mL	A0222076	03/22/2026	09/22/2025 / sam	05/19/2025 / SAM	V14951

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30489 / VOA Mix, 8260B Acetates Mix, P&TM, 1mL	A0222076	03/22/2026	09/22/2025 / sam	05/19/2025 / SAM	V14952

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	101625	11/16/2025	10/17/2025 / sam	10/17/2025 / sam	V15073

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	101625	11/16/2025	10/17/2025 / sam	10/17/2025 / sam	V15074

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	101625	11/16/2025	10/17/2025 / sam	10/17/2025 / sam	V15075

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / Iwona	07/03/2024 / Iwona	W3112

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

avantor™ | J.T.Baker®

Material No.: 9077-02
Batch No.: 2310762004
Manufactured Date: 2023-08-11
Expiration Date: 2026-08-10
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (CH_3OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.5 ppm
Titrable Acid (µeq/g)	≤ 0.3	0.2
Titrable Base (µeq/g)	≤ 0.10	0.01
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis – Below EPA 8260B CRQL	Conforms	Conforms

For Laboratory,Research,or Manufacturing Use
Performance Tested for Use in EPA Methods
500 Series for Drinking Water
600 Series for Wastewater
846 for Solid Waste

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Ken Koehnlein
Sr. Manager, Quality Assurance

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

avantor™ | J.T.Baker®

Material No.: 9077-02
Batch No.: 2310762004
Manufactured Date: 2023-08-11
Expiration Date: 2026-08-10
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Certificate of Analysis

Test	Specification	Result
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Volatile Organic Trace Analysis – Below EPA 8260B CRQL	Conforms	Conforms

For Laboratory,Research,or Manufacturing Use
Performance Tested for Use in EPA Methods
500 Series for Drinking Water
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Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Ken Koehnlein
Sr. Manager, Quality Assurance

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

Rec 09/17/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 95317
Lot Number: 021624
Description: Universal VOA Megamix
69 components
Expiration Date: 021627
Recommended Storage: Freezer (0 °C)
Nominal Concentration (µg/mL): 2000
NIST Test ID#: 6UTB

Solvent(s): Lot#
Methanol EG359-USQ12

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 100.0 0.021 Flask Uncertainty

Formulated By: Prashant Chauhan 021624 DATE

Reviewed By: Pedro L. Rentas 021624 DATE

Compound	(RM#) Part Number	Lot Number	Dil. Factor	Initial Vol. (mL)	Initial Conc.(ug/mL)	Nominal Conc (µg/mL)	Purity (%)	Purity Uncertainty	Uncertainty Pipette (mL)	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Acetonitrile	(0324)	021644	NA	NA	NA	2000	99.99	0.2	NA	0.20007	0.20020	2001.3	8.1	75-05-8	40 ppm (70mg/m3/8H)	orl-rat 2460mg/kg
2. Allyl chloride (3-Chloropropene)	(0325)	102396	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20221	2001.4	8.2	107-05-1	1 ppm (3mg/m3/8H)	orl-rat 700mg/kg
3. Carbon disulphide	(0060)	MKCR8561	NA	NA	NA	2000	99.99	0.2	NA	0.20007	0.20023	2001.6	8.1	75-15-0	4 ppm (12mg/m3) (skin)	orl-rat 1200mg/kg
4. cis-1,4-Dichloro-2-butene	(1196)	14718EF	NA	NA	NA	2000	95	0.2	NA	0.21058	0.21069	2001.1	8.5	1476-11-5	N/A	N/A
5. trans-1,4-Dichloro-2-butene	(0466)	MKBP6041V	NA	NA	NA	2000	96.5	0.2	NA	0.20731	0.20748	2001.7	8.4	110-57-6	N/A	N/A
6. Diethyl ether	(0153)	IK18CAS0000	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20040	2001.5	8.1	60-29-7	N/A	N/A
7. Ethyl methacrylate	(0381)	06128PX	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20230	2002.3	8.2	97-63-2	N/A	orl-rat 14800mg/kg
8. Iodomethane	(0489)	SHBF8718V	NA	NA	NA	2000	99.5	0.2	NA	0.20106	0.20121	2001.5	8.2	74-88-4	5 ppm(28mg/m3/8H)(skin)	orl-rat 76mg/kg
9. 2-Methyl-1-propanol	(0445)	15241EB	NA	NA	NA	2000	99.5	0.2	NA	0.20106	0.20120	2001.4	8.1	78-83-1	50 ppm (150mg/m3/8H)	orl-rat 2460mg/kg
10. Methacrylonitrile	(0442)	00427ET	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20221	2001.4	8.2	126-98-7	1 ppm (3mg/m3/8H)(skin)	orl-rat 120mg/kg
11. Methyl acrylate	(1075)	SHBK0679	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20040	2001.5	8.1	96-33-3	10 ppm(35mg/m3/8H)(skin)	orl-rat 277mg/kg
12. Methyl methacrylate	(0404)	MKBW5137V	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20041	2001.6	8.1	80-62-6	100 ppm (410mg/m3/8H)	orl-rat 7872mg/kg
13. Nitrobenzene	(0228)	01213TV	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20220	2001.3	8.2	98-95-3	1 ppm (5mg/m3/8H)(skin)	orl-rat 780mg/kg
14. 2-Nitropropane	(0461)	14002JX	NA	NA	NA	2000	97.3	0.2	NA	0.20560	0.20577	2001.6	8.3	79-46-9	10 ppm (35mg/m3/8H)	orl-rat 720mg/kg
15. Pentachloroethane	(0450)	HGA01	NA	NA	NA	2000	98	0.2	NA	0.20413	0.20430	2001.6	8.3	76-01-7	N/A	N/A
16. 1,1,2-Trichlorotrifluoroethane	(0474)	18930	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20225	2001.8	8.2	76-13-1	1000 ppm (7600mg/m3/8H)	orl-rat 43g/kg
17. Bromodichloromethane	35171	101623	0.05	5.00	40001.7	2000	NA	NA	0.017	NA	NA	1999.6	22.9	75-27-4	N/A	orl-rat 916mg/kg
18. Dibromochloromethane	35171	101623	0.05	5.00	40002.1	2000	NA	NA	0.017	NA	NA	1999.6	23.0	124-48-1	N/A	orl-rat 846mg/kg
19. cis-1,2-Dichloroethene	35171	101623	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.7	22.9	156-59-2	N/A	N/A
20. trans-1,2-Dichloroethene	35171	101623	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.6	23.0	156-60-5	N/A	orl-rat 1235mg/kg
21. Methylene chloride	35171	101623	0.05	5.00	40002.8	2000	NA	NA	0.017	NA	NA	1999.6	22.9	75-09-2	500 ppm	orl-rat 820mg/kg
22. 1,1-Dichloroethene	32251	102023	0.10	10.00	20001.6	2000	NA	NA	0.042	NA	NA	1999.7	20.4	75-35-4	1 ppm (4mg/m3/8H)	orl-rat 200mg/kg
23. Bromoform	95321	020724	0.10	10.00	20003.2	2000	NA	NA	0.042	NA	NA	1999.8	20.5	75-25-2	0.5 ppm (5mg/m3) (skin)	orl-rat 933mg/kg
24. Carbon tetrachloride	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.4	56-23-5	2 ppm (12.6mg/m3/8H)	orl-rat 2350mg/kg
25. Chloroform	95321	020724	0.10	10.00	20024.0	2000	NA	NA	0.042	NA	NA	2001.9	20.5	67-66-3	50 ppm (240mg/m3) (CL)	orl-rat 908mg/kg
26. Dibromomethane	95321	020724	0.10	10.00	20002.9	2000	NA	NA	0.042	NA	NA	1999.8	20.5	74-95-3	N/A	orl-rat 108mg/kg
27. 1,1-Dichloroethane	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.5	75-34-3	100 ppm	orl-rat 725mg/kg
28. 2,2-Dichloropropane	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.4	594-20-7	N/A	N/A
29. Tetrachloroethene	95321	020724	0.10	10.00	20201.1	2000	NA	NA	0.042	NA	NA	2019.6	20.6	127-18-4	25 ppm (170mg/m3/8H)(final)	orl-rat 2629mg/kg
30. 1,1,1-Trichloroethane	95321	020724	0.10	10.00	20003.0	2000	NA	NA	0.042	NA	NA	1999.8	20.5	71-55-6	350 ppm (1900mg/m3/8H)	orl-rat 10300mg/kg
31. 1,2-Dibromo-3-chloropropane	35161	112322	0.05	5.00	40016.5	2000	NA	NA	0.017	NA	NA	2000.3	22.9	96-12-8	0.001 ppm	orl-rat 170mg/kg
32. 1,2-Dibromoethane	35161	112322	0.05	5.00	40024.8	2000	NA	NA	0.017	NA	NA	2000.7	22.9	106-93-4	20 ppm (8H)	orl-rat 108mg/kg
33. 1,2-Dichloroethane	35161	112322	0.05	5.00	40018.0	2000	NA	NA	0.017	NA	NA	2000.4	22.9	107-06-2	50 ppm (8H)	orl-rat 670mg/kg
34. 1,2-Dichloropropane	35161	112322	0.05	5.00	40051.0	2000	NA	NA	0.017	NA	NA	2002.0	22.9	78-87-5	75 ppm (350mg/m3/8H)	orl-rat 1947mg/kg
35. 1,3-Dichloropropane	35161	112322	0.05	5.00	40005.9	2000	NA	NA	0.017	NA	NA	1999.8	22.9	142-28-9	N/A	unr-mus 3600mg/kg
36. 1,1-Dichloropropene	35161	112322	0.05	5.00	40012.1	2000	NA	NA	0.017	NA	NA	2000.1	29.7	563-58-6	N/A	N/A
37. cis-1,3-Dichloropropene	35161	112322	0.05	5.00	40010.0	2000	NA	NA	0.017	NA	NA	2000.0	23.0	10061-01-5	N/A	N/A
38. trans-1,3-Dichloropropene	35161	112322	0.05	5.00	40017.6	2000	NA	NA	0.017	NA	NA	2000.4	23.0	10061-02-6	N/A	N/A
39. Hexachloro-1,3-butadiene	35161	112322	0.05	5.00	40021.9	2000	NA	NA	0.017	NA	NA	2000.6	29.7	87-68-3	0.02 ppm (0.24mg/m3/8H)	orl-rat 82mg/kg
40. 1,1,1,2-Tetrachloroethane	35161	112322	0.05	5.00	40011.9	2000	NA	NA	0.017	NA	NA	2000.1	22.9	630-20-6	N/A	orl-rat 670mg/kg
41. 1,1,2,2-Tetrachloroethane	35161	112322	0.05	5.00	40007.5	2000	NA	NA	0.017	NA	NA	1999.9	22.9	79-34-5	5 ppm (35mg/m3/8H)(skin)	orl-rat 800mg/kg
42. 1,1,2-Trichloroethane	35161	112322	0.05	5.00	40006.6	2000	NA	NA	0.017	NA	NA	1999.8	23.0	79-00-5	10 ppm (45mg/m3/8H)(skin)	orl-rat 836mg/kg
43. Trichloroethene	35161	112322	0.05	5.00	40029.0	2000	NA	NA	0.017	NA	NA	2000.9	22.9	79-01-6	50 ppm (270mg/m3/8H)	orl-mus 2402mg/kg
44. 1,2,3-Trichloropropane	35161	112322	0.05	5.00	40007.5	2000	NA	NA	0.017	NA	NA	1999.9	22.9	96-18-4	10 ppm (60mg/m3/8H)	orl-rat 149.6mg/kg
45. Benzene	35162	050823	0.05	5.00	40005.0	2000	NA	NA	0.017	NA	NA	1999.7	22.9	71-43-2	1 ppm	orl-rat 4894mg/kg
46. Bromobenzene	35162	050823	0.05	5.00	40006.9	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-86-1	N/A	orl-rat 2699mg/kg
47. n-Butyl benzene	35162	050823	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	104-51-8	N/A	N/A
48. Ethyl benzene	35162	050823	0.05	5.00	40004.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	100-41-4	100 ppm (435mg/m3/8H)	orl-rat >2000mg/kg
49. p-Isopropyl toluene	35162	050823	0.05	5.00	40005.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	99-87-6	N/A	orl-rat 4750mg/kg
50. Naphthalene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	91-20-3	10 ppm (50mg/m3/8H)	orl-rat 490mg/kg
51. Styrene	35162	050823	0.05	5.00	40004.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	100-42-5	100 ppm	orl-rat 5000mg/kg
52. Toluene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-88-3	200 ppm	orl-rat 5000mg/kg
53. 1,2,3-Trichlorobenzene	35162	050823	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.7	22.9	87-61-6	N/A	ipr-mus 1390mg/kg
54. 1,2,4-Trichlorobenzene	35162	050823	0.05	5.00	40006.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	120-82-1	5 ppm (CL) (40mg/m3)	orl-rat 756mg/kg
55. 1,2,4-Trimethylbenzene	35162	050823	0.05	5.00	40001.6	2000	NA	NA	0.017	NA	NA	1999.6	23.0	95-63-6	N/A	orl-rat 5g/kg
56. 1,3,5-Trimethylbenzene	35162	050823	0.05	5.00	40006.7	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-67-8	N/A	orl-rat 5000mg/kg
57. m-Xylene	35162	050823	0.05	5.00	40005.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-38-3	100 ppm (435mg/m3/8H)	orl-rat 5g/kg
58. tert-Butyl benzene	35163	101923	0.05	5.00	40001.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	98-06-6	N/A	N/A
59. sec-Butyl benzene	35163	101923	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.8	22.9	135-98-8	N/A	orl-rat 2240mg/kg
60. Chlorobenzene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	108-90-7	75 ppm (350mg/m3/8H)	orl-rat 2290mg/kg
61. 2-Chlorotoluene	35163	101923	0.05	5.00	40000.3	2000	NA	NA	0.017	NA	NA	1999.5	22.9	95-49-8	50 ppm (250mg/m3/8H)	orl-rat 3900mg/kg
62. 4-Chlorotoluene	35163	101923	0.05	5.00	40003.3	2000	NA	NA	0.017	NA	NA	1999.7	22.9	106-43-4	N/A	orl-rat 2100mg/kg
63. 1,2-Dichlorobenzene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	95-50-1	50 ppm (300mg/m3) (CL)	orl-rat 500mg/kg
64. 1,3-Dichlorobenzene	35163	101923	0.05	5.00	40001.7	2000	NA	NA	0.017	NA	NA	1999.6	23.0	541-73-1	N/A	ipr-mus 1062mg/kg
65. 1,4-Dichlorobenzene	35163	101923	0.05	5.00	40001.8	2000	NA	NA	0.017	NA	NA	1999.6	22.9	106-46-7	75 ppm (450mg/m3/8H)	orl-rat 500mg/kg
66. Isopropylbenzene	35163	101923	0.05	5.00	40000.8	2000	NA	NA	0.017	NA	NA	1999.5	22.9	98-82-8	50 ppm (245mg/m3/8H)	orl-rat 1400mg/kg
67. n-Propylbenzene	35163	101923	0.05	5.00	40003.4	2000	NA	NA	0.017	NA	NA	1999.7	23.0	103-65-1	N/A	orl-rat 8040mg/kg
68. o-Xylene	35163	101923	0.05	5.00	40040.8	2000	NA	NA	0.017	NA	NA	2001.5	23.0	95-47-6	100 ppm (435mg/m3/8H)	ipr-mus 1364mg/kg
69. p-Xylene	35163	101923	0.05	5.00	40000.6	2000	NA	NA	0.017	NA	NA	1999.5	22.9	106-42-3	100 ppm (435mg/m3/8H)	orl-rat 5g/kg

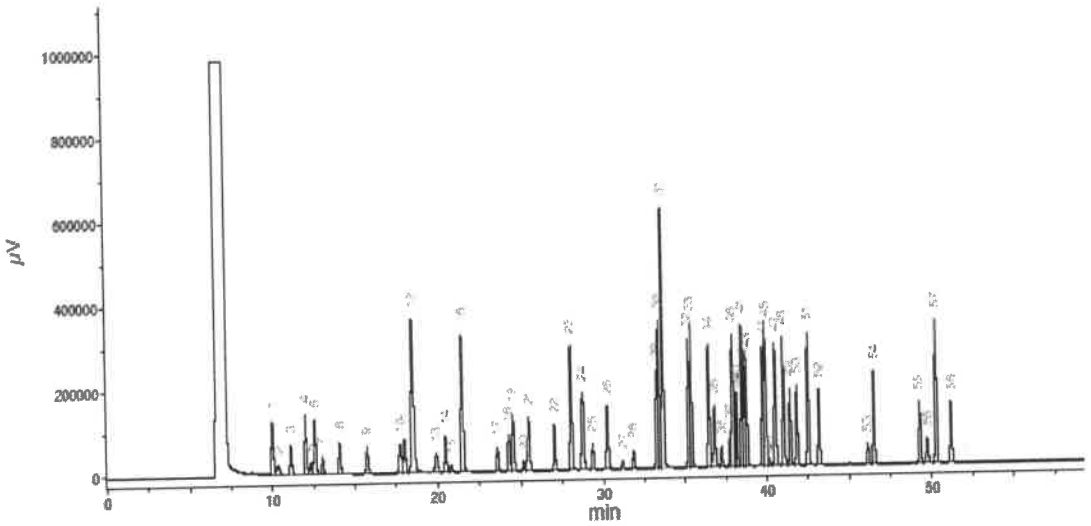
- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Run 16, "P95317 L021624 (2000µg/mL in MeOH)"

Run Length: 60.00 min, 35998 points at 10 points/second.
Created: Sat, Feb 17, 2024 at 8:56:46 AM.
Sampled: Sequence "021624-GC5M1", Method "GC5-M1".
Analyzed using Method "GC5-M1".

Comments

GC5-M1 Analysis by Candice Warren
Column ID SPB-Vocol 105 meter X 0.53mm X 3.0µm film thickness
Flow rates: Total flow=290mL/min., Helium (carrier)=10mL/min.,
Helium(make-up)=10mL/min., Hydogen(make-up)=40mL/min., Air(make-up)=230mL/min.
Oven Profile: Temp. 1=35°C (Time 1=10 min.), Temp 2=200°C (Time 2=8.75 min.),
Rate = 4°C/min., Total run time=60 min. Injector temp.=200°C, FID Temp.=200°C.
FID Signal = Edaq Channel 1
Standard injection = 0.5µL, Range=3



Peak #	Name	FID RT (min.)
1	Ether	9.97
2	1,1,2-Trichloro-1,2,3-trifluoroethane	10.33
3	1,1-Dichloroethene	11.10
4	Acetonitrile	12.00
5	Iodomethane	12.31
6	Allyl chloride	12.56
7	Carbon disulfide/Methylene chloride	13.04
8	trans-1,2-Dichloroethene	14.07
9	1,1-Dichloroethane	15.74
10	2,2-Dichloropropane	17.74
11	cis-1,2-Dichloroethene	18.00
12	Methacrylonitrile/Methyl acrylate/Chloroform	18.49
13	Isobutanol/1,1,1-Trichloroethane	18.91
14	1,1-Dichloropropene	19.46
15	Carbon tetrachloride	20.79
16	Benzene/1,2-Dichloroethane	21.48
17	Trichloroethene	23.86
18	1,2-Dichloropropane	24.26
19	Methyl methacrylate	24.62
20	Bromodichloromethane	25.13
21	Dibromomethane/2-Nitropropane	25.46
22	cis-1,3-Dichloropropene	27.07
23	Toluene	28.09
24	Ethyl methacrylate/trans-1,3-Dichloropropene	28.73
25	1,1,2-Trichloroethane	29.34
26	Tetrachloroethene/1,3-Dichloropropane	30.34
27	Dibromochloromethane	31.16
28	1,2-Dibromoethane	31.84
29	Chlorobenzene	33.26
30	Ethylbenzene/1,1,1,2-Tetrachloroethane	33.40
31	m-Xylene/p-Xylene	33.85
32	o-Xylene	35.33
33	Styrene	35.50
34	Isopropylbenzene/Bromoform	35.48
35	cis-1,4-Dichloro-2-butene	36.80
36	1,1,2,2-Tetrachloroethane	37.23
37	1,2,3-Trichloropropane	37.77
38	n-Propylbenzene	37.92
39	trans-1,4-Dichloro-2-butene	38.05
40	Bromobenzene	38.14
41	1,3,5-Trimethylbenzene	38.50
42	2-Chlorotoluene	38.62
43	4-Chlorotoluene	38.77
44	tert-Butylbenzene	39.76
45	1,2,4-Trimethylbenzene	39.91
46	Pentachloroethane	40.17
47	sec-Butylbenzene	40.52
48	p-Isopropyltoluene	41.02
49	1,3-Dichlorobenzene	41.12
50	1,4-Dichlorobenzene	41.63
51	n-Butylbenzene	42.52
52	1,2-Dichlorobenzene	42.18
53	1,2-Dibromo-3-chloropropane	46.12
54	Nitrobenzene	46.58
55	1,2,4-Trichlorobenzene	49.26
56	Hexachlorobutadiene	49.72
57	Naphthalene	50.46
58	1,2,3-Trichlorobenzene	51.16

Absolute Standards Inc.

PO Box 5585
Hamden, CT 06518-0585

Phone: 203-281-2917
FAX: 203-281-2922

Safety Data Sheet (SDS) GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	**1-800-535-5053**
Address	44 Rossotto Dr. Hamden CT, 06514	Emergency Telephone International	**1-352-323-3500**
		Date Prepared/Revised	January 1, 2024

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

H225	**Highly Flammable Liquid and Vapor**	**H301, 311, 331**	**Toxic if swallowed, skin contact, inhaled**
H370	**Cause damage to organs**	**H351**	**Suspected of causing cancer**
P271	**Use in ventilated area**	**P280**	**Use gloves, eye protection/face sheild**
P302,332	**If on skin, wash with soap and water**	**P305,351,338**	**If in eyes, remove contacts, rinse with water**

Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))			% (optional)
Methanol	METHYL ALCOHOL	CAS#: 67-56-1	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Flammability	Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol 67-56-1 TWA 200 ppm
Skin notation TWA 200 ppm
Potential for skin absorption , ingestion and inhalation.
Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

Section IX - Physical/Chemical Characteristics

Boiling Point	65°C	Specific Gravity (H2O = 1)	0.79
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6

Solubility in Water COMPLETE

Appearance and Odor CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions Vapours may form explosive mixture with air.
Conditions to avoid Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions. - Carbon oxides

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
LD50 Dermal - rabbit - 15,800 mg/kg
Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

LC50	15,400 mg/l - 96 h
EC50	24,500.00 mg/l - 48 h
EC100	10,000.00 mg/l - 24 h

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

IATA
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

Rec 09/17/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 95317
Lot Number: 021624
Description: Universal VOA Megamix
69 components
Expiration Date: 021627
Recommended Storage: Freezer (0 °C)
Nominal Concentration (µg/mL): 2000
NIST Test ID#: 6UTB

Solvent(s): Lot#
Methanol EG359-USQ12

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 100.0 0.021 Flask Uncertainty

Formulated By: Prashant Chauhan 021624 DATE

Reviewed By: Pedro L. Rentas 021624 DATE

Compound	(RM#) Part Number	Lot Number	Dil. Factor	Initial Vol. (mL)	Initial Conc.(ug/mL)	Nominal Conc (µg/mL)	Purity (%)	Purity Uncertainty	Uncertainty Pipette (mL)	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Acetonitrile	(0324)	021644	NA	NA	NA	2000	99.99	0.2	NA	0.20007	0.20020	2001.3	8.1	75-05-8	40 ppm (70mg/m3/8H)	orl-rat 2460mg/kg
2. Allyl chloride (3-Chloropropene)	(0325)	102396	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20221	2001.4	8.2	107-05-1	1 ppm (3mg/m3/8H)	orl-rat 700mg/kg
3. Carbon disulphide	(0060)	MKCR8561	NA	NA	NA	2000	99.99	0.2	NA	0.20007	0.20023	2001.6	8.1	75-15-0	4 ppm (12mg/m3) (skin)	orl-rat 1200mg/kg
4. cis-1,4-Dichloro-2-butene	(1196)	14718EF	NA	NA	NA	2000	95	0.2	NA	0.21058	0.21069	2001.1	8.5	1476-11-5	N/A	N/A
5. trans-1,4-Dichloro-2-butene	(0466)	MKBP6041V	NA	NA	NA	2000	96.5	0.2	NA	0.20731	0.20748	2001.7	8.4	110-57-6	N/A	N/A
6. Diethyl ether	(0153)	IK18CAS0000	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20040	2001.5	8.1	60-29-7	N/A	N/A
7. Ethyl methacrylate	(0381)	06128PX	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20230	2002.3	8.2	97-63-2	N/A	orl-rat 14800mg/kg
8. Iodomethane	(0489)	SHBF8718V	NA	NA	NA	2000	99.5	0.2	NA	0.20106	0.20121	2001.5	8.2	74-88-4	5 ppm(28mg/m3/8H)(skin)	orl-rat 76mg/kg
9. 2-Methyl-1-propanol	(0445)	15241EB	NA	NA	NA	2000	99.5	0.2	NA	0.20106	0.20120	2001.4	8.1	78-83-1	50 ppm (150mg/m3/8H)	orl-rat 2460mg/kg
10. Methacrylonitrile	(0442)	00427ET	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20221	2001.4	8.2	126-98-7	1 ppm (3mg/m3/8H)(skin)	orl-rat 120mg/kg
11. Methyl acrylate	(1075)	SHBK0679	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20040	2001.5	8.1	96-33-3	10 ppm(35mg/m3/8H)(skin)	orl-rat 277mg/kg
12. Methyl methacrylate	(0404)	MKBW5137V	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20041	2001.6	8.1	80-62-6	100 ppm (410mg/m3/8H)	orl-rat 7872mg/kg
13. Nitrobenzene	(0228)	01213TV	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20220	2001.3	8.2	98-95-3	1 ppm (5mg/m3/8H)(skin)	orl-rat 780mg/kg
14. 2-Nitropropane	(0461)	14002JX	NA	NA	NA	2000	97.3	0.2	NA	0.20560	0.20577	2001.6	8.3	79-46-9	10 ppm (35mg/m3/8H)	orl-rat 720mg/kg
15. Pentachloroethane	(0450)	HGA01	NA	NA	NA	2000	98	0.2	NA	0.20413	0.20430	2001.6	8.3	76-01-7	N/A	N/A
16. 1,1,2-Trichlorotrifluoroethane	(0474)	18930	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20225	2001.8	8.2	76-13-1	1000 ppm (7600mg/m3/8H)	orl-rat 43g/kg
17. Bromodichloromethane	35171	101623	0.05	5.00	40001.7	2000	NA	NA	0.017	NA	NA	1999.6	22.9	75-27-4	N/A	orl-rat 916mg/kg
18. Dibromochloromethane	35171	101623	0.05	5.00	40002.1	2000	NA	NA	0.017	NA	NA	1999.6	23.0	124-48-1	N/A	orl-rat 846mg/kg
19. cis-1,2-Dichloroethene	35171	101623	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.7	22.9	156-59-2	N/A	N/A
20. trans-1,2-Dichloroethene	35171	101623	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.6	23.0	156-60-5	N/A	orl-rat 1235mg/kg
21. Methylene chloride	35171	101623	0.05	5.00	40002.8	2000	NA	NA	0.017	NA	NA	1999.6	22.9	75-09-2	500 ppm	orl-rat 820mg/kg
22. 1,1-Dichloroethene	32251	102023	0.10	10.00	20001.6	2000	NA	NA	0.042	NA	NA	1999.7	20.4	75-35-4	1 ppm (4mg/m3/8H)	orl-rat 200mg/kg
23. Bromoform	95321	020724	0.10	10.00	20003.2	2000	NA	NA	0.042	NA	NA	1999.8	20.5	75-25-2	0.5 ppm (5mg/m3) (skin)	orl-rat 933mg/kg
24. Carbon tetrachloride	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.4	56-23-5	2 ppm (12.6mg/m3/8H)	orl-rat 2350mg/kg
25. Chloroform	95321	020724	0.10	10.00	20024.0	2000	NA	NA	0.042	NA	NA	2001.9	20.5	67-66-3	50 ppm (240mg/m3) (CL)	orl-rat 908mg/kg
26. Dibromomethane	95321	020724	0.10	10.00	20002.9	2000	NA	NA	0.042	NA	NA	1999.8	20.5	74-95-3	N/A	orl-rat 108mg/kg
27. 1,1-Dichloroethane	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.5	75-34-3	100 ppm	orl-rat 725mg/kg
28. 2,2-Dichloropropane	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.4	594-20-7	N/A	N/A
29. Tetrachloroethene	95321	020724	0.10	10.00	20201.1	2000	NA	NA	0.042	NA	NA	2019.6	20.6	127-18-4	25 ppm (170mg/m3/8H)(final)	orl-rat 2629mg/kg
30. 1,1,1-Trichloroethane	95321	020724	0.10	10.00	20003.0	2000	NA	NA	0.042	NA	NA	1999.8	20.5	71-55-6	350 ppm (1900mg/m3/8H)	orl-rat 10300mg/kg
31. 1,2-Dibromo-3-chloropropane	35161	112322	0.05	5.00	40016.5	2000	NA	NA	0.017	NA	NA	2000.3	22.9	96-12-8	0.001 ppm	orl-rat 170mg/kg
32. 1,2-Dibromoethane	35161	112322	0.05	5.00	40024.8	2000	NA	NA	0.017	NA	NA	2000.7	22.9	106-93-4	20 ppm (8H)	orl-rat 108mg/kg
33. 1,2-Dichloroethane	35161	112322	0.05	5.00	40018.0	2000	NA	NA	0.017	NA	NA	2000.4	22.9	107-06-2	50 ppm (8H)	orl-rat 670mg/kg
34. 1,2-Dichloropropane	35161	112322	0.05	5.00	40051.0	2000	NA	NA	0.017	NA	NA	2002.0	22.9	78-87-5	75 ppm (350mg/m3/8H)	orl-rat 1947mg/kg
35. 1,3-Dichloropropane	35161	112322	0.05	5.00	40005.9	2000	NA	NA	0.017	NA	NA	1999.8	22.9	142-28-9	N/A	unr-mus 3600mg/kg
36. 1,1-Dichloropropene	35161	112322	0.05	5.00	40012.1	2000	NA	NA	0.017	NA	NA	2000.1	29.7	563-58-6	N/A	N/A
37. cis-1,3-Dichloropropene	35161	112322	0.05	5.00	40010.0	2000	NA	NA	0.017	NA	NA	2000.0	23.0	10061-01-5	N/A	N/A
38. trans-1,3-Dichloropropene	35161	112322	0.05	5.00	40017.6	2000	NA	NA	0.017	NA	NA	2000.4	23.0	10061-02-6	N/A	N/A
39. Hexachloro-1,3-butadiene	35161	112322	0.05	5.00	40021.9	2000	NA	NA	0.017	NA	NA	2000.6	29.7	87-68-3	0.02 ppm (0.24mg/m3/8H)	orl-rat 82mg/kg
40. 1,1,1,2-Tetrachloroethane	35161	112322	0.05	5.00	40011.9	2000	NA	NA	0.017	NA	NA	2000.1	22.9	630-20-6	N/A	orl-rat 670mg/kg
41. 1,1,2,2-Tetrachloroethane	35161	112322	0.05	5.00	40007.5	2000	NA	NA	0.017	NA	NA	1999.9	22.9	79-34-5	5 ppm (35mg/m3/8H)(skin)	orl-rat 800mg/kg
42. 1,1,2-Trichloroethane	35161	112322	0.05	5.00	40006.6	2000	NA	NA	0.017	NA	NA	1999.8	23.0	79-00-5	10 ppm (45mg/m3/8H)(skin)	orl-rat 836mg/kg
43. Trichloroethene	35161	112322	0.05	5.00	40029.0	2000	NA	NA	0.017	NA	NA	2000.9	22.9	79-01-6	50 ppm (270mg/m3/8H)	orl-mus 2402mg/kg
44. 1,2,3-Trichloropropane	35161	112322	0.05	5.00	40007.5	2000	NA	NA	0.017	NA	NA	1999.9	22.9	96-18-4	10 ppm (60mg/m3/8H)	orl-rat 149.6mg/kg
45. Benzene	35162	050823	0.05	5.00	40005.0	2000	NA	NA	0.017	NA	NA	1999.7	22.9	71-43-2	1 ppm	orl-rat 4894mg/kg
46. Bromobenzene	35162	050823	0.05	5.00	40006.9	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-86-1	N/A	orl-rat 2699mg/kg
47. n-Butyl benzene	35162	050823	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	104-51-8	N/A	N/A
48. Ethyl benzene	35162	050823	0.05	5.00	40004.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	100-41-4	100 ppm (435mg/m3/8H)	orl-rat >2000mg/kg
49. p-Isopropyl toluene	35162	050823	0.05	5.00	40005.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	99-87-6	N/A	orl-rat 4750mg/kg
50. Naphthalene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	91-20-3	10 ppm (50mg/m3/8H)	orl-rat 490mg/kg
51. Styrene	35162	050823	0.05	5.00	40004.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	100-42-5	100 ppm	orl-rat 5000mg/kg
52. Toluene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-88-3	200 ppm	orl-rat 5000mg/kg
53. 1,2,3-Trichlorobenzene	35162	050823	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.7	22.9	87-61-6	N/A	ipr-mus 1390mg/kg
54. 1,2,4-Trichlorobenzene	35162	050823	0.05	5.00	40006.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	120-82-1	5 ppm (CL) (40mg/m3)	orl-rat 756mg/kg
55. 1,2,4-Trimethylbenzene	35162	050823	0.05	5.00	40001.6	2000	NA	NA	0.017	NA	NA	1999.6	23.0	95-63-6	N/A	orl-rat 5g/kg
56. 1,3,5-Trimethylbenzene	35162	050823	0.05	5.00	40006.7	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-67-8	N/A	orl-rat 5000mg/kg
57. m-Xylene	35162	050823	0.05	5.00	40005.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-38-3	100 ppm (435mg/m3/8H)	orl-rat 5g/kg
58. tert-Butyl benzene	35163	101923	0.05	5.00	40001.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	98-06-6	N/A	N/A
59. sec-Butyl benzene	35163	101923	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.8	22.9	135-98-8	N/A	orl-rat 2240mg/kg
60. Chlorobenzene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	108-90-7	75 ppm (350mg/m3/8H)	orl-rat 2290mg/kg
61. 2-Chlorotoluene	35163	101923	0.05	5.00	40000.3	2000	NA	NA	0.017	NA	NA	1999.5	22.9	95-49-8	50 ppm (250mg/m3/8H)	orl-rat 3900mg/kg
62. 4-Chlorotoluene	35163	101923	0.05	5.00	40003.3	2000	NA	NA	0.017	NA	NA	1999.7	22.9	106-43-4	N/A	orl-rat 2100mg/kg
63. 1,2-Dichlorobenzene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	95-50-1	50 ppm (300mg/m3) (CL)	orl-rat 500mg/kg
64. 1,3-Dichlorobenzene	35163	101923	0.05	5.00	40001.7	2000	NA	NA	0.017	NA	NA	1999.6	23.0	541-73-1	N/A	ipr-mus 1062mg/kg
65. 1,4-Dichlorobenzene	35163	101923	0.05	5.00	40001.8	2000	NA	NA	0.017	NA	NA	1999.6	22.9	106-46-7	75 ppm (450mg/m3/8H)	orl-rat 500mg/kg
66. Isopropylbenzene	35163	101923	0.05	5.00	40000.8	2000	NA	NA	0.017	NA	NA	1999.5	22.9	98-82-8	50 ppm (245mg/m3/8H)	orl-rat 1400mg/kg
67. n-Propylbenzene	35163	101923	0.05	5.00	40003.4	2000	NA	NA	0.017	NA	NA	1999.7	23.0	103-65-1	N/A	orl-rat 8040mg/kg
68. o-Xylene	35163	101923	0.05	5.00	40040.8	2000	NA	NA	0.017	NA	NA	2001.5	23.0	95-47-6	100 ppm (435mg/m3/8H)	ipr-mus 1364mg/kg
69. p-Xylene	35163	101923	0.05	5.00	40000.6	2000	NA	NA	0.017	NA	NA	1999.5	22.9	106-42-3	100 ppm (435mg/m3/8H)	orl-rat 5g/kg

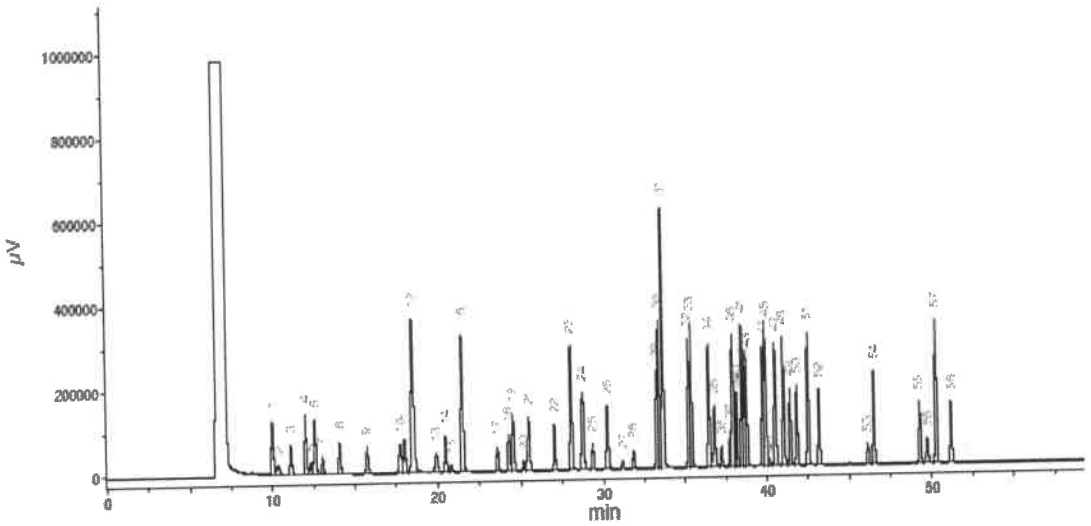
- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Run 16, "P95317 L021624 (2000µg/mL in MeOH)"

Run Length: 60.00 min, 35998 points at 10 points/second.
Created: Sat, Feb 17, 2024 at 8:56:46 AM.
Sampled: Sequence "021624-GC5M1", Method "GC5-M1".
Analyzed using Method "GC5-M1".

Comments

GC5-M1 Analysis by Candice Warren
Column ID SPB-Vocol 105 meter X 0.53mm X 3.0µm film thickness
Flow rates: Total flow=290mL/min., Helium (carrier)=10mL/min.,
Helium(make-up)=10mL/min., Hydogen(make-up)=40mL/min., Air(make-up)=230mL/min.
Oven Profile: Temp. 1=35°C (Time 1=10 min.), Temp 2=200°C (Time 2=8.75 min.),
Rate = 4°C/min., Total run time=60 min. Injector temp.=200°C, FID Temp.=200°C.
FID Signal = Edaq Channel 1
Standard injection = 0.5µL, Range=3



Peak #	Name	FID RT (min.)
1	Ether	9.97
2	1,1,2-Trichloro-1,2,3-trifluoroethane	10.33
3	1,1-Dichloroethene	11.10
4	Acetonitrile	12.00
5	Iodomethane	12.31
6	Allyl chloride	12.56
7	Carbon disulfide/Methylene chloride	13.04
8	trans-1,2-Dichloroethene	14.07
9	1,1-Dichloroethane	15.74
10	2,2-Dichloropropane	17.74
11	cis-1,2-Dichloroethene	18.00
12	Methacrylonitrile/Methyl acrylate/Chloroform	18.49
13	Isobutanol/1,1,1-Trichloroethane	18.91
14	1,1-Dichloropropene	19.46
15	Carbon tetrachloride	20.79
16	Benzene/1,2-Dichloroethane	21.48
17	Trichloroethene	23.86
18	1,2-Dichloropropane	24.26
19	Methyl methacrylate	24.62
20	Bromodichloromethane	25.13
21	Dibromomethane/2-Nitropropane	25.46
22	cis-1,3-Dichloropropene	27.07
23	Toluene	28.09
24	Ethyl methacrylate/trans-1,3-Dichloropropene	28.73
25	1,1,2-Trichloroethane	29.34
26	Tetrachloroethene/1,3-Dichloropropane	30.34
27	Dibromochloromethane	31.16
28	1,2-Dibromoethane	31.84
29	Chlorobenzene	33.26
30	Ethylbenzene/1,1,1,2-Tetrachloroethane	33.40
31	m-Xylene/p-Xylene	33.85
32	o-Xylene	35.33
33	Styrene	35.50
34	Isopropylbenzene/Bromoform	35.48
35	cis-1,4-Dichloro-2-butene	36.80
36	1,1,2,2-Tetrachloroethane	37.23
37	1,2,3-Trichloropropane	37.77
38	n-Propylbenzene	37.92
39	trans-1,4-Dichloro-2-butene	38.05
40	Bromobenzene	38.14
41	1,3,5-Trimethylbenzene	38.50
42	2-Chlorotoluene	38.62
43	4-Chlorotoluene	38.77
44	tert-Butylbenzene	39.76
45	1,2,4-Trimethylbenzene	39.91
46	Pentachloroethane	40.17
47	sec-Butylbenzene	40.52
48	p-Isopropyltoluene	41.02
49	1,3-Dichlorobenzene	41.12
50	1,4-Dichlorobenzene	41.63
51	n-Butylbenzene	42.52
52	1,2-Dichlorobenzene	42.18
53	1,2-Dibromo-3-chloropropane	46.12
54	Nitrobenzene	46.58
55	1,2,4-Trichlorobenzene	49.26
56	Hexachlorobutadiene	49.72
57	Naphthalene	50.46
58	1,2,3-Trichlorobenzene	51.16

Absolute Standards Inc.

PO Box 5585
Hamden, CT 06518-0585

Phone: 203-281-2917
FAX: 203-281-2922

Safety Data Sheet (SDS) GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	**1-800-535-5053**
Address	44 Rossotto Dr. Hamden CT, 06514	Emergency Telephone International	**1-352-323-3500**
		Date Prepared/Revised	January 1, 2024

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

H225	**Highly Flammable Liquid and Vapor**	**H301, 311, 331**	**Toxic if swallowed, skin contact, inhaled**
H370	**Cause damage to organs**	**H351**	**Suspected of causing cancer**
P271	**Use in ventilated area**	**P280**	**Use gloves, eye protection/face sheild**
P302,332	**If on skin, wash with soap and water**	**P305,351,338**	**If in eyes, remove contacts, rinse with water**

Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))			% (optional)
Methanol	METHYL ALCOHOL	CAS#: 67-56-1	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Flammability	Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol 67-56-1 TWA 200 ppm
Skin notation TWA 200 ppm
Potential for skin absorption , ingestion and inhalation.
Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

Section IX - Physical/Chemical Characteristics

Boiling Point	65°C	Specific Gravity (H2O = 1)	0.79
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6

Solubility in Water COMPLETE

Appearance and Odor CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions Vapours may form explosive mixture with air.
Conditions to avoid Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions. - Carbon oxides

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
LD50 Dermal - rabbit - 15,800 mg/kg
Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

LC50	15,400 mg/l - 96 h
EC50	24,500.00 mg/l - 48 h
EC100	10,000.00 mg/l - 24 h

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

IATA
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

Rec 09/16/24 2 Vials

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 091424
Description: Acrolein

Expiration Date: 101424
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

Solvent(s): **Lot#**
Water 072324Q

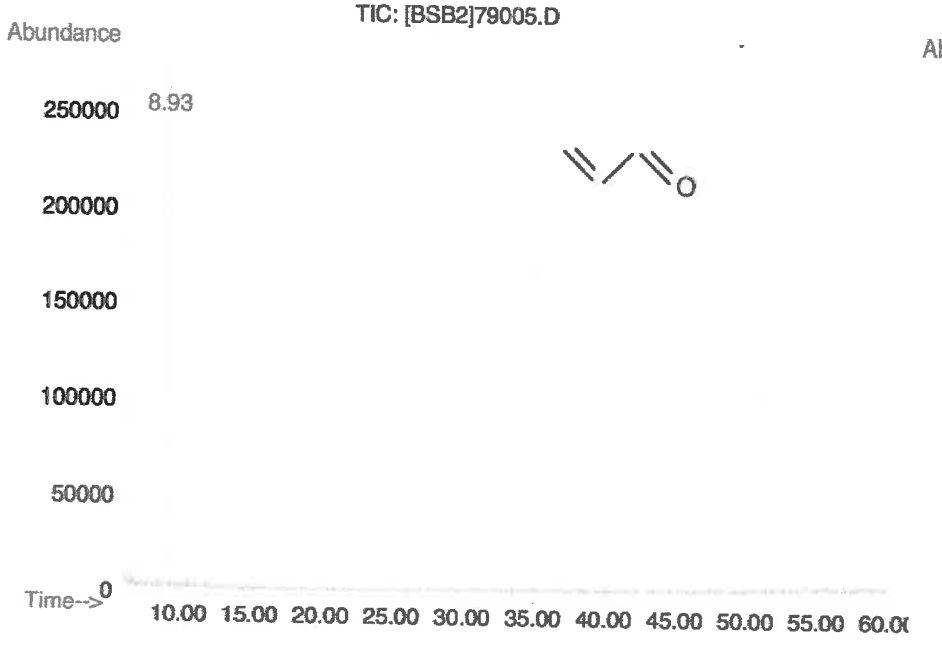
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

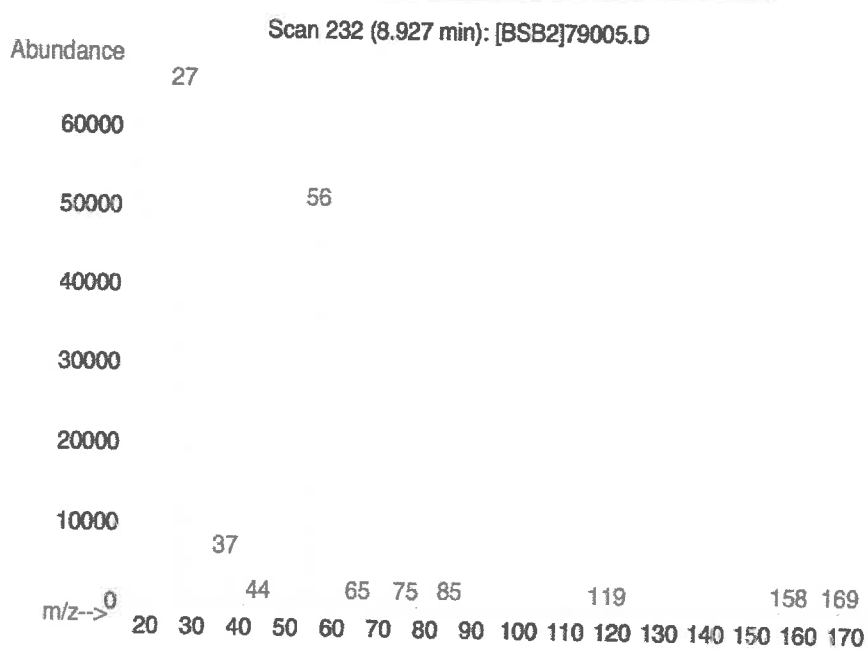
Formulated By: Justin Dippold 091424 DATE

Reviewed By: Pedro L. Rentas 091424 DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Acrolein	5	103755V10F	5000	97	0.5	0.05166	0.05175	5008.9	52.5	107-02-8	0.1 ppm	orl-rat 46mg/kg

Method: GC6MSD-1. **Detector:** Mass Selective Detector (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C (Time 2 = 8.75 min.). Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. **Analyst:** Pedro Rentas. **NOTE:** Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately Long term storage is not recommended. Please contact our technical department if further information is required.





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- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
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Certified Reference Material CRM

Rec 09/16/24 2 Vials

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

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Lot Number: 091424
Description: Acrolein

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Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

Solvent(s): **Lot#**
Water 072324Q

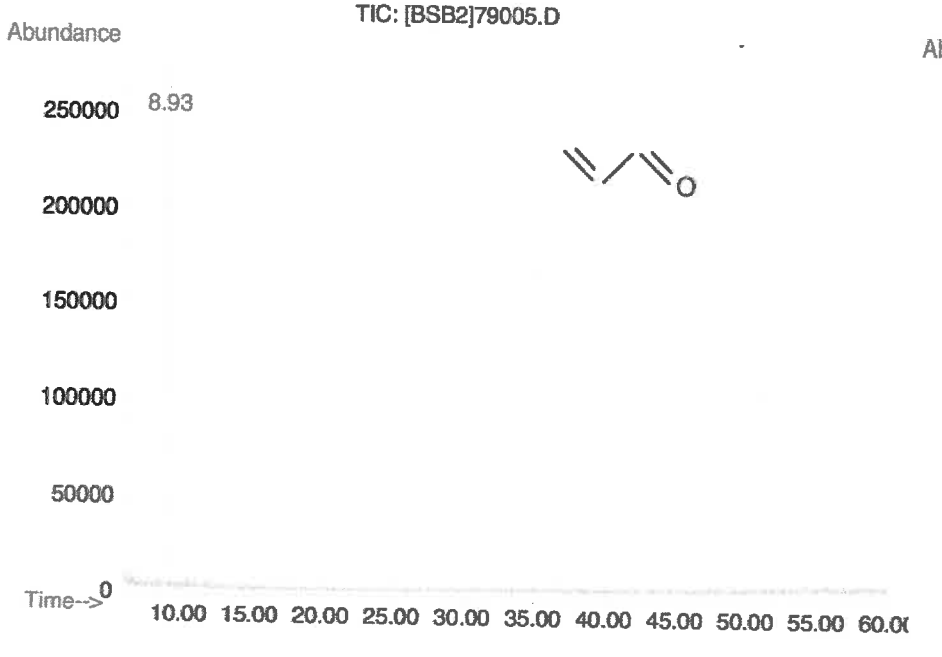
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

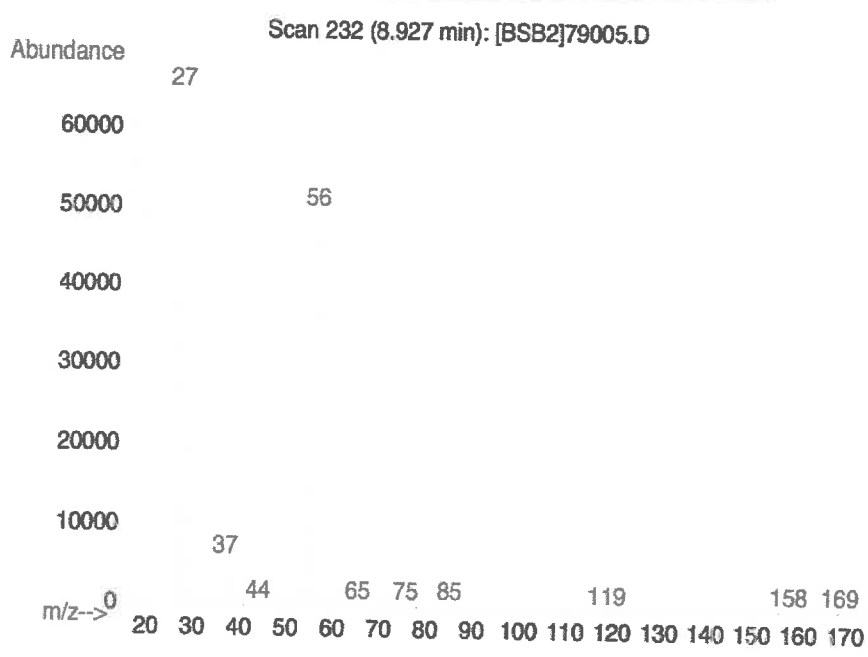
Formulated By: Justin Dippold 091424 DATE

Reviewed By: Pedro L. Rentas 091424 DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Acrolein	5	103755V10F	5000	97	0.5	0.05166	0.05175	5008.9	52.5	107-02-8	0.1 ppm	orl-rat 46mg/kg

Method: GC6MSD-1. **Detector:** Mass Selective Detector (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C (Time 2 = 8.75 min.). Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. **Analyst:** Pedro Rentas. **NOTE:** Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately Long term storage is not recommended. Please contact our technical department if further information is required.





- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

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Rec 12/6/24
20 vial

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https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 95318
Lot Number: 120524
Description: 2-Chloroethyl vinyl ether

Expiration Date: 120527
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 10000
NIST Test ID#: 6UTB

Solvent(s): Methanol **Lot#** EJ143-US

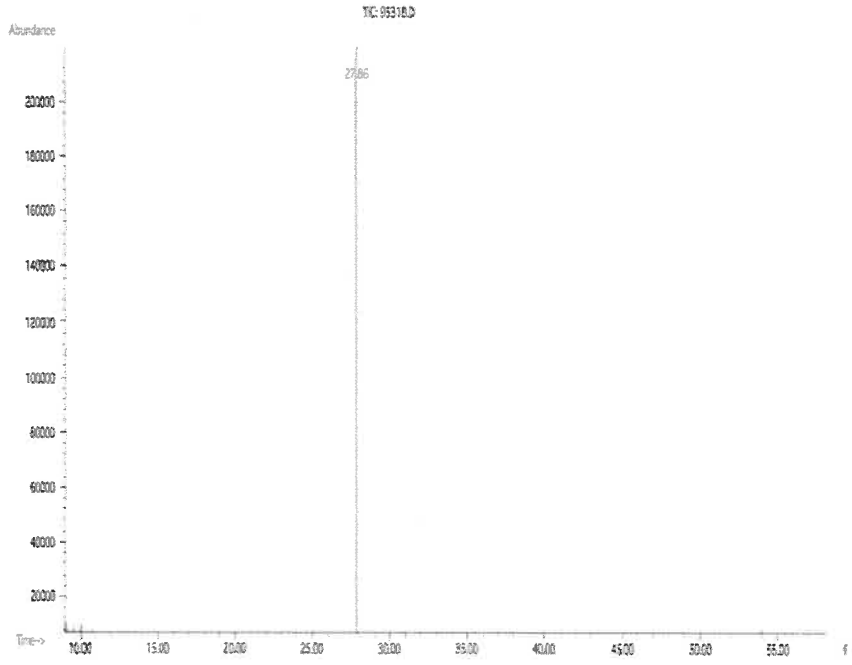
V14630 to V14649

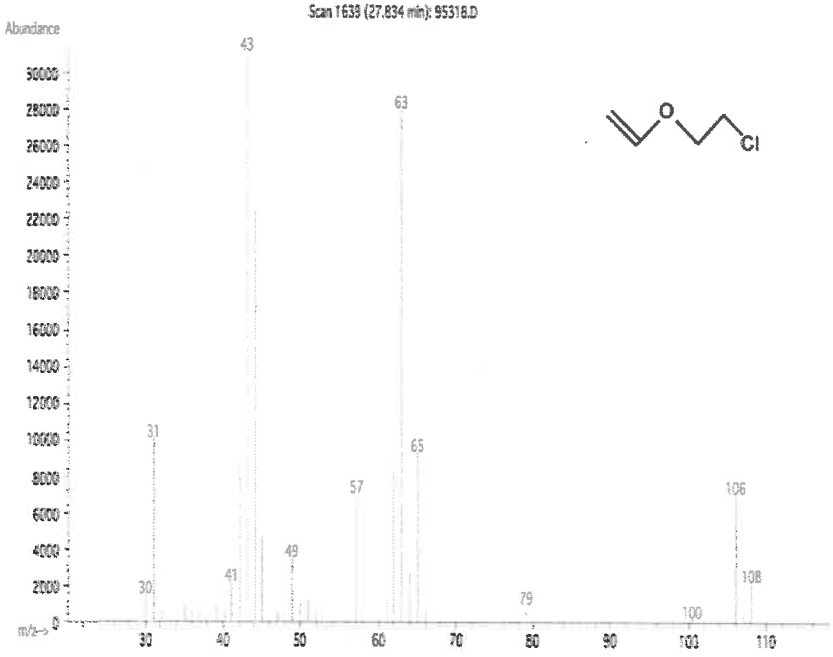
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 50.0 0.001 Flask Uncertainty

Prashant Chauhan	120524
Formulated By: Prashant Chauhan	DATE
Pedro L. Rentas	120524
Reviewed By: Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 2-Chloroethyl vinyl ether	74	MKCD0033	10000	99	0.2	0.50536	0.50550	10002.9	40.5	110-75-8	N/A	ori-rat 250mg/kg

Method: GC6MSD-1.M. **Detector:** MSD. **Column:** (60m X 0.25mm X 1.5 µm). **Oven Profile:** Temp 1 = 35°C (Time 1=10min.), Temp 2 = 200°C (Time 2=8.75 min.), Rate = 4°C/min., Injector B Temp.= 200°C, Detector B Temp. = 220°C. **Analyst:** Candice Warren.





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Absolute Standards Inc.
PO Box 5585
Hamden, CT 06518-0585
Phone: 203-281-2917
FAX: 203-281-2922

Safety Data Sheet (SDS) GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	**1-800-535-5053**
Address	44 Rossotto Dr. Hamden CT, 06514	Emergency Telephone International Date Prepared/Revised	**1-352-323-3500** January 1, 2024

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

H225	**Highly Flammable Liquid and Vapor**	**H301, 311, 331**	**Toxic if swallowed, skin contact, inhaled**
H370	**Cause damage to organs**	**H351**	**Suspected of causing cancer**
P271	**Use in ventilated area**	**P280**	**Use gloves, eye protection/face sheild**
P302,332	**If on skin, wash with soap and water**	**P305,351,338**	**If in eyes, remove contacts, rinse with water**

Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))			% (optional)
Methanol	METHYL ALCOHOL	CAS#: 67-56-1	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Flammability	Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol 67-56-1 TWA 200 ppm
Skin notation TWA 200 ppm
Potential for skin absorption , ingestion and inhalation.
Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

Section IX - Physical/Chemical Characteristics

Boiling Point	65°C	Specific Gravity (H2O = 1)	0.79
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6

Solubility in Water COMPLETE

Appearance and Odor CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions Vapours may form explosive mixture with air.
Conditions to avoid Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions. - Carbon oxides

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
LD50 Dermal - rabbit - 15,800 mg/kg
Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

LC50	15,400 mg/l - 96 h
EC50	24,500.00 mg/l - 48 h
EC100	10,000.00 mg/l - 24 h

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

IATA
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

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CERTIFIED WEIGHT REPORT

Part Number: 95318
Lot Number: 120524
Description: 2-Chloroethyl vinyl ether

Expiration Date: 120527
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 10000
NIST Test ID#: 6UTB

Solvent(s): Methanol **Lot#** EJ143-US

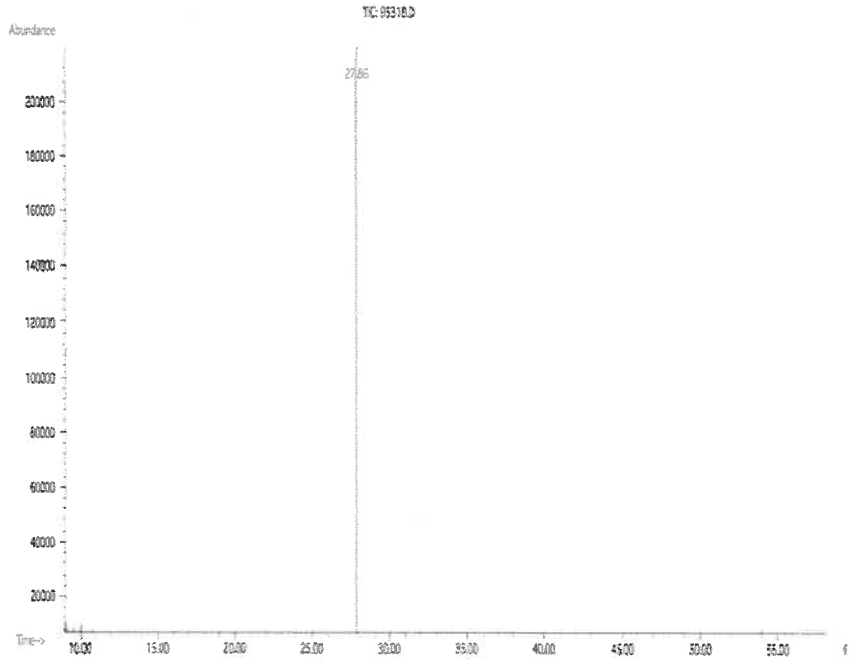
V14630 to V14649

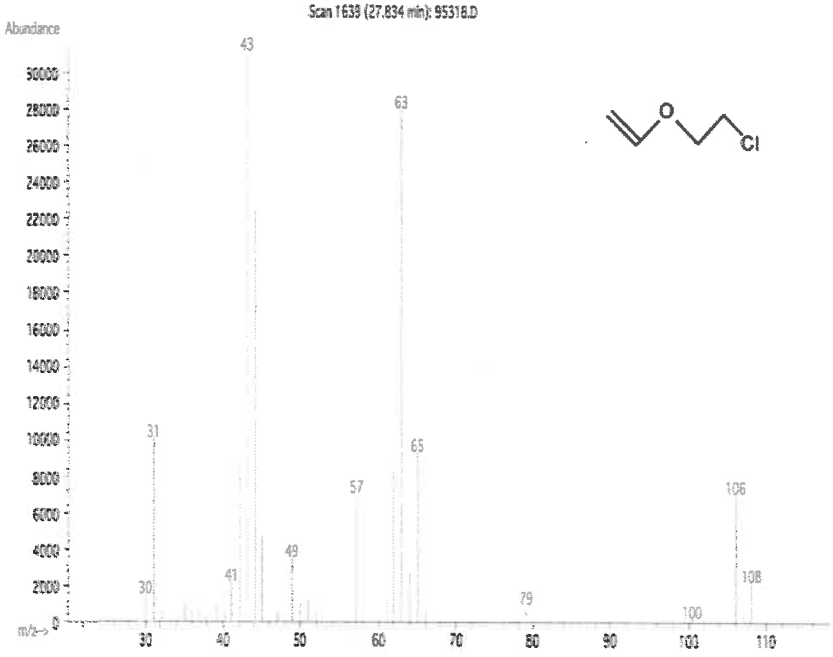
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 50.0 0.001 Flask Uncertainty

Prashant Chauhan	120524
Formulated By: Prashant Chauhan	DATE
Pedro L. Rentas	120524
Reviewed By: Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 2-Chloroethyl vinyl ether	74	MKCD0033	10000	99	0.2	0.50536	0.50550	10002.9	40.5	110-75-8	N/A	ori-rat 250mg/kg

Method: GC6MSD-1.M. **Detector:** MSD. **Column:** (60m X 0.25mm X 1.5 µm). **Oven Profile:** Temp 1 = 35°C (Time 1=10min.), Temp 2 = 200°C (Time 2=8.75 min.), Rate = 4°C/min., Injector B Temp.= 200°C, Detector B Temp. = 220°C. **Analyst:** Candice Warren.





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Address	44 Rossotto Dr. Hamden CT, 06514	Emergency Telephone International Date Prepared/Revised	**1-352-323-3500** January 1, 2024

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

H225	**Highly Flammable Liquid and Vapor**	**H301, 311, 331**	**Toxic if swallowed, skin contact, inhaled**
H370	**Cause damage to organs**	**H351**	**Suspected of causing cancer**
P271	**Use in ventilated area**	**P280**	**Use gloves, eye protection/face sheild**
P302,332	**If on skin, wash with soap and water**	**P305,351,338**	**If in eyes, remove contacts, rinse with water**

Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))			% (optional)
Methanol	METHYL ALCOHOL	CAS#: 67-56-1	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
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If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Flammability	Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

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Methanol 67-56-1 TWA 200 ppm
Skin notation TWA 200 ppm
Potential for skin absorption , ingestion and inhalation.
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Section IX - Physical/Chemical Characteristics

Boiling Point	65°C	Specific Gravity (H2O = 1)	0.79
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6

Solubility in Water COMPLETE

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Chemical stability Stable under recommended storage conditions.
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LD50 Oral - rat - 5,628 mg/kg
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LC50	15,400 mg/l - 96 h
EC50	24,500.00 mg/l - 48 h
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Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

IATA
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
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Lot Number: 120524
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Expiration Date: 120527
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 10000
NIST Test ID#: 6UTB

Solvent(s): Methanol **Lot#** EJ143-US

V14630 to V14649

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Pedro L. Rentas	120524
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Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
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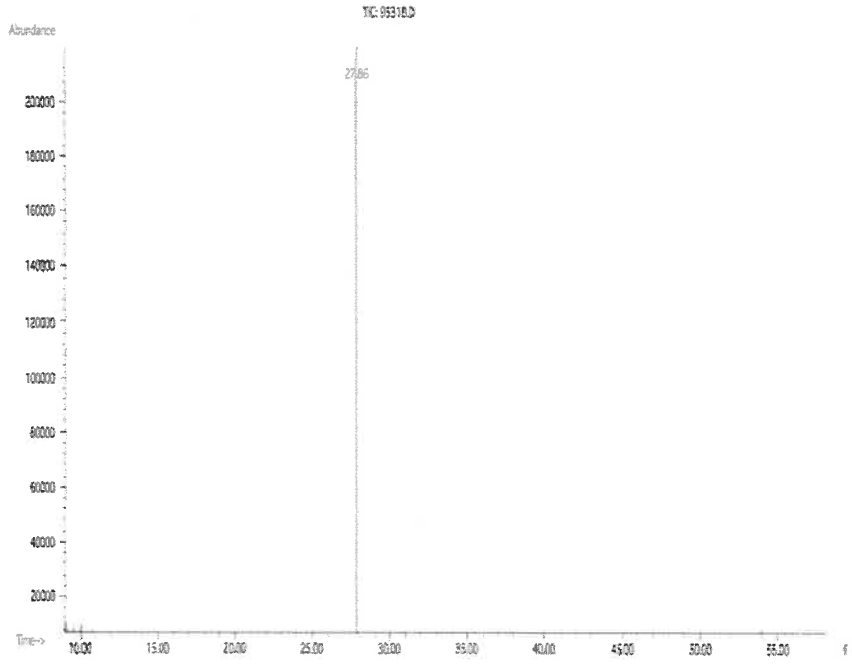
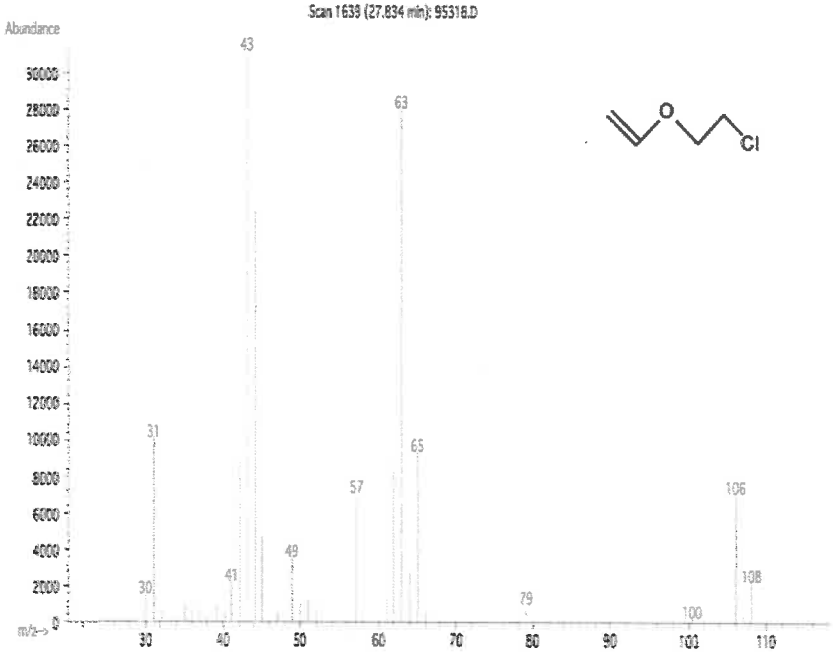
Method: GC6MSD-1.M. **Detector:** MSD. **Column:** (60m X 0.25mm X 1.5 µm). **Oven Profile:** Temp 1 = 35°C (Time 1=10min.), Temp 2 = 200°C (Time 2=8.75 min.), Rate = 4°C/min., Injector B Temp.= 200°C, Detector B Temp. = 220°C. **Analyst:** Candice Warren.





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Address	44 Rossotto Dr. Hamden CT, 06514	Emergency Telephone International Date Prepared/Revised	**1-352-323-3500** January 1, 2024

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Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))			% (optional)
Methanol	METHYL ALCOHOL	CAS#: 67-56-1	> 97

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Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol 67-56-1 TWA 200 ppm
Skin notation TWA 200 ppm
Potential for skin absorption , ingestion and inhalation.
Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

Section IX - Physical/Chemical Characteristics

Boiling Point	65°C	Specific Gravity (H2O = 1)	0.79
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6

Solubility in Water COMPLETE

Appearance and Odor CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions Vapours may form explosive mixture with air.
Conditions to avoid Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions. - Carbon oxides

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
LD50 Dermal - rabbit - 15,800 mg/kg
Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

LC50	15,400 mg/l - 96 h
EC50	24,500.00 mg/l - 48 h
EC100	10,000.00 mg/l - 24 h

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

IATA
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

Rec 12/6/24
20 vial

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 95318
Lot Number: 120524
Description: 2-Chloroethyl vinyl ether

Expiration Date: 120527
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 10000
NIST Test ID#: 6UTB

Solvent(s): Methanol **Lot#** EJ143-US

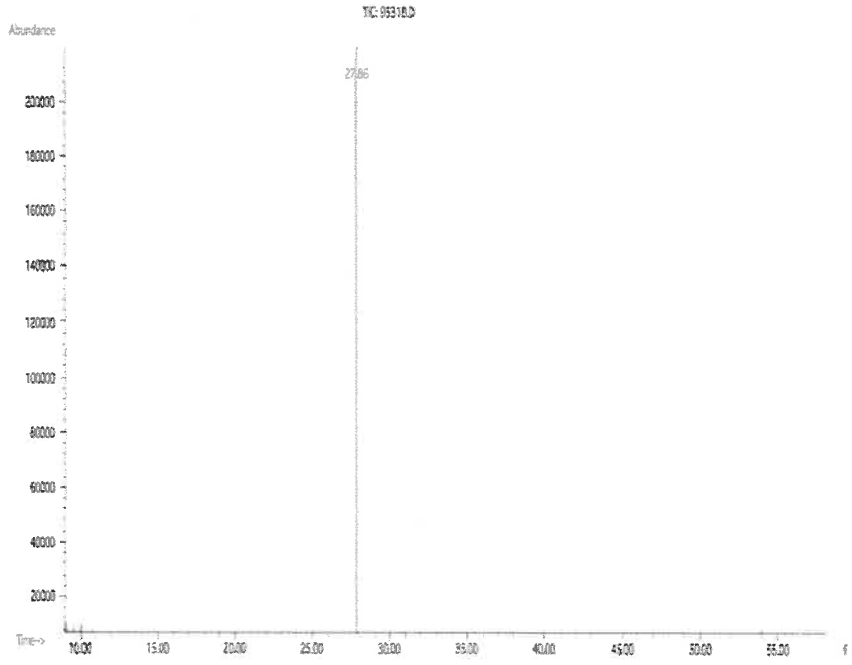
V14630 to V14649

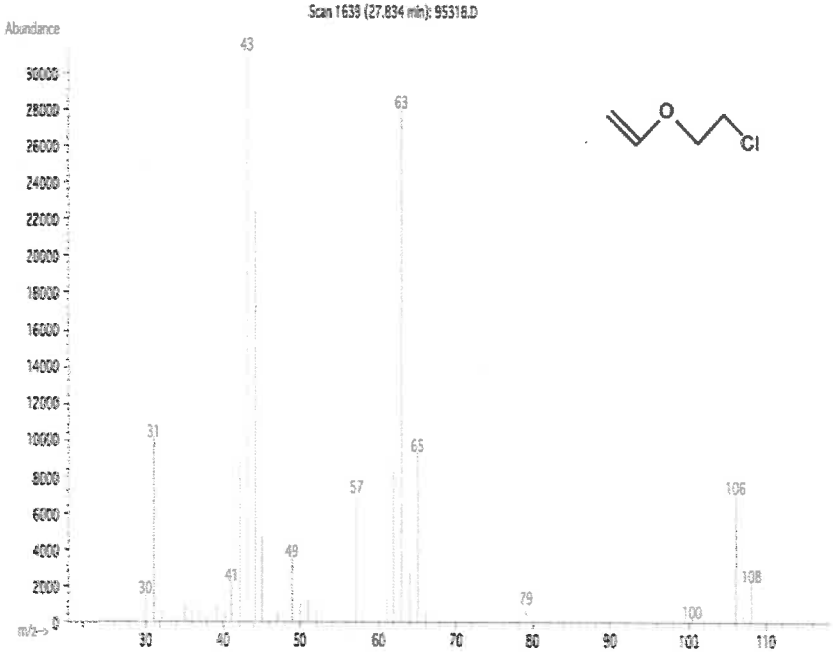
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 50.0 0.001 Flask Uncertainty

Prashant Chauhan	120524
Formulated By: Prashant Chauhan	DATE
Pedro L. Rentas	120524
Reviewed By: Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 2-Chloroethyl vinyl ether	74	MKCD0033	10000	99	0.2	0.50536	0.50550	10002.9	40.5	110-75-8	N/A	ori-rat 250mg/kg

Method: GC6MSD-1.M. **Detector:** MSD. **Column:** (60m X 0.25mm X 1.5 µm). **Oven Profile:** Temp 1 = 35°C (Time 1=10min.), Temp 2 = 200°C (Time 2=8.75 min.), Rate = 4°C/min., Injector B Temp.= 200°C, Detector B Temp. = 220°C. **Analyst:** Candice Warren.





- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Absolute Standards Inc.
PO Box 5585
Hamden, CT 06518-0585
Phone: 203-281-2917
FAX: 203-281-2922

Safety Data Sheet (SDS) GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	**1-800-535-5053**
Address	44 Rossotto Dr. Hamden CT, 06514	Emergency Telephone International Date Prepared/Revised	**1-352-323-3500** January 1, 2024

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

H225	**Highly Flammable Liquid and Vapor**	**H301, 311, 331**	**Toxic if swallowed, skin contact, inhaled**
H370	**Cause damage to organs**	**H351**	**Suspected of causing cancer**
P271	**Use in ventilated area**	**P280**	**Use gloves, eye protection/face sheild**
P302,332	**If on skin, wash with soap and water**	**P305,351,338**	**If in eyes, remove contacts, rinse with water**

Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))			% (optional)
Methanol	METHYL ALCOHOL	CAS#: 67-56-1	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Flammability	Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

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Methanol 67-56-1 TWA 200 ppm
Skin notation TWA 200 ppm
Potential for skin absorption , ingestion and inhalation.
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Boiling Point	65°C	Specific Gravity (H2O = 1)	0.79
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6

Solubility in Water COMPLETE

Appearance and Odor CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.

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UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

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OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

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RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30067 **Lot No.:** A0191805

Description : 4-Bromofluorobenzene Standard

4-Bromofluorobenzene Standard 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1-Bromo-4-fluorobenzene (BFB)	460-00-4	184975	99%	2,483.9 µg/mL	+/- 139.5488

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

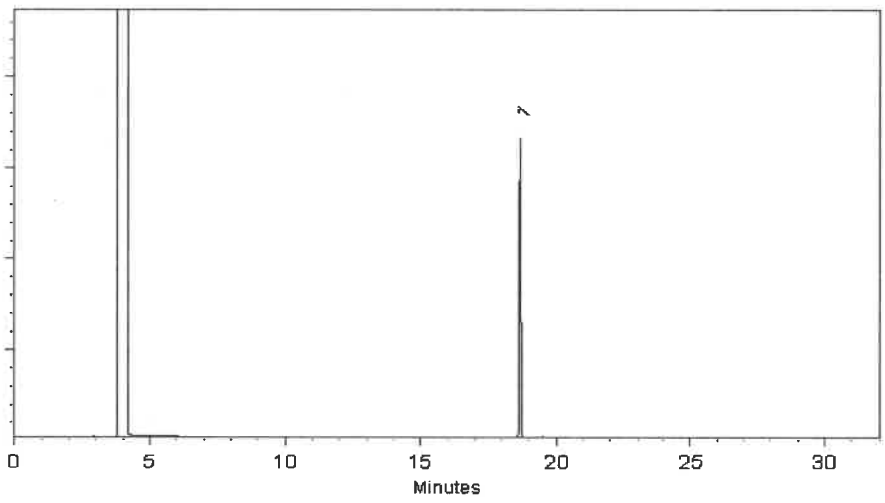
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Alicia Leathers - Operation Technician I **Date Mixed:** 17-Nov-2022 **Balance Serial #** B251644995

Jennifer Pollino - Operations Tech III - ARM QC **Date Passed:** 21-Nov-2022

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

RESTEK
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CERTIFIED REFERENCE MATERIAL

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Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30006 **Lot No.:** A0200785

Description : VOA Calibration Mix #1

VOA Calibration Mix #1 5,000µg/mL, P&T Methanol/Water(90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2026 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Acetone	67-64-1	SHBP8774	99%	5,018.5 µg/mL	+/- 173.4162
2	2-Butanone (MEK)	78-93-3	SHBL5543	99%	5,016.0 µg/mL	+/- 173.3298
3	4-Methyl-2-pentanone (MIBK)	108-10-1	SHBP4724	99%	5,010.7 µg/mL	+/- 173.1455
4	2-Hexanone	591-78-6	MKCQ6663	99%	5,015.0 µg/mL	+/- 173.2952

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

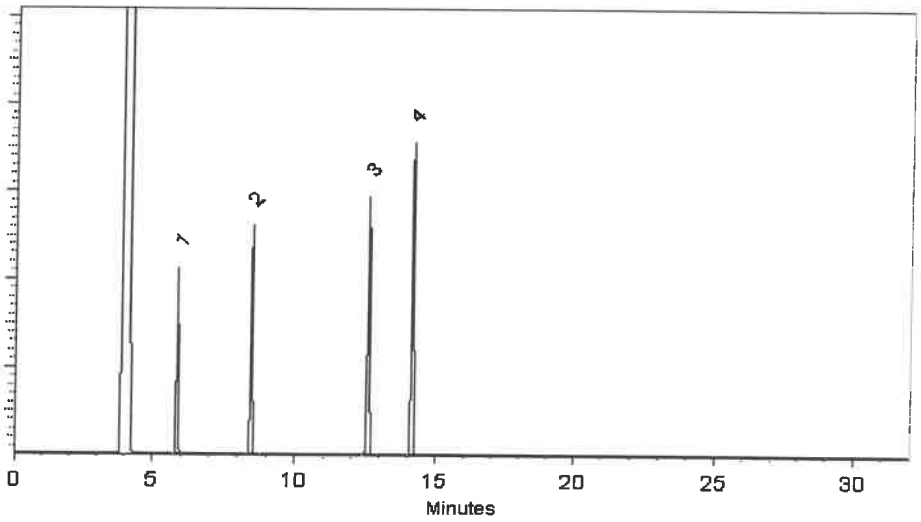
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Laith Clemente - Operations Technician I

Date Mixed: 09-Aug-2023 **Balance Serial #** B707717271

Marlina Cowan – Operations Tech II ARM QC

Date Passed: 16-Aug-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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Certificate of Analysis

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30006 **Lot No.:** A0200785

Description : VOA Calibration Mix #1

VOA Calibration Mix #1 5,000µg/mL, P&T Methanol/Water(90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2026 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Acetone	67-64-1	SHBP8774	99%	5,018.5 µg/mL	+/- 173.4162
2	2-Butanone (MEK)	78-93-3	SHBL5543	99%	5,016.0 µg/mL	+/- 173.3298
3	4-Methyl-2-pentanone (MIBK)	108-10-1	SHBP4724	99%	5,010.7 µg/mL	+/- 173.1455
4	2-Hexanone	591-78-6	MKCQ6663	99%	5,015.0 µg/mL	+/- 173.2952

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

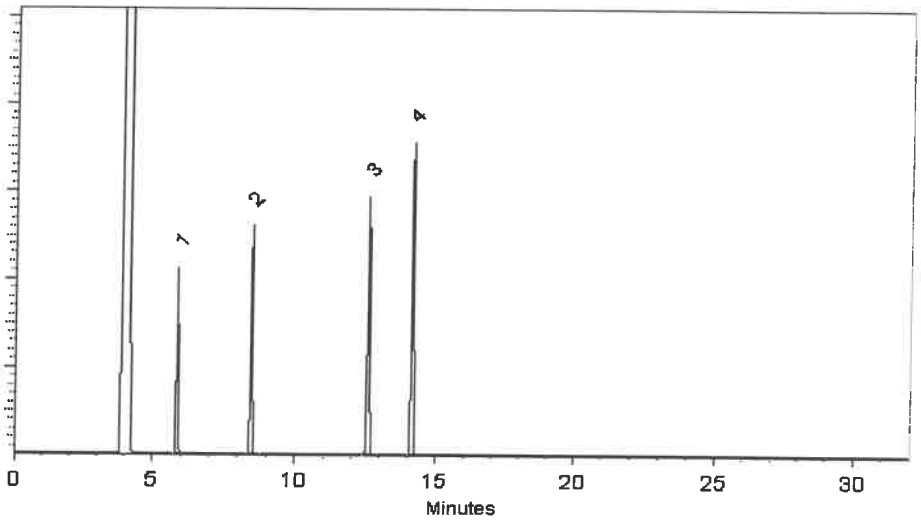
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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Laith Clemente - Operations Technician I

Date Mixed: 09-Aug-2023 **Balance Serial #** B707717271

Marlina Cowan – Operations Tech II ARM QC

Date Passed: 16-Aug-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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Certified Uncertainty Value Notes:

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$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30006 **Lot No.:** A0200785

Description : VOA Calibration Mix #1

VOA Calibration Mix #1 5,000µg/mL, P&T Methanol/Water(90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2026 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Acetone	67-64-1	SHBP8774	99%	5,018.5 µg/mL	+/- 173.4162
2	2-Butanone (MEK)	78-93-3	SHBL5543	99%	5,016.0 µg/mL	+/- 173.3298
3	4-Methyl-2-pentanone (MIBK)	108-10-1	SHBP4724	99%	5,010.7 µg/mL	+/- 173.1455
4	2-Hexanone	591-78-6	MKCQ6663	99%	5,015.0 µg/mL	+/- 173.2952

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

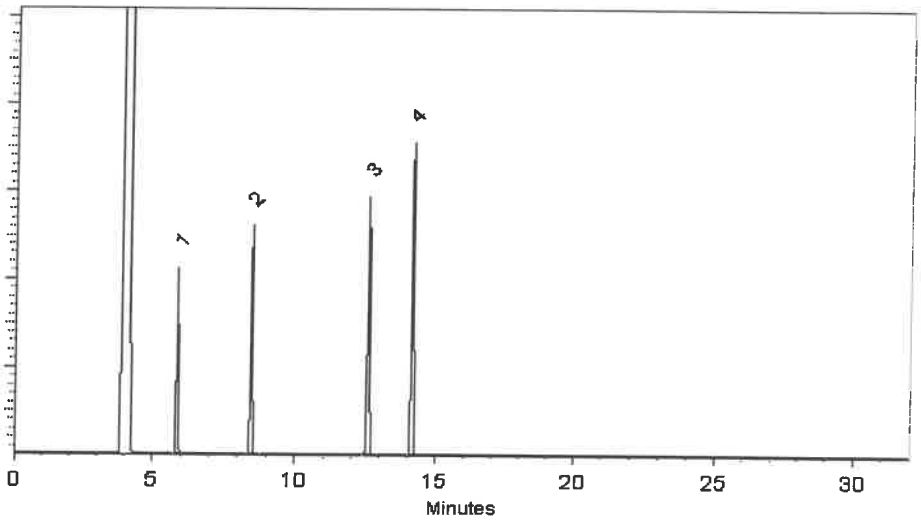
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Laith Clemente - Operations Technician I

Date Mixed: 09-Aug-2023 **Balance Serial #** B707717271

Marlina Cowan – Operations Tech II ARM QC

Date Passed: 16-Aug-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555581 **Lot No.:** A0210184

Description : Custom 8260 Internal Standard Mix

Custom 8260 Internal Standard Mix 25,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2027 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,4-Dichlorobenzene-d4	3855-82-1	PR-30447	99%	25,212.0 µg/mL	+/- 1,427.8857
2	1,4-Difluorobenzene	540-36-3	MKCS8657	99%	25,220.0 µg/mL	+/- 1,428.3388
3	Chlorobenzene-d5	3114-55-4	PR-31132	99%	25,116.0 µg/mL	+/- 1,422.4487
4	Pentafluorobenzene	363-72-4	MKCR9383	99%	25,180.0 µg/mL	+/- 1,426.0734

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

John Friedline - Operations Technician I

Date Mixed: 11-Apr-2024 **Balance:** 1127510105

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30225 **Lot No.:** A0214960

Description : Bromochloromethane Standard

Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2029 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Bromochloromethane	74-97-5	SYN240416CTH	99%	2,012.0 µg/mL	+/- 113.0519

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

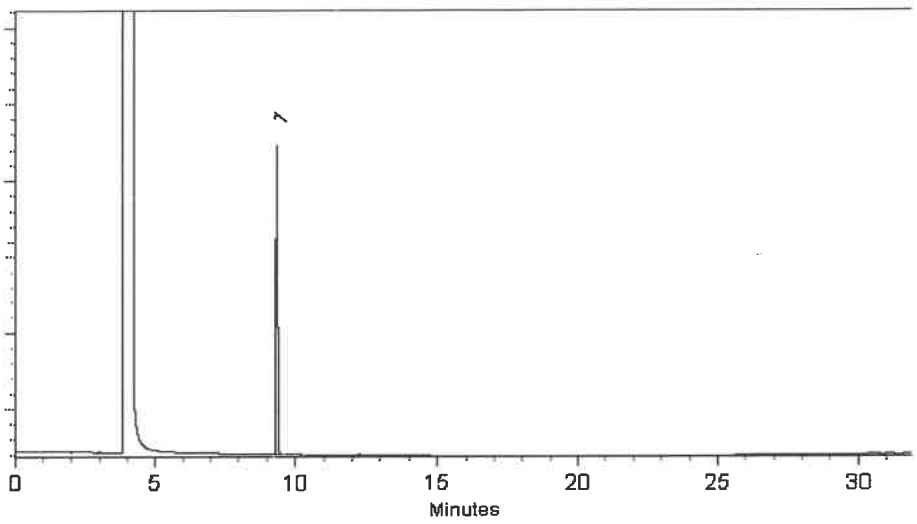
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Stacey Wanner - Operations Technician I

Date Mixed: 08-Aug-2024 **Balance Serial #** 1127510105

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Aug-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

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- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30225 **Lot No.:** A0214960

Description : Bromochloromethane Standard

Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2029 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Bromochloromethane	74-97-5	SYN240416CTH	99%	2,012.0 µg/mL	+/- 113.0519

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

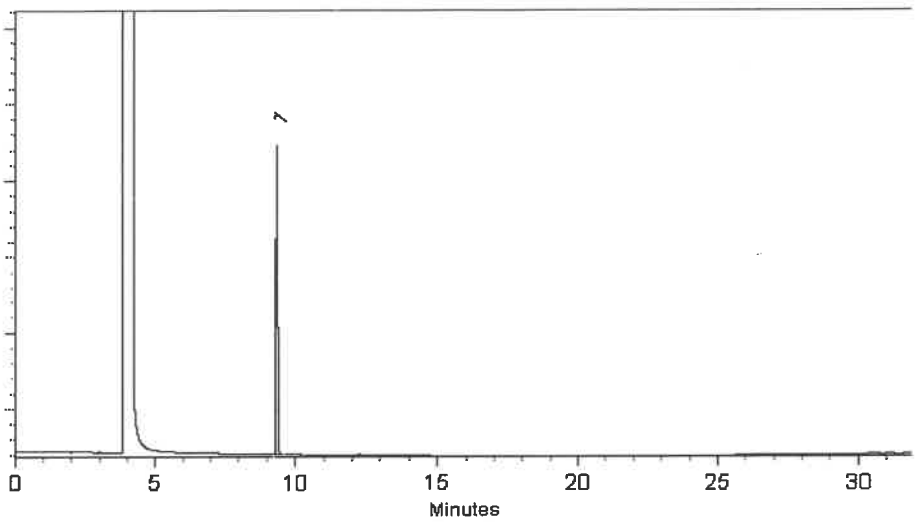
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Stacey Wanner - Operations Technician I

Date Mixed: 08-Aug-2024 **Balance Serial #** 1127510105

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Aug-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

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Manufacturing Notes:

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30225 **Lot No.:** A0214960

Description : Bromochloromethane Standard

Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2029 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Bromochloromethane	74-97-5	SYN240416CTH	99%	2,012.0 µg/mL	+/- 113.0519

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

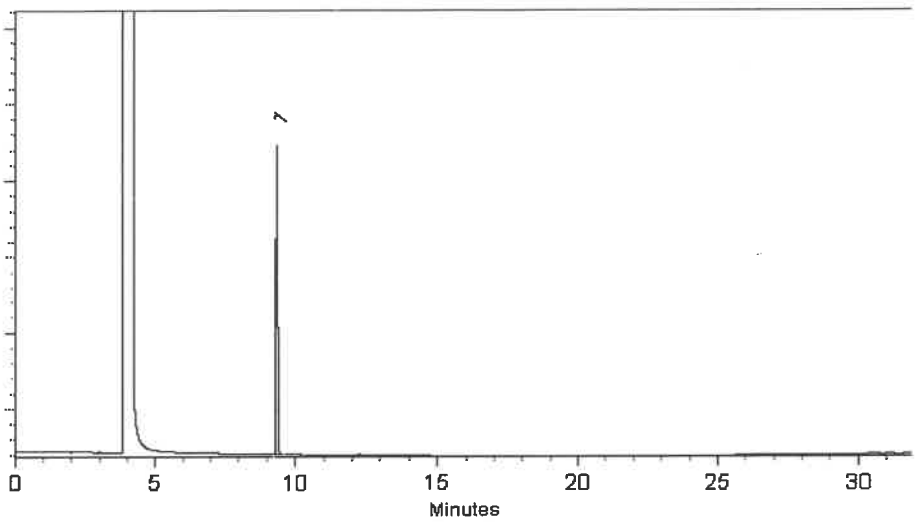
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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Stacey Wanner - Operations Technician I

Date Mixed: 08-Aug-2024 **Balance Serial #** 1127510105

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Aug-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
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- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30225 **Lot No.:** A0214960

Description : Bromochloromethane Standard

Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2029 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Bromochloromethane	74-97-5	SYN240416CTH	99%	2,012.0 µg/mL	+/- 113.0519

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

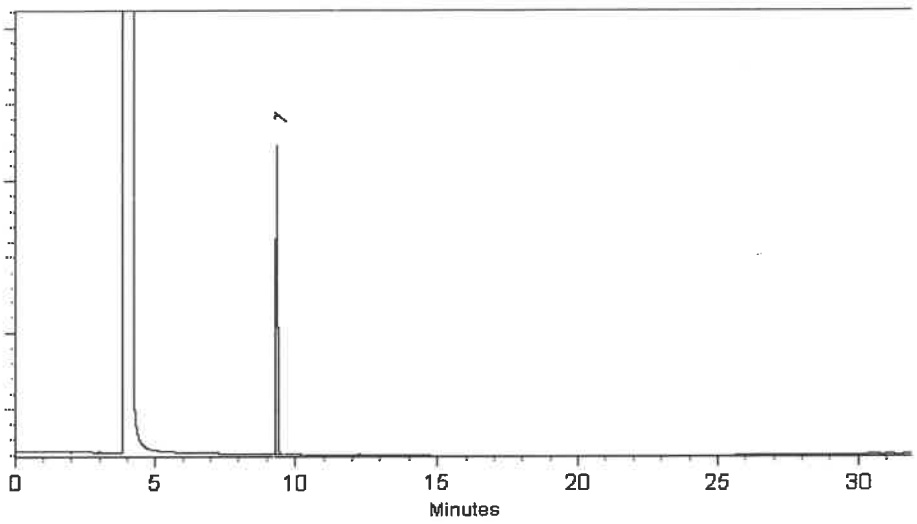
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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Stacey Wanner - Operations Technician I

Date Mixed: 08-Aug-2024 **Balance Serial #** 1127510105

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Aug-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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Rec 12/17/24

CERTIFIED REFERENCE MATERIAL

30 Vial

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V14727 to
V14756

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Certificate #3222.01

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30042 **Lot No.:** A0216826

Description : 502.2 Calibration Mix #1

502.2 Calibration Mix #1 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2031 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Dichlorodifluoromethane (CFC-12)	75-71-8	00022922	99%	2,000.9 µg/mL	+/- 112.4144
2	Chloromethane (methyl chloride)	74-87-3	00022694	99%	2,000.7 µg/mL	+/- 112.3998
3	Vinyl chloride	75-01-4	00015559	99%	2,000.3 µg/mL	+/- 112.3779
4	Bromomethane (methyl bromide)	74-83-9	00017022	99%	2,001.8 µg/mL	+/- 112.4650
5	Chloroethane (ethyl chloride)	75-00-3	107-401039114-1	99%	2,000.1 µg/mL	+/- 112.3700
6	Trichlorofluoromethane (CFC-11)	75-69-4	MKCJ8658	99%	2,000.7 µg/mL	+/- 112.3992

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

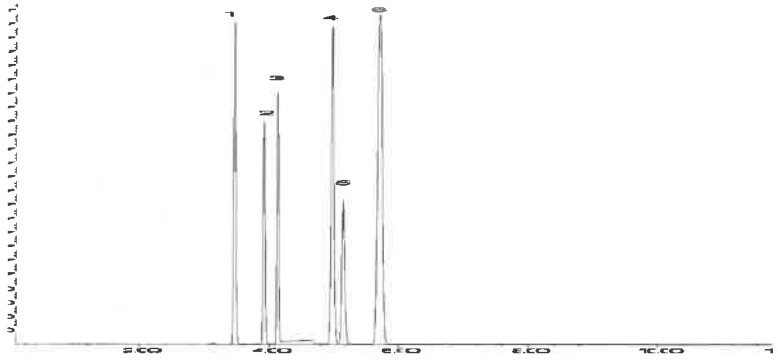
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD

Split Vent:
Split ratio 10:1

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 23-Sep-2024 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 04-Oct-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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CERTIFIED REFERENCE MATERIAL

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V14727 to
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Reference Material Producer
Certificate #3222.01

ACCREDITED
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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30042 **Lot No.:** A0216826

Description : 502.2 Calibration Mix #1

502.2 Calibration Mix #1 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2031 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Dichlorodifluoromethane (CFC-12)	75-71-8	00022922	99%	2,000.9 µg/mL	+/- 112.4144
2	Chloromethane (methyl chloride)	74-87-3	00022694	99%	2,000.7 µg/mL	+/- 112.3998
3	Vinyl chloride	75-01-4	00015559	99%	2,000.3 µg/mL	+/- 112.3779
4	Bromomethane (methyl bromide)	74-83-9	00017022	99%	2,001.8 µg/mL	+/- 112.4650
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6	Trichlorofluoromethane (CFC-11)	75-69-4	MKCJ8658	99%	2,000.7 µg/mL	+/- 112.3992

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

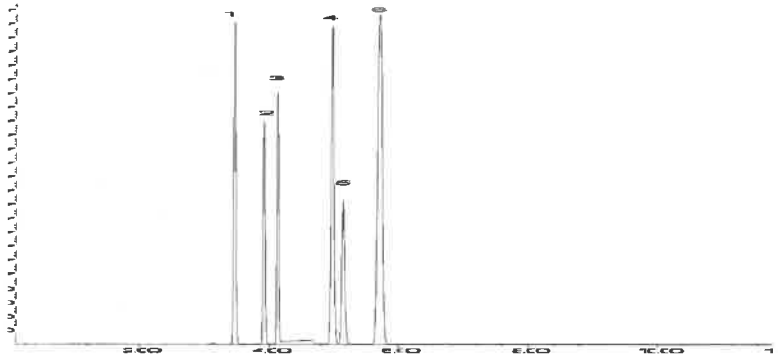
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD

Split Vent:
Split ratio 10:1

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 23-Sep-2024 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 04-Oct-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
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Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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Certificate of Analysis

chromatographic plus

J14842 to 14846

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Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30470 **Lot No.:** A0217535

Description : tert-Butanol Standard

tert-Butanol Std 50,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	tert-Butanol (TBA)	75-65-0	SHBQ8002-1	99%	50,007.5 µg/mL	+/- 717.6137

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

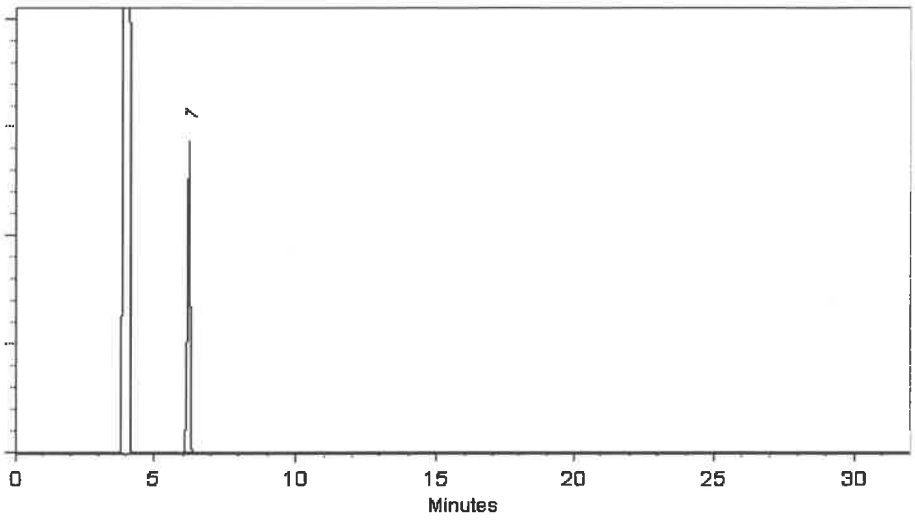
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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Aaron Enyart - Operations Tech I

Date Mixed: 07-Oct-2024 **Balance Serial #** B251644995

Brittany Federinko - Operations Tech I

Date Passed: 09-Oct-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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Zoviny Rec 01/08/21

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

V14803 - V14822

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555408-SL **Lot No.:** A0220471

Description : Custom Vinyl Acetate Standard

Custom Vinyl Acetate Standard 8,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2026 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Vinyl acetate	108-05-4	RD240423RSR	99%	8,066.0 µg/mL	+/- 278.7979

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

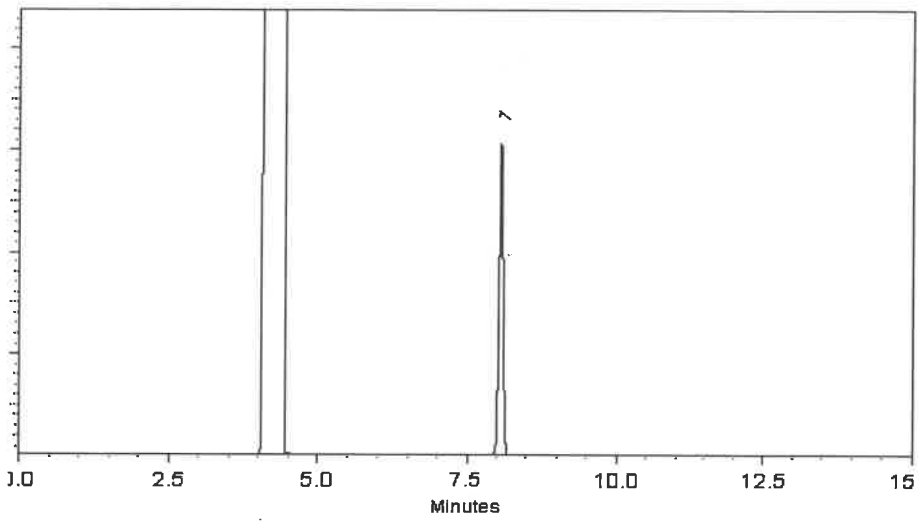
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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Ethan Winiarski - Operations Tech I

Date Mixed: 24-Dec-2024 **Balance Serial #** 1127510105

Dillan Murphy - Operations Technician I

Date Passed: 02-Jan-2025

REVIEWED

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
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Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
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- Purity of isomeric compounds is reported as the sum of the isomers.
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Certified Uncertainty Value Notes:

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  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

V14803 - V14822

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Catalog No. : 555408-SL **Lot No.:** A0220471

Description : Custom Vinyl Acetate Standard

Custom Vinyl Acetate Standard 8,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2026 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Vinyl acetate	108-05-4	RD240423RSR	99%	8,066.0 µg/mL	+/- 278.7979

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

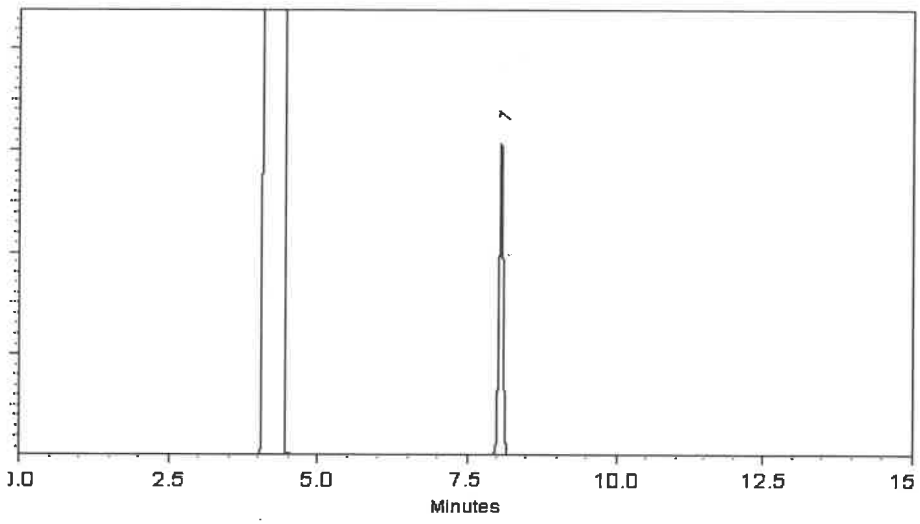
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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Ethan Winiarski - Operations Tech I

Date Mixed: 24-Dec-2024 **Balance Serial #** 1127510105

Dillan Murphy - Operations Technician I

Date Passed: 02-Jan-2025

REVIEWED

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

10 vial

CERTIFIED REFERENCE MATERIAL

Lee 03/31/25

Certificate of Analysis

gravimetric

V14904 to V14913

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555582 **Lot No.:** A0223904

Description : Custom 8260A/B Surrogate Mix

Custom 8260A/B Surrogate Mix 25,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2028 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2-Dichloroethane-d4	17060-07-0	PR-33313	99%	25,108.0 µg/mL	+/- 1,421.9957
2	1-Bromo-4-fluorobenzene (BFB)	460-00-4	0000268853	99%	25,108.0 µg/mL	+/- 1,421.9957
3	Dibromofluoromethane	1868-53-7	VENKAT02	99%	25,232.0 µg/mL	+/- 1,429.0184
4	Toluene-d8	2037-26-5	PR-34141	99%	25,156.0 µg/mL	+/- 1,424.7141

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Brittany Federinko - Operations Tech I

Date Mixed: 27-Mar-2025 **Balance:** B251644995

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

Rec 05/09/25

avantor™ | J.T.Baker®

V14921 to
V14938

Material No.: 9077-02
Batch No.: 24G0262002
Manufactured Date: 2024-05-14
Expiration Date: 2027-05-14
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (CH_3OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.3 ppm
Titrable Acid (µeq/g)	≤ 0.3	0.3
Titrable Base (µeq/g)	≤ 0.10	0.03
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis - Below EPA 8260B CRQL	Conforms	Conforms

For Laboratory,Research,or Manufacturing Use
Performance Tested for Use in EPA Methods
500 Series for Drinking Water
600 Series for Wastewater
846 for Solid Waste

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

JCroak

Jamie Croak
Director Quality Operations, Bioscience Production

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

Rec 05/09/25

avantor™ | J.T.Baker®

V14921 to
V14938

Material No.: 9077-02
Batch No.: 24G0262002
Manufactured Date: 2024-05-14
Expiration Date: 2027-05-14
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (CH_3OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.3 ppm
Titrable Acid (µeq/g)	≤ 0.3	0.3
Titrable Base (µeq/g)	≤ 0.10	0.03
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis - Below EPA 8260B CRQL	Conforms	Conforms

For Laboratory,Research,or Manufacturing Use
Performance Tested for Use in EPA Methods
500 Series for Drinking Water
600 Series for Wastewater
846 for Solid Waste

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

JCroak

Jamie Croak
Director Quality Operations, Bioscience Production

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

Rec 05/09/25

avantor™ | J.T.Baker®

V14921 to
V14938

Material No.: 9077-02
Batch No.: 24G0262002
Manufactured Date: 2024-05-14
Expiration Date: 2027-05-14
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (CH_3OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.3 ppm
Titrable Acid (µeq/g)	≤ 0.3	0.3
Titrable Base (µeq/g)	≤ 0.10	0.03
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis - Below EPA 8260B CRQL	Conforms	Conforms

For Laboratory,Research,or Manufacturing Use
Performance Tested for Use in EPA Methods
500 Series for Drinking Water
600 Series for Wastewater
846 for Solid Waste

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

JCroak

Jamie Croak
Director Quality Operations, Bioscience Production

Rec 05/19/25

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL
20 Vial

Certificate of Analysis

chromatographic plus

VJ14951 to VJ14970

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30489 **Lot No.:** A0222076

Description : 8260B Acetates Mix

8260B Acetates Mix 2,000 µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2026 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Methyl acetate	79-20-9	SHBR1889	99%	2,004.0 µg/mL	+/- 69.2674
2	Vinyl acetate	108-05-4	RD240423RSR	99%	2,010.0 µg/mL	+/- 69.4748
3	Ethyl acetate	141-78-6	SHBS3323	99%	2,019.3 µg/mL	+/- 69.7974
4	Isopropyl acetate	108-21-4	BCCG7069	99%	2,008.0 µg/mL	+/- 69.4057
5	Propyl acetate	109-60-4	P8XLN	99%	2,008.0 µg/mL	+/- 69.4057
6	Butyl acetate	123-86-4	SHBR2024	99%	2,008.0 µg/mL	+/- 69.4057
7	Amyl acetate	628-63-7	BCBT7442	99%	2,006.7 µg/mL	+/- 69.3596

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this

Rec 05/19/25

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL
20 Vial

Certificate of Analysis

chromatographic plus

VJ14951 to VJ14970

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30489 **Lot No.:** A0222076

Description : 8260B Acetates Mix

8260B Acetates Mix 2,000 µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2026 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Methyl acetate	79-20-9	SHBR1889	99%	2,004.0 µg/mL	+/- 69.2674
2	Vinyl acetate	108-05-4	RD240423RSR	99%	2,010.0 µg/mL	+/- 69.4748
3	Ethyl acetate	141-78-6	SHBS3323	99%	2,019.3 µg/mL	+/- 69.7974
4	Isopropyl acetate	108-21-4	BCCG7069	99%	2,008.0 µg/mL	+/- 69.4057
5	Propyl acetate	109-60-4	P8XLN	99%	2,008.0 µg/mL	+/- 69.4057
6	Butyl acetate	123-86-4	SHBR2024	99%	2,008.0 µg/mL	+/- 69.4057
7	Amyl acetate	628-63-7	BCBT7442	99%	2,006.7 µg/mL	+/- 69.3596

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this

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Certified Reference Material CRM

Rec 10/16/25 5 Vial

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 101625
Description: Acrolein

Solvent(s): Water **Lot#** 041725Q

Expiration Date: 111625
Recommended Storage: Refrigerate (2°C to 8°C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

V15071 – V15075

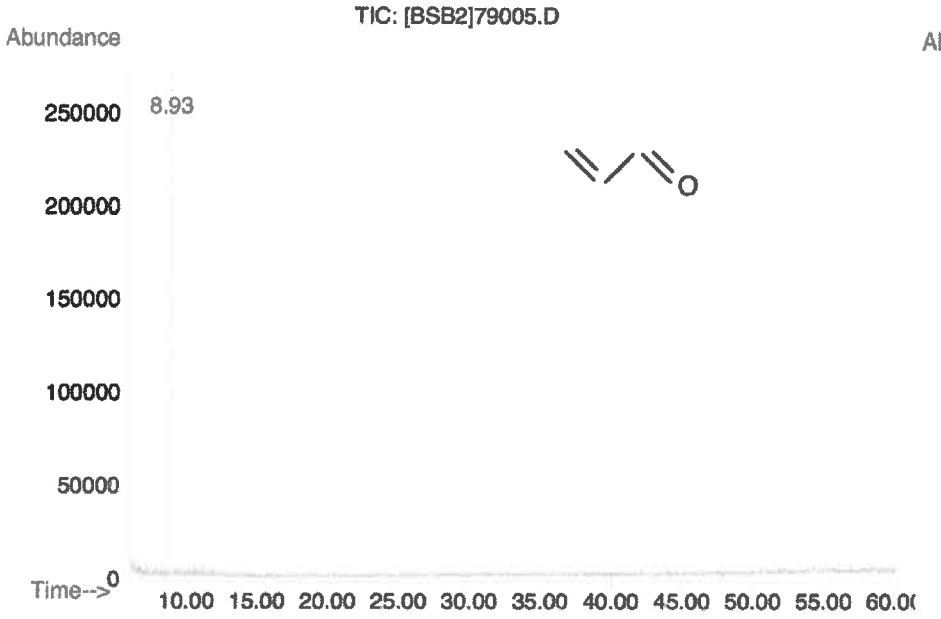
5E-05 Balance Uncertainty
0.001 Flask Uncertainty

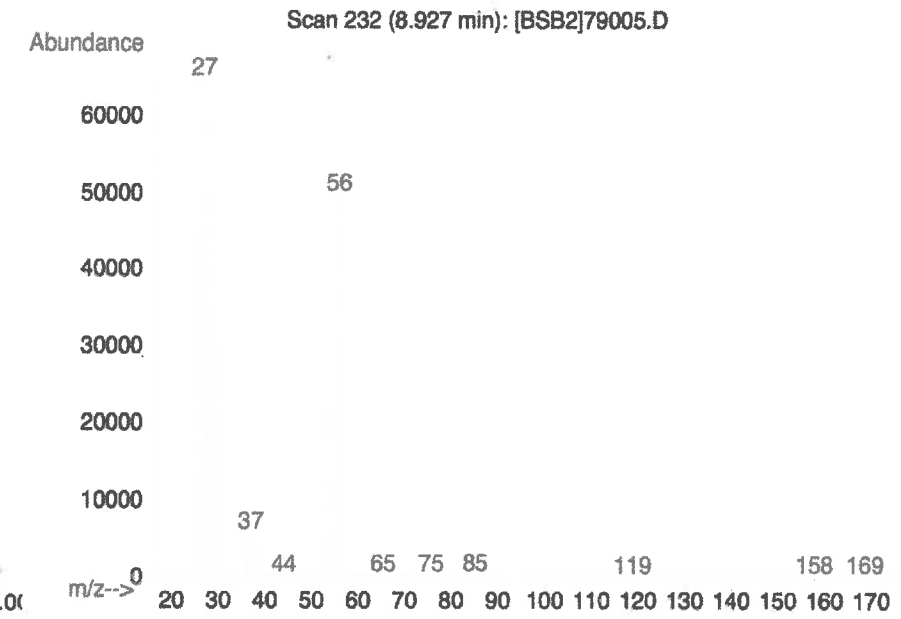
Weight(s) shown below were combined and diluted to (mL): 10.0

Prashant Chauhan		101625
Formulated By:	Prashant Chauhan	DATE
Pedro Rentas		101625
Reviewed By:	Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Acrolein	5	103755V10F	5000	97	0.5	0.05166	0.05180	5013.7	52.6	107-02-8	0.1 ppm	orl-rat 46mg/kg

Method: GC6MSD-1. **Detector:** Mass Selective Detector (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C (Time 2 = 8.75 min.) Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. **Analyst:** Pedro Rentas. **NOTE:** Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately Long term storage is not recommended. Please contact our technical department if further information is required.





- **The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.**
- **Standards are prepared gravimetrically using balances that are calibrated by an ISO 17025 certified organization with weights traceable through NIST to the SI kilogram (see above).**
- **Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.**
- **All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.**
- **Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Goverament Printing Office, Washington, DC, (1994).**
  Rev 1.0, 2/25/2025

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

Rec 10/16/25 5 Vial

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 101625
Description: Acrolein

Solvent(s): Water **Lot#** 041725Q

Expiration Date: 111625
Recommended Storage: Refrigerate (2°C to 8°C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

V15071 – V15075

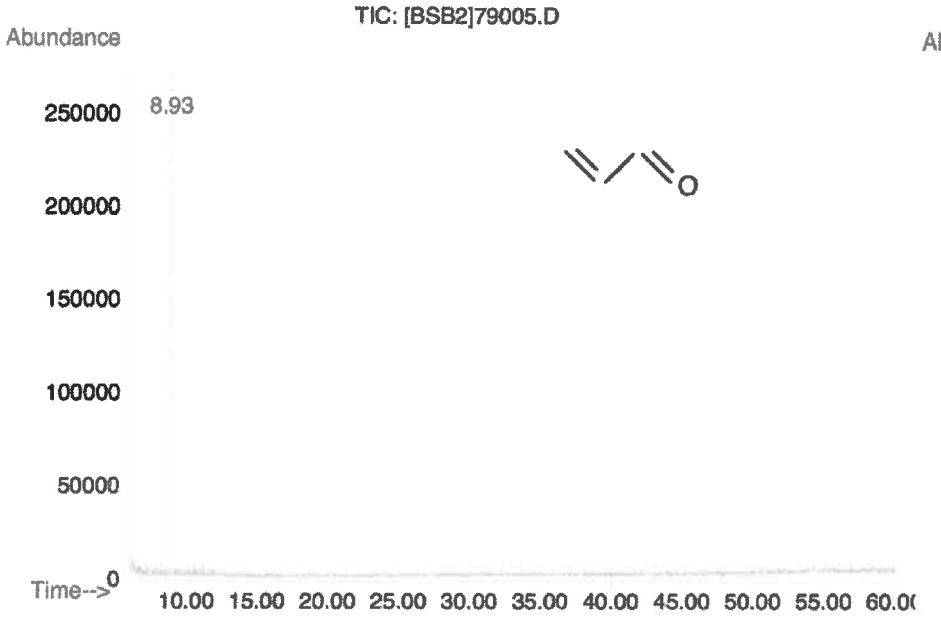
5E-05 Balance Uncertainty
0.001 Flask Uncertainty

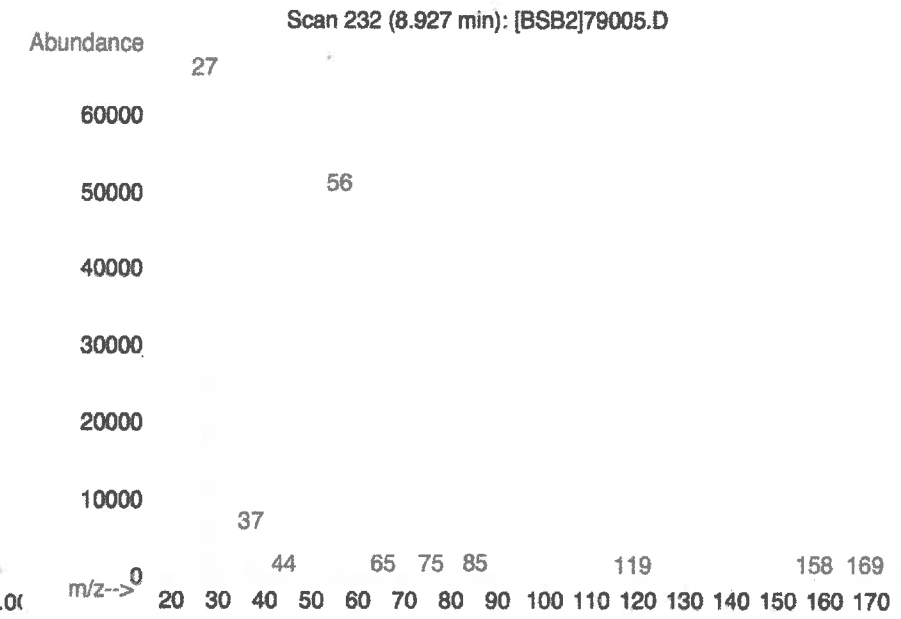
Weight(s) shown below were combined and diluted to (mL): 10.0

Prashant Chauhan		101625
Formulated By:	Prashant Chauhan	DATE
Pedro Rentas		101625
Reviewed By:	Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Acrolein	5	103755V10F	5000	97	0.5	0.05166	0.05180	5013.7	52.6	107-02-8	0.1 ppm	orl-rat 46mg/kg

Method: GC6MSD-1. **Detector:** Mass Selective Detector (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C (Time 2 = 8.75 min.) Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. **Analyst:** Pedro Rentas. **NOTE:** Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately Long term storage is not recommended. Please contact our technical department if further information is required.





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  Rev 1.0, 2/25/2025

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Certified Reference Material CRM

Rec 10/16/25 5 Vial

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 101625
Description: Acrolein

Solvent(s): Water **Lot#** 041725Q

Expiration Date: 111625
Recommended Storage: Refrigerate (2°C to 8°C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

V15071 – V15075

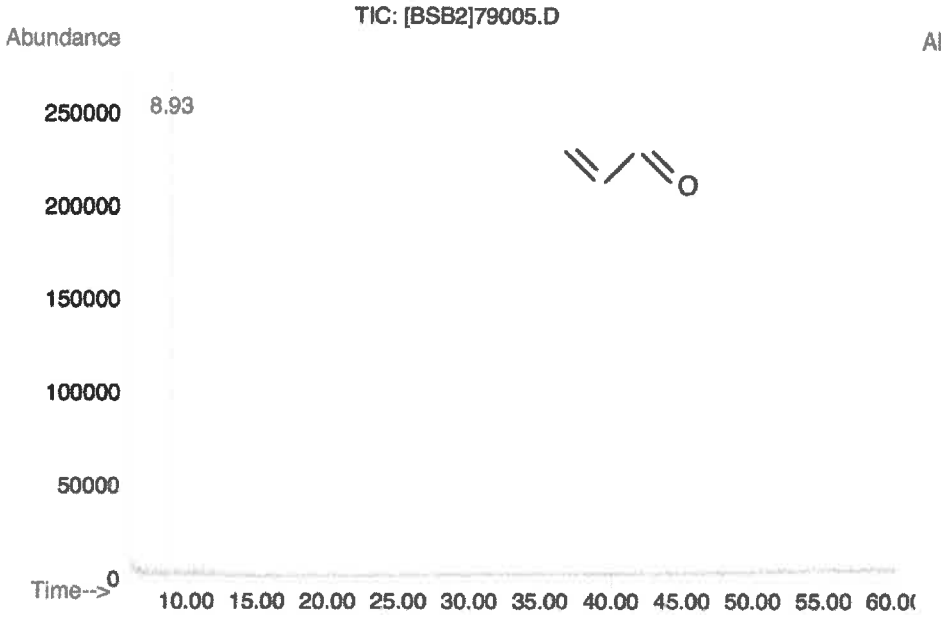
5E-05 Balance Uncertainty
0.001 Flask Uncertainty

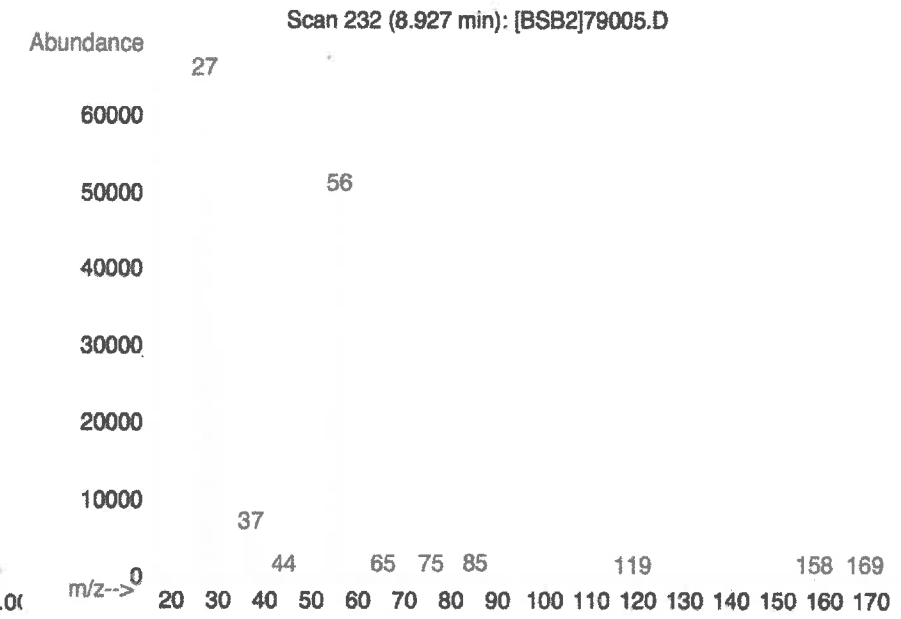
Weight(s) shown below were combined and diluted to (mL): 10.0

Prashant Chauhan		101625
Formulated By:	Prashant Chauhan	DATE
Pedro Rentas		101625
Reviewed By:	Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Acrolein	5	103755V10F	5000	97	0.5	0.05166	0.05180	5013.7	52.6	107-02-8	0.1 ppm	orl-rat 46mg/kg

Method: GC6MSD-1. **Detector:** Mass Selective Detector (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C (Time 2 = 8.75 min.) Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. **Analyst:** Pedro Rentas. **NOTE:** Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately Long term storage is not recommended. Please contact our technical department if further information is required.





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  Rev 1.0, 2/25/2025

SHIPPING DOCUMENTS

Alliance TECHNICAL GROUP

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

ALLIANCE PROJECT NO.
QUOTE NO. Q3368
COC Number 2045360

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: Aramark Uniforms
ADDRESS: 740 Frelinghuysen Ave
CITY Newark STATE: NJ ZIP: 07114
ATTENTION: Jarrod Mills
PHONE: 973-824-1101 FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME:
PROJECT NO.: LOCATION:
PROJECT MANAGER:
e-mail:
PHONE: FAX:

CLIENT BILLING INFORMATION

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

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 + Raw Data) ❑ NYS ASP A ❑ NYS ASP B
❑ Other _____
❑ EDD FORMAT _____

ANALYSIS

PRESERVATIVES

COMMENTS

← Specify Preservatives
A-HCl D-NaOH
B-HN03 E-ICE
C-H2SO4 F-OTHER

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	1	2	3	4	5	6	7	8	9
1.	Outside Dumpster	S		✓	10.16.25	1300	7									
2.	Press Sludge			✓		1304	7									
3.	Tank 1			✓		1308	7									
4.	Tank 2			✓		1312	7									
5.	Oil Sludge			✓		1315	7									
6.																
7.																
8.																
9.																
10.																

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

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1.	10-16-25 1340	1.	10.16.25 1340
2.		2.	
3.	10-16-25 1815	3.	

Conditions of bottles or coolers at receipt: ❑ COMPLIANT ❑ NON COMPLIANT ❑ COOLER TEMP 3.1 °C
Comments:

Page _____ of

CLIENT: ❑ Hand Delivered ❑ Other

Shipment Complete ❑ YES ❑ NO

WHITE - ALLIANCE COPY FOR RETURN TO CLIENT YELLOW - ALLIANCE COPY PINK - SAMPLER COPY

Outlook

RE: [WMSolutions.com] Profile 100601PAE (Vestis Uniform Services) has been returned to your drafts tab

From Barnes, Tommy <tommy.barnes@vestis.com>
Date Mon 10/6/2025 10:25 AM
To Vanegas, Jose <Jose.Vanegas@vestis.com>
Cc Dikos, Tom <tom.dikos@vestis.com>; Castillo Vasquez, Gustavo A. <gustavo.castillo@vestis.com>; Williams III, Jack <jack.williams@vestis.com>; Romain, Sobner <sobner.romain@vestis.com>

Jose,
I will complete Form 25R and also fix the section G of the profile.
Unfortunately, it looks like we need to run additional analysis on the sludge per the landfill.
Can you please call your lab (Alliance Technical Group 908-789-8900) and let them know you need to analyze your filter cake asap? It should be analyzed for the following:

- Oil & Grease (as received)
- Paint Filter Test
- Total PCBs (mg/kg)
- Total Solids (as received)
- Total Volatile Solids (as received)
- Ammonia-Nitrogen (ASTM Extraction - mg/L)
- Chemical Oxygen Demand (ASTM Extraction - mg/L)
- Oil & Grease (ASTM Extraction - mg/L)
- Total Solids (ASTM Extraction - mg/L)
- pH (ASTM Extraction)
- TCLP Copper
- TCLP Nickel
- TCLP Zinc
- TCLP Pesticides TCLP Herbicides

Thanks,

Tommy Barnes
Manager, Environmental Compliance
M: 317.910.4373
tommy.barnes@vestis.com | www.vestis.com

vestis
Uniforms and Workplace Supplies

From: Vanegas, Jose <Jose.Vanegas@vestis.com>
Sent: Monday, October 6, 2025 8:51 AM
To: Barnes, Tommy <tommy.barnes@vestis.com>

284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

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

QA Control Code: A2070148