

Cover Page

Order ID : Q1514

Project ID : Amtrak Sawtooth Bridges 2025

Client : Portal Partners Tri-Venture

Lab Sample Number

Q1514-01
Q1514-02
Q1514-03
Q1514-04
Q1514-05
Q1514-06
Q1514-07
Q1514-08
Q1514-09
Q1514-10

Client Sample Number

ENV-105-SB01
ENV-105-SB01
ENV-105-SB02
ENV-105-SB02
ENV-103-SB01
ENV-103-SB01
ENV-105-GW01
ENV-103-GW01
FB03062025
TB03062025

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

Signature : _____

Date: 3/12/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

DATA REPORTING QUALIFIERS- ORGANIC

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

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

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q1514

Completed

For thorough review, the report must have the following:

GENERAL:

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

✓

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

✓

Is the chain of custody signed and complete

✓

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

✓

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

✓

COVER PAGE:

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

✓

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

✓

CHAIN OF CUSTODY:

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

✓

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

✓

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

✓

Were the samples received within hold time

✓

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

✓

ANALYTICAL:

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

QA Review Signature: KORI AMARNATH

Date: 03/12/2025

LAB CHRONICLE

OrderID:	Q1514	OrderDate:	3/6/2025 2:08:00 PM
Client:	Portal Partners Tri-Venture	Project:	Amtrak Sawtooth Bridges 2025
Contact:	Joseph Krupansky	Location:	I31,VOA Ref. #2 Soil,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1514-01	ENV-105-SB01	SOIL	VOC-TCLVOA-10	8260D	03/05/25		03/11/25	03/06/25
Q1514-02	ENV-105-SB01	TCLP	TCLP VOA	8260D	03/05/25		03/11/25	03/06/25
Q1514-03	ENV-105-SB02	SOIL	VOC-TCLVOA-10	8260D	03/05/25		03/11/25	03/06/25
Q1514-04	ENV-105-SB02	TCLP	TCLP VOA	8260D	03/05/25		03/11/25	03/06/25
Q1514-05	ENV-103-SB01	SOIL	VOC-TCLVOA-10	8260D	03/05/25		03/11/25	03/06/25
Q1514-06	ENV-103-SB01	TCLP	TCLP VOA	8260D	03/05/25		03/11/25	03/06/25
Q1514-07	ENV-105-GW01	Water	VOC-TCLVOA-10	8260-Low	03/05/25		03/10/25	03/06/25
Q1514-08	ENV-103-GW01	Water	VOC-TCLVOA-10	8260-Low	03/05/25		03/10/25	03/06/25
Q1514-09	FB03062025	Water	VOC-TCLVOA-10	8260-Low	03/06/25		03/11/25	03/06/25
Q1514-10	TB03062025	Water	VOC-TCLVOA-10	8260-Low	03/05/25		03/10/25	03/06/25

Hit Summary Sheet
SW-846

SDG No.: Q1514

Client: Portal Partners Tri-Venture

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID: Q1514-01	ENV-105-SB01 ENV-105-SB01	SOIL	Acetone	27.4		4.70	18.7	ug/Kg
			Total Voc :	27.4				
			Total Concentration:	27.4				
Client ID: Q1514-03	ENV-105-SB02 ENV-105-SB02	SOIL	Acetone	18.8	J	5.10	20.6	ug/Kg
Q1514-03	ENV-105-SB02	SOIL	Carbon Disulfide	2.20	J	1.10	4.10	ug/Kg
			Total Voc :	21.0				
			Total Concentration:	21.0				
Client ID: Q1514-05	ENV-103-SB01 ENV-103-SB01	SOIL	Bromomethane	0.87	J	0.75	3.70	ug/Kg
			Total Voc :	0.87				
			Total Concentration:	0.87				
Client ID: Q1514-07	ENV-105-GW01 ENV-105-GW01	Water	Acetone	7.20		1.40	5.00	ug/L
			Total Voc :	7.20				
			Total Concentration:	7.20				
Client ID: Q1514-08	ENV-103-GW01 ENV-103-GW01	Water	Acetone	26.1		1.40	5.00	ug/L
			Total Voc :	26.1				
Q1514-08	ENV-103-GW01	Water	Dimethyl sulfide	* 31.3	J	0	0	ug/L
			Total Tics :	31.3				
			Total Concentration:	57.4				
Client ID: Q1514-09	FB03062025 FB03062025	Water	Acetone	10.0		1.40	5.00	ug/L
			Total Voc :	10.0				
			Total Concentration:	10.0				



QC SUMMARY

Surrogate Summary

SDG No.: **Q1514**

Client: **Portal Partners Tri-Venture**

Analytical Method: **SW8260D**

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits	
						Low	High
Q1514-01	ENV-105-SB01	1,2-Dichloroethane-d4	50	60.4	121	70 (63)	130 (155)
		Dibromofluoromethane	50	51.4	103	70 (70)	130 (134)
		Toluene-d8	50	42.8	86	70 (74)	130 (123)
		4-Bromofluorobenzene	50	36.8	74	70 (38)	130 (136)
Q1514-03	ENV-105-SB02	1,2-Dichloroethane-d4	50	59.8	120	70 (63)	130 (155)
		Dibromofluoromethane	50	51.8	104	70 (70)	130 (134)
		Toluene-d8	50	48.7	97	70 (74)	130 (123)
		4-Bromofluorobenzene	50	42.6	85	70 (38)	130 (136)
Q1514-05	ENV-103-SB01	1,2-Dichloroethane-d4	50	56.4	113	70 (63)	130 (155)
		Dibromofluoromethane	50	50.8	101	70 (70)	130 (134)
		Toluene-d8	50	47.8	96	70 (74)	130 (123)
		4-Bromofluorobenzene	50	40.4	81	70 (38)	130 (136)
VY0311SBL01	VY0311SBL01	1,2-Dichloroethane-d4	50	53.3	107	70 (63)	130 (155)
		Dibromofluoromethane	50	50.4	101	70 (70)	130 (134)
		Toluene-d8	50	48.5	97	70 (74)	130 (123)
		4-Bromofluorobenzene	50	42.5	85	70 (38)	130 (136)
VY0311SBS01	VY0311SBS01	1,2-Dichloroethane-d4	50	52.4	105	70 (63)	130 (155)
		Dibromofluoromethane	50	52.9	106	70 (70)	130 (134)
		Toluene-d8	50	52.2	104	70 (74)	130 (123)
		4-Bromofluorobenzene	50	52.5	105	70 (38)	130 (136)
VY0311SBSD01	VY0311SBSD01	1,2-Dichloroethane-d4	50	54.4	109	70 (63)	130 (155)
		Dibromofluoromethane	50	53.0	106	70 (70)	130 (134)
		Toluene-d8	50	52.2	104	70 (74)	130 (123)
		4-Bromofluorobenzene	50	52.7	105	70 (38)	130 (136)

Surrogate Summary

SDG No.: **Q1514**

Client: **Portal Partners Tri-Venture**

Analytical Method: **SW8260-Low**

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits	
						Low	High
Q1514-07	ENV-105-GW01	1,2-Dichloroethane-d4	50	52.9	106	70 (74)	130 (125)
		Dibromofluoromethane	50	48.0	96	70 (75)	130 (124)
		Toluene-d8	50	45.4	91	70 (86)	130 (113)
		4-Bromofluorobenzene	50	47.1	94	70 (77)	130 (121)
Q1514-08	ENV-103-GW01	1,2-Dichloroethane-d4	50	53.6	107	70 (74)	130 (125)
		Dibromofluoromethane	50	48.4	97	70 (75)	130 (124)
		Toluene-d8	50	47.7	95	70 (86)	130 (113)
		4-Bromofluorobenzene	50	46.9	94	70 (77)	130 (121)
Q1514-09	FB03062025	1,2-Dichloroethane-d4	50	58.7	117	70 (74)	130 (125)
		Dibromofluoromethane	50	51.2	102	70 (75)	130 (124)
		Toluene-d8	50	48.4	97	70 (86)	130 (113)
		4-Bromofluorobenzene	50	47.5	95	70 (77)	130 (121)
Q1514-10	TB03062025	1,2-Dichloroethane-d4	50	55.8	112	70 (74)	130 (125)
		Dibromofluoromethane	50	49.8	100	70 (75)	130 (124)
		Toluene-d8	50	48.0	96	70 (86)	130 (113)
		4-Bromofluorobenzene	50	47.7	95	70 (77)	130 (121)
VN0310WBL01	VN0310WBL01	1,2-Dichloroethane-d4	50	54.6	109	70 (74)	130 (125)
		Dibromofluoromethane	50	50.6	101	70 (75)	130 (124)
		Toluene-d8	50	47.0	94	70 (86)	130 (113)
		4-Bromofluorobenzene	50	45.0	90	70 (77)	130 (121)
VN0310WBS01	VN0310WBS01	1,2-Dichloroethane-d4	50	50.3	101	70 (74)	130 (125)
		Dibromofluoromethane	50	49.3	99	70 (75)	130 (124)
		Toluene-d8	50	50.0	100	70 (86)	130 (113)
		4-Bromofluorobenzene	50	54.4	109	70 (77)	130 (121)
VN0310WBSD0	VN0310WBSD01	1,2-Dichloroethane-d4	50	48.9	98	70 (74)	130 (125)
		Dibromofluoromethane	50	47.2	94	70 (75)	130 (124)
		Toluene-d8	50	46.9	94	70 (86)	130 (113)
		4-Bromofluorobenzene	50	50.4	101	70 (77)	130 (121)
VN0311WBL01	VN0311WBL01	1,2-Dichloroethane-d4	50	56.1	112	70 (74)	130 (125)
		Dibromofluoromethane	50	49.0	98	70 (75)	130 (124)
		Toluene-d8	50	44.5	89	70 (86)	130 (113)
		4-Bromofluorobenzene	50	42.2	84	70 (77)	130 (121)
VN0311WBS01	VN0311WBS01	1,2-Dichloroethane-d4	50	46.9	94	70 (74)	130 (125)
		Dibromofluoromethane	50	46.9	94	70 (75)	130 (124)
		Toluene-d8	50	46.3	93	70 (86)	130 (113)
		4-Bromofluorobenzene	50	48.7	97	70 (77)	130 (121)

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1514

Client: Portal Partners Tri-Venture

Analytical Method: SW8260-Low

Datafile : VN085917.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VN0310WBS01	Dichlorodifluoromethane	20	21.1	ug/L	106			40 (69)	160 (116)	
	Chloromethane	20	21.1	ug/L	106			40 (65)	160 (116)	
	Vinyl chloride	20	19.7	ug/L	99			70 (65)	130 (117)	
	Bromomethane	20	17.8	ug/L	89			40 (58)	160 (125)	
	Chloroethane	20	17.5	ug/L	88			40 (56)	160 (128)	
	Trichlorofluoromethane	20	19.9	ug/L	100			40 (73)	160 (115)	
	1,1,2-Trichlorotrifluoroethane	20	20.0	ug/L	100			70 (80)	130 (112)	
	1,1-Dichloroethene	20	20.4	ug/L	102			70 (74)	130 (110)	
	Acetone	100	110	ug/L	110			40 (60)	160 (125)	
	Carbon disulfide	20	22.1	ug/L	111			40 (64)	160 (112)	
	Methyl tert-butyl Ether	20	21.4	ug/L	107			70 (78)	130 (114)	
	Methyl Acetate	20	16.9	ug/L	85			70 (67)	130 (125)	
	Methylene Chloride	20	20.5	ug/L	103			70 (72)	130 (114)	
	trans-1,2-Dichloroethene	20	20.2	ug/L	101			70 (75)	130 (108)	
	1,1-Dichloroethane	20	20.9	ug/L	104			70 (78)	130 (112)	
	Cyclohexane	20	21.8	ug/L	109			70 (75)	130 (110)	
	2-Butanone	100	110	ug/L	110			40 (65)	160 (122)	
	Carbon Tetrachloride	20	20.8	ug/L	104			70 (77)	130 (113)	
	cis-1,2-Dichloroethene	20	20.0	ug/L	100			70 (77)	130 (110)	
	Bromochloromethane	20	24.8	ug/L	124			70 (70)	130 (124)	
	Chloroform	20	20.6	ug/L	103			70 (79)	130 (113)	
	1,1,1-Trichloroethane	20	20.5	ug/L	103			70 (80)	130 (108)	
	Methylcyclohexane	20	21.5	ug/L	108			70 (72)	130 (115)	
	Benzene	20	20.9	ug/L	104			70 (82)	130 (109)	
	1,2-Dichloroethane	20	21.0	ug/L	105			70 (80)	130 (115)	
	Trichloroethene	20	19.8	ug/L	99			70 (77)	130 (113)	
	1,2-Dichloropropane	20	21.4	ug/L	107			70 (83)	130 (111)	
	Bromodichloromethane	20	20.4	ug/L	102			70 (83)	130 (110)	
	4-Methyl-2-Pentanone	100	110	ug/L	110			40 (74)	160 (118)	
	Toluene	20	21.9	ug/L	110			70 (82)	130 (110)	
	t-1,3-Dichloropropene	20	21.6	ug/L	108			70 (79)	130 (110)	
	cis-1,3-Dichloropropene	20	21.7	ug/L	109			70 (82)	130 (110)	
	1,1,2-Trichloroethane	20	20.3	ug/L	102			70 (83)	130 (112)	
	2-Hexanone	100	120	ug/L	120			40 (73)	160 (117)	
	Dibromochloromethane	20	20.8	ug/L	104			70 (82)	130 (110)	
	1,2-Dibromoethane	20	20.7	ug/L	104			70 (81)	130 (110)	
	Tetrachloroethene	20	20.9	ug/L	104			70 (67)	130 (123)	
	Chlorobenzene	20	20.1	ug/L	101			70 (82)	130 (109)	
	Ethyl Benzene	20	21.2	ug/L	106			70 (83)	130 (109)	
	m/p-Xylenes	40	44.9	ug/L	112			70 (82)	130 (110)	
	o-Xylene	20	21.6	ug/L	108			70 (83)	130 (109)	
	Styrene	20	21.3	ug/L	106			70 (80)	130 (111)	
	Bromoform	20	21.2	ug/L	106			70 (79)	130 (109)	
	Isopropylbenzene	20	20.6	ug/L	103			70 (83)	130 (112)	
	1,1,2,2-Tetrachloroethane	20	19.3	ug/L	97			70 (76)	130 (118)	
	1,3-Dichlorobenzene	20	19.4	ug/L	97			70 (82)	130 (108)	
	1,4-Dichlorobenzene	20	19.5	ug/L	98			70 (82)	130 (107)	
	1,2-Dichlorobenzene	20	19.6	ug/L	98			70 (82)	130 (109)	

() = LABORATORY INHOUSE LIMIT

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1514

Client: Portal Partners Tri-Venture

Analytical Method: SW8260-Low

Datafile : VN085917.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VN0310WBS01	1,2-Dibromo-3-Chloropropane	20	18.1	ug/L	91			40 (68)	160 (112)	
	1,2,4-Trichlorobenzene	20	18.7	ug/L	94			70 (75)	130 (113)	
	1,2,3-Trichlorobenzene	20	18.3	ug/L	92			70 (76)	130 (114)	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1514

Client: Portal Partners Tri-Venture

Analytical Method: SW8260-Low

Datafile : VN085918.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VN0310WBSD01	Dichlorodifluoromethane	20	18.8	ug/L	94	12		40 (69)	160 (116)	20 (20)
	Chloromethane	20	19.1	ug/L	96	10		40 (65)	160 (116)	20 (20)
	Vinyl chloride	20	17.4	ug/L	87	13		70 (65)	130 (117)	20 (20)
	Bromomethane	20	16.7	ug/L	84	6		40 (58)	160 (125)	20 (20)
	Chloroethane	20	16.0	ug/L	80	10		40 (56)	160 (128)	20 (20)
	Trichlorofluoromethane	20	18.0	ug/L	90	11		40 (73)	160 (115)	20 (20)
	1,1,2-Trichlorotrifluoroethane	20	18.3	ug/L	92	8		70 (80)	130 (112)	20 (20)
	1,1-Dichloroethene	20	18.4	ug/L	92	10		70 (74)	130 (110)	20 (20)
	Acetone	100	90.0	ug/L	90	20		40 (60)	160 (125)	20 (20)
	Carbon disulfide	20	19.7	ug/L	99	11		40 (64)	160 (112)	20 (20)
	Methyl tert-butyl Ether	20	19.7	ug/L	99	8		70 (78)	130 (114)	20 (20)
	Methyl Acetate	20	16.5	ug/L	83	2		70 (67)	130 (125)	20 (20)
	Methylene Chloride	20	18.5	ug/L	93	10		70 (72)	130 (114)	20 (20)
	trans-1,2-Dichloroethene	20	18.4	ug/L	92	9		70 (75)	130 (108)	20 (20)
	1,1-Dichloroethane	20	18.6	ug/L	93	11		70 (78)	130 (112)	20 (20)
	Cyclohexane	20	19.1	ug/L	96	13		70 (75)	130 (110)	20 (20)
	2-Butanone	100	100	ug/L	100	10		40 (65)	160 (122)	20 (20)
	Carbon Tetrachloride	20	18.7	ug/L	94	10		70 (77)	130 (113)	20 (20)
	cis-1,2-Dichloroethene	20	18.1	ug/L	91	9		70 (77)	130 (110)	20 (20)
	Bromochloromethane	20	22.8	ug/L	114	8		70 (70)	130 (124)	20 (20)
	Chloroform	20	18.3	ug/L	92	11		70 (79)	130 (113)	20 (20)
	1,1,1-Trichloroethane	20	18.3	ug/L	92	11		70 (80)	130 (108)	20 (20)
	Methylcyclohexane	20	18.6	ug/L	93	15		70 (72)	130 (115)	20 (20)
	Benzene	20	19.3	ug/L	97	7		70 (82)	130 (109)	20 (20)
	1,2-Dichloroethane	20	18.9	ug/L	95	10		70 (80)	130 (115)	20 (20)
	Trichloroethene	20	17.3	ug/L	86	14		70 (77)	130 (113)	20 (20)
	1,2-Dichloropropane	20	19.3	ug/L	97	10		70 (83)	130 (111)	20 (20)
	Bromodichloromethane	20	18.7	ug/L	94	8		70 (83)	130 (110)	20 (20)
	4-Methyl-2-Pentanone	100	100	ug/L	100	10		40 (74)	160 (118)	20 (20)
	Toluene	20	19.8	ug/L	99	11		70 (82)	130 (110)	20 (20)
	t-1,3-Dichloropropene	20	19.8	ug/L	99	9		70 (79)	130 (110)	20 (20)
	cis-1,3-Dichloropropene	20	19.7	ug/L	99	10		70 (82)	130 (110)	20 (20)
	1,1,2-Trichloroethane	20	18.5	ug/L	93	9		70 (83)	130 (112)	20 (20)
	2-Hexanone	100	100	ug/L	100	18		40 (73)	160 (117)	20 (20)
	Dibromochloromethane	20	19.1	ug/L	96	8		70 (82)	130 (110)	20 (20)
	1,2-Dibromoethane	20	19.4	ug/L	97	7		70 (81)	130 (110)	20 (20)
	Tetrachloroethene	20	18.5	ug/L	93	11		70 (67)	130 (123)	20 (20)
	Chlorobenzene	20	18.1	ug/L	91	10		70 (82)	130 (109)	20 (20)
	Ethyl Benzene	20	18.9	ug/L	95	11		70 (83)	130 (109)	20 (20)
	m/p-Xylenes	40	38.8	ug/L	97	14		70 (82)	130 (110)	20 (20)
	o-Xylene	20	19.0	ug/L	95	13		70 (83)	130 (109)	20 (20)
	Styrene	20	18.5	ug/L	93	13		70 (80)	130 (111)	20 (20)
	Bromoform	20	19.0	ug/L	95	11		70 (79)	130 (109)	20 (20)
	Isopropylbenzene	20	17.8	ug/L	89	15		70 (83)	130 (112)	20 (20)
	1,1,2,2-Tetrachloroethane	20	18.0	ug/L	90	7		70 (76)	130 (118)	20 (20)
	1,3-Dichlorobenzene	20	17.6	ug/L	88	10		70 (82)	130 (108)	20 (20)
	1,4-Dichlorobenzene	20	16.9	ug/L	85	14		70 (82)	130 (107)	20 (20)
	1,2-Dichlorobenzene	20	17.3	ug/L	86	13		70 (82)	130 (109)	20 (20)

() = LABORATORY INHOUSE LIMIT

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1514

Client: Portal Partners Tri-Venture

Analytical Method: SW8260-Low

Datafile : VN085918.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VN0310WBSD01	1,2-Dibromo-3-Chloropropane	20	17.9	ug/L	90	1		40 (68)	160 (112)	20 (20)
	1,2,4-Trichlorobenzene	20	16.5	ug/L	83	12		70 (75)	130 (113)	20 (20)
	1,2,3-Trichlorobenzene	20	17.3	ug/L	86	7		70 (76)	130 (114)	20 (20)

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1514

Client: Portal Partners Tri-Venture

Analytical Method: SW8260-Low

Datafile : VN085931.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VN0311WBS01	Dichlorodifluoromethane	20	19.7	ug/L	99			40 (69)	160 (116)	
	Chloromethane	20	18.7	ug/L	94			40 (65)	160 (116)	
	Vinyl chloride	20	17.4	ug/L	87			70 (65)	130 (117)	
	Bromomethane	20	17.0	ug/L	85			40 (58)	160 (125)	
	Chloroethane	20	15.7	ug/L	79			40 (56)	160 (128)	
	Trichlorofluoromethane	20	19.0	ug/L	95			40 (73)	160 (115)	
	1,1,2-Trichlorotrifluoroethane	20	19.1	ug/L	96			70 (80)	130 (112)	
	1,1-Dichloroethene	20	19.0	ug/L	95			70 (74)	130 (110)	
	Acetone	100	91.4	ug/L	91			40 (60)	160 (125)	
	Carbon disulfide	20	19.7	ug/L	99			40 (64)	160 (112)	
	Methyl tert-butyl Ether	20	18.5	ug/L	93			70 (78)	130 (114)	
	Methyl Acetate	20	16.1	ug/L	81			70 (67)	130 (125)	
	Methylene Chloride	20	18.7	ug/L	94			70 (72)	130 (114)	
	trans-1,2-Dichloroethene	20	18.5	ug/L	93			70 (75)	130 (108)	
	1,1-Dichloroethane	20	19.1	ug/L	96			70 (78)	130 (112)	
	Cyclohexane	20	18.7	ug/L	94			70 (75)	130 (110)	
	2-Butanone	100	96.2	ug/L	96			40 (65)	160 (122)	
	Carbon Tetrachloride	20	19.7	ug/L	99			70 (77)	130 (113)	
	cis-1,2-Dichloroethene	20	18.0	ug/L	90			70 (77)	130 (110)	
	Bromochloromethane	20	24.1	ug/L	121			70 (70)	130 (124)	
	Chloroform	20	19.1	ug/L	96			70 (79)	130 (113)	
	1,1,1-Trichloroethane	20	19.1	ug/L	96			70 (80)	130 (108)	
	Methylcyclohexane	20	17.7	ug/L	89			70 (72)	130 (115)	
	Benzene	20	19.7	ug/L	99			70 (82)	130 (109)	
	1,2-Dichloroethane	20	19.8	ug/L	99			70 (80)	130 (115)	
	Trichloroethene	20	17.7	ug/L	89			70 (77)	130 (113)	
	1,2-Dichloropropane	20	19.6	ug/L	98			70 (83)	130 (111)	
	Bromodichloromethane	20	19.3	ug/L	97			70 (83)	130 (110)	
	4-Methyl-2-Pentanone	100	100	ug/L	100			40 (74)	160 (118)	
	Toluene	20	20.5	ug/L	103			70 (82)	130 (110)	
	t-1,3-Dichloropropene	20	19.1	ug/L	96			70 (79)	130 (110)	
	cis-1,3-Dichloropropene	20	19.3	ug/L	97			70 (82)	130 (110)	
	1,1,2-Trichloroethane	20	19.7	ug/L	99			70 (83)	130 (112)	
	2-Hexanone	100	100	ug/L	100			40 (73)	160 (117)	
	Dibromochloromethane	20	19.5	ug/L	98			70 (82)	130 (110)	
	1,2-Dibromoethane	20	19.4	ug/L	97			70 (81)	130 (110)	
	Tetrachloroethene	20	19.1	ug/L	96			70 (67)	130 (123)	
	Chlorobenzene	20	18.5	ug/L	93			70 (82)	130 (109)	
	Ethyl Benzene	20	18.8	ug/L	94			70 (83)	130 (109)	
	m/p-Xylenes	40	40.3	ug/L	101			70 (82)	130 (110)	
	o-Xylene	20	19.0	ug/L	95			70 (83)	130 (109)	
	Styrene	20	19.0	ug/L	95			70 (80)	130 (111)	
	Bromoform	20	19.5	ug/L	98			70 (79)	130 (109)	
	Isopropylbenzene	20	17.4	ug/L	87			70 (83)	130 (112)	
	1,1,2,2-Tetrachloroethane	20	17.7	ug/L	89			70 (76)	130 (118)	
	1,3-Dichlorobenzene	20	17.4	ug/L	87			70 (82)	130 (108)	
	1,4-Dichlorobenzene	20	16.8	ug/L	84			70 (82)	130 (107)	
	1,2-Dichlorobenzene	20	17.5	ug/L	88			70 (82)	130 (109)	

() = LABORATORY INHOUSE LIMIT

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1514

Client: Portal Partners Tri-Venture

Analytical Method: SW8260-Low

Datafile : VN085931.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VN0311WBS01	1,2-Dibromo-3-Chloropropane	20	15.8	ug/L	79			40 (68)	160 (112)	
	1,2,4-Trichlorobenzene	20	15.3	ug/L	77			70 (75)	130 (113)	
	1,2,3-Trichlorobenzene	20	14.9	ug/L	75			70 (76)	130 (114)	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1514

Client: Portal Partners Tri-Venture

Analytical Method: SW8260D

Datafile : VY021476.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VY0311SBS01	Dichlorodifluoromethane	20	17.6	ug/Kg	88			40 (64)	160 (136)	
	Chloromethane	20	19.6	ug/Kg	98			40 (70)	160 (130)	
	Vinyl chloride	20	19.8	ug/Kg	99			70 (72)	130 (129)	
	Bromomethane	20	19.4	ug/Kg	97			40 (58)	160 (141)	
	Chloroethane	20	21.4	ug/Kg	107			40 (69)	160 (130)	
	Trichlorofluoromethane	20	20.8	ug/Kg	104			40 (69)	160 (134)	
	1,1,2-Trichlorotrifluoroethane	20	17.6	ug/Kg	88			70 (81)	130 (123)	
	1,1-Dichloroethene	20	18.1	ug/Kg	91			70 (79)	130 (121)	
	Acetone	100	120	ug/Kg	120			40 (60)	160 (131)	
	Carbon disulfide	20	17.6	ug/Kg	88			40 (45)	160 (154)	
	Methyl tert-butyl Ether	20	17.2	ug/Kg	86			70 (77)	130 (129)	
	Methyl Acetate	20	18.7	ug/Kg	94			70 (69)	130 (149)	
	Methylene Chloride	20	18.1	ug/Kg	91			70 (56)	130 (174)	
	trans-1,2-Dichloroethene	20	17.9	ug/Kg	90			70 (80)	130 (123)	
	1,1-Dichloroethane	20	18.6	ug/Kg	93			70 (82)	130 (123)	
	Cyclohexane	20	16.7	ug/Kg	84			70 (76)	130 (122)	
	2-Butanone	100	99.2	ug/Kg	99			40 (69)	160 (131)	
	Carbon Tetrachloride	20	18.0	ug/Kg	90			70 (76)	130 (129)	
	cis-1,2-Dichloroethene	20	18.2	ug/Kg	91			70 (82)	130 (123)	
	Bromochloromethane	20	19.5	ug/Kg	98			70 (80)	130 (127)	
	Chloroform	20	19.1	ug/Kg	96			70 (82)	130 (125)	
	1,1,1-Trichloroethane	20	18.5	ug/Kg	93			70 (80)	130 (126)	
	Methylcyclohexane	20	16.9	ug/Kg	85			70 (77)	130 (123)	
	Benzene	20	18.3	ug/Kg	92			70 (84)	130 (121)	
	1,2-Dichloroethane	20	17.9	ug/Kg	90			70 (81)	130 (126)	
	Trichloroethene	20	18.6	ug/Kg	93			70 (83)	130 (122)	
	1,2-Dichloropropane	20	18.2	ug/Kg	91			70 (83)	130 (122)	
	Bromodichloromethane	20	18.6	ug/Kg	93			70 (82)	130 (123)	
	4-Methyl-2-Pentanone	100	87.8	ug/Kg	88			40 (70)	160 (135)	
	Toluene	20	18.2	ug/Kg	91			70 (83)	130 (122)	
	t-1,3-Dichloropropene	20	18.1	ug/Kg	91			70 (78)	130 (124)	
	cis-1,3-Dichloropropene	20	18.0	ug/Kg	90			70 (81)	130 (122)	
	1,1,2-Trichloroethane	20	18.4	ug/Kg	92			70 (82)	130 (125)	
	2-Hexanone	100	97.6	ug/Kg	98			40 (66)	160 (138)	
	Dibromochloromethane	20	18.0	ug/Kg	90			70 (79)	130 (125)	
	1,2-Dibromoethane	20	17.9	ug/Kg	90			70 (80)	130 (125)	
	Tetrachloroethene	20	19.5	ug/Kg	98			70 (83)	130 (125)	
	Chlorobenzene	20	17.9	ug/Kg	90			70 (84)	130 (122)	
	Ethyl Benzene	20	17.5	ug/Kg	88			70 (82)	130 (124)	
	m/p-Xylenes	40	36.0	ug/Kg	90			70 (83)	130 (124)	
	o-Xylene	20	17.5	ug/Kg	88			70 (83)	130 (123)	
	Styrene	20	17.8	ug/Kg	89			70 (82)	130 (124)	
	Bromoform	20	17.8	ug/Kg	89			70 (75)	130 (127)	
	Isopropylbenzene	20	17.1	ug/Kg	86			70 (82)	130 (124)	
	1,1,2,2-Tetrachloroethane	20	16.6	ug/Kg	83			70 (77)	130 (127)	
	1,3-Dichlorobenzene	20	17.5	ug/Kg	88			70 (83)	130 (122)	
	1,4-Dichlorobenzene	20	17.8	ug/Kg	89			70 (84)	130 (121)	
	1,2-Dichlorobenzene	20	17.7	ug/Kg	89			70 (83)	130 (124)	

() = LABORATORY INHOUSE LIMIT

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1514

Client: Portal Partners Tri-Venture

Analytical Method: SW8260D

Datafile : VY021476.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VY0311SBS01	1,2-Dibromo-3-Chloropropane	20	17.2	ug/Kg	86			40 (66)	160 (134)	
	1,2,4-Trichlorobenzene	20	18.2	ug/Kg	91			70 (78)	130 (127)	
	1,2,3-Trichlorobenzene	20	18.0	ug/Kg	90			70 (70)	130 (137)	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1514

Client: Portal Partners Tri-Venture

Analytical Method: SW8260D

Datafile : VY021477.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VY0311SBSD01	Dichlorodifluoromethane	20	20.4	ug/Kg	102	15		40 (64)	160 (136)	30 (20)
	Chloromethane	20	21.6	ug/Kg	108	10		40 (70)	160 (130)	30 (20)
	Vinyl chloride	20	23.2	ug/Kg	116	16		70 (72)	130 (129)	30 (20)
	Bromomethane	20	21.7	ug/Kg	109	12		40 (58)	160 (141)	30 (20)
	Chloroethane	20	23.4	ug/Kg	117	9		40 (69)	160 (130)	30 (20)
	Trichlorofluoromethane	20	22.4	ug/Kg	112	7		40 (69)	160 (134)	30 (20)
	1,1,2-Trichlorotrifluoroethane	20	21.4	ug/Kg	107	19		70 (81)	130 (123)	30 (20)
	1,1-Dichloroethene	20	21.3	ug/Kg	106	15		70 (79)	130 (121)	30 (20)
	Acetone	100	130	ug/Kg	130	8		40 (60)	160 (131)	30 (20)
	Carbon disulfide	20	20.1	ug/Kg	101	14		40 (45)	160 (154)	30 (20)
	Methyl tert-butyl Ether	20	21.4	ug/Kg	107	22		70 (77)	130 (129)	30 (20)
	Methyl Acetate	20	24.7	ug/Kg	124	28		70 (69)	130 (149)	30 (20)
	Methylene Chloride	20	21.2	ug/Kg	106	15		70 (56)	130 (174)	30 (20)
	trans-1,2-Dichloroethene	20	20.1	ug/Kg	101	12		70 (80)	130 (123)	30 (20)
	1,1-Dichloroethane	20	21.0	ug/Kg	105	12		70 (82)	130 (123)	30 (20)
	Cyclohexane	20	19.3	ug/Kg	97	14		70 (76)	130 (122)	30 (20)
	2-Butanone	100	120	ug/Kg	120	19		40 (69)	160 (131)	30 (20)
	Carbon Tetrachloride	20	20.6	ug/Kg	103	13		70 (76)	130 (129)	30 (20)
	cis-1,2-Dichloroethene	20	20.9	ug/Kg	104	13		70 (82)	130 (123)	30 (20)
	Bromochloromethane	20	21.9	ug/Kg	110	12		70 (80)	130 (127)	30 (20)
	Chloroform	20	21.6	ug/Kg	108	12		70 (82)	130 (125)	30 (20)
	1,1,1-Trichloroethane	20	20.8	ug/Kg	104	11		70 (80)	130 (126)	30 (20)
	Methylcyclohexane	20	19.6	ug/Kg	98	14		70 (77)	130 (123)	30 (20)
	Benzene	20	20.9	ug/Kg	104	12		70 (84)	130 (121)	30 (20)
	1,2-Dichloroethane	20	21.8	ug/Kg	109	19		70 (81)	130 (126)	30 (20)
	Trichloroethene	20	20.8	ug/Kg	104	11		70 (83)	130 (122)	30 (20)
	1,2-Dichloropropane	20	21.8	ug/Kg	109	18		70 (83)	130 (122)	30 (20)
	Bromodichloromethane	20	21.0	ug/Kg	105	12		70 (82)	130 (123)	30 (20)
	4-Methyl-2-Pentanone	100	110	ug/Kg	110	22		40 (70)	160 (135)	30 (20)
	Toluene	20	21.0	ug/Kg	105	14		70 (83)	130 (122)	30 (20)
	t-1,3-Dichloropropene	20	21.5	ug/Kg	108	17		70 (78)	130 (124)	30 (20)
	cis-1,3-Dichloropropene	20	21.1	ug/Kg	106	16		70 (81)	130 (122)	30 (20)
	1,1,2-Trichloroethane	20	21.7	ug/Kg	109	17		70 (82)	130 (125)	30 (20)
	2-Hexanone	100	120	ug/Kg	120	20		40 (66)	160 (138)	30 (20)
	Dibromochloromethane	20	21.8	ug/Kg	109	19		70 (79)	130 (125)	30 (20)
	1,2-Dibromoethane	20	21.7	ug/Kg	109	19		70 (80)	130 (125)	30 (20)
	Tetrachloroethene	20	21.7	ug/Kg	109	11		70 (83)	130 (125)	30 (20)
	Chlorobenzene	20	20.5	ug/Kg	103	13		70 (84)	130 (122)	30 (20)
	Ethyl Benzene	20	19.9	ug/Kg	100	13		70 (82)	130 (124)	30 (20)
	m/p-Xylenes	40	40.5	ug/Kg	101	12		70 (83)	130 (124)	30 (20)
	o-Xylene	20	20.1	ug/Kg	101	14		70 (83)	130 (123)	30 (20)
	Styrene	20	20.6	ug/Kg	103	15		70 (82)	130 (124)	30 (20)
	Bromoform	20	21.3	ug/Kg	106	17		70 (75)	130 (127)	30 (20)
	Isopropylbenzene	20	19.2	ug/Kg	96	11		70 (82)	130 (124)	30 (20)
	1,1,2,2-Tetrachloroethane	20	20.0	ug/Kg	100	19		70 (77)	130 (127)	30 (20)
	1,3-Dichlorobenzene	20	20.1	ug/Kg	101	14		70 (83)	130 (122)	30 (20)
	1,4-Dichlorobenzene	20	20.4	ug/Kg	102	14		70 (84)	130 (121)	30 (20)
	1,2-Dichlorobenzene	20	20.6	ug/Kg	103	15		70 (83)	130 (124)	30 (20)

() = LABORATORY INHOUSE LIMIT

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1514

Client: Portal Partners Tri-Venture

Analytical Method: SW8260D

Datafile : VY021477.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VY0311SBSD01	1,2-Dibromo-3-Chloropropane	20	21.0	ug/Kg	105	20		40 (66)	160 (134)	30 (20)
	1,2,4-Trichlorobenzene	20	21.0	ug/Kg	105	14		70 (78)	130 (127)	30 (20)
	1,2,3-Trichlorobenzene	20	21.2	ug/Kg	106	16		70 (70)	130 (137)	30 (20)

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VN0310WBL01

Lab Name: CHEMTECH

Contract: PORT06

Lab Code: CHEM Case No.: Q1514

SAS No.: Q1514 SDG NO.: Q1514

Lab File ID: VN085916.D

Lab Sample ID: VN0310WBL01

Date Analyzed: 03/10/2025

Time Analyzed: 13:22

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

Heated Purge: (Y/N) N

Instrument ID: MSVOA_N

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VN0310WBS01	VN0310WBS01	VN085917.D	03/10/2025
VN0310WBSD01	VN0310WBSD01	VN085918.D	03/10/2025
ENV-105-GW01	Q1514-07	VN085919.D	03/10/2025
ENV-103-GW01	Q1514-08	VN085920.D	03/10/2025
TB03062025	Q1514-10	VN085922.D	03/10/2025

COMMENTS: _____

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VN0311WBL01

Lab Name: CHEMTECH

Contract: PORT06

Lab Code: CHEM Case No.: Q1514

SAS No.: Q1514 SDG NO.: Q1514

Lab File ID: VN085930.D

Lab Sample ID: VN0311WBL01

Date Analyzed: 03/11/2025

Time Analyzed: 14:21

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

Heated Purge: (Y/N) N

Instrument ID: MSVOA_N

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VN0311WBS01	VN0311WBS01	VN085931.D	03/11/2025
FB03062025	Q1514-09	VN085934.D	03/11/2025

COMMENTS: _____

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VY0311SBL01

Lab Name: CHEMTECH

Contract: PORT06

Lab Code: CHEM Case No.: Q1514

SAS No.: Q1514 SDG NO.: Q1514

Lab File ID: VY021475.D

Lab Sample ID: VY0311SBL01

Date Analyzed: 03/11/2025

Time Analyzed: 10:12

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

Heated Purge: (Y/N) Y

Instrument ID: MSVOA_Y

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VY0311SBS01	VY0311SBS01	VY021476.D	03/11/2025
VY0311SBSD01	VY0311SBSD01	VY021477.D	03/11/2025
ENV-103-SB01	Q1514-05	VY021480.D	03/11/2025
ENV-105-SB02	Q1514-03	VY021481.D	03/11/2025
ENV-105-SB01	Q1514-01	VY021482.D	03/11/2025

COMMENTS: _____



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

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: PORT06
Lab Code: CHEM Case No.: Q1514 SAS No.: Q1514 SDG NO.: Q1514
Lab File ID: VN085771.D BFB Injection Date: 02/18/2025
Instrument ID: MSVOA_N BFB Injection Time: 10:35
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.1
75	30.0 - 60.0% of mass 95	49.7
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	1.4 (1.8) 1
174	50.0 - 100.0% of mass 95	81.7
175	5.0 - 9.0% of mass 174	6 (7.4) 1
176	95.0 - 101.0% of mass 174	78.9 (96.5) 1
177	5.0 - 9.0% of mass 176	5.4 (6.9) 2

1-Value is % mass 174

2-Value is % mass 176

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDICC100	VSTDICC100	VN085772.D	02/18/2025	11:09
VSTDICCC050	VSTDICCC050	VN085773.D	02/18/2025	11:32
VSTDICC010	VSTDICC010	VN085775.D	02/18/2025	12:20
VSTDICC005	VSTDICC005	VN085776.D	02/18/2025	12:43
VSTDICC001	VSTDICC001	VN085777.D	02/18/2025	13:07
VSTDICC020	VSTDICC020	VN085779.D	02/18/2025	14:18



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Fax : 908 789 8922

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: PORT06
Lab Code: CHEM Case No.: Q1514 SAS No.: Q1514 SDG NO.: Q1514
Lab File ID: VN085913.D BFB Injection Date: 03/10/2025
Instrument ID: MSVOA_N BFB Injection Time: 10:54
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.3
75	30.0 - 60.0% of mass 95	48.7
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7
173	Less than 2.0% of mass 174	0.7 (1) 1
174	50.0 - 100.0% of mass 95	76.4
175	5.0 - 9.0% of mass 174	6.7 (8.8) 1
176	95.0 - 101.0% of mass 174	76.4 (100.1) 1
177	5.0 - 9.0% of mass 176	5.6 (7.4) 2

1-Value is % mass 174

2-Value is % mass 176

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VN085914.D	03/10/2025	12:21
VN0310WBL01	VN0310WBL01	VN085916.D	03/10/2025	13:22
VN0310WBS01	VN0310WBS01	VN085917.D	03/10/2025	16:12
VN0310WBSD01	VN0310WBSD01	VN085918.D	03/10/2025	16:47
ENV-105-GW01	Q1514-07	VN085919.D	03/10/2025	17:11
ENV-103-GW01	Q1514-08	VN085920.D	03/10/2025	17:35
TB03062025	Q1514-10	VN085922.D	03/10/2025	18:23



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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: PORT06
Lab Code: CHEM Case No.: Q1514 SAS No.: Q1514 SDG NO.: Q1514
Lab File ID: VN085927.D BFB Injection Date: 03/11/2025
Instrument ID: MSVOA_N BFB Injection Time: 12:12
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.4
75	30.0 - 60.0% of mass 95	50.2
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	1.1 (1.4) 1
174	50.0 - 100.0% of mass 95	78.8
175	5.0 - 9.0% of mass 174	5.7 (7.3) 1
176	95.0 - 101.0% of mass 174	75.9 (96.3) 1
177	5.0 - 9.0% of mass 176	4.9 (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:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VN085928.D	03/11/2025	13:22
VN0311WBL01	VN0311WBL01	VN085930.D	03/11/2025	14:21
VN0311WBS01	VN0311WBS01	VN085931.D	03/11/2025	14:54
FB03062025	Q1514-09	VN085934.D	03/11/2025	16:16



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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: PORT06
Lab Code: CHEM Case No.: Q1514 SAS No.: Q1514 SDG NO.: Q1514
Lab File ID: VY021395.D BFB Injection Date: 03/04/2025
Instrument ID: MSVOA_Y BFB Injection Time: 08:52
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.6
75	30.0 - 60.0% of mass 95	54.3
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	1.4 (1.8) 1
174	50.0 - 100.0% of mass 95	77.8
175	5.0 - 9.0% of mass 174	6.6 (8.4) 1
176	95.0 - 101.0% of mass 174	75.7 (97.2) 1
177	5.0 - 9.0% of mass 176	5 (6.6) 2

1-Value is % mass 174

2-Value is % mass 176

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDIC010	VSTDIC010	VY021397.D	03/04/2025	09:46
VSTDIC020	VSTDIC020	VY021398.D	03/04/2025	10:09
VSTDIC050	VSTDIC050	VY021399.D	03/04/2025	10:30
VSTDIC100	VSTDIC100	VY021400.D	03/04/2025	11:06
VSTDIC150	VSTDIC150	VY021401.D	03/04/2025	11:29
VSTDIC005	VSTDIC005	VY021403.D	03/04/2025	12:15



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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: PORT06
Lab Code: CHEM Case No.: Q1514 SAS No.: Q1514 SDG NO.: Q1514
Lab File ID: VY021473.D BFB Injection Date: 03/11/2025
Instrument ID: MSVOA_Y BFB Injection Time: 09:00
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.5
75	30.0 - 60.0% of mass 95	53
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.3
173	Less than 2.0% of mass 174	0.9 (1.1) 1
174	50.0 - 100.0% of mass 95	84.5
175	5.0 - 9.0% of mass 174	6.4 (7.6) 1
176	95.0 - 101.0% of mass 174	80.4 (95.2) 1
177	5.0 - 9.0% of mass 176	5.4 (6.7) 2

1-Value is % mass 174

2-Value is % mass 176

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VY021474.D	03/11/2025	09:42
VY0311SBL01	VY0311SBL01	VY021475.D	03/11/2025	10:12
VY0311SBS01	VY0311SBS01	VY021476.D	03/11/2025	11:03
VY0311SBSD01	VY0311SBSD01	VY021477.D	03/11/2025	11:26
ENV-103-SB01	Q1514-05	VY021480.D	03/11/2025	12:48
ENV-105-SB02	Q1514-03	VY021481.D	03/11/2025	13:11
ENV-105-SB01	Q1514-01	VY021482.D	03/11/2025	13:35

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: PORT06
 Lab Code: CHEM Case No.: Q1514 SAS No.: Q1514 SDG NO.: Q1514
 Lab File ID: VN085914.D Date Analyzed: 03/10/2025
 Instrument ID: MSVOA_N Time Analyzed: 12:21
 GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	199203	8.22	319135	9.10	288321	11.87
UPPER LIMIT	398406	8.724	638270	9.6	576642	12.365
LOWER LIMIT	99601.5	7.724	159568	8.6	144161	11.365
EPA SAMPLE NO.						
ENV-105-GW01	180602	8.22	336697	9.10	290159	11.87
ENV-103-GW01	199177	8.22	373736	9.10	326066	11.87
TB03062025	185446	8.22	343862	9.10	305300	11.87
VN0310WBL01	185188	8.22	337149	9.10	297684	11.87
VN0310WBS01	200845	8.22	334623	9.10	292041	11.87
VN0310WBSD01	183155	8.22	304090	9.10	267080	11.87

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

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

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

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: PORT06
 Lab Code: CHEM Case No.: Q1514 SAS No.: Q1514 SDG NO.: Q1514
 Lab File ID: VN085914.D Date Analyzed: 03/10/2025
 Instrument ID: MSVOA_N Time Analyzed: 12:21
 GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	156195	13.788				
UPPER LIMIT	312390	14.288				
LOWER LIMIT	78097.5	13.288				
EPA SAMPLE NO.						
ENV-105-GW01	119785	13.79				
ENV-103-GW01	130206	13.79				
TB03062025	121043	13.79				
VN0310WBL01	112686	13.79				
VN0310WBS01	146257	13.79				
VN0310WBSD01	130620	13.79				

IS4 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

* Values outside of QC limits.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: PORT06
 Lab Code: CHEM Case No.: Q1514 SAS No.: Q1514 SDG NO.: Q1514
 Lab File ID: VN085928.D Date Analyzed: 03/11/2025
 Instrument ID: MSVOA_N Time Analyzed: 13:22
 GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	193697	8.22	310218	9.10	283255	11.87
UPPER LIMIT	387394	8.724	620436	9.6	566510	12.365
LOWER LIMIT	96848.5	7.724	155109	8.6	141628	11.365
EPA SAMPLE NO.						
FB03062025	176702	8.22	336260	9.10	299219	11.87
VN0311WBL01	166099	8.22	319285	9.10	277562	11.87
VN0311WBS01	171959	8.22	282309	9.10	250243	11.87

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

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

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

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: PORT06
 Lab Code: CHEM Case No.: Q1514 SAS No.: Q1514 SDG NO.: Q1514
 Lab File ID: VN085928.D Date Analyzed: 03/11/2025
 Instrument ID: MSVOA_N Time Analyzed: 13:22
 GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	153775	13.788				
UPPER LIMIT	307550	14.288				
LOWER LIMIT	76887.5	13.288				
EPA SAMPLE NO.						
FB03062025	119405	13.79				
VN0311WBL01	106492	13.79				
VN0311WBS01	128349	13.79				

IS4 = 1,4-Dichlorobenzene-d4

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

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

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: PORT06
 Lab Code: CHEM Case No.: Q1514 SAS No.: Q1514 SDG NO.: Q1514
 Lab File ID: VY021474.D Date Analyzed: 03/11/2025
 Instrument ID: MSVOA_Y Time Analyzed: 09:42
 GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	243763	7.71	363423	8.62	331214	11.42
UPPER LIMIT	487526	8.207	726846	9.116	662428	11.92
LOWER LIMIT	121882	7.207	181712	8.116	165607	10.92
EPA SAMPLE NO.						
ENV-105-SB01	310817	7.71	561377	8.62	429027	11.41
ENV-105-SB02	269495	7.71	487605	8.62	426245	11.41
ENV-103-SB01	233794	7.71	402762	8.62	340384	11.41
VY0311SBL01	266206	7.71	468026	8.62	406786	11.41
VY0311SBS01	225793	7.71	350967	8.61	312829	11.41
VY0311SBSD01	205814	7.71	320893	8.62	289092	11.41

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

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

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

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: PORT06
 Lab Code: CHEM Case No.: Q1514 SAS No.: Q1514 SDG NO.: Q1514
 Lab File ID: VY021474.D Date Analyzed: 03/11/2025
 Instrument ID: MSVOA_Y Time Analyzed: 09:42
 GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

	IS4 AREA #	RT #				
12 HOUR STD	170654	13.346				
UPPER LIMIT	341308	13.846				
LOWER LIMIT	85327	12.846				
EPA SAMPLE NO.						
ENV-105-SB01	159534	13.35				
ENV-105-SB02	159684	13.35				
ENV-103-SB01	126386	13.35				
VY0311SBL01	157191	13.35				
VY0311SBS01	162394	13.35				
VY0311SBSD01	150821	13.35				

IS4 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

* Values outside of QC limits.



SAMPLE DATA

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	03/05/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/06/25
Client Sample ID:	ENV-105-SB01	SDG No.:	Q1514
Lab Sample ID:	Q1514-01	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	91.6
Sample Wt/Vol:	7.28 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021482.D	1		03/11/25 13:35	vy031125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	1.20	U	1.20	3.70	ug/Kg
74-87-3	Chloromethane	0.87	U	0.87	3.70	ug/Kg
75-01-4	Vinyl Chloride	0.58	U	0.58	3.70	ug/Kg
74-83-9	Bromomethane	0.77	U	0.77	3.70	ug/Kg
75-00-3	Chloroethane	0.76	U	0.76	3.70	ug/Kg
75-69-4	Trichlorofluoromethane	0.68	U	0.68	3.70	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	0.80	U	0.80	3.70	ug/Kg
75-35-4	1,1-Dichloroethene	0.58	U	0.58	3.70	ug/Kg
67-64-1	Acetone	27.4		4.70	18.7	ug/Kg
75-15-0	Carbon Disulfide	0.96	U	0.96	3.70	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.50	U	0.50	3.70	ug/Kg
79-20-9	Methyl Acetate	1.30	U	1.30	3.70	ug/Kg
75-09-2	Methylene Chloride	2.60	U	2.60	7.50	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.63	U	0.63	3.70	ug/Kg
75-34-3	1,1-Dichloroethane	0.47	U	0.47	3.70	ug/Kg
110-82-7	Cyclohexane	0.52	U	0.52	3.70	ug/Kg
78-93-3	2-Butanone	4.30	U	4.30	18.7	ug/Kg
56-23-5	Carbon Tetrachloride	0.65	U	0.65	3.70	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.46	U	0.46	3.70	ug/Kg
74-97-5	Bromochloromethane	1.80	U	1.80	3.70	ug/Kg
67-66-3	Chloroform	0.50	U	0.50	3.70	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.58	U	0.58	3.70	ug/Kg
108-87-2	Methylcyclohexane	0.65	U	0.65	3.70	ug/Kg
71-43-2	Benzene	0.54	U	0.54	3.70	ug/Kg
107-06-2	1,2-Dichloroethane	0.46	U	0.46	3.70	ug/Kg
79-01-6	Trichloroethene	0.56	U	0.56	3.70	ug/Kg
78-87-5	1,2-Dichloropropane	0.49	U	0.49	3.70	ug/Kg
75-27-4	Bromodichloromethane	0.42	U	0.42	3.70	ug/Kg
108-10-1	4-Methyl-2-Pentanone	3.30	U	3.30	18.7	ug/Kg
108-88-3	Toluene	0.50	U	0.50	3.70	ug/Kg

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	03/05/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/06/25
Client Sample ID:	ENV-105-SB01	SDG No.:	Q1514
Lab Sample ID:	Q1514-01	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	91.6
Sample Wt/Vol:	7.28 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021482.D	1		03/11/25 13:35	vy031125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	0.45	U	0.45	3.70	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.43	U	0.43	3.70	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.63	U	0.63	3.70	ug/Kg
591-78-6	2-Hexanone	3.60	U	3.60	18.7	ug/Kg
124-48-1	Dibromochloromethane	0.49	U	0.49	3.70	ug/Kg
106-93-4	1,2-Dibromoethane	0.59	U	0.59	3.70	ug/Kg
127-18-4	Tetrachloroethene	0.67	U	0.67	3.70	ug/Kg
108-90-7	Chlorobenzene	0.55	U	0.55	3.70	ug/Kg
100-41-4	Ethyl Benzene	0.46	U	0.46	3.70	ug/Kg
179601-23-1	m/p-Xylenes	1.00	U	1.00	7.50	ug/Kg
95-47-6	o-Xylene	0.52	U	0.52	3.70	ug/Kg
100-42-5	Styrene	0.45	U	0.45	3.70	ug/Kg
75-25-2	Bromoform	0.61	U	0.61	3.70	ug/Kg
98-82-8	Isopropylbenzene	0.50	U	0.50	3.70	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	0.82	U	0.82	3.70	ug/Kg
541-73-1	1,3-Dichlorobenzene	0.55	U	0.55	3.70	ug/Kg
106-46-7	1,4-Dichlorobenzene	0.60	U	0.60	3.70	ug/Kg
95-50-1	1,2-Dichlorobenzene	0.44	U	0.44	3.70	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	1.20	U	1.20	3.70	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	0.59	U	0.59	3.70	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	0.58	U	0.58	3.70	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	60.4		70 (63) - 130 (155)	121%	SPK: 50
1868-53-7	Dibromofluoromethane	51.3		70 (70) - 130 (134)	103%	SPK: 50
2037-26-5	Toluene-d8	42.8		70 (74) - 130 (123)	86%	SPK: 50
460-00-4	4-Bromofluorobenzene	36.8		70 (38) - 130 (136)	74%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	311000	7.707			
540-36-3	1,4-Difluorobenzene	561000	8.616			
3114-55-4	Chlorobenzene-d5	429000	11.414			
3855-82-1	1,4-Dichlorobenzene-d4	160000	13.346			

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	03/05/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/06/25
Client Sample ID:	ENV-105-SB01	SDG No.:	Q1514
Lab Sample ID:	Q1514-01	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	91.6
Sample Wt/Vol:	7.28 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021482.D	1		03/11/25 13:35	vy031125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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_Y\Data\VY031125\
 Data File : VY021482.D
 Acq On : 11 Mar 2025 13:35
 Operator : SY/MD
 Sample : Q1514-01
 Misc : 7.28g/5.0mL/MSVOA_Y/SOIL/B
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 ENV-105-SB01

Quant Time: Mar 12 01:24:40 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 12:42:45 2025
 Response via : Initial Calibration

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

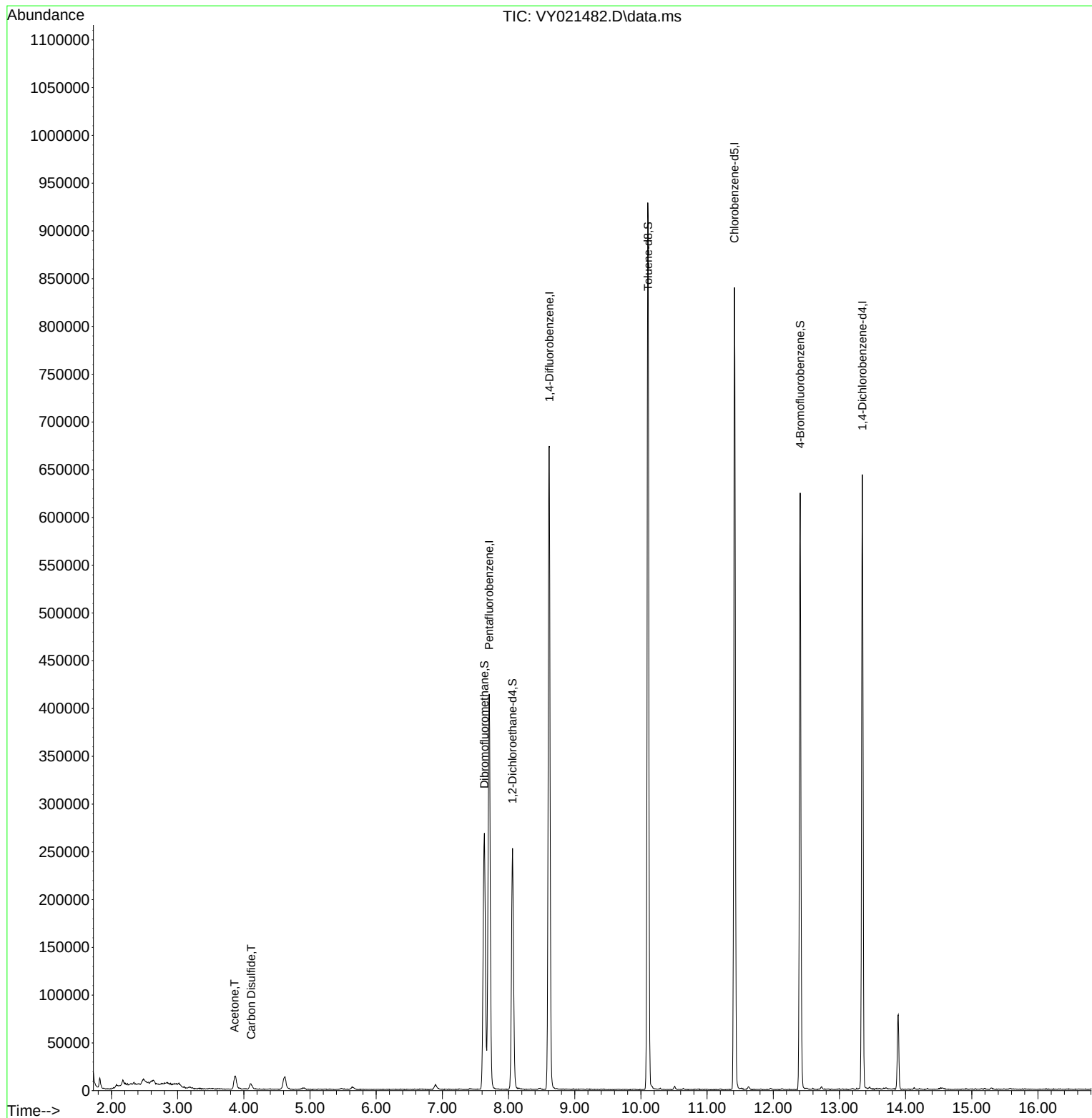
Internal Standards						
1) Pentafluorobenzene	7.707	168	310817	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	561377	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.414	117	429027	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.346	152	159534	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	198337	60.374	ug/l	0.00
Spiked Amount	50.000	Range	50 - 163	Recovery	= 120.740%	
35) Dibromofluoromethane	7.634	113	189469	51.346	ug/l	0.00
Spiked Amount	50.000	Range	54 - 147	Recovery	= 102.700%	
50) Toluene-d8	10.109	98	597514	42.766	ug/l	0.00
Spiked Amount	50.000	Range	58 - 134	Recovery	= 85.540%	
62) 4-Bromofluorobenzene	12.408	95	174764	36.773	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	= 73.540%	
Target Compounds						Qvalue
16) Acetone	3.860	43	26145	36.489	ug/l	99
17) Carbon Disulfide	4.110	76	10693	1.069	ug/l #	94

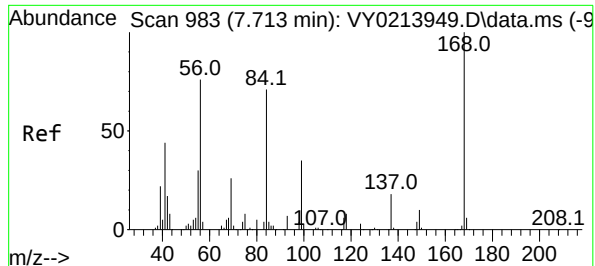
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
Data File : VY021482.D
Acq On : 11 Mar 2025 13:35
Operator : SY/MD
Sample : Q1514-01
Misc : 7.28g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
ENV-105-SB01

Quant Time: Mar 12 01:24:40 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 12:42:45 2025
Response via : Initial Calibration

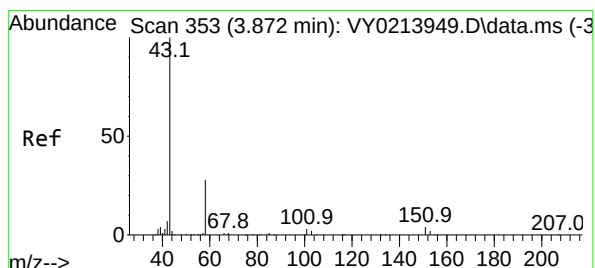
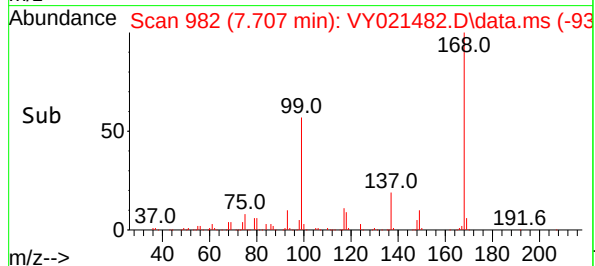
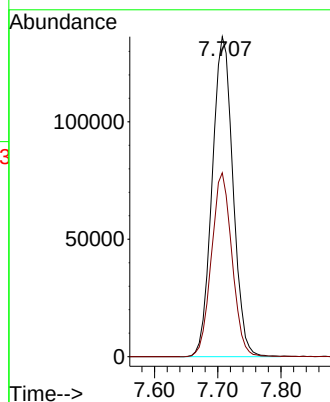
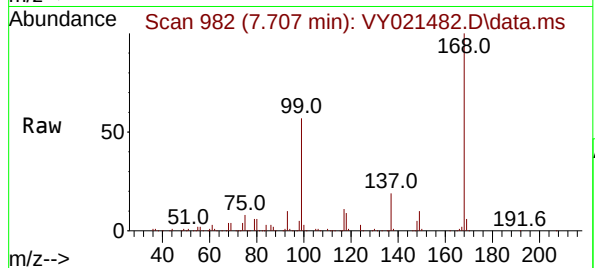




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.707 min Scan# 91
Delta R.T. -0.006 min
Lab File: VY021482.D
Acq: 11 Mar 2025 13:35

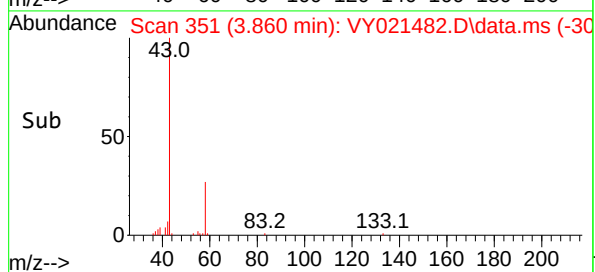
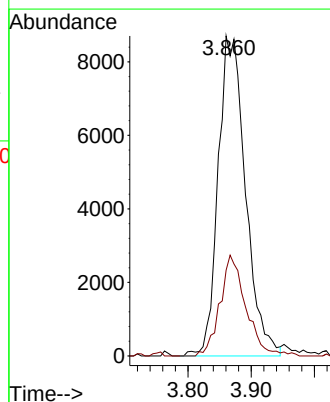
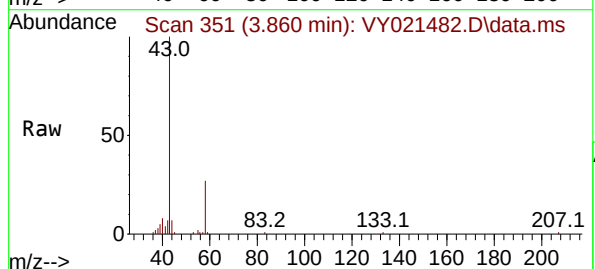
Instrument :
MSVOA_Y
ClientSampleId :
ENV-105-SB01

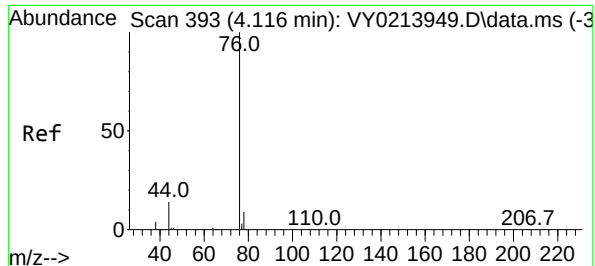
Tgt Ion:168 Resp: 310817
Ion Ratio Lower Upper
168 100
99 57.5 46.0 69.0



#16
Acetone
Concen: 36.489 ug/l
RT: 3.860 min Scan# 351
Delta R.T. -0.012 min
Lab File: VY021482.D
Acq: 11 Mar 2025 13:35

Tgt Ion: 43 Resp: 26145
Ion Ratio Lower Upper
43 100
58 26.8 22.1 33.1





#17

Carbon Disulfide

Concen: 1.069 ug/l

RT: 4.110 min Scan# 393

Delta R.T. -0.006 min

Lab File: VY021482.D

Acq: 11 Mar 2025 13:35

Instrument :

MSVOA_Y

ClientSampleId :

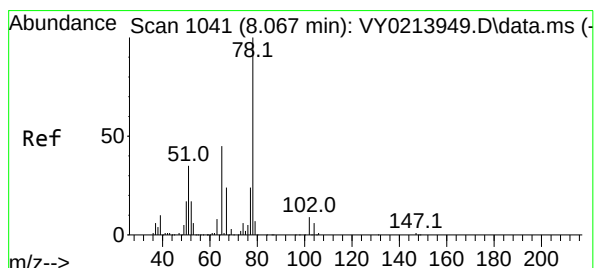
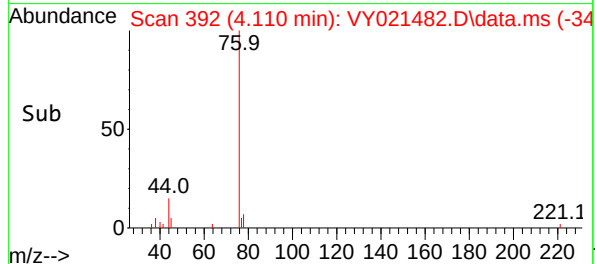
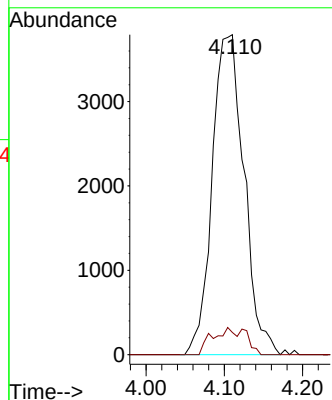
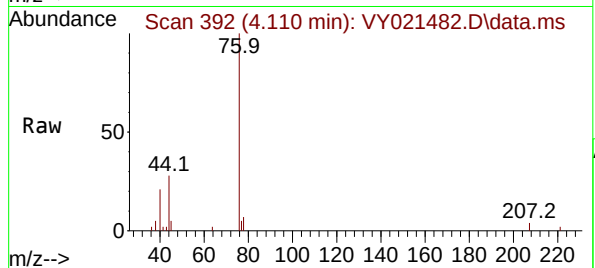
ENV-105-SB01

Tgt Ion: 76 Resp: 10693

Ion Ratio Lower Upper

76 100

78 7.0 7.4 11.0#



#33

1,2-Dichloroethane-d4

Concen: 60.374 ug/l

RT: 8.061 min Scan# 1040

Delta R.T. -0.006 min

Lab File: VY021482.D

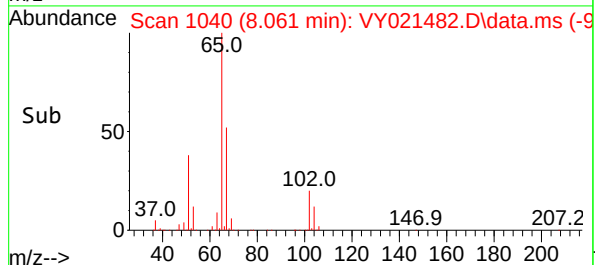
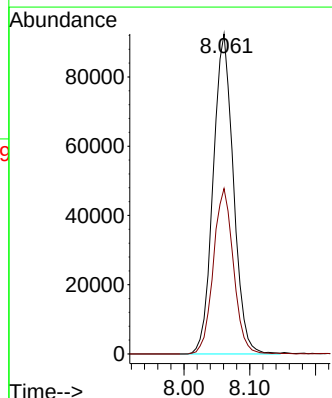
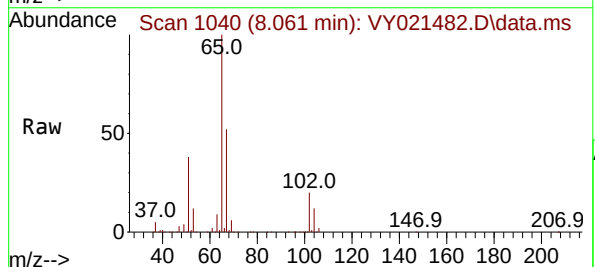
Acq: 11 Mar 2025 13:35

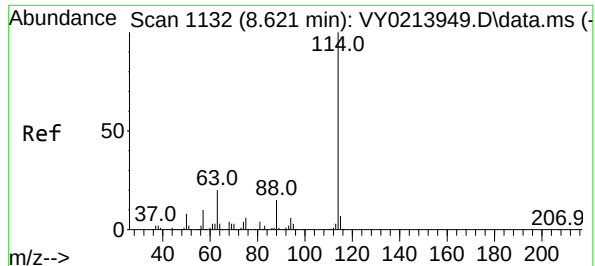
Tgt Ion: 65 Resp: 198337

Ion Ratio Lower Upper

65 100

67 51.4 0.0 102.8





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.616 min Scan# 1132

Delta R.T. -0.006 min

Lab File: VY021482.D

Acq: 11 Mar 2025 13:35

Instrument :

MSVOA_Y

ClientSampleId :

ENV-105-SB01

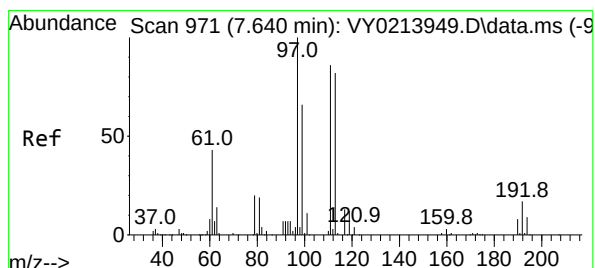
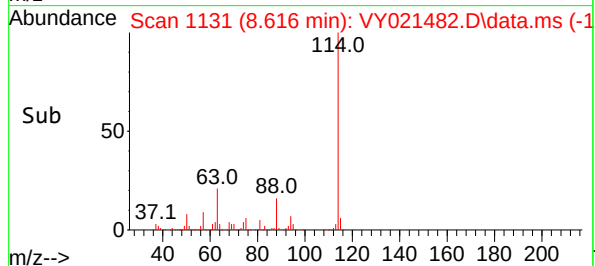
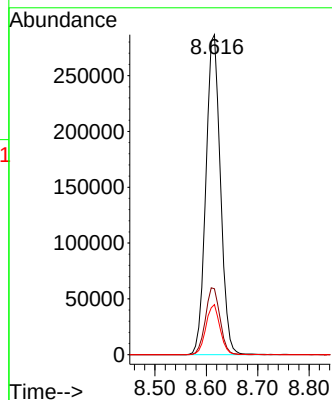
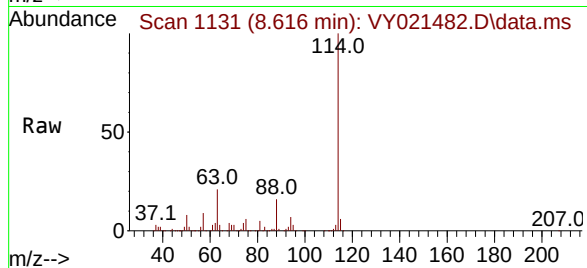
Tgt Ion:114 Resp: 561377

Ion Ratio Lower Upper

114 100

63 20.6 0.0 40.8

88 15.6 0.0 30.8



#35

Dibromofluoromethane

Concen: 51.346 ug/l

RT: 7.634 min Scan# 970

Delta R.T. -0.006 min

Lab File: VY021482.D

Acq: 11 Mar 2025 13:35

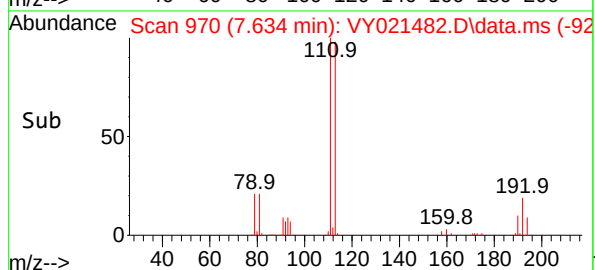
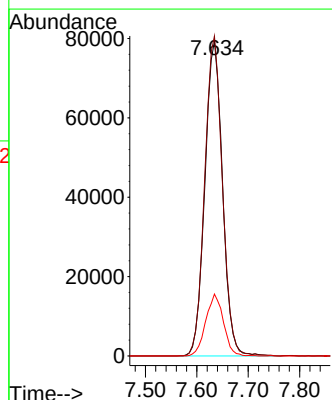
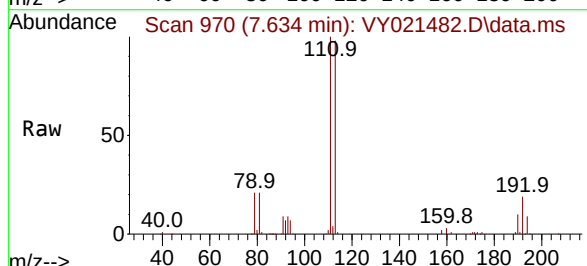
Tgt Ion:113 Resp: 189469

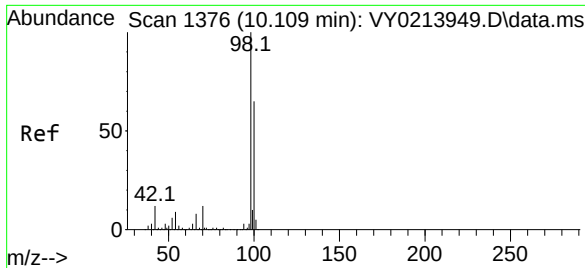
Ion Ratio Lower Upper

113 100

111 101.6 82.0 123.0

192 19.7 15.9 23.9





#50

Toluene-d8

Concen: 42.766 ug/l

RT: 10.109 min Scan# 1376

Delta R.T. 0.000 min

Lab File: VY021482.D

Acq: 11 Mar 2025 13:35

Instrument :

MSVOA_Y

ClientSampleId :

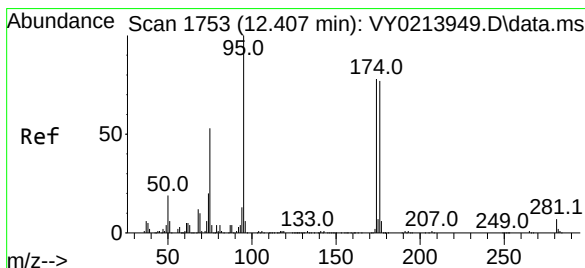
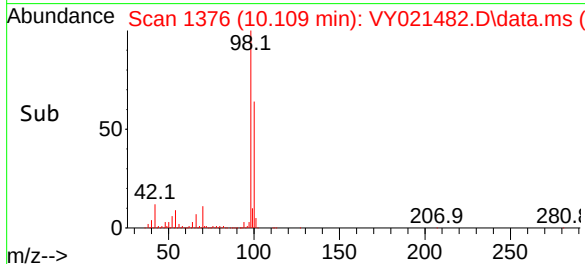
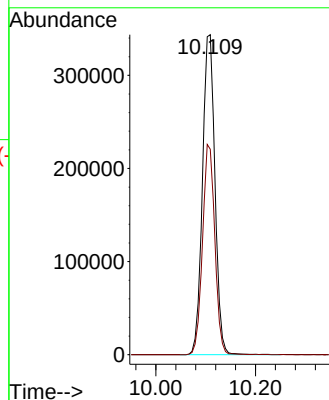
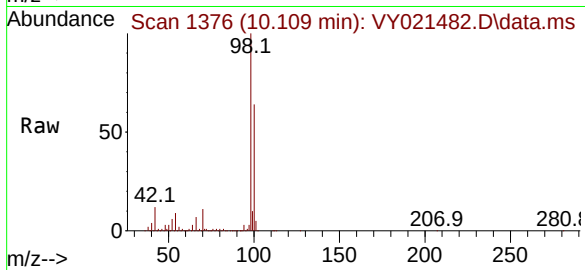
ENV-105-SB01

Tgt Ion: 98 Resp: 597514

Ion Ratio Lower Upper

98 100

100 64.6 52.1 78.1



#62

4-Bromofluorobenzene

Concen: 36.773 ug/l

RT: 12.408 min Scan# 1753

Delta R.T. 0.000 min

Lab File: VY021482.D

Acq: 11 Mar 2025 13:35

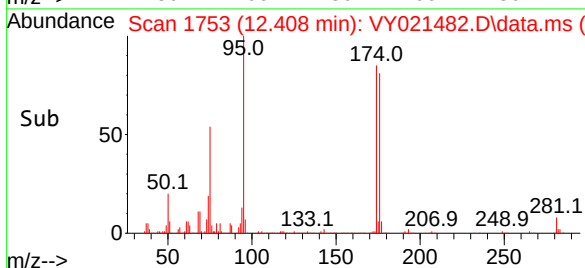
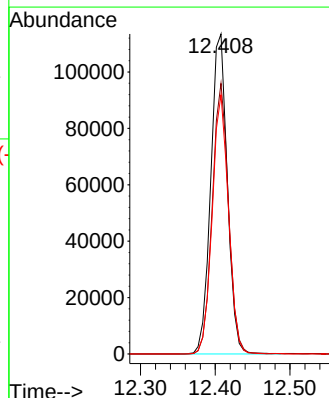
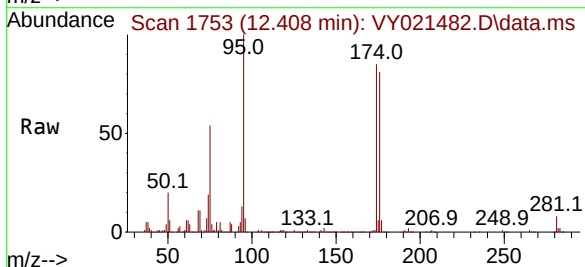
Tgt Ion: 95 Resp: 174764

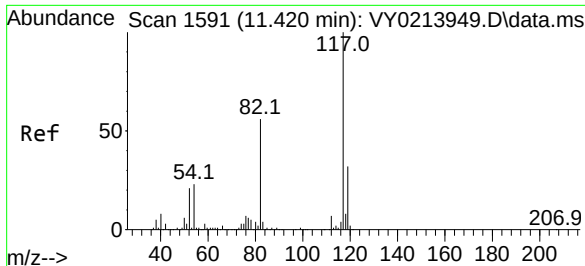
Ion Ratio Lower Upper

95 100

174 83.1 0.0 165.0

176 79.7 0.0 160.0





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.414 min Scan# 11

Delta R.T. -0.006 min

Lab File: VY021482.D

Acq: 11 Mar 2025 13:35

Instrument :

MSVOA_Y

ClientSampleId :

ENV-105-SB01

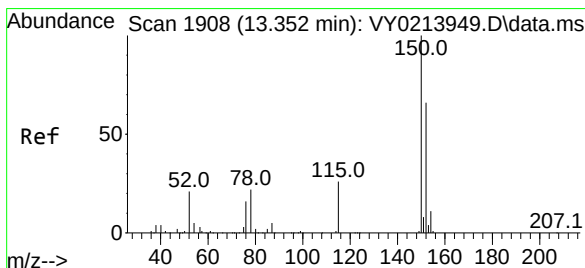
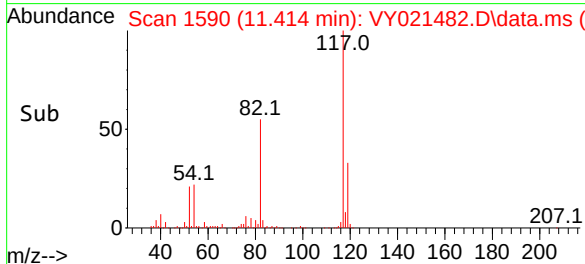
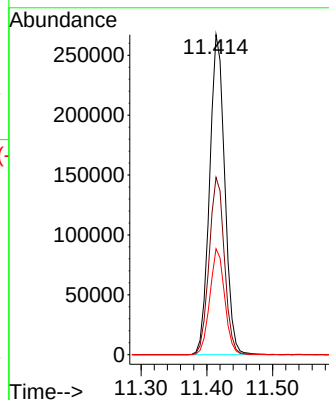
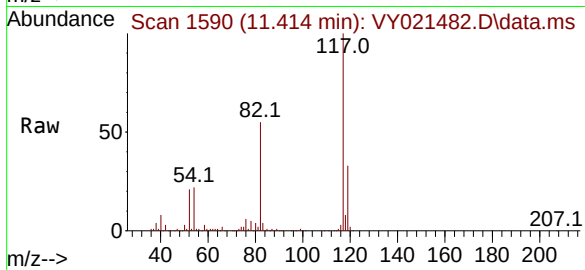
Tgt Ion:117 Resp: 429027

Ion Ratio Lower Upper

117 100

82 55.4 44.6 67.0

119 33.1 25.4 38.0



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.346 min Scan# 1907

Delta R.T. -0.006 min

Lab File: VY021482.D

Acq: 11 Mar 2025 13:35

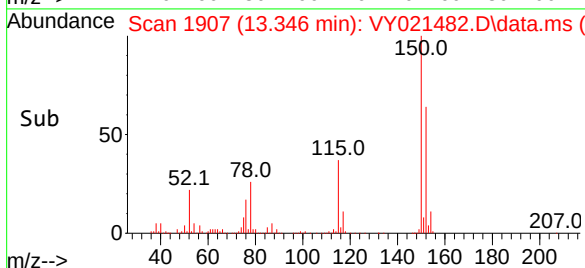
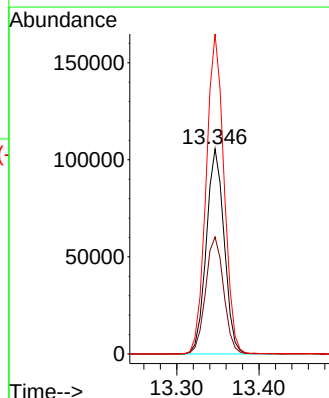
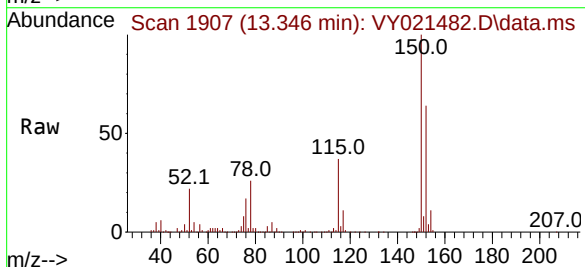
Tgt Ion:152 Resp: 159534

Ion Ratio Lower Upper

152 100

115 57.9 29.0 87.0

150 155.7 0.0 347.2



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
 Data File : VY021482.D
 Acq On : 11 Mar 2025 13:35
 Operator : SY/MD
 Sample : Q1514-01
 Misc : 7.28g/5.0mL/MSVOA_Y/SOIL/B
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 ENV-105-SB01

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Filtering: 5

Sampling : 1

Min Area: 3 % of largest Peak

Start Thrs: 0.2

Max Peaks: 100

Stop Thrs : 0

Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M

Title : SW846 8260

Signal : TIC: VY021482.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.824	12	17	25	rVB2	10971	19006	1.18%	0.219%
2	2.483	118	125	134	rBV6	5583	19166	1.19%	0.221%
3	3.873	343	353	361	rBV2	13710	40049	2.48%	0.461%
4	4.104	382	391	400	rBV2	5784	17184	1.07%	0.198%
5	4.622	463	476	485	rBV2	13274	42719	2.65%	0.492%
6	7.634	960	970	976	rBV	267949	642637	39.87%	7.396%
7	7.707	976	982	997	rVB	413486	935725	58.05%	10.769%
8	8.061	1030	1040	1054	rBV	252439	547244	33.95%	6.298%
9	8.616	1121	1131	1147	rBV	673528	1339882	83.12%	15.421%
10	10.103	1367	1375	1391	rBV	928403	1611926	100.00%	18.552%
11	11.414	1583	1590	1603	rBV	839256	1353653	83.98%	15.579%
12	12.408	1746	1753	1764	rBV2	624639	1005959	62.41%	11.578%
13	13.346	1900	1907	1914	rBV	642668	982215	60.93%	11.304%
14	13.889	1989	1996	2004	rVB	78255	131414	8.15%	1.512%

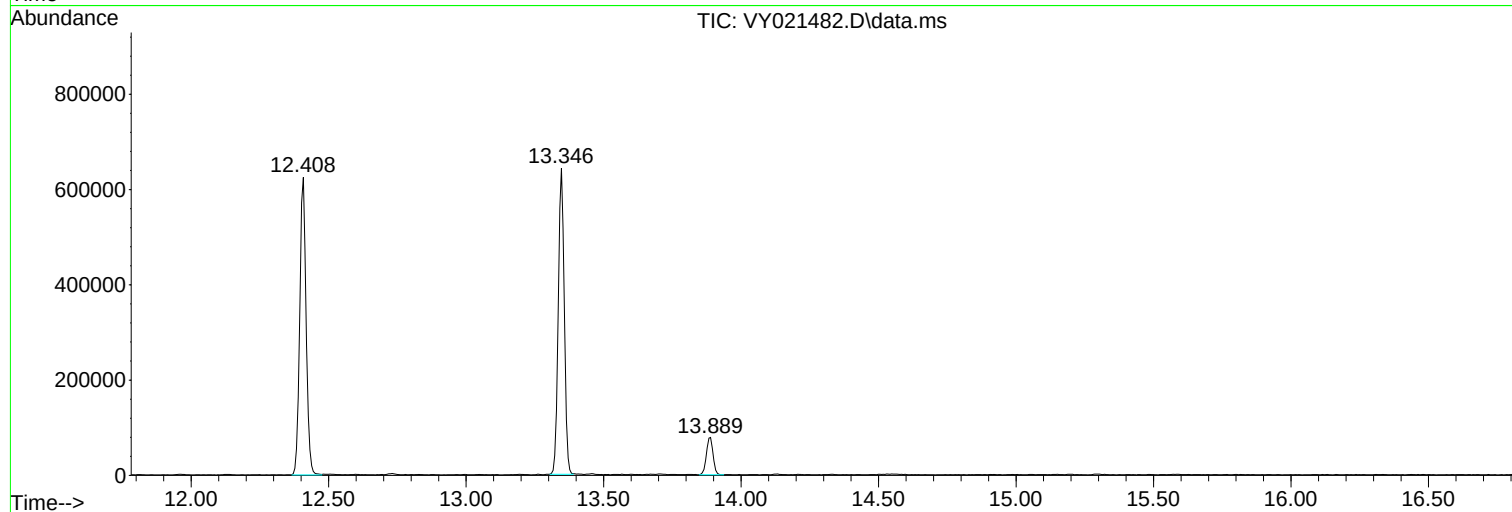
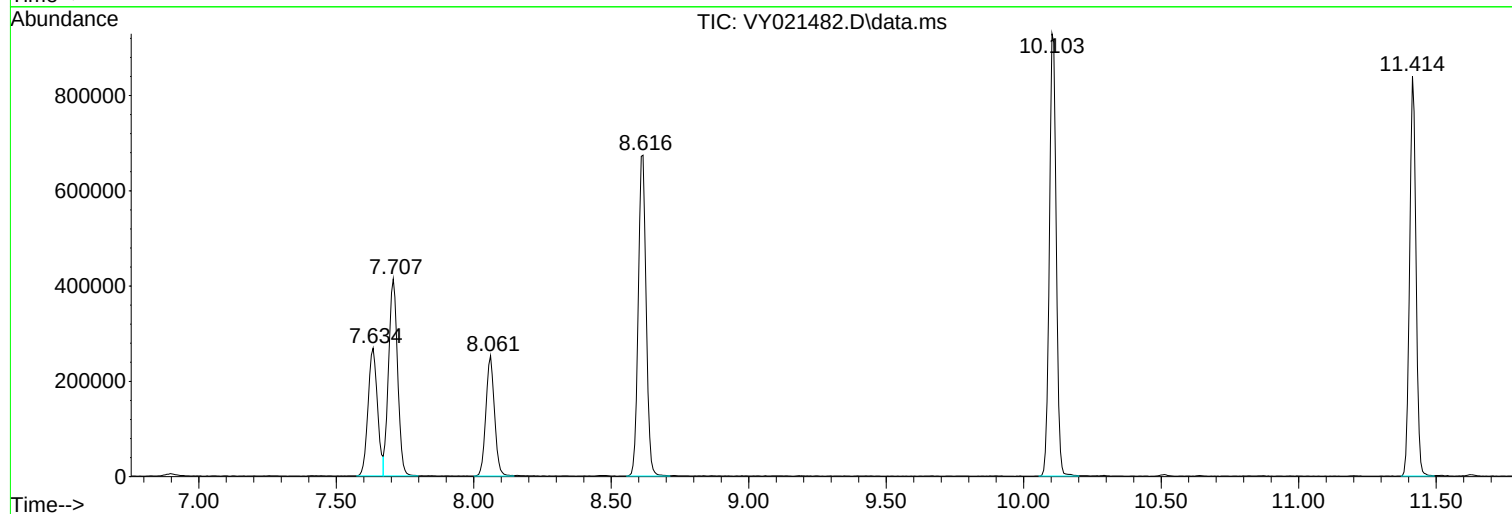
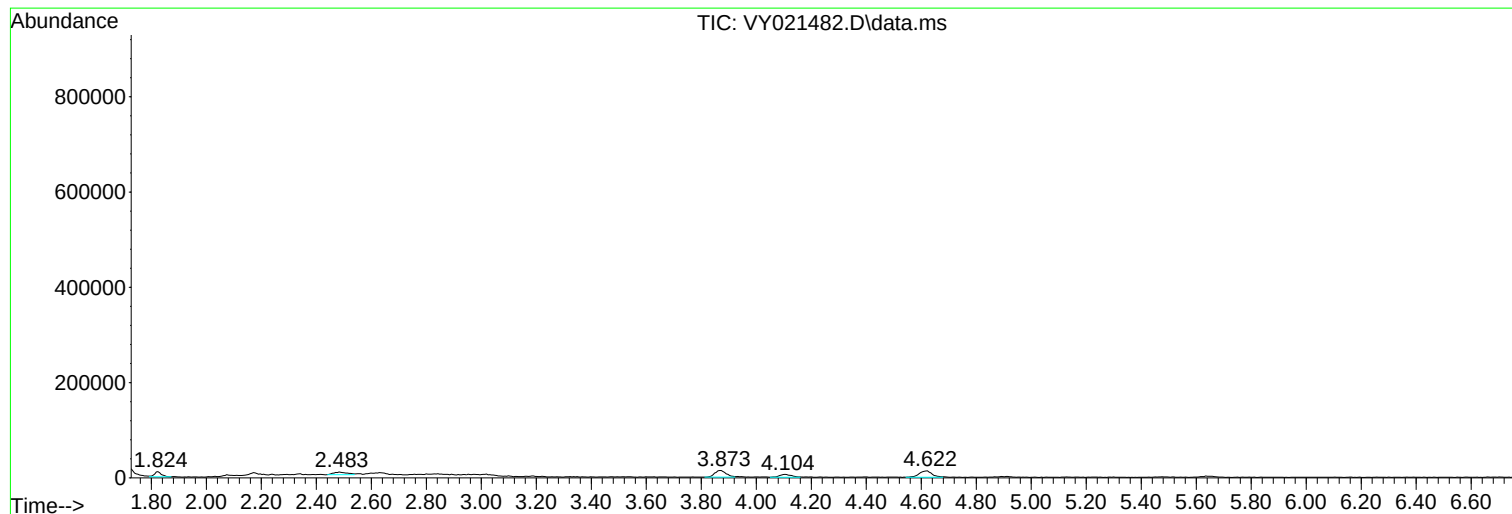
Sum of corrected areas: 8688779

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
Data File : VY021482.D
Acq On : 11 Mar 2025 13:35
Operator : SY/MD
Sample : Q1514-01
Misc : 7.28g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
ENV-105-SB01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
Data File : VY021482.D
Acq On : 11 Mar 2025 13:35
Operator : SY/MD
Sample : Q1514-01
Misc : 7.28g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
ENV-105-SB01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
Data File : VY021482.D
Acq On : 11 Mar 2025 13:35
Operator : SY/MD
Sample : Q1514-01
Misc : 7.28g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
ENV-105-SB01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	03/05/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/06/25
Client Sample ID:	ENV-105-SB02	SDG No.:	Q1514
Lab Sample ID:	Q1514-03	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	81
Sample Wt/Vol:	7.48 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021481.D	1		03/11/25 13:11	vy031125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	1.40	U	1.40	4.10	ug/Kg
74-87-3	Chloromethane	0.96	U	0.96	4.10	ug/Kg
75-01-4	Vinyl Chloride	0.64	U	0.64	4.10	ug/Kg
74-83-9	Bromomethane	0.85	U	0.85	4.10	ug/Kg
75-00-3	Chloroethane	0.83	U	0.83	4.10	ug/Kg
75-69-4	Trichlorofluoromethane	0.75	U	0.75	4.10	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	0.88	U	0.88	4.10	ug/Kg
75-35-4	1,1-Dichloroethene	0.64	U	0.64	4.10	ug/Kg
67-64-1	Acetone	18.8	J	5.10	20.6	ug/Kg
75-15-0	Carbon Disulfide	2.20	J	1.10	4.10	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.55	U	0.55	4.10	ug/Kg
79-20-9	Methyl Acetate	1.50	U	1.50	4.10	ug/Kg
75-09-2	Methylene Chloride	2.80	U	2.80	8.30	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.69	U	0.69	4.10	ug/Kg
75-34-3	1,1-Dichloroethane	0.52	U	0.52	4.10	ug/Kg
110-82-7	Cyclohexane	0.57	U	0.57	4.10	ug/Kg
78-93-3	2-Butanone	4.70	U	4.70	20.6	ug/Kg
56-23-5	Carbon Tetrachloride	0.72	U	0.72	4.10	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.50	U	0.50	4.10	ug/Kg
74-97-5	Bromochloromethane	2.00	U	2.00	4.10	ug/Kg
67-66-3	Chloroform	0.55	U	0.55	4.10	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.64	U	0.64	4.10	ug/Kg
108-87-2	Methylcyclohexane	0.72	U	0.72	4.10	ug/Kg
71-43-2	Benzene	0.59	U	0.59	4.10	ug/Kg
107-06-2	1,2-Dichloroethane	0.50	U	0.50	4.10	ug/Kg
79-01-6	Trichloroethene	0.62	U	0.62	4.10	ug/Kg
78-87-5	1,2-Dichloropropane	0.54	U	0.54	4.10	ug/Kg
75-27-4	Bromodichloromethane	0.46	U	0.46	4.10	ug/Kg
108-10-1	4-Methyl-2-Pentanone	3.60	U	3.60	20.6	ug/Kg
108-88-3	Toluene	0.55	U	0.55	4.10	ug/Kg

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	03/05/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/06/25
Client Sample ID:	ENV-105-SB02	SDG No.:	Q1514
Lab Sample ID:	Q1514-03	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	81
Sample Wt/Vol:	7.48 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021481.D	1		03/11/25 13:11	vy031125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	0.50	U	0.50	4.10	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.47	U	0.47	4.10	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.69	U	0.69	4.10	ug/Kg
591-78-6	2-Hexanone	4.00	U	4.00	20.6	ug/Kg
124-48-1	Dibromochloromethane	0.54	U	0.54	4.10	ug/Kg
106-93-4	1,2-Dibromoethane	0.65	U	0.65	4.10	ug/Kg
127-18-4	Tetrachloroethene	0.73	U	0.73	4.10	ug/Kg
108-90-7	Chlorobenzene	0.61	U	0.61	4.10	ug/Kg
100-41-4	Ethyl Benzene	0.51	U	0.51	4.10	ug/Kg
179601-23-1	m/p-Xylenes	1.10	U	1.10	8.30	ug/Kg
95-47-6	o-Xylene	0.58	U	0.58	4.10	ug/Kg
100-42-5	Styrene	0.50	U	0.50	4.10	ug/Kg
75-25-2	Bromoform	0.67	U	0.67	4.10	ug/Kg
98-82-8	Isopropylbenzene	0.55	U	0.55	4.10	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	0.91	U	0.91	4.10	ug/Kg
541-73-1	1,3-Dichlorobenzene	0.61	U	0.61	4.10	ug/Kg
106-46-7	1,4-Dichlorobenzene	0.66	U	0.66	4.10	ug/Kg
95-50-1	1,2-Dichlorobenzene	0.49	U	0.49	4.10	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	1.30	U	1.30	4.10	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	0.65	U	0.65	4.10	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	0.64	U	0.64	4.10	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	59.8		70 (63) - 130 (155)	120%	SPK: 50
1868-53-7	Dibromofluoromethane	51.8		70 (70) - 130 (134)	104%	SPK: 50
2037-26-5	Toluene-d8	48.7		70 (74) - 130 (123)	97%	SPK: 50
460-00-4	4-Bromofluorobenzene	42.6		70 (38) - 130 (136)	85%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	269000	7.707			
540-36-3	1,4-Difluorobenzene	488000	8.615			
3114-55-4	Chlorobenzene-d5	426000	11.414			
3855-82-1	1,4-Dichlorobenzene-d4	160000	13.346			

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	03/05/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/06/25
Client Sample ID:	ENV-105-SB02	SDG No.:	Q1514
Lab Sample ID:	Q1514-03	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	81
Sample Wt/Vol:	7.48 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021481.D	1		03/11/25 13:11	vy031125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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_Y\Data\VY031125\
 Data File : VY021481.D
 Acq On : 11 Mar 2025 13:11
 Operator : SY/MD
 Sample : Q1514-03
 Misc : 7.48g/5.0mL/MSVOA_Y/SOIL/B
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 ENV-105-SB02

Quant Time: Mar 12 01:24:28 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 12:42:45 2025
 Response via : Initial Calibration

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

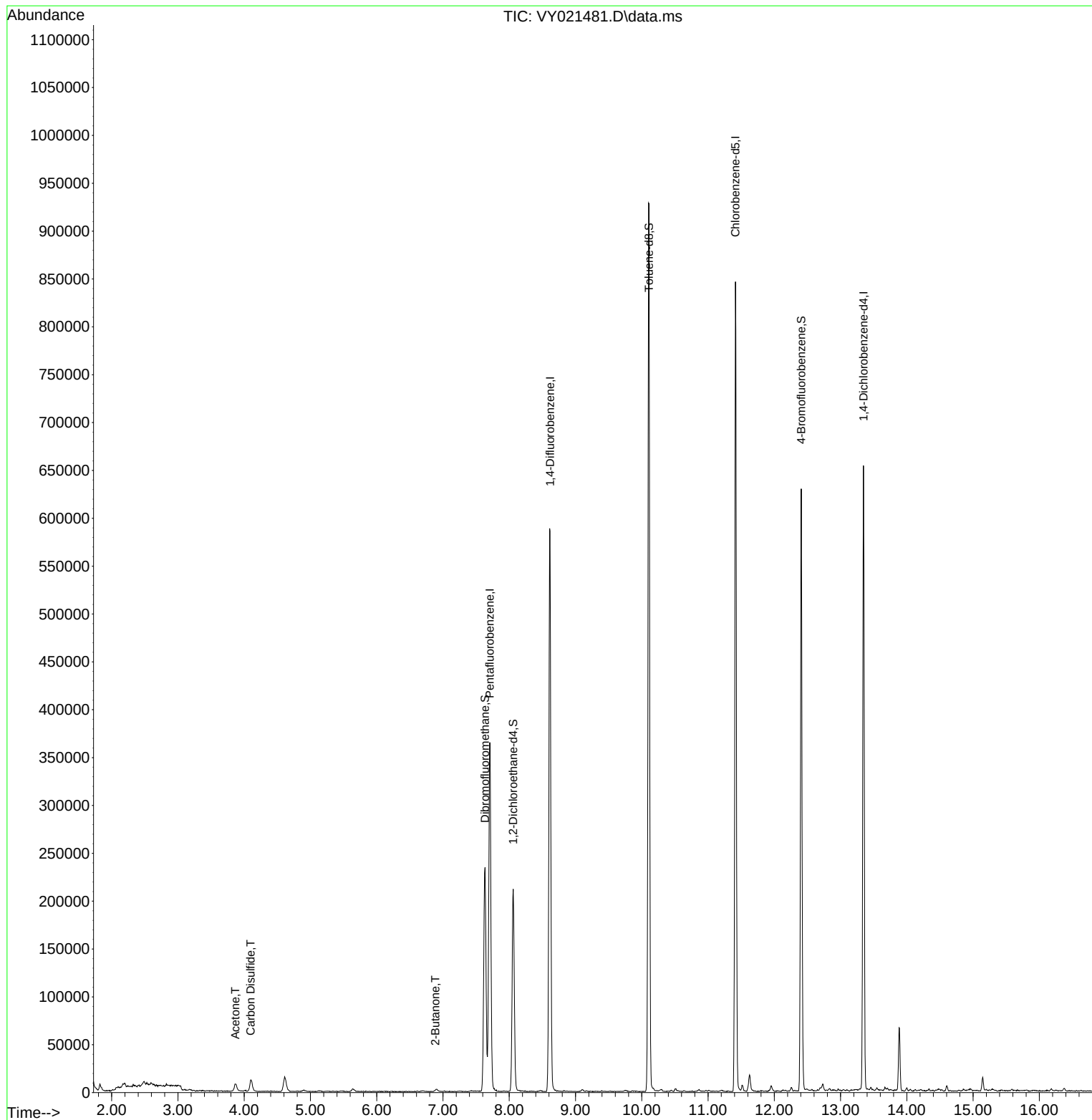
Internal Standards						
1) Pentafluorobenzene	7.707	168	269495	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.615	114	487605	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.414	117	426245	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.346	152	159684	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	170368	59.812	ug/l	0.00
Spiked Amount	50.000	Range	50 - 163	Recovery	=	119.620%
35) Dibromofluoromethane	7.634	113	165963	51.781	ug/l	0.00
Spiked Amount	50.000	Range	54 - 147	Recovery	=	103.560%
50) Toluene-d8	10.109	98	591303	48.725	ug/l	0.00
Spiked Amount	50.000	Range	58 - 134	Recovery	=	97.440%
62) 4-Bromofluorobenzene	12.407	95	175823	42.593	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	=	85.180%
Target Compounds						
						Qvalue
16) Acetone	3.866	43	14141	22.762	ug/l	99
17) Carbon Disulfide	4.098	76	23452	2.703	ug/l #	94
25) 2-Butanone	6.884	43	3893	4.530	ug/l #	87

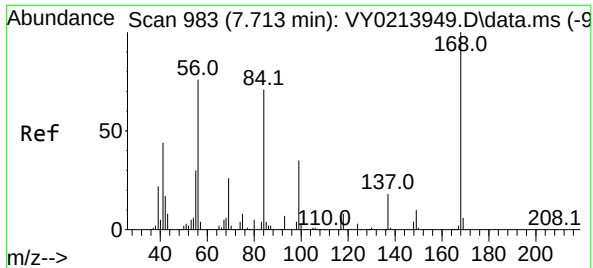
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
Data File : VY021481.D
Acq On : 11 Mar 2025 13:11
Operator : SY/MD
Sample : Q1514-03
Misc : 7.48g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
ENV-105-SB02

Quant Time: Mar 12 01:24:28 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 12:42:45 2025
Response via : Initial Calibration

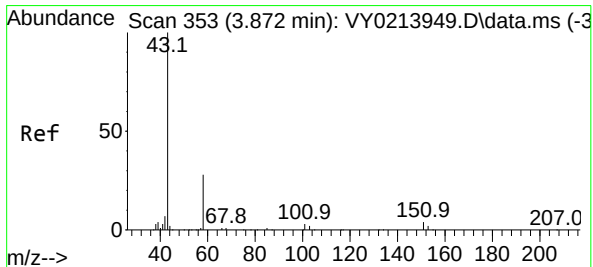
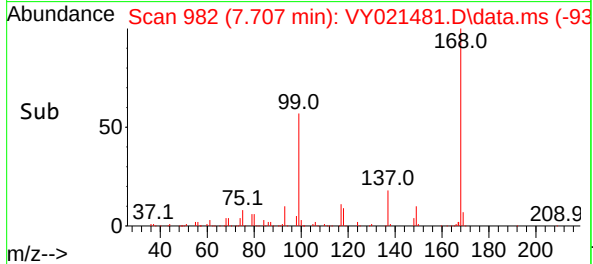
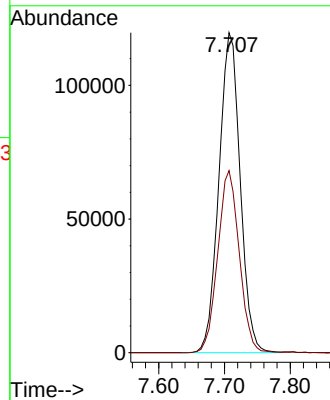
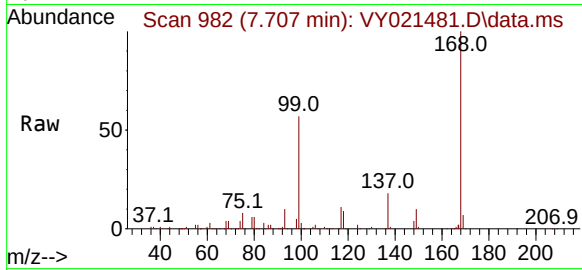




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.707 min Scan# 91
Delta R.T. -0.006 min
Lab File: VY021481.D
Acq: 11 Mar 2025 13:11

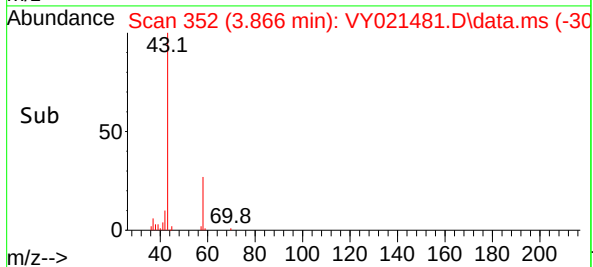
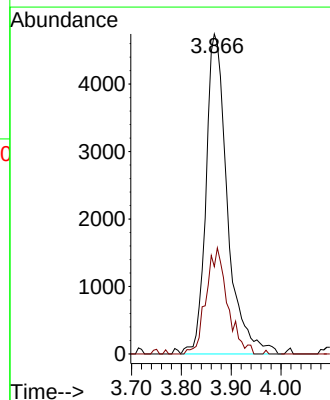
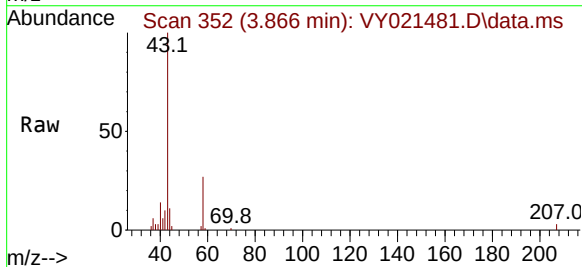
Instrument :
MSVOA_Y
ClientSampleId :
ENV-105-SB02

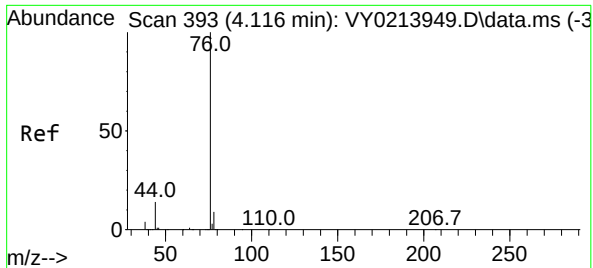
Tgt Ion:168 Resp: 269495
Ion Ratio Lower Upper
168 100
99 56.9 46.0 69.0



#16
Acetone
Concen: 22.762 ug/l
RT: 3.866 min Scan# 352
Delta R.T. -0.006 min
Lab File: VY021481.D
Acq: 11 Mar 2025 13:11

Tgt Ion: 43 Resp: 14141
Ion Ratio Lower Upper
43 100
58 27.3 22.1 33.1





#17

Carbon Disulfide

Concen: 2.703 ug/l

RT: 4.098 min Scan# 390

Delta R.T. -0.018 min

Lab File: VY021481.D

Acq: 11 Mar 2025 13:11

Instrument :

MSVOA_Y

ClientSampleId :

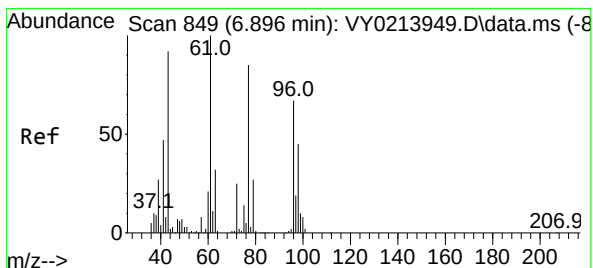
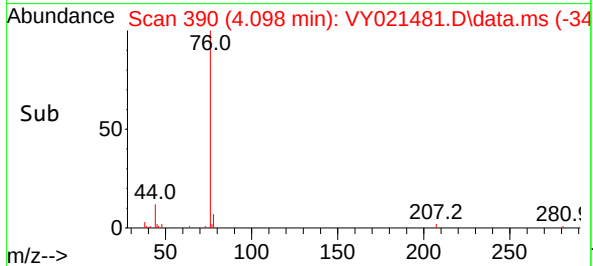
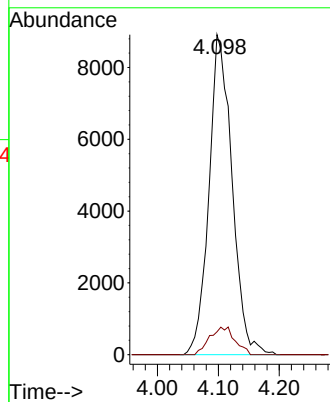
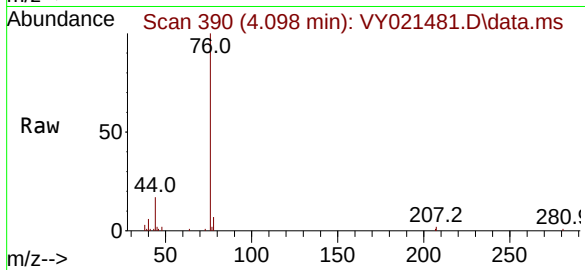
ENV-105-SB02

Tgt Ion: 76 Resp: 23452

Ion Ratio Lower Upper

76 100

78 7.2 7.4 11.0#



#25

2-Butanone

Concen: 4.530 ug/l

RT: 6.884 min Scan# 847

Delta R.T. -0.012 min

Lab File: VY021481.D

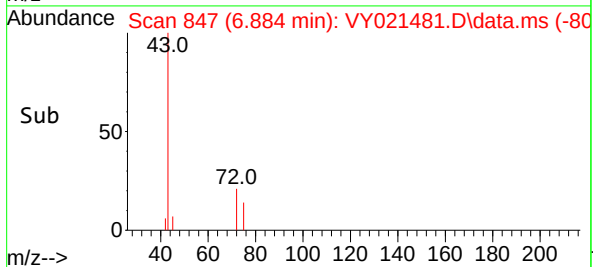
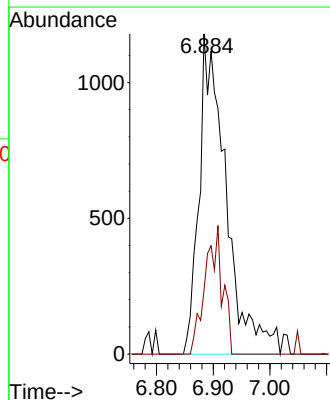
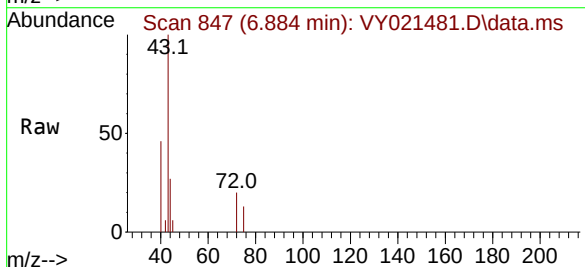
Acq: 11 Mar 2025 13:11

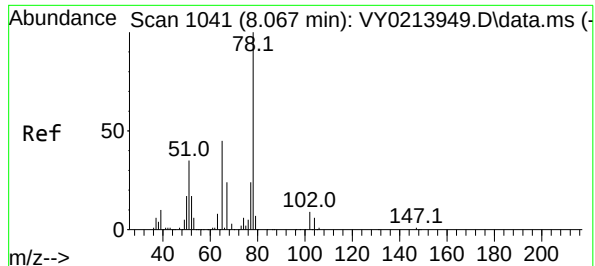
Tgt Ion: 43 Resp: 3893

Ion Ratio Lower Upper

43 100

72 19.9 21.4 32.0#





#33

1,2-Dichloroethane-d4

Concen: 59.812 ug/l

RT: 8.061 min Scan# 110

Delta R.T. -0.006 min

Lab File: VY021481.D

Acq: 11 Mar 2025 13:11

Instrument :

MSVOA_Y

ClientSampleId :

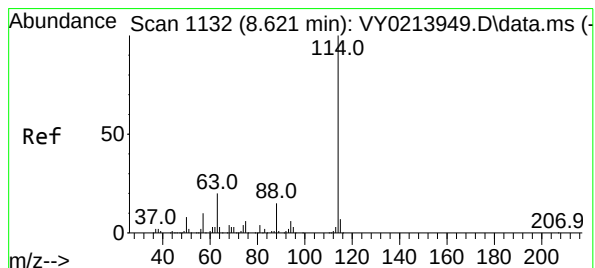
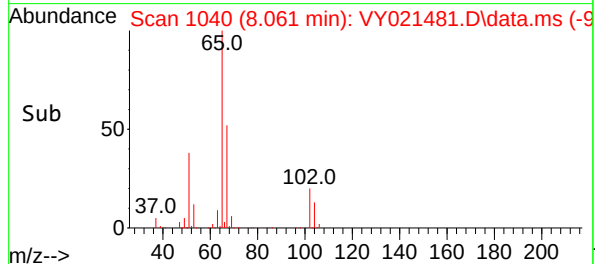
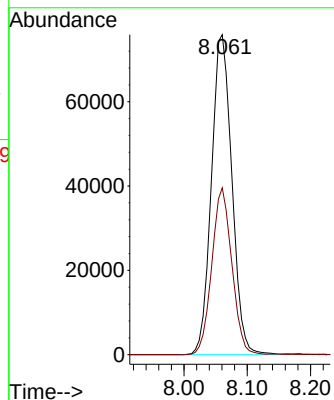
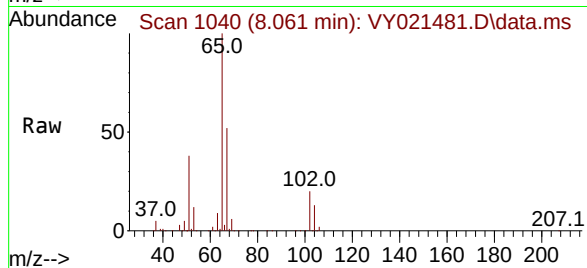
ENV-105-SB02

Tgt Ion: 65 Resp: 170368

Ion Ratio Lower Upper

65 100

67 51.2 0.0 102.8



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.615 min Scan# 1131

Delta R.T. -0.006 min

Lab File: VY021481.D

Acq: 11 Mar 2025 13:11

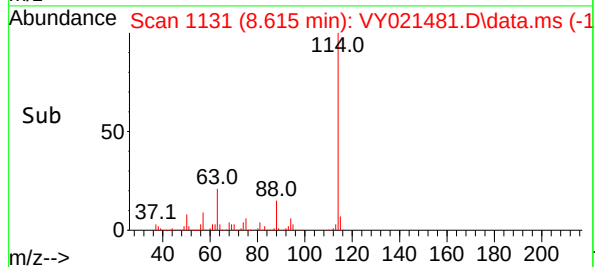
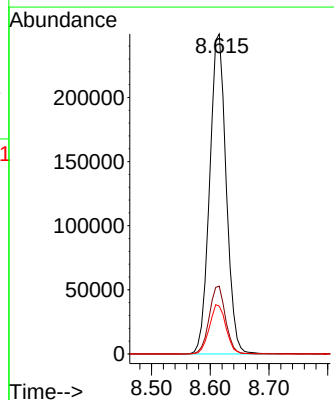
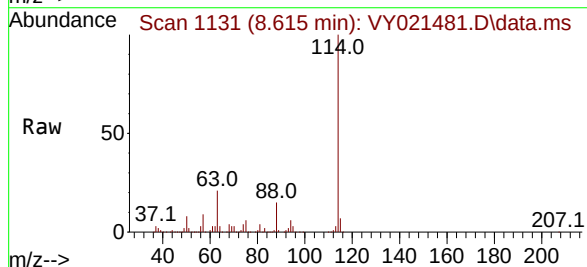
Tgt Ion: 114 Resp: 487605

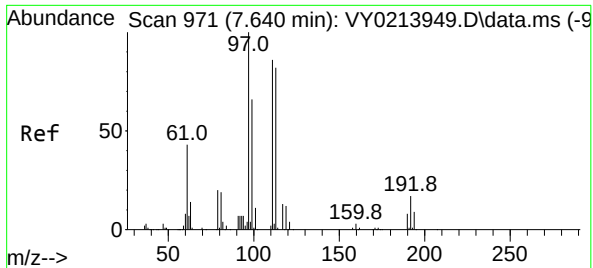
Ion Ratio Lower Upper

114 100

63 21.2 0.0 40.8

88 15.0 0.0 30.8





#35

Dibromofluoromethane

Concen: 51.781 ug/l

RT: 7.634 min Scan# 91

Delta R.T. -0.006 min

Lab File: VY021481.D

Acq: 11 Mar 2025 13:11

Instrument :

MSVOA_Y

ClientSampleId :

ENV-105-SB02

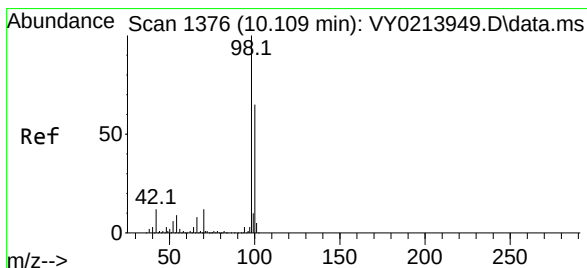
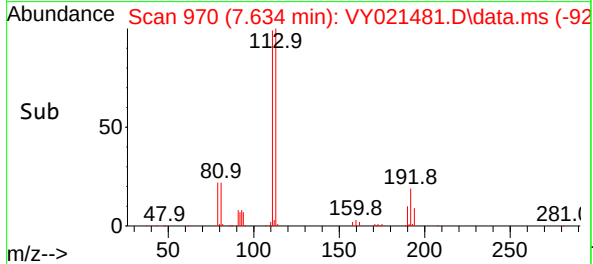
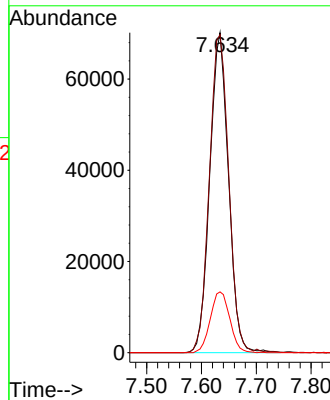
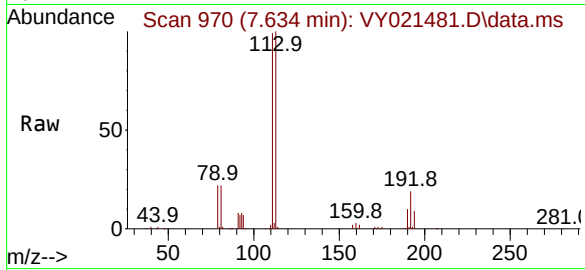
Tgt Ion:113 Resp: 165963

Ion Ratio Lower Upper

113 100

111 103.1 82.0 123.0

192 19.8 15.9 23.9



#50

Toluene-d8

Concen: 48.725 ug/l

RT: 10.109 min Scan# 1376

Delta R.T. 0.000 min

Lab File: VY021481.D

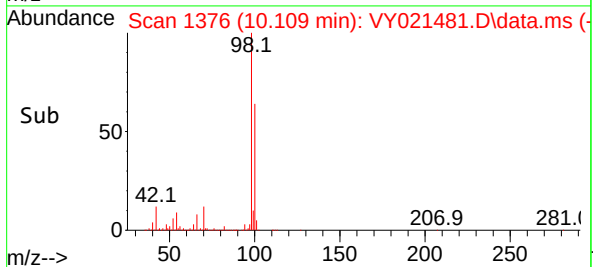
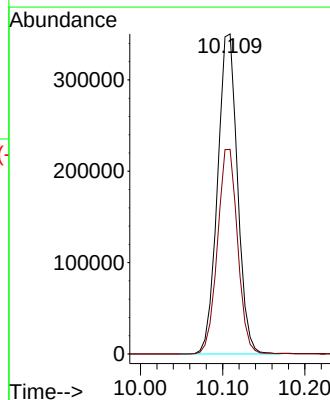
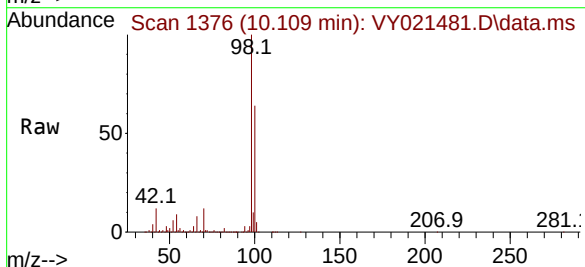
Acq: 11 Mar 2025 13:11

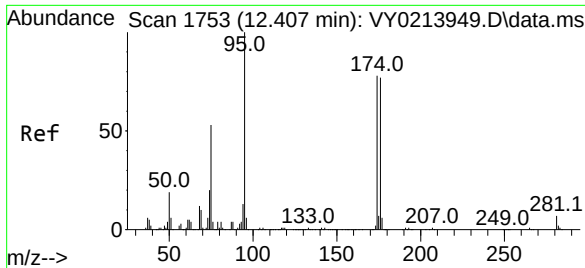
Tgt Ion: 98 Resp: 591303

Ion Ratio Lower Upper

98 100

100 64.5 52.1 78.1





#62

4-Bromofluorobenzene

Concen: 42.593 ug/l

RT: 12.407 min Scan# 1753

Delta R.T. 0.000 min

Lab File: VY021481.D

Acq: 11 Mar 2025 13:11

Instrument :

MSVOA_Y

ClientSampleId :

ENV-105-SB02

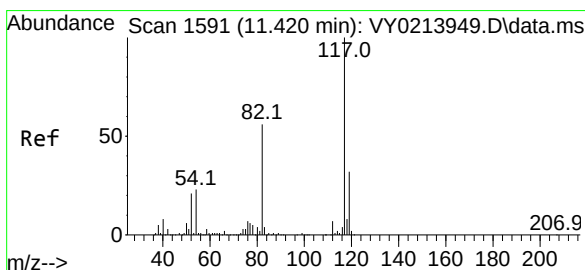
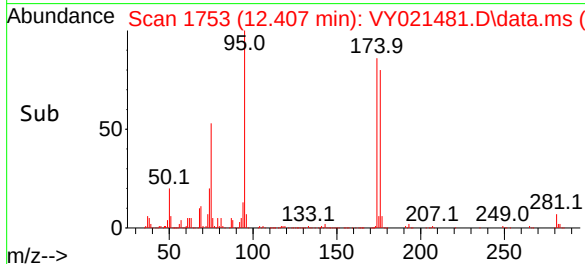
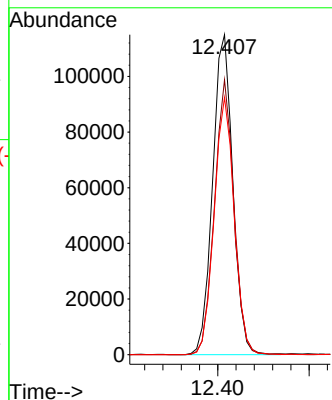
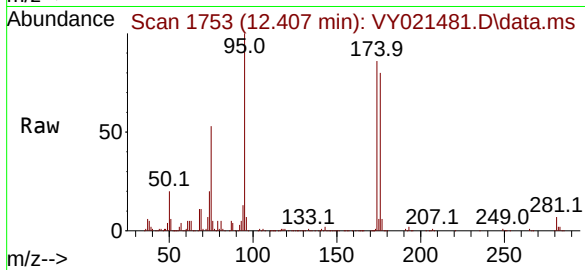
Tgt Ion: 95 Resp: 175823

Ion Ratio Lower Upper

95 100

174 83.5 0.0 165.0

176 80.0 0.0 160.0



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.414 min Scan# 1590

Delta R.T. -0.006 min

Lab File: VY021481.D

Acq: 11 Mar 2025 13:11

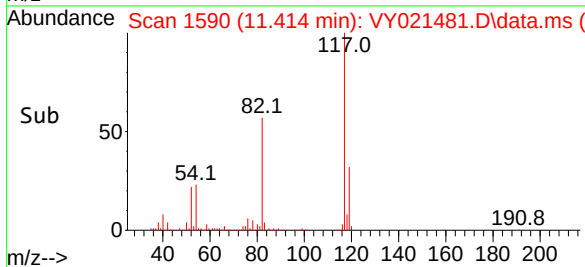
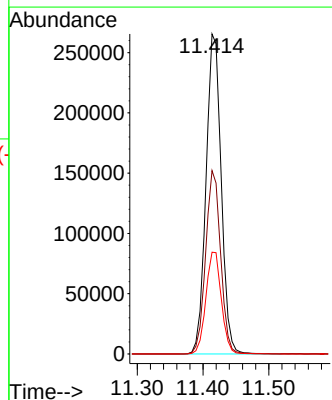
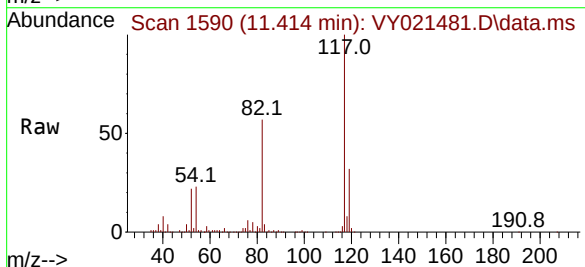
Tgt Ion: 117 Resp: 426245

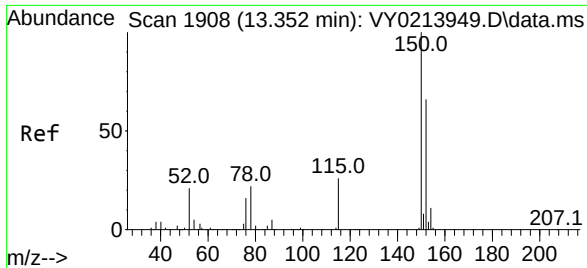
Ion Ratio Lower Upper

117 100

82 57.3 44.6 67.0

119 31.8 25.4 38.0





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.346 min Scan# 1907

Delta R.T. -0.006 min

Lab File: VY021481.D

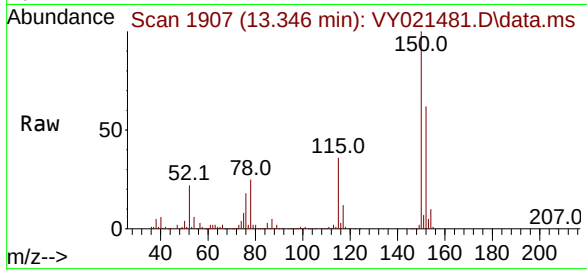
Acq: 11 Mar 2025 13:11

Instrument :

MSVOA_Y

ClientSampleId :

ENV-105-SB02



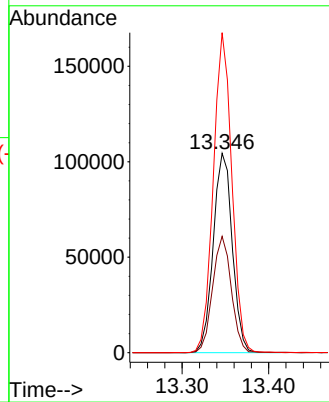
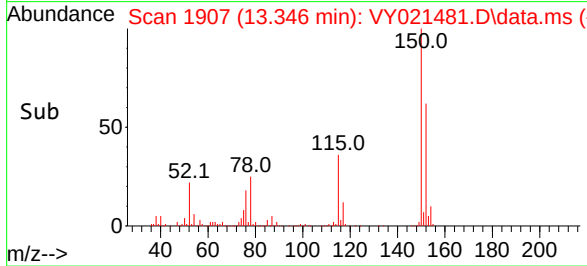
Tgt Ion:152 Resp: 159684

Ion Ratio Lower Upper

152 100

115 57.4 29.0 87.0

150 156.1 0.0 347.2



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
 Data File : VY021481.D
 Acq On : 11 Mar 2025 13:11
 Operator : SY/MD
 Sample : Q1514-03
 Misc : 7.48g/5.0mL/MSVOA_Y/SOIL/B
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 ENV-105-SB02

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Filtering: 5

Sampling : 1

Min Area: 3 % of largest Peak

Start Thrs: 0.2

Max Peaks: 100

Stop Thrs : 0

Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M

Title : SW846 8260

Signal : TIC: VY021481.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.866	344	352	361	rBV2	7273	20723	1.30%	0.251%
2	4.104	381	391	404	rVB2	11996	33327	2.09%	0.404%
3	4.610	464	474	487	rBV3	15536	48531	3.04%	0.589%
4	7.634	959	970	976	rBV	233749	569309	35.63%	6.904%
5	7.707	976	982	997	rVB	363783	813092	50.88%	9.861%
6	8.061	1031	1040	1051	rBV	211100	474337	29.68%	5.753%
7	8.609	1121	1130	1143	rBV	588381	1167525	73.07%	14.160%
8	10.103	1367	1375	1385	rBV	928344	1597907	100.00%	19.379%
9	11.414	1583	1590	1603	rBV	845950	1353967	84.73%	16.421%
10	11.627	1618	1625	1632	rBV	17105	36823	2.30%	0.447%
11	12.407	1746	1753	1762	rBV2	629160	1008304	63.10%	12.229%
12	13.346	1899	1907	1915	rVB	651387	986679	61.75%	11.966%
13	13.883	1989	1995	2002	rVB	66143	111154	6.96%	1.348%
14	15.145	2196	2202	2207	rBV2	14181	23843	1.49%	0.289%

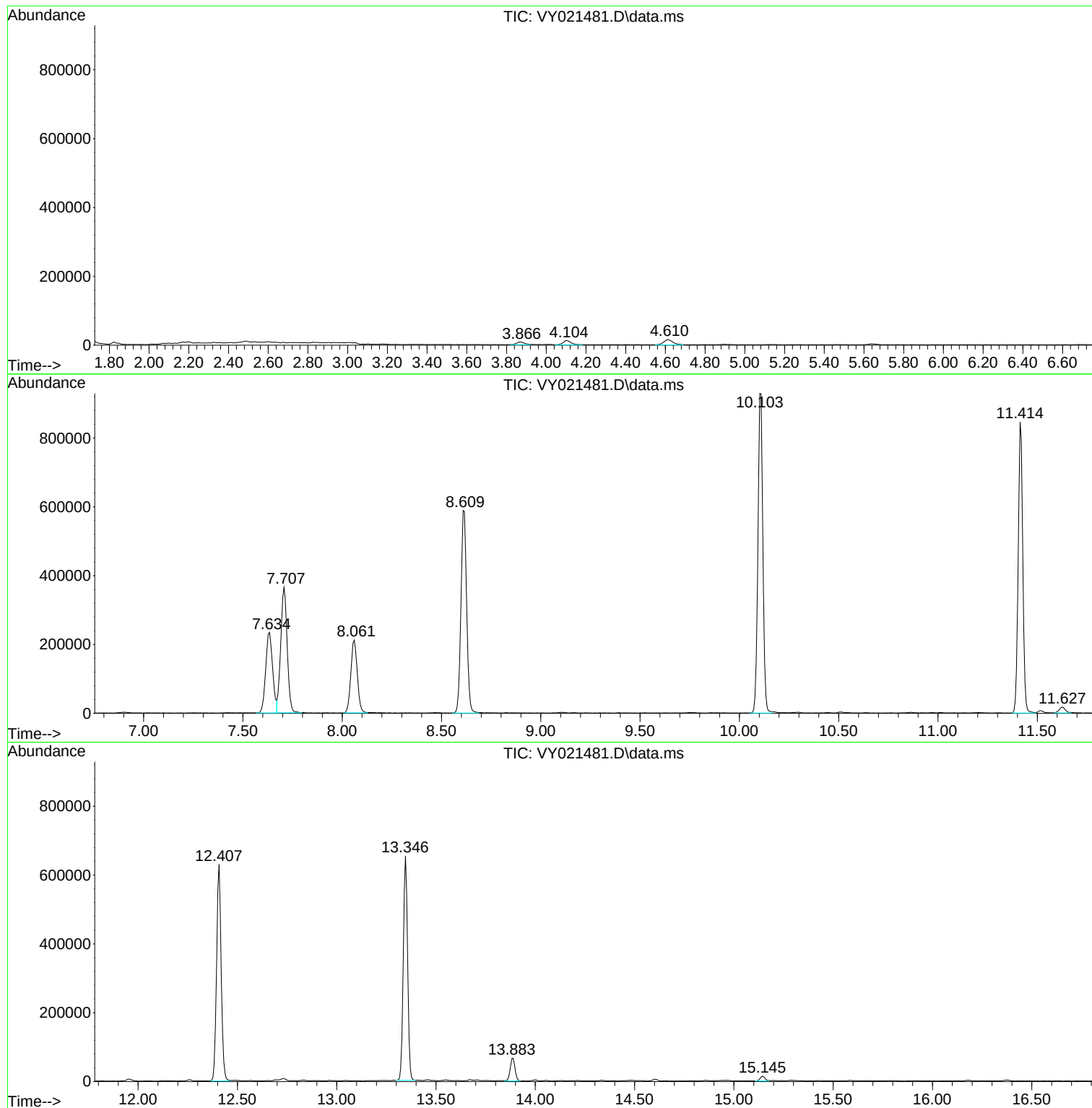
Sum of corrected areas: 8245521

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
Data File : VY021481.D
Acq On : 11 Mar 2025 13:11
Operator : SY/MD
Sample : Q1514-03
Misc : 7.48g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
ENV-105-SB02

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
Data File : VY021481.D
Acq On : 11 Mar 2025 13:11
Operator : SY/MD
Sample : Q1514-03
Misc : 7.48g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
ENV-105-SB02

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
Data File : VY021481.D
Acq On : 11 Mar 2025 13:11
Operator : SY/MD
Sample : Q1514-03
Misc : 7.48g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
ENV-105-SB02

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	03/05/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/06/25
Client Sample ID:	ENV-103-SB01	SDG No.:	Q1514
Lab Sample ID:	Q1514-05	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	89.1
Sample Wt/Vol:	7.66 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021480.D	1		03/11/25 12:48	vy031125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	1.20	U	1.20	3.70	ug/Kg
74-87-3	Chloromethane	0.85	U	0.85	3.70	ug/Kg
75-01-4	Vinyl Chloride	0.56	U	0.56	3.70	ug/Kg
74-83-9	Bromomethane	0.87	J	0.75	3.70	ug/Kg
75-00-3	Chloroethane	0.74	U	0.74	3.70	ug/Kg
75-69-4	Trichlorofluoromethane	0.67	U	0.67	3.70	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	0.78	U	0.78	3.70	ug/Kg
75-35-4	1,1-Dichloroethene	0.57	U	0.57	3.70	ug/Kg
67-64-1	Acetone	4.60	U	4.60	18.3	ug/Kg
75-15-0	Carbon Disulfide	0.94	U	0.94	3.70	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.49	U	0.49	3.70	ug/Kg
79-20-9	Methyl Acetate	1.30	U	1.30	3.70	ug/Kg
75-09-2	Methylene Chloride	2.50	U	2.50	7.30	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.62	U	0.62	3.70	ug/Kg
75-34-3	1,1-Dichloroethane	0.46	U	0.46	3.70	ug/Kg
110-82-7	Cyclohexane	0.51	U	0.51	3.70	ug/Kg
78-93-3	2-Butanone	4.20	U	4.20	18.3	ug/Kg
56-23-5	Carbon Tetrachloride	0.64	U	0.64	3.70	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.45	U	0.45	3.70	ug/Kg
74-97-5	Bromochloromethane	1.80	U	1.80	3.70	ug/Kg
67-66-3	Chloroform	0.49	U	0.49	3.70	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.57	U	0.57	3.70	ug/Kg
108-87-2	Methylcyclohexane	0.64	U	0.64	3.70	ug/Kg
71-43-2	Benzene	0.53	U	0.53	3.70	ug/Kg
107-06-2	1,2-Dichloroethane	0.45	U	0.45	3.70	ug/Kg
79-01-6	Trichloroethene	0.55	U	0.55	3.70	ug/Kg
78-87-5	1,2-Dichloropropane	0.48	U	0.48	3.70	ug/Kg
75-27-4	Bromodichloromethane	0.41	U	0.41	3.70	ug/Kg
108-10-1	4-Methyl-2-Pentanone	3.20	U	3.20	18.3	ug/Kg
108-88-3	Toluene	0.49	U	0.49	3.70	ug/Kg

Report of Analysis

Client:	Portal Partners Tri-Venture		Date Collected:	03/05/25	
Project:	Amtrak Sawtooth Bridges 2025		Date Received:	03/06/25	
Client Sample ID:	ENV-103-SB01		SDG No.:	Q1514	
Lab Sample ID:	Q1514-05		Matrix:	SOIL	
Analytical Method:	SW8260		% Solid:	89.1	
Sample Wt/Vol:	7.66	Units: g	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOC-TCLVOA-10	
GC Column:	RXI-624	ID : 0.25	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021480.D	1		03/11/25 12:48	vy031125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	0.44	U	0.44	3.70	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.42	U	0.42	3.70	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.62	U	0.62	3.70	ug/Kg
591-78-6	2-Hexanone	3.50	U	3.50	18.3	ug/Kg
124-48-1	Dibromochloromethane	0.48	U	0.48	3.70	ug/Kg
106-93-4	1,2-Dibromoethane	0.58	U	0.58	3.70	ug/Kg
127-18-4	Tetrachloroethene	0.65	U	0.65	3.70	ug/Kg
108-90-7	Chlorobenzene	0.54	U	0.54	3.70	ug/Kg
100-41-4	Ethyl Benzene	0.45	U	0.45	3.70	ug/Kg
179601-23-1	m/p-Xylenes	0.99	U	0.99	7.30	ug/Kg
95-47-6	o-Xylene	0.51	U	0.51	3.70	ug/Kg
100-42-5	Styrene	0.44	U	0.44	3.70	ug/Kg
75-25-2	Bromoform	0.59	U	0.59	3.70	ug/Kg
98-82-8	Isopropylbenzene	0.49	U	0.49	3.70	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	0.81	U	0.81	3.70	ug/Kg
541-73-1	1,3-Dichlorobenzene	0.54	U	0.54	3.70	ug/Kg
106-46-7	1,4-Dichlorobenzene	0.59	U	0.59	3.70	ug/Kg
95-50-1	1,2-Dichlorobenzene	0.43	U	0.43	3.70	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	1.10	U	1.10	3.70	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	0.58	U	0.58	3.70	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	0.57	U	0.57	3.70	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	56.4		70 (63) - 130 (155)	113%	SPK: 50
1868-53-7	Dibromofluoromethane	50.7		70 (70) - 130 (134)	101%	SPK: 50
2037-26-5	Toluene-d8	47.8		70 (74) - 130 (123)	96%	SPK: 50
460-00-4	4-Bromofluorobenzene	40.4		70 (38) - 130 (136)	81%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	234000	7.707			
540-36-3	1,4-Difluorobenzene	403000	8.615			
3114-55-4	Chlorobenzene-d5	340000	11.414			
3855-82-1	1,4-Dichlorobenzene-d4	126000	13.346			

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	03/05/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/06/25
Client Sample ID:	ENV-103-SB01	SDG No.:	Q1514
Lab Sample ID:	Q1514-05	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	89.1
Sample Wt/Vol:	7.66 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021480.D	1		03/11/25 12:48	vy031125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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_Y\Data\VY031125\
 Data File : VY021480.D
 Acq On : 11 Mar 2025 12:48
 Operator : SY/MD
 Sample : Q1514-05
 Misc : 7.66g/5.0mL/MSVOA_Y/SOIL/B
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 ENV-103-SB01

Quant Time: Mar 12 01:24:17 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 12:42:45 2025
 Response via : Initial Calibration

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

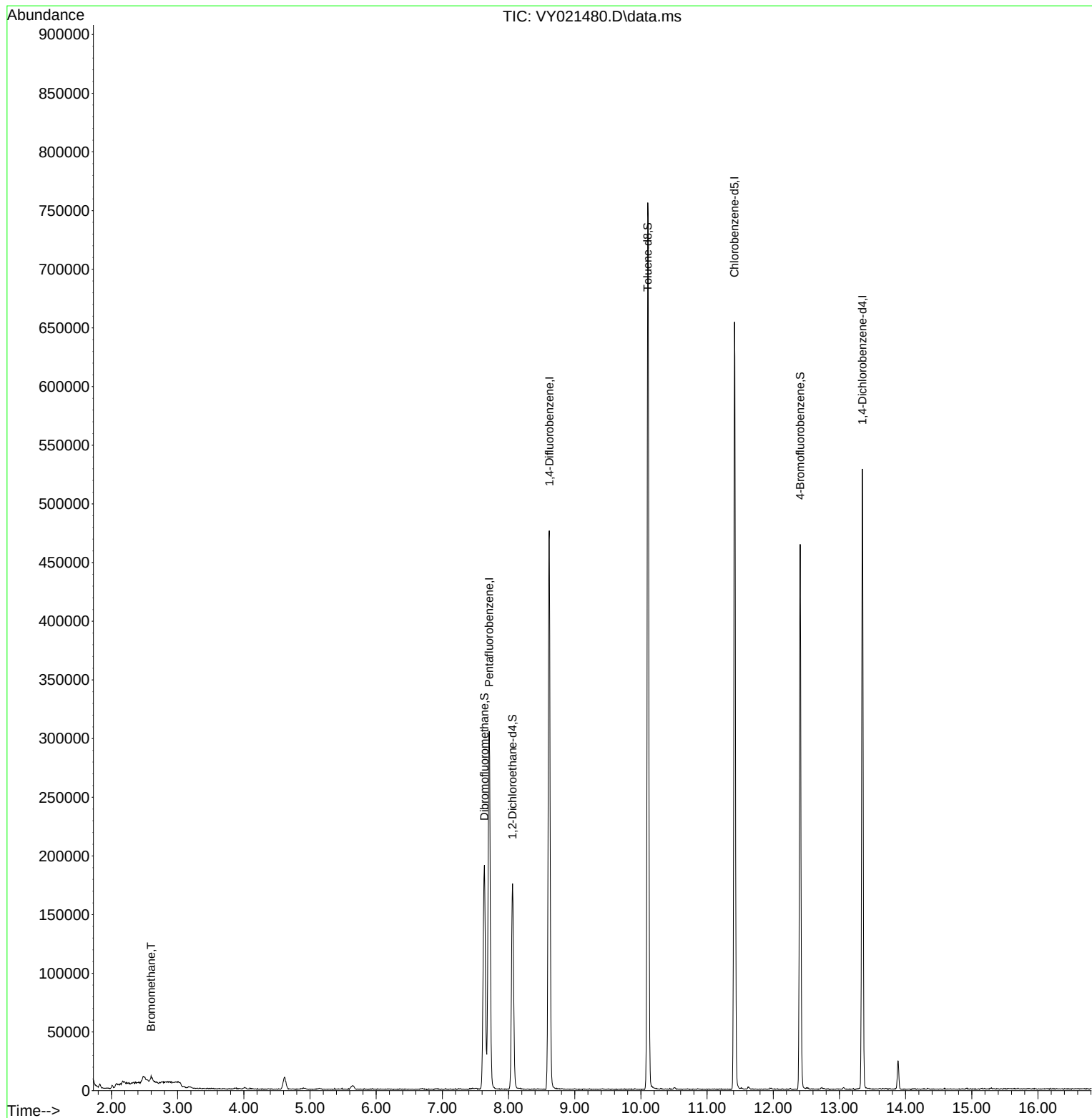
Internal Standards						
1) Pentafluorobenzene	7.707	168	233794	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.615	114	402762	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.414	117	340384	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.346	152	126386	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	139449	56.433	ug/l	0.00
Spiked Amount	50.000	Range	50 - 163	Recovery	=	112.860%
35) Dibromofluoromethane	7.634	113	134348	50.747	ug/l	0.00
Spiked Amount	50.000	Range	54 - 147	Recovery	=	101.500%
50) Toluene-d8	10.103	98	479026	47.788	ug/l	0.00
Spiked Amount	50.000	Range	58 - 134	Recovery	=	95.580%
62) 4-Bromofluorobenzene	12.407	95	137856	40.430	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	=	80.860%
Target Compounds						
5) Bromomethane	2.598	94	2830	1.185	ug/l	Qvalue 90

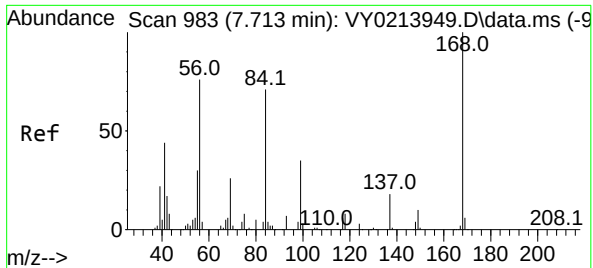
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
Data File : VY021480.D
Acq On : 11 Mar 2025 12:48
Operator : SY/MD
Sample : Q1514-05
Misc : 7.66g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
ENV-103-SB01

Quant Time: Mar 12 01:24:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 12:42:45 2025
Response via : Initial Calibration

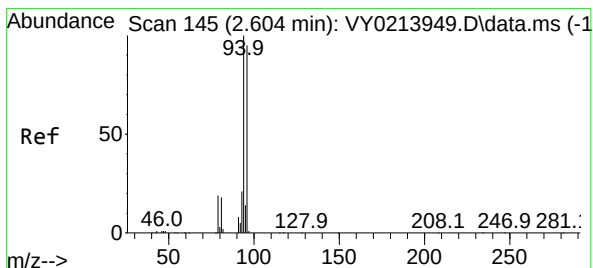
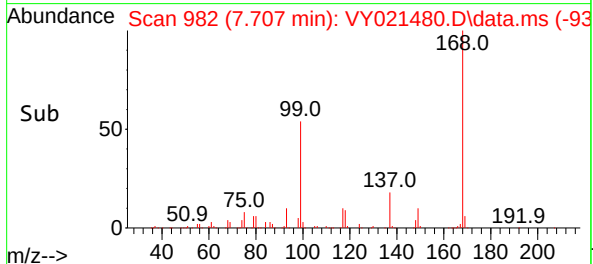
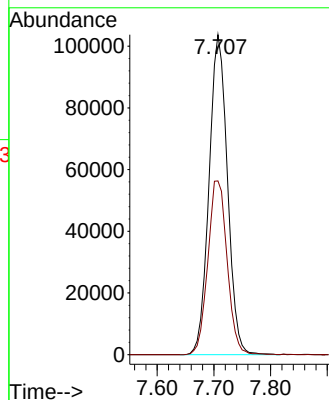
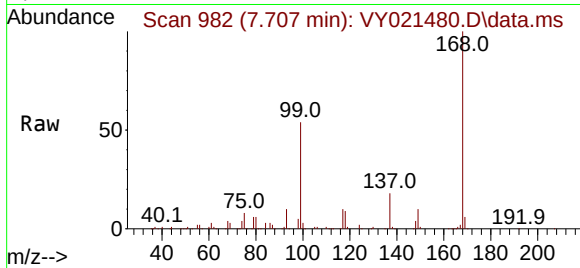




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.707 min Scan# 91
Delta R.T. -0.006 min
Lab File: VY021480.D
Acq: 11 Mar 2025 12:48

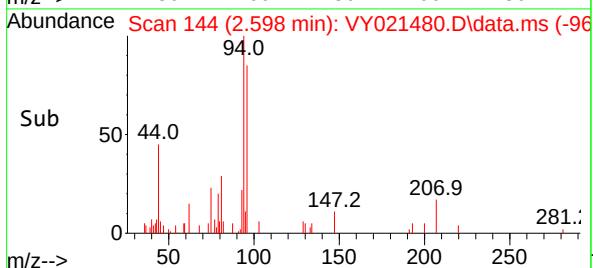
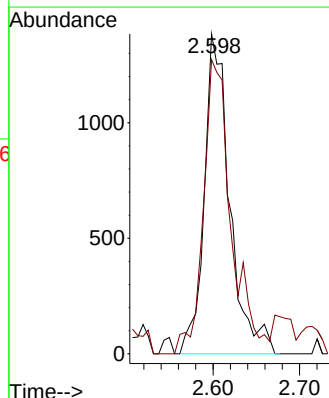
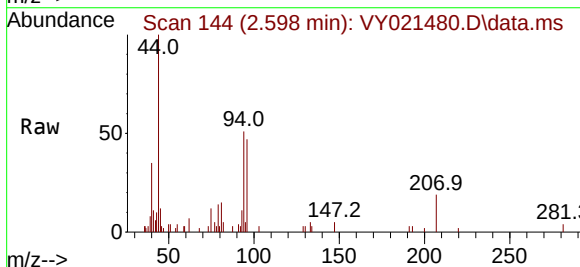
Instrument :
MSVOA_Y
ClientSampleId :
ENV-103-SB01

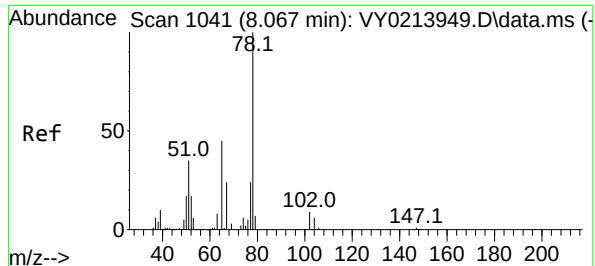
Tgt Ion:168 Resp: 233794
Ion Ratio Lower Upper
168 100
99 54.3 46.0 69.0



#5
Bromomethane
Concen: 1.185 ug/l
RT: 2.598 min Scan# 144
Delta R.T. -0.006 min
Lab File: VY021480.D
Acq: 11 Mar 2025 12:48

Tgt Ion: 94 Resp: 2830
Ion Ratio Lower Upper
94 100
96 85.9 76.3 114.5





#33

1,2-Dichloroethane-d4

Concen: 56.433 ug/l

RT: 8.061 min Scan# 1

Delta R.T. -0.006 min

Lab File: VY021480.D

Acq: 11 Mar 2025 12:48

Instrument :

MSVOA_Y

ClientSampleId :

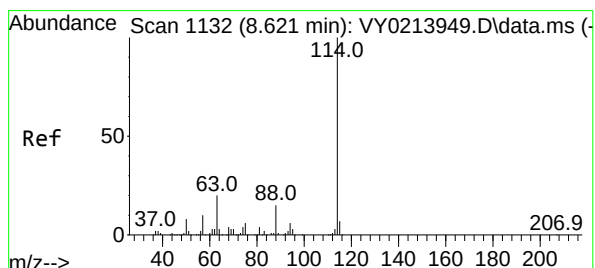
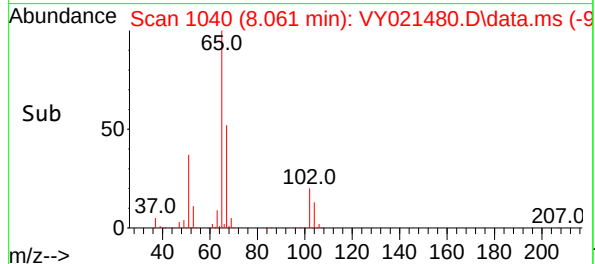
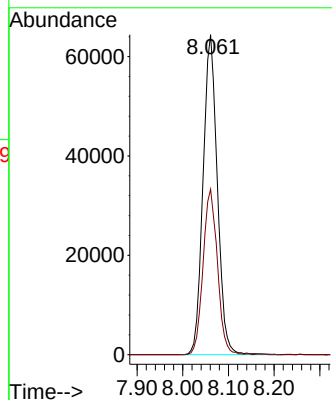
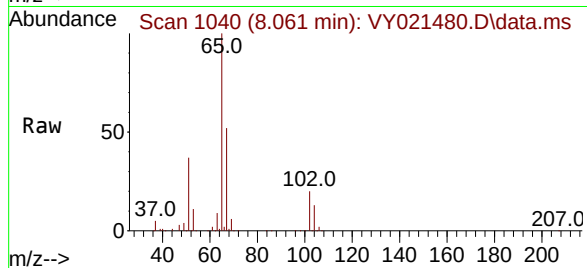
ENV-103-SB01

Tgt Ion: 65 Resp: 139449

Ion Ratio Lower Upper

65 100

67 52.0 0.0 102.8



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.615 min Scan# 1131

Delta R.T. -0.006 min

Lab File: VY021480.D

Acq: 11 Mar 2025 12:48

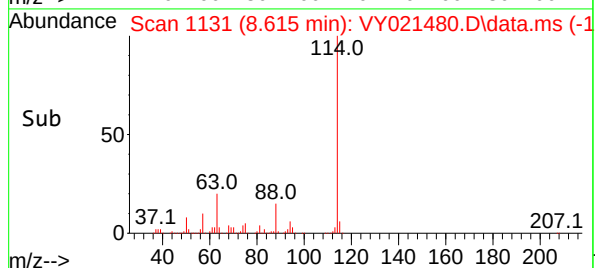
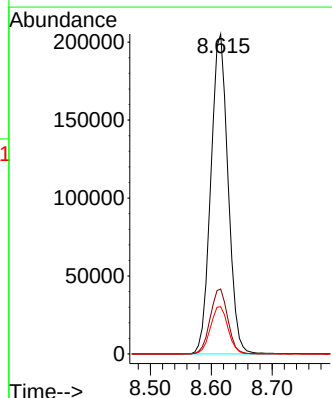
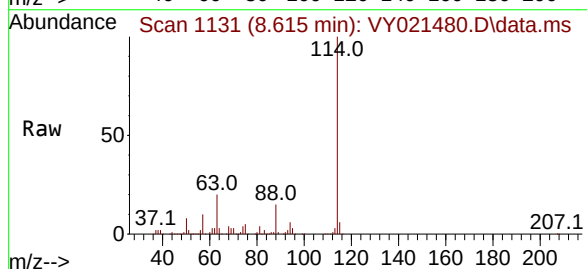
Tgt Ion: 114 Resp: 402762

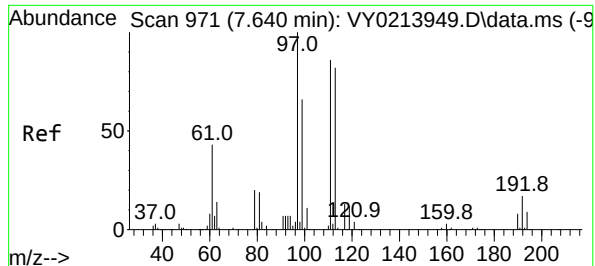
Ion Ratio Lower Upper

114 100

63 20.3 0.0 40.8

88 14.7 0.0 30.8





#35

Dibromofluoromethane

Concen: 50.747 ug/l

RT: 7.634 min Scan# 91

Delta R.T. -0.006 min

Lab File: VY021480.D

Acq: 11 Mar 2025 12:48

Instrument :

MSVOA_Y

ClientSampleId :

ENV-103-SB01

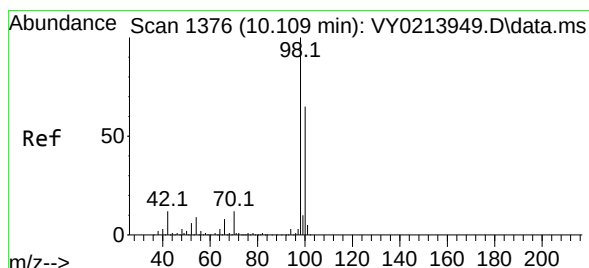
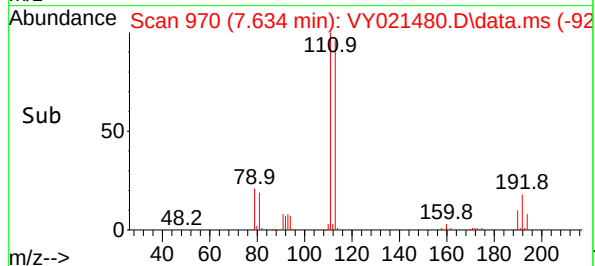
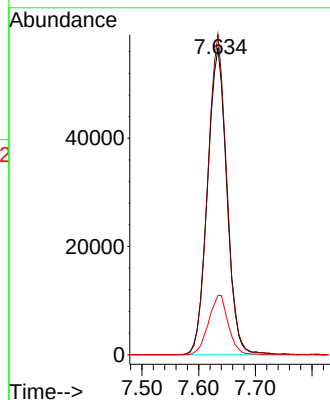
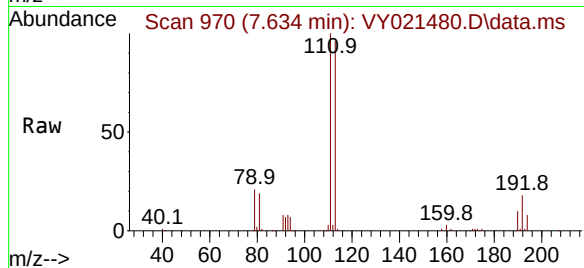
Tgt Ion:113 Resp: 134348

Ion Ratio Lower Upper

113 100

111 102.4 82.0 123.0

192 19.7 15.9 23.9



#50

Toluene-d8

Concen: 47.788 ug/l

RT: 10.103 min Scan# 1375

Delta R.T. -0.006 min

Lab File: VY021480.D

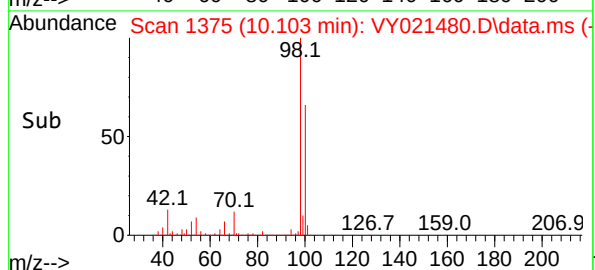
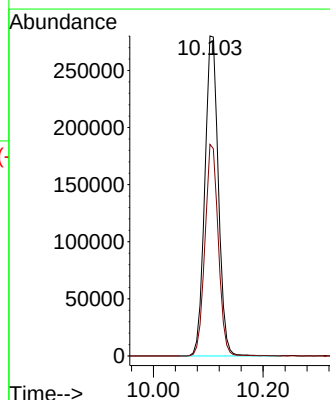
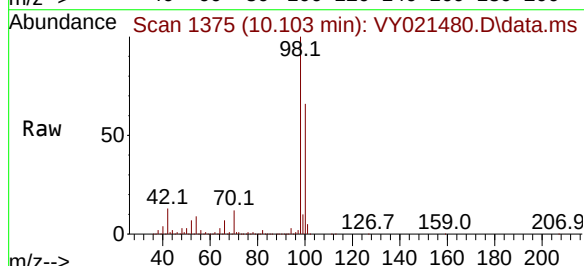
Acq: 11 Mar 2025 12:48

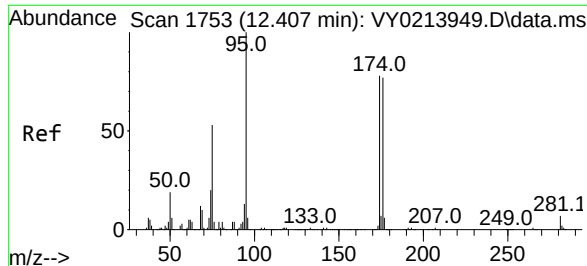
Tgt Ion: 98 Resp: 479026

Ion Ratio Lower Upper

98 100

100 65.1 52.1 78.1





#62

4-Bromofluorobenzene

Concen: 40.430 ug/l

RT: 12.407 min Scan# 1753

Delta R.T. 0.000 min

Lab File: VY021480.D

Acq: 11 Mar 2025 12:48

Instrument :

MSVOA_Y

ClientSampleId :

ENV-103-SB01

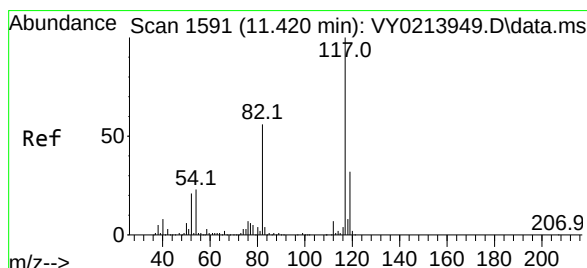
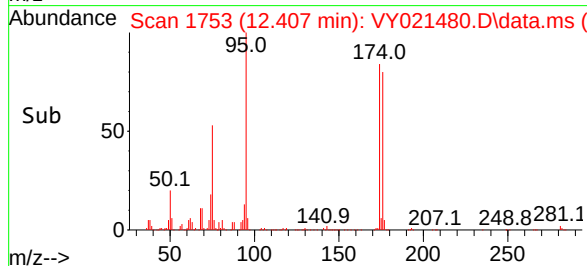
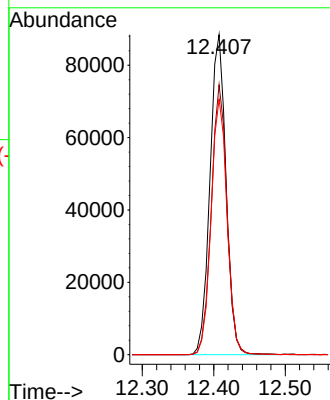
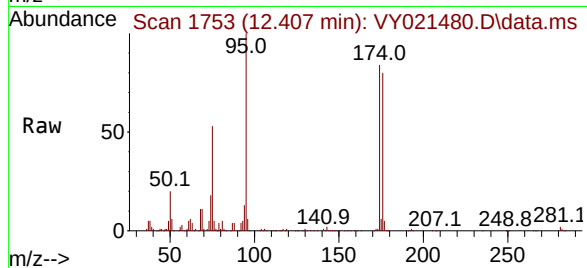
Tgt Ion: 95 Resp: 137856

Ion Ratio Lower Upper

95 100

174 82.8 0.0 165.0

176 79.4 0.0 160.0



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.414 min Scan# 1590

Delta R.T. -0.006 min

Lab File: VY021480.D

Acq: 11 Mar 2025 12:48

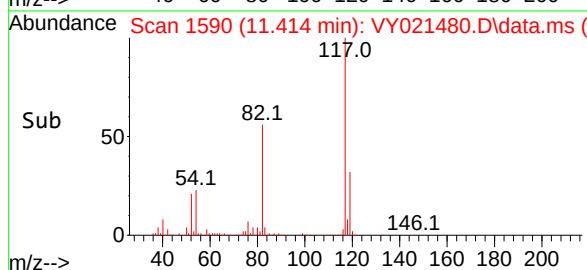
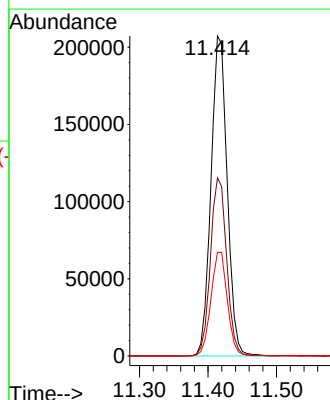
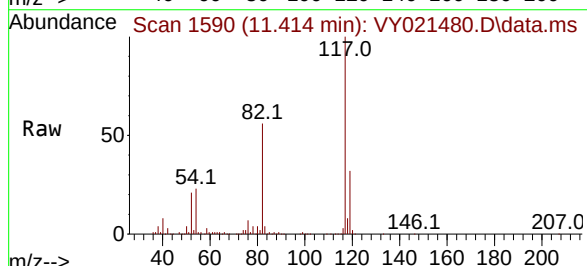
Tgt Ion: 117 Resp: 340384

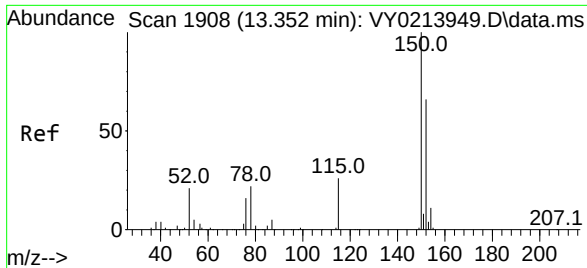
Ion Ratio Lower Upper

117 100

82 55.7 44.6 67.0

119 32.3 25.4 38.0





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.346 min Scan# 1907

Delta R.T. -0.006 min

Lab File: VY021480.D

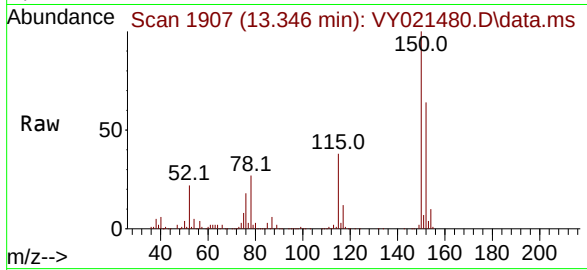
Acq: 11 Mar 2025 12:48

Instrument :

MSVOA_Y

ClientSampleId :

ENV-103-SB01



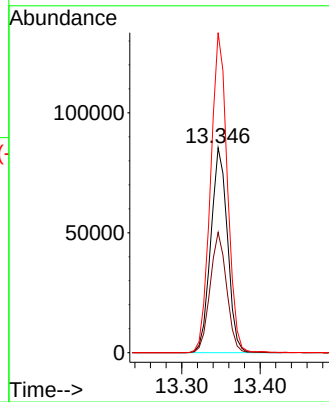
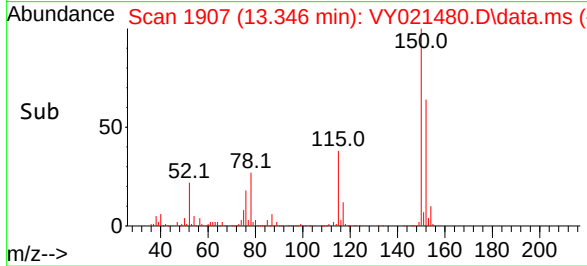
Tgt Ion:152 Resp: 126386

Ion Ratio Lower Upper

152 100

115 58.1 29.0 87.0

150 156.9 0.0 347.2



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
Data File : VY021480.D
Acq On : 11 Mar 2025 12:48
Operator : SY/MD
Sample : Q1514-05
Misc : 7.66g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
ENV-103-SB01

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Sampling : 1

Start Thrs: 0.2

Stop Thrs : 0

Filtering: 5

Min Area: 3 % of largest Peak

Max Peaks: 100

Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M

Title : SW846 8260

Signal : TIC: VY021480.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.616	465	475	484	rBV4	10294	31550	2.44%	0.486%
2	7.634	957	970	976	rBV2	190944	460779	35.62%	7.103%
3	7.707	976	982	993	rVB	303838	698988	54.04%	10.775%
4	8.061	1030	1040	1052	rBV	175299	391100	30.24%	6.029%
5	8.615	1122	1131	1146	rBV	476211	962219	74.39%	14.833%
6	10.103	1367	1375	1384	rBV	755830	1293493	100.00%	19.939%
7	11.414	1582	1590	1602	rBV	654073	1080051	83.50%	16.649%
8	12.407	1746	1753	1766	rBV	464579	740301	57.23%	11.412%
9	13.346	1901	1907	1921	rVB	528062	787693	60.90%	12.142%
10	13.883	1987	1995	2003	rVB	24216	41014	3.17%	0.632%

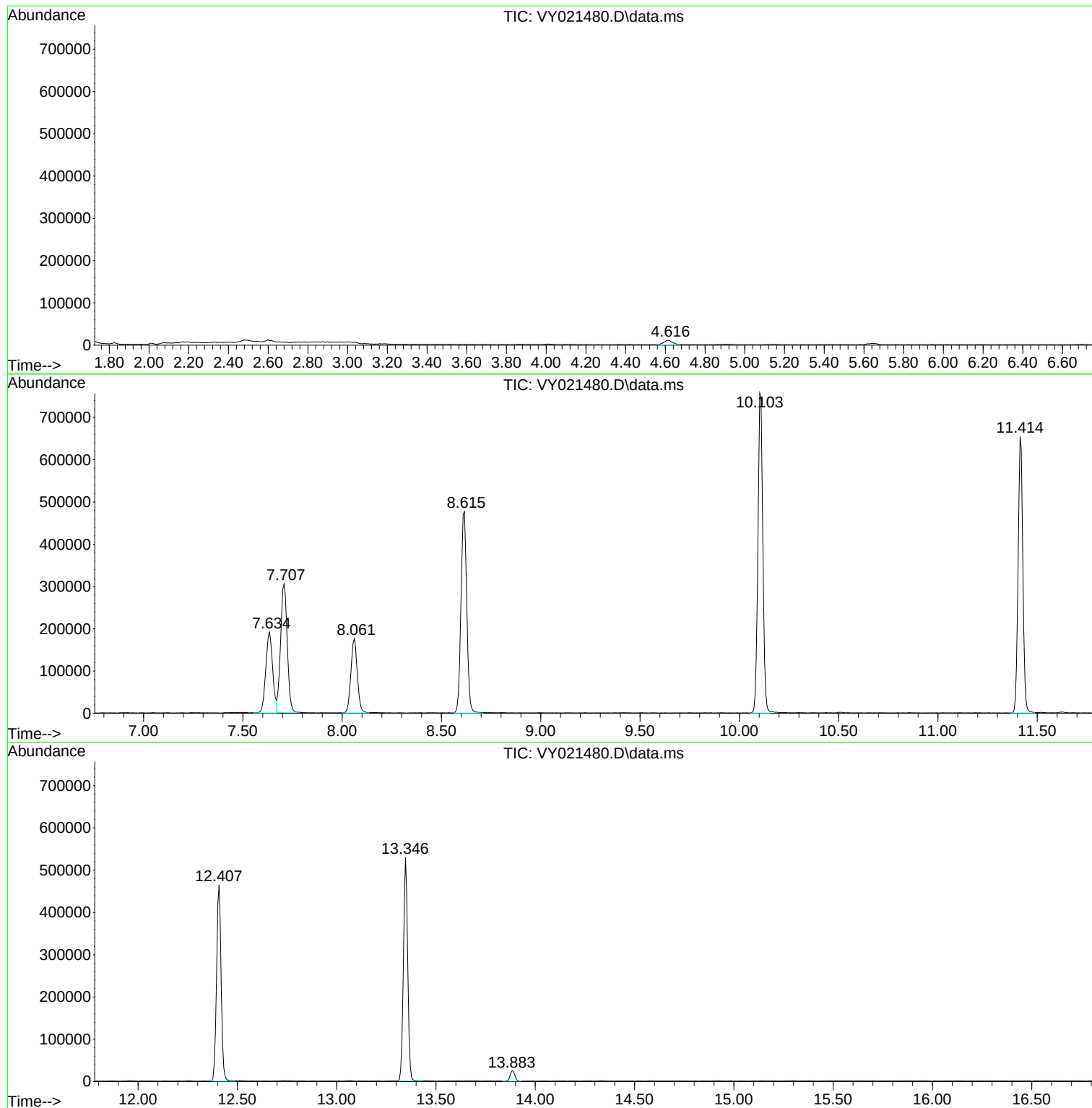
Sum of corrected areas: 6487188

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
Data File : VY021480.D
Acq On : 11 Mar 2025 12:48
Operator : SY/MD
Sample : Q1514-05
Misc : 7.66g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
ENV-103-SB01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
Data File : VY021480.D
Acq On : 11 Mar 2025 12:48
Operator : SY/MD
Sample : Q1514-05
Misc : 7.66g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
ENV-103-SB01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
Data File : VY021480.D
Acq On : 11 Mar 2025 12:48
Operator : SY/MD
Sample : Q1514-05
Misc : 7.66g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
ENV-103-SB01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	03/05/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/06/25
Client Sample ID:	ENV-105-GW01	SDG No.:	Q1514
Lab Sample ID:	Q1514-07	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:			uL
GC Column:	RXI-624	ID :	0.25
Prep Method :		Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085919.D	1		03/10/25 17:11	VN031025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.21	U	0.21	1.00	ug/L
74-87-3	Chloromethane	0.35	U	0.35	1.00	ug/L
75-01-4	Vinyl Chloride	0.34	U	0.34	1.00	ug/L
74-83-9	Bromomethane	1.40	U	1.40	5.00	ug/L
75-00-3	Chloroethane	0.56	U	0.56	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.34	U	0.34	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.25	U	0.25	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.26	U	0.26	1.00	ug/L
67-64-1	Acetone	7.20		1.40	5.00	ug/L
75-15-0	Carbon Disulfide	0.32	U	0.32	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	0.16	U	0.16	1.00	ug/L
79-20-9	Methyl Acetate	0.60	U	0.60	1.00	ug/L
75-09-2	Methylene Chloride	0.32	U	0.32	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.25	U	0.25	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.23	U	0.23	1.00	ug/L
110-82-7	Cyclohexane	1.60	U	1.60	5.00	ug/L
78-93-3	2-Butanone	1.30	U	1.30	5.00	ug/L
56-23-5	Carbon Tetrachloride	0.25	U	0.25	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.25	U	0.25	1.00	ug/L
74-97-5	Bromochloromethane	0.18	U	0.18	1.00	ug/L
67-66-3	Chloroform	0.26	U	0.26	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.19	U	0.19	1.00	ug/L
108-87-2	Methylcyclohexane	0.19	U	0.19	1.00	ug/L
71-43-2	Benzene	0.16	U	0.16	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.24	U	0.24	1.00	ug/L
79-01-6	Trichloroethene	0.32	U	0.32	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.19	U	0.19	1.00	ug/L
75-27-4	Bromodichloromethane	0.24	U	0.24	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	0.75	U	0.75	5.00	ug/L
108-88-3	Toluene	0.18	U	0.18	1.00	ug/L

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	03/05/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/06/25
Client Sample ID:	ENV-105-GW01	SDG No.:	Q1514
Lab Sample ID:	Q1514-07	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085919.D	1		03/10/25 17:11	VN031025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.21	U	0.21	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.18	U	0.18	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.21	U	0.21	1.00	ug/L
591-78-6	2-Hexanone	1.10	U	1.10	5.00	ug/L
124-48-1	Dibromochloromethane	0.18	U	0.18	1.00	ug/L
106-93-4	1,2-Dibromoethane	0.16	U	0.16	1.00	ug/L
127-18-4	Tetrachloroethene	0.25	U	0.25	1.00	ug/L
108-90-7	Chlorobenzene	0.13	U	0.13	1.00	ug/L
100-41-4	Ethyl Benzene	0.16	U	0.16	1.00	ug/L
179601-23-1	m/p-Xylenes	0.31	U	0.31	2.00	ug/L
95-47-6	o-Xylene	0.14	U	0.14	1.00	ug/L
100-42-5	Styrene	0.16	U	0.16	1.00	ug/L
75-25-2	Bromoform	0.21	U	0.21	1.00	ug/L
98-82-8	Isopropylbenzene	0.13	U	0.13	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.27	U	0.27	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.24	U	0.24	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.27	U	0.27	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.19	U	0.19	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.46	U	0.46	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.42	U	0.42	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.51	U	0.51	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	52.9		70 (74) - 130 (125)	106%	SPK: 50
1868-53-7	Dibromofluoromethane	48.0		70 (75) - 130 (124)	96%	SPK: 50
2037-26-5	Toluene-d8	45.4		70 (86) - 130 (113)	91%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.1		70 (77) - 130 (121)	94%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	181000	8.224			
540-36-3	1,4-Difluorobenzene	337000	9.1			
3114-55-4	Chlorobenzene-d5	290000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	120000	13.788			

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	03/05/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/06/25
Client Sample ID:	ENV-105-GW01	SDG No.:	Q1514
Lab Sample ID:	Q1514-07	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:			uL
GC Column:	RXI-624	ID :	0.25
Prep Method :		Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085919.D	1		03/10/25 17:11	VN031025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\
 Data File : VN085919.D
 Acq On : 10 Mar 2025 17:11
 Operator : JC\MD
 Sample : Q1514-07
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 ENV-105-GW01

Quant Time: Mar 11 01:39:49 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
 Quant Title : SW846 8260
 QLast Update : Wed Feb 19 03:43:32 2025
 Response via : Initial Calibration

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

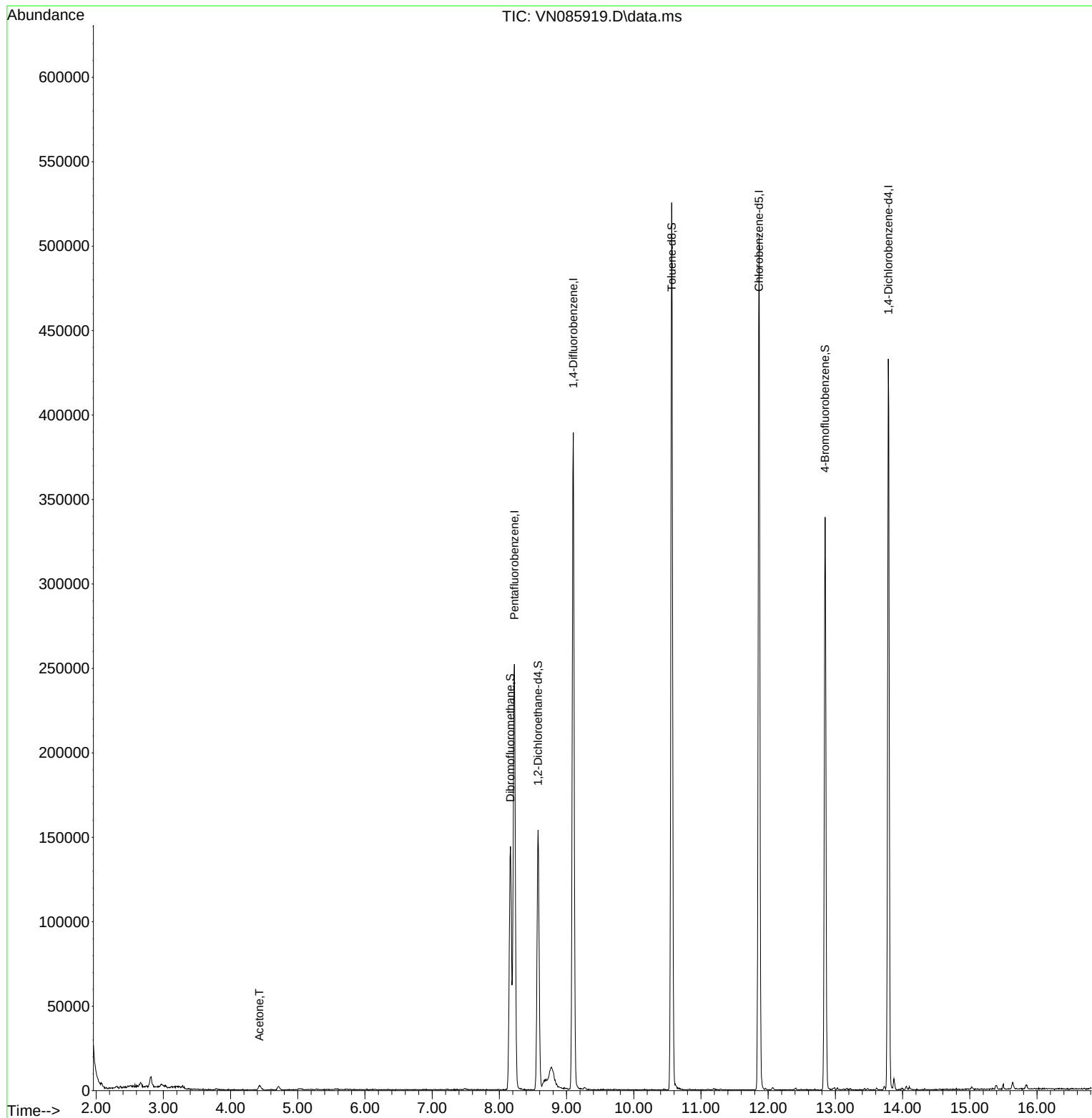
Internal Standards						
1) Pentafluorobenzene	8.224	168	180602	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	336697	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	290159	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	119785	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	123756	52.855	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 105.700%			
35) Dibromofluoromethane	8.165	113	105753	48.000	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 96.000%			
50) Toluene-d8	10.565	98	364171	45.431	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 90.860%			
62) 4-Bromofluorobenzene	12.847	95	124468	47.128	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 94.260%			
Target Compounds						
16) Acetone	4.430	43	5327	7.190	ug/l	Qvalue 96

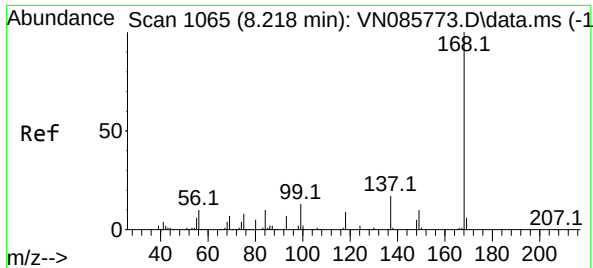
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\
Data File : VN085919.D
Acq On : 10 Mar 2025 17:11
Operator : JC\MD
Sample : Q1514-07
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ENV-105-GW01

Quant Time: Mar 11 01:39:49 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260
QLast Update : Wed Feb 19 03:43:32 2025
Response via : Initial Calibration

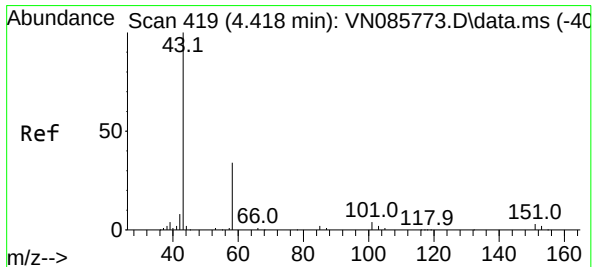
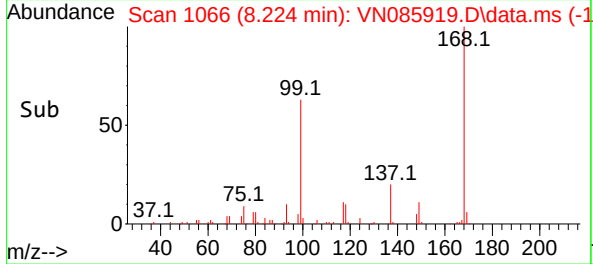
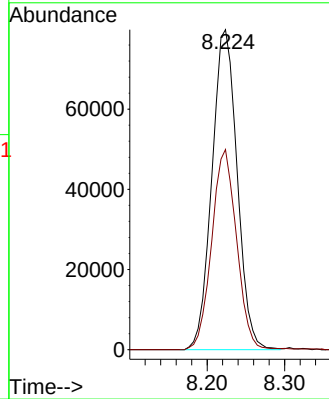
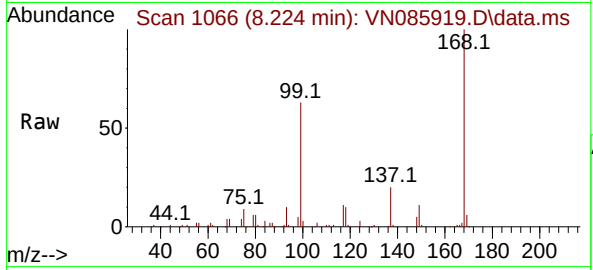




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1066
Delta R.T. 0.006 min
Lab File: VN085919.D
Acq: 10 Mar 2025 17:11

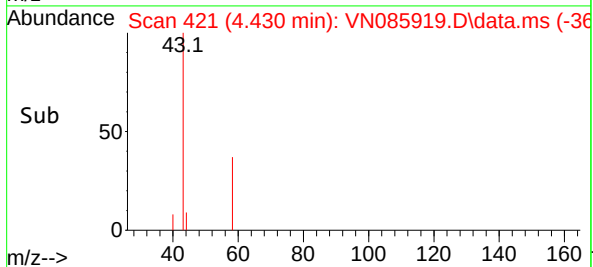
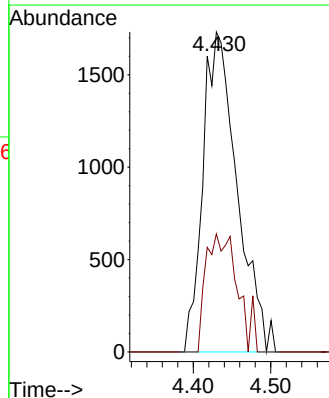
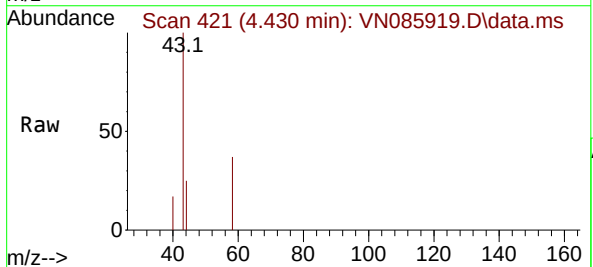
Instrument :
MSVOA_N
ClientSampleId :
ENV-105-GW01

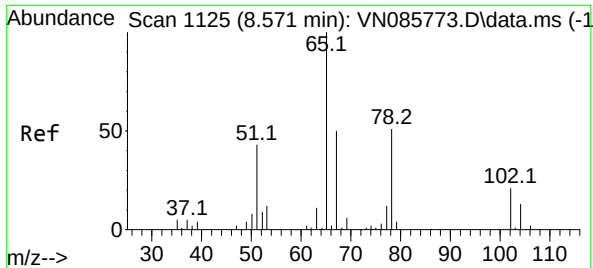
Tgt Ion:168 Resp: 180602
Ion Ratio Lower Upper
168 100
99 62.6 47.9 71.9



#16
Acetone
Concen: 7.190 ug/l
RT: 4.430 min Scan# 421
Delta R.T. 0.012 min
Lab File: VN085919.D
Acq: 10 Mar 2025 17:11

Tgt Ion: 43 Resp: 5327
Ion Ratio Lower Upper
43 100
58 36.9 27.5 41.3





#33

1,2-Dichloroethane-d4

Concen: 52.855 ug/l

RT: 8.577 min Scan# 1125

Delta R.T. 0.006 min

Lab File: VN085919.D

Acq: 10 Mar 2025 17:11

Instrument :

MSVOA_N

ClientSampleId :

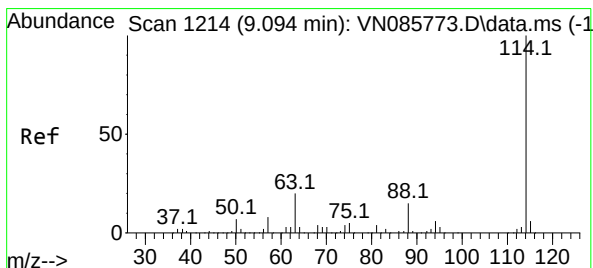
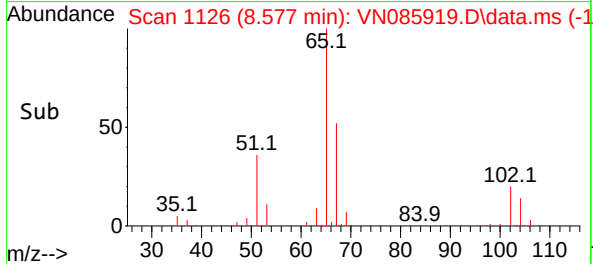
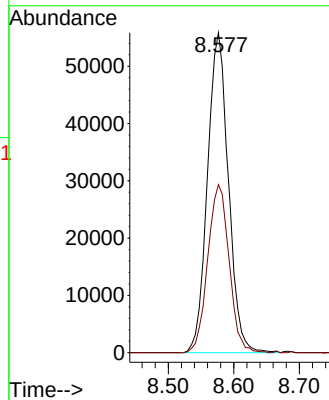
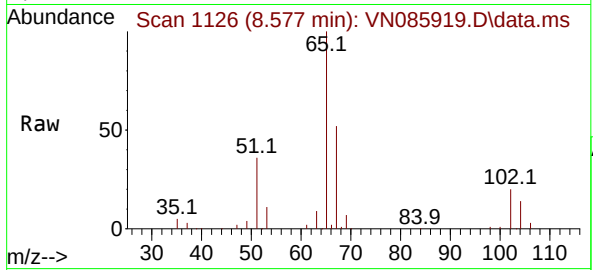
ENV-105-GW01

Tgt Ion: 65 Resp: 123756

Ion Ratio Lower Upper

65 100

67 53.6 0.0 106.2



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.100 min Scan# 1215

Delta R.T. 0.006 min

Lab File: VN085919.D

Acq: 10 Mar 2025 17:11

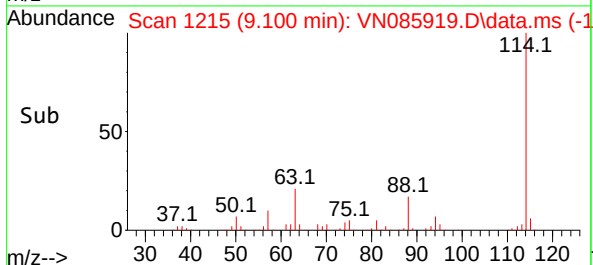
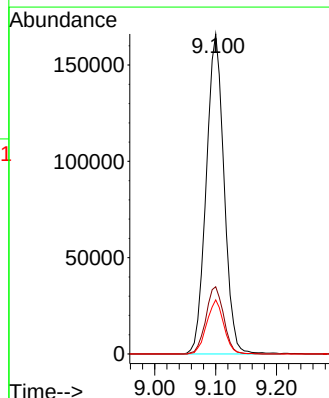
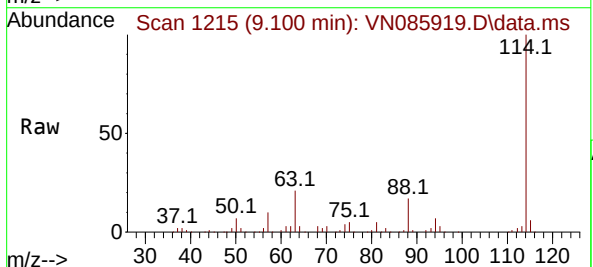
Tgt Ion: 114 Resp: 336697

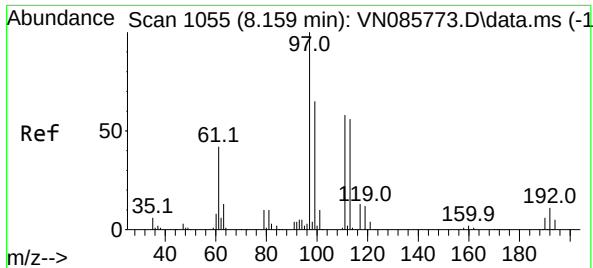
Ion Ratio Lower Upper

114 100

63 21.0 0.0 39.2

88 16.9 0.0 30.0





#35

Dibromofluoromethane

Concen: 48.000 ug/l

RT: 8.165 min Scan# 1055

Delta R.T. 0.006 min

Lab File: VN085919.D

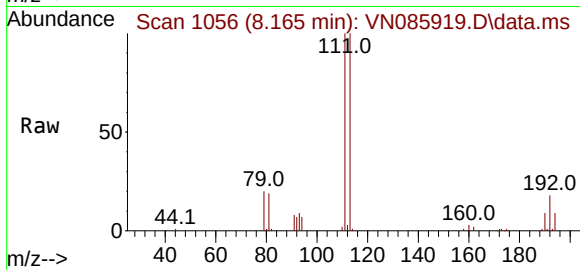
Acq: 10 Mar 2025 17:11

Instrument :

MSVOA_N

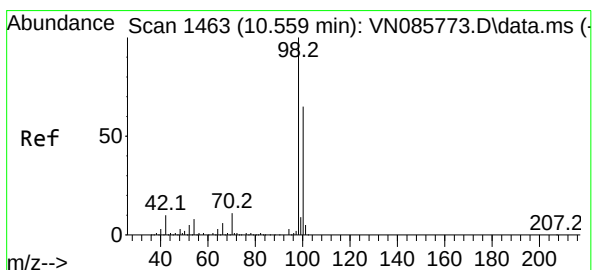
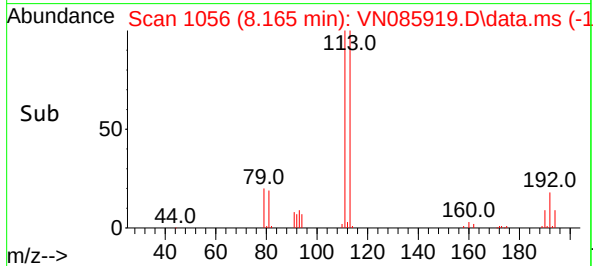
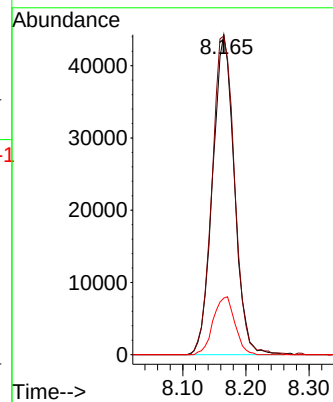
ClientSampleId :

ENV-105-GW01



Tgt Ion:113 Resp: 105753

Ion	Ratio	Lower	Upper
113	100		
111	103.3	82.2	123.4
192	18.0	14.7	22.1



#50

Toluene-d8

Concen: 45.431 ug/l

RT: 10.565 min Scan# 1464

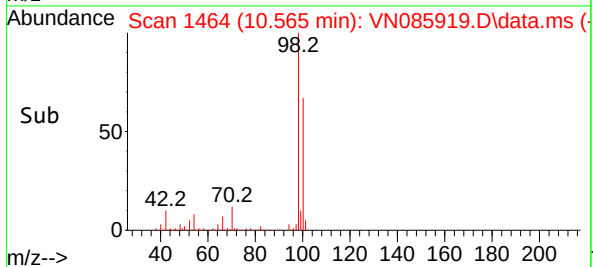
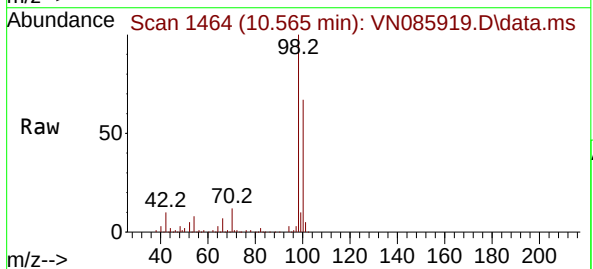
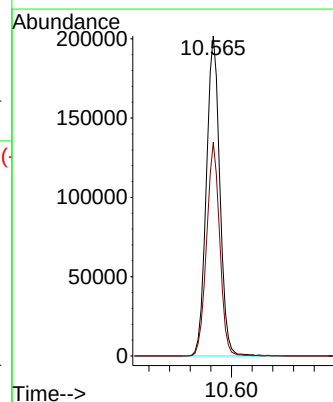
Delta R.T. 0.006 min

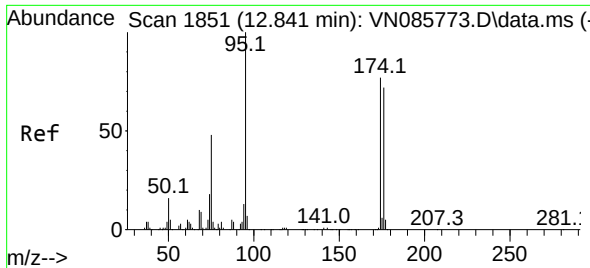
Lab File: VN085919.D

Acq: 10 Mar 2025 17:11

Tgt Ion: 98 Resp: 364171

Ion	Ratio	Lower	Upper
98	100		
100	65.0	52.1	78.1

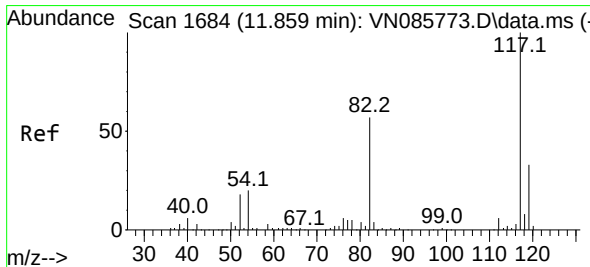
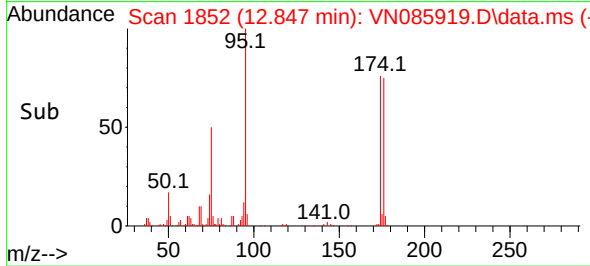
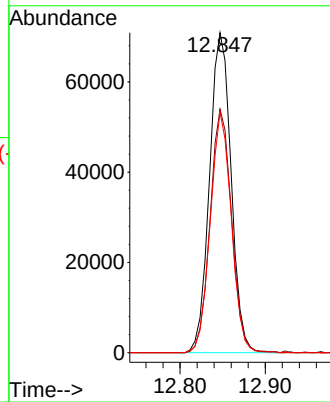
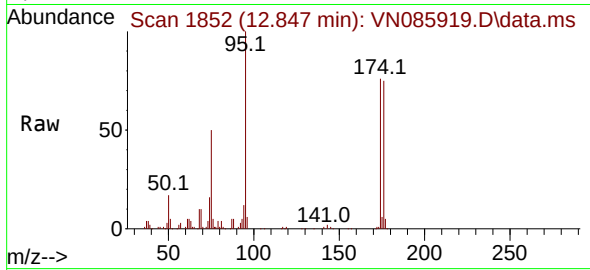




#62
4-Bromofluorobenzene
Concen: 47.128 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.006 min
Lab File: VN085919.D
Acq: 10 Mar 2025 17:11

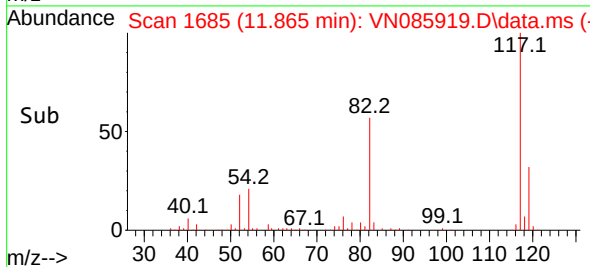
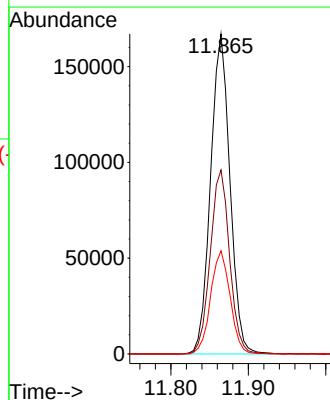
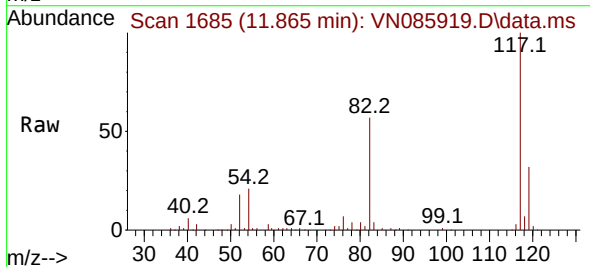
Instrument :
MSVOA_N
ClientSampleId :
ENV-105-GW01

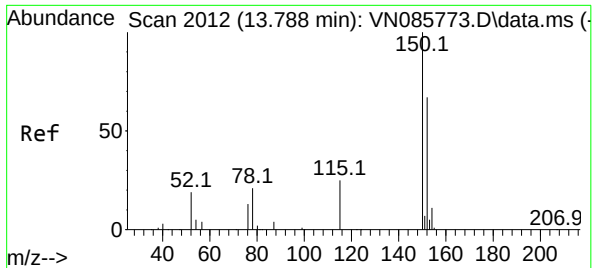
Tgt Ion: 95 Resp: 124468
Ion Ratio Lower Upper
95 100
174 75.9 0.0 152.4
176 73.3 0.0 146.6



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1685
Delta R.T. 0.006 min
Lab File: VN085919.D
Acq: 10 Mar 2025 17:11

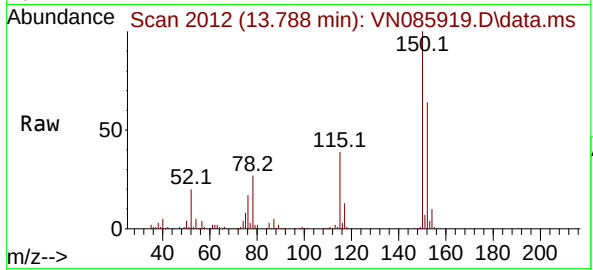
Tgt Ion: 117 Resp: 290159
Ion Ratio Lower Upper
117 100
82 57.5 45.7 68.5
119 32.3 26.2 39.2



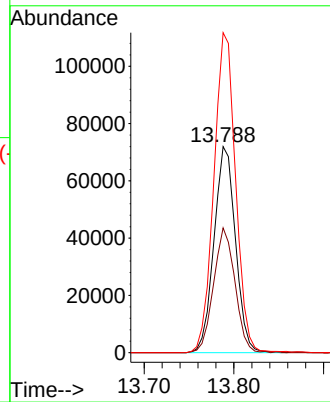
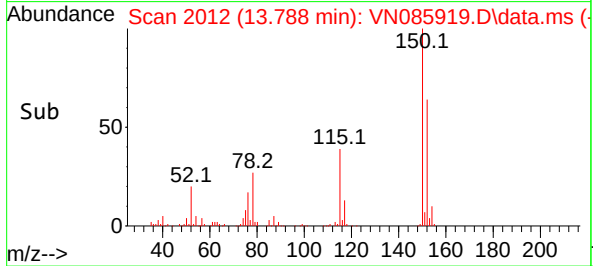


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 20
Delta R.T. -0.000 min
Lab File: VN085919.D
Acq: 10 Mar 2025 17:11

Instrument :
MSVOA_N
ClientSampleId :
ENV-105-GW01



Tgt Ion:152 Resp: 119785
Ion Ratio Lower Upper
152 100
115 60.4 30.4 91.3
150 157.2 0.0 345.4



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\
Data File : VN085919.D
Acq On : 10 Mar 2025 17:11
Operator : JC\MD
Sample : Q1514-07
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ENV-105-GW01

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Filtering: 5

Sampling : 1

Min Area: 3 % of largest Peak

Start Thrs: 0.2

Max Peaks: 100

Stop Thrs : 0

Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M

Title : SW846 8260

Signal : TIC: VN085919.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.818	140	147	155	rVB3	6264	14928	1.59%	0.285%
2	8.165	1046	1056	1060	rBV2	144008	336826	35.78%	6.440%
3	8.224	1060	1066	1079	rVB	251507	567252	60.25%	10.846%
4	8.577	1117	1126	1135	rBV	153789	340336	36.15%	6.507%
5	8.777	1153	1160	1176	rVB4	11846	53720	5.71%	1.027%
6	9.100	1207	1215	1231	rVB	388751	785421	83.42%	15.017%
7	10.565	1456	1464	1478	rBV	525254	941485	100.00%	18.001%
8	11.865	1675	1685	1699	rBV	506884	883183	93.81%	16.887%
9	12.847	1844	1852	1861	rBV	339194	586657	62.31%	11.217%
10	13.788	2005	2012	2023	rBV	432438	720270	76.50%	13.772%

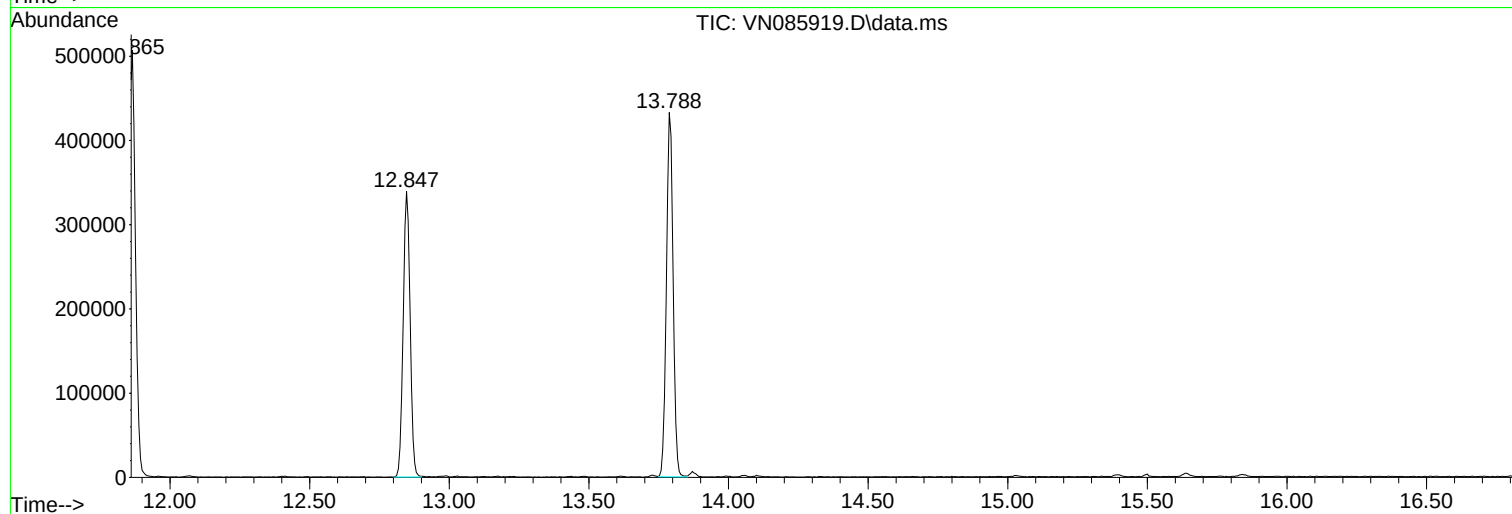
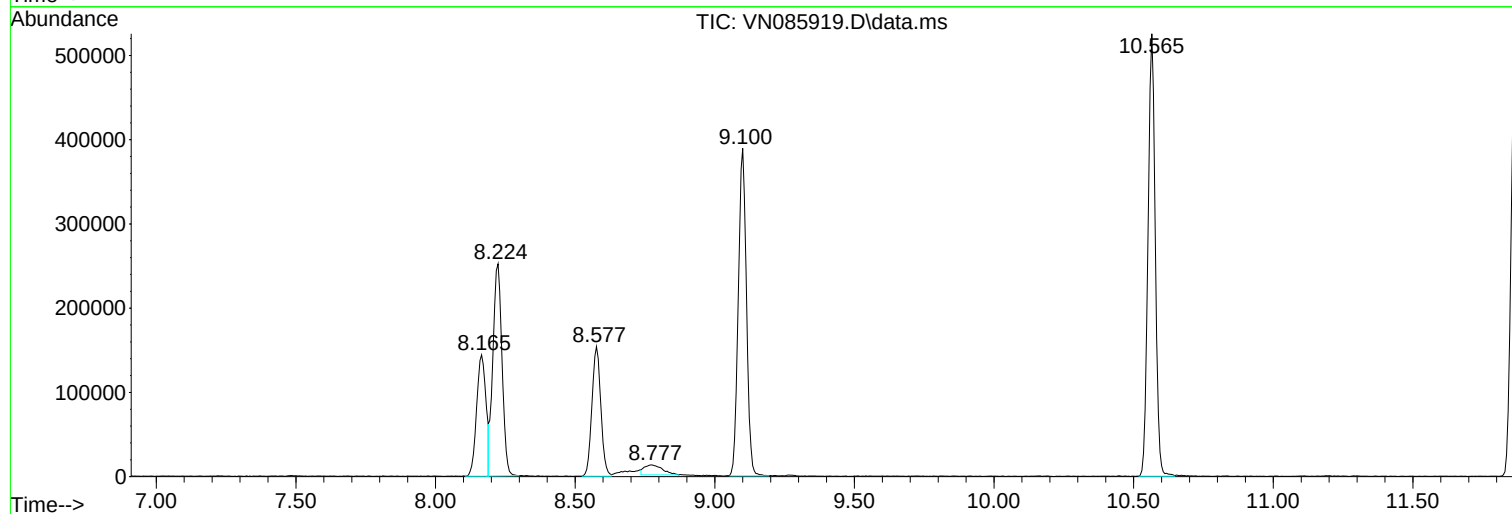
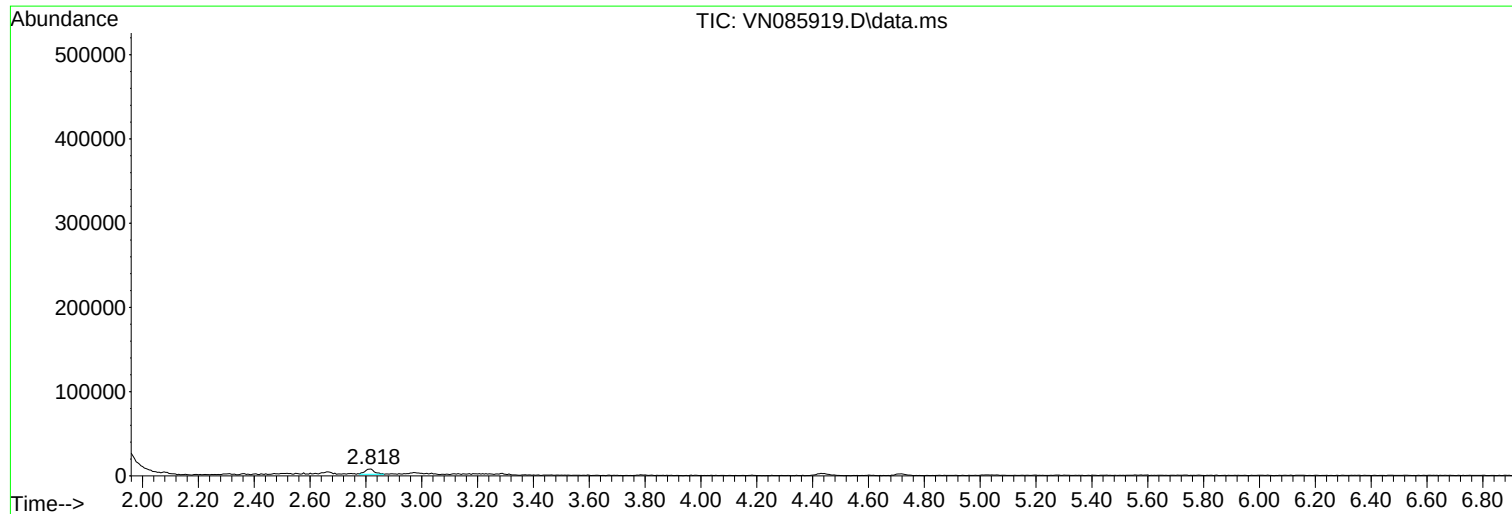
Sum of corrected areas: 5230078

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\
Data File : VN085919.D
Acq On : 10 Mar 2025 17:11
Operator : JC\MD
Sample : Q1514-07
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ENV-105-GW01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\
Data File : VN085919.D
Acq On : 10 Mar 2025 17:11
Operator : JC\MD
Sample : Q1514-07
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ENV-105-GW01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\
Data File : VN085919.D
Acq On : 10 Mar 2025 17:11
Operator : JC\MD
Sample : Q1514-07
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ENV-105-GW01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	03/05/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/06/25
Client Sample ID:	ENV-103-GW01	SDG No.:	Q1514
Lab Sample ID:	Q1514-08	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085920.D	1		03/10/25 17:35	VN031025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.21	U	0.21	1.00	ug/L
74-87-3	Chloromethane	0.35	U	0.35	1.00	ug/L
75-01-4	Vinyl Chloride	0.34	U	0.34	1.00	ug/L
74-83-9	Bromomethane	1.40	U	1.40	5.00	ug/L
75-00-3	Chloroethane	0.56	U	0.56	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.34	U	0.34	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.25	U	0.25	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.26	U	0.26	1.00	ug/L
67-64-1	Acetone	26.1		1.40	5.00	ug/L
75-15-0	Carbon Disulfide	0.32	U	0.32	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	0.16	U	0.16	1.00	ug/L
79-20-9	Methyl Acetate	0.60	U	0.60	1.00	ug/L
75-09-2	Methylene Chloride	0.32	U	0.32	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.25	U	0.25	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.23	U	0.23	1.00	ug/L
110-82-7	Cyclohexane	1.60	U	1.60	5.00	ug/L
78-93-3	2-Butanone	1.30	U	1.30	5.00	ug/L
56-23-5	Carbon Tetrachloride	0.25	U	0.25	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.25	U	0.25	1.00	ug/L
74-97-5	Bromochloromethane	0.18	U	0.18	1.00	ug/L
67-66-3	Chloroform	0.26	U	0.26	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.19	U	0.19	1.00	ug/L
108-87-2	Methylcyclohexane	0.19	U	0.19	1.00	ug/L
71-43-2	Benzene	0.16	U	0.16	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.24	U	0.24	1.00	ug/L
79-01-6	Trichloroethene	0.32	U	0.32	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.19	U	0.19	1.00	ug/L
75-27-4	Bromodichloromethane	0.24	U	0.24	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	0.75	U	0.75	5.00	ug/L
108-88-3	Toluene	0.18	U	0.18	1.00	ug/L

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	03/05/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/06/25
Client Sample ID:	ENV-103-GW01	SDG No.:	Q1514
Lab Sample ID:	Q1514-08	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085920.D	1		03/10/25 17:35	VN031025

[illegible]

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	03/05/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/06/25
Client Sample ID:	ENV-103-GW01	SDG No.:	Q1514
Lab Sample ID:	Q1514-08	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:			uL
GC Column:	RXI-624	ID :	0.25
Prep Method :		Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085920.D	1		03/10/25 17:35	VN031025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
000075-18-3	Dimethyl sulfide	31.3	J		4.52	ug/L

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\
Data File : VN085920.D
Acq On : 10 Mar 2025 17:35
Operator : JC\MD
Sample : Q1514-08
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ENV-103-GW01

Quant Time: Mar 11 01:40:22 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260
QLast Update : Wed Feb 19 03:43:32 2025
Response via : Initial Calibration

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

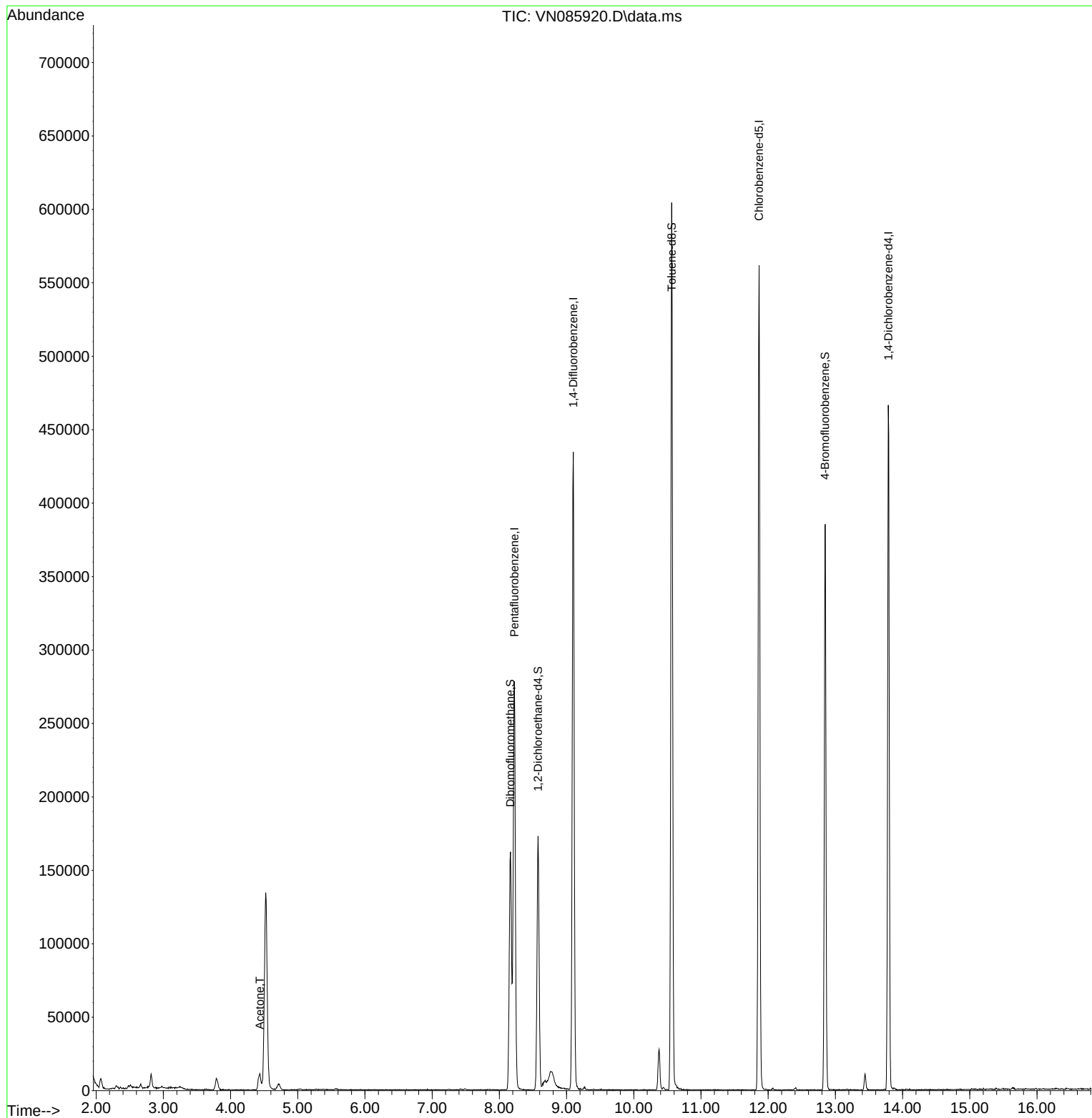
Internal Standards						
1) Pentafluorobenzene	8.224	168	199177	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	373736	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	326066	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	130206	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.576	65	138417	53.603	ug/l	0.00
Spiked Amount	50.000	Range	74 - 125	Recovery	= 107.200%	
35) Dibromofluoromethane	8.165	113	118331	48.386	ug/l	0.00
Spiked Amount	50.000	Range	75 - 124	Recovery	= 96.780%	
50) Toluene-d8	10.565	98	424658	47.727	ug/l	0.00
Spiked Amount	50.000	Range	86 - 113	Recovery	= 95.460%	
62) 4-Bromofluorobenzene	12.847	95	137377	46.861	ug/l	0.00
Spiked Amount	50.000	Range	77 - 121	Recovery	= 93.720%	
Target Compounds						
16) Acetone	4.436	43	21342	26.120	ug/l	Qvalue 97

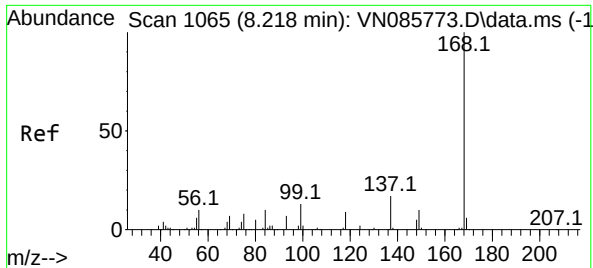
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\
Data File : VN085920.D
Acq On : 10 Mar 2025 17:35
Operator : JC\MD
Sample : Q1514-08
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ENV-103-GW01

Quant Time: Mar 11 01:40:22 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260
QLast Update : Wed Feb 19 03:43:32 2025
Response via : Initial Calibration

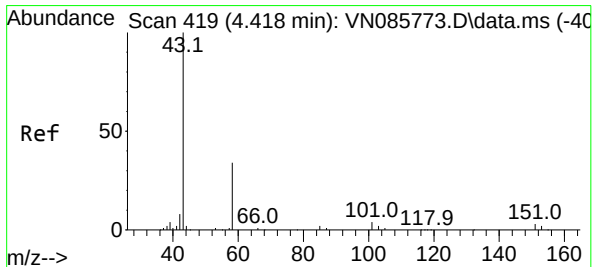
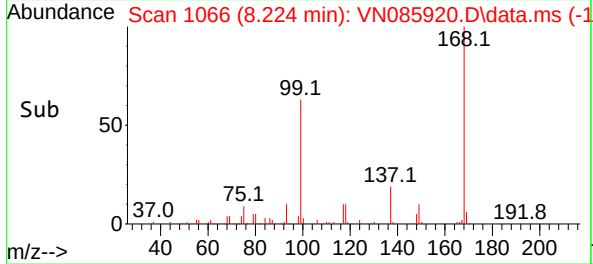
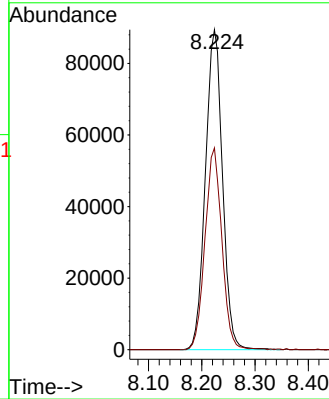
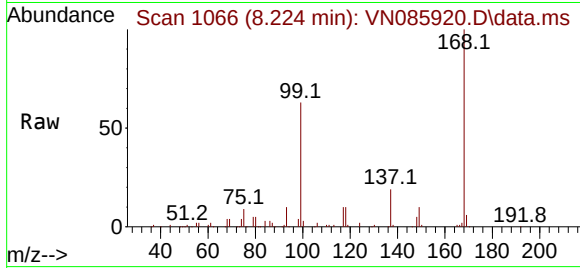




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1066
Delta R.T. 0.006 min
Lab File: VN085920.D
Acq: 10 Mar 2025 17:35

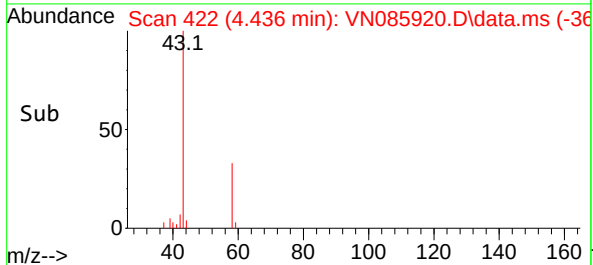
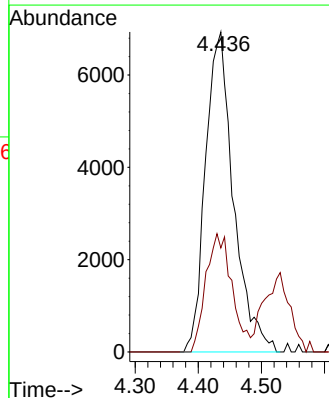
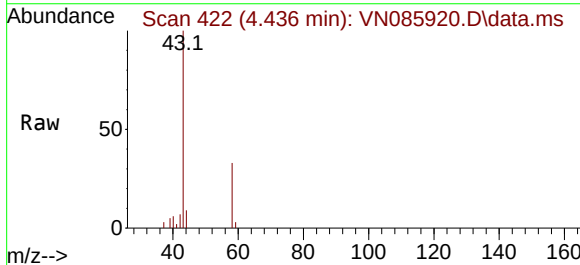
Instrument :
MSVOA_N
ClientSampleId :
ENV-103-GW01

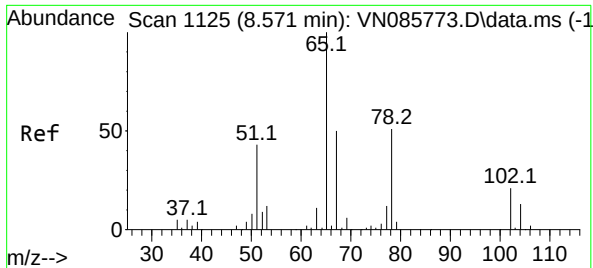
Tgt Ion:168 Resp: 199177
Ion Ratio Lower Upper
168 100
99 63.1 47.9 71.9



#16
Acetone
Concen: 26.120 ug/l
RT: 4.436 min Scan# 422
Delta R.T. 0.017 min
Lab File: VN085920.D
Acq: 10 Mar 2025 17:35

Tgt Ion: 43 Resp: 21342
Ion Ratio Lower Upper
43 100
58 32.5 27.5 41.3





#33

1,2-Dichloroethane-d4

Concen: 53.603 ug/l

RT: 8.576 min Scan# 1125

Delta R.T. 0.006 min

Lab File: VN085920.D

Acq: 10 Mar 2025 17:35

Instrument :

MSVOA_N

ClientSampleId :

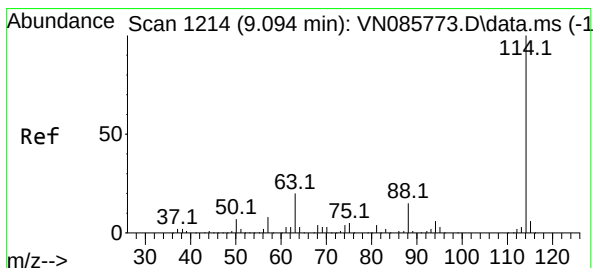
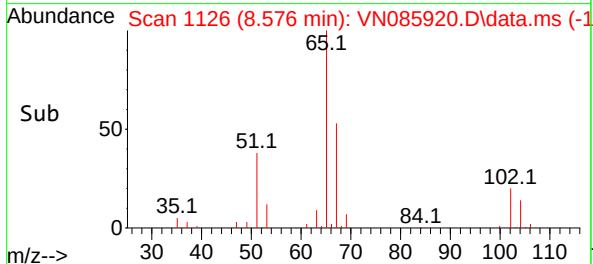
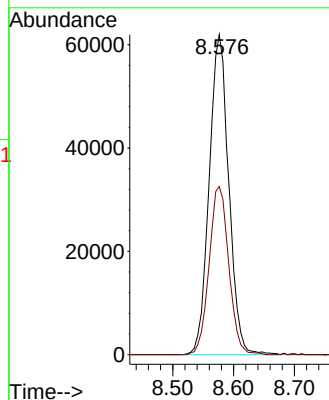
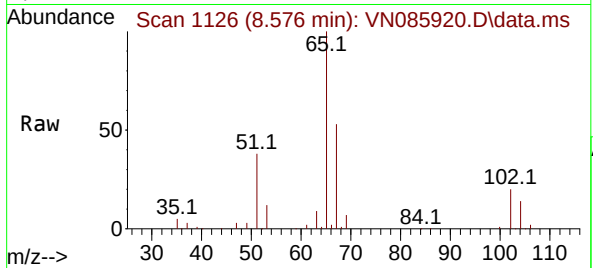
ENV-103-GW01

Tgt Ion: 65 Resp: 138417

Ion Ratio Lower Upper

65 100

67 52.7 0.0 106.2



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.100 min Scan# 1215

Delta R.T. 0.006 min

Lab File: VN085920.D

Acq: 10 Mar 2025 17:35

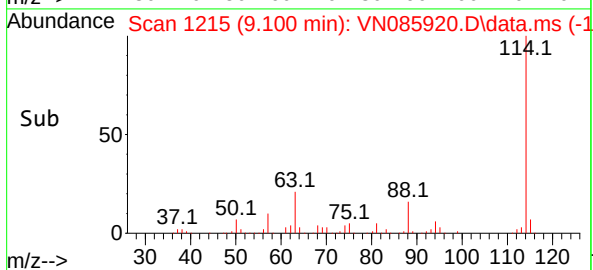
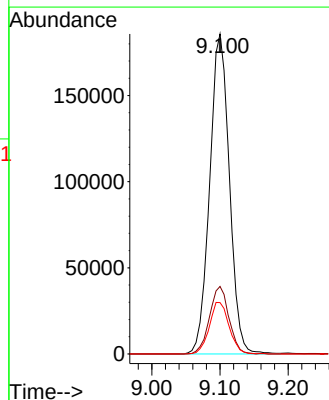
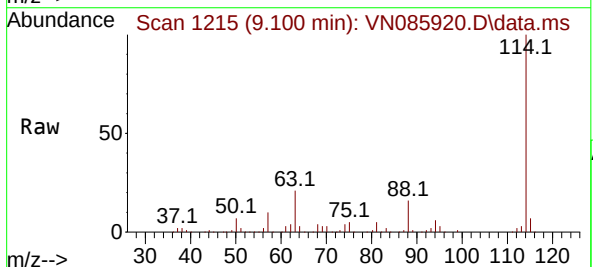
Tgt Ion: 114 Resp: 373736

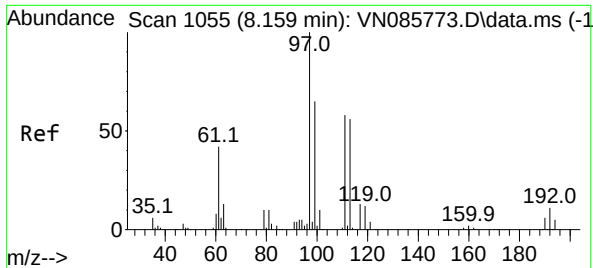
Ion Ratio Lower Upper

114 100

63 21.1 0.0 39.2

88 16.1 0.0 30.0

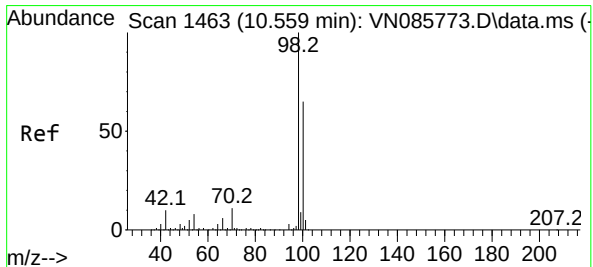
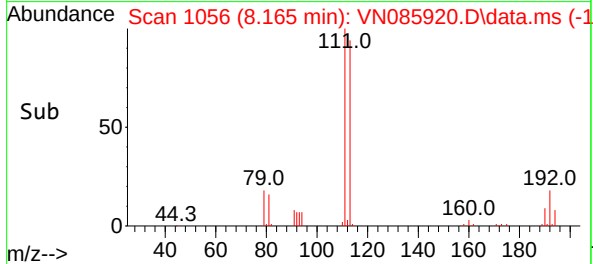
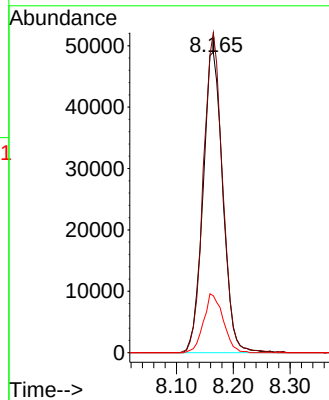
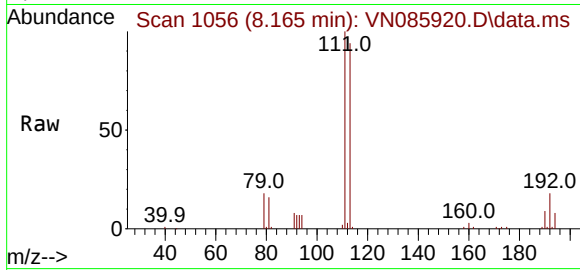




#35
Dibromofluoromethane
Concen: 48.386 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.006 min
Lab File: VN085920.D
Acq: 10 Mar 2025 17:35

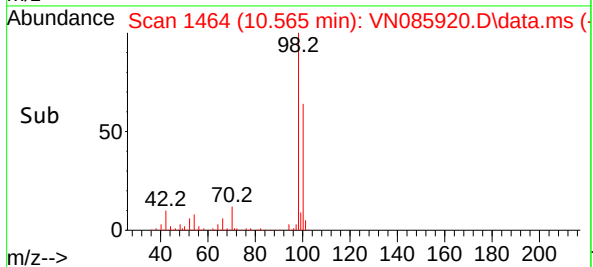
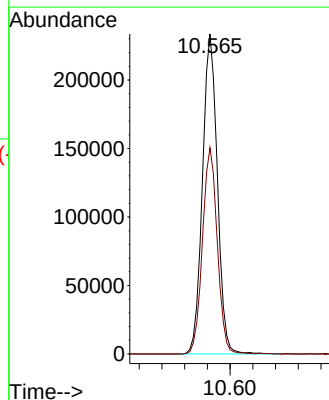
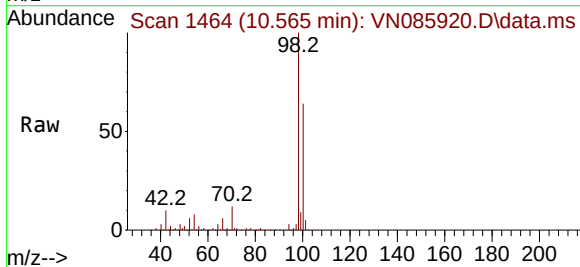
Instrument :
MSVOA_N
ClientSampleId :
ENV-103-GW01

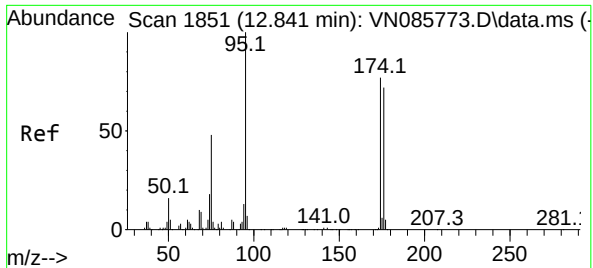
Tgt Ion:113 Resp: 118331
Ion Ratio Lower Upper
113 100
111 103.3 82.2 123.4
192 19.4 14.7 22.1



#50
Toluene-d8
Concen: 47.727 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.006 min
Lab File: VN085920.D
Acq: 10 Mar 2025 17:35

Tgt Ion: 98 Resp: 424658
Ion Ratio Lower Upper
98 100
100 64.1 52.1 78.1

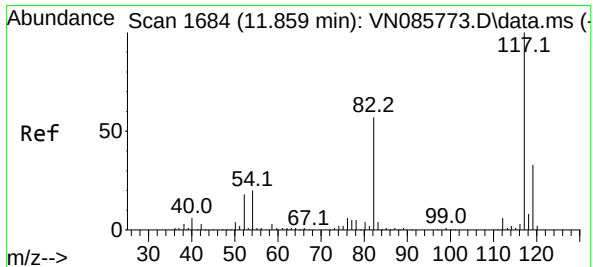
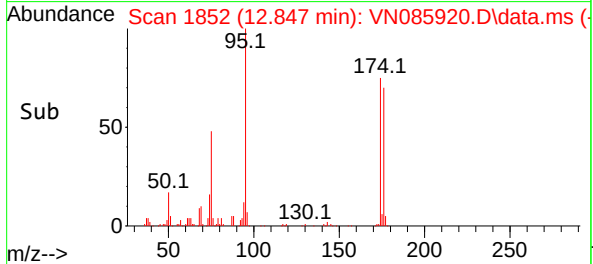
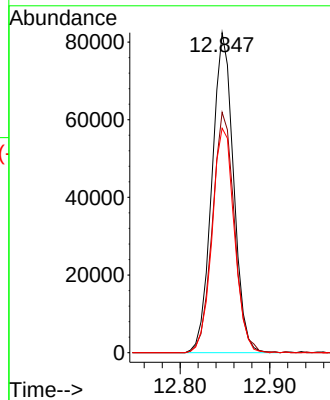
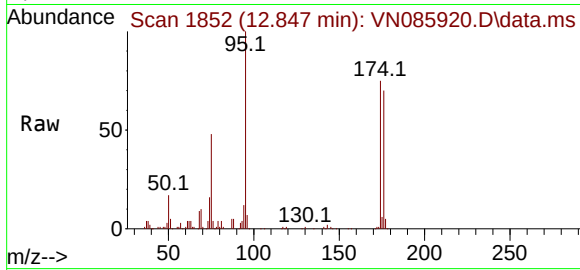




#62
4-Bromofluorobenzene
Concen: 46.861 ug/l
RT: 12.847 min Scan# 1851
Delta R.T. 0.006 min
Lab File: VN085920.D
Acq: 10 Mar 2025 17:35

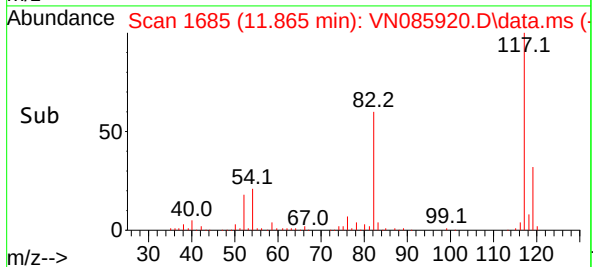
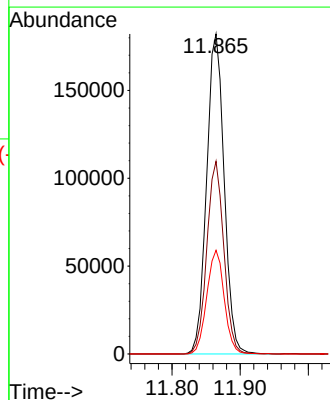
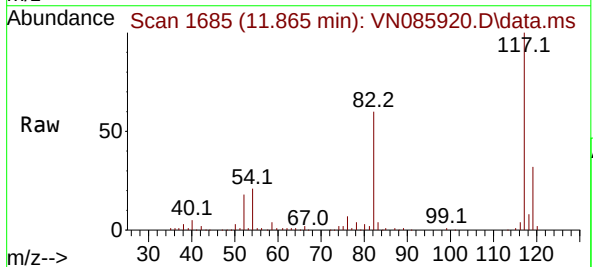
Instrument :
MSVOA_N
ClientSampleId :
ENV-103-GW01

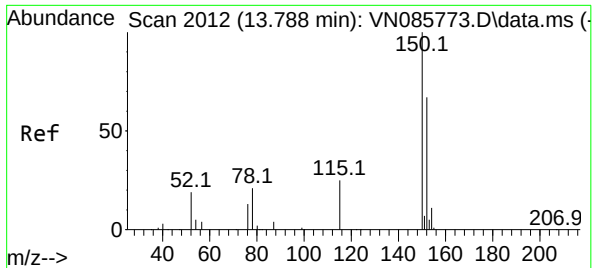
Tgt Ion: 95 Resp: 137377
Ion Ratio Lower Upper
95 100
174 76.5 0.0 152.4
176 72.3 0.0 146.6



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1685
Delta R.T. 0.006 min
Lab File: VN085920.D
Acq: 10 Mar 2025 17:35

Tgt Ion: 117 Resp: 326066
Ion Ratio Lower Upper
117 100
82 60.2 45.7 68.5
119 32.4 26.2 39.2

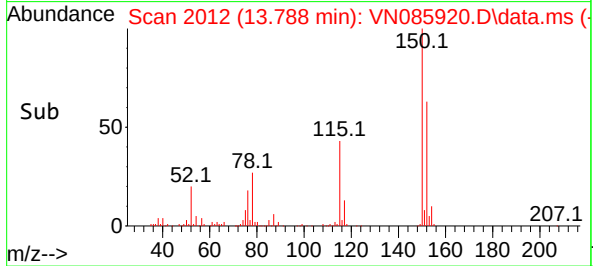
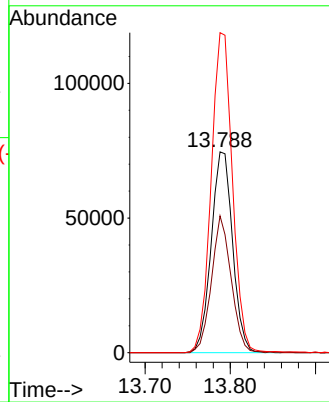
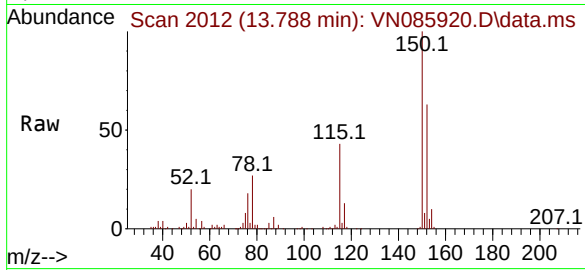




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 20
Delta R.T. -0.000 min
Lab File: VN085920.D
Acq: 10 Mar 2025 17:35

Instrument :
MSVOA_N
ClientSampleId :
ENV-103-GW01

Tgt Ion:152 Resp: 130206
Ion Ratio Lower Upper
152 100
115 62.6 30.4 91.3
150 158.3 0.0 345.4



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\
 Data File : VN085920.D
 Acq On : 10 Mar 2025 17:35
 Operator : JC\MD
 Sample : Q1514-08
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 ENV-103-GW01

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Filtering: 5

Sampling : 1

Min Area: 3 % of largest Peak

Start Thrs: 0.2

Max Peaks: 100

Stop Thrs : 0

Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
 Title : SW846 8260

Signal : TIC: VN085920.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.071	15	20	26	rVB6	6614	14181	1.29%	0.224%
2	2.818	142	147	154	rVB3	9277	16374	1.49%	0.259%
3	3.789	304	312	322	rVB	8122	22052	2.01%	0.348%
4	4.436	411	422	427	rBV2	11376	32419	2.95%	0.512%
5	4.524	427	437	454	rVB2	133889	391867	35.69%	6.189%
6	8.165	1044	1056	1060	rBV	162247	378079	34.43%	5.972%
7	8.224	1060	1066	1077	rVB	277134	626072	57.02%	9.889%
8	8.576	1116	1126	1134	rBV	172737	376625	34.30%	5.949%
9	9.100	1204	1215	1231	rVB	434044	873552	79.56%	13.797%
10	10.376	1423	1432	1440	rBV2	27582	55178	5.03%	0.872%
11	10.565	1456	1464	1475	rBV	604383	1097992	100.00%	17.342%
12	11.865	1677	1685	1697	rBV	561434	989269	90.10%	15.625%
13	12.847	1845	1852	1863	rBV	385235	649305	59.14%	10.255%
14	13.441	1947	1953	1961	rVB2	10906	18740	1.71%	0.296%
15	13.788	2005	2012	2021	rBV	466378	789600	71.91%	12.471%

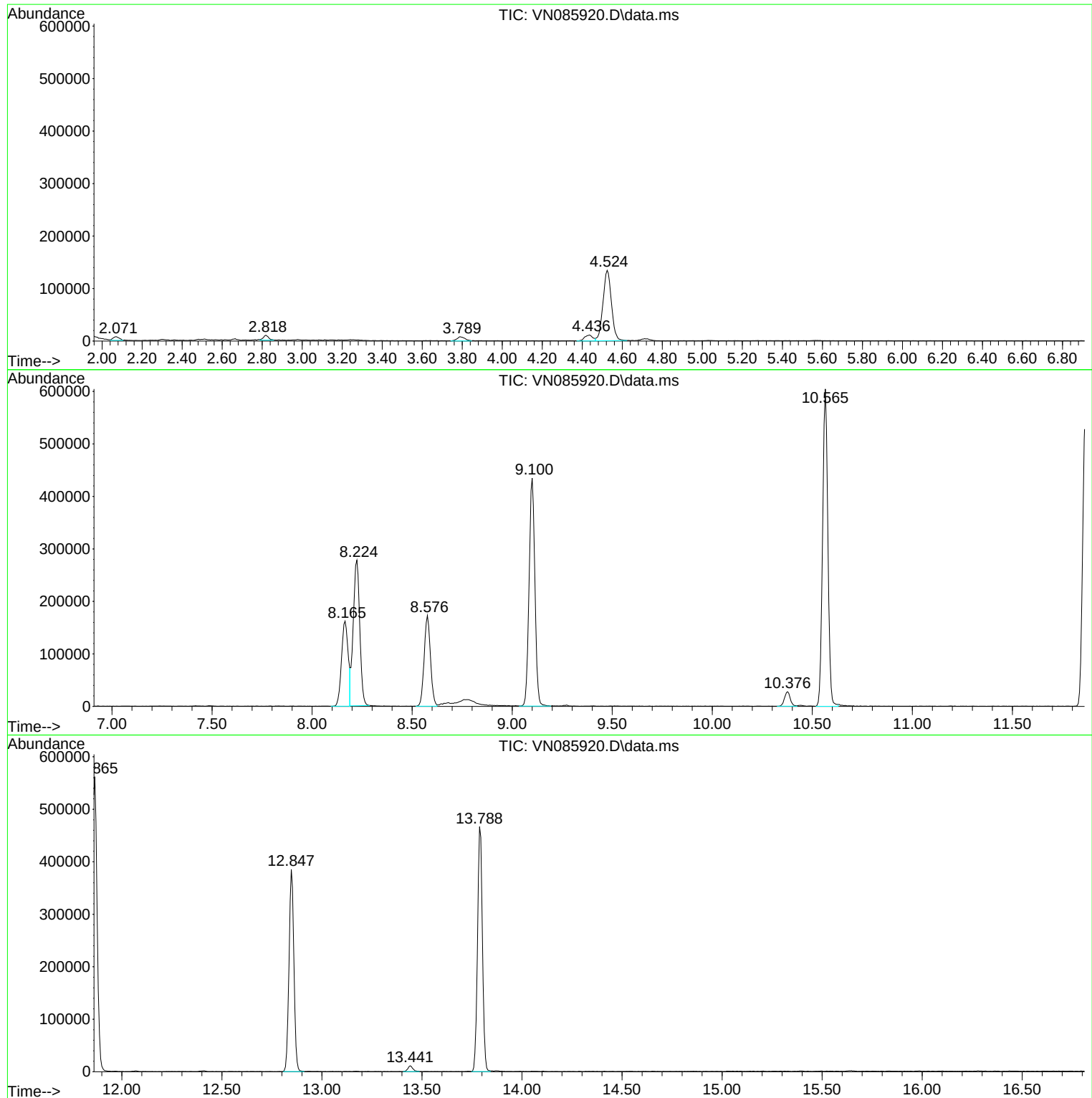
Sum of corrected areas: 6331305

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\
Data File : VN085920.D
Acq On : 10 Mar 2025 17:35
Operator : JC\MD
Sample : Q1514-08
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ENV-103-GW01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\
Data File : VN085920.D
Acq On : 10 Mar 2025 17:35
Operator : JC\MD
Sample : Q1514-08
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ENV-103-GW01

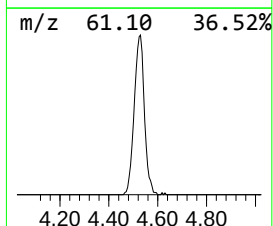
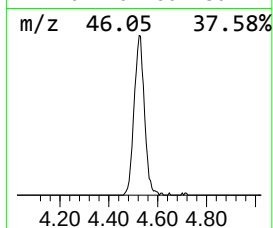
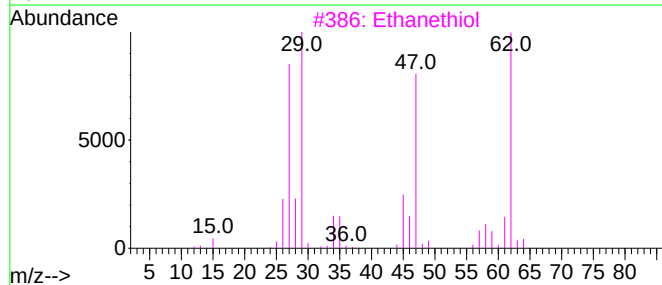
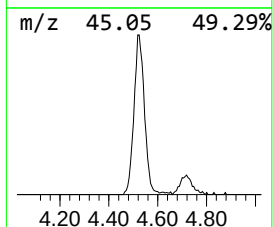
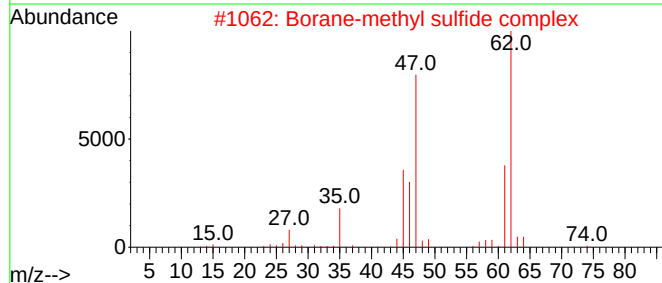
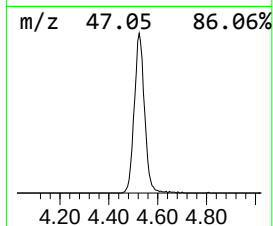
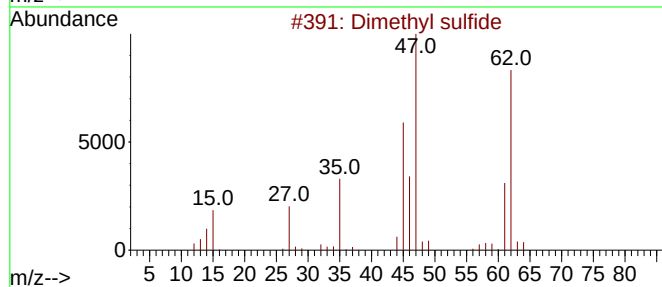
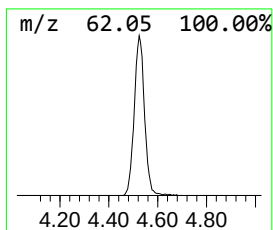
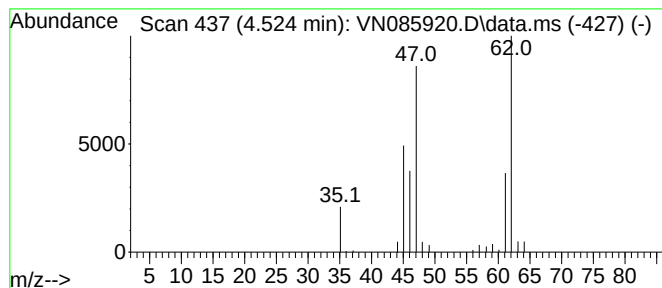
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

Peak Number 1 Dimethyl sulfide Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.524	31.30 ug/l	391867	Pentafluorobenzene	8.224

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Dimethyl sulfide	62	C2H6S	000075-18-3	95
2			Borane-methyl sulfide complex	76	C2H9BS	013292-87-0	90
3			Ethanethiol	62	C2H6S	000075-08-1	86
4			Ethene, chloro-	62	C2H3Cl	000075-01-4	38
5			Phosphine, ethyl-	62	C2H7P	000593-68-0	5



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\
Data File : VN085920.D
Acq On : 10 Mar 2025 17:35
Operator : JC\MD
Sample : Q1514-08
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ENV-103-GW01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
Dimethyl sulfide	4.524	31.3	ug/l	391867	1	8.224	626072	50.0

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	03/06/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/06/25
Client Sample ID:	FB03062025	SDG No.:	Q1514
Lab Sample ID:	Q1514-09	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085934.D	1		03/11/25 16:16	VN031125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.21	U	0.21	1.00	ug/L
74-87-3	Chloromethane	0.35	U	0.35	1.00	ug/L
75-01-4	Vinyl Chloride	0.34	U	0.34	1.00	ug/L
74-83-9	Bromomethane	1.40	U	1.40	5.00	ug/L
75-00-3	Chloroethane	0.56	U	0.56	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.34	U	0.34	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.25	U	0.25	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.26	U	0.26	1.00	ug/L
67-64-1	Acetone	10.0		1.40	5.00	ug/L
75-15-0	Carbon Disulfide	0.32	U	0.32	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	0.16	U	0.16	1.00	ug/L
79-20-9	Methyl Acetate	0.60	U	0.60	1.00	ug/L
75-09-2	Methylene Chloride	0.32	U	0.32	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.25	U	0.25	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.23	U	0.23	1.00	ug/L
110-82-7	Cyclohexane	1.60	U	1.60	5.00	ug/L
78-93-3	2-Butanone	1.30	U	1.30	5.00	ug/L
56-23-5	Carbon Tetrachloride	0.25	U	0.25	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.25	U	0.25	1.00	ug/L
74-97-5	Bromochloromethane	0.18	U	0.18	1.00	ug/L
67-66-3	Chloroform	0.26	U	0.26	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.19	U	0.19	1.00	ug/L
108-87-2	Methylcyclohexane	0.19	U	0.19	1.00	ug/L
71-43-2	Benzene	0.16	U	0.16	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.24	U	0.24	1.00	ug/L
79-01-6	Trichloroethene	0.32	U	0.32	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.19	U	0.19	1.00	ug/L
75-27-4	Bromodichloromethane	0.24	U	0.24	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	0.75	U	0.75	5.00	ug/L
108-88-3	Toluene	0.18	U	0.18	1.00	ug/L

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	03/06/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/06/25
Client Sample ID:	FB03062025	SDG No.:	Q1514
Lab Sample ID:	Q1514-09	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085934.D	1		03/11/25 16:16	VN031125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.21	U	0.21	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.18	U	0.18	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.21	U	0.21	1.00	ug/L
591-78-6	2-Hexanone	1.10	U	1.10	5.00	ug/L
124-48-1	Dibromochloromethane	0.18	U	0.18	1.00	ug/L
106-93-4	1,2-Dibromoethane	0.16	U	0.16	1.00	ug/L
127-18-4	Tetrachloroethene	0.25	U	0.25	1.00	ug/L
108-90-7	Chlorobenzene	0.13	U	0.13	1.00	ug/L
100-41-4	Ethyl Benzene	0.16	U	0.16	1.00	ug/L
179601-23-1	m/p-Xylenes	0.31	U	0.31	2.00	ug/L
95-47-6	o-Xylene	0.14	U	0.14	1.00	ug/L
100-42-5	Styrene	0.16	U	0.16	1.00	ug/L
75-25-2	Bromoform	0.21	U	0.21	1.00	ug/L
98-82-8	Isopropylbenzene	0.13	U	0.13	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.27	U	0.27	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.24	U	0.24	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.27	U	0.27	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.19	U	0.19	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.46	U	0.46	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.42	U	0.42	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.51	U	0.51	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	58.7		70 (74) - 130 (125)	117%	SPK: 50
1868-53-7	Dibromofluoromethane	51.2		70 (75) - 130 (124)	102%	SPK: 50
2037-26-5	Toluene-d8	48.4		70 (86) - 130 (113)	97%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.5		70 (77) - 130 (121)	95%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	177000	8.224			
540-36-3	1,4-Difluorobenzene	336000	9.1			
3114-55-4	Chlorobenzene-d5	299000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	119000	13.788			

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	03/06/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/06/25
Client Sample ID:	FB03062025	SDG No.:	Q1514
Lab Sample ID:	Q1514-09	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:			uL
GC Column:	RXI-624	ID :	0.25
Prep Method :		Level :	LOW
		Final Vol:	5000 uL
		Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085934.D	1		03/11/25 16:16	VN031125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031125\
 Data File : VN085934.D
 Acq On : 11 Mar 2025 16:16
 Operator : JC\MD
 Sample : Q1514-09
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 FB03062025

Quant Time: Mar 12 01:23:43 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
 Quant Title : SW846 8260
 QLast Update : Wed Feb 19 03:43:32 2025
 Response via : Initial Calibration

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

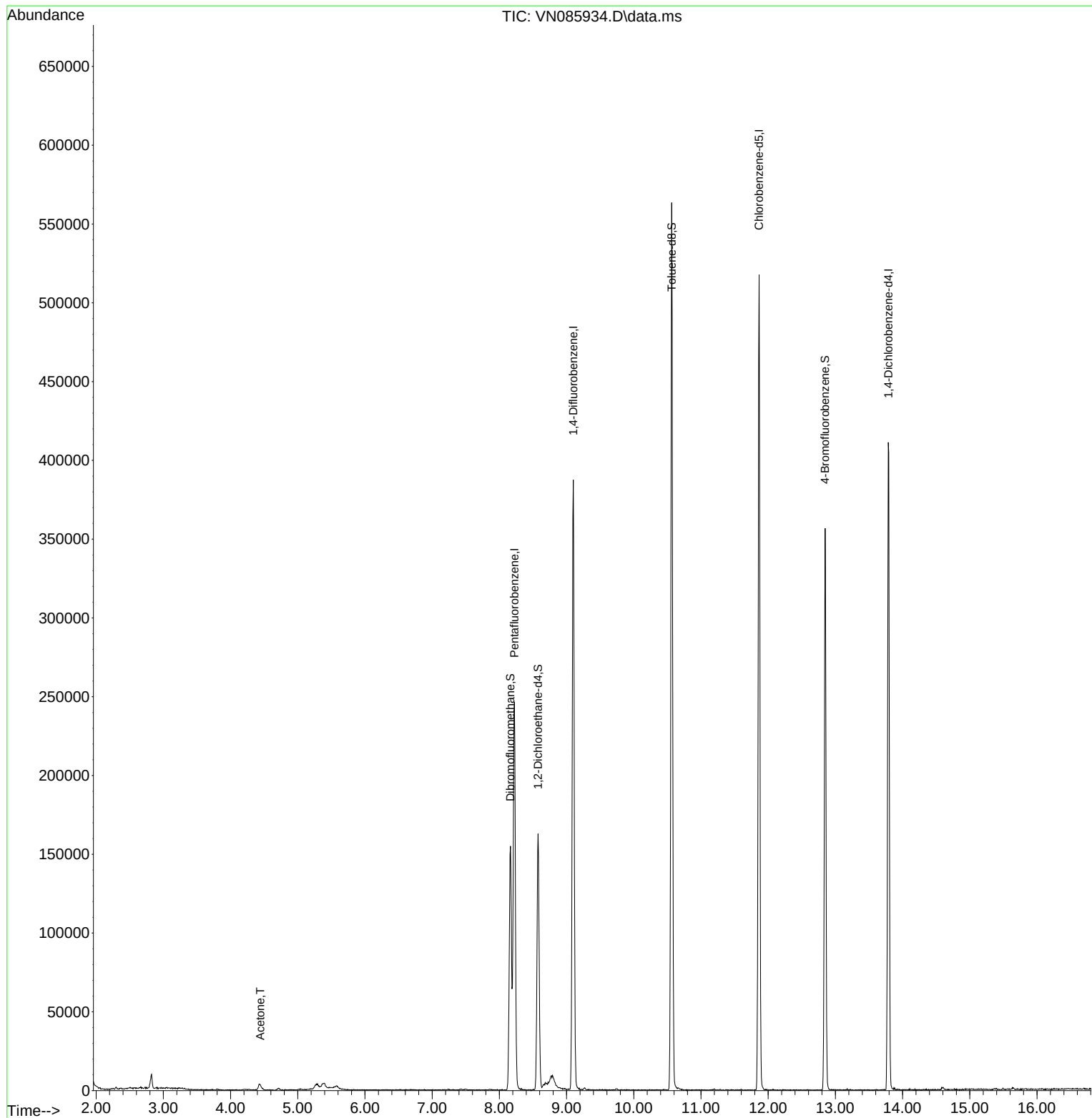
Internal Standards						
1) Pentafluorobenzene	8.224	168	176702	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	336260	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	299219	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	119405	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	134504	58.713	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 117.420%			
35) Dibromofluoromethane	8.165	113	112664	51.203	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 102.400%			
50) Toluene-d8	10.565	98	387134	48.359	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 96.720%			
62) 4-Bromofluorobenzene	12.847	95	125306	47.507	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 95.020%			
Target Compounds						
16) Acetone	4.442	43	7216	9.955	ug/l	95

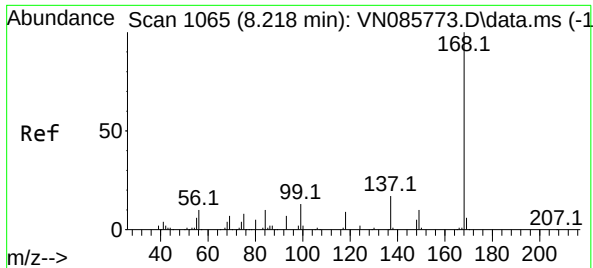
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031125\
Data File : VN085934.D
Acq On : 11 Mar 2025 16:16
Operator : JC\MD
Sample : Q1514-09
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
FB03062025

Quant Time: Mar 12 01:23:43 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260
QLast Update : Wed Feb 19 03:43:32 2025
Response via : Initial Calibration

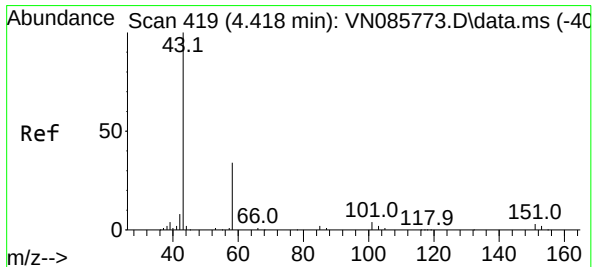
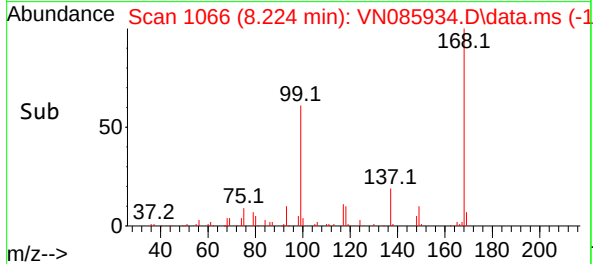
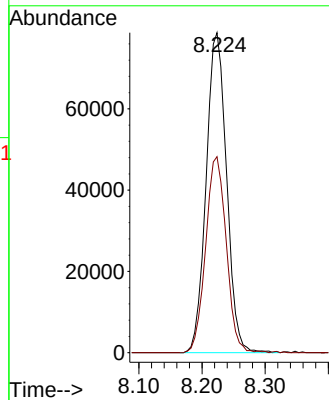
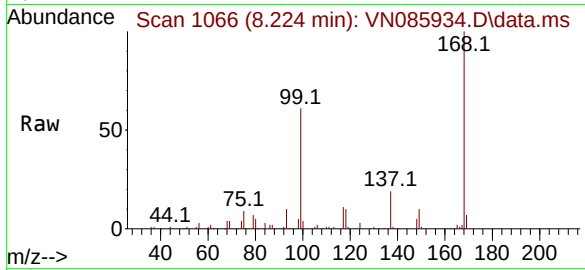




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1066
Delta R.T. 0.006 min
Lab File: VN085934.D
Acq: 11 Mar 2025 16:16

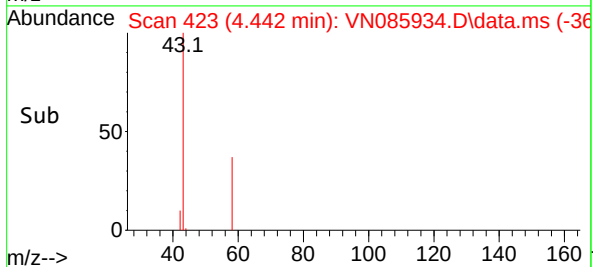
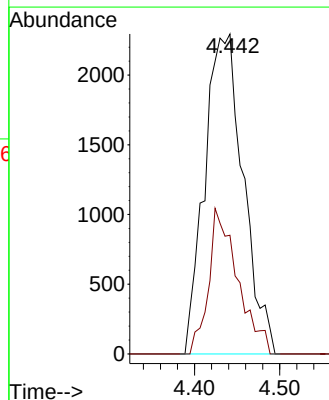
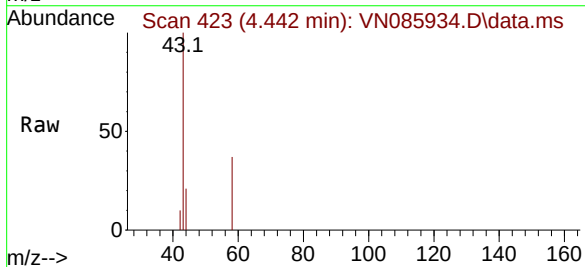
Instrument :
MSVOA_N
ClientSampleId :
FB03062025

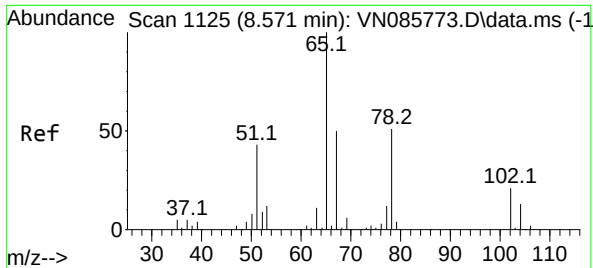
Tgt Ion:168 Resp: 176702
Ion Ratio Lower Upper
168 100
99 61.2 47.9 71.9



#16
Acetone
Concen: 9.955 ug/l
RT: 4.442 min Scan# 423
Delta R.T. 0.024 min
Lab File: VN085934.D
Acq: 11 Mar 2025 16:16

Tgt Ion: 43 Resp: 7216
Ion Ratio Lower Upper
43 100
58 37.1 27.5 41.3





#33

1,2-Dichloroethane-d4

Concen: 58.713 ug/l

RT: 8.577 min Scan# 1125

Delta R.T. 0.006 min

Lab File: VN085934.D

Acq: 11 Mar 2025 16:16

Instrument :

MSVOA_N

ClientSampleId :

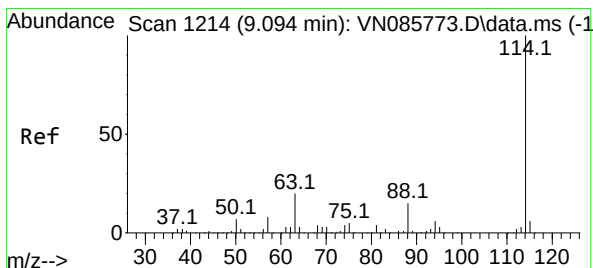
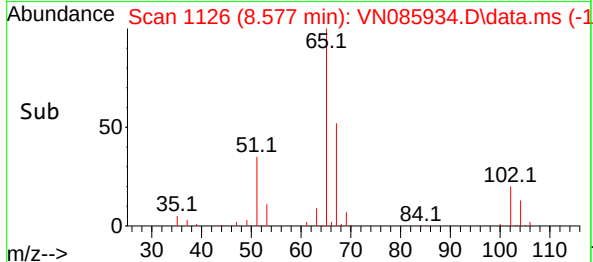
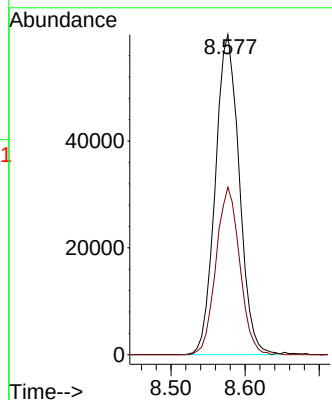
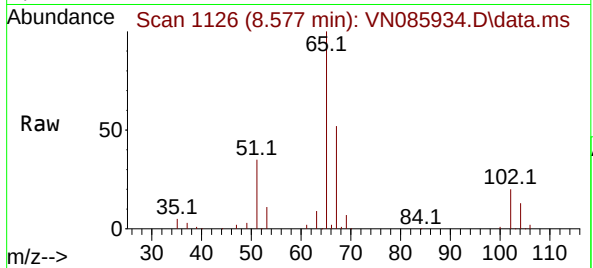
FB03062025

Tgt Ion: 65 Resp: 134504

Ion Ratio Lower Upper

65 100

67 51.9 0.0 106.2



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.100 min Scan# 1215

Delta R.T. 0.006 min

Lab File: VN085934.D

Acq: 11 Mar 2025 16:16

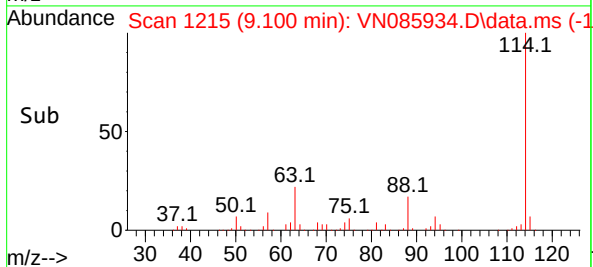
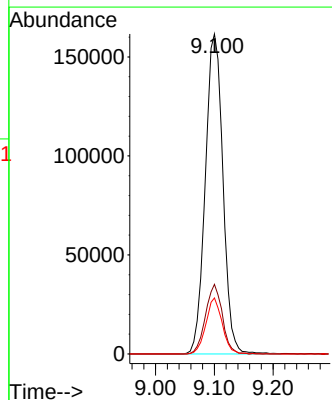
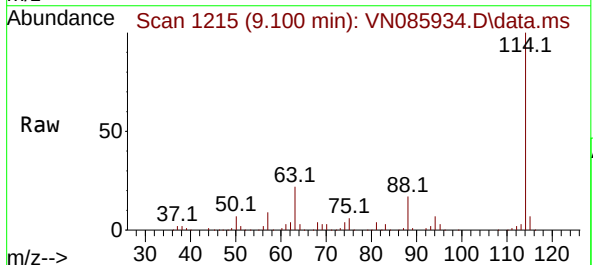
Tgt Ion: 114 Resp: 336260

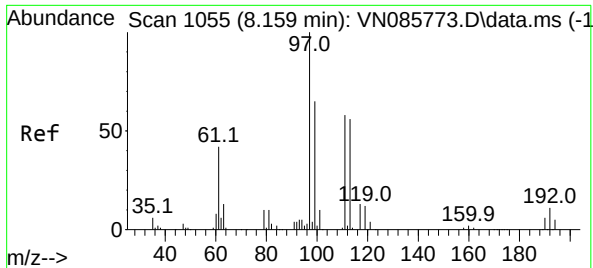
Ion Ratio Lower Upper

114 100

63 21.8 0.0 39.2

88 17.5 0.0 30.0





#35

Dibromofluoromethane

Concen: 51.203 ug/l

RT: 8.165 min Scan# 1055

Delta R.T. 0.006 min

Lab File: VN085934.D

Acq: 11 Mar 2025 16:16

Instrument :

MSVOA_N

ClientSampleId :

FB03062025

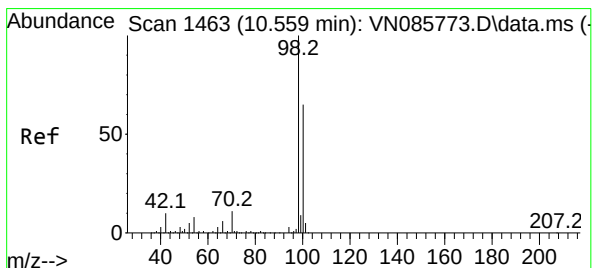
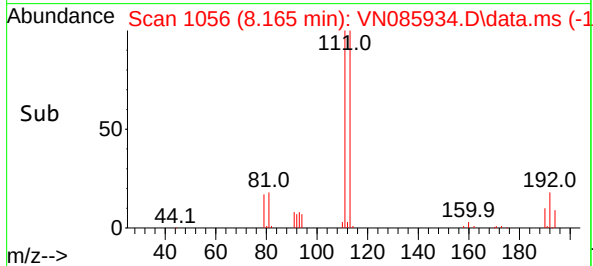
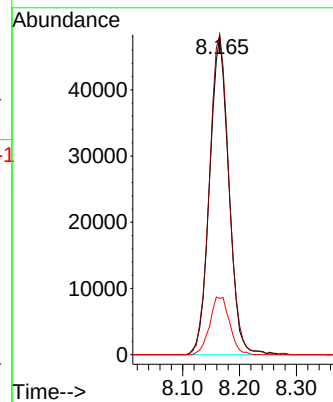
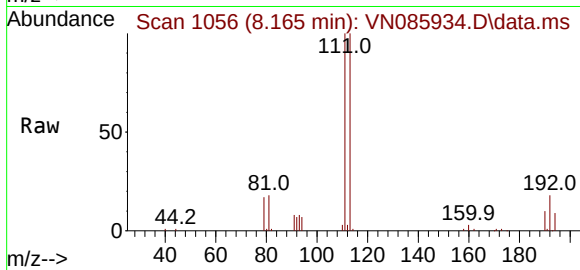
Tgt Ion:113 Resp: 112664

Ion Ratio Lower Upper

113 100

111 102.4 82.2 123.4

192 18.7 14.7 22.1



#50

Toluene-d8

Concen: 48.359 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. 0.006 min

Lab File: VN085934.D

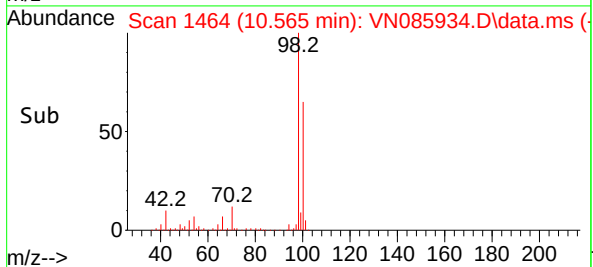
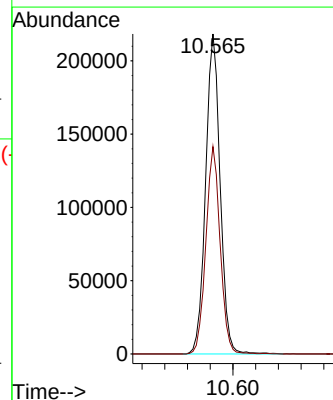
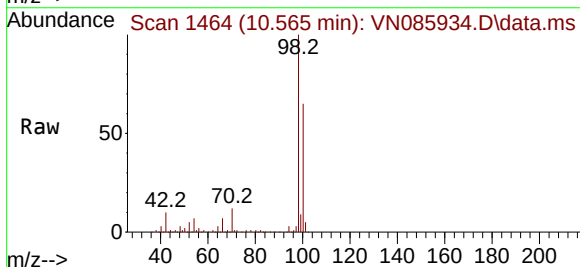
Acq: 11 Mar 2025 16:16

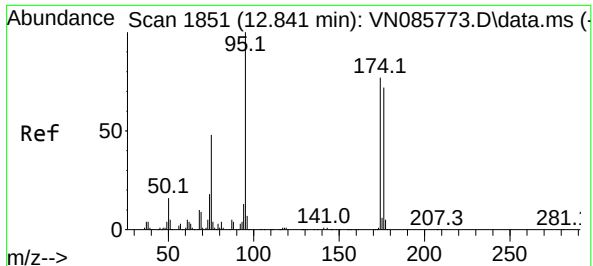
Tgt Ion: 98 Resp: 387134

Ion Ratio Lower Upper

98 100

100 63.6 52.1 78.1

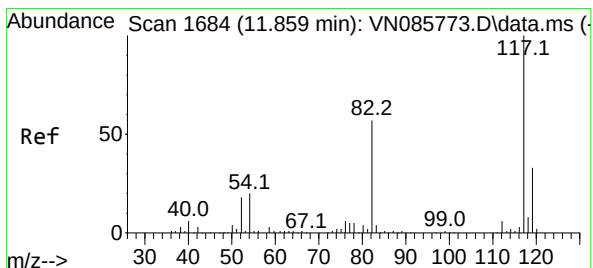
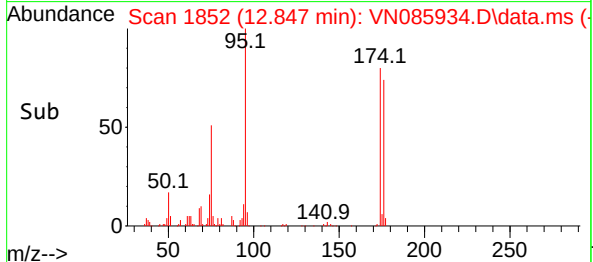
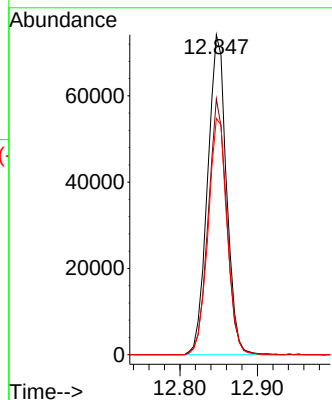
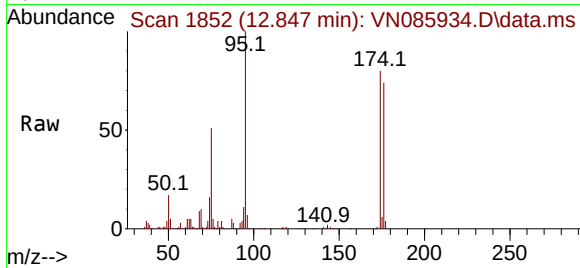




#62
4-Bromofluorobenzene
Concen: 47.507 ug/l
RT: 12.847 min Scan# 1851
Delta R.T. 0.006 min
Lab File: VN085934.D
Acq: 11 Mar 2025 16:16

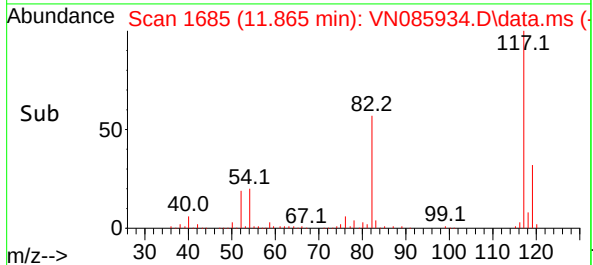
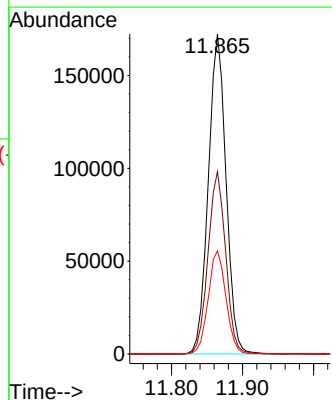
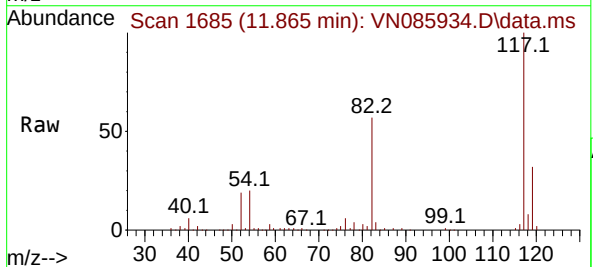
Instrument :
MSVOA_N
ClientSampleId :
FB03062025

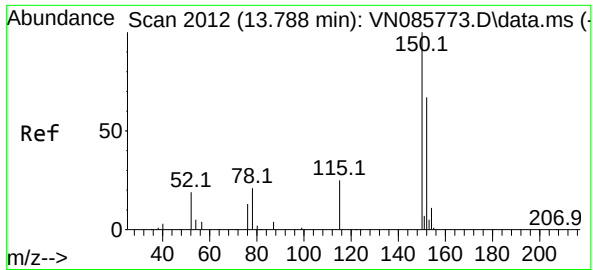
Tgt Ion	95	Resp	125306
Ion Ratio	100		
Lower			
Upper			
174	78.1	0.0	152.4
176	74.5	0.0	146.6



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1685
Delta R.T. 0.006 min
Lab File: VN085934.D
Acq: 11 Mar 2025 16:16

Tgt Ion	117	Resp	299219
Ion Ratio <th>100</th> <td></td> <td></td>	100		
Lower <td></td> <td></td> <td></td>			
Upper <td></td> <td></td> <td></td>			
82	57.1	45.7	68.5
119	32.2	26.2	39.2





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.788 min Scan# 20

Delta R.T. 0.000 min

Lab File: VN085934.D

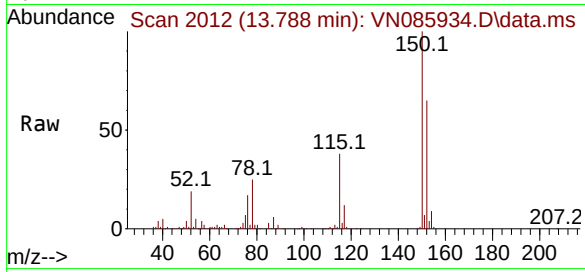
Acq: 11 Mar 2025 16:16

Instrument :

MSVOA_N

ClientSampleId :

FB03062025



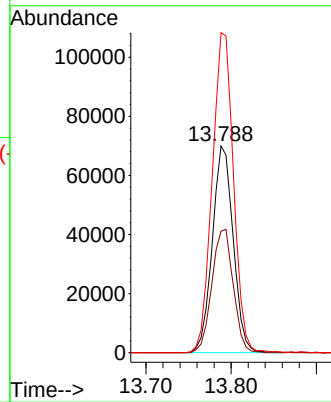
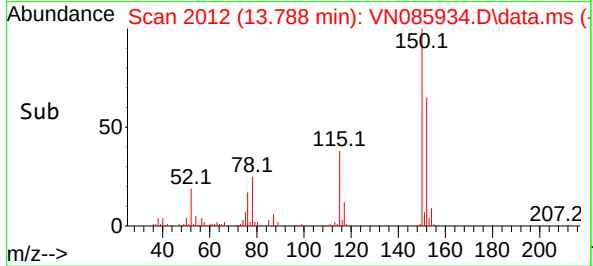
Tgt Ion:152 Resp: 119405

Ion Ratio Lower Upper

152 100

115 60.8 30.4 91.3

150 157.6 0.0 345.4



Report of Analysis

Client:	Portal Partners Tri-Venture		Date Collected:	03/05/25	
Project:	Amtrak Sawtooth Bridges 2025		Date Received:	03/06/25	
Client Sample ID:	TB03062025		SDG No.:	Q1514	
Lab Sample ID:	Q1514-10		Matrix:	Water	
Analytical Method:	SW8260		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOC-TCLVOA-10	
GC Column:	RXI-624	ID : 0.25	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085922.D	1		03/10/25 18:23	VN031025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.21	U	0.21	1.00	ug/L
74-87-3	Chloromethane	0.35	U	0.35	1.00	ug/L
75-01-4	Vinyl Chloride	0.34	U	0.34	1.00	ug/L
74-83-9	Bromomethane	1.40	U	1.40	5.00	ug/L
75-00-3	Chloroethane	0.56	U	0.56	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.34	U	0.34	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.25	U	0.25	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.26	U	0.26	1.00	ug/L
67-64-1	Acetone	1.40	U	1.40	5.00	ug/L
75-15-0	Carbon Disulfide	0.32	U	0.32	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	0.16	U	0.16	1.00	ug/L
79-20-9	Methyl Acetate	0.60	U	0.60	1.00	ug/L
75-09-2	Methylene Chloride	0.32	U	0.32	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.25	U	0.25	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.23	U	0.23	1.00	ug/L
110-82-7	Cyclohexane	1.60	U	1.60	5.00	ug/L
78-93-3	2-Butanone	1.30	U	1.30	5.00	ug/L
56-23-5	Carbon Tetrachloride	0.25	U	0.25	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.25	U	0.25	1.00	ug/L
74-97-5	Bromochloromethane	0.18	U	0.18	1.00	ug/L
67-66-3	Chloroform	0.26	U	0.26	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.19	U	0.19	1.00	ug/L
108-87-2	Methylcyclohexane	0.19	U	0.19	1.00	ug/L
71-43-2	Benzene	0.16	U	0.16	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.24	U	0.24	1.00	ug/L
79-01-6	Trichloroethene	0.32	U	0.32	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.19	U	0.19	1.00	ug/L
75-27-4	Bromodichloromethane	0.24	U	0.24	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	0.75	U	0.75	5.00	ug/L
108-88-3	Toluene	0.18	U	0.18	1.00	ug/L

Report of Analysis

Client:	Portal Partners Tri-Venture			Date Collected:	03/05/25	
Project:	Amtrak Sawtooth Bridges 2025			Date Received:	03/06/25	
Client Sample ID:	TB03062025			SDG No.:	Q1514	
Lab Sample ID:	Q1514-10			Matrix:	Water	
Analytical Method:	SW8260			% Solid:	0	
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL
Soil Aliquot Vol:			uL	Test:	VOC-TCLVOA-10	
GC Column:	RXI-624	ID :	0.25	Level :	LOW	
Prep Method :						

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085922.D	1		03/10/25 18:23	VN031025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.21	U	0.21	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.18	U	0.18	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.21	U	0.21	1.00	ug/L
591-78-6	2-Hexanone	1.10	U	1.10	5.00	ug/L
124-48-1	Dibromochloromethane	0.18	U	0.18	1.00	ug/L
106-93-4	1,2-Dibromoethane	0.16	U	0.16	1.00	ug/L
127-18-4	Tetrachloroethene	0.25	U	0.25	1.00	ug/L
108-90-7	Chlorobenzene	0.13	U	0.13	1.00	ug/L
100-41-4	Ethyl Benzene	0.16	U	0.16	1.00	ug/L
179601-23-1	m/p-Xylenes	0.31	U	0.31	2.00	ug/L
95-47-6	o-Xylene	0.14	U	0.14	1.00	ug/L
100-42-5	Styrene	0.16	U	0.16	1.00	ug/L
75-25-2	Bromoform	0.21	U	0.21	1.00	ug/L
98-82-8	Isopropylbenzene	0.13	U	0.13	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.27	U	0.27	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.24	U	0.24	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.27	U	0.27	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.19	U	0.19	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.46	U	0.46	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.42	U	0.42	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.51	U	0.51	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	55.8		70 (74) - 130 (125)	112%	SPK: 50
1868-53-7	Dibromofluoromethane	49.8		70 (75) - 130 (124)	100%	SPK: 50
2037-26-5	Toluene-d8	48.0		70 (86) - 130 (113)	96%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.7		70 (77) - 130 (121)	95%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	185000	8.224			
540-36-3	1,4-Difluorobenzene	344000	9.1			
3114-55-4	Chlorobenzene-d5	305000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	121000	13.788			

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	03/05/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/06/25
Client Sample ID:	TB03062025	SDG No.:	Q1514
Lab Sample ID:	Q1514-10	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:			uL
GC Column:	RXI-624	ID :	0.25
Prep Method :		Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085922.D	1		03/10/25 18:23	VN031025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\
 Data File : VN085922.D
 Acq On : 10 Mar 2025 18:23
 Operator : JC\MD
 Sample : Q1514-10
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 TB03062025

Quant Time: Mar 11 01:41:16 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
 Quant Title : SW846 8260
 QLast Update : Wed Feb 19 03:43:32 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	8.224	168	185446	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	343862	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	305300	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	121043	50.000	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	134170	55.806	ug/l	0.00
Spiked Amount	50.000	Range	74 - 125	Recovery	=	111.620%
35) Dibromofluoromethane	8.165	113	111966	49.761	ug/l	0.00
Spiked Amount	50.000	Range	75 - 124	Recovery	=	99.520%
50) Toluene-d8	10.565	98	392872	47.991	ug/l	0.00
Spiked Amount	50.000	Range	86 - 113	Recovery	=	95.980%
62) 4-Bromofluorobenzene	12.847	95	128707	47.718	ug/l	0.00
Spiked Amount	50.000	Range	77 - 121	Recovery	=	95.440%

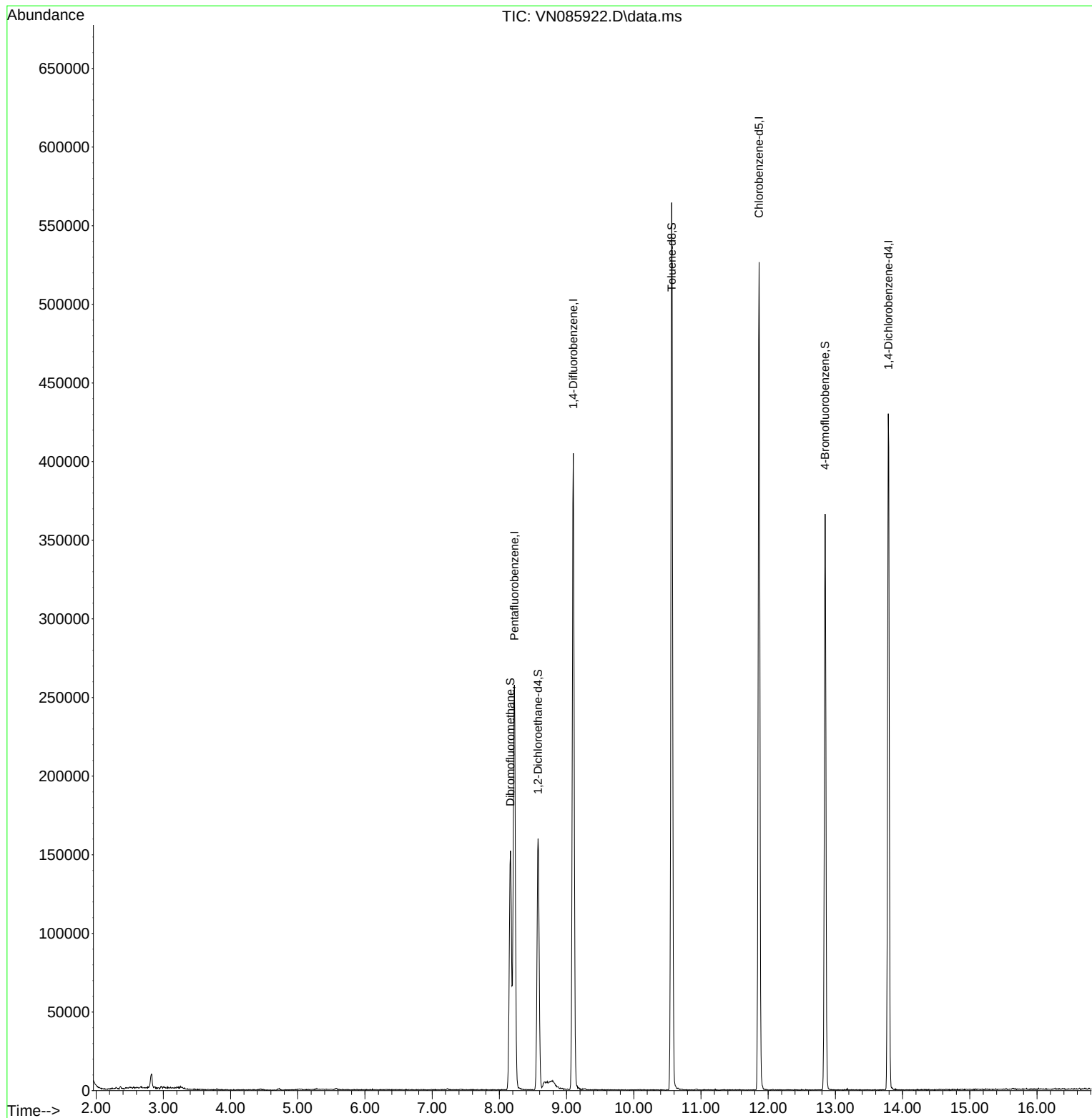
Target Compounds	Qvalue

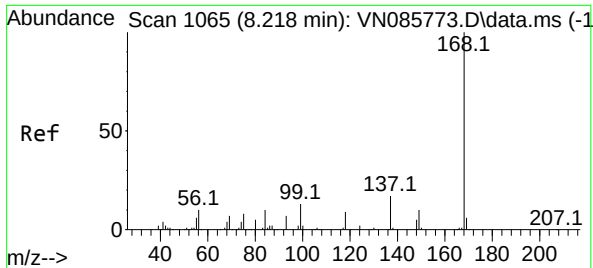
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\
Data File : VN085922.D
Acq On : 10 Mar 2025 18:23
Operator : JC\MD
Sample : Q1514-10
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
TB03062025

Quant Time: Mar 11 01:41:16 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260
QLast Update : Wed Feb 19 03:43:32 2025
Response via : Initial Calibration

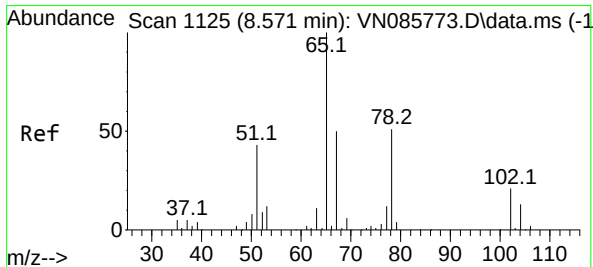
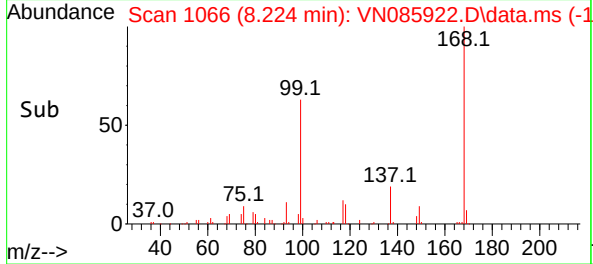
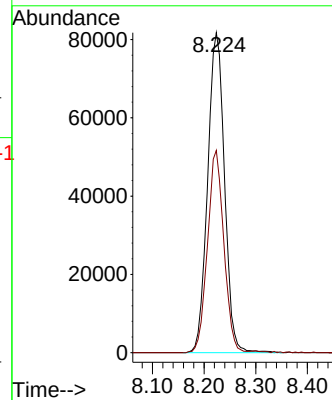
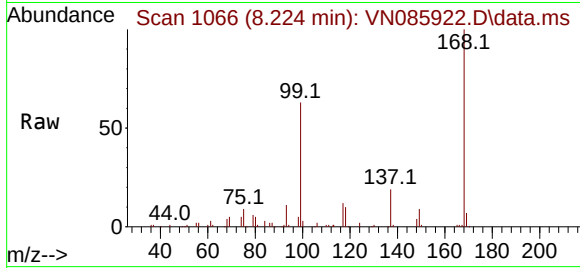




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1066
Delta R.T. 0.006 min
Lab File: VN085922.D
Acq: 10 Mar 2025 18:23

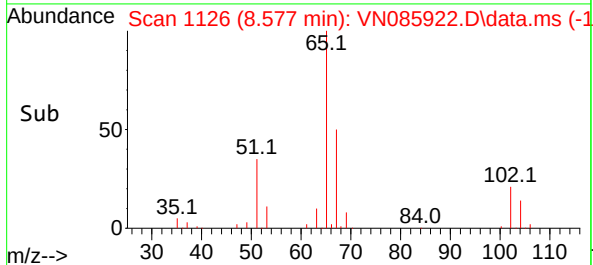
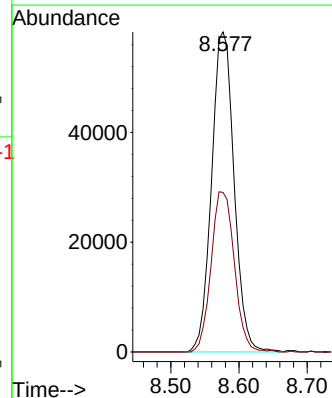
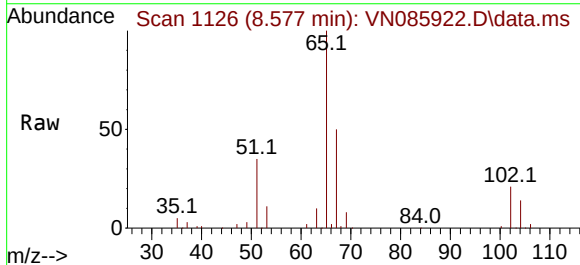
Instrument :
MSVOA_N
ClientSampleId :
TB03062025

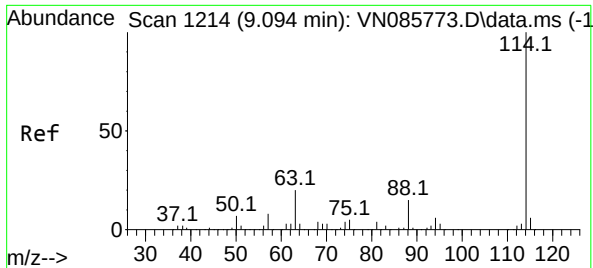
Tgt Ion:168 Resp: 185446
Ion Ratio Lower Upper
168 100
99 63.2 47.9 71.9



#33
1,2-Dichloroethane-d4
Concen: 55.806 ug/l
RT: 8.577 min Scan# 1126
Delta R.T. 0.006 min
Lab File: VN085922.D
Acq: 10 Mar 2025 18:23

Tgt Ion: 65 Resp: 134170
Ion Ratio Lower Upper
65 100
67 51.7 0.0 106.2

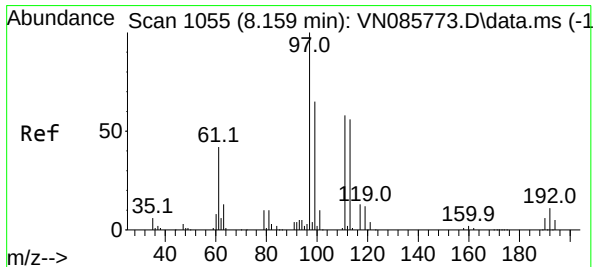
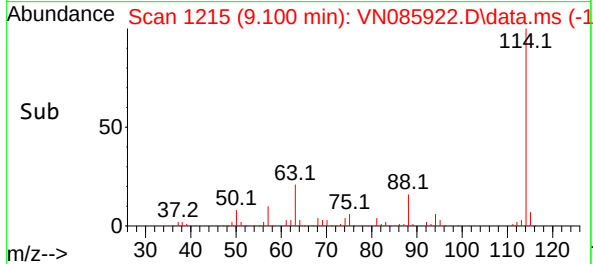
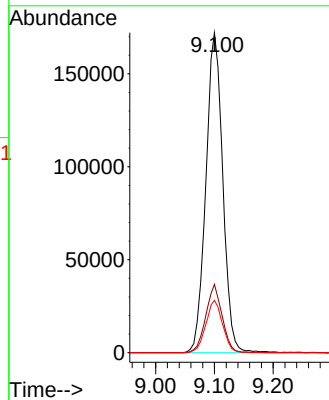
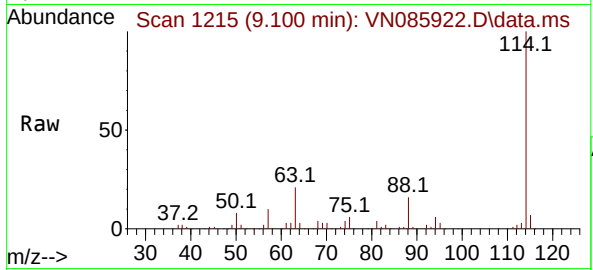




#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 11
Delta R.T. 0.006 min
Lab File: VN085922.D
Acq: 10 Mar 2025 18:23

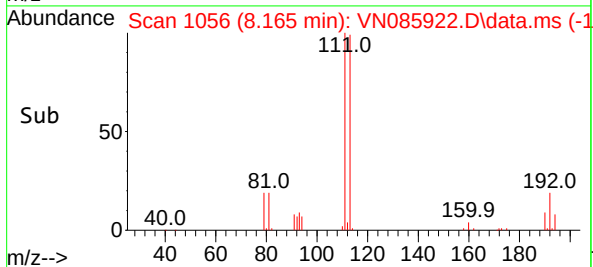
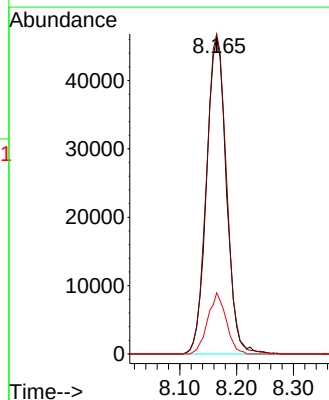
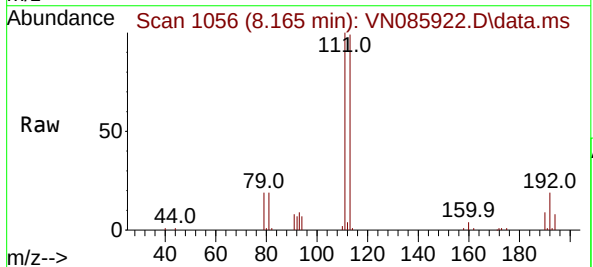
Instrument :
MSVOA_N
ClientSampleId :
TB03062025

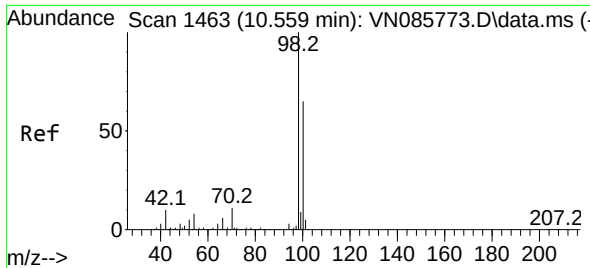
Tgt Ion:114 Resp: 343862
Ion Ratio Lower Upper
114 100
63 21.4 0.0 39.2
88 16.4 0.0 30.0



#35
Dibromofluoromethane
Concen: 49.761 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.006 min
Lab File: VN085922.D
Acq: 10 Mar 2025 18:23

Tgt Ion:113 Resp: 111966
Ion Ratio Lower Upper
113 100
111 102.4 82.2 123.4
192 18.0 14.7 22.1

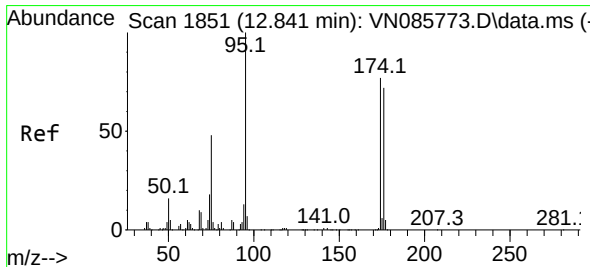
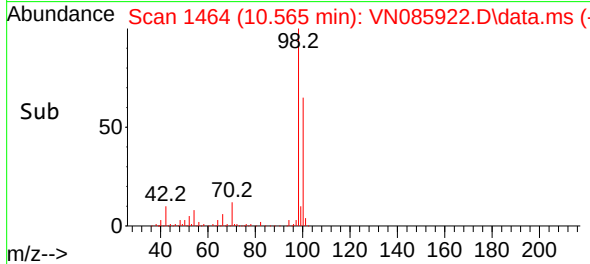
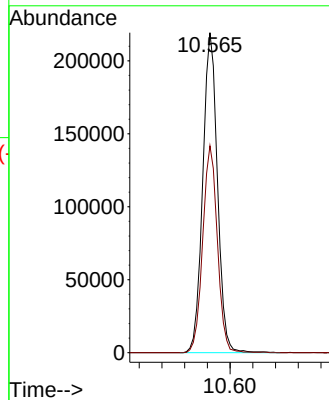
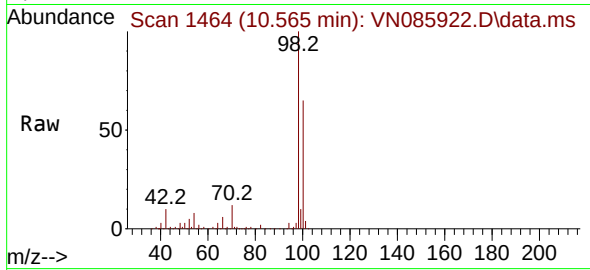




#50
Toluene-d8
Concen: 47.991 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.006 min
Lab File: VN085922.D
Acq: 10 Mar 2025 18:23

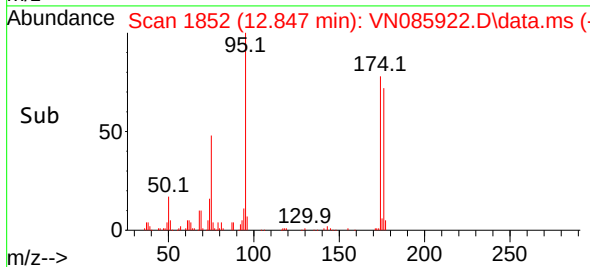
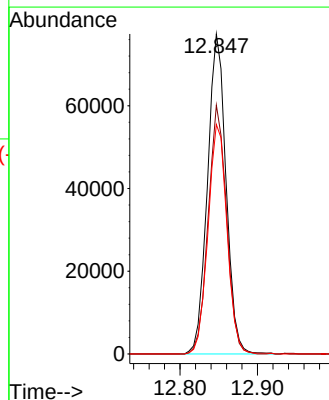
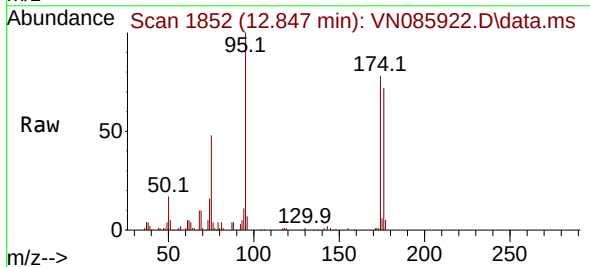
Instrument :
MSVOA_N
ClientSampleId :
TB03062025

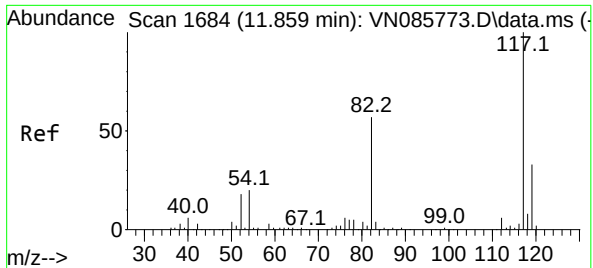
Tgt Ion: 98 Resp: 392872
Ion Ratio Lower Upper
98 100
100 64.4 52.1 78.1



#62
4-Bromofluorobenzene
Concen: 47.718 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.006 min
Lab File: VN085922.D
Acq: 10 Mar 2025 18:23

Tgt Ion: 95 Resp: 128707
Ion Ratio Lower Upper
95 100
174 77.1 0.0 152.4
176 73.0 0.0 146.6

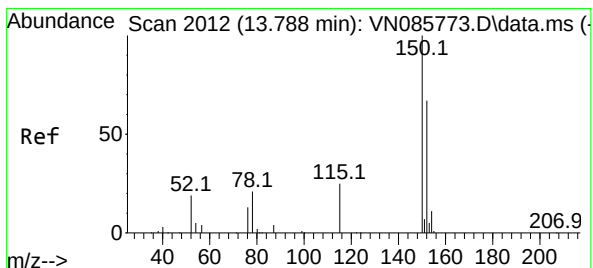
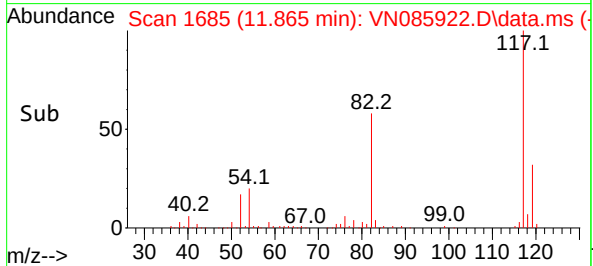
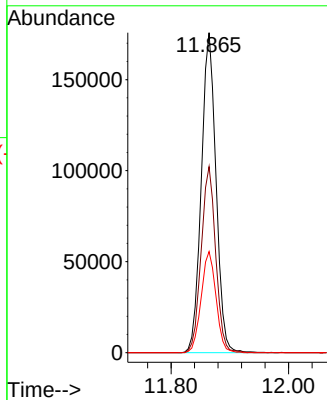
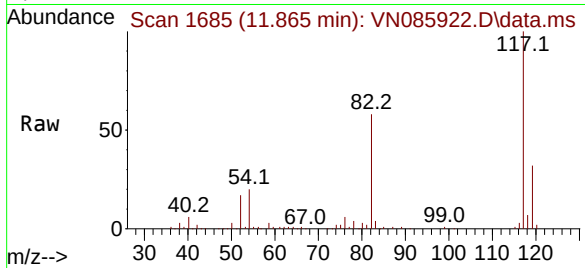




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 11
Delta R.T. 0.006 min
Lab File: VN085922.D
Acq: 10 Mar 2025 18:23

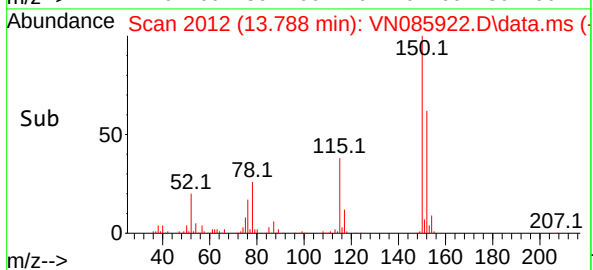
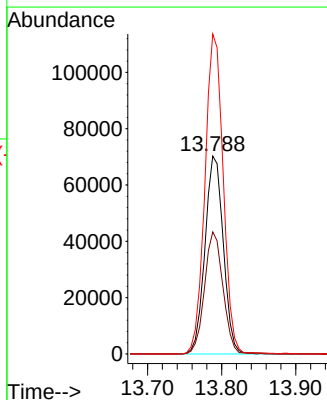
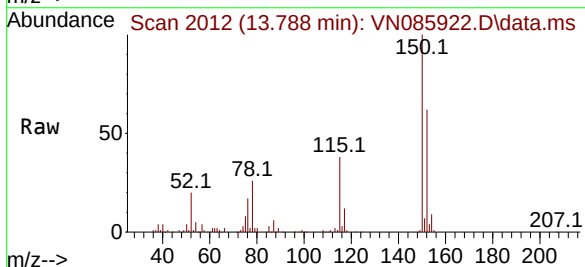
Instrument :
MSVOA_N
ClientSampleId :
TB03062025

Tgt Ion:117 Resp: 305300
Ion Ratio Lower Upper
117 100
82 58.2 45.7 68.5
119 31.6 26.2 39.2



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. -0.000 min
Lab File: VN085922.D
Acq: 10 Mar 2025 18:23

Tgt Ion:152 Resp: 121043
Ion Ratio Lower Upper
152 100
115 61.7 30.4 91.3
150 160.6 0.0 345.4



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\
Data File : VN085922.D
Acq On : 10 Mar 2025 18:23
Operator : JC\MD
Sample : Q1514-10
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
TB03062025

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Sampling : 1

Start Thrs: 0.2

Stop Thrs : 0

Filtering: 5

Min Area: 3 % of largest Peak

Max Peaks: 100

Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M

Title : SW846 8260

Signal : TIC: VN085922.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.824	141	148	153	rVB4	8553	15746	1.55%	0.292%
2	8.165	1046	1056	1060	rBV	152148	353103	34.82%	6.540%
3	8.224	1060	1066	1076	rVB2	256526	582261	57.41%	10.784%
4	8.577	1114	1126	1135	rBV	159821	362520	35.75%	6.714%
5	9.100	1205	1215	1226	rBV	404545	804215	79.30%	14.894%
6	10.565	1456	1464	1478	rBV	564256	1014161	100.00%	18.783%
7	11.865	1677	1685	1696	rBV	526317	922696	90.98%	17.089%
8	12.847	1845	1852	1866	rBV	366018	607957	59.95%	11.260%
9	13.788	2004	2012	2020	rBV	429958	736826	72.65%	13.646%

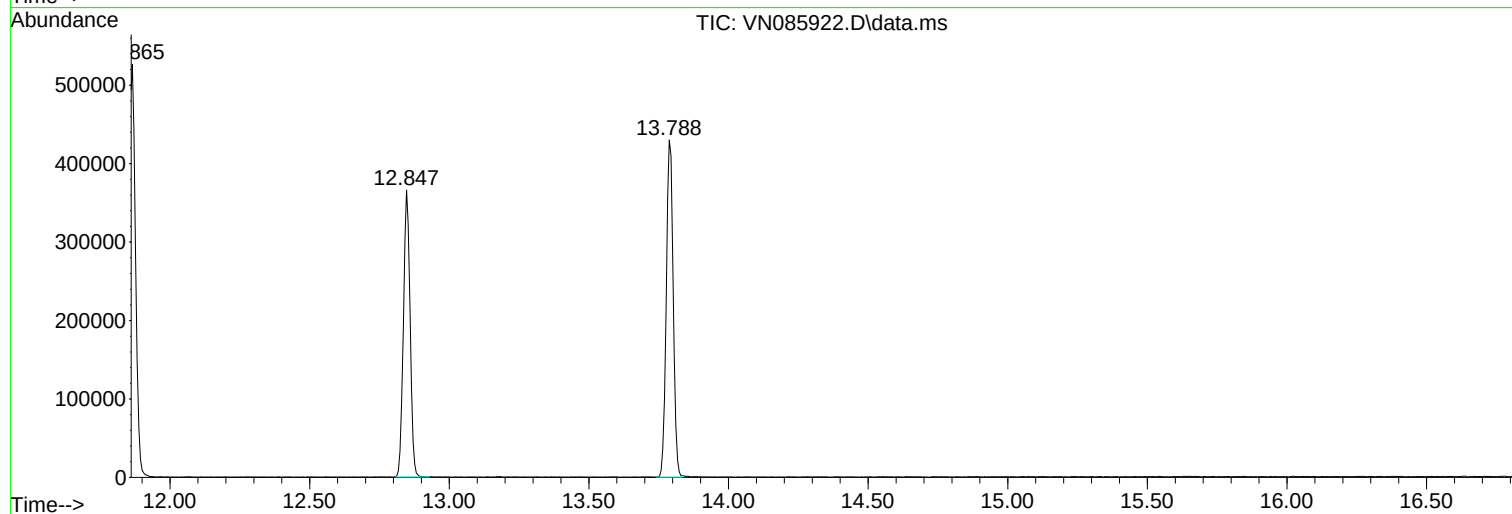
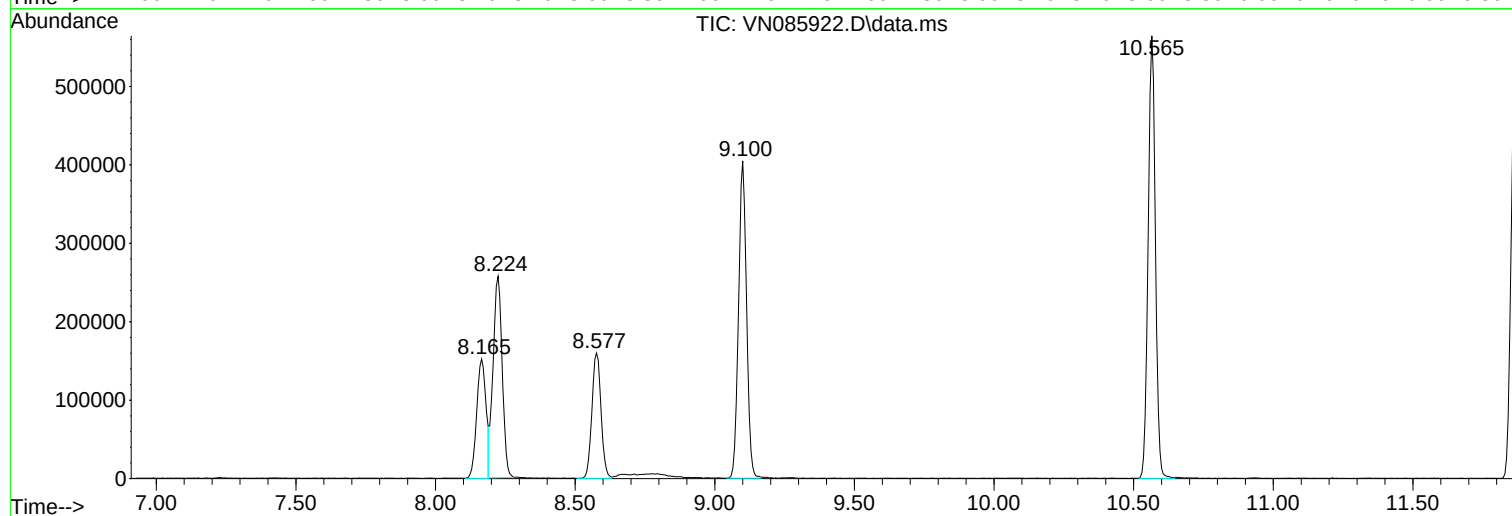
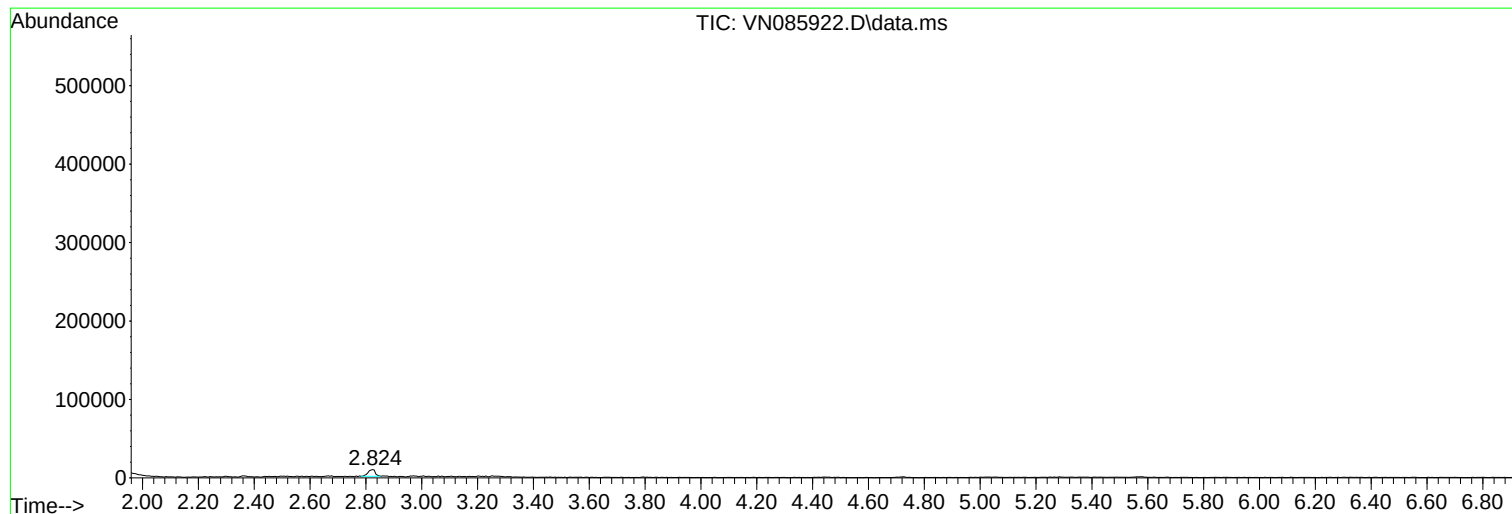
Sum of corrected areas: 5399485

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\
Data File : VN085922.D
Acq On : 10 Mar 2025 18:23
Operator : JC\MD
Sample : Q1514-10
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
TB03062025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\
Data File : VN085922.D
Acq On : 10 Mar 2025 18:23
Operator : JC\MD
Sample : Q1514-10
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
TB03062025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\
Data File : VN085922.D
Acq On : 10 Mar 2025 18:23
Operator : JC\MD
Sample : Q1514-10
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
TB03062025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc



CALIBRATION SUMMARY



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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: PORT06
 Lab Code: CHEM Case No.: Q1514 SAS No.: Q1514 SDG No.: Q1514
 Instrument ID: MSVOA_N Calibration Date(s): 02/18/2025 02/18/2025
 Heated Purge: (Y/N) N Calibration Time(s): 11:09 14:18
 GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID:		RRF100 = VN085772.D		RRF050 = VN085773.D		RRF010 = VN085775.D		
		RRF005 = VN085776.D		RRF001 = VN085777.D		RRF020 = VN085779.D		
COMPOUND	RRF100	RRF050	RRF010	RRF005	RRF001	RRF020	RRF	% RSD
Dichlorodifluoromethane	0.694	0.669	0.779	0.650	0.660	0.628	0.680	7.8
Chloromethane	0.647	0.622	0.742	0.662	0.817	0.604	0.682	11.9
Vinyl Chloride	0.698	0.678	0.796	0.729	0.761	0.674	0.723	6.7
Bromomethane	0.434	0.424	0.543	0.496		0.413	0.462	12.1
Chloroethane	0.447	0.417	0.516	0.470	0.584	0.438	0.479	12.9
Trichlorofluoromethane	1.010	0.959	1.134	1.065	1.103	1.006	1.046	6.3
1,1,2-Trichlorotrifluoroethane	0.602	0.564	0.674	0.635	0.554	0.599	0.605	7.4
1,1-Dichloroethene	0.555	0.527	0.591	0.571	0.514	0.531	0.548	5.3
Acetone	0.195	0.184	0.217	0.208	0.227	0.198	0.205	7.7
Carbon Disulfide	1.565	1.473	1.804	1.604	1.848	1.455	1.625	10.2
Methyl tert-butyl Ether	1.747	1.658	1.714	1.560	1.438	1.659	1.629	7
Methyl Acetate	0.653	0.619	0.794	0.690	0.853	0.625	0.705	13.7
Methylene Chloride	0.628	0.593	0.710	0.666	0.736	0.625	0.660	8.3
trans-1,2-Dichloroethene	0.585	0.549	0.621	0.599	0.623	0.566	0.590	5.1
1,1-Dichloroethane	1.097	1.035	1.216	1.125	1.073	1.089	1.106	5.6
Cyclohexane	0.878	0.860	0.977	1.056		0.858	0.926	9.5
2-Butanone	0.308	0.294	0.331	0.299	0.279	0.299	0.302	5.6
Carbon Tetrachloride	0.573	0.528	0.583	0.545	0.533	0.538	0.550	4.1
cis-1,2-Dichloroethene	0.705	0.661	0.740	0.685	0.646	0.671	0.685	4.9
Bromochloromethane	0.481	0.444	0.346	0.570	0.483	0.402	0.454	17
Chloroform	1.120	1.070	1.269	1.164	1.171	1.141	1.156	5.7
1,1,1-Trichloroethane	1.012	0.967	1.089	1.058	1.030	1.012	1.028	4.1
Methylcyclohexane	0.560	0.492	0.446	0.405	0.373	0.453	0.455	14.5
Benzene	1.581	1.441	1.568	1.421	1.420	1.474	1.484	4.9
1,2-Dichloroethane	0.499	0.456	0.527	0.464	0.472	0.483	0.483	5.4
Trichloroethene	0.370	0.339	0.384	0.350	0.395	0.348	0.364	6.1
1,2-Dichloropropane	0.377	0.347	0.385	0.344	0.339	0.357	0.358	5.2
Bromodichloromethane	0.569	0.518	0.571	0.533	0.512	0.541	0.541	4.6
4-Methyl-2-Pentanone	0.414	0.379	0.392	0.342	0.290	0.388	0.367	12.1
Toluene	0.993	0.902	0.924	0.820	0.689	0.891	0.870	12

* 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.



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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: PORT06
 Lab Code: CHEM Case No.: Q1514 SAS No.: Q1514 SDG No.: Q1514
 Instrument ID: MSVOA_N Calibration Date(s): 02/18/2025 02/18/2025
 Heated Purge: (Y/N) N Calibration Time(s): 11:09 14:18
 GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID:		RRF100 = VN085772.D		RRF050 = VN085773.D		RRF010 = VN085775.D			
		RRF005 = VN085776.D		RRF001 = VN085777.D		RRF020 = VN085779.D			
COMPOUND	RRF100	RRF050	RRF010	RRF005	RRF001	RRF020	RRF	% RSD	
t-1,3-Dichloropropene	0.576	0.521	0.518	0.471	0.408	0.505	0.500	11.3	
cis-1,3-Dichloropropene	0.626	0.566	0.582	0.513	0.442	0.559	0.548	11.6	
1,1,2-Trichloroethane	0.361	0.331	0.370	0.346	0.324	0.344	0.346	5	
2-Hexanone	0.296	0.273	0.266	0.227	0.184	0.270	0.253	16	
Dibromochloromethane	0.440	0.402	0.431	0.384	0.355	0.405	0.403	7.7	
1,2-Dibromoethane	0.354	0.322	0.362	0.320	0.273	0.330	0.327	9.7	
Tetrachloroethene	0.384	0.361	0.420	0.391	0.393	0.375	0.387	5.2	
Chlorobenzene	1.183	1.110	1.212	1.139	1.109	1.119	1.145	3.8	
Ethyl Benzene	2.105	1.904	1.830	1.665	1.424	1.838	1.794	12.8	
m/p-Xylenes	0.809	0.741	0.725	0.610	0.481	0.722	0.682	17.2	
o-Xylene	0.771	0.704	0.666	0.584	0.502	0.659	0.648	14.5	
Styrene	1.327	1.203	1.060	0.885	0.744	1.133	1.059	20.2	
Bromoform	0.327	0.303	0.322	0.301	0.274	0.309	0.306	6.2	
Isopropylbenzene	3.851	3.596	3.623	3.067	2.933	3.484	3.425	10.3	
1,1,2,2-Tetrachloroethane	1.073	1.053	1.304	1.218	1.271	1.154	1.179	8.8	
1,3-Dichlorobenzene	1.772	1.635	1.876	1.697	1.748	1.675	1.734	4.9	
1,4-Dichlorobenzene	1.750	1.647	1.884	1.777	1.921	1.684	1.777	6.1	
1,2-Dichlorobenzene	1.660	1.574	1.768	1.642	1.744	1.617	1.667	4.5	
1,2-Dibromo-3-Chloropropane	0.198	0.193	0.238	0.222	0.256	0.191	0.216	12.4	
1,2,4-Trichlorobenzene	0.877	0.802	0.827	0.728	0.829	0.704	0.794	8.3	
1,2,3-Trichlorobenzene	0.825	0.789	0.844	0.736	0.917	0.675	0.798	10.6	
1,2-Dichloroethane-d4	0.698	0.613	0.588	0.767		0.575	0.648	12.6	
Dibromofluoromethane	0.375	0.317	0.294	0.357		0.293	0.327	11.5	
Toluene-d8	1.444	1.199	1.017	1.212		1.080	1.190	13.8	
4-Bromofluorobenzene	0.503	0.419	0.323	0.370		0.346	0.392	18.2	

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

Method Path : Z:\voasrv\HPCHEM1\MSVOA_N\methods\
 Method File : 82N021825W.M
 Title : SW846 8260
 Last Update : Wed Feb 19 03:43:32 2025
 Response Via : Initial Calibration

Calibration Files

1 =VN085777.D 5 =VN085776.D 10 =VN085775.D 20 =VN085779.D 50 =VN085773.D 100 =VN085772.D

	Compound	1	5	10	20	50	100	Avg	%RSD
1) I	Pentafluorobenzene	-----ISTD-----							
2) T	Dichlorodifluo...	0.660	0.650	0.779	0.628	0.669	0.694	0.680	7.78
3) P	Chloromethane	0.817	0.662	0.742	0.604	0.622	0.647	0.682	11.93
4) C	Vinyl Chloride	0.761	0.729	0.796	0.674	0.678	0.698	0.723	6.72#
5) T	Bromomethane		0.496	0.543	0.413	0.424	0.434	0.462	12.05
6) T	Chloroethane	0.584	0.470	0.516	0.438	0.417	0.447	0.479	12.88
7) T	Trichlorofluor...	1.103	1.065	1.134	1.006	0.959	1.010	1.046	6.33
8) T	Diethyl Ether	0.313	0.353	0.366	0.325	0.331	0.343	0.339	5.72
9) T	1,1,2-Trichlor...	0.554	0.635	0.674	0.599	0.564	0.602	0.605	7.39
10) T	Methyl Iodide		0.724	0.806	0.712	0.722	0.764	0.745	5.24
11) T	Tert butyl alc...		0.083	0.092	0.073	0.078	0.072	0.080	9.91
12) CM	1,1-Dichloroet...	0.514	0.571	0.591	0.531	0.527	0.555	0.548	5.35#
13) T	Acrolein		0.126	0.117	0.105	0.126	0.116	0.118	7.35
14) T	Allyl chloride	0.694	0.724	0.778	0.686	0.691	0.747	0.720	5.13
15) T	Acrylonitrile	0.255	0.260	0.278	0.256	0.245	0.262	0.259	4.23
16) T	Acetone	0.227	0.208	0.217	0.198	0.184	0.195	0.205	7.68
17) T	Carbon Disulfide	1.848	1.604	1.804	1.455	1.473	1.565	1.625	10.22
18) T	Methyl Acetate	0.853	0.690	0.794	0.625	0.619	0.653	0.705	13.70
19) T	Methyl tert-bu...	1.438	1.560	1.714	1.659	1.658	1.747	1.629	6.95
20) T	Methylene Chlo...	0.736	0.666	0.710	0.625	0.593	0.628	0.660	8.34
21) T	trans-1,2-Dich...	0.623	0.599	0.621	0.566	0.549	0.585	0.590	5.05
22) T	Diisopropyl ether	1.326	1.567	1.764	1.716	1.643	1.744	1.627	10.09
23) T	Vinyl Acetate	0.999	1.034	1.189	1.126	1.118	1.218	1.114	7.63
24) P	1,1-Dichloroet...	1.073	1.125	1.216	1.089	1.035	1.097	1.106	5.59
25) T	2-Butanone	0.279	0.299	0.331	0.299	0.294	0.308	0.302	5.61
26) T	2,2-Dichloropr...	0.943	0.987	1.069	0.971	0.946	0.984	0.983	4.68
27) T	cis-1,2-Dichlo...	0.646	0.685	0.740	0.671	0.661	0.705	0.685	4.91
28) T	Bromochloromet...	0.483	0.570	0.346	0.402	0.444	0.481	0.454	16.96
29) T	Tetrahydrofuran	0.167	0.183	0.214	0.204	0.196	0.206	0.195	8.97
30) C	Chloroform	1.171	1.164	1.269	1.141	1.070	1.120	1.156	5.74#
31) T	Cyclohexane		1.056	0.977	0.858	0.860	0.878	0.926	9.50
32) T	1,1,1-Trichlor...	1.030	1.058	1.089	1.012	0.967	1.012	1.028	4.09
33) S	1,2-Dichloroet...		0.767	0.588	0.575	0.613	0.698	0.648	12.64
34) I	1,4-Difluorobenzene	-----ISTD-----							
35) S	Dibromofluorom...		0.357	0.294	0.293	0.317	0.375	0.327	11.46
36) T	1,1-Dichloropr...	0.426	0.436	0.490	0.458	0.460	0.509	0.463	6.84
37) T	Ethyl Acetate	0.353	0.376	0.385	0.396	0.375	0.400	0.381	4.47
38) T	Carbon Tetrach...	0.533	0.545	0.583	0.538	0.528	0.573	0.550	4.11
39) T	Methylcyclohexane	0.373	0.405	0.446	0.453	0.492	0.560	0.455	14.50
40) TM	Benzene	1.420	1.421	1.568	1.474	1.441	1.581	1.484	4.89
41) T	Methacrylonitrile	0.165	0.197	0.211	0.211	0.216	0.222	0.204	10.14
42) TM	1,2-Dichloroet...	0.472	0.464	0.527	0.483	0.456	0.499	0.483	5.42
43) T	Isopropyl Acetate	1.354	0.742	0.764	0.670	0.637	0.673	0.807	33.76
44) TM	Trichloroethene	0.395	0.350	0.384	0.348	0.339	0.370	0.364	6.15
45) C	1,2-Dichloropr...	0.339	0.344	0.385	0.357	0.347	0.377	0.358	5.25#
46) T	Dibromomethane	0.242	0.245	0.265	0.256	0.243	0.266	0.253	4.42
47) T	Bromodichlorom...	0.512	0.533	0.571	0.541	0.518	0.569	0.541	4.62
48) T	Methyl methacr...	0.236	0.258	0.277	0.294	0.301	0.332	0.283	11.90
49) T	1,4-Dioxane	0.005	0.005	0.006	0.005	0.006	0.005	0.005	5.54
50) S	Toluene-d8		1.212	1.017	1.080	1.199	1.444	1.190	13.77
51) T	4-Methyl-2-Pen...	0.290	0.342	0.392	0.388	0.379	0.414	0.367	12.11
52) CM	Toluene	0.689	0.820	0.924	0.891	0.902	0.993	0.870	12.03#
53) T	t-1,3-Dichloro...	0.408	0.471	0.518	0.505	0.521	0.576	0.500	11.31
54) T	cis-1,3-Dichlo...	0.442	0.513	0.582	0.559	0.566	0.626	0.548	11.58
55) T	1,1,2-Trichlor...	0.324	0.346	0.370	0.344	0.331	0.361	0.346	5.04
56) T	Ethyl methacry...	0.264	0.382	0.448	0.457	0.497	0.557	0.434	23.32

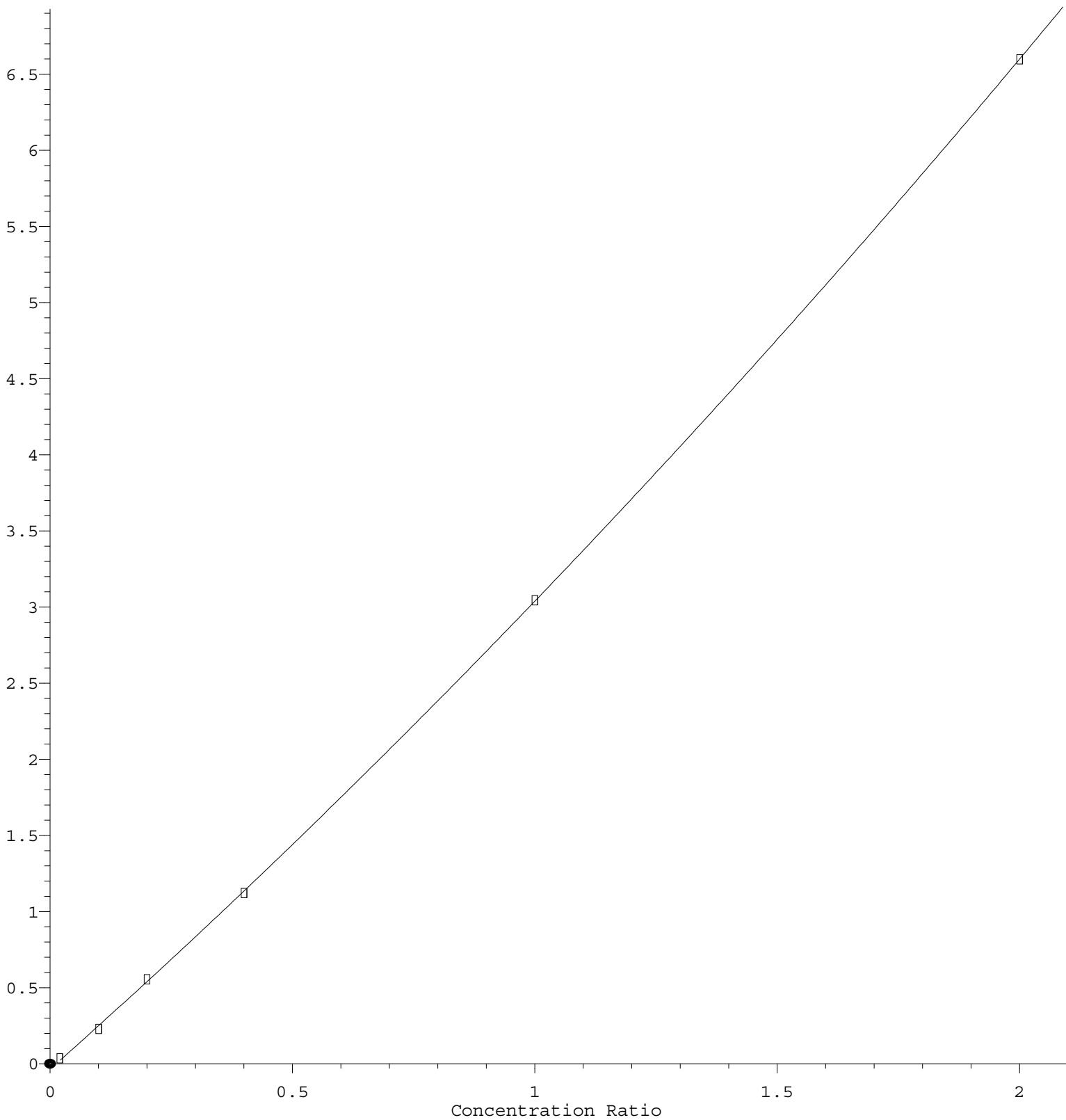
Method Path : Z:\voasrv\HPCHEM1\MSVOA_N\methods\
 Method File : 82N021825W.M

57)	T	1,3-Dichloropr...	0.533	0.553	0.615	0.580	0.565	0.619	0.577	5.91
58)	T	2-Chloroethyl ...	0.133	0.176	0.170	0.249	0.174	0.266	0.195	26.24
59)	T	2-Hexanone	0.184	0.227	0.266	0.270	0.273	0.296	0.253	15.99
60)	T	Dibromochlorom...	0.355	0.384	0.431	0.405	0.402	0.440	0.403	7.70
61)	T	1,2-Dibromoethane	0.273	0.320	0.362	0.330	0.322	0.354	0.327	9.68
62)	S	4-Bromofluorob...	0.370	0.323	0.346	0.419	0.503	0.392		18.22
63)	I	Chlorobenzene-d5	-----ISTD-----							
64)	T	Tetrachloroethene	0.393	0.391	0.420	0.375	0.361	0.384	0.387	5.17
65)	PM	Chlorobenzene	1.109	1.139	1.212	1.119	1.110	1.183	1.145	3.75
66)	T	1,1,1,2-Tetrac...	0.408	0.402	0.444	0.401	0.395	0.420	0.412	4.31
67)	C	Ethyl Benzene	1.424	1.665	1.830	1.838	1.904	2.105	1.794	12.85#
68)	T	m/p-Xylenes	0.481	0.610	0.725	0.722	0.741	0.809	0.682	17.19
69)	T	o-Xylene	0.502	0.584	0.666	0.659	0.704	0.771	0.648	14.48
70)	T	Styrene	0.744	0.885	1.060	1.133	1.203	1.327	1.059	20.15
71)	P	Bromoform	0.274	0.301	0.322	0.309	0.303	0.327	0.306	6.20
72)	I	1,4-Dichlorobenzen...	-----ISTD-----							
73)	T	Isopropylbenzene	2.933	3.067	3.623	3.484	3.596	3.851	3.425	10.31
74)	T	N-amyl acetate	1.072	1.117	1.263	1.245	1.241	1.311	1.208	7.67
75)	P	1,1,2,2-Tetrac...	1.271	1.218	1.304	1.154	1.053	1.073	1.179	8.77
76)	T	1,2,3-Trichlor...	1.324	1.161	1.145	1.122	0.947	0.964	1.111	12.59
77)	T	Bromobenzene	0.862	0.905	1.024	0.908	0.904	0.950	0.925	6.01
78)	T	n-propylbenzene	3.031	3.463	4.126	4.090	4.256	4.572	3.923	14.46
79)	T	2-Chlorotoluene	2.385	2.425	2.842	2.681	2.616	2.779	2.621	7.07
80)	T	1,3,5-Trimethy...	2.032	2.418	2.989	3.004	3.056	3.243	2.790	16.62
81)	T	trans-1,4-Dich...	0.339	0.392	0.367	0.397	0.409	0.381		7.38
82)	T	4-Chlorotoluene	2.201	2.437	2.837	2.643	2.658	2.815	2.598	9.32
83)	T	tert-Butylbenzene	1.802	2.119	2.432	2.421	2.578	2.727	2.346	14.27
84)	T	1,2,4-Trimethy...	1.838	2.387	2.937	3.018	3.078	3.306	2.761	19.75
85)	T	sec-Butylbenzene	2.486	2.938	3.534	3.417	3.653	3.864	3.315	15.40
86)	T	p-Isopropyltol...	1.779	2.288	2.776	2.804	3.045	3.299	2.665	20.58
87)	T	1,3-Dichlorobe...	1.748	1.697	1.876	1.675	1.635	1.772	1.734	4.93
88)	T	1,4-Dichlorobe...	1.921	1.777	1.884	1.684	1.647	1.750	1.777	6.08
89)	T	n-Butylbenzene	2.102	2.032	2.338	2.271	2.551	2.829	2.354	12.58
90)	T	Hexachloroethane	0.707	0.629	0.635	0.589	0.587	0.620	0.628	6.99
91)	T	1,2-Dichlorobe...	1.744	1.642	1.768	1.617	1.574	1.660	1.667	4.48
92)	T	1,2-Dibromo-3-...	0.256	0.222	0.238	0.191	0.193	0.198	0.216	12.42
93)	T	1,2,4-Trichlor...	0.829	0.728	0.827	0.704	0.802	0.877	0.794	8.31
94)	T	Hexachlorobuta...	0.649	0.481	0.503	0.405	0.424	0.435	0.483	18.51
95)	T	Naphthalene	2.397	1.858	2.160	1.821	2.324	2.527	2.181	13.31
96)	T	1,2,3-Trichlor...	0.917	0.736	0.844	0.675	0.789	0.825	0.798	10.65

(#) = Out of Range

p-Isopropyltoluene

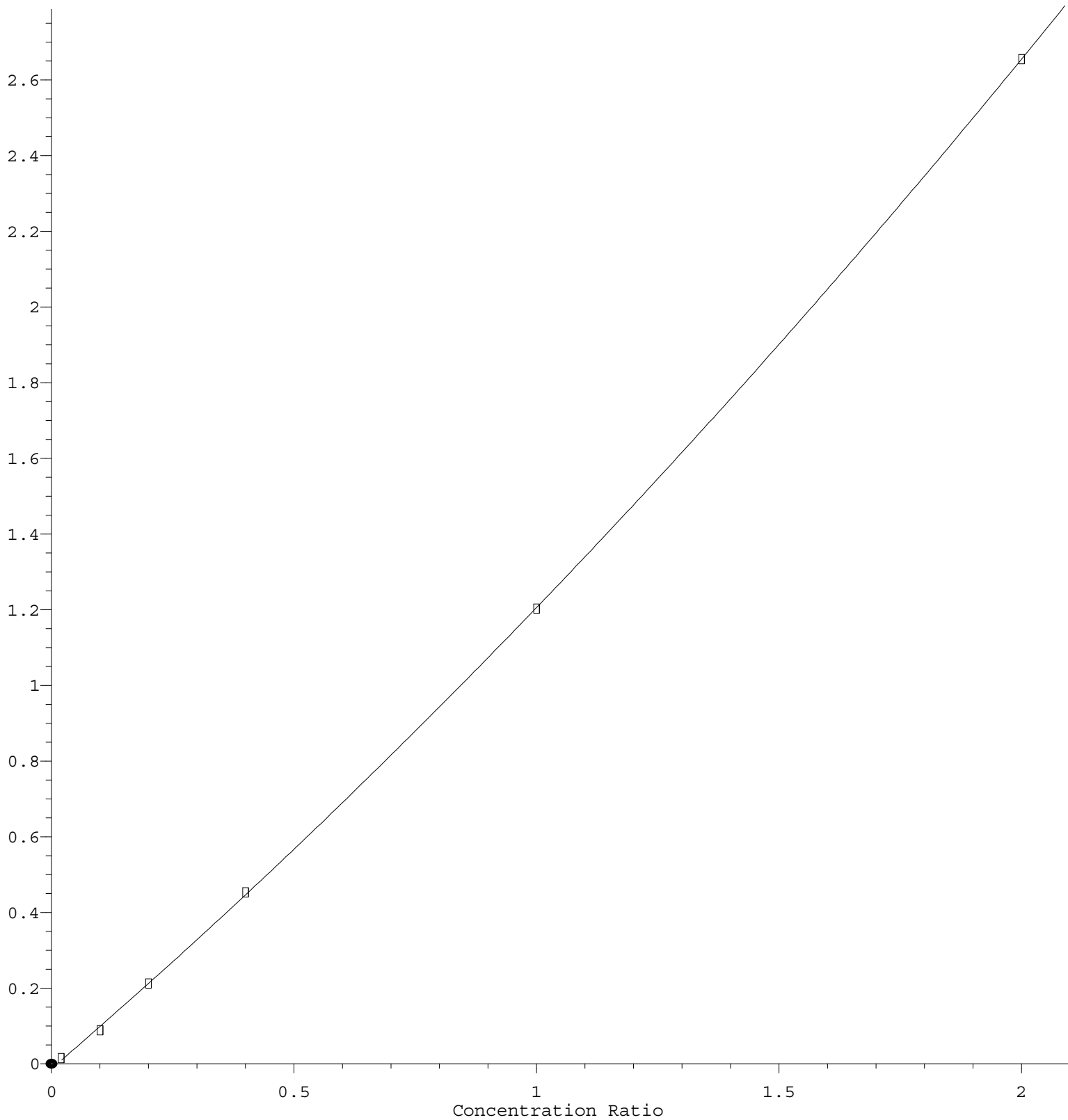
Response Ratio



R = 2.438e-001 A*A + 2.829e+000 A - 3.541e-002
Coef of Det (r^2) = 0.999965 Curve Fit: Quadratic
Method Name: Z:\voasrv\HPCHEM1\MSVOA N\methods\82N021825W.M
Calibration Table Last Updated: Wed Feb 19 03:43:32 2025

Styrene

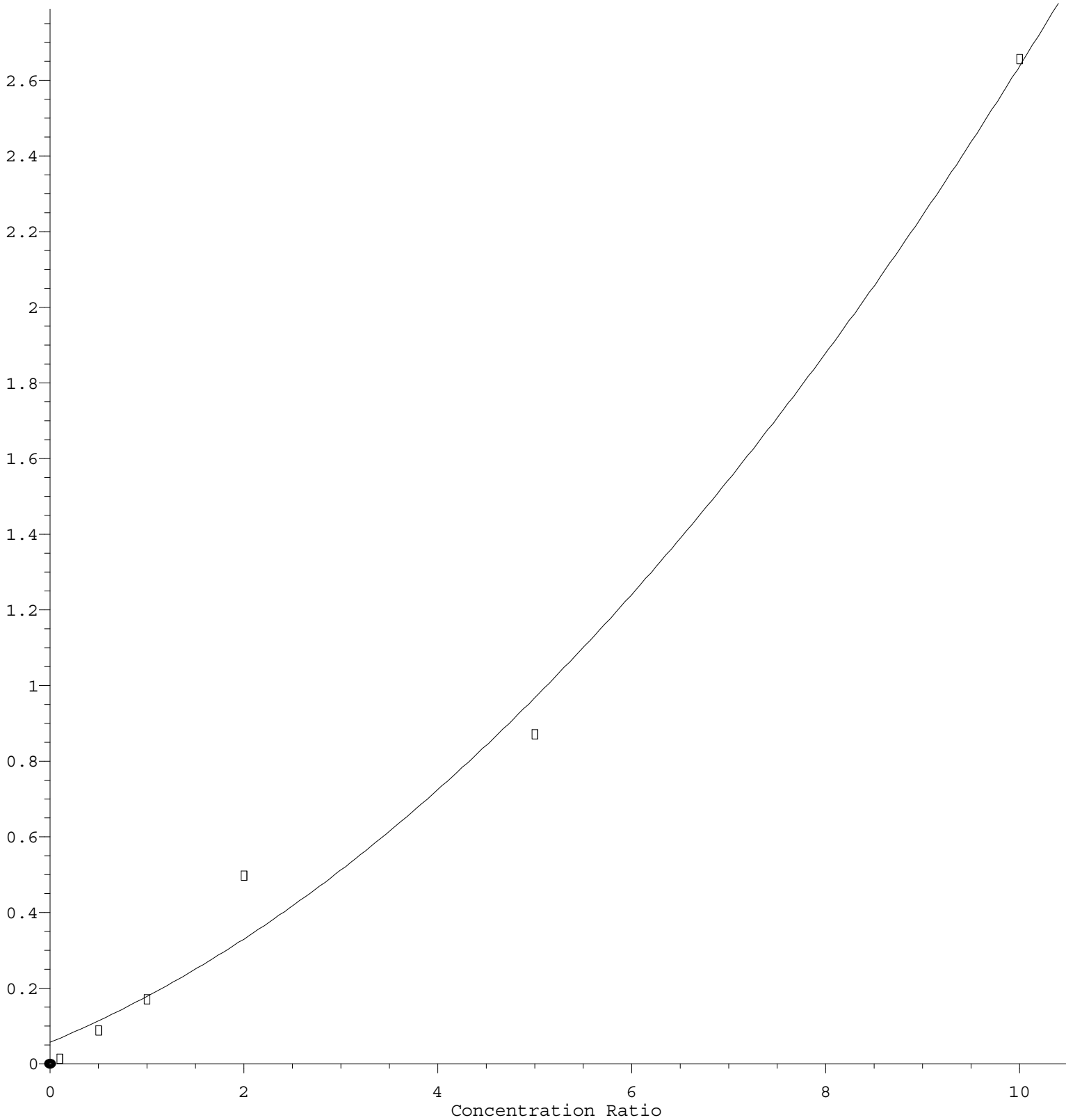
Response Ratio



$R = 1.156e-001 A^2 + 1.102e+000 A - 1.290e-002$
 Coef of Det (r^2) = 0.999965 Curve Fit: Quadratic
 Method Name: Z:\voasrv\HPCHEM1\MSVOA N\methods\82N021825W.M
 Calibration Table Last Updated: Wed Feb 19 03:43:32 2025

2-Chloroethyl Vinyl ether

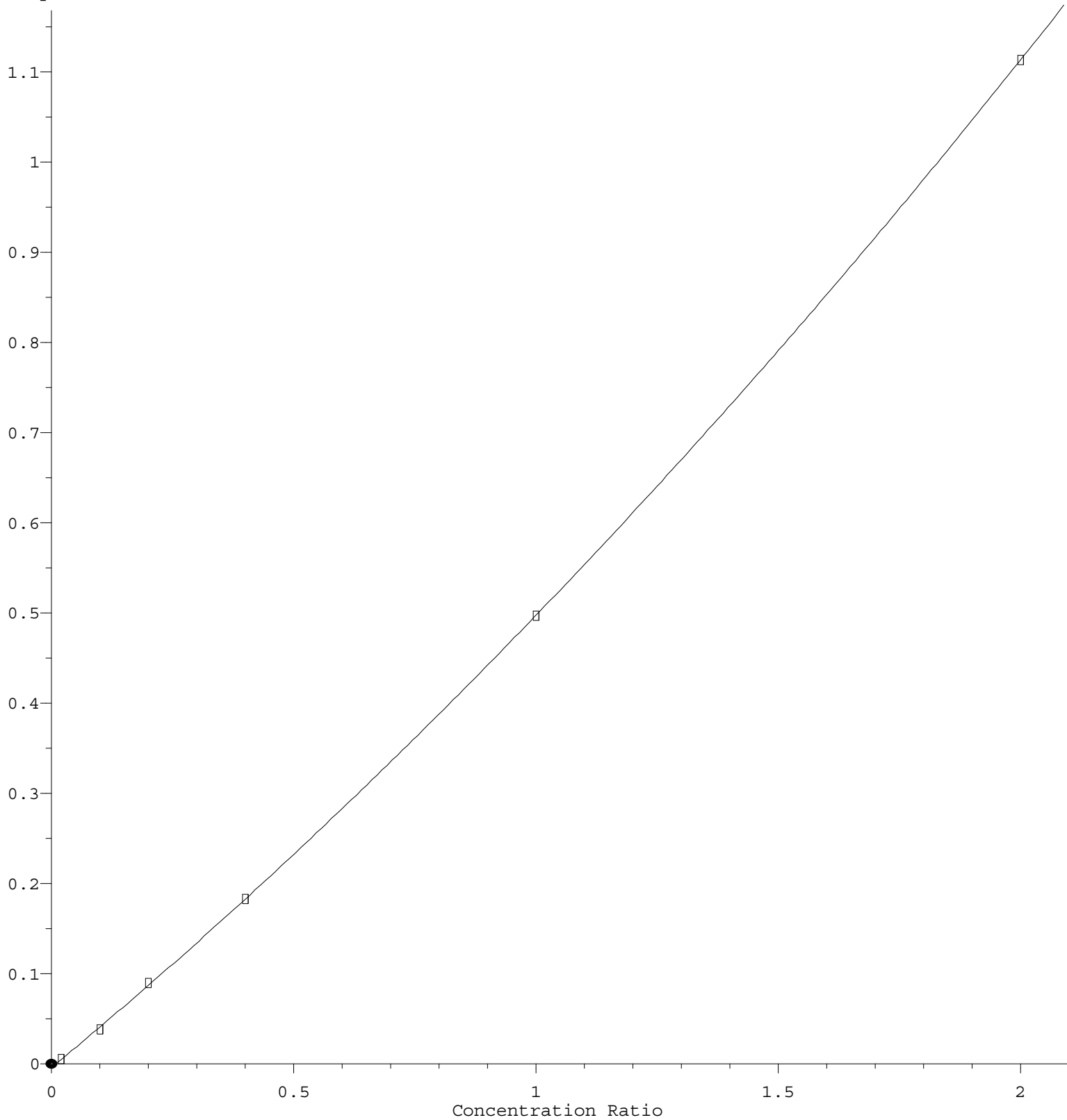
Response Ratio



$R = 1.518 \times 10^{-2} A^2 + 1.064 \times 10^{-1} A + 5.673 \times 10^{-2}$
 Coef of Det (r^2) = 0.991781 Curve Fit: Quadratic
 Method Name: Z:\voasrv\HPCHEM1\MSVOA N\methods\82N021825W.M
 Calibration Table Last Updated: Wed Feb 19 03:43:32 2025

Ethyl methacrylate

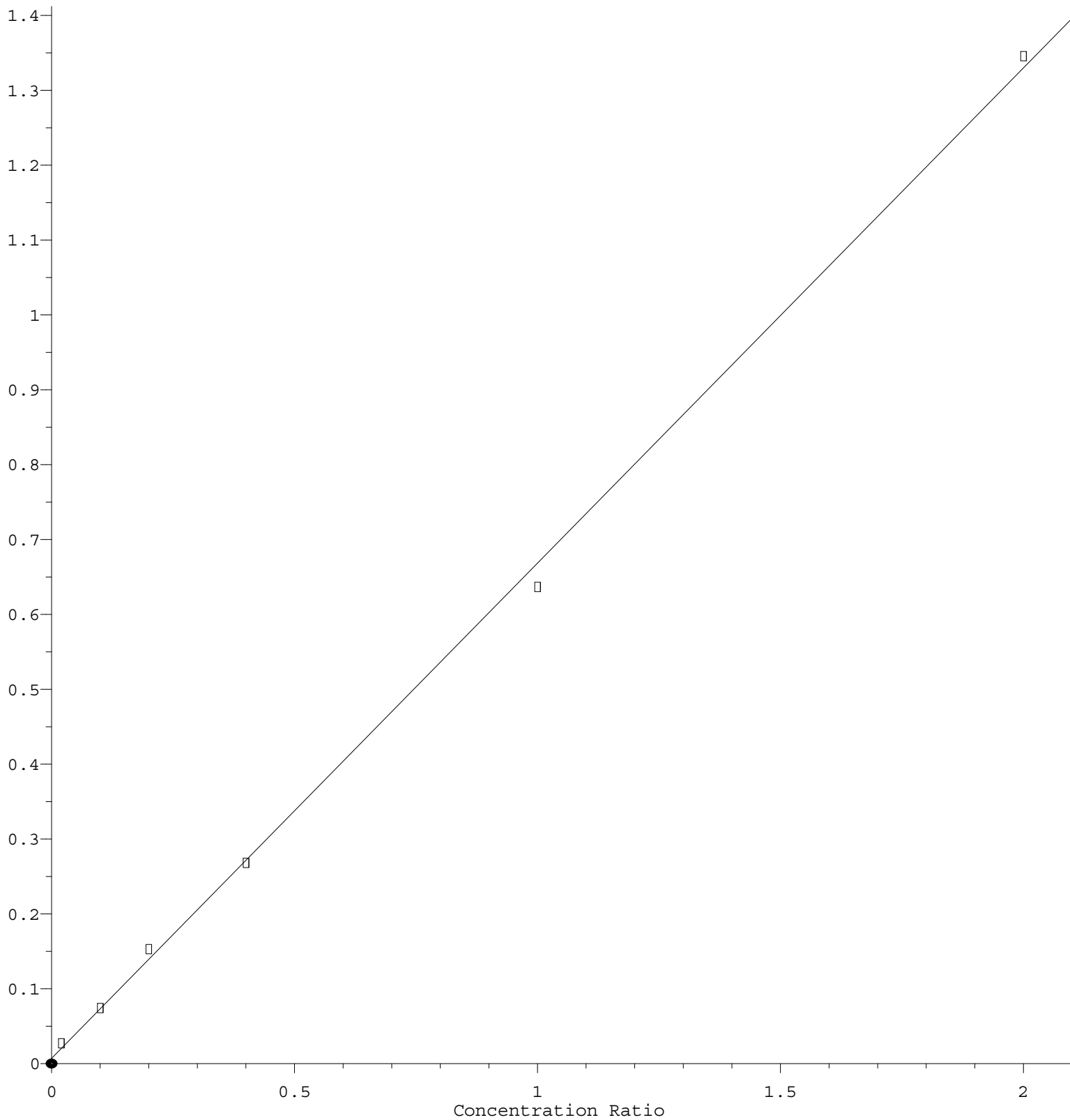
Response Ratio



$R = 5.718e-002 A^2 + 4.442e-001 A - 4.090e-003$
Coef of Det (r^2) = 0.999984 Curve Fit: Quadratic
Method Name: Z:\voasrv\HPCHEM1\MSVOA N\methods\82N021825W.M
Calibration Table Last Updated: Wed Feb 19 03:43:32 2025

Isopropyl Acetate

Response Ratio



$$\text{Response} = 6.614\text{e-}001 * \text{Amt} + 7.307\text{e-}003$$

Coef of Det (r^2) = 0.998821 Curve Fit: Linear

Method Name: Z:\voasrv\HPCHEM1\MSVOA N\methods\82N021825W.M

Calibration Table Last Updated: Wed Feb 19 03:43:32 2025

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN021825\
 Data File : VN085772.D
 Acq On : 18 Feb 2025 11:09
 Operator : JC\MD
 Sample : VSTDICC100
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICC100

Manual Integrations
 APPROVED

Reviewed By : John Carlone 02/19/2025
 Supervised By : Mahesh Dadoda 02/19/2025

Quant Time: Feb 19 03:15:39 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
 Quant Title : SW846 8260
 QLast Update : Wed Feb 19 03:03:15 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	8.218	168	290979	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.094	114	458183	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.859	117	412615	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	208401	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.571	65	406028	107.630	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 215.260%#			
35) Dibromofluoromethane	8.159	113	343729	114.648	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 229.300%#			
50) Toluene-d8	10.559	98	1323681	121.348	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 242.700%#			
62) 4-Bromofluorobenzene	12.841	95	460996	128.269	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 256.540%#			
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	2.124	85	403621	101.979	ug/l	99
3) Chloromethane	2.359	50	376343	94.759	ug/l	99
4) Vinyl Chloride	2.512	62	406434	96.652	ug/l	100
5) Bromomethane	2.948	94	252576	93.935	ug/l	99
6) Chloroethane	3.118	64	260404	93.490	ug/l	97
7) Trichlorofluoromethane	3.495	101	587970	96.574	ug/l	98
8) Diethyl Ether	3.959	74	199406	101.225	ug/l	98
9) 1,1,2-Trichlorotrifluo...	4.365	101	350536	99.604	ug/l	98
10) Methyl Iodide	4.583	142	444531	102.472	ug/l	98
11) Tert butyl alcohol	5.506	59	210616	453.930	ug/l	100
12) 1,1-Dichloroethene	4.336	96	323037	101.234	ug/l	96
13) Acrolein	4.171	56	337091	489.916	ug/l	98
14) Allyl chloride	5.018	41	434760	103.773	ug/l	97
15) Acrylonitrile	5.706	53	761272	504.697	ug/l	99
16) Acetone	4.418	43	567220	475.190	ug/l	99
17) Carbon Disulfide	4.706	76	910987	96.328	ug/l	99
18) Methyl Acetate	5.012	43	379901	92.531	ug/l	99
19) Methyl tert-butyl Ether	5.783	73	1016766	107.229	ug/l	100
20) Methylene Chloride	5.271	84	365222	95.142	ug/l	98
21) trans-1,2-Dichloroethene	5.783	96	340161	99.001	ug/l	96
22) Diisopropyl ether	6.665	45	1015041	107.223	ug/l	99
23) Vinyl Acetate	6.594	43	3542783	548.253	ug/l	100
24) 1,1-Dichloroethane	6.565	63	638203	99.172	ug/l	98
25) 2-Butanone	7.471	43	896027	510.235	ug/l	100
26) 2,2-Dichloropropane	7.483	77	572429	100.033	ug/l	99
27) cis-1,2-Dichloroethene	7.477	96	410066	102.929	ug/l	99
28) Bromochloromethane	7.806	49	280092	105.895	ug/l	97
29) Tetrahydrofuran	7.830	42	599504	528.664	ug/l	100
30) Chloroform	7.959	83	651761	96.914	ug/l	99
31) Cyclohexane	8.253	56	511031	94.843	ug/l	98
32) 1,1,1-Trichloroethane	8.165	97	589206	98.502	ug/l	98
36) 1,1-Dichloropropene	8.365	75	466531	109.949	ug/l	99
37) Ethyl Acetate	7.553	43	366887	105.069	ug/l	99
38) Carbon Tetrachloride	8.353	117	524870	104.105	ug/l	98
39) Methylcyclohexane	9.594	83	513492	123.184	ug/l	98
40) Benzene	8.600	78	1448660	106.522	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN021825\
 Data File : VN085772.D
 Acq On : 18 Feb 2025 11:09
 Operator : JC\MD
 Sample : VSTDICC100
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICC100

Manual Integrations
 APPROVED

Reviewed By : John Carlone 02/19/2025
 Supervised By : Mahesh Dadoda 02/19/2025

Quant Time: Feb 19 03:15:39 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
 Quant Title : SW846 8260
 QLast Update : Wed Feb 19 03:03:15 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.771	41	203689	109.119	ug/l	95
42) 1,2-Dichloroethane	8.665	62	457707	103.326	ug/l	100
43) Isopropyl Acetate	8.683	43	616521	101.163	ug/l	98
44) Trichloroethene	9.347	130	339019	101.529	ug/l	100
45) 1,2-Dichloropropane	9.618	63	345721	105.316	ug/l	99
46) Dibromomethane	9.700	93	243628	105.216	ug/l	100
47) Bromodichloromethane	9.883	83	521496	105.269	ug/l	99
48) Methyl methacrylate	9.677	41	304067	117.252	ug/l	100
49) 1,4-Dioxane	9.688	88	100443	2036.793	ug/l	98
51) 4-Methyl-2-Pentanone	10.441	43	1896777	563.403	ug/l	100
52) Toluene	10.624	92	910251	114.182	ug/l	100
53) t-1,3-Dichloropropene	10.829	75	527815	115.223	ug/l	99
54) cis-1,3-Dichloropropene	10.306	75	573653	114.202	ug/l	99
55) 1,1,2-Trichloroethane	11.012	97	330642	104.317	ug/l	99
56) Ethyl methacrylate	10.871	69	510041	100.007	ug/l	100
57) 1,3-Dichloropropane	11.159	76	567039	107.169	ug/l	100
58) 2-Chloroethyl Vinyl ether	10.153	63	1216927	502.158	ug/l	99
59) 2-Hexanone	11.188	43	1358126	586.394	ug/l	99
60) Dibromochloromethane	11.353	129	402920	109.169	ug/l	99
61) 1,2-Dibromoethane	11.465	107	324747	108.439	ug/l	99
64) Tetrachloroethene	11.100	164	316658	99.063	ug/l	97
65) Chlorobenzene	11.888	112	976337	103.290	ug/l	98
66) 1,1,1,2-Tetrachloroethane	11.959	131	346777	102.068	ug/l	100
67) Ethyl Benzene	11.959	91	1736848	117.301	ug/l	100
68) m/p-Xylenes	12.065	106	1335750	237.496	ug/l	99
69) o-Xylene	12.394	106	635879	118.977	ug/l	99
70) Styrene	12.406	104	1095464	100.012	ug/l	100
71) Bromoform	12.576	173	269816	106.877	ug/l #	98
73) Isopropylbenzene	12.688	105	1605096	112.422	ug/l	100
74) N-amyl acetate	12.488	43	546485	108.541	ug/l	99
75) 1,1,2,2-Tetrachloroethane	12.935	83	447332	91.050	ug/l	100
76) 1,2,3-Trichloropropane	12.988	75	401864m	87.774	ug/l	
77) Bromobenzene	12.976	156	395882	102.631	ug/l	100
78) n-propylbenzene	13.029	91	1905758	116.552	ug/l	100
79) 2-Chlorotoluene	13.118	91	1158348	106.029	ug/l	100
80) 1,3,5-Trimethylbenzene	13.171	105	1351753	116.226	ug/l	100
81) trans-1,4-Dichloro-2-b...	12.735	75	170494	107.459	ug/l	96
82) 4-Chlorotoluene	13.218	91	1173182	108.322	ug/l	99
83) tert-Butylbenzene	13.435	119	1136802	116.235	ug/l	100
84) 1,2,4-Trimethylbenzene	13.476	105	1378080	119.764	ug/l	100
85) sec-Butylbenzene	13.612	105	1610382	116.540	ug/l	100
86) p-Isopropyltoluene	13.723	119	1374884	99.983	ug/l	100
87) 1,3-Dichlorobenzene	13.729	146	738679	102.213	ug/l	99
88) 1,4-Dichlorobenzene	13.806	146	729470	98.484	ug/l	99
89) n-Butylbenzene	14.053	91	1179057	120.179	ug/l	99
90) Hexachloroethane	14.329	117	258559	98.800	ug/l	97
91) 1,2-Dichlorobenzene	14.100	146	691905	99.562	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.717	75	82545	91.495	ug/l	97
93) 1,2,4-Trichlorobenzene	15.388	180	365599	110.404	ug/l	99
94) Hexachlorobutadiene	15.494	225	181264	90.068	ug/l	98
95) Naphthalene	15.635	128	1053414	115.870	ug/l	100
96) 1,2,3-Trichlorobenzene	15.835	180	343936	103.456	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN021825\
Data File : VN085772.D
Acq On : 18 Feb 2025 11:09
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/19/2025
Supervised By :Mahesh Dadoda 02/19/2025

Quant Time: Feb 19 03:15:39 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260
QLast Update : Wed Feb 19 03:03:15 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_N\Data\VN021825\
Data File : VN085772.D
Acq On : 18 Feb 2025 11:09
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC100

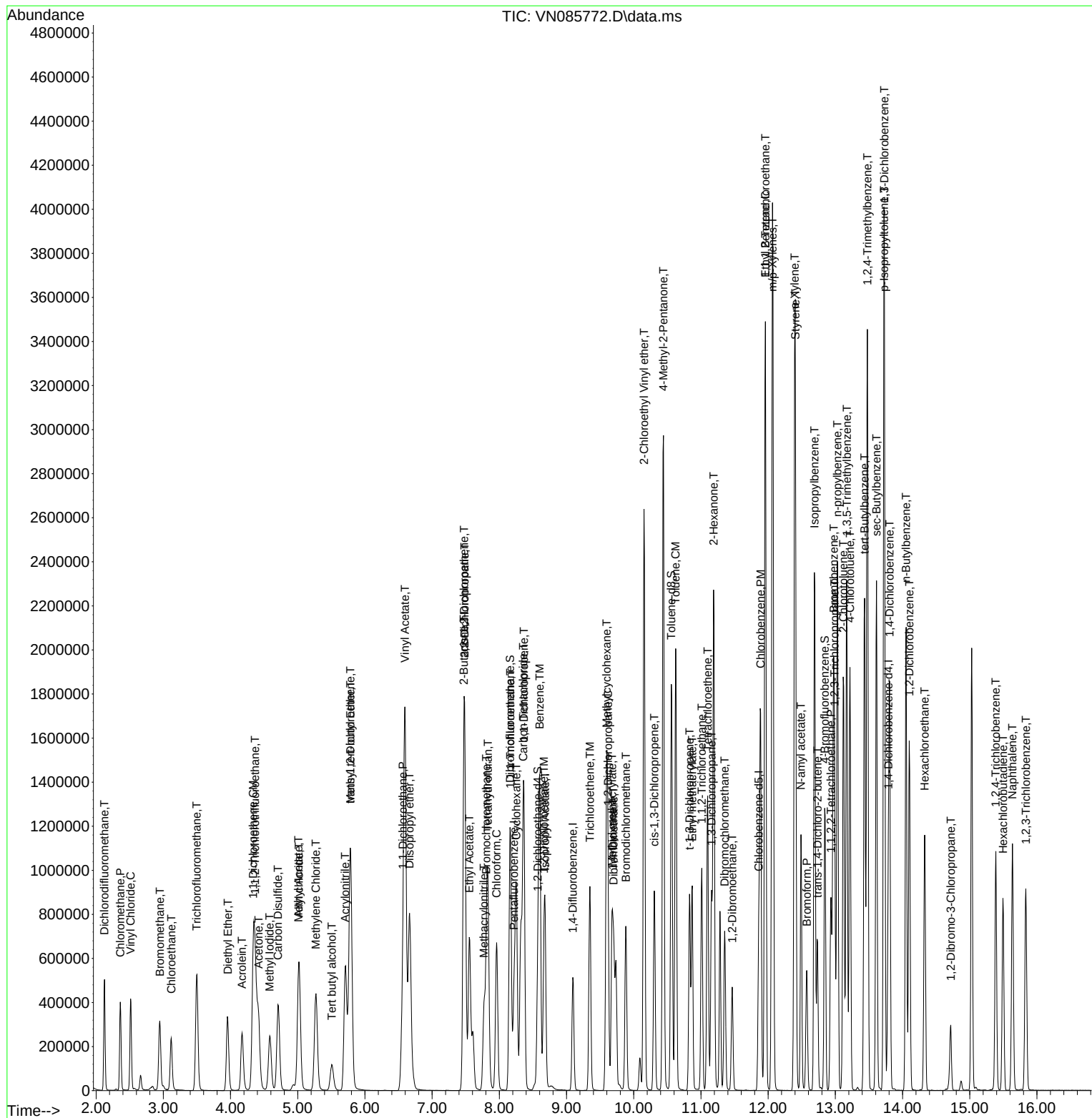
Manual Integrations

APPROVED

Reviewed By :John Carlone 02/19/2025

Supervised By :Mahesh Dadoda 02/19/2025

Quant Time: Feb 19 03:15:39 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260
QLast Update : Wed Feb 19 03:03:15 2025
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN021825\
 Data File : VN085773.D
 Acq On : 18 Feb 2025 11:32
 Operator : JC\MD
 Sample : VSTDICCC050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICCC050

Manual Integrations
 APPROVED

Reviewed By : John Carlone 02/19/2025
 Supervised By : Mahesh Dadoda 02/19/2025

Quant Time: Feb 19 03:16:32 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
 Quant Title : SW846 8260
 QLast Update : Wed Feb 19 03:03:15 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.218	168	322407	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.094	114	526945	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.859	117	461653	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	227499	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.571	65	197726	47.304	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery =	94.600%		
35) Dibromofluoromethane	8.159	113	167050	48.447	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	96.900%		
50) Toluene-d8	10.559	98	632021	50.380	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery =	100.760%		
62) 4-Bromofluorobenzene	12.841	95	220691	53.393	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery =	106.780%		
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	2.124	85	215740	49.195	ug/l	100
3) Chloromethane	2.359	50	200592	45.584	ug/l	100
4) Vinyl Chloride	2.512	62	218675	46.933	ug/l	100
5) Bromomethane	2.953	94	136563	45.838	ug/l	100
6) Chloroethane	3.124	64	134303	43.517	ug/l	100
7) Trichlorofluoromethane	3.501	101	309133	45.825	ug/l	100
8) Diethyl Ether	3.959	74	106634	48.854	ug/l	100
9) 1,1,2-Trichlorotrifluo...	4.365	101	181996	46.673	ug/l	100
10) Methyl Iodide	4.583	142	232889	48.452	ug/l	100
11) Tert butyl alcohol	5.506	59	126538	246.136	ug/l	100
12) 1,1-Dichloroethene	4.336	96	170063	48.100	ug/l	100
13) Acrolein	4.177	56	203891	267.442	ug/l	100
14) Allyl chloride	5.018	41	222754	47.986	ug/l	100
15) Acrylonitrile	5.712	53	394641	236.130	ug/l	100
16) Acetone	4.418	43	297175	224.691	ug/l	100
17) Carbon Disulfide	4.712	76	474860	45.317	ug/l	100
18) Methyl Acetate	5.018	43	199458	43.846	ug/l	100
19) Methyl tert-butyl Ether	5.789	73	534589	50.883	ug/l	100
20) Methylene Chloride	5.271	84	191098	44.929	ug/l	100
21) trans-1,2-Dichloroethene	5.783	96	176973	46.486	ug/l	100
22) Diisopropyl ether	6.665	45	529828	50.512	ug/l	100
23) Vinyl Acetate	6.594	43	1802342	251.727	ug/l	100
24) 1,1-Dichloroethane	6.565	63	333567	46.781	ug/l	100
25) 2-Butanone	7.471	43	474562	243.893	ug/l	100
26) 2,2-Dichloropropane	7.483	77	304840	48.079	ug/l	100
27) cis-1,2-Dichloroethene	7.483	96	213235	48.306	ug/l	100
28) Bromochloromethane	7.806	49	143276	48.888	ug/l	100
29) Tetrahydrofuran	7.830	42	315243	250.894	ug/l	100
30) Chloroform	7.959	83	344841	46.278	ug/l	100
31) Cyclohexane	8.253	56	277254	46.440	ug/l	100
32) 1,1,1-Trichloroethane	8.165	97	311700	47.030	ug/l	100
36) 1,1-Dichloropropene	8.365	75	242144	49.620	ug/l	100
37) Ethyl Acetate	7.553	43	197609	49.206	ug/l	100
38) Carbon Tetrachloride	8.353	117	278306	47.997	ug/l	100
39) Methylcyclohexane	9.594	83	259289	54.085	ug/l	100
40) Benzene	8.600	78	759363	48.551	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN021825\
 Data File : VN085773.D
 Acq On : 18 Feb 2025 11:32
 Operator : JC\MD
 Sample : VSTDICCC050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICCC050

Manual Integrations
 APPROVED

Reviewed By : John Carlone 02/19/2025
 Supervised By : Mahesh Dadoda 02/19/2025

Quant Time: Feb 19 03:16:32 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
 Quant Title : SW846 8260
 QLast Update : Wed Feb 19 03:03:15 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.765	41	113568	52.901	ug/l	100
42) 1,2-Dichloroethane	8.665	62	240115	47.132	ug/l	100
43) Isopropyl Acetate	8.683	43	335482	47.574	ug/l	100
44) Trichloroethene	9.347	130	178742	46.544	ug/l	100
45) 1,2-Dichloropropane	9.618	63	182649	48.379	ug/l	100
46) Dibromomethane	9.700	93	127850	48.010	ug/l	100
47) Bromodichloromethane	9.882	83	272912	47.901	ug/l	100
48) Methyl methacrylate	9.677	41	158375	53.102	ug/l	100
49) 1,4-Dioxane	9.688	88	60759	1071.301	ug/l	100
51) 4-Methyl-2-Pentanone	10.441	43	997906	257.731	ug/l	100
52) Toluene	10.624	92	475069	51.816	ug/l	100
53) t-1,3-Dichloropropene	10.829	75	274791	52.159	ug/l	100
54) cis-1,3-Dichloropropene	10.306	75	298359	51.646	ug/l	100
55) 1,1,2-Trichloroethane	11.012	97	174198	47.788	ug/l	100
56) Ethyl methacrylate	10.871	69	261825	49.960	ug/l	100
57) 1,3-Dichloropropane	11.159	76	297683	48.920	ug/l	100
58) 2-Chloroethyl Vinyl ether	10.153	63	458983	230.774	ug/l	100
59) 2-Hexanone	11.188	43	719870	270.257	ug/l	100
60) Dibromochloromethane	11.353	129	211769	49.890	ug/l	100
61) 1,2-Dibromoethane	11.465	107	169422	49.191	ug/l	100
64) Tetrachloroethene	11.100	164	166710	46.613	ug/l	100
65) Chlorobenzene	11.882	112	512436	48.454	ug/l	100
66) 1,1,1,2-Tetrachloroethane	11.959	131	182537	48.020	ug/l	100
67) Ethyl Benzene	11.959	91	879040	53.062	ug/l	100
68) m/p-Xylenes	12.065	106	684377	108.757	ug/l	100
69) o-Xylene	12.394	106	324948	54.342	ug/l	100
70) Styrene	12.406	104	555269	49.909	ug/l	100
71) Bromoform	12.570	173	139895	49.528	ug/l #	100
73) Isopropylbenzene	12.688	105	817980	52.482	ug/l	100
74) N-amyl acetate	12.488	43	282288	51.360	ug/l	100
75) 1,1,2,2-Tetrachloroethane	12.935	83	239463	44.649	ug/l	100
76) 1,2,3-Trichloropropane	12.988	75	215451m	43.108	ug/l	100
77) Bromobenzene	12.976	156	205754	48.863	ug/l	100
78) n-propylbenzene	13.029	91	968182	54.241	ug/l	100
79) 2-Chlorotoluene	13.118	91	595046	49.895	ug/l	100
80) 1,3,5-Trimethylbenzene	13.165	105	695205	54.757	ug/l	100
81) trans-1,4-Dichloro-2-b...	12.729	75	90255	52.111	ug/l	100
82) 4-Chlorotoluene	13.218	91	604612	51.139	ug/l	100
83) tert-Butylbenzene	13.435	119	586493	54.933	ug/l	100
84) 1,2,4-Trimethylbenzene	13.476	105	700260	55.748	ug/l	100
85) sec-Butylbenzene	13.612	105	831143	55.099	ug/l	100
86) p-Isopropyltoluene	13.723	119	692641	50.103	ug/l	100
87) 1,3-Dichlorobenzene	13.729	146	372004	47.154	ug/l	100
88) 1,4-Dichlorobenzene	13.806	146	374700	46.340	ug/l	100
89) n-Butylbenzene	14.053	91	580445	54.197	ug/l	100
90) Hexachloroethane	14.329	117	133438	46.708	ug/l	100
91) 1,2-Dichlorobenzene	14.100	146	358159	47.211	ug/l	100
92) 1,2-Dibromo-3-Chloropr...	14.712	75	43935	44.611	ug/l	100
93) 1,2,4-Trichlorobenzene	15.388	180	182458	50.473	ug/l	100
94) Hexachlorobutadiene	15.494	225	96444	43.899	ug/l	100
95) Naphthalene	15.635	128	528627	53.265	ug/l	100
96) 1,2,3-Trichlorobenzene	15.835	180	179544	49.473	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN021825\
Data File : VN085773.D
Acq On : 18 Feb 2025 11:32
Operator : JC\MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/19/2025
Supervised By :Mahesh Dadoda 02/19/2025

Quant Time: Feb 19 03:16:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260
QLast Update : Wed Feb 19 03:03:15 2025
Response via : Initial Calibration

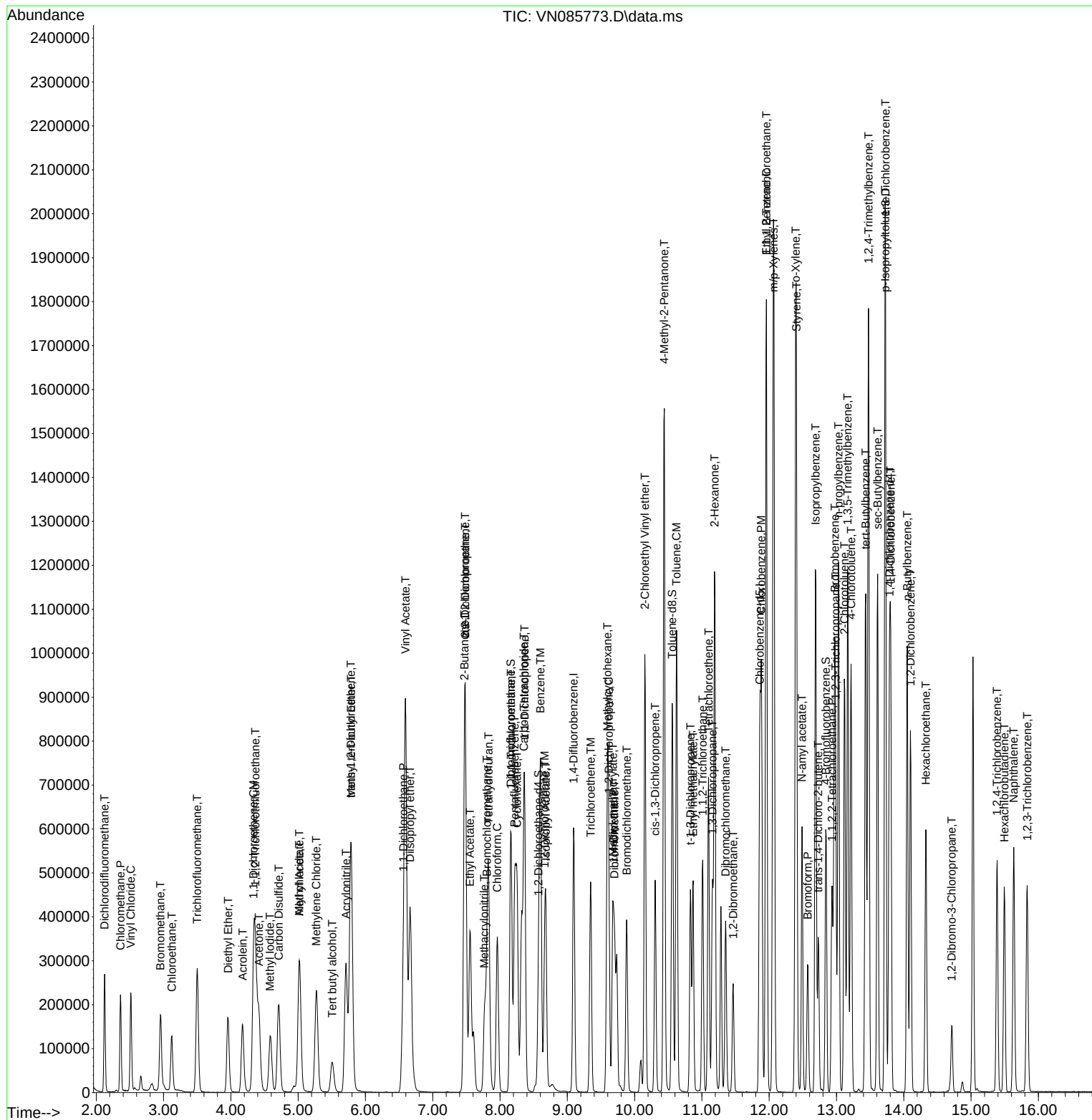
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations

Reviewed By :John Carlone 02/19/2025
Supervised By :Mahesh Dadoda 02/19/2025



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN021825\
 Data File : VN085775.D
 Acq On : 18 Feb 2025 12:20
 Operator : JC\MD
 Sample : VSTDIC010
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDIC010

Manual Integrations
 APPROVED

Reviewed By : John Carlone 02/19/2025
 Supervised By : Mahesh Dadoda 02/19/2025

Quant Time: Feb 19 03:17:27 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
 Quant Title : SW846 8260
 QLast Update : Wed Feb 19 03:03:15 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	8.218	168	235331	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.094	114	397776	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.859	117	339681	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	151740	50.000	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	27654	9.064	ug/l	0.00
Spiked Amount	50.000	Range	74 - 125	Recovery	=	18.120%#
35) Dibromofluoromethane	8.159	113	23353	8.972	ug/l	0.00
Spiked Amount	50.000	Range	75 - 124	Recovery	=	17.940%#
50) Toluene-d8	10.565	98	80889	8.542	ug/l	0.00
Spiked Amount	50.000	Range	86 - 113	Recovery	=	17.080%#
62) 4-Bromofluorobenzene	12.841	95	25697	8.236	ug/l	0.00
Spiked Amount	50.000	Range	77 - 121	Recovery	=	16.480%#

Target Compounds					Qvalue	
2) Dichlorodifluoromethane	2.124	85	36657	11.452	ug/l	96
3) Chloromethane	2.359	50	34946	10.880	ug/l	97
4) Vinyl Chloride	2.518	62	37462	11.015	ug/l	99
5) Bromomethane	2.965	94	25562	11.755	ug/l	100
6) Chloroethane	3.124	64	24265	10.772	ug/l	95
7) Trichlorofluoromethane	3.500	101	53380	10.841	ug/l	99
8) Diethyl Ether	3.959	74	17236	10.819	ug/l	94
9) 1,1,2-Trichlorotrifluo...	4.371	101	31724	11.146	ug/l	96
10) Methyl Iodide	4.589	142	37913	10.806	ug/l	93
11) Tert butyl alcohol	5.506	59	21584	57.519	ug/l	99
12) 1,1-Dichloroethene	4.342	96	27815	10.778	ug/l	97
13) Acrolein	4.177	56	27644	49.677	ug/l	98
14) Allyl chloride	5.024	41	36624	10.809	ug/l	98
15) Acrylonitrile	5.718	53	65440	53.643	ug/l	99
16) Acetone	4.424	43	51172	53.007	ug/l	97
17) Carbon Disulfide	4.712	76	84915	11.102	ug/l	99
18) Methyl Acetate	5.024	43	37354	11.250	ug/l	98
19) Methyl tert-butyl Ether	5.788	73	80686	10.521	ug/l	96
20) Methylene Chloride	5.271	84	33412	10.762	ug/l	98
21) trans-1,2-Dichloroethene	5.783	96	29226	10.517	ug/l	91
22) Diisopropyl ether	6.671	45	83002	10.841	ug/l	95
23) Vinyl Acetate	6.600	43	279697m	53.519	ug/l	
24) 1,1-Dichloroethane	6.565	63	57247	10.999	ug/l	97
25) 2-Butanone	7.477	43	77791	54.772	ug/l	98
26) 2,2-Dichloropropane	7.482	77	50333	10.876	ug/l	98
27) cis-1,2-Dichloroethene	7.488	96	34806	10.802	ug/l	98
28) Bromochloromethane	7.812	49	16276	7.609	ug/l #	99
29) Tetrahydrofuran	7.835	42	50478	55.039	ug/l	98
30) Chloroform	7.959	83	59719	10.980	ug/l	96
31) Cyclohexane	8.253	56	45995	10.555	ug/l	97
32) 1,1,1-Trichloroethane	8.165	97	51254	10.595	ug/l	98
36) 1,1-Dichloropropene	8.365	75	38983	10.582	ug/l	99
37) Ethyl Acetate	7.553	43	30665	10.115	ug/l	96
38) Carbon Tetrachloride	8.353	117	46420	10.605	ug/l	97
39) Methylcyclohexane	9.594	83	35475	9.803	ug/l #	85
40) Benzene	8.606	78	124704	10.562	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN021825\
 Data File : VN085775.D
 Acq On : 18 Feb 2025 12:20
 Operator : JC\MD
 Sample : VSTDICC010
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 5 Sample Multiplier: 1

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC010

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/19/2025

Supervised By :Mahesh Dadoda 02/19/2025

Quant Time: Feb 19 03:17:27 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M

Quant Title : SW846 8260

QLast Update : Wed Feb 19 03:03:15 2025

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.771	41	16811	10.373	ug/l	99
42) 1,2-Dichloroethane	8.665	62	41912	10.898	ug/l	98
43) Isopropyl Acetate	8.682	43	60794	11.001	ug/l	95
44) Trichloroethene	9.347	130	30561	10.542	ug/l	88
45) 1,2-Dichloropropane	9.618	63	30619	10.744	ug/l	100
46) Dibromomethane	9.706	93	21085	10.489	ug/l	98
47) Bromodichloromethane	9.882	83	45413	10.559	ug/l	95
48) Methyl methacrylate	9.676	41	22058	9.798	ug/l	96
49) 1,4-Dioxane	9.688	88	8936	208.723	ug/l #	95
51) 4-Methyl-2-Pentanone	10.441	43	155789	53.302	ug/l	98
52) Toluene	10.623	92	73516	10.622	ug/l	98
53) t-1,3-Dichloropropene	10.829	75	41230	10.367	ug/l	100
54) cis-1,3-Dichloropropene	10.306	75	46300	10.617	ug/l	95
55) 1,1,2-Trichloroethane	11.012	97	29408	10.687	ug/l	96
56) Ethyl methacrylate	10.871	69	35641	10.274	ug/l	99
57) 1,3-Dichloropropane	11.159	76	48905	10.647	ug/l	98
58) 2-Chloroethyl Vinyl ether	10.159	63	67791	47.108	ug/l	97
59) 2-Hexanone	11.188	43	105782	52.609	ug/l	97
60) Dibromochloromethane	11.353	129	34267	10.694	ug/l	98
61) 1,2-Dibromoethane	11.465	107	28789	11.073	ug/l	97
64) Tetrachloroethene	11.100	164	28564	10.855	ug/l	92
65) Chlorobenzene	11.888	112	82365	10.585	ug/l	99
66) 1,1,1,2-Tetrachloroethane	11.953	131	30133	10.773	ug/l	99
67) Ethyl Benzene	11.959	91	124323	10.199	ug/l	98
68) m/p-Xylenes	12.065	106	98574	21.290	ug/l	98
69) o-Xylene	12.394	106	45263	10.287	ug/l	100
70) Styrene	12.406	104	72044	9.994	ug/l	98
71) Bromoform	12.576	173	21882	10.529	ug/l #	98
73) Isopropylbenzene	12.688	105	109944	10.576	ug/l	99
74) N-amyl acetate	12.488	43	38318	10.452	ug/l	97
75) 1,1,2,2-Tetrachloroethane	12.935	83	39575	11.063	ug/l	99
76) 1,2,3-Trichloropropane	12.988	75	34754m	10.425	ug/l	
77) Bromobenzene	12.976	156	31066	11.061	ug/l	98
78) n-propylbenzene	13.029	91	125206	10.517	ug/l	99
79) 2-Chlorotoluene	13.117	91	86237	10.841	ug/l	100
80) 1,3,5-Trimethylbenzene	13.170	105	90718	10.713	ug/l	100
81) trans-1,4-Dichloro-2-b...	12.735	75	11901	10.302	ug/l	97
82) 4-Chlorotoluene	13.217	91	86106	10.919	ug/l	100
83) tert-Butylbenzene	13.435	119	73803	10.364	ug/l	96
84) 1,2,4-Trimethylbenzene	13.476	105	89125	10.638	ug/l	99
85) sec-Butylbenzene	13.611	105	107253	10.660	ug/l	99
86) p-Isopropyltoluene	13.723	119	84249	10.256	ug/l	99
87) 1,3-Dichlorobenzene	13.729	146	56944	10.822	ug/l	97
88) 1,4-Dichlorobenzene	13.806	146	57166	10.600	ug/l	99
89) n-Butylbenzene	14.053	91	70940	9.931	ug/l	96
90) Hexachloroethane	14.329	117	19282	10.119	ug/l	94
91) 1,2-Dichlorobenzene	14.100	146	53647	10.602	ug/l	100
92) 1,2-Dibromo-3-Chloropr...	14.717	75	7223	10.996	ug/l	95
93) 1,2,4-Trichlorobenzene	15.388	180	25090	10.406	ug/l	98
94) Hexachlorobutadiene	15.494	225	15278	10.426	ug/l	95
95) Naphthalene	15.635	128	65549	9.902	ug/l	99
96) 1,2,3-Trichlorobenzene	15.835	180	25612	10.581	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN021825\
Data File : VN085775.D
Acq On : 18 Feb 2025 12:20
Operator : JC\MD
Sample : VSTDICC010
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/19/2025
Supervised By :Mahesh Dadoda 02/19/2025

Quant Time: Feb 19 03:17:27 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260
QLast Update : Wed Feb 19 03:03:15 2025
Response via : Initial Calibration

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

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

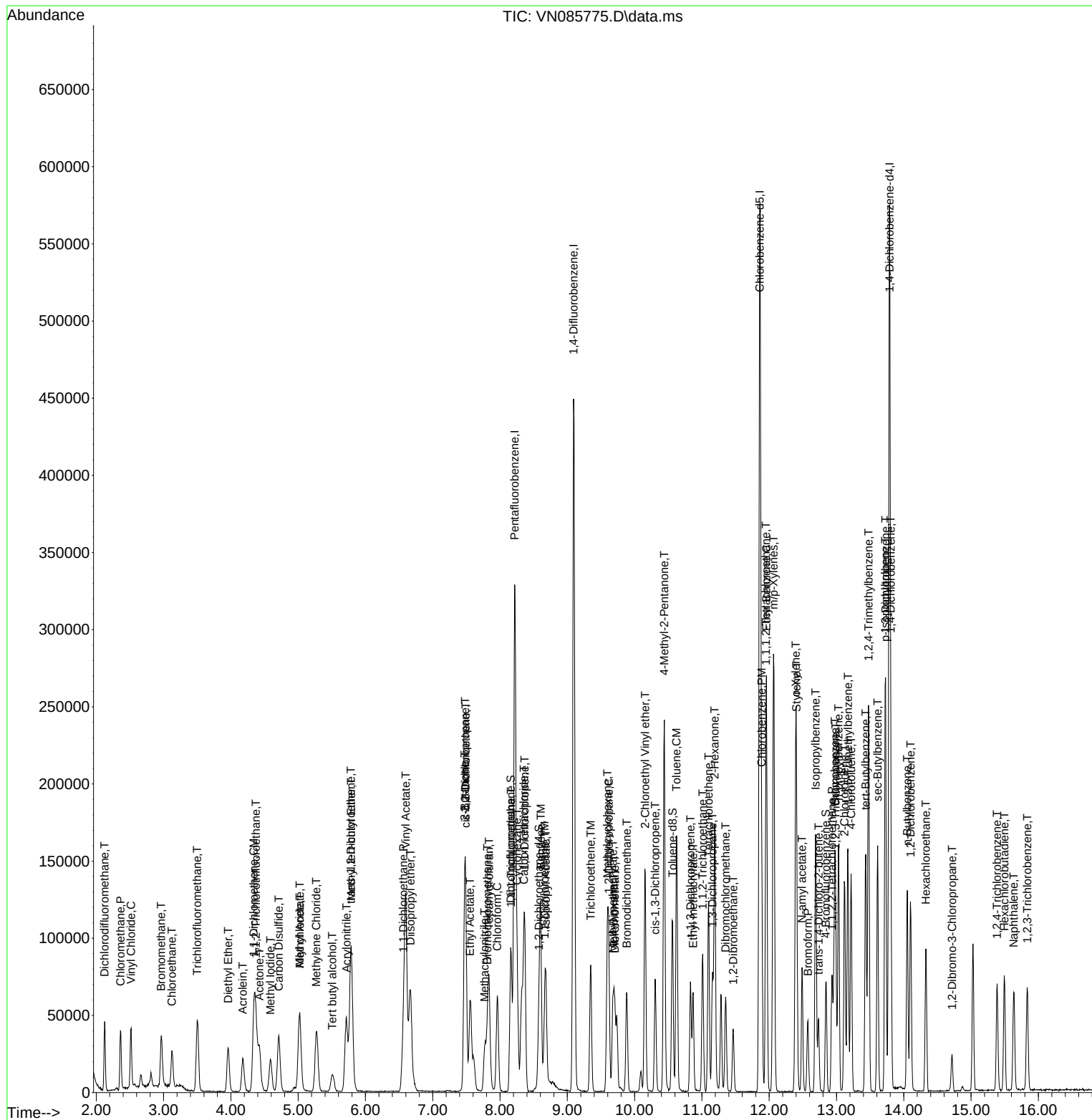

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Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN021825\  
Data File : VN085775.D  
Acq On    : 18 Feb 2025  12:20  
Operator  : JC\MD  
Sample    : VSTDIC010  
Misc      : 5.0mL/MSVOA_N/WATER  
ALS Vial  : 5      Sample Multiplier: 1
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Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations APPROVED

Reviewed By :John Carlone 02/19/2025
Supervised By :Mahesh Dadoda 02/19/2025

Quant Time: Feb 19 03:17:27 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260
QLast Update : Wed Feb 19 03:03:15 2025
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN021825\
 Data File : VN085776.D
 Acq On : 18 Feb 2025 12:43
 Operator : JC\MD
 Sample : VSTDICC005
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICC005

Manual Integrations
 APPROVED

Reviewed By : John Carlone 02/19/2025
 Supervised By : Mahesh Dadoda 02/19/2025

Quant Time: Feb 19 03:18:16 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
 Quant Title : SW846 8260
 QLast Update : Wed Feb 19 03:03:15 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	8.218	168	272461	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.094	114	471970	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.859	117	396883	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	179241	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.571	65	20906	5.918	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery =	11.840%#		
35) Dibromofluoromethane	8.165	113	16866	5.461	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	10.920%#		
50) Toluene-d8	10.559	98	57180	5.089	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery =	10.180%#		
62) 4-Bromofluorobenzene	12.841	95	17484	4.723	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery =	9.440%#		
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	2.124	85	17717	4.781	ug/l	97
3) Chloromethane	2.359	50	18038	4.850	ug/l	98
4) Vinyl Chloride	2.512	62	19849	5.041	ug/l	93
5) Bromomethane	2.953	94	13523	5.371	ug/l	97
6) Chloroethane	3.118	64	12801	4.908	ug/l	93
7) Trichlorofluoromethane	3.500	101	29008	5.088	ug/l	92
8) Diethyl Ether	3.959	74	9618	5.214	ug/l	96
9) 1,1,2-Trichlorotrifluo...	4.371	101	17299	5.250	ug/l	98
10) Methyl Iodide	4.595	142	19721	4.855	ug/l #	88
11) Tert butyl alcohol	5.518	59	11272	25.945	ug/l #	94
12) 1,1-Dichloroethene	4.342	96	15564	5.209	ug/l	96
13) Acrolein	4.177	56	17171	26.652	ug/l	95
14) Allyl chloride	5.012	41	19720	5.027	ug/l	94
15) Acrylonitrile	5.718	53	35404	25.067	ug/l	98
16) Acetone	4.424	43	28402	25.411	ug/l	100
17) Carbon Disulfide	4.706	76	43711	4.936	ug/l	96
18) Methyl Acetate	5.018	43	18793	4.888	ug/l	98
19) Methyl tert-butyl Ether	5.783	73	42491	4.786	ug/l	98
20) Methylene Chloride	5.271	84	18139	5.046	ug/l #	88
21) trans-1,2-Dichloroethene	5.783	96	16330	5.076	ug/l	93
22) Diisopropyl ether	6.671	45	42703	4.817	ug/l	95
23) Vinyl Acetate	6.594	43	140821m	23.273	ug/l	
24) 1,1-Dichloroethane	6.565	63	30658	5.088	ug/l #	93
25) 2-Butanone	7.477	43	40795	24.809	ug/l	95
26) 2,2-Dichloropropane	7.488	77	26889	5.018	ug/l	99
27) cis-1,2-Dichloroethene	7.483	96	18673	5.006	ug/l	98
28) Bromochloromethane	7.806	49	15543	6.276	ug/l	91
29) Tetrahydrofuran	7.841	42	24907	23.457	ug/l	98
30) Chloroform	7.959	83	31702	5.034	ug/l	100
31) Cyclohexane	8.247	56	28784	5.705	ug/l	91
32) 1,1,1-Trichloroethane	8.165	97	28815	5.145	ug/l #	50
36) 1,1-Dichloropropene	8.365	75	20593	4.711	ug/l	98
37) Ethyl Acetate	7.553	43	17768	4.940	ug/l #	85
38) Carbon Tetrachloride	8.353	117	25734	4.955	ug/l	95
39) Methylcyclohexane	9.594	83	19113	4.451	ug/l	97
40) Benzene	8.600	78	67051	4.786	ug/l	97

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN021825\
 Data File : VN085776.D
 Acq On : 18 Feb 2025 12:43
 Operator : JC\MD
 Sample : VSTDICC005
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 6 Sample Multiplier: 1

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC005

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/19/2025

Supervised By :Mahesh Dadoda 02/19/2025

Quant Time: Feb 19 03:18:16 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M

Quant Title : SW846 8260

QLast Update : Wed Feb 19 03:03:15 2025

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.777	41	9296	4.835	ug/l	98
42) 1,2-Dichloroethane	8.665	62	21886	4.796	ug/l	99
43) Isopropyl Acetate	8.682	43	35032	5.059	ug/l	92
44) Trichloroethene	9.347	130	16513	4.801	ug/l	96
45) 1,2-Dichloropropane	9.618	63	16228	4.799	ug/l	97
46) Dibromomethane	9.706	93	11544	4.840	ug/l	98
47) Bromodichloromethane	9.888	83	25152	4.929	ug/l	96
48) Methyl methacrylate	9.677	41	12200	4.567	ug/l	97
49) 1,4-Dioxane	9.688	88	4669	91.913	ug/l #	89
51) 4-Methyl-2-Pentanone	10.441	43	80666	23.260	ug/l	96
52) Toluene	10.629	92	38701	4.713	ug/l	100
53) t-1,3-Dichloropropene	10.829	75	22215	4.708	ug/l	99
54) cis-1,3-Dichloropropene	10.312	75	24235	4.684	ug/l #	91
55) 1,1,2-Trichloroethane	11.012	97	16352	5.008	ug/l	94
56) Ethyl methacrylate	10.871	69	18032	4.704	ug/l	99
57) 1,3-Dichloropropane	11.159	76	26117	4.792	ug/l	100
58) 2-Chloroethyl Vinyl ether	10.153	63	41567	14.159	ug/l	97
59) 2-Hexanone	11.188	43	53498	22.424	ug/l	94
60) Dibromochloromethane	11.353	129	18137	4.771	ug/l	98
61) 1,2-Dibromoethane	11.465	107	15097	4.894	ug/l	99
64) Tetrachloroethene	11.100	164	15504	5.043	ug/l	92
65) Chlorobenzene	11.888	112	45215	4.973	ug/l	95
66) 1,1,1,2-Tetrachloroethane	11.959	131	15949	4.880	ug/l	98
67) Ethyl Benzene	11.959	91	66079	4.640	ug/l	99
68) m/p-Xylenes	12.065	106	48412	8.949	ug/l	99
69) o-Xylene	12.394	106	23196	4.512	ug/l	100
70) Styrene	12.406	104	35138	4.557	ug/l	97
71) Bromoform	12.576	173	11934	4.915	ug/l #	94
73) Isopropylbenzene	12.694	105	54982	4.477	ug/l	99
74) N-amyl acetate	12.488	43	20017	4.623	ug/l	96
75) 1,1,2,2-Tetrachloroethane	12.929	83	21823	5.164	ug/l	98
76) 1,2,3-Trichloropropane	12.988	75	20813m	5.285	ug/l	
77) Bromobenzene	12.976	156	16215	4.888	ug/l	95
78) n-propylbenzene	13.029	91	62073	4.414	ug/l	99
79) 2-Chlorotoluene	13.117	91	43457	4.625	ug/l	99
80) 1,3,5-Trimethylbenzene	13.170	105	43342	4.333	ug/l	97
81) trans-1,4-Dichloro-2-b...	12.729	75	6070	4.448	ug/l	90
82) 4-Chlorotoluene	13.217	91	43684	4.690	ug/l	100
83) tert-Butylbenzene	13.435	119	37975	4.515	ug/l	96
84) 1,2,4-Trimethylbenzene	13.476	105	42792	4.324	ug/l	97
85) sec-Butylbenzene	13.612	105	52659	4.431	ug/l	98
86) p-Isopropyltoluene	13.723	119	41010	4.632	ug/l	97
87) 1,3-Dichlorobenzene	13.729	146	30417	4.894	ug/l	99
88) 1,4-Dichlorobenzene	13.806	146	31847	4.999	ug/l	96
89) n-Butylbenzene	14.053	91	36427	4.317	ug/l	98
90) Hexachloroethane	14.329	117	11276	5.010	ug/l	99
91) 1,2-Dichlorobenzene	14.100	146	29424	4.923	ug/l	98
92) 1,2-Dibromo-3-Chloropr...	14.711	75	3987	5.138	ug/l	89
93) 1,2,4-Trichlorobenzene	15.388	180	13040	4.578	ug/l	96
94) Hexachlorobutadiene	15.494	225	8623	4.982	ug/l	98
95) Naphthalene	15.635	128	33300	4.259	ug/l	100
96) 1,2,3-Trichlorobenzene	15.835	180	13188	4.612	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN021825\
Data File : VN085776.D
Acq On : 18 Feb 2025 12:43
Operator : JC\MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/19/2025
Supervised By :Mahesh Dadoda 02/19/2025

Quant Time: Feb 19 03:18:16 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260
QLast Update : Wed Feb 19 03:03:15 2025
Response via : Initial Calibration

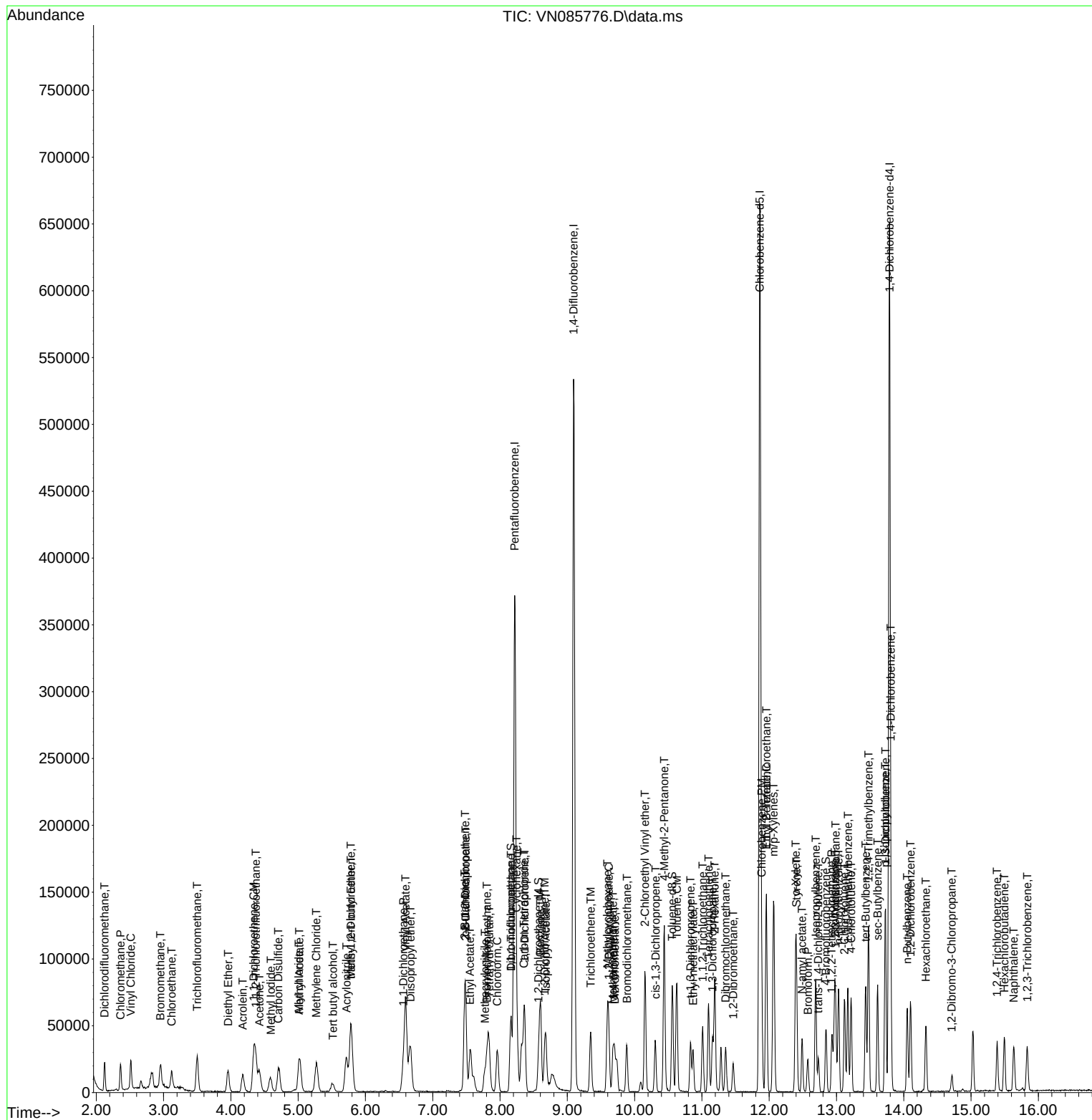
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :John Carlone 02/19/2025
Supervised By :Mahesh Dadoda 02/19/2025



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN021825\
 Data File : VN085777.D
 Acq On : 18 Feb 2025 13:07
 Operator : JC\MD
 Sample : VSTDICC001
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICC001

Manual Integrations
 APPROVED

Reviewed By : John Carlone 02/19/2025
 Supervised By : Mahesh Dadoda 02/19/2025

Quant Time: Feb 19 03:01:21 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
 Quant Title : SW846 8260
 QLast Update : Wed Feb 19 02:27:19 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	8.224	168	274051	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.094	114	476457	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.859	117	394997	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	152224	50.000	ug/l	0.00

System Monitoring Compounds

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

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	2.124	85	3620	0.971	ug/l	84
3) Chloromethane	2.359	50	4478	1.197	ug/l #	83
4) Vinyl Chloride	2.518	62	4169	1.053	ug/l #	80
6) Chloroethane	3.124	64	3201	1.220	ug/l	100
7) Trichlorofluoromethane	3.500	101	6048	1.055	ug/l #	71
8) Diethyl Ether	3.965	74	1716m	0.925	ug/l	
9) 1,1,2-Trichlorotrifluo...	4.371	101	3034	0.915	ug/l	90
12) 1,1-Dichloroethene	4.341	96	2817	0.937	ug/l #	75
14) Allyl chloride	5.024	41	3802m	0.964	ug/l	
15) Acrylonitrile	5.718	53	6980	4.913	ug/l	98
16) Acetone	4.436	43	6230	5.542	ug/l #	73
17) Carbon Disulfide	4.712	76	10131	1.137	ug/l	98
18) Methyl Acetate	5.030	43	4677	1.210	ug/l #	52
19) Methyl tert-butyl Ether	5.794	73	7883	0.883	ug/l	97
20) Methylene Chloride	5.277	84	4036	1.116	ug/l #	84
21) trans-1,2-Dichloroethene	5.788	96	3415	1.055	ug/l	91
22) Diisopropyl ether	6.659	45	7268	0.815	ug/l #	80
23) Vinyl Acetate	6.600	43	27376m	4.498	ug/l	
24) 1,1-Dichloroethane	6.571	63	5881	0.970	ug/l #	82
25) 2-Butanone	7.482	43	7658	4.630	ug/l	92
26) 2,2-Dichloropropane	7.477	77	5170m	0.959	ug/l	
27) cis-1,2-Dichloroethene	7.488	96	3541	0.944	ug/l	92
28) Bromochloromethane	7.812	49	2649	1.063	ug/l #	98
29) Tetrahydrofuran	7.841	42	4567	4.276	ug/l	93
30) Chloroform	7.959	83	6416	1.013	ug/l	98
32) 1,1,1-Trichloroethane	8.159	97	5643	1.002	ug/l #	47
36) 1,1-Dichloropropene	8.365	75	4055	0.919	ug/l	93
37) Ethyl Acetate	7.553	43	3365	0.927	ug/l #	84
38) Carbon Tetrachloride	8.353	117	5079	0.969	ug/l #	94
39) Methylcyclohexane	9.594	83	3557	0.821	ug/l #	89
40) Benzene	8.606	78	13536	0.957	ug/l	96
41) Methacrylonitrile	7.771	41	1573	0.810	ug/l #	85
42) 1,2-Dichloroethane	8.671	62	4497	0.976	ug/l	88
43) Isopropyl Acetate	8.677	43	12901	1.494	ug/l #	73
44) Trichloroethene	9.347	130	3768	1.085	ug/l	98
45) 1,2-Dichloropropane	9.618	63	3235	0.948	ug/l	91

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN021825\
 Data File : VN085777.D
 Acq On : 18 Feb 2025 13:07
 Operator : JC\MD
 Sample : VSTDICC001
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICC001

Manual Integrations
 APPROVED

Reviewed By : John Carlone 02/19/2025
 Supervised By : Mahesh Dadoda 02/19/2025

Quant Time: Feb 19 03:01:21 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
 Quant Title : SW846 8260
 QLast Update : Wed Feb 19 02:27:19 2025
 Response via : Initial Calibration

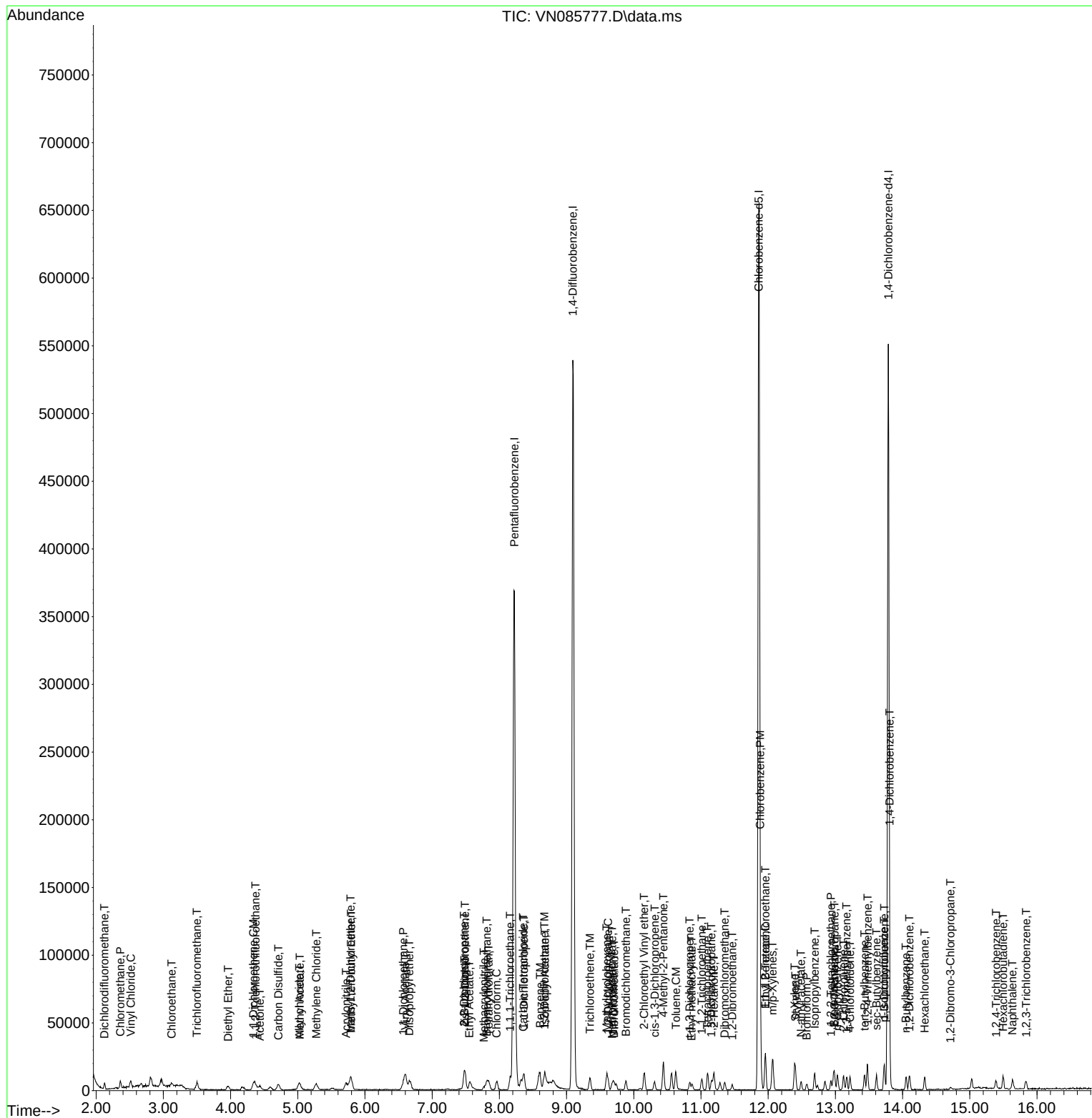
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) Dibromomethane	9.706	93	2304	0.957	ug/l	96
47) Bromodichloromethane	9.882	83	4879	0.947	ug/l #	92
48) Methyl methacrylate	9.676	41	2247	0.833	ug/l	92
49) 1,4-Dioxane	9.694	88	992	19.344	ug/l #	76
51) 4-Methyl-2-Pentanone	10.441	43	13832	3.951	ug/l	94
52) Toluene	10.629	92	6568	0.792	ug/l	98
53) t-1,3-Dichloropropene	10.829	75	3884	0.815	ug/l	95
54) cis-1,3-Dichloropropene	10.312	75	4211	0.806	ug/l #	87
55) 1,1,2-Trichloroethane	11.012	97	3084	0.936	ug/l #	88
56) Ethyl methacrylate	10.859	69	2517	1.052	ug/l #	75
57) 1,3-Dichloropropane	11.153	76	5078	0.923	ug/l	93
58) 2-Chloroethyl Vinyl ether	10.153	63	6353	3.424	ug/l	99
59) 2-Hexanone	11.194	43	8780	3.646	ug/l	91
60) Dibromochloromethane	11.353	129	3380	0.881	ug/l	91
61) 1,2-Dibromoethane	11.465	107	2599	0.835	ug/l	89
64) Tetrachloroethene	11.094	164	3108	1.016	ug/l	87
65) Chlorobenzene	11.882	112	8761	0.968	ug/l	92
66) 1,1,1,2-Tetrachloroethane	11.959	131	3222	0.991	ug/l #	66
67) Ethyl Benzene	11.959	91	11246	0.793	ug/l	100
68) m/p-Xylenes	12.065	106	7606	1.413	ug/l	91
69) o-Xylene	12.394	106	3965	0.775	ug/l	95
70) Styrene	12.406	104	5877	1.257	ug/l	99
71) Bromoform	12.570	173	2161	0.894	ug/l #	87
73) Isopropylbenzene	12.694	105	8928	0.856	ug/l	95
74) N-amyl acetate	12.488	43	3263	0.887	ug/l #	91
75) 1,1,2,2-Tetrachloroethane	12.935	83	3870	1.078	ug/l	99
76) 1,2,3-Trichloropropane	12.988	75	4032m	1.206	ug/l	
77) Bromobenzene	12.976	156	2624	0.931	ug/l	76
78) n-propylbenzene	13.029	91	9228	0.773	ug/l	99
79) 2-Chlorotoluene	13.123	91	7260	0.910	ug/l	95
80) 1,3,5-Trimethylbenzene	13.164	105	6185	0.728	ug/l	98
82) 4-Chlorotoluene	13.217	91	6700	0.847	ug/l	99
83) tert-Butylbenzene	13.435	119	5485	0.768	ug/l	93
84) 1,2,4-Trimethylbenzene	13.482	105	5595	0.666	ug/l	96
85) sec-Butylbenzene	13.611	105	7569	0.750	ug/l	99
86) p-Isopropyltoluene	13.723	119	5416	1.252	ug/l	95
87) 1,3-Dichlorobenzene	13.729	146	5321	1.008	ug/l	98
88) 1,4-Dichlorobenzene	13.806	146	5848m	1.081	ug/l	
89) n-Butylbenzene	14.047	91	6398	0.893	ug/l	91
90) Hexachloroethane	14.329	117	2153	1.126	ug/l	91
91) 1,2-Dichlorobenzene	14.100	146	5309	1.046	ug/l	97
92) 1,2-Dibromo-3-Chloropr...	14.711	75	780	1.184	ug/l	93
93) 1,2,4-Trichlorobenzene	15.394	180	2525	1.044	ug/l	95
94) Hexachlorobutadiene	15.494	225	1976	1.344	ug/l	94
95) Naphthalene	15.635	128	7298	1.099	ug/l #	94
96) 1,2,3-Trichlorobenzene	15.841	180	2791	1.149	ug/l	97

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

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :John Carlone 02/19/2025
Supervised By :Mahesh Dadoda 02/19/2025



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN021825\
 Data File : VN085779.D
 Acq On : 18 Feb 2025 14:18
 Operator : JC\MD
 Sample : VSTDICC020
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDICC020

Manual Integrations
 APPROVED

Reviewed By : John Carlone 02/19/2025
 Supervised By : Mahesh Dadoda 02/19/2025

Quant Time: Feb 19 03:19:11 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
 Quant Title : SW846 8260
 QLast Update : Wed Feb 19 03:03:15 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	8.218	168	309026	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.094	114	515996	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.859	117	448882	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	214863	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.571	65	71117	17.751	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery =	35.500%#		
35) Dibromofluoromethane	8.159	113	60447	17.903	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	35.800%#		
50) Toluene-d8	10.559	98	222839	18.140	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery =	36.280%#		
62) 4-Bromofluorobenzene	12.847	95	71343	17.627	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery =	35.260%#		
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	2.124	85	77669	18.478	ug/l	96
3) Chloromethane	2.360	50	74700	17.710	ug/l	98
4) Vinyl Chloride	2.512	62	83284	18.649	ug/l	96
5) Bromomethane	2.954	94	51068	17.884	ug/l	97
6) Chloroethane	3.118	64	54178	18.315	ug/l	98
7) Trichlorofluoromethane	3.501	101	124306	19.225	ug/l	100
8) Diethyl Ether	3.959	74	40213	19.221	ug/l	97
9) 1,1,2-Trichlorotrifluo...	4.377	101	74051	19.813	ug/l	98
10) Methyl Iodide	4.589	142	87963	19.093	ug/l	96
11) Tert butyl alcohol	5.512	59	45305	91.941	ug/l	99
12) 1,1-Dichloroethene	4.336	96	65660	19.375	ug/l	95
13) Acrolein	4.177	56	65092	89.078	ug/l	99
14) Allyl chloride	5.024	41	84778	19.054	ug/l	98
15) Acrylonitrile	5.712	53	158250	98.787	ug/l	99
16) Acetone	4.418	43	122455	96.596	ug/l	97
17) Carbon Disulfide	4.706	76	179885	17.910	ug/l	100
18) Methyl Acetate	5.012	43	77229	17.712	ug/l	99
19) Methyl tert-butyl Ether	5.795	73	205047	20.362	ug/l	97
20) Methylene Chloride	5.271	84	77308	18.963	ug/l	98
21) trans-1,2-Dichloroethene	5.777	96	69924	19.162	ug/l	91
22) Diisopropyl ether	6.665	45	212086	21.095	ug/l	99
23) Vinyl Acetate	6.600	43	695943	101.409	ug/l	99
24) 1,1-Dichloroethane	6.565	63	134620	19.697	ug/l	98
25) 2-Butanone	7.477	43	184659	99.012	ug/l	98
26) 2,2-Dichloropropane	7.489	77	120039	19.752	ug/l	99
27) cis-1,2-Dichloroethene	7.483	96	82886	19.590	ug/l	99
28) Bromochloromethane	7.806	49	49657	17.678	ug/l	95
29) Tetrahydrofuran	7.836	42	125831	104.482	ug/l	100
30) Chloroform	7.959	83	141059	19.750	ug/l	98
31) Cyclohexane	8.253	56	106009	18.525	ug/l	97
32) 1,1,1-Trichloroethane	8.165	97	125061	19.686	ug/l	98
36) 1,1-Dichloropropene	8.365	75	94481	19.772	ug/l	99
37) Ethyl Acetate	7.553	43	81716	20.780	ug/l	99
38) Carbon Tetrachloride	8.359	117	111137	19.574	ug/l	96
39) Methylcyclohexane	9.600	83	93454	19.907	ug/l	99
40) Benzene	8.600	78	304209	19.863	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN021825\
 Data File : VN085779.D
 Acq On : 18 Feb 2025 14:18
 Operator : JC\MD
 Sample : VSTDICC020
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 10 Sample Multiplier: 1

Instrument :

MSVOA_N

ClientSampleId :

VSTDICC020

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/19/2025

Supervised By :Mahesh Dadoda 02/19/2025

Quant Time: Feb 19 03:19:11 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M

Quant Title : SW846 8260

QLast Update : Wed Feb 19 03:03:15 2025

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.771	41	43566	20.724	ug/l	98
42) 1,2-Dichloroethane	8.665	62	99651	19.975	ug/l	99
43) Isopropyl Acetate	8.683	43	138304	19.709	ug/l	99
44) Trichloroethene	9.347	130	71769	19.085	ug/l	97
45) 1,2-Dichloropropane	9.618	63	73743	19.947	ug/l	98
46) Dibromomethane	9.706	93	52878	20.278	ug/l	97
47) Bromodichloromethane	9.883	83	111634	20.010	ug/l	97
48) Methyl methacrylate	9.677	41	60690	20.781	ug/l	99
49) 1,4-Dioxane	9.688	88	21778	392.137	ug/l #	88
51) 4-Methyl-2-Pentanone	10.441	43	400235	105.563	ug/l	99
52) Toluene	10.624	92	184001	20.495	ug/l	98
53) t-1,3-Dichloropropene	10.830	75	104301	20.218	ug/l	99
54) cis-1,3-Dichloropropene	10.306	75	115451	20.409	ug/l	98
55) 1,1,2-Trichloroethane	11.012	97	71034	19.900	ug/l	97
56) Ethyl methacrylate	10.871	69	94315	20.003	ug/l	97
57) 1,3-Dichloropropane	11.159	76	119649	20.080	ug/l	99
58) 2-Chloroethyl Vinyl ether	10.159	63	256540	146.107	ug/l	99
59) 2-Hexanone	11.188	43	278550	106.794	ug/l	99
60) Dibromochloromethane	11.353	129	83651	20.125	ug/l	100
61) 1,2-Dibromoethane	11.465	107	68205	20.223	ug/l	99
64) Tetrachloroethene	11.100	164	67288	19.350	ug/l	94
65) Chlorobenzene	11.888	112	200885	19.535	ug/l	97
66) 1,1,1,2-Tetrachloroethane	11.959	131	72064	19.497	ug/l	99
67) Ethyl Benzene	11.959	91	330056	20.490	ug/l	97
68) m/p-Xylenes	12.065	106	259251	42.371	ug/l	100
69) o-Xylene	12.394	106	118291	20.345	ug/l	96
70) Styrene	12.406	104	203369	20.270	ug/l	100
71) Bromoform	12.576	173	55518	20.214	ug/l #	96
73) Isopropylbenzene	12.688	105	299398	20.339	ug/l	100
74) N-amyl acetate	12.488	43	106973	20.608	ug/l	98
75) 1,1,2,2-Tetrachloroethane	12.935	83	99174	19.579	ug/l	99
76) 1,2,3-Trichloropropane	12.988	75	96439m	20.431	ug/l	
77) Bromobenzene	12.976	156	78068	19.630	ug/l	98
78) n-propylbenzene	13.029	91	351518	20.852	ug/l	100
79) 2-Chlorotoluene	13.124	91	230434	20.458	ug/l	99
80) 1,3,5-Trimethylbenzene	13.171	105	258212	21.534	ug/l	99
81) trans-1,4-Dichloro-2-b...	12.729	75	31517	19.267	ug/l	92
82) 4-Chlorotoluene	13.218	91	227177	20.345	ug/l	100
83) tert-Butylbenzene	13.435	119	208096	20.637	ug/l	97
84) 1,2,4-Trimethylbenzene	13.476	105	259373	21.863	ug/l	99
85) sec-Butylbenzene	13.612	105	293653	20.612	ug/l	99
86) p-Isopropyltoluene	13.723	119	240984	19.772	ug/l	99
87) 1,3-Dichlorobenzene	13.729	146	143937	19.318	ug/l	99
88) 1,4-Dichlorobenzene	13.806	146	144744	18.954	ug/l	99
89) n-Butylbenzene	14.053	91	195221	19.300	ug/l	97
90) Hexachloroethane	14.329	117	50599	18.753	ug/l	98
91) 1,2-Dichlorobenzene	14.100	146	138931	19.390	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.718	75	16407	17.639	ug/l	98
93) 1,2,4-Trichlorobenzene	15.388	180	60520	17.726	ug/l	98
94) Hexachlorobutadiene	15.500	225	34783	16.763	ug/l	97
95) Naphthalene	15.635	128	156537	16.700	ug/l	99
96) 1,2,3-Trichlorobenzene	15.835	180	57998	16.921	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN021825\
Data File : VN085779.D
Acq On : 18 Feb 2025 14:18
Operator : JC\MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/19/2025
Supervised By :Mahesh Dadoda 02/19/2025

Quant Time: Feb 19 03:19:11 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260
QLast Update : Wed Feb 19 03:03:15 2025
Response via : Initial Calibration

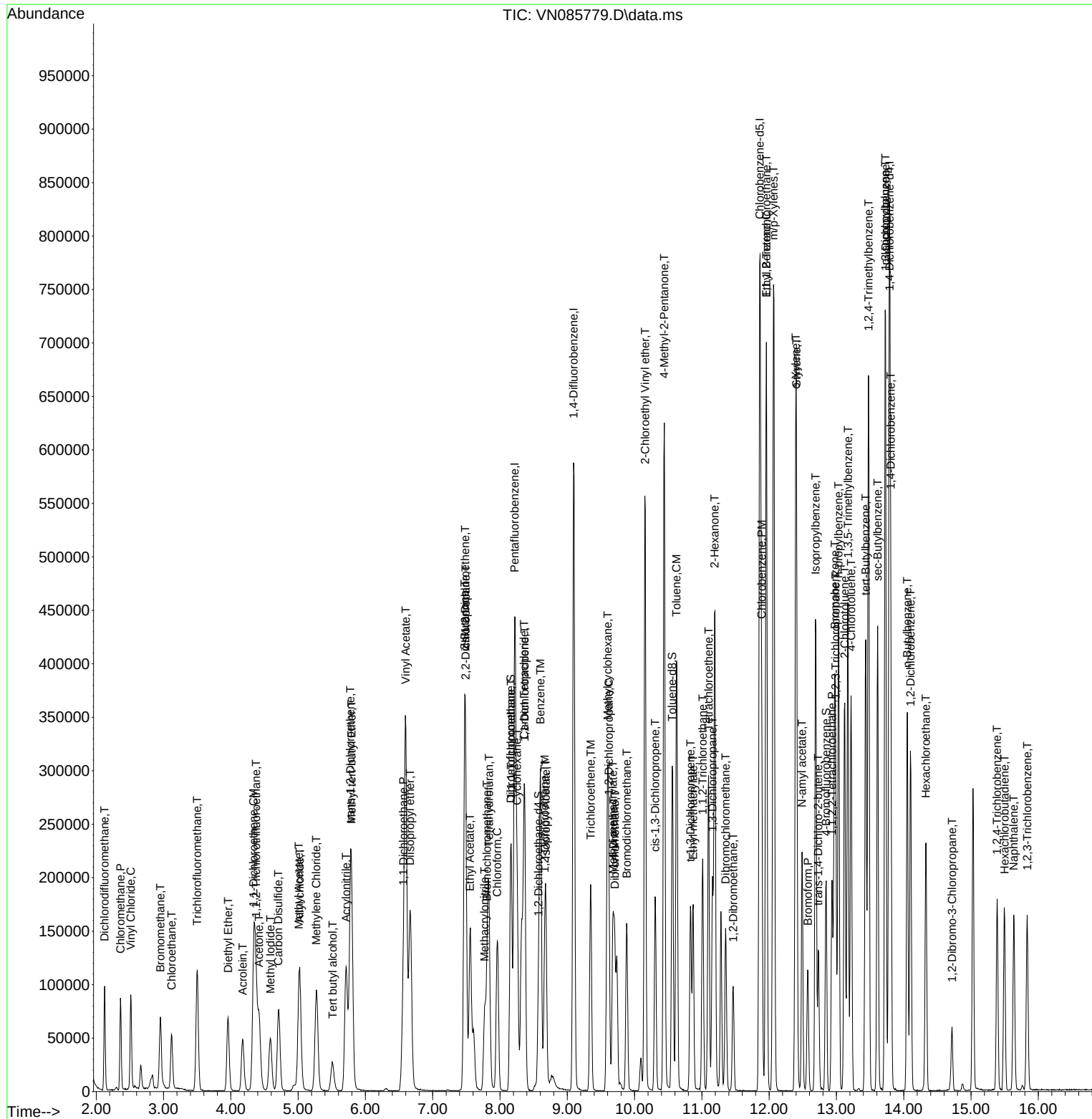
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations

Reviewed By :John Carlone 02/19/2025
Supervised By :Mahesh Dadoda 02/19/2025



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN021825\
 Data File : VN085780.D
 Acq On : 18 Feb 2025 16:28
 Operator : JC\MD
 Sample : VSTDICV050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 13 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 ICVVN021825

Quant Time: Feb 19 05:09:13 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
 Quant Title : SW846 8260
 QLast Update : Wed Feb 19 03:43:32 2025
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By : John Carlone 02/19/2025
 Supervised By : Mahesh Dadoda 02/19/2025

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

Internal Standards						
1) Pentafluorobenzene	8.218	168	314015	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.094	114	510764	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.859	117	456487	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	222696	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	204064	50.125	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 100.260%			
35) Dibromofluoromethane	8.165	113	170358	50.972	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 101.940%			
50) Toluene-d8	10.559	98	651463	53.575	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 107.140%			
62) 4-Bromofluorobenzene	12.841	95	227023	56.665	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 113.320%			
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	2.124	85	193054	45.199	ug/l	98
3) Chloromethane	2.359	50	181889	42.438	ug/l	98
4) Vinyl Chloride	2.512	62	197171	43.449	ug/l	97
5) Bromomethane	2.953	94	119789	41.282	ug/l	95
6) Chloroethane	3.118	64	122900	40.887	ug/l	95
7) Trichlorofluoromethane	3.500	101	279842	42.592	ug/l	98
8) Diethyl Ether	3.959	74	96415	45.353	ug/l	97
9) 1,1,2-Trichlorotrifluo...	4.371	101	165520	43.582	ug/l	98
10) Methyl Iodide	4.589	142	211559	45.190	ug/l	99
11) Tert butyl alcohol	5.506	59	118845	237.350	ug/l	99
12) 1,1-Dichloroethene	4.336	96	153815	44.667	ug/l	98
13) Acrolein	4.171	56	179054	241.140	ug/l	97
14) Allyl chloride	5.024	41	201442	44.555	ug/l	99
15) Acrylonitrile	5.712	53	378819	232.720	ug/l	99
16) Acetone	4.418	43	279680	217.115	ug/l	99
17) Carbon Disulfide	4.712	76	423019	41.449	ug/l	99
18) Methyl Acetate	5.018	43	194998	44.011	ug/l	100
19) Methyl tert-butyl Ether	5.789	73	491324	48.014	ug/l	99
20) Methylene Chloride	5.277	84	173805	41.955	ug/l	99
21) trans-1,2-Dichloroethene	5.783	96	161205	43.475	ug/l	94
22) Diisopropyl ether	6.665	45	483670	47.344	ug/l	99
23) Vinyl Acetate	6.600	43	1698852	242.867	ug/l	99
24) 1,1-Dichloroethane	6.565	63	301375	43.396	ug/l	99
25) 2-Butanone	7.477	43	456416	240.836	ug/l	100
26) 2,2-Dichloropropane	7.482	77	274082	44.383	ug/l	99
27) cis-1,2-Dichloroethene	7.482	96	190393	44.284	ug/l	99
28) Bromochloromethane	7.812	49	142695	49.991	ug/l	97
29) Tetrahydrofuran	7.830	42	304613	248.913	ug/l	99
30) Chloroform	7.965	83	312547	43.065	ug/l	97
31) Cyclohexane	8.253	56	248433	42.725	ug/l	99
32) 1,1,1-Trichloroethane	8.165	97	281708	43.640	ug/l	99
36) 1,1-Dichloropropene	8.365	75	220335	46.581	ug/l	99
37) Ethyl Acetate	7.553	43	182091	46.779	ug/l	99
38) Carbon Tetrachloride	8.359	117	251949	44.828	ug/l	99
39) Methylcyclohexane	9.600	83	230541	49.612	ug/l	98
40) Benzene	8.600	78	682453	45.016	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN021825\
 Data File : VN085780.D
 Acq On : 18 Feb 2025 16:28
 Operator : JC\MD
 Sample : VSTDICV050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 13 Sample Multiplier: 1

Instrument :

MSVOA_N

ClientSampleId :

ICVVN021825

Manual Integrations

APPROVED

Reviewed By :John Carlone 02/19/2025

Supervised By :Mahesh Dadoda 02/19/2025

Quant Time: Feb 19 05:09:13 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M

Quant Title : SW846 8260

QLast Update : Wed Feb 19 03:43:32 2025

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.771	41	105287	50.597	ug/l	99
42) 1,2-Dichloroethane	8.665	62	223798	45.321	ug/l	100
43) Isopropyl Acetate	8.682	43	317074	46.374	ug/l	99
44) Trichloroethene	9.347	130	161430	43.368	ug/l	99
45) 1,2-Dichloropropane	9.618	63	165383	45.194	ug/l	99
46) Dibromomethane	9.700	93	118394	45.867	ug/l	98
47) Bromodichloromethane	9.882	83	245433	44.443	ug/l	96
48) Methyl methacrylate	9.676	41	149072	51.566	ug/l	99
49) 1,4-Dioxane	9.688	88	55529	1010.103	ug/l	98
51) 4-Methyl-2-Pentanone	10.441	43	954888	254.433	ug/l	100
52) Toluene	10.623	92	429445	48.324	ug/l	100
53) t-1,3-Dichloropropene	10.829	75	249572	48.873	ug/l	100
54) cis-1,3-Dichloropropene	10.306	75	269744	48.172	ug/l	98
55) 1,1,2-Trichloroethane	11.012	97	160020	45.289	ug/l	99
56) Ethyl methacrylate	10.871	69	243449	48.142	ug/l	99
57) 1,3-Dichloropropane	11.159	76	272817	46.254	ug/l	99
58) 2-Chloroethyl Vinyl ether	10.153	63	565673	276.203	ug/l	99
59) 2-Hexanone	11.188	43	687507	266.284	ug/l	100
60) Dibromochloromethane	11.353	129	192169	46.707	ug/l	100
61) 1,2-Dibromoethane	11.465	107	157602	47.208	ug/l	99
64) Tetrachloroethene	11.100	164	148840	42.088	ug/l	98
65) Chlorobenzene	11.888	112	464545	44.422	ug/l	98
66) 1,1,1,2-Tetrachloroethane	11.959	131	163676	43.545	ug/l	100
67) Ethyl Benzene	11.959	91	797025	48.655	ug/l	99
68) m/p-Xylenes	12.065	106	619505	99.562	ug/l	100
69) o-Xylene	12.394	106	294679	49.837	ug/l	100
70) Styrene	12.406	104	498501	45.726	ug/l	99
71) Bromoform	12.576	173	130201	46.617	ug/l #	97
73) Isopropylbenzene	12.694	105	747608	49.002	ug/l	100
74) N-amyl acetate	12.488	43	265786	49.401	ug/l	99
75) 1,1,2,2-Tetrachloroethane	12.935	83	225776	43.005	ug/l	100
76) 1,2,3-Trichloropropane	12.988	75	227901m	46.070	ug/l	
77) Bromobenzene	12.976	156	185833	45.084	ug/l	98
78) n-propylbenzene	13.029	91	872362	49.927	ug/l	99
79) 2-Chlorotoluene	13.123	91	541105	46.350	ug/l	100
80) 1,3,5-Trimethylbenzene	13.170	105	622090	50.055	ug/l	100
81) trans-1,4-Dichloro-2-b...	12.729	75	79943	47.152	ug/l	94
82) 4-Chlorotoluene	13.217	91	548585	47.401	ug/l	99
83) tert-Butylbenzene	13.435	119	521552	49.904	ug/l	98
84) 1,2,4-Trimethylbenzene	13.476	105	633621	51.531	ug/l	99
85) sec-Butylbenzene	13.612	105	737200	49.925	ug/l	100
86) p-Isopropyltoluene	13.723	119	617918	46.012	ug/l	99
87) 1,3-Dichlorobenzene	13.729	146	341228	44.186	ug/l	99
88) 1,4-Dichlorobenzene	13.806	146	338619	42.781	ug/l	100
89) n-Butylbenzene	14.053	91	513863	49.015	ug/l	98
90) Hexachloroethane	14.329	117	119768	42.828	ug/l	98
91) 1,2-Dichlorobenzene	14.100	146	325885	43.883	ug/l	100
92) 1,2-Dibromo-3-Chloropr...	14.717	75	41836	43.396	ug/l	98
93) 1,2,4-Trichlorobenzene	15.388	180	161503	45.640	ug/l	99
94) Hexachlorobutadiene	15.494	225	84060	39.087	ug/l	99
95) Naphthalene	15.635	128	487372	50.167	ug/l	99
96) 1,2,3-Trichlorobenzene	15.835	180	158416	44.593	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN021825\
Data File : VN085780.D
Acq On : 18 Feb 2025 16:28
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 13 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN021825

Manual Integrations
APPROVED

Reviewed By :John Carlone 02/19/2025
Supervised By :Mahesh Dadoda 02/19/2025

Quant Time: Feb 19 05:09:13 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260
QLast Update : Wed Feb 19 03:43:32 2025
Response via : Initial Calibration

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

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

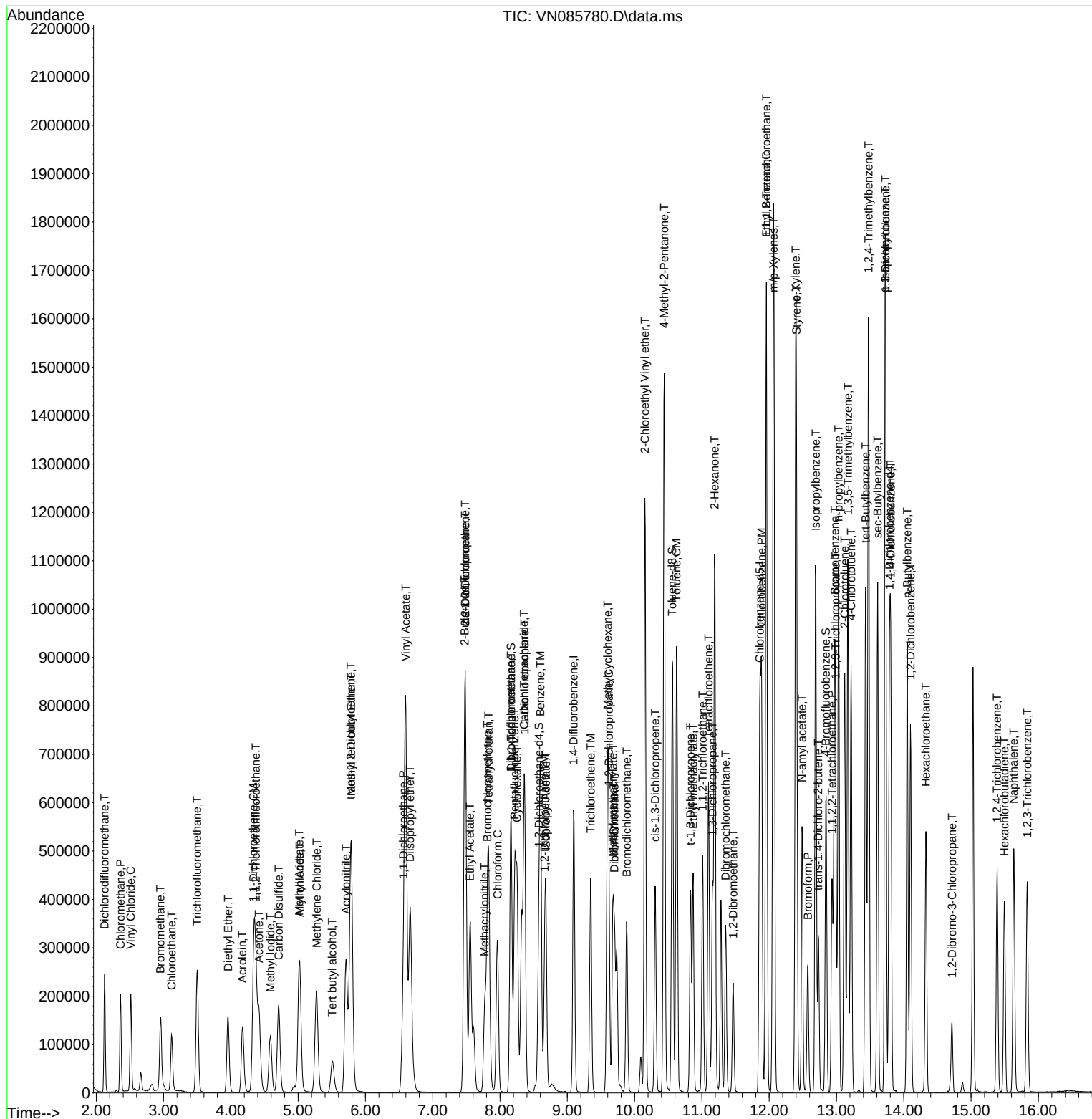

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Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN021825\  
Data File : VN085780.D  
Acq On    : 18 Feb 2025  16:28  
Operator  : JC\MD  
Sample    : VSTDICV050  
Misc      : 5.0mL/MSVOA_N/WATER  
ALS Vial  : 13   Sample Multiplier: 1
```

Instrument :
MSVOA_N
ClientSampleId :
ICVVN021825

Manual Integrations

Reviewed By :John Carlone 02/19/2025
Supervised By :Mahesh Dadoda 02/19/2025

Quant Time: Feb 19 05:09:13 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260
QLast Update : Wed Feb 19 03:43:32 2025
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN021825\
 Data File : VN085780.D
 Acq On : 18 Feb 2025 16:28
 Operator : JC\MD
 Sample : VSTDICV050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 13 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 ICVVN021825

Quant Time: Feb 19 05:09:13 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
 Quant Title : SW846 8260
 QLast Update : Wed Feb 19 03:43:32 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	97	0.00
2 T	Dichlorodifluoromethane	0.680	0.615	9.6	89	0.00
3 P	Chloromethane	0.682	0.579	15.1	91	0.00
4 C	Vinyl Chloride	0.723	0.628	13.1#	90	0.00
5 T	Bromomethane	0.462	0.381	17.5	88	0.00
6 T	Chloroethane	0.479	0.391	18.4	92	0.00
7 T	Trichlorofluoromethane	1.046	0.891	14.8	91	0.00
8 T	Diethyl Ether	0.339	0.307	9.4	90	0.00
9 T	1,1,2-Trichlorotrifluoroeth	0.605	0.527	12.9	91	0.00
10 T	Methyl Iodide	0.745	0.674	9.5	91	0.00
11 T	Tert butyl alcohol	0.080	0.076	5.0	94	0.00
12 CM	1,1-Dichloroethene	0.548	0.490	10.6#	90	0.00
13 T	Acrolein	0.118	0.114	3.4	88	0.00
14 T	Allyl chloride	0.720	0.642	10.8	90	0.00
15 T	Acrylonitrile	0.259	0.241	6.9	96	0.00
16 T	Acetone	0.205	0.178	13.2	94	0.00
17 T	Carbon Disulfide	1.625	1.347	17.1	89	0.00
18 T	Methyl Acetate	0.705	0.621	11.9	98	0.00
19 T	Methyl tert-butyl Ether	1.629	1.565	3.9	92	0.00
20 T	Methylene Chloride	0.660	0.553	16.2	91	0.00
21 T	trans-1,2-Dichloroethene	0.590	0.513	13.1	91	0.00
22 T	Diisopropyl ether	1.627	1.540	5.3	91	0.00
23 T	Vinyl Acetate	1.114	1.082	2.9	94	0.00
24 P	1,1-Dichloroethane	1.106	0.960	13.2	90	0.00
25 T	2-Butanone	0.302	0.291	3.6	96	0.00
26 T	2,2-Dichloropropane	0.983	0.873	11.2	90	0.00
27 T	cis-1,2-Dichloroethene	0.685	0.606	11.5	89	0.00
28 T	Bromochloromethane	0.454	0.454	0.0	100	0.00
29 T	Tetrahydrofuran	0.195	0.194	0.5	97	0.00
30 C	Chloroform	1.156	0.995	13.9#	91	0.00
31 T	Cyclohexane	0.926	0.791	14.6	90	0.00
32 T	1,1,1-Trichloroethane	1.028	0.897	12.7	90	0.00
33 S	1,2-Dichloroethane-d4	0.648	0.650	-0.3	103	0.00
34 I	1,4-Difluorobenzene	1.000	1.000	0.0	97	0.00
35 S	Dibromofluoromethane	0.327	0.334	-2.1	102	0.00
36 T	1,1-Dichloropropene	0.463	0.431	6.9	91	0.00
37 T	Ethyl Acetate	0.381	0.357	6.3	92	0.00
38 T	Carbon Tetrachloride	0.550	0.493	10.4	91	0.00
39 T	Methylcyclohexane	0.455	0.451	0.9	89	0.00
40 TM	Benzene	1.484	1.336	10.0	90	0.00
41 T	Methacrylonitrile	0.204	0.206	-1.0	93	0.00
42 TM	1,2-Dichloroethane	0.483	0.438	9.3	93	0.00
43 T	Isopropyl Acetate	0.807	0.621	23.0	95	0.00
44 TM	Trichloroethene	0.364	0.316	13.2	90	0.00
45 C	1,2-Dichloropropane	0.358	0.324	9.5#	91	0.00
46 T	Dibromomethane	0.253	0.232	8.3	93	0.00
47 T	Bromodichloromethane	0.541	0.481	11.1	90	0.00
48 T	Methyl methacrylate	0.283	0.292	-3.2	94	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN021825\
 Data File : VN085780.D
 Acq On : 18 Feb 2025 16:28
 Operator : JC\MD
 Sample : VSTDICV050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 13 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 ICSVN021825

Quant Time: Feb 19 05:09:13 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
 Quant Title : SW846 8260
 QLast Update : Wed Feb 19 03:43:32 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	0.005	0.005	0.0	91	0.00
50 S	Toluene-d8	1.190	1.275	-7.1	103	0.00
51 T	4-Methyl-2-Pentanone	0.367	0.374	-1.9	96	0.00
52 CM	Toluene	0.870	0.841	3.3#	90	0.00
53 T	t-1,3-Dichloropropene	0.500	0.489	2.2	91	0.00
54 T	cis-1,3-Dichloropropene	0.548	0.528	3.6	90	0.00
55 T	1,1,2-Trichloroethane	0.346	0.313	9.5	92	0.00
56 T	Ethyl methacrylate	0.434	0.477	-9.9	93	0.00
57 T	1,3-Dichloropropane	0.577	0.534	7.5	92	0.00
58 T	2-Chloroethyl Vinyl ether	0.195	0.222	-13.8	123	0.00
59 T	2-Hexanone	0.253	0.269	-6.3	96	0.00
60 T	Dibromochloromethane	0.403	0.376	6.7	91	0.00
61 T	1,2-Dibromoethane	0.327	0.309	5.5	93	0.00
62 S	4-Bromofluorobenzene	0.392	0.444	-13.3	103	0.00
63 I	Chlorobenzene-d5	1.000	1.000	0.0	99	0.00
64 T	Tetrachloroethene	0.387	0.326	15.8	89	0.00
65 PM	Chlorobenzene	1.145	1.018	11.1	91	0.00
66 T	1,1,1,2-Tetrachloroethane	0.412	0.359	12.9	90	0.00
67 C	Ethyl Benzene	1.794	1.746	2.7#	91	0.00
68 T	m/p-Xylenes	0.682	0.679	0.4	91	0.00
69 T	o-Xylene	0.648	0.646	0.3	91	0.00
70 T	Styrene	1.059	1.092	-3.1	90	0.00
71 P	Bromoform	0.306	0.285	6.9	93	0.00
72 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	98	0.00
73 T	Isopropylbenzene	3.425	3.357	2.0	91	0.00
74 T	N-amyl acetate	1.208	1.193	1.2	94	0.00
75 P	1,1,2,2-Tetrachloroethane	1.179	1.014	14.0	94	0.00
76 T	1,2,3-Trichloropropane	1.111	1.023	7.9	106	0.00
77 T	Bromobenzene	0.925	0.834	9.8	90	0.00
78 T	n-propylbenzene	3.923	3.917	0.2	90	0.00
79 T	2-Chlorotoluene	2.621	2.430	7.3	91	0.00
80 T	1,3,5-Trimethylbenzene	2.790	2.793	-0.1	89	0.00
81 T	trans-1,4-Dichloro-2-butene	0.381	0.359	5.8	89	0.00
82 T	4-Chlorotoluene	2.598	2.463	5.2	91	0.00
83 T	tert-Butylbenzene	2.346	2.342	0.2	89	0.00
84 T	1,2,4-Trimethylbenzene	2.761	2.845	-3.0	90	0.00
85 T	sec-Butylbenzene	3.315	3.310	0.2	89	0.00
86 T	p-Isopropyltoluene	2.665	2.775	-4.1	89	0.00
87 T	1,3-Dichlorobenzene	1.734	1.532	11.6	92	0.00
88 T	1,4-Dichlorobenzene	1.777	1.521	14.4	90	0.00
89 T	n-Butylbenzene	2.354	2.307	2.0	89	0.00
90 T	Hexachloroethane	0.628	0.538	14.3	90	0.00
91 T	1,2-Dichlorobenzene	1.667	1.463	12.2	91	0.00
92 T	1,2-Dibromo-3-Chloropropane	0.216	0.188	13.0	95	0.00
93 T	1,2,4-Trichlorobenzene	0.794	0.725	8.7	89	0.00
94 T	Hexachlorobutadiene	0.483	0.377	21.9	87	0.00
95 T	Naphthalene	2.181	2.189	-0.4	92	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN021825\
Data File : VN085780.D
Acq On : 18 Feb 2025 16:28
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 13 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN021825

Quant Time: Feb 19 05:09:13 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260
QLast Update : Wed Feb 19 03:43:32 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	0.798	0.711	10.9	88	0.00

(#) = Out of Range

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN021825\
 Data File : VN085780.D
 Acq On : 18 Feb 2025 16:28
 Operator : JC\MD
 Sample : VSTDICV050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 13 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 ICVVN021825

Quant Time: Feb 19 05:09:13 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
 Quant Title : SW846 8260
 QLast Update : Wed Feb 19 03:43:32 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	97	0.00
2 T	Dichlorodifluoromethane	50.000	45.199	9.6	89	0.00
3 P	Chloromethane	50.000	42.438	15.1	91	0.00
4 C	Vinyl Chloride	50.000	43.449	13.1#	90	0.00
5 T	Bromomethane	50.000	41.282	17.4	88	0.00
6 T	Chloroethane	50.000	40.887	18.2	92	0.00
7 T	Trichlorofluoromethane	50.000	42.592	14.8	91	0.00
8 T	Diethyl Ether	50.000	45.353	9.3	90	0.00
9 T	1,1,2-Trichlorotrifluoroeth	50.000	43.582	12.8	91	0.00
10 T	Methyl Iodide	50.000	45.190	9.6	91	0.00
11 T	Tert butyl alcohol	250.000	237.350	5.1	94	0.00
12 CM	1,1-Dichloroethene	50.000	44.667	10.7#	90	0.00
13 T	Acrolein	250.000	241.140	3.5	88	0.00
14 T	Allyl chloride	50.000	44.555	10.9	90	0.00
15 T	Acrylonitrile	250.000	232.720	6.9	96	0.00
16 T	Acetone	250.000	217.115	13.2	94	0.00
17 T	Carbon Disulfide	50.000	41.449	17.1	89	0.00
18 T	Methyl Acetate	50.000	44.011	12.0	98	0.00
19 T	Methyl tert-butyl Ether	50.000	48.014	4.0	92	0.00
20 T	Methylene Chloride	50.000	41.955	16.1	91	0.00
21 T	trans-1,2-Dichloroethene	50.000	43.475	13.0	91	0.00
22 T	Diisopropyl ether	50.000	47.344	5.3	91	0.00
23 T	Vinyl Acetate	250.000	242.867	2.9	94	0.00
24 P	1,1-Dichloroethane	50.000	43.396	13.2	90	0.00
25 T	2-Butanone	250.000	240.836	3.7	96	0.00
26 T	2,2-Dichloropropane	50.000	44.383	11.2	90	0.00
27 T	cis-1,2-Dichloroethene	50.000	44.284	11.4	89	0.00
28 T	Bromochloromethane	50.000	49.991	0.0	100	0.00
29 T	Tetrahydrofuran	250.000	248.913	0.4	97	0.00
30 C	Chloroform	50.000	43.065	13.9#	91	0.00
31 T	Cyclohexane	50.000	42.725	14.5	90	0.00
32 T	1,1,1-Trichloroethane	50.000	43.640	12.7	90	0.00
33 S	1,2-Dichloroethane-d4	50.000	50.125	-0.3	103	0.00
34 I	1,4-Difluorobenzene	50.000	50.000	0.0	97	0.00
35 S	Dibromofluoromethane	50.000	50.972	-1.9	102	0.00
36 T	1,1-Dichloropropene	50.000	46.581	6.8	91	0.00
37 T	Ethyl Acetate	50.000	46.779	6.4	92	0.00
38 T	Carbon Tetrachloride	50.000	44.828	10.3	91	0.00
39 T	Methylcyclohexane	50.000	49.612	0.8	89	0.00
40 TM	Benzene	50.000	45.016	10.0	90	0.00
41 T	Methacrylonitrile	50.000	50.597	-1.2	93	0.00
42 TM	1,2-Dichloroethane	50.000	45.321	9.4	93	0.00
43 T	Isopropyl Acetate	50.000	46.374	7.3	95	0.00
44 TM	Trichloroethene	50.000	43.368	13.3	90	0.00
45 C	1,2-Dichloropropane	50.000	45.194	9.6#	91	0.00
46 T	Dibromomethane	50.000	45.867	8.3	93	0.00
47 T	Bromodichloromethane	50.000	44.443	11.1	90	0.00
48 T	Methyl methacrylate	50.000	51.566	-3.1	94	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN021825\
 Data File : VN085780.D
 Acq On : 18 Feb 2025 16:28
 Operator : JC\MD
 Sample : VSTDICV050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 13 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 ICSVN021825

Quant Time: Feb 19 05:09:13 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
 Quant Title : SW846 8260
 QLast Update : Wed Feb 19 03:43:32 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	1010.103	-1.0	91	0.00
50 S	Toluene-d8	50.000	53.575	-7.2	103	0.00
51 T	4-Methyl-2-Pentanone	250.000	254.433	-1.8	96	0.00
52 CM	Toluene	50.000	48.324	3.4#	90	0.00
53 T	t-1,3-Dichloropropene	50.000	48.873	2.3	91	0.00
54 T	cis-1,3-Dichloropropene	50.000	48.172	3.7	90	0.00
55 T	1,1,2-Trichloroethane	50.000	45.289	9.4	92	0.00
56 T	Ethyl methacrylate	50.000	48.142	3.7	93	0.00
57 T	1,3-Dichloropropane	50.000	46.254	7.5	92	0.00
58 T	2-Chloroethyl Vinyl ether	250.000	276.203	-10.5	123	0.00
59 T	2-Hexanone	250.000	266.284	-6.5	96	0.00
60 T	Dibromochloromethane	50.000	46.707	6.6	91	0.00
61 T	1,2-Dibromoethane	50.000	47.208	5.6	93	0.00
62 S	4-Bromofluorobenzene	50.000	56.665	-13.3	103	0.00
63 I	Chlorobenzene-d5	50.000	50.000	0.0	99	0.00
64 T	Tetrachloroethene	50.000	42.088	15.8	89	0.00
65 PM	Chlorobenzene	50.000	44.422	11.2	91	0.00
66 T	1,1,1,2-Tetrachloroethane	50.000	43.545	12.9	90	0.00
67 C	Ethyl Benzene	50.000	48.655	2.7#	91	0.00
68 T	m/p-Xylenes	100.000	99.562	0.4	91	0.00
69 T	o-Xylene	50.000	49.837	0.3	91	0.00
70 T	Styrene	50.000	45.726	8.5	90	0.00
71 P	Bromoform	50.000	46.617	6.8	93	0.00
72 I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	98	0.00
73 T	Isopropylbenzene	50.000	49.002	2.0	91	0.00
74 T	N-amyl acetate	50.000	49.401	1.2	94	0.00
75 P	1,1,2,2-Tetrachloroethane	50.000	43.005	14.0	94	0.00
76 T	1,2,3-Trichloropropane	50.000	46.070	7.9	106	0.00
77 T	Bromobenzene	50.000	45.084	9.8	90	0.00
78 T	n-propylbenzene	50.000	49.927	0.1	90	0.00
79 T	2-Chlorotoluene	50.000	46.350	7.3	91	0.00
80 T	1,3,5-Trimethylbenzene	50.000	50.055	-0.1	89	0.00
81 T	trans-1,4-Dichloro-2-butene	50.000	47.152	5.7	89	0.00
82 T	4-Chlorotoluene	50.000	47.401	5.2	91	0.00
83 T	tert-Butylbenzene	50.000	49.904	0.2	89	0.00
84 T	1,2,4-Trimethylbenzene	50.000	51.531	-3.1	90	0.00
85 T	sec-Butylbenzene	50.000	49.925	0.2	89	0.00
86 T	p-Isopropyltoluene	50.000	46.012	8.0	89	0.00
87 T	1,3-Dichlorobenzene	50.000	44.186	11.6	92	0.00
88 T	1,4-Dichlorobenzene	50.000	42.781	14.4	90	0.00
89 T	n-Butylbenzene	50.000	49.015	2.0	89	0.00
90 T	Hexachloroethane	50.000	42.828	14.3	90	0.00
91 T	1,2-Dichlorobenzene	50.000	43.883	12.2	91	0.00
92 T	1,2-Dibromo-3-Chloropropane	50.000	43.396	13.2	95	0.00
93 T	1,2,4-Trichlorobenzene	50.000	45.640	8.7	89	0.00
94 T	Hexachlorobutadiene	50.000	39.087	21.8	87	0.00
95 T	Naphthalene	50.000	50.167	-0.3	92	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN021825\
Data File : VN085780.D
Acq On : 18 Feb 2025 16:28
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 13 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN021825

Quant Time: Feb 19 05:09:13 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260
QLast Update : Wed Feb 19 03:43:32 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	44.593	10.8	88	0.00

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



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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: PORT06
 Lab Code: CHEM Case No.: Q1514 SAS No.: Q1514 SDG No.: Q1514
 Instrument ID: MSVOA_Y Calibration Date(s): 03/04/2025 03/04/2025
 Heated Purge: (Y/N) Y Calibration Time(s): 09:46 12:15
 GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID:	RRF010 = VY021397.D			RRF020 = VY021398.D		RRF050 = VY021399.D			
	RRF100 = VY021400.D			RRF150 = VY021401.D		RRF005 = VY021403.D			
COMPOUND	RRF010	RRF020	RRF050	RRF100	RRF150	RRF005	RRF	% RSD	
Dichlorodifluoromethane	0.493	0.416	0.447	0.440	0.429	0.529	0.459	9.4	
Chloromethane	0.694	0.588	0.617	0.608	0.580	0.793	0.647	12.7	
Vinyl Chloride	0.762	0.639	0.691	0.706	0.665	0.778	0.707	7.7	
Bromomethane	0.555	0.450	0.468	0.483	0.468	0.641	0.511	14.4	
Chloroethane	0.505	0.427	0.460	0.458	0.432	0.521	0.467	8.2	
Trichlorofluoromethane	1.050	0.896	0.967	0.963	0.935	1.109	0.987	8	
1,1,2-Trichlorotrifluoroethane	0.600	0.507	0.538	0.542	0.525	0.668	0.563	10.7	
1,1-Dichloroethene	0.542	0.460	0.506	0.512	0.494	0.566	0.514	7.2	
Acetone	0.124	0.091	0.134	0.103	0.095	0.144	0.115	18.9	
Carbon Disulfide	1.705	1.425	1.631	1.618	1.546	1.732	1.610	7	
Methyl tert-butyl Ether	1.290	1.177	1.366	1.299	1.315	1.364	1.302	5.3	
Methyl Acetate	0.253	0.227	0.284	0.245	0.257	0.268	0.256	7.6	
Methylene Chloride	0.717	0.538	0.552	0.530	0.507	0.788	0.605	19.4	
trans-1,2-Dichloroethene	0.608	0.516	0.564	0.570	0.545	0.648	0.575	8.1	
1,1-Dichloroethane	1.124	0.955	1.050	1.035	0.991	1.179	1.056	7.9	
Cyclohexane	1.039	0.885	0.941	0.943	0.914	1.216	0.990	12.4	
2-Butanone	0.160	0.136	0.181	0.149	0.151	0.180	0.159	11.2	
Carbon Tetrachloride	0.627	0.538	0.587	0.595	0.579	0.625	0.592	5.6	
cis-1,2-Dichloroethene	0.675	0.592	0.654	0.658	0.639	0.702	0.653	5.6	
Bromochloromethane	0.481	0.423	0.467	0.426	0.380	0.478	0.443	9	
Chloroform	1.181	0.992	1.087	1.066	1.029	1.222	1.096	8.1	
1,1,1-Trichloroethane	1.063	0.894	0.978	0.983	0.953	1.151	1.004	9	
Methylcyclohexane	0.595	0.550	0.651	0.680	0.669	0.641	0.631	7.8	
Benzene	1.554	1.366	1.542	1.540	1.473	1.618	1.515	5.7	
1,2-Dichloroethane	0.446	0.386	0.436	0.414	0.408	0.453	0.424	6.1	
Trichloroethene	0.390	0.349	0.381	0.384	0.378	0.415	0.383	5.5	
1,2-Dichloropropane	0.371	0.333	0.368	0.358	0.347	0.388	0.361	5.3	
Bromodichloromethane	0.550	0.485	0.548	0.535	0.521	0.559	0.533	5	
4-Methyl-2-Pentanone	0.210	0.202	0.263	0.230	0.243	0.219	0.228	9.9	
Toluene	0.952	0.853	0.988	0.997	0.958	0.983	0.955	5.6	

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



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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: PORT06
 Lab Code: CHEM Case No.: Q1514 SAS No.: Q1514 SDG No.: Q1514
 Instrument ID: MSVOA_Y Calibration Date(s): 03/04/2025 03/04/2025
 Heated Purge: (Y/N) Y Calibration Time(s): 09:46 12:15
 GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID:		RRF010 = VY021397.D		RRF020 = VY021398.D		RRF050 = VY021399.D			
		RRF100 = VY021400.D		RRF150 = VY021401.D		RRF005 = VY021403.D			
COMPOUND	RRF010	RRF020	RRF050	RRF100	RRF150	RRF005	RRF	% RSD	
t-1,3-Dichloropropene	0.447	0.420	0.499	0.495	0.495	0.461	0.470	6.8	
cis-1,3-Dichloropropene	0.544	0.498	0.587	0.579	0.566	0.570	0.557	5.8	
1,1,2-Trichloroethane	0.264	0.237	0.283	0.259	0.257	0.274	0.263	6	
2-Hexanone	0.135	0.129	0.182	0.156	0.163	0.139	0.151	13.1	
Dibromochloromethane	0.358	0.327	0.376	0.363	0.361	0.374	0.360	4.9	
1,2-Dibromoethane	0.246	0.226	0.262	0.248	0.247	0.258	0.248	5.1	
Tetrachloroethene	0.418	0.370	0.403	0.407	0.393	0.449	0.407	6.5	
Chlorobenzene	1.194	1.065	1.186	1.192	1.165	1.283	1.181	5.9	
Ethyl Benzene	2.005	1.825	2.135	2.209	2.146	2.115	2.072	6.7	
m/p-Xylenes	0.761	0.705	0.822	0.833	0.803	0.797	0.787	6	
o-Xylene	0.700	0.635	0.759	0.779	0.754	0.723	0.725	7.2	
Styrene	1.133	1.084	1.277	1.306	1.267	1.151	1.203	7.6	
Bromoform	0.227	0.213	0.250	0.237	0.238	0.235	0.233	5.3	
Isopropylbenzene	3.797	3.468	4.034	4.231	4.124	3.977	3.939	6.9	
1,1,2,2-Tetrachloroethane	0.712	0.637	0.727	0.667	0.690	0.737	0.695	5.4	
1,3-Dichlorobenzene	1.861	1.640	1.812	1.840	1.822	2.031	1.834	6.8	
1,4-Dichlorobenzene	1.820	1.624	1.782	1.783	1.764	1.989	1.794	6.5	
1,2-Dichlorobenzene	1.561	1.431	1.588	1.568	1.560	1.723	1.572	5.9	
1,2-Dibromo-3-Chloropropane	0.101	0.092	0.108	0.098	0.108	0.117	0.104	8.3	
1,2,4-Trichlorobenzene	0.723	0.735	0.908	0.926	0.994	0.864	0.859	12.7	
1,2,3-Trichlorobenzene	0.604	0.614	0.775	0.771	0.835	0.734	0.722	13	
1,2-Dichloroethane-d4	0.580	0.514	0.482	0.511	0.477	0.606	0.528	10	
Dibromofluoromethane	0.348	0.315	0.296	0.332	0.311	0.371	0.329	8.3	
Toluene-d8	1.276	1.179	1.135	1.289	1.203	1.384	1.244	7.2	
4-Bromofluorobenzene	0.424	0.394	0.386	0.433	0.405	0.498	0.423	9.6	

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

Method Path : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\
 Method File : 82Y030425S.M
 Title : SW846 8260
 Last Update : Wed Mar 05 12:42:45 2025
 Response Via : Initial Calibration

Calibration Files

5 =VY021403.D 10 =VY021397.D 20 =VY021398.D 50 =VY021399.D 100 =VY021400.D 150 =VY021401.D

	Compound	5	10	20	50	100	150	Avg	%RSD
1) I	Pentafluorobenzene	-----ISTD-----							
2) T	Dichlorodifluo...	0.529	0.493	0.416	0.447	0.440	0.429	0.459	9.38
3) P	Chloromethane	0.793	0.694	0.588	0.617	0.608	0.580	0.647	12.70
4) C	Vinyl Chloride	0.778	0.762	0.639	0.691	0.706	0.665	0.707	7.70#
5) T	Bromomethane	0.641	0.555	0.450	0.468	0.483	0.468	0.511	14.40
6) T	Chloroethane	0.521	0.505	0.427	0.460	0.458	0.432	0.467	8.21
7) T	Trichlorofluor...	1.109	1.050	0.896	0.967	0.963	0.935	0.987	7.97
8) T	Diethyl Ether	0.301	0.280	0.249	0.283	0.264	0.263	0.273	6.77
9) T	1,1,2-Trichlor...	0.668	0.600	0.507	0.538	0.542	0.525	0.563	10.69
10) T	Methyl Iodide	0.492	0.562	0.515	0.632	0.628	0.606	0.573	10.39
11) T	Tert butyl alc...	0.061	0.049	0.036	0.038	0.030	0.033	0.041	28.30
12) CM	1,1-Dichloroet...	0.566	0.542	0.460	0.506	0.512	0.494	0.514	7.23#
13) T	Acrolein	0.054	0.051	0.043	0.005	0.004	0.004	0.027	92.94
14) T	Allyl chloride	0.883	0.851	0.744	0.842	0.847	0.813	0.830	5.72
15) T	Acrylonitrile	0.122	0.121	0.105	0.125	0.111	0.113	0.116	6.52
16) T	Acetone	0.144	0.124	0.091	0.134	0.103	0.095	0.115	18.92
17) T	Carbon Disulfide	1.732	1.705	1.425	1.631	1.618	1.546	1.610	6.95
18) T	Methyl Acetate	0.268	0.253	0.227	0.284	0.245	0.257	0.256	7.60
19) T	Methyl tert-bu...	1.364	1.289	1.177	1.366	1.299	1.315	1.302	5.30
20) T	Methylene Chlo...	0.788	0.717	0.538	0.552	0.530	0.507	0.605	19.37
21) T	trans-1,2-Dich...	0.648	0.608	0.516	0.564	0.570	0.545	0.575	8.12
22) T	Diisopropyl ether	1.846	1.824	1.675	1.851	1.798	1.738	1.789	3.87
23) T	Vinyl Acetate	1.014	0.996	0.937	1.110	1.032	1.035	1.021	5.55
24) P	1,1-Dichloroet...	1.179	1.124	0.955	1.050	1.035	0.991	1.056	7.88
25) T	2-Butanone	0.180	0.160	0.136	0.181	0.149	0.151	0.159	11.20
26) T	2,2-Dichloropr...	1.106	1.043	0.860	0.938	0.955	0.926	0.971	9.11
27) T	cis-1,2-Dichlo...	0.702	0.675	0.592	0.654	0.658	0.639	0.653	5.64
28) T	Bromochloromet...	0.478	0.481	0.423	0.467	0.426	0.380	0.443	8.99
29) T	Tetrahydrofuran	0.104	0.096	0.089	0.111	0.094	0.098	0.098	7.69
30) C	Chloroform	1.222	1.181	0.992	1.087	1.066	1.029	1.096	8.11#
31) T	Cyclohexane	1.216	1.039	0.885	0.941	0.943	0.914	0.990	12.38
32) T	1,1,1-Trichlor...	1.151	1.063	0.894	0.978	0.983	0.953	1.004	9.02
33) S	1,2-Dichloroet...	0.606	0.580	0.514	0.482	0.511	0.477	0.528	9.98
34) I	1,4-Difluorobenzene	-----ISTD-----							
35) S	Dibromofluorom...	0.371	0.348	0.315	0.296	0.332	0.311	0.329	8.31
36) T	1,1-Dichloropr...	0.549	0.528	0.462	0.518	0.525	0.504	0.514	5.73
37) T	Ethyl Acetate	0.242	0.225	0.206	0.248	0.220	0.225	0.227	6.72
38) T	Carbon Tetrach...	0.625	0.627	0.538	0.587	0.595	0.579	0.592	5.56
39) T	Methylcyclohexane	0.641	0.595	0.550	0.651	0.680	0.669	0.631	7.84
40) TM	Benzene	1.618	1.554	1.366	1.542	1.540	1.473	1.515	5.71
41) T	Methacrylonitrile	0.122	0.132	0.104	0.131	0.129	0.124	0.124	8.53
42) TM	1,2-Dichloroet...	0.453	0.446	0.386	0.436	0.414	0.408	0.424	6.07
43) T	Isopropyl Acetate	0.456	0.421	0.386	0.483	0.442	0.461	0.441	7.75
44) TM	Trichloroethene	0.415	0.390	0.349	0.381	0.384	0.378	0.383	5.51
45) C	1,2-Dichloropr...	0.388	0.371	0.333	0.368	0.358	0.347	0.361	5.33#
46) T	Dibromomethane	0.208	0.202	0.185	0.212	0.198	0.198	0.201	4.75
47) T	Bromodichlorom...	0.559	0.550	0.485	0.548	0.535	0.521	0.533	5.05
48) T	Methyl methacr...	0.187	0.183	0.184	0.229	0.212	0.222	0.203	10.14
49) T	1,4-Dioxane	0.002	0.002	0.002	0.002	0.002	0.002	0.002	10.05
50) S	Toluene-d8	1.384	1.276	1.179	1.135	1.289	1.203	1.244	7.24
51) T	4-Methyl-2-Pen...	0.219	0.210	0.202	0.263	0.230	0.243	0.228	9.85
52) CM	Toluene	0.983	0.952	0.853	0.988	0.997	0.958	0.955	5.56#
53) T	t-1,3-Dichloro...	0.461	0.447	0.420	0.499	0.495	0.495	0.470	6.82
54) T	cis-1,3-Dichlo...	0.570	0.544	0.498	0.587	0.579	0.566	0.557	5.84
55) T	1,1,2-Trichlor...	0.274	0.264	0.237	0.283	0.259	0.257	0.263	5.99
56) T	Ethyl methacry...	0.291	0.293	0.289	0.383	0.367	0.386	0.335	14.50

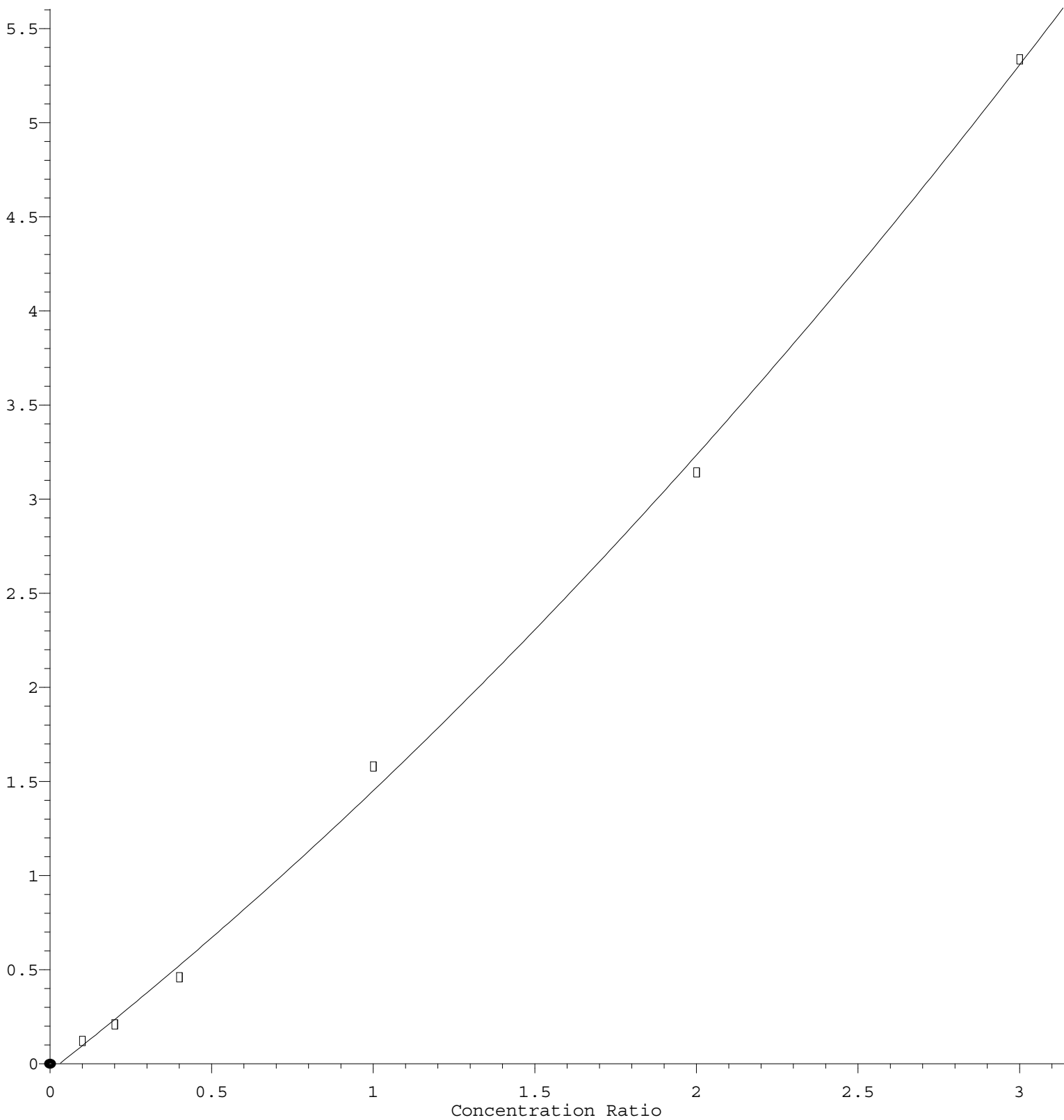
Method Path : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\
 Method File : 82Y030425S.M

57)	T	1,3-Dichloropr...	0.465	0.462	0.421	0.478	0.452	0.451	0.455	4.24
58)	T	2-Chloroethyl ...	0.136	0.135	0.139	0.174	0.162	0.181	0.155	13.30
59)	T	2-Hexanone	0.139	0.135	0.129	0.182	0.156	0.163	0.151	13.15
60)	T	Dibromochlorom...	0.374	0.358	0.327	0.376	0.363	0.361	0.360	4.92
61)	T	1,2-Dibromoethane	0.258	0.246	0.226	0.262	0.248	0.247	0.248	5.07
62)	S	4-Bromofluorob...	0.498	0.424	0.394	0.386	0.433	0.405	0.423	9.60
63)	I	Chlorobenzene-d5	-----ISTD-----							
64)	T	Tetrachloroethene	0.449	0.418	0.370	0.403	0.407	0.393	0.407	6.47
65)	PM	Chlorobenzene	1.283	1.194	1.065	1.186	1.192	1.165	1.181	5.93
66)	T	1,1,1,2-Tetrac...	0.449	0.420	0.377	0.421	0.423	0.414	0.417	5.61
67)	C	Ethyl Benzene	2.115	2.005	1.825	2.135	2.209	2.146	2.072	6.67#
68)	T	m/p-Xylenes	0.797	0.761	0.705	0.822	0.833	0.803	0.787	5.97
69)	T	o-Xylene	0.723	0.700	0.635	0.759	0.779	0.754	0.725	7.20
70)	T	Styrene	1.151	1.133	1.084	1.277	1.306	1.267	1.203	7.61
71)	P	Bromoform	0.235	0.227	0.213	0.250	0.237	0.238	0.233	5.28
72)	I	1,4-Dichlorobenzen...	-----ISTD-----							
73)	T	Isopropylbenzene	3.977	3.797	3.468	4.034	4.231	4.124	3.939	6.93
74)	T	N-amyl acetate	0.765	0.746	0.743	0.950	0.925	1.003	0.855	13.67
75)	P	1,1,2,2-Tetrac...	0.737	0.712	0.637	0.727	0.667	0.690	0.695	5.44
76)	T	1,2,3-Trichlor...	0.627	0.523	0.430	0.491	0.488	0.464	0.504	13.47
77)	T	Bromobenzene	0.982	0.928	0.823	0.926	0.936	0.933	0.921	5.67
78)	T	n-propylbenzene	4.979	4.605	4.262	4.905	5.046	4.904	4.783	6.20
79)	T	2-Chlorotoluene	2.922	2.707	2.449	2.741	2.824	2.768	2.735	5.82
80)	T	1,3,5-Trimethy...	3.307	3.096	2.895	3.256	3.373	3.277	3.201	5.49
81)	T	trans-1,4-Dich...	0.213	0.214	0.193	0.238	0.229	0.243	0.222	8.31
82)	T	4-Chlorotoluene	2.991	2.866	2.534	2.849	2.931	2.824	2.832	5.59
83)	T	tert-Butylbenzene	2.890	2.771	2.493	2.924	3.096	2.959	2.855	7.23
84)	T	1,2,4-Trimethy...	3.241	3.006	2.901	3.274	3.353	3.294	3.178	5.70
85)	T	sec-Butylbenzene	4.457	3.977	3.848	4.358	4.471	4.380	4.248	6.29
86)	T	p-Isopropyltol...	3.547	3.237	3.132	3.591	3.761	3.732	3.500	7.42
87)	T	1,3-Dichlorobe...	2.031	1.861	1.640	1.812	1.840	1.822	1.834	6.80
88)	T	1,4-Dichlorobe...	1.989	1.820	1.624	1.782	1.783	1.764	1.794	6.54
89)	T	n-Butylbenzene	3.269	2.837	2.867	3.387	3.535	3.497	3.232	9.55
90)	T	Hexachloroethane	0.840	0.746	0.649	0.729	0.759	0.757	0.747	8.24
91)	T	1,2-Dichlorobe...	1.723	1.561	1.431	1.588	1.568	1.560	1.572	5.92
92)	T	1,2-Dibromo-3-...	0.117	0.101	0.092	0.108	0.098	0.108	0.104	8.28
93)	T	1,2,4-Trichlor...	0.864	0.723	0.735	0.908	0.926	0.994	0.859	12.66
94)	T	Hexachlorobuta...	0.581	0.469	0.480	0.551	0.567	0.582	0.538	9.41
95)	T	Naphthalene	1.214	1.048	1.148	1.580	1.571	1.779	1.390	21.00
96)	T	1,2,3-Trichlor...	0.734	0.604	0.614	0.775	0.771	0.835	0.722	12.99

(#) = Out of Range

Naphthalene

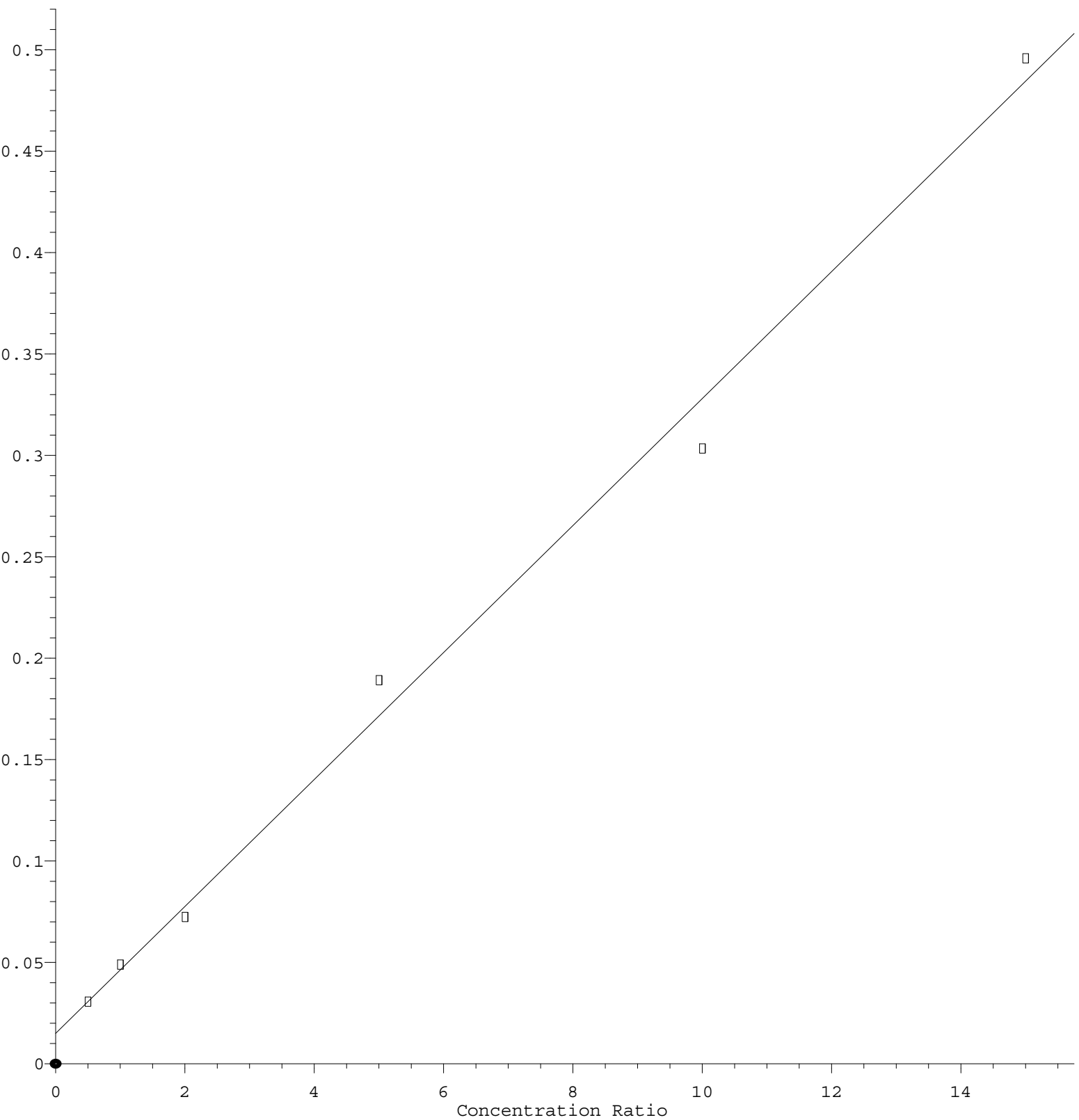
Response Ratio



$R = 1.461e-001 A^2 + 1.344e+000 A - 3.906e-002$
 Coef of Det (r^2) = 0.998562 Curve Fit: Quadratic
 Method Name: Z:\voasrv\HPCHEM1\MSVOA Y\methods\82Y030425S.M
 Calibration Table Last Updated: Wed Mar 05 12:42:45 2025

Tert butyl alcohol

Response Ratio



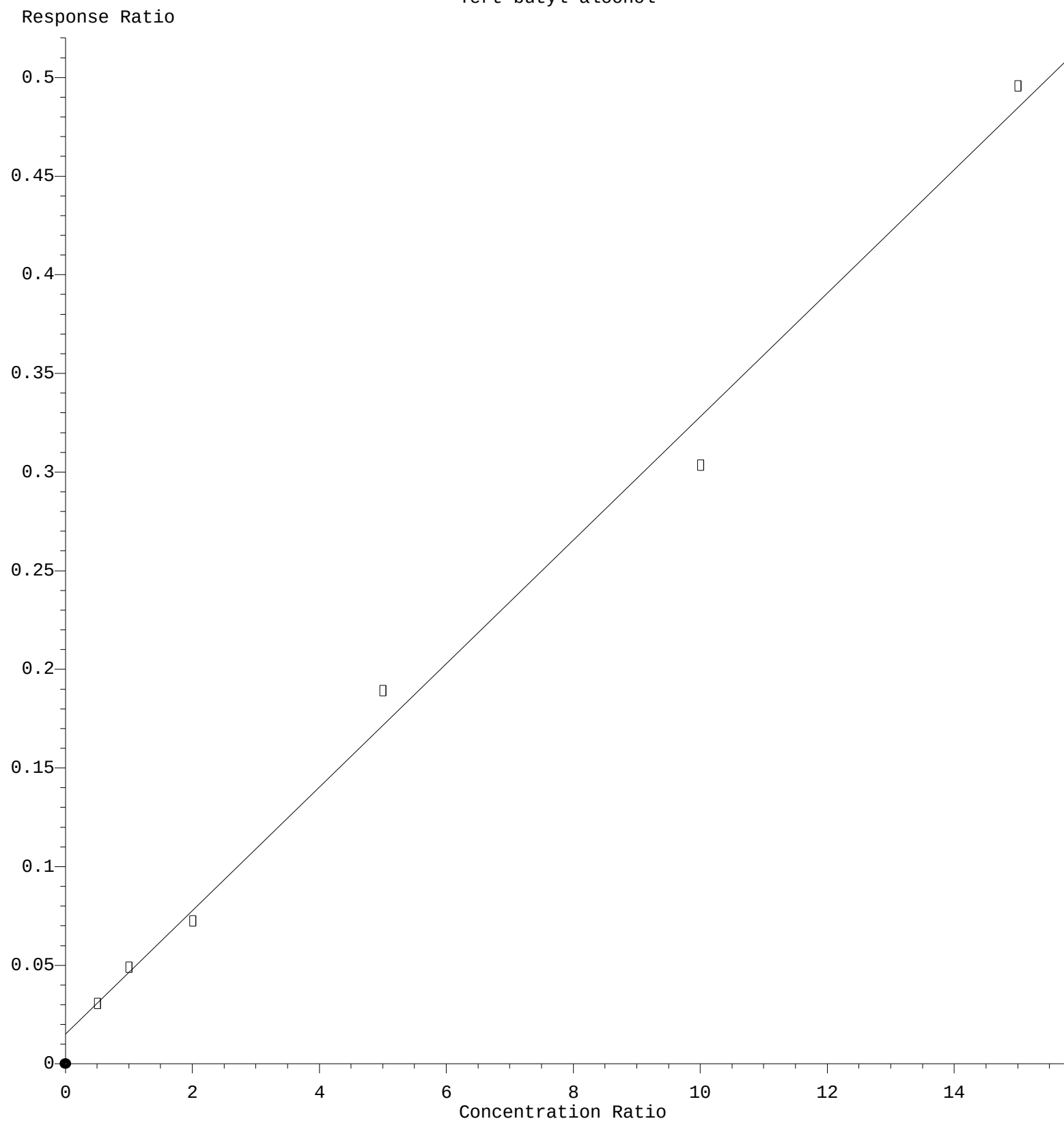
$$\text{Response} = 3.126\text{e-}002 * \text{Amt} + 1.549\text{e-}002$$

Coef of Det (r^2) = 0.993493 Curve Fit: Linear

Method Name: Z:\voasrv\HPCHEM1\MSVOA Y\methods\82Y030425S.M

Calibration Table Last Updated: Wed Mar 05 12:42:45 2025

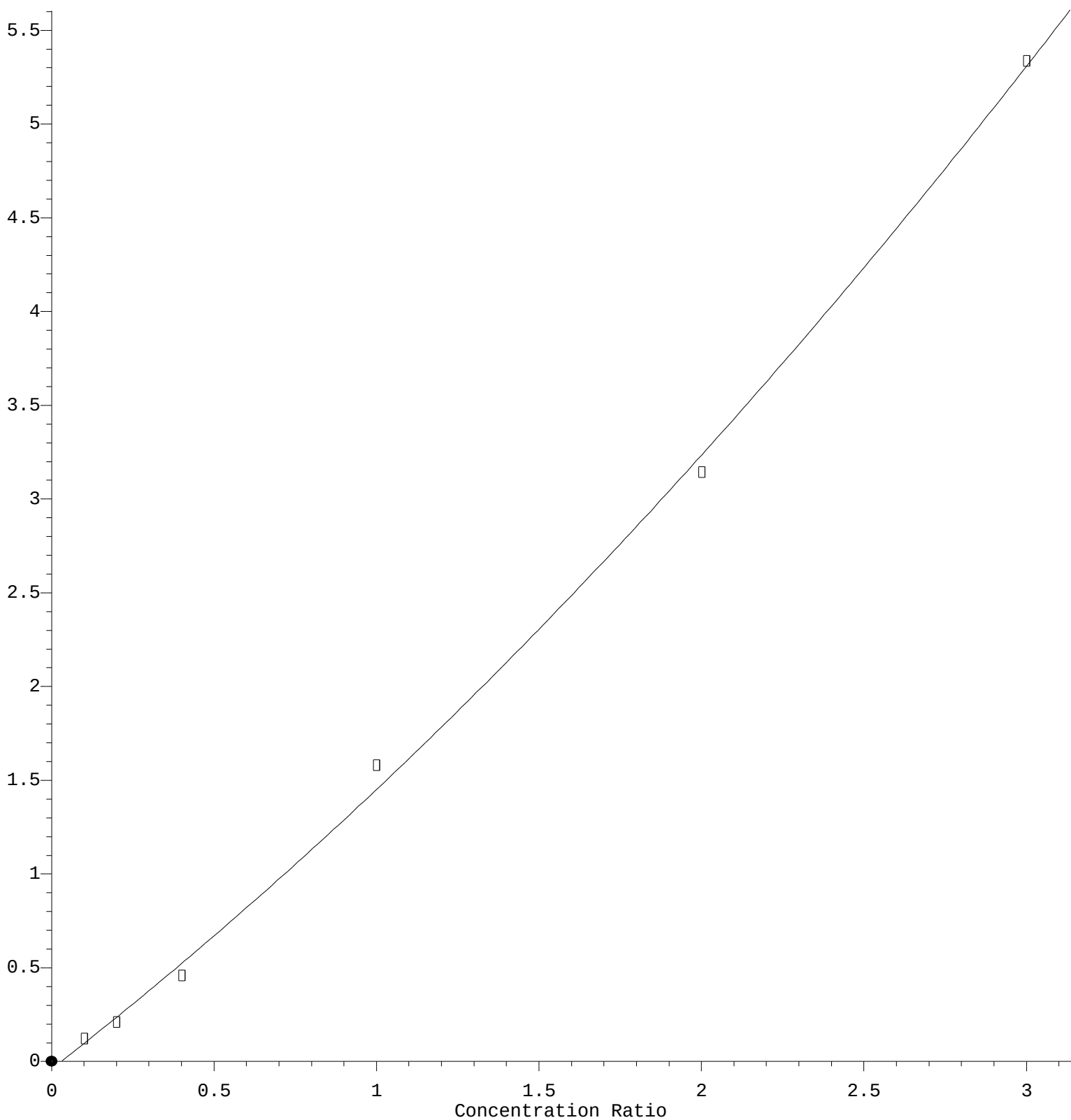
Tert butylalcohol



Response = $3.126 \times 10^{-2} \times \text{Amt} + 1.549 \times 10^{-2}$
 Coef of Det (r^2) = 0.993493 Curve Fit: Linear
 Method Name: Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Calibration Table Last Updated: Wed Mar 05 12:42:45 2025

Naphthalene

Response Ratio



$R = 1.461e-001 A^2 + 1.344e+000 A - 3.906e-002$
 Coef of Det (r^2) = 0.998562 Curve Fit: Quadratic
 Method Name: Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Calibration Table Last Updated: Wed Mar 05 12:42:45 2025

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
 Data File : VY021397.D
 Acq On : 04 Mar 2025 09:46
 Operator : SY/MD
 Sample : VSTDICC010
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDICC010

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
 Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 02:57:08 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 02:30:51 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	7.719	168	210415	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.621	114	334495	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	286225	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.352	152	137839	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.067	65	24408	10.975	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery =	21.960%#		
35) Dibromofluoromethane	7.640	113	23289	10.592	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery =	21.180%#		
50) Toluene-d8	10.109	98	85383	10.256	ug/l	0.00
Spiked Amount 50.000	Range 58 - 134		Recovery =	20.520%#		
62) 4-Bromofluorobenzene	12.407	95	28379	10.022	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery =	20.040%#		
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	1.867	85	20733	10.737	ug/l	93
3) Chloromethane	2.074	50	29226	10.736	ug/l	100
4) Vinyl Chloride	2.208	62	32085	10.785	ug/l	95
5) Bromomethane	2.604	94	23372	10.870	ug/l	97
6) Chloroethane	2.744	64	21248	10.808	ug/l	95
7) Trichlorofluoromethane	3.067	101	44207	10.646	ug/l	97
8) Diethyl Ether	3.464	74	11802	10.256	ug/l	96
9) 1,1,2-Trichlorotrifluo...	3.823	101	25259	10.654	ug/l	98
10) Methyl Iodide	4.012	142	23638	9.809	ug/l	100
11) Tert butyl alcohol	4.872	59	10292m	53.545	ug/l	
12) 1,1-Dichloroethene	3.805	96	22821	10.558	ug/l	94
13) Acrolein	3.659	56	10792	95.404	ug/l	92
14) Allyl chloride	4.397	41	35815	10.253	ug/l	100
15) Acrylonitrile	5.073	53	25558	52.174	ug/l	99
16) Acetone	3.872	43	26021	53.644	ug/l	98
17) Carbon Disulfide	4.116	76	71755	10.593	ug/l	98
18) Methyl Acetate	4.397	43	10640	9.886	ug/l	95
19) Methyl tert-butyl Ether	5.128	73	54266	9.906	ug/l	99
20) Methylene Chloride	4.622	84	30170	11.849	ug/l	96
21) trans-1,2-Dichloroethene	5.128	96	25590	10.572	ug/l	90
22) Diisopropyl ether	6.030	45	76752	10.196	ug/l	96
23) Vinyl Acetate	5.969	43	209626	48.795	ug/l	99
24) 1,1-Dichloroethane	5.921	63	47303	10.647	ug/l	96
25) 2-Butanone	6.902	43	33631	50.121	ug/l	100
26) 2,2-Dichloropropane	6.890	77	43881	10.734	ug/l	100
27) cis-1,2-Dichloroethene	6.908	96	28406	10.330	ug/l	98
28) Bromochloromethane	7.250	49	20230	10.861	ug/l	99
29) Tetrahydrofuran	7.274	42	20096	48.513	ug/l	99
30) Chloroform	7.426	83	49699	10.773	ug/l	96
31) Cyclohexane	7.707	56	43729	10.499	ug/l #	91
32) 1,1,1-Trichloroethane	7.628	97	44743	10.592	ug/l	98
36) 1,1-Dichloropropene	7.841	75	35303	10.258	ug/l	99
37) Ethyl Acetate	6.994	43	15039	9.687	ug/l	99
38) Carbon Tetrachloride	7.823	117	41920	10.591	ug/l	98
39) Methylcyclohexane	9.109	83	39826	9.434	ug/l	94
40) Benzene	8.085	78	103944	10.253	ug/l	96

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
 Data File : VY021397.D
 Acq On : 04 Mar 2025 09:46
 Operator : SY/MD
 Sample : VSTDICC010
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDICC010

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
 Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 02:57:08 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 02:30:51 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.219	41	8855m	10.472	ug/l	
42) 1,2-Dichloroethane	8.164	62	29851	10.525	ug/l	99
43) Isopropyl Acetate	8.201	43	28138	9.529	ug/l #	90
44) Trichloroethene	8.871	130	26077	10.179	ug/l	98
45) 1,2-Dichloropropane	9.146	63	24839	10.294	ug/l	96
46) Dibromomethane	9.237	93	13535	10.081	ug/l	99
47) Bromodichloromethane	9.426	83	36777	10.315	ug/l	97
48) Methyl methacrylate	9.225	41	12236	8.937	ug/l	99
49) 1,4-Dioxane	9.249	88	2337	177.344	ug/l #	87
51) 4-Methyl-2-Pentanone	9.999	43	70235	46.097	ug/l	100
52) Toluene	10.176	92	63716	9.968	ug/l	99
53) t-1,3-Dichloropropene	10.402	75	29928	9.528	ug/l	99
54) cis-1,3-Dichloropropene	9.859	75	36383	9.756	ug/l	96
55) 1,1,2-Trichloroethane	10.578	97	17683	10.069	ug/l	96
56) Ethyl methacrylate	10.444	69	19614	8.757	ug/l	99
57) 1,3-Dichloropropane	10.725	76	30899	10.151	ug/l	99
58) 2-Chloroethyl Vinyl ether	9.719	63	45096	43.615	ug/l	100
59) 2-Hexanone	10.767	43	45211	44.876	ug/l	96
60) Dibromochloromethane	10.914	129	23922	9.936	ug/l	100
61) 1,2-Dibromoethane	11.017	107	16472	9.938	ug/l	96
64) Tetrachloroethene	10.652	164	23948	10.289	ug/l	97
65) Chlorobenzene	11.444	112	68332	10.110	ug/l	96
66) 1,1,1,2-Tetrachloroethane	11.523	131	24052	10.065	ug/l	99
67) Ethyl Benzene	11.523	91	114793	9.676	ug/l	97
68) m/p-Xylenes	11.633	106	87134	19.346	ug/l	98
69) o-Xylene	11.956	106	40080	9.655	ug/l	98
70) Styrene	11.974	104	64841	9.416	ug/l	99
71) Bromoform	12.139	173	12983	9.719	ug/l #	94
73) Isopropylbenzene	12.261	105	104663	9.639	ug/l	99
74) N-amyl acetate	12.072	43	20573	8.725	ug/l	97
75) 1,1,2,2-Tetrachloroethane	12.511	83	19638	10.249	ug/l	100
76) 1,2,3-Trichloropropane	12.560	75	14405m	10.371	ug/l	
77) Bromobenzene	12.535	156	25588	10.073	ug/l	99
78) n-propylbenzene	12.602	91	126938	9.626	ug/l	99
79) 2-Chlorotoluene	12.682	91	74631	9.898	ug/l	99
80) 1,3,5-Trimethylbenzene	12.743	105	85353	9.673	ug/l	99
81) trans-1,4-Dichloro-2-b...	12.304	75	5896	9.650	ug/l	98
82) 4-Chlorotoluene	12.785	91	78997	10.118	ug/l	100
83) tert-Butylbenzene	13.005	119	76394	9.705	ug/l	98
84) 1,2,4-Trimethylbenzene	13.047	105	82865	9.458	ug/l	100
85) sec-Butylbenzene	13.182	105	109643	9.362	ug/l	100
86) p-Isopropyltoluene	13.297	119	89228	9.248	ug/l	100
87) 1,3-Dichlorobenzene	13.291	146	51307	10.147	ug/l	99
88) 1,4-Dichlorobenzene	13.371	146	50160	10.143	ug/l	97
89) n-Butylbenzene	13.620	91	78217	8.779	ug/l	100
90) Hexachloroethane	13.883	117	20579	9.998	ug/l	96
91) 1,2-Dichlorobenzene	13.663	146	43028	9.929	ug/l	98
92) 1,2-Dibromo-3-Chloropr...	14.285	75	2787	9.710	ug/l	94
93) 1,2,4-Trichlorobenzene	14.925	180	19935	8.422	ug/l	97
94) Hexachlorobutadiene	15.029	225	12923	8.709	ug/l	98
95) Naphthalene	15.151	128	28894	9.071	ug/l	99
96) 1,2,3-Trichlorobenzene	15.334	180	16639	8.358	ug/l	97

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
Data File : VY021397.D
Acq On : 04 Mar 2025 09:46
Operator : SY/MD
Sample : VSTDICC010
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC010

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 02:57:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 02:30:51 2025
Response via : Initial Calibration

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

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

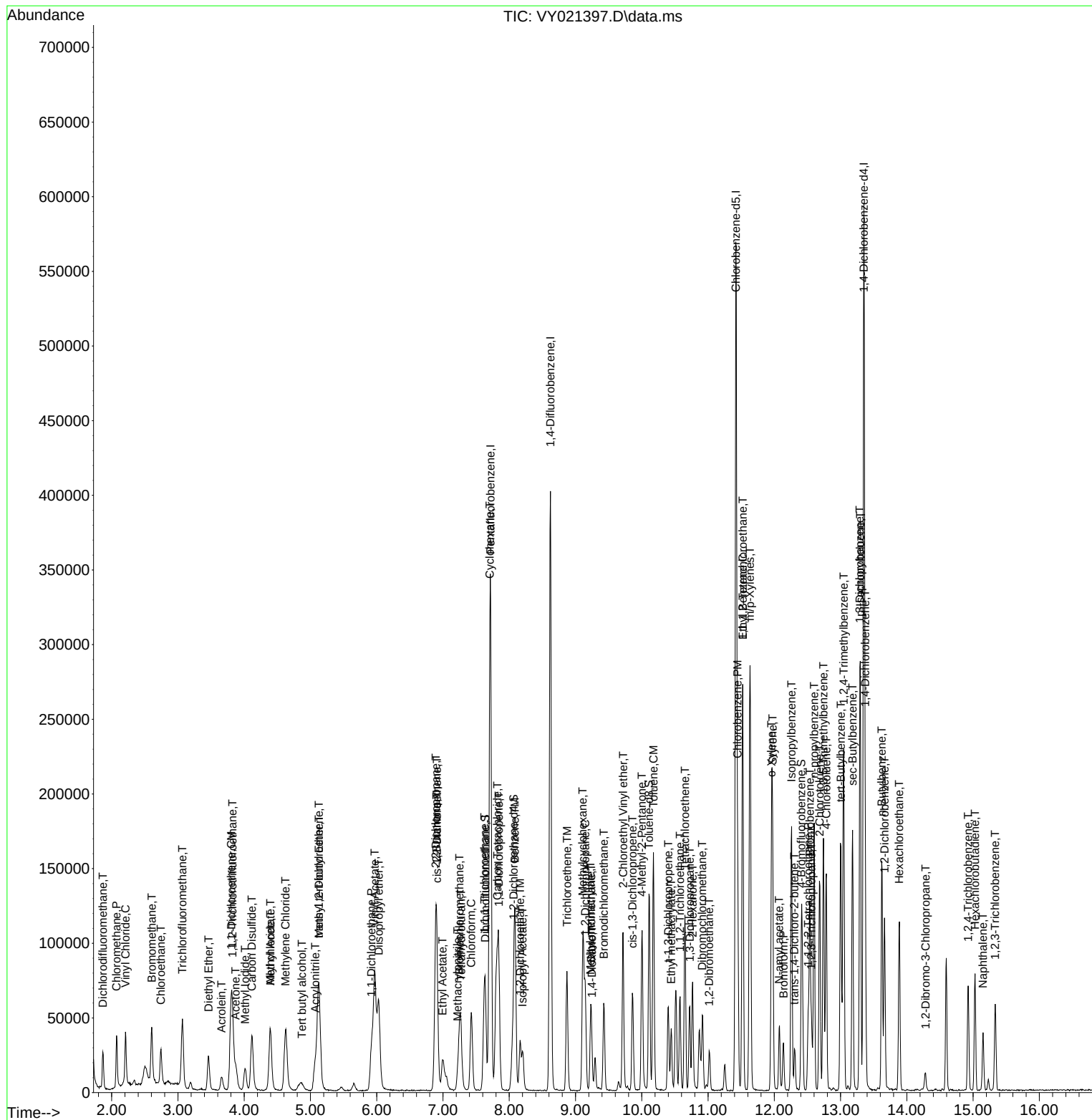
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
Data File : VY021397.D
Acq On : 04 Mar 2025 09:46
Operator : SY/MD
Sample : VSTDICC010
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC010

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 02:57:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 02:30:51 2025
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
 Data File : VY021398.D
 Acq On : 04 Mar 2025 10:09
 Operator : SY/MD
 Sample : VSTDICC020
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDICC020

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
 Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 02:58:07 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 02:30:51 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	7.713	168	234648	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.622	114	364702	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	318510	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.352	152	158359	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.067	65	48282	19.468	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery =	38.940%#		
35) Dibromofluoromethane	7.640	113	45904	19.149	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery =	38.300%#		
50) Toluene-d8	10.109	98	172011	18.951	ug/l	0.00
Spiked Amount 50.000	Range 58 - 134		Recovery =	37.900%#		
62) 4-Bromofluorobenzene	12.407	95	57456	18.609	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery =	37.220%		
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	1.867	85	39013	18.118	ug/l	99
3) Chloromethane	2.074	50	55232	18.193	ug/l	98
4) Vinyl Chloride	2.208	62	59949	18.070	ug/l	97
5) Bromomethane	2.598	94	42205	17.602	ug/l	97
6) Chloroethane	2.738	64	40060	18.272	ug/l	98
7) Trichlorofluoromethane	3.062	101	84097	18.161	ug/l	99
8) Diethyl Ether	3.458	74	23333	18.183	ug/l	96
9) 1,1,2-Trichlorotrifluo...	3.824	101	47597	18.003	ug/l	99
10) Methyl Iodide	4.007	142	48356	17.994	ug/l	99
11) Tert butyl alcohol	4.866	59	16988	91.100	ug/l	97
12) 1,1-Dichloroethene	3.799	96	43203	17.924	ug/l	96
13) Acrolein	3.659	56	20256	160.575	ug/l	90
14) Allyl chloride	4.397	41	69859	17.935	ug/l	99
15) Acrylonitrile	5.067	53	49390	90.413	ug/l	99
16) Acetone	3.872	43	42878	79.267	ug/l	97
17) Carbon Disulfide	4.110	76	133782	17.710	ug/l	98
18) Methyl Acetate	4.391	43	21340	17.780	ug/l	97
19) Methyl tert-butyl Ether	5.122	73	110487	18.085	ug/l	97
20) Methylene Chloride	4.628	84	50462	17.772	ug/l	97
21) trans-1,2-Dichloroethene	5.122	96	48412	17.935	ug/l	98
22) Diisopropyl ether	6.024	45	157248	18.732	ug/l	96
23) Vinyl Acetate	5.970	43	439671	91.773	ug/l	99
24) 1,1-Dichloroethane	5.921	63	89625	18.090	ug/l	98
25) 2-Butanone	6.902	43	63994	85.523	ug/l	92
26) 2,2-Dichloropropane	6.890	77	80697	17.702	ug/l	100
27) cis-1,2-Dichloroethene	6.896	96	55597	18.130	ug/l	99
28) Bromochloromethane	7.250	49	39711	19.118	ug/l	98
29) Tetrahydrofuran	7.274	42	41984	90.885	ug/l	98
30) Chloroform	7.427	83	93077	18.092	ug/l	98
31) Cyclohexane	7.707	56	83067	17.884	ug/l	96
32) 1,1,1-Trichloroethane	7.622	97	83884	17.807	ug/l	99
36) 1,1-Dichloropropene	7.841	75	67437	17.972	ug/l	98
37) Ethyl Acetate	6.988	43	30017m	17.733	ug/l	
38) Carbon Tetrachloride	7.823	117	78440	18.176	ug/l	99
39) Methylcyclohexane	9.115	83	80192	17.422	ug/l	100
40) Benzene	8.085	78	199273	18.027	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
 Data File : VY021398.D
 Acq On : 04 Mar 2025 10:09
 Operator : SY/MD
 Sample : VSTDICC020
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDICC020

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
 Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 02:58:07 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 02:30:51 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.225	41	15135	16.416	ug/l #	77
42) 1,2-Dichloroethane	8.164	62	56356	18.224	ug/l	100
43) Isopropyl Acetate	8.201	43	56260	17.474	ug/l #	87
44) Trichloroethene	8.865	130	50961	18.244	ug/l	97
45) 1,2-Dichloropropane	9.146	63	48565	18.460	ug/l	93
46) Dibromomethane	9.231	93	26972	18.426	ug/l	99
47) Bromodichloromethane	9.426	83	70770	18.205	ug/l	99
48) Methyl methacrylate	9.225	41	26835	17.976	ug/l	97
49) 1,4-Dioxane	9.237	88	5448	379.181	ug/l	94
51) 4-Methyl-2-Pentanone	9.999	43	147076	88.535	ug/l	99
52) Toluene	10.176	92	124450	17.858	ug/l	100
53) t-1,3-Dichloropropene	10.396	75	61342	17.911	ug/l	99
54) cis-1,3-Dichloropropene	9.859	75	72678	17.873	ug/l	98
55) 1,1,2-Trichloroethane	10.572	97	34630	18.085	ug/l	98
56) Ethyl methacrylate	10.444	69	42134	17.253	ug/l	99
57) 1,3-Dichloropropane	10.719	76	61443	18.514	ug/l	99
58) 2-Chloroethyl Vinyl ether	9.713	63	101217	89.786	ug/l	100
59) 2-Hexanone	10.768	43	94397	85.937	ug/l	98
60) Dibromochloromethane	10.914	129	47714	18.176	ug/l	98
61) 1,2-Dibromoethane	11.017	107	32927	18.220	ug/l	96
64) Tetrachloroethene	10.652	164	47121	18.193	ug/l	97
65) Chlorobenzene	11.444	112	135648	18.035	ug/l	97
66) 1,1,1,2-Tetrachloroethane	11.517	131	47998	18.050	ug/l	99
67) Ethyl Benzene	11.523	91	232468	17.609	ug/l	99
68) m/p-Xylenes	11.633	106	179664	35.847	ug/l	99
69) o-Xylene	11.956	106	80909	17.516	ug/l	98
70) Styrene	11.975	104	138147	18.027	ug/l	99
71) Bromoform	12.133	173	27186	18.288	ug/l #	99
73) Isopropylbenzene	12.255	105	219699	17.612	ug/l	99
74) N-amyl acetate	12.072	43	47062	17.372	ug/l	97
75) 1,1,2,2-Tetrachloroethane	12.511	83	40373	18.341	ug/l	99
76) 1,2,3-Trichloropropane	12.560	75	27215m	17.055	ug/l	
77) Bromobenzene	12.536	156	52163	17.874	ug/l	97
78) n-propylbenzene	12.596	91	269961	17.819	ug/l	99
79) 2-Chlorotoluene	12.682	91	155109	17.906	ug/l	100
80) 1,3,5-Trimethylbenzene	12.743	105	183398	18.091	ug/l	98
81) trans-1,4-Dichloro-2-b...	12.304	75	12253	17.456	ug/l	98
82) 4-Chlorotoluene	12.779	91	160509	17.893	ug/l	99
83) tert-Butylbenzene	12.999	119	157912	17.461	ug/l	99
84) 1,2,4-Trimethylbenzene	13.048	105	183733	18.254	ug/l	100
85) sec-Butylbenzene	13.182	105	243719	18.113	ug/l	100
86) p-Isopropyltoluene	13.298	119	198423	17.900	ug/l	99
87) 1,3-Dichlorobenzene	13.291	146	103878	17.882	ug/l	99
88) 1,4-Dichlorobenzene	13.371	146	102862	18.106	ug/l	100
89) n-Butylbenzene	13.621	91	181603	17.741	ug/l	99
90) Hexachloroethane	13.883	117	41098	17.379	ug/l	97
91) 1,2-Dichlorobenzene	13.663	146	90658	18.208	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.279	75	5850	17.741	ug/l	92
93) 1,2,4-Trichlorobenzene	14.925	180	46578	17.127	ug/l	100
94) Hexachlorobutadiene	15.029	225	30431	17.851	ug/l	98
95) Naphthalene	15.145	128	72734	17.845	ug/l	100
96) 1,2,3-Trichlorobenzene	15.334	180	38873	16.996	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
Data File : VY021398.D
Acq On : 04 Mar 2025 10:09
Operator : SY/MD
Sample : VSTDICC020
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 02:58:07 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 02:30:51 2025
Response via : Initial Calibration

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

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

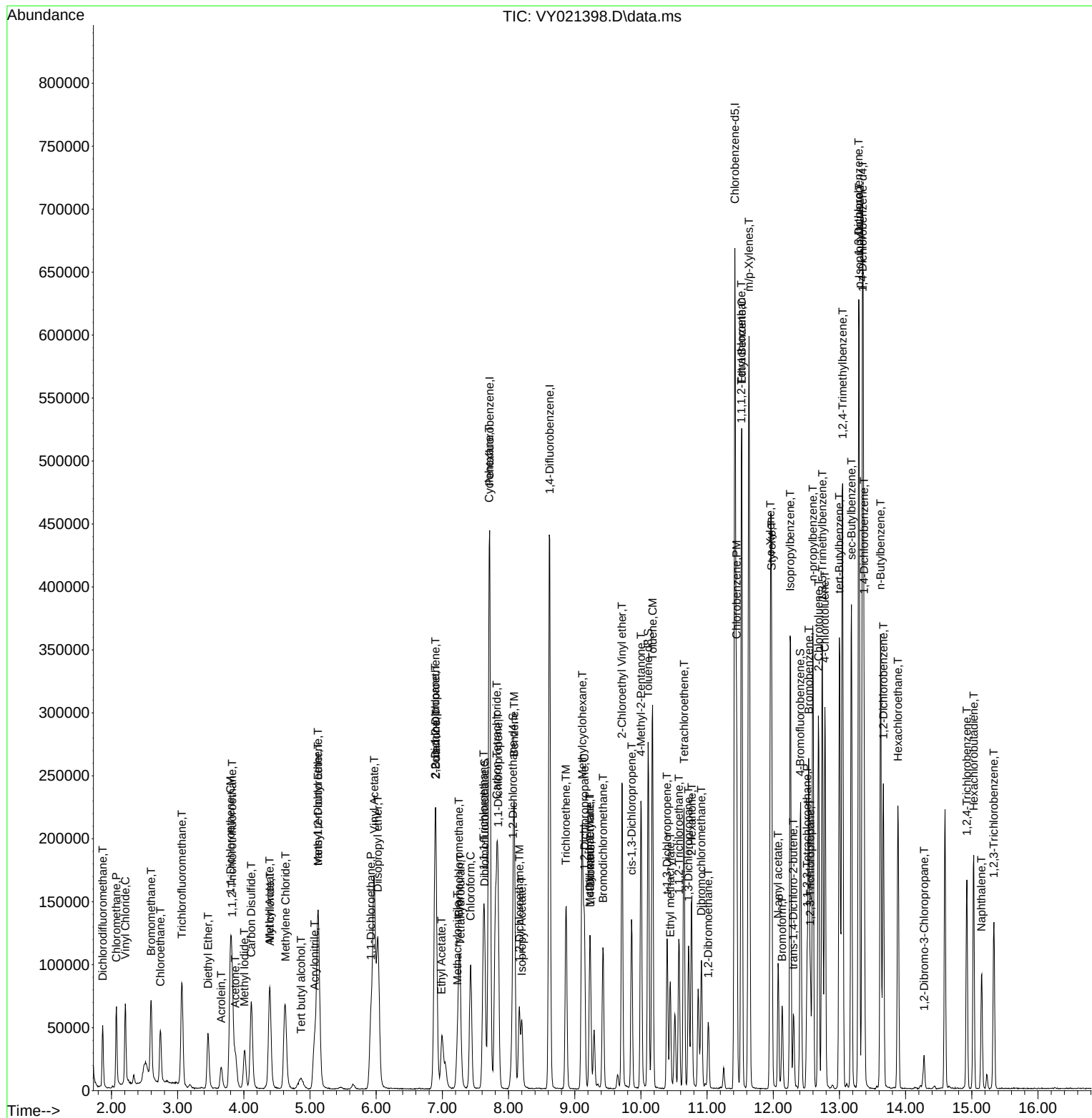
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
 Data File : VY021398.D
 Acq On : 04 Mar 2025 10:09
 Operator : SY/MD
 Sample : VSTDIC020
 Misc : 5.00g/5.0mL/MSVOA_Y/soil
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDIC020

Quant Time: Mar 05 02:58:07 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 02:30:51 2025
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
 Supervised By :Semsettin Yesilyurt 03/06/2025



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
 Data File : VY021399.D
 Acq On : 04 Mar 2025 10:30
 Operator : SY/MD
 Sample : VSTDICCC050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDICCC050

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
 Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 02:59:09 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 02:30:51 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	7.713	168	235140	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.621	114	360221	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	321260	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.352	152	162486	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.067	65	113391	45.625	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery =	91.240%		
35) Dibromofluoromethane	7.640	113	106487	44.973	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery =	89.940%		
50) Toluene-d8	10.109	98	408759	45.594	ug/l	0.00
Spiked Amount 50.000	Range 58 - 134		Recovery =	91.180%		
62) 4-Bromofluorobenzene	12.407	95	139117	45.618	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery =	91.240%		
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.867	85	105206	48.756	ug/l	100
3) Chloromethane	2.074	50	145113	47.700	ug/l	100
4) Vinyl Chloride	2.208	62	162385	48.845	ug/l	100
5) Bromomethane	2.604	94	110008	45.784	ug/l	100
6) Chloroethane	2.738	64	108266	49.279	ug/l	100
7) Trichlorofluoromethane	3.067	101	227308	48.986	ug/l	100
8) Diethyl Ether	3.458	74	66509	51.720	ug/l	100
9) 1,1,2-Trichlorotrifluo...	3.830	101	126512	47.753	ug/l	100
10) Methyl Iodide	4.012	142	148683	55.210	ug/l	100
11) Tert butyl alcohol	4.872	59	44476	277.793	ug/l	100
12) 1,1-Dichloroethene	3.799	96	118986	49.262	ug/l	100
13) Acrolein	3.665	56	5354	42.354	ug/l	100
14) Allyl chloride	4.397	41	197932	50.708	ug/l	100
15) Acrylonitrile	5.067	53	146888	268.329	ug/l	100
16) Acetone	3.872	43	157979	291.440	ug/l	100
17) Carbon Disulfide	4.116	76	383514	50.664	ug/l	100
18) Methyl Acetate	4.390	43	66880	55.606	ug/l	100
19) Methyl tert-butyl Ether	5.122	73	321178	52.463	ug/l	100
20) Methylene Chloride	4.622	84	129715	45.588	ug/l	100
21) trans-1,2-Dichloroethene	5.128	96	132731	49.068	ug/l	100
22) Diisopropyl ether	6.024	45	435305	51.747	ug/l	100
23) Vinyl Acetate	5.969	43	1305446	271.918	ug/l	100
24) 1,1-Dichloroethane	5.927	63	247003	49.750	ug/l	100
25) 2-Butanone	6.896	43	212274	283.093	ug/l	100
26) 2,2-Dichloropropane	6.890	77	220625	48.295	ug/l	100
27) cis-1,2-Dichloroethene	6.896	96	153891	50.078	ug/l	100
28) Bromochloromethane	7.250	49	109912	52.805	ug/l	100
29) Tetrahydrofuran	7.268	42	129976	280.779	ug/l	100
30) Chloroform	7.426	83	255675	49.593	ug/l	100
31) Cyclohexane	7.707	56	221181	47.519	ug/l	100
32) 1,1,1-Trichloroethane	7.622	97	230018	48.727	ug/l	100
36) 1,1-Dichloropropene	7.841	75	186577	50.340	ug/l	100
37) Ethyl Acetate	6.988	43	89317	53.423	ug/l	100
38) Carbon Tetrachloride	7.823	117	211310	49.573	ug/l	100
39) Methylcyclohexane	9.115	83	234520	51.585	ug/l	100
40) Benzene	8.085	78	555364	50.867	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
 Data File : VY021399.D
 Acq On : 04 Mar 2025 10:30
 Operator : SY/MD
 Sample : VSTDICCC050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDICCC050

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
 Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 02:59:09 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 02:30:51 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.219	41	47147	51.774	ug/l	100
42) 1,2-Dichloroethane	8.164	62	157205	51.469	ug/l	100
43) Isopropyl Acetate	8.201	43	173913	54.689	ug/l	100
44) Trichloroethene	8.871	130	137378	49.793	ug/l	100
45) 1,2-Dichloropropane	9.146	63	132392	50.949	ug/l	100
46) Dibromomethane	9.237	93	76517	52.923	ug/l	100
47) Bromodichloromethane	9.426	83	197243	51.370	ug/l	100
48) Methyl methacrylate	9.225	41	82355	55.853	ug/l	100
49) 1,4-Dioxane	9.231	88	16238	1144.224	ug/l	100
51) 4-Methyl-2-Pentanone	9.999	43	472885	288.203	ug/l	100
52) Toluene	10.176	92	356029	51.723	ug/l	100
53) t-1,3-Dichloropropene	10.395	75	179810	53.154	ug/l	100
54) cis-1,3-Dichloropropene	9.859	75	211622	52.691	ug/l	100
55) 1,1,2-Trichloroethane	10.572	97	101913	53.886	ug/l	100
56) Ethyl methacrylate	10.444	69	137939	57.187	ug/l	100
57) 1,3-Dichloropropane	10.719	76	172259	52.551	ug/l	100
58) 2-Chloroethyl Vinyl ether	9.713	63	313349	281.418	ug/l	100
59) 2-Hexanone	10.761	43	327200	301.583	ug/l	100
60) Dibromochloromethane	10.914	129	135595	52.296	ug/l	100
61) 1,2-Dibromoethane	11.017	107	94280	52.819	ug/l	100
64) Tetrachloroethene	10.652	164	129562	49.596	ug/l	100
65) Chlorobenzene	11.444	112	381086	50.233	ug/l	100
66) 1,1,1,2-Tetrachloroethane	11.517	131	135273	50.434	ug/l	100
67) Ethyl Benzene	11.523	91	685789	51.502	ug/l	100
68) m/p-Xylenes	11.633	106	528037	104.452	ug/l	100
69) o-Xylene	11.956	106	243863	52.341	ug/l	100
70) Styrene	11.974	104	410178	53.068	ug/l	100
71) Bromoform	12.133	173	80342	53.584	ug/l	100
73) Isopropylbenzene	12.255	105	655492	51.212	ug/l	100
74) N-amyl acetate	12.072	43	154403	55.547	ug/l	100
75) 1,1,2,2-Tetrachloroethane	12.511	83	118077	52.277	ug/l	100
76) 1,2,3-Trichloropropane	12.560	75	79840m	48.762	ug/l	
77) Bromobenzene	12.535	156	150460	50.247	ug/l	100
78) n-propylbenzene	12.596	91	797005	51.272	ug/l	100
79) 2-Chlorotoluene	12.682	91	445409	50.112	ug/l	100
80) 1,3,5-Trimethylbenzene	12.743	105	528974	50.855	ug/l	100
81) trans-1,4-Dichloro-2-b...	12.304	75	38697	53.727	ug/l	100
82) 4-Chlorotoluene	12.779	91	462879	50.291	ug/l	100
83) tert-Butylbenzene	12.999	119	475042	51.194	ug/l	100
84) 1,2,4-Trimethylbenzene	13.047	105	531919	51.505	ug/l	100
85) sec-Butylbenzene	13.175	105	708040	51.284	ug/l	100
86) p-Isopropyltoluene	13.297	119	583517	51.302	ug/l	100
87) 1,3-Dichlorobenzene	13.291	146	294406	49.392	ug/l	100
88) 1,4-Dichlorobenzene	13.371	146	289572	49.675	ug/l	100
89) n-Butylbenzene	13.620	91	550274	52.392	ug/l	100
90) Hexachloroethane	13.883	117	118465	48.822	ug/l	100
91) 1,2-Dichlorobenzene	13.663	146	258078	50.517	ug/l	100
92) 1,2-Dibromo-3-Chloropr...	14.279	75	17568	51.924	ug/l	100
93) 1,2,4-Trichlorobenzene	14.925	180	147587	52.891	ug/l	100
94) Hexachlorobutadiene	15.029	225	89592	51.220	ug/l	100
95) Naphthalene	15.151	128	256660	53.894	ug/l	100
96) 1,2,3-Trichlorobenzene	15.334	180	125962	53.673	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
Data File : VY021399.D
Acq On : 04 Mar 2025 10:30
Operator : SY/MD
Sample : VSTDICCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 02:59:09 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 02:30:51 2025
Response via : Initial Calibration

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

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

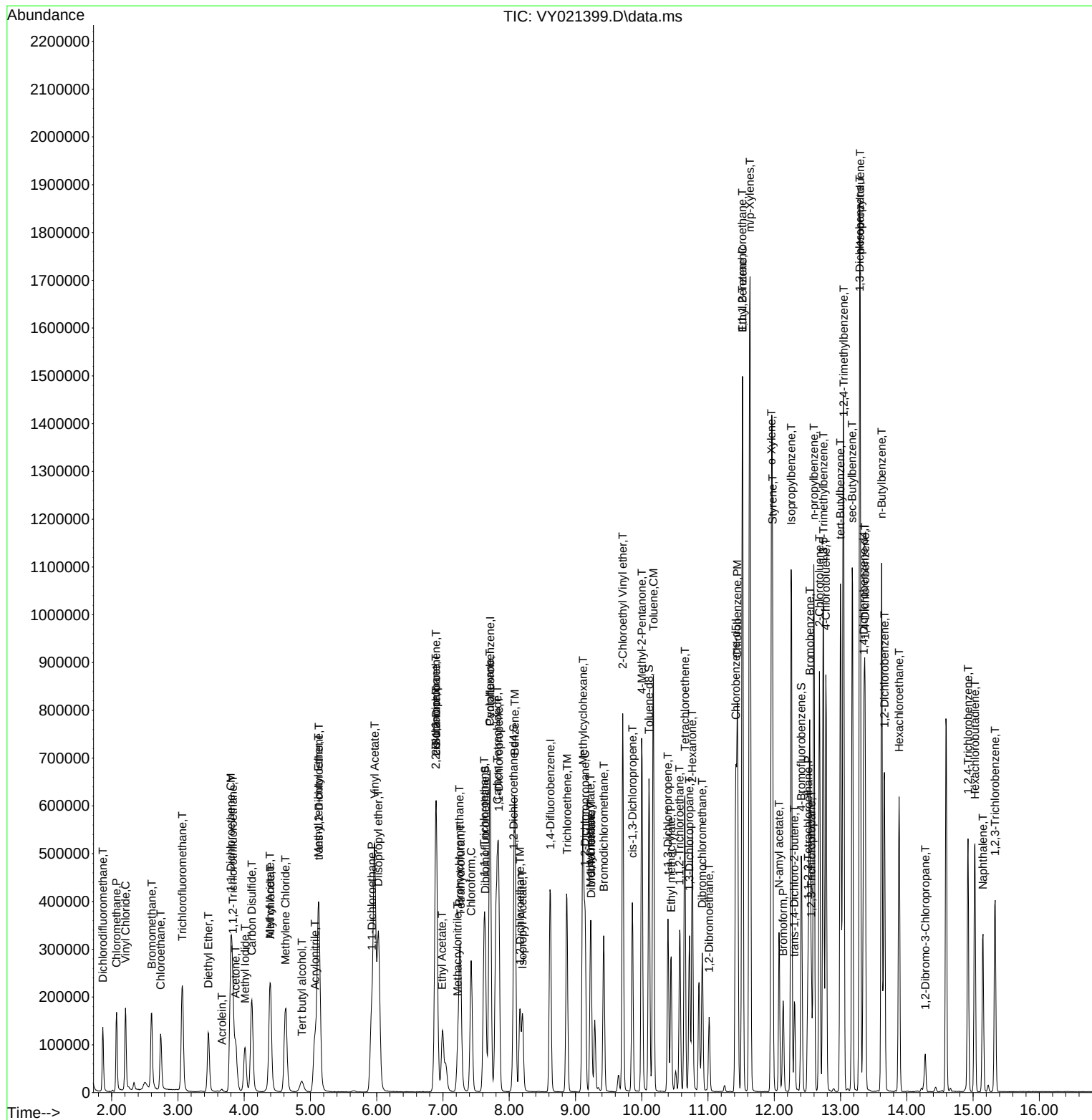
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
Data File : VY021399.D
Acq On : 04 Mar 2025 10:30
Operator : SY/MD
Sample : VSTDICCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 02:59:09 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 02:30:51 2025
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
 Data File : VY021400.D
 Acq On : 04 Mar 2025 11:06
 Operator : SY/MD
 Sample : VSTDICC100
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDICC100

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
 Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 03:00:08 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 02:30:51 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	7.713	168	244207	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.622	114	369748	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	325902	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.352	152	161237	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.067	65	249506	96.666	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 193.340%#			
35) Dibromofluoromethane	7.640	113	245300	100.930	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 201.860%#			
50) Toluene-d8	10.115	98	953319	103.596	ug/l	0.00
Spiked Amount 50.000	Range 58 - 134		Recovery = 207.200%#			
62) 4-Bromofluorobenzene	12.414	95	320008	102.231	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery = 204.460%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.867	85	214851	95.873	ug/l	98
3) Chloromethane	2.074	50	297027	94.011	ug/l	99
4) Vinyl Chloride	2.208	62	344887	99.889	ug/l	98
5) Bromomethane	2.598	94	236127	94.624	ug/l	99
6) Chloroethane	2.739	64	223479	97.944	ug/l	97
7) Trichlorofluoromethane	3.068	101	470472	97.624	ug/l	99
8) Diethyl Ether	3.464	74	129160	96.710	ug/l	96
9) 1,1,2-Trichlorotrifluo...	3.824	101	264663	96.189	ug/l	99
10) Methyl Iodide	4.013	142	306871	109.719	ug/l	100
11) Tert butyl alcohol	4.872	59	74090	460.479	ug/l	99
12) 1,1-Dichloroethene	3.799	96	250255	99.762	ug/l	99
13) Acrolein	3.659	56	10283	78.325	ug/l	89
14) Allyl chloride	4.397	41	413704	102.051	ug/l	99
15) Acrylonitrile	5.067	53	271919	478.287	ug/l	98
16) Acetone	3.872	43	252046	447.711	ug/l	94
17) Carbon Disulfide	4.116	76	790255	100.521	ug/l	100
18) Methyl Acetate	4.391	43	119905	95.992	ug/l	99
19) Methyl tert-butyl Ether	5.122	73	634643	99.817	ug/l	100
20) Methylene Chloride	4.628	84	258664	87.531	ug/l	98
21) trans-1,2-Dichloroethene	5.122	96	278418	99.104	ug/l	96
22) Diisopropyl ether	6.025	45	878111	100.510	ug/l	97
23) Vinyl Acetate	5.970	43	2520516	505.518	ug/l	100
24) 1,1-Dichloroethane	5.921	63	505607	98.056	ug/l	99
25) 2-Butanone	6.902	43	363091	466.248	ug/l	100
26) 2,2-Dichloropropane	6.890	77	466669	98.362	ug/l	99
27) cis-1,2-Dichloroethene	6.896	96	321461	100.724	ug/l	99
28) Bromochloromethane	7.250	49	208133	96.281	ug/l	99
29) Tetrahydrofuran	7.268	42	228343	474.960	ug/l	99
30) Chloroform	7.427	83	520812	97.270	ug/l	97
31) Cyclohexane	7.707	56	460568	95.275	ug/l	98
32) 1,1,1-Trichloroethane	7.628	97	480163	97.941	ug/l	100
36) 1,1-Dichloropropene	7.841	75	388384	102.089	ug/l	99
37) Ethyl Acetate	6.994	43	162380	94.621	ug/l	98
38) Carbon Tetrachloride	7.823	117	439762	100.510	ug/l	98
39) Methylcyclohexane	9.115	83	503172	107.827	ug/l	98
40) Benzene	8.085	78	1138841	101.621	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
 Data File : VY021400.D
 Acq On : 04 Mar 2025 11:06
 Operator : SY/MD
 Sample : VSTDICC100
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDICC100

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
 Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 03:00:08 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 02:30:51 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.226	41	95564	102.238	ug/l #	88
42) 1,2-Dichloroethane	8.164	62	305782	97.534	ug/l	100
43) Isopropyl Acetate	8.201	43	327171	100.231	ug/l	99
44) Trichloroethene	8.872	130	284312	100.395	ug/l	97
45) 1,2-Dichloropropane	9.146	63	264690	99.238	ug/l	97
46) Dibromomethane	9.237	93	146713	98.859	ug/l	100
47) Bromodichloromethane	9.426	83	395676	100.395	ug/l	99
48) Methyl methacrylate	9.225	41	156771	103.582	ug/l	100
49) 1,4-Dioxane	9.237	88	29902	2052.779	ug/l	97
51) 4-Methyl-2-Pentanone	10.006	43	850519	504.998	ug/l	100
52) Toluene	10.176	92	737467	104.377	ug/l	100
53) t-1,3-Dichloropropene	10.402	75	365825	105.356	ug/l	99
54) cis-1,3-Dichloropropene	9.859	75	428305	103.894	ug/l	99
55) 1,1,2-Trichloroethane	10.579	97	191894	98.848	ug/l	99
56) Ethyl methacrylate	10.444	69	271599	109.699	ug/l	98
57) 1,3-Dichloropropane	10.725	76	334146	99.311	ug/l	99
58) 2-Chloroethyl Vinyl ether	9.713	63	600796	525.670	ug/l	100
59) 2-Hexanone	10.768	43	575211	516.516	ug/l	100
60) Dibromochloromethane	10.914	129	268359	100.834	ug/l	100
61) 1,2-Dibromoethane	11.024	107	183206	99.993	ug/l	99
64) Tetrachloroethene	10.652	164	265100	100.033	ug/l	97
65) Chlorobenzene	11.450	112	776963	100.956	ug/l	97
66) 1,1,1,2-Tetrachloroethane	11.524	131	275635	101.302	ug/l	99
67) Ethyl Benzene	11.524	91	1439764	106.585	ug/l	100
68) m/p-Xylenes	11.633	106	1085642	211.694	ug/l	99
69) o-Xylene	11.962	106	507619	107.399	ug/l	100
70) Styrene	11.975	104	851456	108.590	ug/l	99
71) Bromoform	12.139	173	154505	101.579	ug/l	99
73) Isopropylbenzene	12.261	105	1364499	107.432	ug/l	99
74) N-amyl acetate	12.078	43	298318	108.151	ug/l	99
75) 1,1,2,2-Tetrachloroethane	12.511	83	215229	96.028	ug/l	99
76) 1,2,3-Trichloropropane	12.560	75	157519m	96.949	ug/l	
77) Bromobenzene	12.536	156	301928	101.611	ug/l	99
78) n-propylbenzene	12.603	91	1627111	105.485	ug/l	100
79) 2-Chlorotoluene	12.688	91	910543	103.236	ug/l	100
80) 1,3,5-Trimethylbenzene	12.743	105	1087821	105.392	ug/l	100
81) trans-1,4-Dichloro-2-b...	12.310	75	73701	103.120	ug/l	97
82) 4-Chlorotoluene	12.786	91	945021	103.470	ug/l	99
83) tert-Butylbenzene	13.005	119	998366	108.425	ug/l	98
84) 1,2,4-Trimethylbenzene	13.048	105	1081299	105.512	ug/l	99
85) sec-Butylbenzene	13.182	105	1441675	105.232	ug/l	99
86) p-Isopropyltoluene	13.298	119	1212941	107.466	ug/l	100
87) 1,3-Dichlorobenzene	13.291	146	593203	100.292	ug/l	100
88) 1,4-Dichlorobenzene	13.371	146	575089	99.419	ug/l	99
89) n-Butylbenzene	13.621	91	1139920	109.374	ug/l	99
90) Hexachloroethane	13.889	117	244664	101.612	ug/l	99
91) 1,2-Dichlorobenzene	13.663	146	505733	99.761	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.279	75	31708	94.443	ug/l	98
93) 1,2,4-Trichlorobenzene	14.925	180	298684	107.869	ug/l	98
94) Hexachlorobutadiene	15.029	225	182747	105.287	ug/l	100
95) Naphthalene	15.151	128	506570	97.607	ug/l	100
96) 1,2,3-Trichlorobenzene	15.334	180	248728	106.805	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
Data File : VY021400.D
Acq On : 04 Mar 2025 11:06
Operator : SY/MD
Sample : VSTDICC100
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 03:00:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 02:30:51 2025
Response via : Initial Calibration

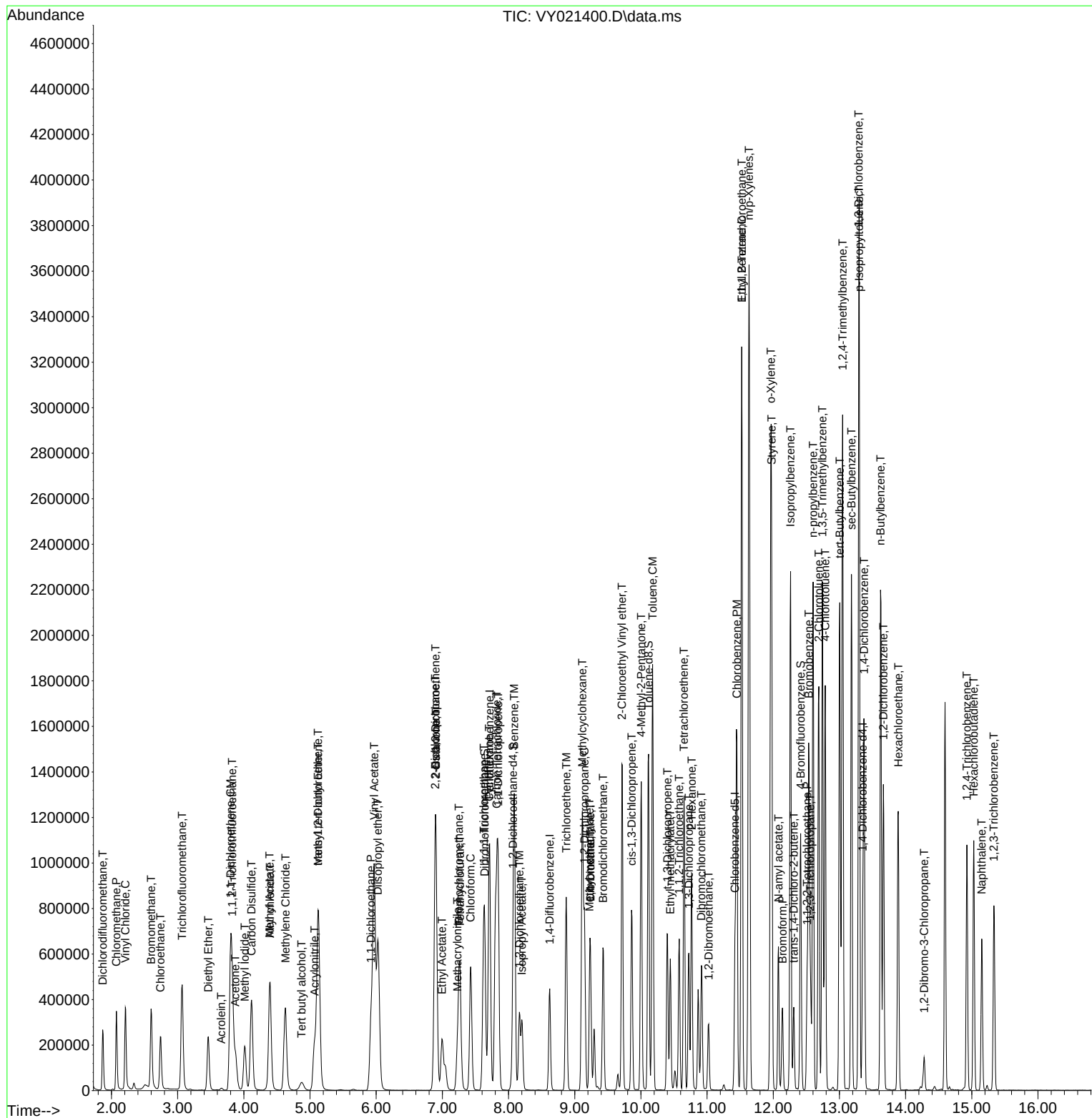
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
Supervised By :Semsettin Yesilyurt 03/06/2025



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
 Data File : VY021401.D
 Acq On : 04 Mar 2025 11:29
 Operator : SY/MD
 Sample : VSTDICC150
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDICC150

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
 Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 03:01:02 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 02:30:51 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	7.713	168	266755	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	403017	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	355825	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.352	152	173358	50.000	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	8.067	65	382016	135.494	ug/l	0.00
Spiked Amount	50.000	Range	50 - 163	Recovery	= 270.980%#	
35) Dibromofluoromethane	7.640	113	376382	142.080	ug/l	0.00
Spiked Amount	50.000	Range	54 - 147	Recovery	= 284.160%#	
50) Toluene-d8	10.109	98	1454175	144.978	ug/l	0.00
Spiked Amount	50.000	Range	58 - 134	Recovery	= 289.960%#	
62) 4-Bromofluorobenzene	12.408	95	489437	143.450	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	= 286.900%#	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.867	85	343152	140.181	ug/l	97
3) Chloromethane	2.074	50	464459	134.578	ug/l	99
4) Vinyl Chloride	2.208	62	532492	141.188	ug/l	99
5) Bromomethane	2.592	94	374688	137.459	ug/l	98
6) Chloroethane	2.739	64	345714	138.708	ug/l	97
7) Trichlorofluoromethane	3.062	101	748024	142.097	ug/l	99
8) Diethyl Ether	3.458	74	210548	144.324	ug/l	97
9) 1,1,2-Trichlorotrifluo...	3.824	101	419826	139.685	ug/l	99
10) Methyl Iodide	4.013	142	485205	158.816	ug/l	98
11) Tert butyl alcohol	4.872	59	132243	768.076	ug/l	100
12) 1,1-Dichloroethene	3.793	96	395483	144.329	ug/l	99
13) Acrolein	3.659	56	16610	115.824	ug/l	89
14) Allyl chloride	4.391	41	650795	146.966	ug/l	99
15) Acrylonitrile	5.061	53	454097	731.212	ug/l	99
16) Acetone	3.873	43	380537	618.814	ug/l	94
17) Carbon Disulfide	4.110	76	1237407	144.094	ug/l	100
18) Methyl Acetate	4.391	43	205359	150.507	ug/l	100
19) Methyl tert-butyl Ether	5.122	73	1052192	151.501	ug/l	99
20) Methylene Chloride	4.622	84	405442	125.603	ug/l	97
21) trans-1,2-Dichloroethene	5.122	96	436290	142.173	ug/l	99
22) Diisopropyl ether	6.025	45	1390733	145.730	ug/l	96
23) Vinyl Acetate	5.964	43	4142519	760.601	ug/l	99
24) 1,1-Dichloroethane	5.921	63	793059	140.803	ug/l	99
25) 2-Butanone	6.896	43	604502	710.631	ug/l	99
26) 2,2-Dichloropropane	6.890	77	740961	142.975	ug/l	98
27) cis-1,2-Dichloroethene	6.896	96	511211	146.639	ug/l	98
28) Bromochloromethane	7.250	49	304092	128.781	ug/l	98
29) Tetrahydrofuran	7.262	42	392146	746.729	ug/l	99
30) Chloroform	7.427	83	823431	140.790	ug/l	98
31) Cyclohexane	7.707	56	731684	138.566	ug/l	97
32) 1,1,1-Trichloroethane	7.622	97	762807	142.442	ug/l	99
36) 1,1-Dichloropropene	7.841	75	609596	147.009	ug/l	99
37) Ethyl Acetate	6.988	43	271579	145.189	ug/l	99
38) Carbon Tetrachloride	7.823	117	700638	146.916	ug/l	100
39) Methylcyclohexane	9.109	83	808497	158.954	ug/l	99
40) Benzene	8.085	78	1781188	145.818	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
 Data File : VY021401.D
 Acq On : 04 Mar 2025 11:29
 Operator : SY/MD
 Sample : VSTDICC150
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDICC150

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
 Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 03:01:02 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 02:30:51 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.226	41	150455	147.676	ug/l #	92
42) 1,2-Dichloroethane	8.164	62	493103	144.299	ug/l	99
43) Isopropyl Acetate	8.201	43	557010	156.557	ug/l	99
44) Trichloroethene	8.866	130	456841	148.000	ug/l	96
45) 1,2-Dichloropropane	9.146	63	419433	144.273	ug/l	98
46) Dibromomethane	9.231	93	239577	148.107	ug/l	99
47) Bromodichloromethane	9.426	83	629944	146.641	ug/l	100
48) Methyl methacrylate	9.225	41	268043	162.482	ug/l	99
49) 1,4-Dioxane	9.231	88	51411	3238.027	ug/l	98
51) 4-Methyl-2-Pentanone	9.999	43	1468813	800.119	ug/l	99
52) Toluene	10.176	92	1158338	150.411	ug/l	99
53) t-1,3-Dichloropropene	10.396	75	598438	158.120	ug/l	99
54) cis-1,3-Dichloropropene	9.859	75	684617	152.359	ug/l	99
55) 1,1,2-Trichloroethane	10.573	97	310174	146.586	ug/l	99
56) Ethyl methacrylate	10.444	69	466697	172.939	ug/l	99
57) 1,3-Dichloropropane	10.719	76	545711	148.802	ug/l	99
58) 2-Chloroethyl Vinyl ether	9.713	63	1094099	878.264	ug/l	99
59) 2-Hexanone	10.762	43	983959	810.617	ug/l	100
60) Dibromochloromethane	10.914	129	436855	150.595	ug/l	99
61) 1,2-Dibromoethane	11.018	107	298827	149.635	ug/l	98
64) Tetrachloroethene	10.652	164	419107	144.847	ug/l	99
65) Chlorobenzene	11.444	112	1243163	147.949	ug/l	100
66) 1,1,1,2-Tetrachloroethane	11.517	131	442377	148.911	ug/l	100
67) Ethyl Benzene	11.524	91	2291269	155.358	ug/l	100
68) m/p-Xylenes	11.633	106	1713936	306.103	ug/l	99
69) o-Xylene	11.956	106	805321	156.057	ug/l	99
70) Styrene	11.975	104	1352252	157.956	ug/l	99
71) Bromoform	12.133	173	253882	152.878	ug/l #	98
73) Isopropylbenzene	12.255	105	2144893	157.067	ug/l	99
74) N-amyl acetate	12.072	43	521557	175.863	ug/l	98
75) 1,1,2,2-Tetrachloroethane	12.511	83	358734	148.865	ug/l	100
76) 1,2,3-Trichloropropane	12.560	75	241297m	138.129	ug/l	
77) Bromobenzene	12.536	156	485258	151.891	ug/l	98
78) n-propylbenzene	12.597	91	2550395	153.780	ug/l	100
79) 2-Chlorotoluene	12.682	91	1439597	151.808	ug/l	99
80) 1,3,5-Trimethylbenzene	12.737	105	1704391	153.582	ug/l	100
81) trans-1,4-Dichloro-2-b...	12.310	75	126267	164.316	ug/l	95
82) 4-Chlorotoluene	12.779	91	1468603	149.554	ug/l	100
83) tert-Butylbenzene	12.999	119	1538803	155.433	ug/l	100
84) 1,2,4-Trimethylbenzene	13.048	105	1713052	155.470	ug/l	99
85) sec-Butylbenzene	13.182	105	2277976	154.650	ug/l	99
86) p-Isopropyltoluene	13.298	119	1940795	159.931	ug/l	100
87) 1,3-Dichlorobenzene	13.292	146	947577	149.004	ug/l	99
88) 1,4-Dichlorobenzene	13.371	146	917648	147.547	ug/l	99
89) n-Butylbenzene	13.621	91	1818773	162.308	ug/l	98
90) Hexachloroethane	13.883	117	393459	151.984	ug/l	99
91) 1,2-Dichlorobenzene	13.663	146	811529	148.890	ug/l	100
92) 1,2-Dibromo-3-Chloropr...	14.279	75	56205	155.702	ug/l	97
93) 1,2,4-Trichlorobenzene	14.925	180	517199	173.726	ug/l	98
94) Hexachlorobutadiene	15.029	225	302517	162.105	ug/l	99
95) Naphthalene	15.151	128	925079	150.626	ug/l	100
96) 1,2,3-Trichlorobenzene	15.334	180	434430	173.503	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
Data File : VY021401.D
Acq On : 04 Mar 2025 11:29
Operator : SY/MD
Sample : VSTDICC150
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 03:01:02 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 02:30:51 2025
Response via : Initial Calibration

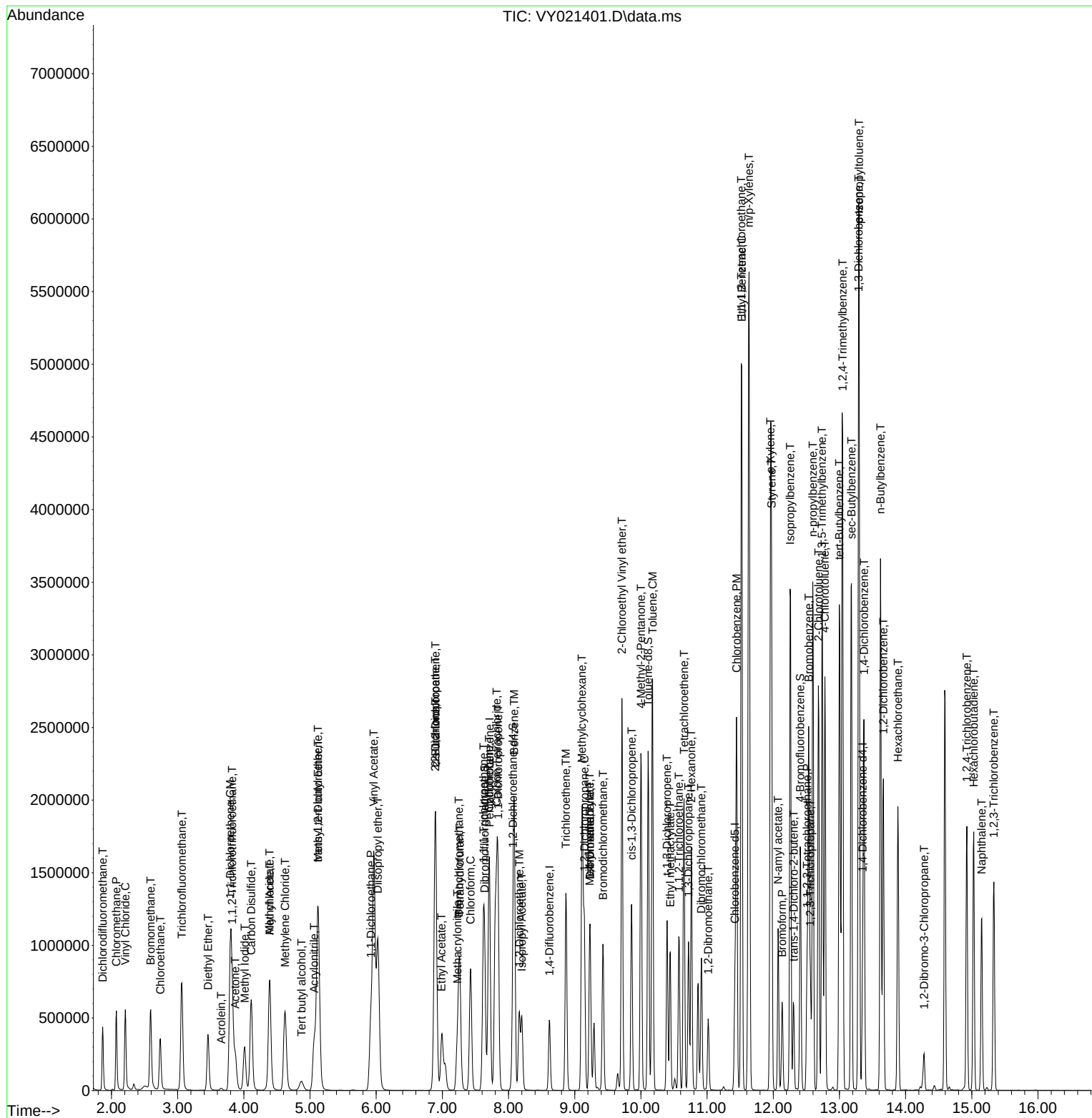
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
Supervised By :Semsettin Yesilyurt 03/06/2025



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
 Data File : VY021403.D
 Acq On : 04 Mar 2025 12:15
 Operator : SY/MD
 Sample : VSTDICC005
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDICC005

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
 Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 03:02:01 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 02:30:51 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	7.713	168	245027	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.622	114	394876	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	337621	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.353	152	161080	50.000	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	8.067	65	14848	5.733	ug/l	0.00
Spiked Amount	50.000	Range	50 - 163	Recovery	=	11.460%#
35) Dibromofluoromethane	7.634	113	14631	5.637	ug/l	0.00
Spiked Amount	50.000	Range	54 - 147	Recovery	=	11.280%#
50) Toluene-d8	10.109	98	54665	5.562	ug/l	0.00
Spiked Amount	50.000	Range	58 - 134	Recovery	=	11.120%#
62) 4-Bromofluorobenzene	12.408	95	19663	5.882	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	=	11.760%#

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.867	85	12951	5.760	ug/l	91
3) Chloromethane	2.074	50	19424	6.127	ug/l	98
4) Vinyl Chloride	2.208	62	19070	5.505	ug/l	99
5) Bromomethane	2.605	94	15706	6.273	ug/l	95
6) Chloroethane	2.745	64	12773	5.579	ug/l	98
7) Trichlorofluoromethane	3.068	101	27176	5.620	ug/l	99
8) Diethyl Ether	3.458	74	7381	5.508	ug/l	93
9) 1,1,2-Trichlorotrifluo...	3.824	101	16374	5.931	ug/l	99
10) Methyl Iodide	4.013	142	12057	4.296	ug/l	99
11) Tert butyl alcohol	4.872	59	7503	24.295	ug/l #	83
12) 1,1-Dichloroethene	3.800	96	13880	5.515	ug/l	97
13) Acrolein	3.653	56	6605	50.142	ug/l	93
14) Allyl chloride	4.385	41	21629	5.317	ug/l	99
15) Acrylonitrile	5.068	53	14939	26.189	ug/l	100
16) Acetone	3.879	43	17626	31.204	ug/l	99
17) Carbon Disulfide	4.110	76	42440	5.380	ug/l	99
18) Methyl Acetate	4.391	43	6561	5.235	ug/l	94
19) Methyl tert-butyl Ether	5.129	73	33420	5.239	ug/l	94
20) Methylene Chloride	4.629	84	19304	6.511	ug/l	97
21) trans-1,2-Dichloroethene	5.116	96	15868	5.629	ug/l	89
22) Diisopropyl ether	6.019	45	45242	5.161	ug/l	88
23) Vinyl Acetate	5.970	43	124260	24.838	ug/l	96
24) 1,1-Dichloroethane	5.921	63	28883	5.583	ug/l	97
25) 2-Butanone	6.903	43	22073	28.249	ug/l	96
26) 2,2-Dichloropropane	6.890	77	27105	5.694	ug/l	100
27) cis-1,2-Dichloroethene	6.890	96	17198	5.371	ug/l	93
28) Bromochloromethane	7.250	49	11718	5.403	ug/l	99
29) Tetrahydrofuran	7.274	42	12689	26.305	ug/l	99
30) Chloroform	7.427	83	29950	5.575	ug/l	99
31) Cyclohexane	7.701	56	29806	6.145	ug/l #	93
32) 1,1,1-Trichloroethane	7.622	97	28207	5.734	ug/l	95
36) 1,1-Dichloropropene	7.841	75	21694	5.340	ug/l	98
37) Ethyl Acetate	6.988	43	9539m	5.205	ug/l	
38) Carbon Tetrachloride	7.823	117	24674	5.281	ug/l	96
39) Methylcyclohexane	9.110	83	25312	5.079	ug/l	95
40) Benzene	8.085	78	63894	5.339	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
 Data File : VY021403.D
 Acq On : 04 Mar 2025 12:15
 Operator : SY/MD
 Sample : VSTDICC005
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDICC005

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
 Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 03:02:01 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 02:30:51 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.232	41	4825	4.834	ug/l #	91
42) 1,2-Dichloroethane	8.158	62	17906	5.348	ug/l	99
43) Isopropyl Acetate	8.201	43	18016	5.168	ug/l	97
44) Trichloroethene	8.872	130	16384	5.417	ug/l	98
45) 1,2-Dichloropropane	9.146	63	15302	5.372	ug/l	91
46) Dibromomethane	9.238	93	8211	5.181	ug/l	99
47) Bromodichloromethane	9.427	83	22083	5.247	ug/l	95
48) Methyl methacrylate	9.225	41	7383	4.568	ug/l	98
49) 1,4-Dioxane	9.231	88	1424	91.537	ug/l #	90
51) 4-Methyl-2-Pentanone	10.000	43	43306	24.077	ug/l	100
52) Toluene	10.176	92	38833	5.146	ug/l	96
53) t-1,3-Dichloropropene	10.396	75	18188	4.905	ug/l	96
54) cis-1,3-Dichloropropene	9.859	75	22504	5.111	ug/l	100
55) 1,1,2-Trichloroethane	10.573	97	10837	5.227	ug/l	97
56) Ethyl methacrylate	10.439	69	11475	4.340	ug/l	97
57) 1,3-Dichloropropane	10.719	76	18380	5.115	ug/l	99
58) 2-Chloroethyl Vinyl ether	9.719	63	26908	22.045	ug/l	99
59) 2-Hexanone	10.762	43	27441	23.073	ug/l	97
60) Dibromochloromethane	10.914	129	14771	5.197	ug/l	96
61) 1,2-Dibromoethane	11.018	107	10188	5.207	ug/l	99
64) Tetrachloroethene	10.652	164	15148	5.518	ug/l	95
65) Chlorobenzene	11.444	112	43322	5.434	ug/l	99
66) 1,1,1,2-Tetrachloroethane	11.524	131	15173	5.383	ug/l	96
67) Ethyl Benzene	11.524	91	71391	5.102	ug/l	97
68) m/p-Xylenes	11.633	106	53829	10.132	ug/l	99
69) o-Xylene	11.957	106	24421	4.988	ug/l	100
70) Styrene	11.975	104	38858	4.784	ug/l	99
71) Bromoform	12.133	173	7934	5.035	ug/l #	96
73) Isopropylbenzene	12.255	105	64065	5.049	ug/l	98
74) N-amyl acetate	12.072	43	12319	4.470	ug/l	97
75) 1,1,2,2-Tetrachloroethane	12.505	83	11865	5.299	ug/l	95
76) 1,2,3-Trichloropropane	12.560	75	10101m	6.223	ug/l	
77) Bromobenzene	12.536	156	15812	5.327	ug/l	97
78) n-propylbenzene	12.597	91	80203	5.205	ug/l	99
79) 2-Chlorotoluene	12.682	91	47065	5.341	ug/l	100
80) 1,3,5-Trimethylbenzene	12.743	105	53272	5.166	ug/l	99
81) trans-1,4-Dichloro-2-b...	12.310	75	3431	4.805	ug/l	92
82) 4-Chlorotoluene	12.780	91	48178	5.280	ug/l	100
83) tert-Butylbenzene	12.999	119	46550	5.060	ug/l	99
84) 1,2,4-Trimethylbenzene	13.048	105	52203	5.099	ug/l	98
85) sec-Butylbenzene	13.176	105	71799	5.246	ug/l	100
86) p-Isopropyltoluene	13.298	119	57131	5.067	ug/l	99
87) 1,3-Dichlorobenzene	13.292	146	32709	5.535	ug/l	99
88) 1,4-Dichlorobenzene	13.371	146	32045	5.545	ug/l	95
89) n-Butylbenzene	13.621	91	52654	5.057	ug/l	99
90) Hexachloroethane	13.883	117	13537	5.628	ug/l	95
91) 1,2-Dichlorobenzene	13.664	146	27758	5.481	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.279	75	1880	5.605	ug/l	86
93) 1,2,4-Trichlorobenzene	14.926	180	13925	5.034	ug/l	98
94) Hexachlorobutadiene	15.029	225	9351	5.393	ug/l	97
95) Naphthalene	15.151	128	19552	5.892	ug/l	99
96) 1,2,3-Trichlorobenzene	15.328	180	11822	5.081	ug/l	96

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
Data File : VY021403.D
Acq On : 04 Mar 2025 12:15
Operator : SY/MD
Sample : VSTDICC005
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 03:02:01 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 02:30:51 2025
Response via : Initial Calibration

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

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

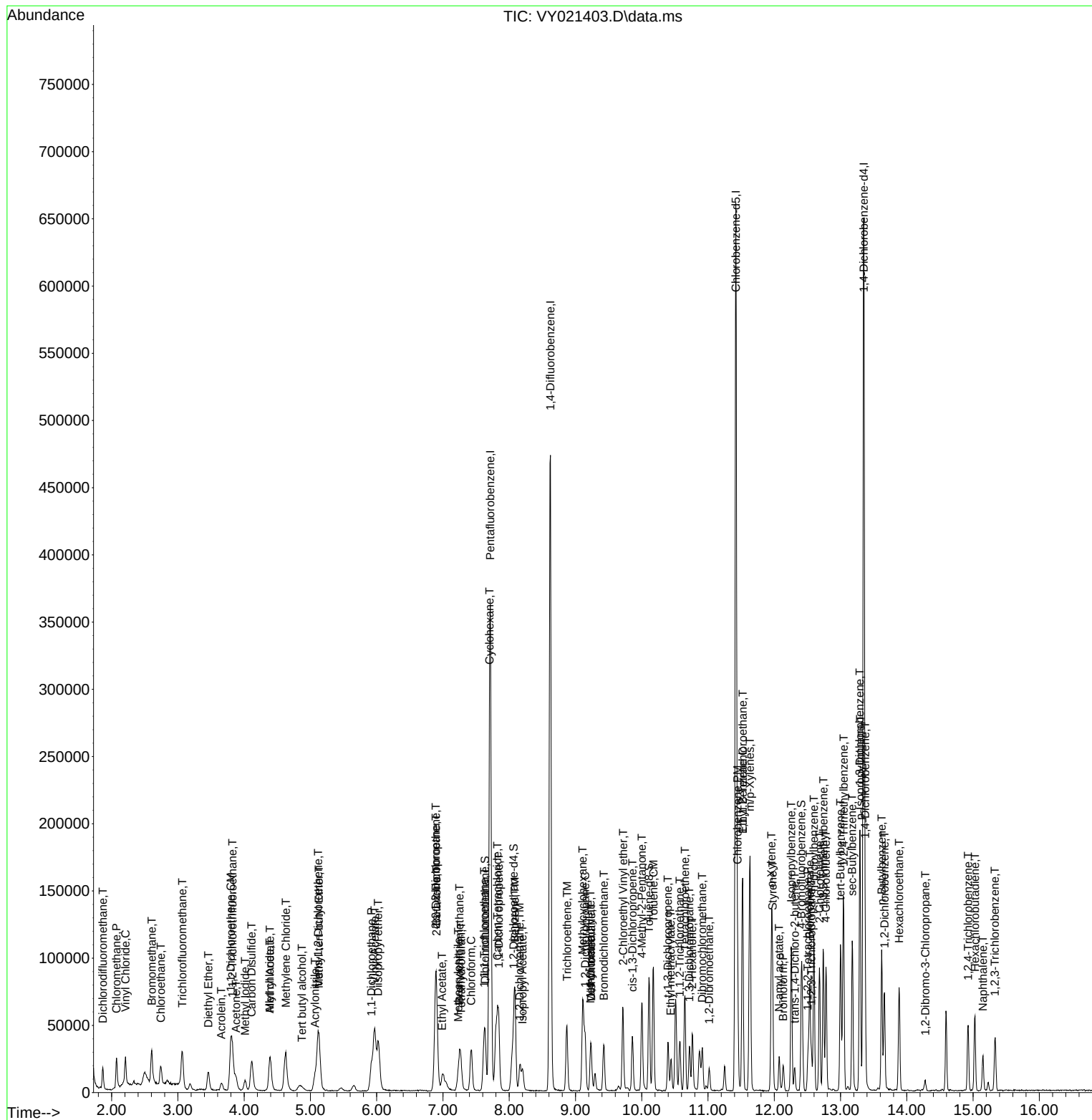
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
Data File : VY021403.D
Acq On : 04 Mar 2025 12:15
Operator : SY/MD
Sample : VSTDIC005
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 03:02:01 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 02:30:51 2025
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
 Data File : VY021404.D
 Acq On : 04 Mar 2025 13:12
 Operator : SY/MD
 Sample : VSTDICV050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 ICVVY030425

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
 Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 04:18:40 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 03:21:56 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	7.713	168	227337	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.622	114	353570	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	304943	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.353	152	150512	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.067	65	119727	49.828	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery =	99.660%		
35) Dibromofluoromethane	7.640	113	118281	50.894	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery =	101.780%		
50) Toluene-d8	10.115	98	468697	53.263	ug/l	0.00
Spiked Amount 50.000	Range 58 - 134		Recovery =	106.520%		
62) 4-Bromofluorobenzene	12.414	95	154333	51.560	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery =	103.120%		
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	1.867	85	98287	47.113	ug/l	99
3) Chloromethane	2.074	50	144341	49.075	ug/l	99
4) Vinyl Chloride	2.214	62	161453	50.231	ug/l	97
5) Bromomethane	2.605	94	107517	46.283	ug/l	100
6) Chloroethane	2.745	64	103894	48.912	ug/l	98
7) Trichlorofluoromethane	3.068	101	219880	49.011	ug/l	99
8) Diethyl Ether	3.464	74	56729	45.628	ug/l	94
9) 1,1,2-Trichlorotrifluo...	3.824	101	123311	48.142	ug/l	99
10) Methyl Iodide	4.013	142	125851	48.336	ug/l	99
11) Tert butyl alcohol	4.866	59	33542	211.206	ug/l	96
12) 1,1-Dichloroethene	3.800	96	115418	49.424	ug/l	97
13) Acrolein	3.659	56	5504	45.035	ug/l	89
14) Allyl chloride	4.397	41	190579	50.500	ug/l	99
15) Acrylonitrile	5.068	53	115490	218.213	ug/l	99
16) Acetone	3.873	43	126338	241.068	ug/l	94
17) Carbon Disulfide	4.117	76	369324	50.464	ug/l	99
18) Methyl Acetate	4.391	43	51747	44.501	ug/l	100
19) Methyl tert-butyl Ether	5.122	73	267823	45.249	ug/l	100
20) Methylene Chloride	4.623	84	120803	43.913	ug/l	99
21) trans-1,2-Dichloroethene	5.129	96	125702	48.065	ug/l	99
22) Diisopropyl ether	6.031	45	393029	48.325	ug/l	96
23) Vinyl Acetate	5.970	43	1084996	233.756	ug/l	99
24) 1,1-Dichloroethane	5.927	63	231573	48.243	ug/l	99
25) 2-Butanone	6.903	43	161045	222.145	ug/l	99
26) 2,2-Dichloropropane	6.896	77	214717	48.615	ug/l	98
27) cis-1,2-Dichloroethene	6.896	96	144113	48.506	ug/l	100
28) Bromochloromethane	7.256	49	113096	56.200	ug/l	98
29) Tetrahydrofuran	7.268	42	95855	214.177	ug/l	99
30) Chloroform	7.427	83	238047	47.758	ug/l	95
31) Cyclohexane	7.707	56	214745	47.720	ug/l	99
32) 1,1,1-Trichloroethane	7.628	97	222274	48.703	ug/l	100
36) 1,1-Dichloropropene	7.841	75	177770	48.866	ug/l	99
37) Ethyl Acetate	6.994	43	69266	43.078	ug/l	99
38) Carbon Tetrachloride	7.823	117	204174	48.800	ug/l	98
39) Methylcyclohexane	9.116	83	230810	51.724	ug/l	98
40) Benzene	8.085	78	520202	48.542	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
 Data File : VY021404.D
 Acq On : 04 Mar 2025 13:12
 Operator : SY/MD
 Sample : VSTDICV050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 ICVVY030425

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
 Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 04:18:40 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 03:21:56 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.250	41	45456m	51.920	ug/l	
42) 1,2-Dichloroethane	8.165	62	136088	45.393	ug/l	99
43) Isopropyl Acetate	8.201	43	134330	43.036	ug/l	99
44) Trichloroethene	8.872	130	130855	48.321	ug/l	99
45) 1,2-Dichloropropane	9.146	63	120606	47.287	ug/l	98
46) Dibromomethane	9.238	93	64447	45.413	ug/l	99
47) Bromodichloromethane	9.433	83	176210	46.755	ug/l	99
48) Methyl methacrylate	9.225	41	65433	45.652	ug/l	98
49) 1,4-Dioxane	9.238	88	12183	874.634	ug/l	97
51) 4-Methyl-2-Pentanone	10.006	43	349128	216.781	ug/l	100
52) Toluene	10.176	92	334342	49.486	ug/l	99
53) t-1,3-Dichloropropene	10.396	75	157093	47.312	ug/l	97
54) cis-1,3-Dichloropropene	9.859	75	190151	48.236	ug/l	100
55) 1,1,2-Trichloroethane	10.579	97	83139	44.786	ug/l	98
56) Ethyl methacrylate	10.445	69	109629	46.305	ug/l	98
57) 1,3-Dichloropropane	10.725	76	148349	46.108	ug/l	99
58) 2-Chloroethyl Vinyl ether	9.719	63	270898	247.869	ug/l	99
59) 2-Hexanone	10.768	43	238913	224.350	ug/l	100
60) Dibromochloromethane	10.914	129	117776	46.278	ug/l	99
61) 1,2-Dibromoethane	11.024	107	80473	45.932	ug/l	98
64) Tetrachloroethene	10.652	164	122018	49.207	ug/l	98
65) Chlorobenzene	11.451	112	350050	48.611	ug/l	98
66) 1,1,1,2-Tetrachloroethane	11.524	131	122471	48.104	ug/l	99
67) Ethyl Benzene	11.524	91	641534	50.757	ug/l	100
68) m/p-Xylenes	11.633	106	483835	100.830	ug/l	98
69) o-Xylene	11.963	106	225974	51.096	ug/l	99
70) Styrene	11.975	104	369770	50.400	ug/l	100
71) Bromoform	12.139	173	65305	45.886	ug/l #	100
73) Isopropylbenzene	12.261	105	618726	52.186	ug/l	100
74) N-amyl acetate	12.079	43	117390	45.591	ug/l	99
75) 1,1,2,2-Tetrachloroethane	12.511	83	92237	44.086	ug/l	99
76) 1,2,3-Trichloropropane	12.560	75	68229m	44.986	ug/l	
77) Bromobenzene	12.536	156	133678	48.194	ug/l	99
78) n-propylbenzene	12.603	91	752110	52.233	ug/l	100
79) 2-Chlorotoluene	12.688	91	415988	50.525	ug/l	98
80) 1,3,5-Trimethylbenzene	12.743	105	502113	52.113	ug/l	99
81) trans-1,4-Dichloro-2-b...	12.310	75	30408	45.578	ug/l	98
82) 4-Chlorotoluene	12.786	91	427326	50.122	ug/l	100
83) tert-Butylbenzene	13.005	119	456314	53.088	ug/l	98
84) 1,2,4-Trimethylbenzene	13.048	105	492767	51.510	ug/l	100
85) sec-Butylbenzene	13.182	105	676621	52.908	ug/l	100
86) p-Isopropyltoluene	13.298	119	553730	52.556	ug/l	99
87) 1,3-Dichlorobenzene	13.292	146	269044	48.728	ug/l	99
88) 1,4-Dichlorobenzene	13.371	146	260977	48.331	ug/l	99
89) n-Butylbenzene	13.621	91	521532	53.606	ug/l	99
90) Hexachloroethane	13.889	117	112571	50.084	ug/l	99
91) 1,2-Dichlorobenzene	13.664	146	227078	47.985	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.285	75	13368	42.654	ug/l	97
93) 1,2,4-Trichlorobenzene	14.926	180	127655	49.388	ug/l	98
94) Hexachlorobutadiene	15.029	225	84554	52.186	ug/l	98
95) Naphthalene	15.151	128	196345	45.480	ug/l	99
96) 1,2,3-Trichlorobenzene	15.334	180	105737	48.639	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
Data File : VY021404.D
Acq On : 04 Mar 2025 13:12
Operator : SY/MD
Sample : VSTDICV050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
ICVVY030425

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 04:18:40 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 03:21:56 2025
Response via : Initial Calibration

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

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

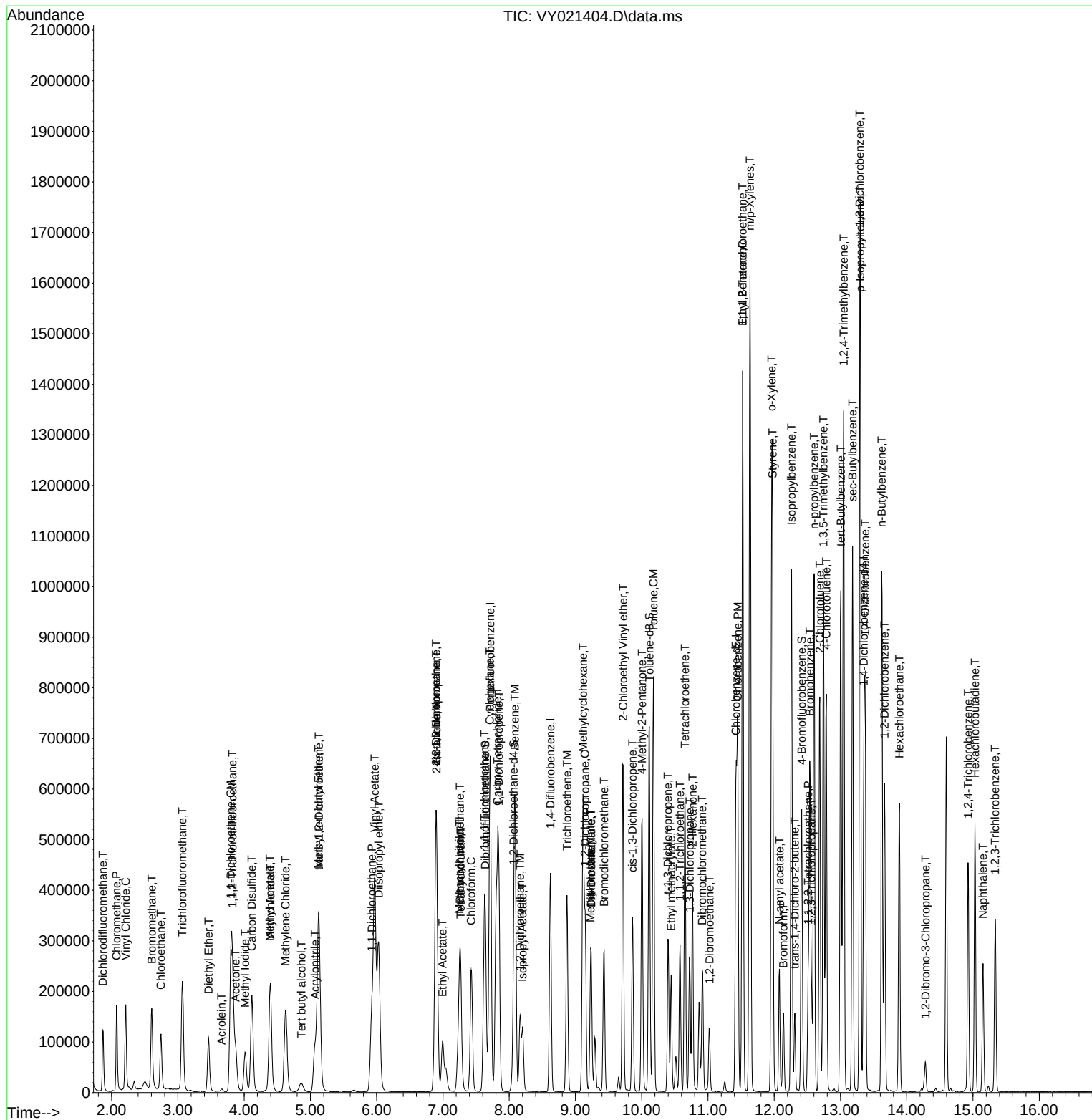
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
 Data File : VY021404.D
 Acq On : 04 Mar 2025 13:12
 Operator : SY/MD
 Sample : VSTDICV050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 ICVVY030425

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
 Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 04:18:40 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 03:21:56 2025
 Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
 Data File : VY021404.D
 Acq On : 04 Mar 2025 13:12
 Operator : SY/MD
 Sample : VSTDICV050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 ICVVY030425

Quant Time: Mar 05 04:18:40 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 03:21:56 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	97	0.00
2 T	Dichlorodifluoromethane	0.459	0.432	5.9	93	0.00
3 P	Chloromethane	0.647	0.635	1.9	99	0.00
4 C	Vinyl Chloride	0.707	0.710	-0.4#	99	0.00
5 T	Bromomethane	0.511	0.473	7.4	98	0.00
6 T	Chloroethane	0.467	0.457	2.1	96	0.00
7 T	Trichlorofluoromethane	0.987	0.967	2.0	97	0.00
8 T	Diethyl Ether	0.273	0.250	8.4	85	0.00
9 T	1,1,2-Trichlorotrifluoroeth	0.563	0.542	3.7	97	0.00
10 T	Methyl Iodide	0.573	0.554	3.3	85	0.00
11 T	Tert butyl alcohol	0.041	0.030	26.8#	75	0.00
12 CM	1,1-Dichloroethene	0.514	0.508	1.2#	97	0.00
13 T	Acrolein	0.027	0.005	81.5#	103	0.00
14 T	Allyl chloride	0.830	0.838	-1.0	96	0.00
15 T	Acrylonitrile	0.116	0.102	12.1	79	0.00
16 T	Acetone	0.115	0.111	3.5	80	0.00
17 T	Carbon Disulfide	1.610	1.625	-0.9	96	0.00
18 T	Methyl Acetate	0.256	0.228	10.9	77	0.00
19 T	Methyl tert-butyl Ether	1.302	1.178	9.5	83	0.00
20 T	Methylene Chloride	0.605	0.531	12.2	93	0.00
21 T	trans-1,2-Dichloroethene	0.575	0.553	3.8	95	0.00
22 T	Diisopropyl ether	1.789	1.729	3.4	90	0.00
23 T	Vinyl Acetate	1.021	0.955	6.5	83	0.00
24 P	1,1-Dichloroethane	1.056	1.019	3.5	94	0.00
25 T	2-Butanone	0.159	0.142	10.7	76	0.00
26 T	2,2-Dichloropropane	0.971	0.944	2.8	97	0.00
27 T	cis-1,2-Dichloroethene	0.653	0.634	2.9	94	0.00
28 T	Bromochloromethane	0.443	0.497	-12.2	103	0.00
29 T	Tetrahydrofuran	0.098	0.084	14.3	74	0.00
30 C	Chloroform	1.096	1.047	4.5#	93	0.00
31 T	Cyclohexane	0.990	0.945	4.5	97	0.00
32 T	1,1,1-Trichloroethane	1.004	0.978	2.6	97	0.00
33 S	1,2-Dichloroethane-d4	0.528	0.527	0.2	106	0.00
34 I	1,4-Difluorobenzene	1.000	1.000	0.0	98	0.00
35 S	Dibromofluoromethane	0.329	0.335	-1.8	111	0.00
36 T	1,1-Dichloropropene	0.514	0.503	2.1	95	0.00
37 T	Ethyl Acetate	0.227	0.196	13.7	78	0.00
38 T	Carbon Tetrachloride	0.592	0.577	2.5	97	0.00
39 T	Methylcyclohexane	0.631	0.653	-3.5	98	0.00
40 TM	Benzene	1.515	1.471	2.9	94	0.00
41 T	Methacrylonitrile	0.124	0.129	-4.0	96	0.03
42 TM	1,2-Dichloroethane	0.424	0.385	9.2	87	0.00
43 T	Isopropyl Acetate	0.441	0.380	13.8	77	0.00
44 TM	Trichloroethene	0.383	0.370	3.4	95	0.00
45 C	1,2-Dichloropropane	0.361	0.341	5.5#	91	0.00
46 T	Dibromomethane	0.201	0.182	9.5	84	0.00
47 T	Bromodichloromethane	0.533	0.498	6.6	89	0.00
48 T	Methyl methacrylate	0.203	0.185	8.9	79	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
 Data File : VY021404.D
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 Operator : SY/MD
 Sample : VSTDICV050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 ICSVY030425

Quant Time: Mar 05 04:18:40 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 03:21:56 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	0.002	0.002	0.0	75	0.00
50 S	Toluene-d8	1.244	1.326	-6.6	115	0.00
51 T	4-Methyl-2-Pentanone	0.228	0.197	13.6	74	0.00
52 CM	Toluene	0.955	0.946	0.9#	94	0.00
53 T	t-1,3-Dichloropropene	0.470	0.444	5.5	87	0.00
54 T	cis-1,3-Dichloropropene	0.557	0.538	3.4	90	0.00
55 T	1,1,2-Trichloroethane	0.263	0.235	10.6	82	0.00
56 T	Ethyl methacrylate	0.335	0.310	7.5	79	0.00
57 T	1,3-Dichloropropane	0.455	0.420	7.7	86	0.00
58 T	2-Chloroethyl Vinyl ether	0.155	0.153	1.3	86	0.00
59 T	2-Hexanone	0.151	0.135	10.6	73	0.00
60 T	Dibromochloromethane	0.360	0.333	7.5	87	0.00
61 T	1,2-Dibromoethane	0.248	0.228	8.1	85	0.00
62 S	4-Bromofluorobenzene	0.423	0.436	-3.1	111	0.00
63 I	Chlorobenzene-d5	1.000	1.000	0.0	95	0.00
64 T	Tetrachloroethene	0.407	0.400	1.7	94	0.00
65 PM	Chlorobenzene	1.181	1.148	2.8	92	0.00
66 T	1,1,1,2-Tetrachloroethane	0.417	0.402	3.6	91	0.00
67 C	Ethyl Benzene	2.072	2.104	-1.5#	94	0.00
68 T	m/p-Xylenes	0.787	0.793	-0.8	92	0.00
69 T	o-Xylene	0.725	0.741	-2.2	93	0.00
70 T	Styrene	1.203	1.213	-0.8	90	0.00
71 P	Bromoform	0.233	0.214	8.2	81	0.00
72 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	93	0.00
73 T	Isopropylbenzene	3.939	4.111	-4.4	94	0.00
74 T	N-amyl acetate	0.855	0.780	8.8	76	0.00
75 P	1,1,2,2-Tetrachloroethane	0.695	0.613	11.8	78	0.00
76 T	1,2,3-Trichloropropane	0.504	0.453	10.1	85	0.00
77 T	Bromobenzene	0.921	0.888	3.6	89	0.00
78 T	n-propylbenzene	4.783	4.997	-4.5	94	0.00
79 T	2-Chlorotoluene	2.735	2.764	-1.1	93	0.00
80 T	1,3,5-Trimethylbenzene	3.201	3.336	-4.2	95	0.00
81 T	trans-1,4-Dichloro-2-butene	0.222	0.202	9.0	79	0.00
82 T	4-Chlorotoluene	2.832	2.839	-0.2	92	0.00
83 T	tert-Butylbenzene	2.855	3.032	-6.2	96	0.00
84 T	1,2,4-Trimethylbenzene	3.178	3.274	-3.0	93	0.00
85 T	sec-Butylbenzene	4.248	4.495	-5.8	96	0.00
86 T	p-Isopropyltoluene	3.500	3.679	-5.1	95	0.00
87 T	1,3-Dichlorobenzene	1.834	1.788	2.5	91	0.00
88 T	1,4-Dichlorobenzene	1.794	1.734	3.3	90	0.00
89 T	n-Butylbenzene	3.232	3.465	-7.2	95	0.00
90 T	Hexachloroethane	0.747	0.748	-0.1	95	0.00
91 T	1,2-Dichlorobenzene	1.572	1.509	4.0	88	0.00
92 T	1,2-Dibromo-3-Chloropropane	0.104	0.089	14.4	76	0.00
93 T	1,2,4-Trichlorobenzene	0.859	0.848	1.3	86	0.00
94 T	Hexachlorobutadiene	0.538	0.562	-4.5	94	0.00
95 T	Naphthalene	1.390	1.305	6.1	77	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
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Operator : SY/MD
Sample : VSTDICV050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
ICVVY030425

Quant Time: Mar 05 04:18:40 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 03:21:56 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	0.722	0.703	2.6	84	0.00

(#) = Out of Range

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
 Data File : VY021404.D
 Acq On : 04 Mar 2025 13:12
 Operator : SY/MD
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Quant Time: Mar 05 04:18:40 2025
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Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 I	Pentafluorobenzene	50.000	50.000	0.0	97	0.00
2 T	Dichlorodifluoromethane	50.000	47.113	5.8	93	0.00
3 P	Chloromethane	50.000	49.075	1.8	99	0.00
4 C	Vinyl Chloride	50.000	50.231	-0.5#	99	0.00
5 T	Bromomethane	50.000	46.283	7.4	98	0.00
6 T	Chloroethane	50.000	48.912	2.2	96	0.00
7 T	Trichlorofluoromethane	50.000	49.011	2.0	97	0.00
8 T	Diethyl Ether	50.000	45.628	8.7	85	0.00
9 T	1,1,2-Trichlorotrifluoroeth	50.000	48.142	3.7	97	0.00
10 T	Methyl Iodide	50.000	48.336	3.3	85	0.00
11 T	Tert butyl alcohol	250.000	211.206	15.5	75	0.00
12 CM	1,1-Dichloroethene	50.000	49.424	1.2#	97	0.00
13 T	Acrolein	250.000	45.035	82.0#	103	0.00
14 T	Allyl chloride	50.000	50.500	-1.0	96	0.00
15 T	Acrylonitrile	250.000	218.213	12.7	79	0.00
16 T	Acetone	250.000	241.068	3.6	80	0.00
17 T	Carbon Disulfide	50.000	50.464	-0.9	96	0.00
18 T	Methyl Acetate	50.000	44.501	11.0	77	0.00
19 T	Methyl tert-butyl Ether	50.000	45.249	9.5	83	0.00
20 T	Methylene Chloride	50.000	43.913	12.2	93	0.00
21 T	trans-1,2-Dichloroethene	50.000	48.065	3.9	95	0.00
22 T	Diisopropyl ether	50.000	48.325	3.3	90	0.00
23 T	Vinyl Acetate	250.000	233.756	6.5	83	0.00
24 P	1,1-Dichloroethane	50.000	48.243	3.5	94	0.00
25 T	2-Butanone	250.000	222.145	11.1	76	0.00
26 T	2,2-Dichloropropane	50.000	48.615	2.8	97	0.00
27 T	cis-1,2-Dichloroethene	50.000	48.506	3.0	94	0.00
28 T	Bromochloromethane	50.000	56.200	-12.4	103	0.00
29 T	Tetrahydrofuran	250.000	214.177	14.3	74	0.00
30 C	Chloroform	50.000	47.758	4.5#	93	0.00
31 T	Cyclohexane	50.000	47.720	4.6	97	0.00
32 T	1,1,1-Trichloroethane	50.000	48.703	2.6	97	0.00
33 S	1,2-Dichloroethane-d4	50.000	49.828	0.3	106	0.00
34 I	1,4-Difluorobenzene	50.000	50.000	0.0	98	0.00
35 S	Dibromofluoromethane	50.000	50.894	-1.8	111	0.00
36 T	1,1-Dichloropropene	50.000	48.866	2.3	95	0.00
37 T	Ethyl Acetate	50.000	43.078	13.8	78	0.00
38 T	Carbon Tetrachloride	50.000	48.800	2.4	97	0.00
39 T	Methylcyclohexane	50.000	51.724	-3.4	98	0.00
40 TM	Benzene	50.000	48.542	2.9	94	0.00
41 T	Methacrylonitrile	50.000	51.920	-3.8	96	0.03
42 TM	1,2-Dichloroethane	50.000	45.393	9.2	87	0.00
43 T	Isopropyl Acetate	50.000	43.036	13.9	77	0.00
44 TM	Trichloroethene	50.000	48.321	3.4	95	0.00
45 C	1,2-Dichloropropane	50.000	47.287	5.4#	91	0.00
46 T	Dibromomethane	50.000	45.413	9.2	84	0.00
47 T	Bromodichloromethane	50.000	46.755	6.5	89	0.00
48 T	Methyl methacrylate	50.000	45.652	8.7	79	0.00

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
49 T	1,4-Dioxane	1000.000	874.634	12.5	75	0.00
50 S	Toluene-d8	50.000	53.263	-6.5	115	0.00
51 T	4-Methyl-2-Pentanone	250.000	216.781	13.3	74	0.00
52 CM	Toluene	50.000	49.486	1.0#	94	0.00
53 T	t-1,3-Dichloropropene	50.000	47.312	5.4	87	0.00
54 T	cis-1,3-Dichloropropene	50.000	48.236	3.5	90	0.00
55 T	1,1,2-Trichloroethane	50.000	44.786	10.4	82	0.00
56 T	Ethyl methacrylate	50.000	46.305	7.4	79	0.00
57 T	1,3-Dichloropropane	50.000	46.108	7.8	86	0.00
58 T	2-Chloroethyl Vinyl ether	250.000	247.869	0.9	86	0.00
59 T	2-Hexanone	250.000	224.350	10.3	73	0.00
60 T	Dibromochloromethane	50.000	46.278	7.4	87	0.00
61 T	1,2-Dibromoethane	50.000	45.932	8.1	85	0.00
62 S	4-Bromofluorobenzene	50.000	51.560	-3.1	111	0.00
63 I	Chlorobenzene-d5	50.000	50.000	0.0	95	0.00
64 T	Tetrachloroethene	50.000	49.207	1.6	94	0.00
65 PM	Chlorobenzene	50.000	48.611	2.8	92	0.00
66 T	1,1,1,2-Tetrachloroethane	50.000	48.104	3.8	91	0.00
67 C	Ethyl Benzene	50.000	50.757	-1.5#	94	0.00
68 T	m/p-Xylenes	100.000	100.830	-0.8	92	0.00
69 T	o-Xylene	50.000	51.096	-2.2	93	0.00
70 T	Styrene	50.000	50.400	-0.8	90	0.00
71 P	Bromoform	50.000	45.886	8.2	81	0.00
72 I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	93	0.00
73 T	Isopropylbenzene	50.000	52.186	-4.4	94	0.00
74 T	N-amyl acetate	50.000	45.591	8.8	76	0.00
75 P	1,1,2,2-Tetrachloroethane	50.000	44.086	11.8	78	0.00
76 T	1,2,3-Trichloropropane	50.000	44.986	10.0	85	0.00
77 T	Bromobenzene	50.000	48.194	3.6	89	0.00
78 T	n-propylbenzene	50.000	52.233	-4.5	94	0.00
79 T	2-Chlorotoluene	50.000	50.525	-1.0	93	0.00
80 T	1,3,5-Trimethylbenzene	50.000	52.113	-4.2	95	0.00
81 T	trans-1,4-Dichloro-2-butene	50.000	45.578	8.8	79	0.00
82 T	4-Chlorotoluene	50.000	50.122	-0.2	92	0.00
83 T	tert-Butylbenzene	50.000	53.088	-6.2	96	0.00
84 T	1,2,4-Trimethylbenzene	50.000	51.510	-3.0	93	0.00
85 T	sec-Butylbenzene	50.000	52.908	-5.8	96	0.00
86 T	p-Isopropyltoluene	50.000	52.556	-5.1	95	0.00
87 T	1,3-Dichlorobenzene	50.000	48.728	2.5	91	0.00
88 T	1,4-Dichlorobenzene	50.000	48.331	3.3	90	0.00
89 T	n-Butylbenzene	50.000	53.606	-7.2	95	0.00
90 T	Hexachloroethane	50.000	50.084	-0.2	95	0.00
91 T	1,2-Dichlorobenzene	50.000	47.985	4.0	88	0.00
92 T	1,2-Dibromo-3-Chloropropane	50.000	42.654	14.7	76	0.00
93 T	1,2,4-Trichlorobenzene	50.000	49.388	1.2	86	0.00
94 T	Hexachlorobutadiene	50.000	52.186	-4.4	94	0.00
95 T	Naphthalene	50.000	45.480	9.0	77	0.00

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	50.000	48.639	2.7	84	0.00

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



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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: PORT06

Lab Code: CHEM Case No.: Q1514 SAS No.: Q1514 SDG No.: Q1514

Instrument ID: MSVOA_N Calibration Date/Time: 03/10/2025 12:21

Lab File ID: VN085914.D Init. Calib. Date(s): 02/18/2025 02/18/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 11:09 14:18

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Dichlorodifluoromethane	0.680	0.774		13.82	20
Chloromethane	0.682	0.791	0.1	15.98	20
Vinyl Chloride	0.723	0.788		8.99	20
Bromomethane	0.462	0.430		-6.93	20
Chloroethane	0.479	0.437		-8.77	20
Trichlorofluoromethane	1.046	1.082		3.44	20
1,1,2-Trichlorotrifluoroethane	0.605	0.627		3.64	20
1,1-Dichloroethene	0.548	0.584		6.57	20
Acetone	0.205	0.243		18.54	20
Carbon Disulfide	1.625	1.855		14.15	20
Methyl tert-butyl Ether	1.629	1.871		14.86	20
Methyl Acetate	0.705	0.645		-8.51	20
Methylene Chloride	0.660	0.679		2.88	20
trans-1,2-Dichloroethene	0.590	0.628		6.44	20
1,1-Dichloroethane	1.106	1.175	0.1	6.24	20
Cyclohexane	0.926	1.029		11.12	20
2-Butanone	0.302	0.375		24.17	20
Carbon Tetrachloride	0.550	0.609		10.73	20
cis-1,2-Dichloroethene	0.685	0.723		5.55	20
Bromochloromethane	0.454	0.540		18.94	20
Chloroform	1.156	1.197		3.55	20
1,1,1-Trichloroethane	1.028	1.086		5.64	20
Methylcyclohexane	0.455	0.559		22.86	20
Benzene	1.484	1.679		13.14	20
1,2-Dichloroethane	0.483	0.546		13.04	20
Trichloroethene	0.364	0.384		5.49	20
1,2-Dichloropropane	0.358	0.417		16.48	20
Bromodichloromethane	0.541	0.598		10.54	20
4-Methyl-2-Pentanone	0.367	0.490		33.51	20
Toluene	0.870	1.062		22.07	20
t-1,3-Dichloropropene	0.500	0.606		21.2	20
cis-1,3-Dichloropropene	0.548	0.656		19.71	20
1,1,2-Trichloroethane	0.346	0.382		10.4	20
2-Hexanone	0.253	0.363		43.48	20
Dibromochloromethane	0.403	0.469		16.38	20
1,2-Dibromoethane	0.327	0.386		18.04	20
Tetrachloroethene	0.387	0.411		6.2	20
Chlorobenzene	1.145	1.237	0.3	8.03	20

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



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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: PORT06

Lab Code: CHEM Case No.: Q1514 SAS No.: Q1514 SDG No.: Q1514

Instrument ID: MSVOA_N Calibration Date/Time: 03/10/2025 12:21

Lab File ID: VN085914.D Init. Calib. Date(s): 02/18/2025 02/18/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 11:09 14:18

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Ethyl Benzene	1.794	2.144		19.51	20
m/p-Xylenes	0.682	0.863		26.54	20
o-Xylene	0.648	0.796		22.84	20
Styrene	1.059	1.380		30.31	20
Bromoform	0.306	0.356	0.1	16.34	20
Isopropylbenzene	3.425	3.710		8.32	20
1,1,2,2-Tetrachloroethane	1.179	1.159	0.3	-1.7	20
1,3-Dichlorobenzene	1.734	1.779		2.6	20
1,4-Dichlorobenzene	1.777	1.765		-0.68	20
1,2-Dichlorobenzene	1.667	1.692		1.5	20
1,2-Dibromo-3-Chloropropane	0.216	0.223		3.24	20
1,2,4-Trichlorobenzene	0.794	0.834		5.04	20
1,2,3-Trichlorobenzene	0.798	0.815		2.13	20
1,2-Dichloroethane-d4	0.648	0.628		-3.09	20
Dibromofluoromethane	0.327	0.328		0.31	20
Toluene-d8	1.190	1.216		2.18	20
4-Bromofluorobenzene	0.392	0.455		16.07	20

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\
 Data File : VN085914.D
 Acq On : 10 Mar 2025 12:21
 Operator : JC\MD
 Sample : VSTDCCC050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDCCC050

Manual Integrations
 APPROVED

Reviewed By : John Carlone 03/11/2025
 Supervised By : Mahesh Dadoda 03/11/2025

Quant Time: Mar 11 01:35:39 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
 Quant Title : SW846 8260
 QLast Update : Wed Feb 19 03:43:32 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	8.224	168	199203	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	319135	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	288321	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	156195	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	125107	48.442	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery =	96.880%		
35) Dibromofluoromethane	8.165	113	104608	50.093	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	100.180%		
50) Toluene-d8	10.565	98	388046	51.074	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery =	102.140%		
62) 4-Bromofluorobenzene	12.847	95	145253	58.025	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery =	116.040%		
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	2.124	85	154217	56.916	ug/l	99
3) Chloromethane	2.360	50	157501	57.928	ug/l	99
4) Vinyl Chloride	2.512	62	156963	54.524	ug/l	96
5) Bromomethane	2.948	94	85714	46.564	ug/l	95
6) Chloroethane	3.112	64	87037	45.644	ug/l	94
7) Trichlorofluoromethane	3.495	101	215570	51.720	ug/l	99
8) Diethyl Ether	3.959	74	74046	54.906	ug/l	95
9) 1,1,2-Trichlorotrifluo...	4.371	101	124810	51.804	ug/l	99
10) Methyl Iodide	4.589	142	159707	53.776	ug/l	96
11) Tert butyl alcohol	5.524	59	86626	272.716	ug/l	100
12) 1,1-Dichloroethene	4.342	96	116396	53.282	ug/l	99
13) Acrolein	4.177	56	131110	278.340	ug/l	99
14) Allyl chloride	5.024	41	161702	56.379	ug/l	95
15) Acrylonitrile	5.718	53	309442	299.665	ug/l	98
16) Acetone	4.430	43	242492	296.742	ug/l	99
17) Carbon Disulfide	4.712	76	369568	57.082	ug/l	98
18) Methyl Acetate	5.024	43	128411	45.686	ug/l	96
19) Methyl tert-butyl Ether	5.795	73	372666	57.409	ug/l	99
20) Methylene Chloride	5.271	84	135289	51.481	ug/l	93
21) trans-1,2-Dichloroethene	5.789	96	125045	53.160	ug/l	97
22) Diisopropyl ether	6.665	45	377284	58.215	ug/l	97
23) Vinyl Acetate	6.600	43	1396718	314.758	ug/l	99
24) 1,1-Dichloroethane	6.571	63	234031	53.121	ug/l	99
25) 2-Butanone	7.483	43	373262	310.476	ug/l	100
26) 2,2-Dichloropropane	7.483	77	207222	52.896	ug/l	99
27) cis-1,2-Dichloroethene	7.483	96	144046	52.814	ug/l	97
28) Bromochloromethane	7.812	49	107632	59.441	ug/l	92
29) Tetrahydrofuran	7.836	42	250844	323.115	ug/l	97
30) Chloroform	7.965	83	238464	51.795	ug/l	99
31) Cyclohexane	8.253	56	204898	55.547	ug/l	95
32) 1,1,1-Trichloroethane	8.165	97	216387	52.842	ug/l	99
36) 1,1-Dichloropropene	8.365	75	172465	58.355	ug/l	99
37) Ethyl Acetate	7.559	43	149219	61.352	ug/l	99
38) Carbon Tetrachloride	8.359	117	194466	55.377	ug/l	98
39) Methylcyclohexane	9.600	83	178412	61.448	ug/l	95
40) Benzene	8.606	78	535918	56.576	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\
 Data File : VN085914.D
 Acq On : 10 Mar 2025 12:21
 Operator : JC\MD
 Sample : VSTDCCC050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 3 Sample Multiplier: 1

Instrument :

MSVOA_N

ClientSampleId :

VSTDCCC050

Manual Integrations

APPROVED

Reviewed By :John Carlone 03/11/2025

Supervised By :Mahesh Dadoda 03/11/2025

Quant Time: Mar 11 01:35:39 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M

Quant Title : SW846 8260

QLast Update : Wed Feb 19 03:43:32 2025

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.777	41	76661	58.962	ug/l	94
42) 1,2-Dichloroethane	8.665	62	174339	56.504	ug/l	99
43) Isopropyl Acetate	8.689	43	254645	59.765	ug/l	99
44) Trichloroethene	9.353	130	122600	52.714	ug/l	95
45) 1,2-Dichloropropane	9.618	63	133163	58.240	ug/l	99
46) Dibromomethane	9.706	93	91031	56.443	ug/l	99
47) Bromodichloromethane	9.888	83	190893	55.323	ug/l	99
48) Methyl methacrylate	9.683	41	114950	63.639	ug/l	100
49) 1,4-Dioxane	9.688	88	44871	1306.344	ug/l #	96
51) 4-Methyl-2-Pentanone	10.441	43	781633	333.327	ug/l	99
52) Toluene	10.630	92	338936	61.041	ug/l	100
53) t-1,3-Dichloropropene	10.835	75	193524	60.654	ug/l	100
54) cis-1,3-Dichloropropene	10.312	75	209417	59.855	ug/l	96
55) 1,1,2-Trichloroethane	11.012	97	122045	55.282	ug/l	96
56) Ethyl methacrylate	10.871	69	191431	59.011	ug/l	100
57) 1,3-Dichloropropane	11.159	76	215250	58.407	ug/l	100
58) 2-Chloroethyl Vinyl ether	10.159	63	491405	349.174	ug/l	99
59) 2-Hexanone	11.194	43	579294	359.098	ug/l	99
60) Dibromochloromethane	11.359	129	149715	58.239	ug/l	100
61) 1,2-Dibromoethane	11.465	107	123093	59.012	ug/l	97
64) Tetrachloroethene	11.100	164	118446	53.028	ug/l	96
65) Chlorobenzene	11.888	112	356759	54.013	ug/l	98
66) 1,1,1,2-Tetrachloroethane	11.959	131	127947	53.894	ug/l	98
67) Ethyl Benzene	11.965	91	618089	59.739	ug/l	99
68) m/p-Xylenes	12.071	106	497382	126.558	ug/l	99
69) o-Xylene	12.400	106	229432	61.435	ug/l	98
70) Styrene	12.412	104	397999	56.495	ug/l	98
71) Bromoform	12.577	173	102633	58.180	ug/l #	99
73) Isopropylbenzene	12.694	105	579548	54.159	ug/l	100
74) N-amyl acetate	12.494	43	223875	59.327	ug/l	98
75) 1,1,2,2-Tetrachloroethane	12.935	83	181013	49.158	ug/l	99
76) 1,2,3-Trichloropropane	12.994	75	155686m	44.871	ug/l	
77) Bromobenzene	12.977	156	147682	51.083	ug/l	95
78) n-propylbenzene	13.035	91	703392	57.396	ug/l	99
79) 2-Chlorotoluene	13.124	91	436012	53.250	ug/l	100
80) 1,3,5-Trimethylbenzene	13.171	105	512738	58.821	ug/l	98
81) trans-1,4-Dichloro-2-b...	12.735	75	66112m	55.597	ug/l	
82) 4-Chlorotoluene	13.218	91	448545	55.258	ug/l	99
83) tert-Butylbenzene	13.435	119	420470	57.362	ug/l	99
84) 1,2,4-Trimethylbenzene	13.482	105	517440	59.999	ug/l	99
85) sec-Butylbenzene	13.612	105	590397	57.006	ug/l	100
86) p-Isopropyltoluene	13.729	119	499312	52.388	ug/l	99
87) 1,3-Dichlorobenzene	13.729	146	277860	51.299	ug/l	99
88) 1,4-Dichlorobenzene	13.812	146	275752	49.672	ug/l	100
89) n-Butylbenzene	14.053	91	425197	57.825	ug/l	98
90) Hexachloroethane	14.335	117	100192	51.081	ug/l	99
91) 1,2-Dichlorobenzene	14.106	146	264313	50.746	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.718	75	34765	51.414	ug/l	97
93) 1,2,4-Trichlorobenzene	15.394	180	130220	52.467	ug/l	99
94) Hexachlorobutadiene	15.500	225	71252	47.238	ug/l	97
95) Naphthalene	15.641	128	385153	56.525	ug/l	99
96) 1,2,3-Trichlorobenzene	15.835	180	127275	51.080	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\
Data File : VN085914.D
Acq On : 10 Mar 2025 12:21
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

Reviewed By :John Carlone 03/11/2025
Supervised By :Mahesh Dadoda 03/11/2025

Quant Time: Mar 11 01:35:39 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260
QLast Update : Wed Feb 19 03:43:32 2025
Response via : Initial Calibration

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

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

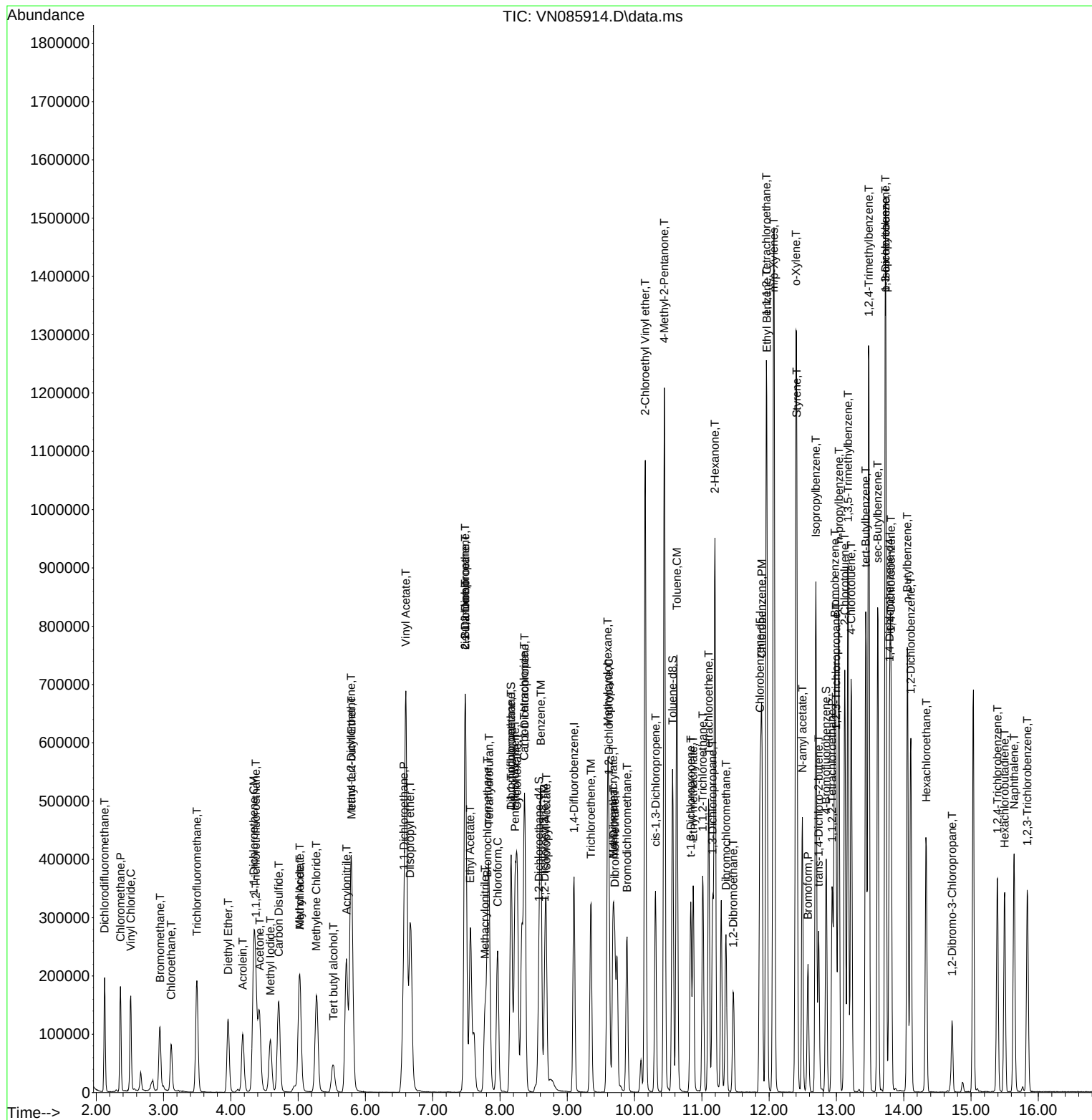
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Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\  
Data File : VN085914.D  
Acq On    : 10 Mar 2025  12:21  
Operator  : JC\MD  
Sample    : VSTDCCC050  
Misc      : 5.0mL/MSVOA_N/WATER  
ALS Vial  : 3      Sample Multiplier: 1
```

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations

Reviewed By :John Carlone 03/11/2025
Supervised By :Mahesh Dadoda 03/11/2025

Quant Time: Mar 11 01:35:39 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260
QLast Update : Wed Feb 19 03:43:32 2025
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\
 Data File : VN085914.D
 Acq On : 10 Mar 2025 12:21
 Operator : JC\MD
 Sample : VSTDCCC050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_N
 LabSampleId :
 VSTDCCC050

Quant Time: Mar 11 01:35:39 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
 Quant Title : SW846 8260
 QLast Update : Wed Feb 19 03:43:32 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	62	0.00
2 T	Dichlorodifluoromethane	0.680	0.774	-13.8	71	0.00
3 P	Chloromethane	0.682	0.791	-16.0	79	0.00
4 C	Vinyl Chloride	0.723	0.788	-9.0#	72	0.00
5 T	Bromomethane	0.462	0.430	6.9	63	0.00
6 T	Chloroethane	0.479	0.437	8.8	65	-0.01
7 T	Trichlorofluoromethane	1.046	1.082	-3.4	70	0.00
8 T	Diethyl Ether	0.339	0.372	-9.7	69	0.00
9 T	1,1,2-Trichlorotrifluoroeth	0.605	0.627	-3.6	69	0.00
10 T	Methyl Iodide	0.745	0.802	-7.7	69	0.00
11 T	Tert butyl alcohol	0.080	0.087	-8.7	68	0.02
12 CM	1,1-Dichloroethene	0.548	0.584	-6.6#	68	0.00
13 T	Acrolein	0.118	0.132	-11.9	64	0.00
14 T	Allyl chloride	0.720	0.812	-12.8	73	0.00
15 T	Acrylonitrile	0.259	0.311	-20.1	78	0.00
16 T	Acetone	0.205	0.243	-18.5	82	0.01
17 T	Carbon Disulfide	1.625	1.855	-14.2	78	0.00
18 T	Methyl Acetate	0.705	0.645	8.5	64	0.00
19 T	Methyl tert-butyl Ether	1.629	1.871	-14.9	70	0.00
20 T	Methylene Chloride	0.660	0.679	-2.9	71	0.00
21 T	trans-1,2-Dichloroethene	0.590	0.628	-6.4	71	0.00
22 T	Diisopropyl ether	1.627	1.894	-16.4	71	0.00
23 T	Vinyl Acetate	1.114	1.402	-25.9#	77	0.00
24 P	1,1-Dichloroethane	1.106	1.175	-6.2	70	0.00
25 T	2-Butanone	0.302	0.375	-24.2	79	0.01
26 T	2,2-Dichloropropane	0.983	1.040	-5.8	68	0.00
27 T	cis-1,2-Dichloroethene	0.685	0.723	-5.5	68	0.00
28 T	Bromochloromethane	0.454	0.540	-18.9	75	0.00
29 T	Tetrahydrofuran	0.195	0.252	-29.2#	80	0.00
30 C	Chloroform	1.156	1.197	-3.5#	69	0.00
31 T	Cyclohexane	0.926	1.029	-11.1	74	0.00
32 T	1,1,1-Trichloroethane	1.028	1.086	-5.6	69	0.00
33 S	1,2-Dichloroethane-d4	0.648	0.628	3.1	63	0.00
34 I	1,4-Difluorobenzene	1.000	1.000	0.0	61	0.00
35 S	Dibromofluoromethane	0.327	0.328	-0.3	63	0.00
36 T	1,1-Dichloropropene	0.463	0.540	-16.6	71	0.00
37 T	Ethyl Acetate	0.381	0.468	-22.8	76	0.00
38 T	Carbon Tetrachloride	0.550	0.609	-10.7	70	0.00
39 T	Methylcyclohexane	0.455	0.559	-22.9	69	0.00
40 TM	Benzene	1.484	1.679	-13.1	71	0.00
41 T	Methacrylonitrile	0.204	0.240	-17.6	68	0.01
42 TM	1,2-Dichloroethane	0.483	0.546	-13.0	73	0.00
43 T	Isopropyl Acetate	0.807	0.798	1.1	76	0.00
44 TM	Trichloroethene	0.364	0.384	-5.5	69	0.00
45 C	1,2-Dichloropropane	0.358	0.417	-16.5#	73	0.00
46 T	Dibromomethane	0.253	0.285	-12.6	71	0.00
47 T	Bromodichloromethane	0.541	0.598	-10.5	70	0.00
48 T	Methyl methacrylate	0.283	0.360	-27.2#	73	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\
 Data File : VN085914.D
 Acq On : 10 Mar 2025 12:21
 Operator : JC\MD
 Sample : VSTDCCC050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_N
 LabSampleId :
 VSTDCCC050

Quant Time: Mar 11 01:35:39 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
 Quant Title : SW846 8260
 QLast Update : Wed Feb 19 03:43:32 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	0.005	0.007	-40.0#	74	0.00
50 S	Toluene-d8	1.190	1.216	-2.2	61	0.00
51 T	4-Methyl-2-Pentanone	0.367	0.490	-33.5#	78	0.00
52 CM	Toluene	0.870	1.062	-22.1#	71	0.00
53 T	t-1,3-Dichloropropene	0.500	0.606	-21.2	70	0.00
54 T	cis-1,3-Dichloropropene	0.548	0.656	-19.7	70	0.00
55 T	1,1,2-Trichloroethane	0.346	0.382	-10.4	70	0.00
56 T	Ethyl methacrylate	0.434	0.600	-38.2#	73	0.00
57 T	1,3-Dichloropropane	0.577	0.674	-16.8	72	0.00
58 T	2-Chloroethyl Vinyl ether	0.195	0.308	-57.9#	107	0.00
59 T	2-Hexanone	0.253	0.363	-43.5#	80	0.00
60 T	Dibromochloromethane	0.403	0.469	-16.4	71	0.00
61 T	1,2-Dibromoethane	0.327	0.386	-18.0	73	0.00
62 S	4-Bromofluorobenzene	0.392	0.455	-16.1	66	0.00
63 I	Chlorobenzene-d5	1.000	1.000	0.0	62	0.00
64 T	Tetrachloroethene	0.387	0.411	-6.2	71	0.00
65 PM	Chlorobenzene	1.145	1.237	-8.0	70	0.00
66 T	1,1,1,2-Tetrachloroethane	0.412	0.444	-7.8	70	0.00
67 C	Ethyl Benzene	1.794	2.144	-19.5#	70	0.00
68 T	m/p-Xylenes	0.682	0.863	-26.5#	73	0.00
69 T	o-Xylene	0.648	0.796	-22.8	71	0.00
70 T	Styrene	1.059	1.380	-30.3#	72	0.00
71 P	Bromoform	0.306	0.356	-16.3	73	0.00
72 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	69	0.00
73 T	Isopropylbenzene	3.425	3.710	-8.3	71	0.00
74 T	N-amyl acetate	1.208	1.433	-18.6	79	0.00
75 P	1,1,2,2-Tetrachloroethane	1.179	1.159	1.7	76	0.00
76 T	1,2,3-Trichloropropane	1.111	0.997	10.3	72	0.00
77 T	Bromobenzene	0.925	0.945	-2.2	72	0.00
78 T	n-propylbenzene	3.923	4.503	-14.8	73	0.00
79 T	2-Chlorotoluene	2.621	2.791	-6.5	73	0.00
80 T	1,3,5-Trimethylbenzene	2.790	3.283	-17.7	74	0.00
81 T	trans-1,4-Dichloro-2-butene	0.381	0.423	-11.0	73	0.00
82 T	4-Chlorotoluene	2.598	2.872	-10.5	74	0.00
83 T	tert-Butylbenzene	2.346	2.692	-14.7	72	0.00
84 T	1,2,4-Trimethylbenzene	2.761	3.313	-20.0	74	0.00
85 T	sec-Butylbenzene	3.315	3.780	-14.0	71	0.00
86 T	p-Isopropyltoluene	2.665	3.197	-20.0	72	0.00
87 T	1,3-Dichlorobenzene	1.734	1.779	-2.6	75	0.00
88 T	1,4-Dichlorobenzene	1.777	1.765	0.7	74	0.00
89 T	n-Butylbenzene	2.354	2.722	-15.6	73	0.00
90 T	Hexachloroethane	0.628	0.641	-2.1	75	0.00
91 T	1,2-Dichlorobenzene	1.667	1.692	-1.5	74	0.00
92 T	1,2-Dibromo-3-Chloropropane	0.216	0.223	-3.2	79	0.00
93 T	1,2,4-Trichlorobenzene	0.794	0.834	-5.0	71	0.00
94 T	Hexachlorobutadiene	0.483	0.456	5.6	74	0.00
95 T	Naphthalene	2.181	2.466	-13.1	73	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\
Data File : VN085914.D
Acq On : 10 Mar 2025 12:21
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Mar 11 01:35:39 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260
QLast Update : Wed Feb 19 03:43:32 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	0.798	0.815	-2.1	71	0.00

(#) = Out of Range

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\
 Data File : VN085914.D
 Acq On : 10 Mar 2025 12:21
 Operator : JC\MD
 Sample : VSTDCCC050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_N
 LabSampleId :
 VSTDCCC050

Quant Time: Mar 11 01:35:39 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
 Quant Title : SW846 8260
 QLast Update : Wed Feb 19 03:43:32 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	62	0.00
2 T	Dichlorodifluoromethane	50.000	56.916	-13.8	71	0.00
3 P	Chloromethane	50.000	57.928	-15.9	79	0.00
4 C	Vinyl Chloride	50.000	54.524	-9.0#	72	0.00
5 T	Bromomethane	50.000	46.564	6.9	63	0.00
6 T	Chloroethane	50.000	45.644	8.7	65	-0.01
7 T	Trichlorofluoromethane	50.000	51.720	-3.4	70	0.00
8 T	Diethyl Ether	50.000	54.906	-9.8	69	0.00
9 T	1,1,2-Trichlorotrifluoroeth	50.000	51.804	-3.6	69	0.00
10 T	Methyl Iodide	50.000	53.776	-7.6	69	0.00
11 T	Tert butyl alcohol	250.000	272.716	-9.1	68	0.02
12 CM	1,1-Dichloroethene	50.000	53.282	-6.6#	68	0.00
13 T	Acrolein	250.000	278.340	-11.3	64	0.00
14 T	Allyl chloride	50.000	56.379	-12.8	73	0.00
15 T	Acrylonitrile	250.000	299.665	-19.9	78	0.00
16 T	Acetone	250.000	296.742	-18.7	82	0.01
17 T	Carbon Disulfide	50.000	57.082	-14.2	78	0.00
18 T	Methyl Acetate	50.000	45.686	8.6	64	0.00
19 T	Methyl tert-butyl Ether	50.000	57.409	-14.8	70	0.00
20 T	Methylene Chloride	50.000	51.481	-3.0	71	0.00
21 T	trans-1,2-Dichloroethene	50.000	53.160	-6.3	71	0.00
22 T	Diisopropyl ether	50.000	58.215	-16.4	71	0.00
23 T	Vinyl Acetate	250.000	314.758	-25.9#	77	0.00
24 P	1,1-Dichloroethane	50.000	53.121	-6.2	70	0.00
25 T	2-Butanone	250.000	310.476	-24.2	79	0.01
26 T	2,2-Dichloropropane	50.000	52.896	-5.8	68	0.00
27 T	cis-1,2-Dichloroethene	50.000	52.814	-5.6	68	0.00
28 T	Bromochloromethane	50.000	59.441	-18.9	75	0.00
29 T	Tetrahydrofuran	250.000	323.115	-29.2#	80	0.00
30 C	Chloroform	50.000	51.795	-3.6#	69	0.00
31 T	Cyclohexane	50.000	55.547	-11.1	74	0.00
32 T	1,1,1-Trichloroethane	50.000	52.842	-5.7	69	0.00
33 S	1,2-Dichloroethane-d4	50.000	48.442	3.1	63	0.00
34 I	1,4-Difluorobenzene	50.000	50.000	0.0	61	0.00
35 S	Dibromofluoromethane	50.000	50.093	-0.2	63	0.00
36 T	1,1-Dichloropropene	50.000	58.355	-16.7	71	0.00
37 T	Ethyl Acetate	50.000	61.352	-22.7	76	0.00
38 T	Carbon Tetrachloride	50.000	55.377	-10.8	70	0.00
39 T	Methylcyclohexane	50.000	61.448	-22.9	69	0.00
40 TM	Benzene	50.000	56.576	-13.2	71	0.00
41 T	Methacrylonitrile	50.000	58.962	-17.9	68	0.01
42 TM	1,2-Dichloroethane	50.000	56.504	-13.0	73	0.00
43 T	Isopropyl Acetate	50.000	59.765	-19.5	76	0.00
44 TM	Trichloroethene	50.000	52.714	-5.4	69	0.00
45 C	1,2-Dichloropropane	50.000	58.240	-16.5#	73	0.00
46 T	Dibromomethane	50.000	56.443	-12.9	71	0.00
47 T	Bromodichloromethane	50.000	55.323	-10.6	70	0.00
48 T	Methyl methacrylate	50.000	63.639	-27.3#	73	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\
 Data File : VN085914.D
 Acq On : 10 Mar 2025 12:21
 Operator : JC\MD
 Sample : VSTDCCC050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_N
 LabSampleId :
 VSTDCCC050

Quant Time: Mar 11 01:35:39 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
 Quant Title : SW846 8260
 QLast Update : Wed Feb 19 03:43:32 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	1306.344	-30.6#	74	0.00
50 S	Toluene-d8	50.000	51.074	-2.1	61	0.00
51 T	4-Methyl-2-Pentanone	250.000	333.327	-33.3#	78	0.00
52 CM	Toluene	50.000	61.041	-22.1#	71	0.00
53 T	t-1,3-Dichloropropene	50.000	60.654	-21.3	70	0.00
54 T	cis-1,3-Dichloropropene	50.000	59.855	-19.7	70	0.00
55 T	1,1,2-Trichloroethane	50.000	55.282	-10.6	70	0.00
56 T	Ethyl methacrylate	50.000	59.011	-18.0	73	0.00
57 T	1,3-Dichloropropane	50.000	58.407	-16.8	72	0.00
58 T	2-Chloroethyl Vinyl ether	250.000	349.174	-39.7#	107	0.00
59 T	2-Hexanone	250.000	359.098	-43.6#	80	0.00
60 T	Dibromochloromethane	50.000	58.239	-16.5	71	0.00
61 T	1,2-Dibromoethane	50.000	59.012	-18.0	73	0.00
62 S	4-Bromofluorobenzene	50.000	58.025	-16.0	66	0.00
63 I	Chlorobenzene-d5	50.000	50.000	0.0	62	0.00
64 T	Tetrachloroethene	50.000	53.028	-6.1	71	0.00
65 PM	Chlorobenzene	50.000	54.013	-8.0	70	0.00
66 T	1,1,1,2-Tetrachloroethane	50.000	53.894	-7.8	70	0.00
67 C	Ethyl Benzene	50.000	59.739	-19.5#	70	0.00
68 T	m/p-Xylenes	100.000	126.558	-26.6#	73	0.00
69 T	o-Xylene	50.000	61.435	-22.9	71	0.00
70 T	Styrene	50.000	56.495	-13.0	72	0.00
71 P	Bromoform	50.000	58.180	-16.4	73	0.00
72 I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	69	0.00
73 T	Isopropylbenzene	50.000	54.159	-8.3	71	0.00
74 T	N-amyl acetate	50.000	59.327	-18.7	79	0.00
75 P	1,1,2,2-Tetrachloroethane	50.000	49.158	1.7	76	0.00
76 T	1,2,3-Trichloropropane	50.000	44.871	10.3	72	0.00
77 T	Bromobenzene	50.000	51.083	-2.2	72	0.00
78 T	n-propylbenzene	50.000	57.396	-14.8	73	0.00
79 T	2-Chlorotoluene	50.000	53.250	-6.5	73	0.00
80 T	1,3,5-Trimethylbenzene	50.000	58.821	-17.6	74	0.00
81 T	trans-1,4-Dichloro-2-butene	50.000	55.597	-11.2	73	0.00
82 T	4-Chlorotoluene	50.000	55.258	-10.5	74	0.00
83 T	tert-Butylbenzene	50.000	57.362	-14.7	72	0.00
84 T	1,2,4-Trimethylbenzene	50.000	59.999	-20.0	74	0.00
85 T	sec-Butylbenzene	50.000	57.006	-14.0	71	0.00
86 T	p-Isopropyltoluene	50.000	52.388	-4.8	72	0.00
87 T	1,3-Dichlorobenzene	50.000	51.299	-2.6	75	0.00
88 T	1,4-Dichlorobenzene	50.000	49.672	0.7	74	0.00
89 T	n-Butylbenzene	50.000	57.825	-15.7	73	0.00
90 T	Hexachloroethane	50.000	51.081	-2.2	75	0.00
91 T	1,2-Dichlorobenzene	50.000	50.746	-1.5	74	0.00
92 T	1,2-Dibromo-3-Chloropropane	50.000	51.414	-2.8	79	0.00
93 T	1,2,4-Trichlorobenzene	50.000	52.467	-4.9	71	0.00
94 T	Hexachlorobutadiene	50.000	47.238	5.5	74	0.00
95 T	Naphthalene	50.000	56.525	-13.0	73	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\
Data File : VN085914.D
Acq On : 10 Mar 2025 12:21
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Mar 11 01:35:39 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260
QLast Update : Wed Feb 19 03:43:32 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	51.080	-2.2	71	0.00

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



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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: PORT06

Lab Code: CHEM Case No.: Q1514 SAS No.: Q1514 SDG No.: Q1514

Instrument ID: MSVOA_N Calibration Date/Time: 03/11/2025 13:22

Lab File ID: VN085928.D Init. Calib. Date(s): 02/18/2025 02/18/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 11:09 14:18

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Dichlorodifluoromethane	0.680	0.770		13.23	20
Chloromethane	0.682	0.739	0.1	8.36	20
Vinyl Chloride	0.723	0.746		3.18	20
Bromomethane	0.462	0.424		-8.23	20
Chloroethane	0.479	0.422		-11.9	20
Trichlorofluoromethane	1.046	1.090		4.21	20
1,1,2-Trichlorotrifluoroethane	0.605	0.640		5.78	20
1,1-Dichloroethene	0.548	0.594		8.39	20
Acetone	0.205	0.227		10.73	20
Carbon Disulfide	1.625	1.805		11.08	20
Methyl tert-butyl Ether	1.629	1.855		13.87	20
Methyl Acetate	0.705	0.620		-12.06	20
Methylene Chloride	0.660	0.672		1.82	20
trans-1,2-Dichloroethene	0.590	0.643		8.98	20
1,1-Dichloroethane	1.106	1.180	0.1	6.69	20
Cyclohexane	0.926	1.033		11.56	20
2-Butanone	0.302	0.338		11.92	20
Carbon Tetrachloride	0.550	0.625		13.64	20
cis-1,2-Dichloroethene	0.685	0.715		4.38	20
Bromochloromethane	0.454	0.587		29.3	20
Chloroform	1.156	1.221		5.62	20
1,1,1-Trichloroethane	1.028	1.094		6.42	20
Methylcyclohexane	0.455	0.563		23.74	20
Benzene	1.484	1.669		12.47	20
1,2-Dichloroethane	0.483	0.541		12.01	20
Trichloroethene	0.364	0.369		1.37	20
1,2-Dichloropropane	0.358	0.406		13.41	20
Bromodichloromethane	0.541	0.594		9.8	20
4-Methyl-2-Pentanone	0.367	0.449		22.34	20
Toluene	0.870	1.065		22.41	20
t-1,3-Dichloropropene	0.500	0.605		21	20
cis-1,3-Dichloropropene	0.548	0.648		18.25	20
1,1,2-Trichloroethane	0.346	0.378		9.25	20
2-Hexanone	0.253	0.329		30.04	20
Dibromochloromethane	0.403	0.469		16.38	20
1,2-Dibromoethane	0.327	0.379		15.9	20
Tetrachloroethene	0.387	0.405		4.65	20
Chlorobenzene	1.145	1.212	0.3	5.85	20

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



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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: PORT06

Lab Code: CHEM Case No.: Q1514 SAS No.: Q1514 SDG No.: Q1514

Instrument ID: MSVOA_N Calibration Date/Time: 03/11/2025 13:22

Lab File ID: VN085928.D Init. Calib. Date(s): 02/18/2025 02/18/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 11:09 14:18

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Ethyl Benzene	1.794	2.160		20.4	20
m/p-Xylenes	0.682	0.856		25.51	20
o-Xylene	0.648	0.785		21.14	20
Styrene	1.059	1.373		29.65	20
Bromoform	0.306	0.350	0.1	14.38	20
Isopropylbenzene	3.425	3.638		6.19	20
1,1,2,2-Tetrachloroethane	1.179	1.097	0.3	-6.95	20
1,3-Dichlorobenzene	1.734	1.744		0.58	20
1,4-Dichlorobenzene	1.777	1.740		-2.08	20
1,2-Dichlorobenzene	1.667	1.670		0.18	20
1,2-Dibromo-3-Chloropropane	0.216	0.204		-5.56	20
1,2,4-Trichlorobenzene	0.794	0.815		2.64	20
1,2,3-Trichlorobenzene	0.798	0.788		-1.25	20
1,2-Dichloroethane-d4	0.648	0.719		10.96	20
Dibromofluoromethane	0.327	0.367		12.23	20
Toluene-d8	1.190	1.369		15.04	20
4-Bromofluorobenzene	0.392	0.506		29.08	20

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031125\
 Data File : VN085928.D
 Acq On : 11 Mar 2025 13:22
 Operator : JC\MD
 Sample : VSTDCCC050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDCCC050

Manual Integrations
 APPROVED

Reviewed By : John Carlone 03/12/2025
 Supervised By : Mahesh Dadoda 03/12/2025

Quant Time: Mar 12 01:17:51 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
 Quant Title : SW846 8260
 QLast Update : Wed Feb 19 03:43:32 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	8.224	168	193697	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	310218	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	283255	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	153775	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	139175	55.421	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 110.840%			
35) Dibromofluoromethane	8.165	113	113839	56.081	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 112.160%			
50) Toluene-d8	10.565	98	424670	57.501	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 115.000%#			
62) 4-Bromofluorobenzene	12.847	95	156821	64.447	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 128.900%#			
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	2.124	85	149052	56.573	ug/l	98
3) Chloromethane	2.359	50	143124	54.136	ug/l	100
4) Vinyl Chloride	2.512	62	144535	51.634	ug/l	100
5) Bromomethane	2.953	94	82079	45.857	ug/l	97
6) Chloroethane	3.118	64	81737	44.083	ug/l	99
7) Trichlorofluoromethane	3.494	101	211138	52.097	ug/l	96
8) Diethyl Ether	3.959	74	70014	53.392	ug/l	96
9) 1,1,2-Trichlorotrifluo...	4.365	101	124057	52.955	ug/l	99
10) Methyl Iodide	4.589	142	150351	52.065	ug/l	97
11) Tert butyl alcohol	5.524	59	74854	242.354	ug/l	100
12) 1,1-Dichloroethene	4.336	96	115016	54.147	ug/l	99
13) Acrolein	4.177	56	96839	211.429	ug/l	97
14) Allyl chloride	5.030	41	150912	54.113	ug/l	95
15) Acrylonitrile	5.712	53	276910	275.784	ug/l	100
16) Acetone	4.424	43	219737	276.540	ug/l	98
17) Carbon Disulfide	4.712	76	349600	55.533	ug/l	100
18) Methyl Acetate	5.018	43	120090	43.940	ug/l	98
19) Methyl tert-butyl Ether	5.788	73	359275	56.919	ug/l	98
20) Methylene Chloride	5.277	84	130189	50.948	ug/l	93
21) trans-1,2-Dichloroethene	5.783	96	124616	54.484	ug/l	93
22) Diisopropyl ether	6.671	45	362103	57.461	ug/l	96
23) Vinyl Acetate	6.600	43	1270226	294.389	ug/l	99
24) 1,1-Dichloroethane	6.565	63	228563	53.355	ug/l	99
25) 2-Butanone	7.482	43	327494	280.150	ug/l	98
26) 2,2-Dichloropropane	7.488	77	203466	53.414	ug/l	99
27) cis-1,2-Dichloroethene	7.482	96	138418	52.194	ug/l	96
28) Bromochloromethane	7.812	49	113720	64.588	ug/l	93
29) Tetrahydrofuran	7.835	42	220221	291.733	ug/l	98
30) Chloroform	7.965	83	236440	52.815	ug/l	100
31) Cyclohexane	8.253	56	200072	55.780	ug/l	94
32) 1,1,1-Trichloroethane	8.165	97	211810	53.194	ug/l	98
36) 1,1-Dichloropropene	8.365	75	165790	57.708	ug/l	99
37) Ethyl Acetate	7.559	43	134008	56.682	ug/l	99
38) Carbon Tetrachloride	8.359	117	193937	56.814	ug/l	94
39) Methylcyclohexane	9.600	83	174606	61.866	ug/l	96
40) Benzene	8.600	78	517879	56.244	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031125\
 Data File : VN085928.D
 Acq On : 11 Mar 2025 13:22
 Operator : JC\MD
 Sample : VSTDCCC050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VSTDCCC050

Manual Integrations
 APPROVED

Reviewed By : John Carlone 03/12/2025
 Supervised By : Mahesh Dadoda 03/12/2025

Quant Time: Mar 12 01:17:51 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
 Quant Title : SW846 8260
 QLast Update : Wed Feb 19 03:43:32 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.777	41	75757	59.941	ug/l	97
42) 1,2-Dichloroethane	8.671	62	167949	55.998	ug/l	100
43) Isopropyl Acetate	8.688	43	229745	55.431	ug/l	98
44) Trichloroethene	9.347	130	114319	50.566	ug/l	98
45) 1,2-Dichloropropane	9.618	63	125922	56.656	ug/l	97
46) Dibromomethane	9.706	93	87140	55.583	ug/l	99
47) Bromodichloromethane	9.882	83	184314	54.952	ug/l	100
48) Methyl methacrylate	9.676	41	106445	60.625	ug/l	98
49) 1,4-Dioxane	9.688	88	41048	1229.394	ug/l	98
51) 4-Methyl-2-Pentanone	10.441	43	696920	305.744	ug/l	100
52) Toluene	10.629	92	330401	61.214	ug/l	99
53) t-1,3-Dichloropropene	10.835	75	187593	60.485	ug/l	100
54) cis-1,3-Dichloropropene	10.312	75	200954	59.087	ug/l	97
55) 1,1,2-Trichloroethane	11.012	97	117216	54.621	ug/l	95
56) Ethyl methacrylate	10.870	69	177513	56.615	ug/l	99
57) 1,3-Dichloropropane	11.159	76	203447	56.791	ug/l	99
58) 2-Chloroethyl Vinyl ether	10.159	63	282710	238.868	ug/l	100
59) 2-Hexanone	11.194	43	510866	325.783	ug/l	99
60) Dibromochloromethane	11.359	129	145539	58.241	ug/l	98
61) 1,2-Dibromoethane	11.465	107	117538	57.968	ug/l	99
64) Tetrachloroethene	11.100	164	114845	52.336	ug/l	95
65) Chlorobenzene	11.888	112	343241	52.896	ug/l	98
66) 1,1,1,2-Tetrachloroethane	11.959	131	125659	53.877	ug/l	99
67) Ethyl Benzene	11.959	91	611796	60.189	ug/l	99
68) m/p-Xylenes	12.070	106	484997	125.614	ug/l	100
69) o-Xylene	12.394	106	222427	60.624	ug/l	97
70) Styrene	12.406	104	388800	56.209	ug/l	98
71) Bromoform	12.576	173	99094	57.178	ug/l #	96
73) Isopropylbenzene	12.694	105	559356	53.095	ug/l	99
74) N-amyl acetate	12.494	43	199571	53.719	ug/l	99
75) 1,1,2,2-Tetrachloroethane	12.935	83	168671	46.527	ug/l	100
76) 1,2,3-Trichloropropane	12.988	75	178136m	52.150	ug/l	
77) Bromobenzene	12.976	156	143525	50.426	ug/l	98
78) n-propylbenzene	13.035	91	682397	56.559	ug/l	99
79) 2-Chlorotoluene	13.123	91	424345	52.640	ug/l	99
80) 1,3,5-Trimethylbenzene	13.170	105	489718	57.065	ug/l	99
81) trans-1,4-Dichloro-2-b...	12.735	75	69980	59.775	ug/l	87
82) 4-Chlorotoluene	13.217	91	436573	54.629	ug/l	100
83) tert-Butylbenzene	13.435	119	392056	54.327	ug/l	96
84) 1,2,4-Trimethylbenzene	13.476	105	505780	59.570	ug/l	99
85) sec-Butylbenzene	13.611	105	567243	55.632	ug/l	100
86) p-Isopropyltoluene	13.729	119	483401	51.591	ug/l	99
87) 1,3-Dichlorobenzene	13.729	146	268224	50.299	ug/l	100
88) 1,4-Dichlorobenzene	13.811	146	267568	48.956	ug/l	100
89) n-Butylbenzene	14.053	91	404902	55.932	ug/l	98
90) Hexachloroethane	14.335	117	93901	48.627	ug/l	99
91) 1,2-Dichlorobenzene	14.106	146	256774	50.074	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.717	75	31337	47.074	ug/l	97
93) 1,2,4-Trichlorobenzene	15.388	180	125292	51.276	ug/l	98
94) Hexachlorobutadiene	15.500	225	67213	45.261	ug/l	99
95) Naphthalene	15.641	128	352544	52.553	ug/l	100
96) 1,2,3-Trichlorobenzene	15.841	180	121186	49.402	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031125\
Data File : VN085928.D
Acq On : 11 Mar 2025 13:22
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

Reviewed By :John Carlone 03/12/2025
Supervised By :Mahesh Dadoda 03/12/2025

Quant Time: Mar 12 01:17:51 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260
QLast Update : Wed Feb 19 03:43:32 2025
Response via : Initial Calibration

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

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

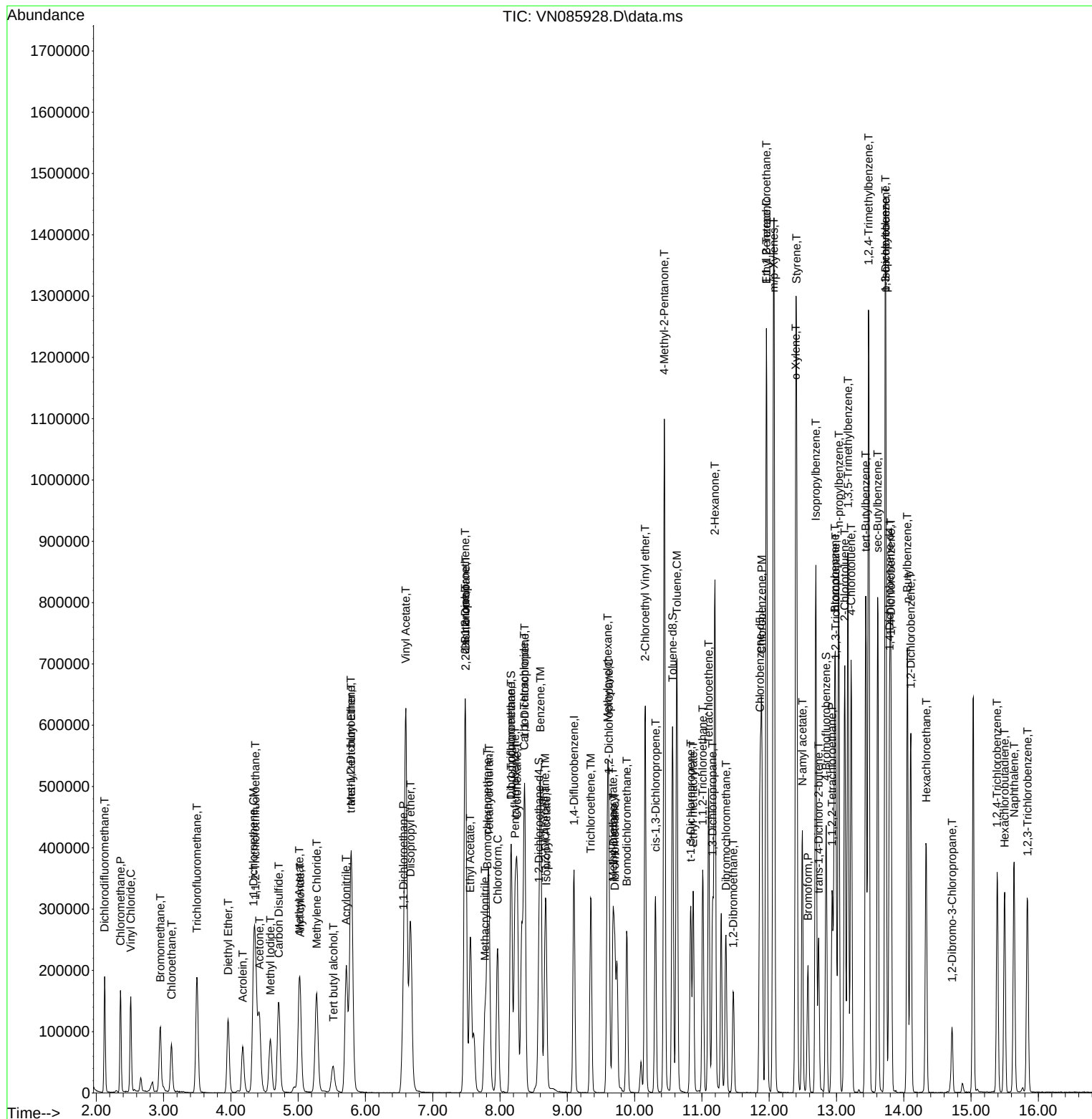
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Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031125\  
Data File : VN085928.D  
Acq On    : 11 Mar 2025  13:22  
Operator  : JC\MD  
Sample    : VSTDCCC050  
Misc      : 5.0mL/MSVOA_N/WATER  
ALS Vial  : 3      Sample Multiplier: 1
```

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations

Reviewed By :John Carlone 03/12/2025
Supervised By :Mahesh Dadoda 03/12/2025

Quant Time: Mar 12 01:17:51 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260
QLast Update : Wed Feb 19 03:43:32 2025
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031125\
 Data File : VN085928.D
 Acq On : 11 Mar 2025 13:22
 Operator : JC\MD
 Sample : VSTDCCC050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_N
 LabSampleId :
 VSTDCCC050

Quant Time: Mar 12 01:17:51 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
 Quant Title : SW846 8260
 QLast Update : Wed Feb 19 03:43:32 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	60	0.00
2 T	Dichlorodifluoromethane	0.680	0.770	-13.2	69	0.00
3 P	Chloromethane	0.682	0.739	-8.4	71	0.00
4 C	Vinyl Chloride	0.723	0.746	-3.2#	66	0.00
5 T	Bromomethane	0.462	0.424	8.2	60	0.00
6 T	Chloroethane	0.479	0.422	11.9	61	0.00
7 T	Trichlorofluoromethane	1.046	1.090	-4.2	68	0.00
8 T	Diethyl Ether	0.339	0.361	-6.5	66	0.00
9 T	1,1,2-Trichlorotrifluoroeth	0.605	0.640	-5.8	68	0.00
10 T	Methyl Iodide	0.745	0.776	-4.2	65	0.00
11 T	Tert butyl alcohol	0.080	0.077	3.8	59	0.02
12 CM	1,1-Dichloroethene	0.548	0.594	-8.4#	68	0.00
13 T	Acrolein	0.118	0.100	15.3	47#	0.00
14 T	Allyl chloride	0.720	0.779	-8.2	68	0.01
15 T	Acrylonitrile	0.259	0.286	-10.4	70	0.00
16 T	Acetone	0.205	0.227	-10.7	74	0.00
17 T	Carbon Disulfide	1.625	1.805	-11.1	74	0.00
18 T	Methyl Acetate	0.705	0.620	12.1	60	0.00
19 T	Methyl tert-butyl Ether	1.629	1.855	-13.9	67	0.00
20 T	Methylene Chloride	0.660	0.672	-1.8	68	0.00
21 T	trans-1,2-Dichloroethene	0.590	0.643	-9.0	70	0.00
22 T	Diisopropyl ether	1.627	1.869	-14.9	68	0.00
23 T	Vinyl Acetate	1.114	1.312	-17.8	70	0.00
24 P	1,1-Dichloroethane	1.106	1.180	-6.7	69	0.00
25 T	2-Butanone	0.302	0.338	-11.9	69	0.01
26 T	2,2-Dichloropropane	0.983	1.050	-6.8	67	0.00
27 T	cis-1,2-Dichloroethene	0.685	0.715	-4.4	65	0.00
28 T	Bromochloromethane	0.454	0.587	-29.3#	79	0.00
29 T	Tetrahydrofuran	0.195	0.227	-16.4	70	0.00
30 C	Chloroform	1.156	1.221	-5.6#	69	0.00
31 T	Cyclohexane	0.926	1.033	-11.6	72	0.00
32 T	1,1,1-Trichloroethane	1.028	1.094	-6.4	68	0.00
33 S	1,2-Dichloroethane-d4	0.648	0.719	-11.0	70	0.00
34 I	1,4-Difluorobenzene	1.000	1.000	0.0	59	0.00
35 S	Dibromofluoromethane	0.327	0.367	-12.2	68	0.00
36 T	1,1-Dichloropropene	0.463	0.534	-15.3	68	0.00
37 T	Ethyl Acetate	0.381	0.432	-13.4	68	0.00
38 T	Carbon Tetrachloride	0.550	0.625	-13.6	70	0.00
39 T	Methylcyclohexane	0.455	0.563	-23.7	67	0.00
40 TM	Benzene	1.484	1.669	-12.5	68	0.00
41 T	Methacrylonitrile	0.204	0.244	-19.6	67	0.01
42 TM	1,2-Dichloroethane	0.483	0.541	-12.0	70	0.00
43 T	Isopropyl Acetate	0.807	0.741	8.2	68	0.00
44 TM	Trichloroethene	0.364	0.369	-1.4	64	0.00
45 C	1,2-Dichloropropane	0.358	0.406	-13.4#	69	0.00
46 T	Dibromomethane	0.253	0.281	-11.1	68	0.00
47 T	Bromodichloromethane	0.541	0.594	-9.8	68	0.00
48 T	Methyl methacrylate	0.283	0.343	-21.2	67	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031125\
 Data File : VN085928.D
 Acq On : 11 Mar 2025 13:22
 Operator : JC\MD
 Sample : VSTDCCC050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_N
 LabSampleId :
 VSTDCCC050

Quant Time: Mar 12 01:17:51 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
 Quant Title : SW846 8260
 QLast Update : Wed Feb 19 03:43:32 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	0.005	0.007	-40.0#	68	0.00
50 S	Toluene-d8	1.190	1.369	-15.0	67	0.00
51 T	4-Methyl-2-Pentanone	0.367	0.449	-22.3	70	0.00
52 CM	Toluene	0.870	1.065	-22.4#	70	0.00
53 T	t-1,3-Dichloropropene	0.500	0.605	-21.0	68	0.00
54 T	cis-1,3-Dichloropropene	0.548	0.648	-18.2	67	0.00
55 T	1,1,2-Trichloroethane	0.346	0.378	-9.2	67	0.00
56 T	Ethyl methacrylate	0.434	0.572	-31.8#	68	0.00
57 T	1,3-Dichloropropane	0.577	0.656	-13.7	68	0.00
58 T	2-Chloroethyl Vinyl ether	0.195	0.182	6.7	62	0.00
59 T	2-Hexanone	0.253	0.329	-30.0#	71	0.00
60 T	Dibromochloromethane	0.403	0.469	-16.4	69	0.00
61 T	1,2-Dibromoethane	0.327	0.379	-15.9	69	0.00
62 S	4-Bromofluorobenzene	0.392	0.506	-29.1#	71	0.00
63 I	Chlorobenzene-d5	1.000	1.000	0.0	61	0.00
64 T	Tetrachloroethene	0.387	0.405	-4.7	69	0.00
65 PM	Chlorobenzene	1.145	1.212	-5.9	67	0.00
66 T	1,1,1,2-Tetrachloroethane	0.412	0.444	-7.8	69	0.00
67 C	Ethyl Benzene	1.794	2.160	-20.4#	70	0.00
68 T	m/p-Xylenes	0.682	0.856	-25.5#	71	0.00
69 T	o-Xylene	0.648	0.785	-21.1	68	0.00
70 T	Styrene	1.059	1.373	-29.7#	70	0.00
71 P	Bromoform	0.306	0.350	-14.4	71	0.00
72 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	68	0.00
73 T	Isopropylbenzene	3.425	3.637	-6.2	68	0.00
74 T	N-amyl acetate	1.208	1.298	-7.5	71	0.00
75 P	1,1,2,2-Tetrachloroethane	1.179	1.097	7.0	70	0.00
76 T	1,2,3-Trichloropropane	1.111	1.158	-4.2	83	0.00
77 T	Bromobenzene	0.925	0.933	-0.9	70	0.00
78 T	n-propylbenzene	3.923	4.438	-13.1	70	0.00
79 T	2-Chlorotoluene	2.621	2.760	-5.3	71	0.00
80 T	1,3,5-Trimethylbenzene	2.790	3.185	-14.2	70	0.00
81 T	trans-1,4-Dichloro-2-butene	0.381	0.455	-19.4	78	0.00
82 T	4-Chlorotoluene	2.598	2.839	-9.3	72	0.00
83 T	tert-Butylbenzene	2.346	2.550	-8.7	67	0.00
84 T	1,2,4-Trimethylbenzene	2.761	3.289	-19.1	72	0.00
85 T	sec-Butylbenzene	3.315	3.689	-11.3	68	0.00
86 T	p-Isopropyltoluene	2.665	3.144	-18.0	70	0.00
87 T	1,3-Dichlorobenzene	1.734	1.744	-0.6	72	0.00
88 T	1,4-Dichlorobenzene	1.777	1.740	2.1	71	0.00
89 T	n-Butylbenzene	2.354	2.633	-11.9	70	0.00
90 T	Hexachloroethane	0.628	0.611	2.7	70	0.00
91 T	1,2-Dichlorobenzene	1.667	1.670	-0.2	72	0.00
92 T	1,2-Dibromo-3-Chloropropane	0.216	0.204	5.6	71	0.00
93 T	1,2,4-Trichlorobenzene	0.794	0.815	-2.6	69	0.00
94 T	Hexachlorobutadiene	0.483	0.437	9.5	70	0.00
95 T	Naphthalene	2.181	2.293	-5.1	67	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031125\
Data File : VN085928.D
Acq On : 11 Mar 2025 13:22
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Mar 12 01:17:51 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260
QLast Update : Wed Feb 19 03:43:32 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	0.798	0.788	1.3	67	0.00

(#) = Out of Range

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031125\
 Data File : VN085928.D
 Acq On : 11 Mar 2025 13:22
 Operator : JC\MD
 Sample : VSTDCCC050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_N
 LabSampleId :
 VSTDCCC050

Quant Time: Mar 12 01:17:51 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
 Quant Title : SW846 8260
 QLast Update : Wed Feb 19 03:43:32 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	60	0.00
2 T	Dichlorodifluoromethane	50.000	56.573	-13.1	69	0.00
3 P	Chloromethane	50.000	54.136	-8.3	71	0.00
4 C	Vinyl Chloride	50.000	51.634	-3.3#	66	0.00
5 T	Bromomethane	50.000	45.857	8.3	60	0.00
6 T	Chloroethane	50.000	44.083	11.8	61	0.00
7 T	Trichlorofluoromethane	50.000	52.097	-4.2	68	0.00
8 T	Diethyl Ether	50.000	53.392	-6.8	66	0.00
9 T	1,1,2-Trichlorotrifluoroeth	50.000	52.955	-5.9	68	0.00
10 T	Methyl Iodide	50.000	52.065	-4.1	65	0.00
11 T	Tert butyl alcohol	250.000	242.354	3.1	59	0.02
12 CM	1,1-Dichloroethene	50.000	54.147	-8.3#	68	0.00
13 T	Acrolein	250.000	211.429	15.4	47	0.00
14 T	Allyl chloride	50.000	54.113	-8.2	68	0.01
15 T	Acrylonitrile	250.000	275.784	-10.3	70	0.00
16 T	Acetone	250.000	276.540	-10.6	74	0.00
17 T	Carbon Disulfide	50.000	55.533	-11.1	74	0.00
18 T	Methyl Acetate	50.000	43.940	12.1	60	0.00
19 T	Methyl tert-butyl Ether	50.000	56.919	-13.8	67	0.00
20 T	Methylene Chloride	50.000	50.948	-1.9	68	0.00
21 T	trans-1,2-Dichloroethene	50.000	54.484	-9.0	70	0.00
22 T	Diisopropyl ether	50.000	57.461	-14.9	68	0.00
23 T	Vinyl Acetate	250.000	294.389	-17.8	70	0.00
24 P	1,1-Dichloroethane	50.000	53.355	-6.7	69	0.00
25 T	2-Butanone	250.000	280.150	-12.1	69	0.01
26 T	2,2-Dichloropropane	50.000	53.414	-6.8	67	0.00
27 T	cis-1,2-Dichloroethene	50.000	52.194	-4.4	65	0.00
28 T	Bromochloromethane	50.000	64.588	-29.2#	79	0.00
29 T	Tetrahydrofuran	250.000	291.733	-16.7	70	0.00
30 C	Chloroform	50.000	52.815	-5.6#	69	0.00
31 T	Cyclohexane	50.000	55.780	-11.6	72	0.00
32 T	1,1,1-Trichloroethane	50.000	53.194	-6.4	68	0.00
33 S	1,2-Dichloroethane-d4	50.000	55.421	-10.8	70	0.00
34 I	1,4-Difluorobenzene	50.000	50.000	0.0	59	0.00
35 S	Dibromofluoromethane	50.000	56.081	-12.2	68	0.00
36 T	1,1-Dichloropropene	50.000	57.708	-15.4	68	0.00
37 T	Ethyl Acetate	50.000	56.682	-13.4	68	0.00
38 T	Carbon Tetrachloride	50.000	56.814	-13.6	70	0.00
39 T	Methylcyclohexane	50.000	61.866	-23.7	67	0.00
40 TM	Benzene	50.000	56.244	-12.5	68	0.00
41 T	Methacrylonitrile	50.000	59.941	-19.9	67	0.01
42 TM	1,2-Dichloroethane	50.000	55.998	-12.0	70	0.00
43 T	Isopropyl Acetate	50.000	55.431	-10.9	68	0.00
44 TM	Trichloroethene	50.000	50.566	-1.1	64	0.00
45 C	1,2-Dichloropropane	50.000	56.656	-13.3#	69	0.00
46 T	Dibromomethane	50.000	55.583	-11.2	68	0.00
47 T	Bromodichloromethane	50.000	54.952	-9.9	68	0.00
48 T	Methyl methacrylate	50.000	60.625	-21.3	67	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031125\
 Data File : VN085928.D
 Acq On : 11 Mar 2025 13:22
 Operator : JC\MD
 Sample : VSTDCCC050
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_N
 LabSampleId :
 VSTDCCC050

Quant Time: Mar 12 01:17:51 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
 Quant Title : SW846 8260
 QLast Update : Wed Feb 19 03:43:32 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	1229.394	-22.9	68	0.00
50 S	Toluene-d8	50.000	57.501	-15.0	67	0.00
51 T	4-Methyl-2-Pentanone	250.000	305.744	-22.3	70	0.00
52 CM	Toluene	50.000	61.214	-22.4#	70	0.00
53 T	t-1,3-Dichloropropene	50.000	60.485	-21.0	68	0.00
54 T	cis-1,3-Dichloropropene	50.000	59.087	-18.2	67	0.00
55 T	1,1,2-Trichloroethane	50.000	54.621	-9.2	67	0.00
56 T	Ethyl methacrylate	50.000	56.615	-13.2	68	0.00
57 T	1,3-Dichloropropane	50.000	56.791	-13.6	68	0.00
58 T	2-Chloroethyl Vinyl ether	250.000	238.868	4.5	62	0.00
59 T	2-Hexanone	250.000	325.783	-30.3#	71	0.00
60 T	Dibromochloromethane	50.000	58.241	-16.5	69	0.00
61 T	1,2-Dibromoethane	50.000	57.968	-15.9	69	0.00
62 S	4-Bromofluorobenzene	50.000	64.447	-28.9#	71	0.00
63 I	Chlorobenzene-d5	50.000	50.000	0.0	61	0.00
64 T	Tetrachloroethene	50.000	52.336	-4.7	69	0.00
65 PM	Chlorobenzene	50.000	52.896	-5.8	67	0.00
66 T	1,1,1,2-Tetrachloroethane	50.000	53.877	-7.8	69	0.00
67 C	Ethyl Benzene	50.000	60.189	-20.4#	70	0.00
68 T	m/p-Xylenes	100.000	125.614	-25.6#	71	0.00
69 T	o-Xylene	50.000	60.624	-21.2	68	0.00
70 T	Styrene	50.000	56.209	-12.4	70	0.00
71 P	Bromoform	50.000	57.178	-14.4	71	0.00
72 I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	68	0.00
73 T	Isopropylbenzene	50.000	53.095	-6.2	68	0.00
74 T	N-amyl acetate	50.000	53.719	-7.4	71	0.00
75 P	1,1,2,2-Tetrachloroethane	50.000	46.527	6.9	70	0.00
76 T	1,2,3-Trichloropropane	50.000	52.150	-4.3	83	0.00
77 T	Bromobenzene	50.000	50.426	-0.9	70	0.00
78 T	n-propylbenzene	50.000	56.559	-13.1	70	0.00
79 T	2-Chlorotoluene	50.000	52.640	-5.3	71	0.00
80 T	1,3,5-Trimethylbenzene	50.000	57.065	-14.1	70	0.00
81 T	trans-1,4-Dichloro-2-butene	50.000	59.775	-19.5	78	0.00
82 T	4-Chlorotoluene	50.000	54.629	-9.3	72	0.00
83 T	tert-Butylbenzene	50.000	54.327	-8.7	67	0.00
84 T	1,2,4-Trimethylbenzene	50.000	59.570	-19.1	72	0.00
85 T	sec-Butylbenzene	50.000	55.632	-11.3	68	0.00
86 T	p-Isopropyltoluene	50.000	51.591	-3.2	70	0.00
87 T	1,3-Dichlorobenzene	50.000	50.299	-0.6	72	0.00
88 T	1,4-Dichlorobenzene	50.000	48.956	2.1	71	0.00
89 T	n-Butylbenzene	50.000	55.932	-11.9	70	0.00
90 T	Hexachloroethane	50.000	48.627	2.7	70	0.00
91 T	1,2-Dichlorobenzene	50.000	50.074	-0.1	72	0.00
92 T	1,2-Dibromo-3-Chloropropane	50.000	47.074	5.9	71	0.00
93 T	1,2,4-Trichlorobenzene	50.000	51.276	-2.6	69	0.00
94 T	Hexachlorobutadiene	50.000	45.261	9.5	70	0.00
95 T	Naphthalene	50.000	52.553	-5.1	67	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031125\
Data File : VN085928.D
Acq On : 11 Mar 2025 13:22
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Mar 12 01:17:51 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260
QLast Update : Wed Feb 19 03:43:32 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	49.402	1.2	67	0.00

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



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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: PORT06

Lab Code: CHEM Case No.: Q1514 SAS No.: Q1514 SDG No.: Q1514

Instrument ID: MSVOA_Y Calibration Date/Time: 03/11/2025 09:42

Lab File ID: VY021474.D Init. Calib. Date(s): 03/04/2025 03/04/2025

Heated Purge: (Y/N) Y Init. Calib. Time(s): 09:46 12:15

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Dichlorodifluoromethane	0.459	0.404		-11.98	20
Chloromethane	0.647	0.619	0.1	-4.33	20
Vinyl Chloride	0.707	0.717		1.41	20
Bromomethane	0.511	0.467		-8.61	20
Chloroethane	0.467	0.485		3.85	20
Trichlorofluoromethane	0.987	0.986		-0.1	20
1,1,2-Trichlorotrifluoroethane	0.563	0.527		-6.39	20
1,1-Dichloroethene	0.514	0.478		-7	20
Acetone	0.115	0.100		-13.04	20
Carbon Disulfide	1.610	1.485		-7.76	20
Methyl tert-butyl Ether	1.302	1.276		-2	20
Methyl Acetate	0.256	0.288		12.5	20
Methylene Chloride	0.605	0.529		-12.56	20
trans-1,2-Dichloroethene	0.575	0.544		-5.39	20
1,1-Dichloroethane	1.056	0.992	0.1	-6.06	20
Cyclohexane	0.990	0.875		-11.62	20
2-Butanone	0.159	0.150		-5.66	20
Carbon Tetrachloride	0.592	0.586		-1.01	20
cis-1,2-Dichloroethene	0.653	0.626		-4.14	20
Bromochloromethane	0.443	0.423		-4.51	20
Chloroform	1.096	1.037		-5.38	20
1,1,1-Trichloroethane	1.004	0.951		-5.28	20
Methylcyclohexane	0.631	0.621		-1.59	20
Benzene	1.515	1.491		-1.58	20
1,2-Dichloroethane	0.424	0.423		-0.24	20
Trichloroethene	0.383	0.375		-2.09	20
1,2-Dichloropropane	0.361	0.356		-1.38	20
Bromodichloromethane	0.533	0.534		0.19	20
4-Methyl-2-Pentanone	0.228	0.243		6.58	20
Toluene	0.955	0.954		-0.1	20
t-1,3-Dichloropropene	0.470	0.485		3.19	20
cis-1,3-Dichloropropene	0.557	0.562		0.9	20
1,1,2-Trichloroethane	0.263	0.268		1.9	20
2-Hexanone	0.151	0.166		9.93	20
Dibromochloromethane	0.360	0.368		2.22	20
1,2-Dibromoethane	0.248	0.253		2.02	20
Tetrachloroethene	0.407	0.400		-1.72	20
Chlorobenzene	1.181	1.133	0.3	-4.06	20

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



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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: PORT06

Lab Code: CHEM Case No.: Q1514 SAS No.: Q1514 SDG No.: Q1514

Instrument ID: MSVOA_Y Calibration Date/Time: 03/11/2025 09:42

Lab File ID: VY021474.D Init. Calib. Date(s): 03/04/2025 03/04/2025

Heated Purge: (Y/N) Y Init. Calib. Time(s): 09:46 12:15

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Ethyl Benzene	2.072	2.033		-1.88	20
m/p-Xylenes	0.787	0.775		-1.52	20
o-Xylene	0.725	0.727		0.28	20
Styrene	1.203	1.227		2	20
Bromoform	0.233	0.241	0.1	3.43	20
Isopropylbenzene	3.939	3.795		-3.66	20
1,1,2,2-Tetrachloroethane	0.695	0.661	0.3	-4.89	20
1,3-Dichlorobenzene	1.834	1.747		-4.74	20
1,4-Dichlorobenzene	1.794	1.723		-3.96	20
1,2-Dichlorobenzene	1.572	1.535		-2.35	20
1,2-Dibromo-3-Chloropropane	0.104	0.105		0.96	20
1,2,4-Trichlorobenzene	0.859	0.916		6.64	20
1,2,3-Trichlorobenzene	0.722	0.771		6.79	20
1,2-Dichloroethane-d4	0.528	0.407		-22.92	20
Dibromofluoromethane	0.329	0.262		-20.36	20
Toluene-d8	1.244	0.971		-21.94	20
4-Bromofluorobenzene	0.423	0.342		-19.15	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_Y\Data\VY031125\
 Data File : VY021474.D
 Acq On : 11 Mar 2025 09:42
 Operator : SY/MD
 Sample : VSTDCCC050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDCCC050

Manual Integrations
 APPROVED

Reviewed By :Romaben Patel 03/12/2025
 Supervised By :Mahesh Dadoda 03/12/2025

Quant Time: Mar 12 01:22:40 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 12:42:45 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	7.707	168	243763	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	363423	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	331214	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.346	152	170654	50.000	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	8.061	65	99275	38.532	ug/l	0.00
Spiked Amount	50.000	Range	50 - 163	Recovery	=	77.060%
35) Dibromofluoromethane	7.634	113	95332	39.907	ug/l	0.00
Spiked Amount	50.000	Range	54 - 147	Recovery	=	79.820%
50) Toluene-d8	10.109	98	352803	39.006	ug/l	0.00
Spiked Amount	50.000	Range	58 - 134	Recovery	=	78.020%
62) 4-Bromofluorobenzene	12.408	95	124309	40.403	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	=	80.800%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.867	85	98364	43.973	ug/l	97
3) Chloromethane	2.068	50	150856	47.834	ug/l	98
4) Vinyl Chloride	2.202	62	174765	50.709	ug/l	100
5) Bromomethane	2.592	94	113739	45.662	ug/l	95
6) Chloroethane	2.733	64	118189	51.893	ug/l	95
7) Trichlorofluoromethane	3.056	101	240284	49.950	ug/l	99
8) Diethyl Ether	3.452	74	62964	47.231	ug/l	99
9) 1,1,2-Trichlorotrifluo...	3.818	101	128513	46.792	ug/l	99
10) Methyl Iodide	4.007	142	146826	52.592	ug/l	99
11) Tert butyl alcohol	4.866	59	40478	240.812	ug/l	99
12) 1,1-Dichloroethene	3.787	96	116565	46.552	ug/l	97
13) Acrolein	3.653	56	4875	37.200	ug/l	85
14) Allyl chloride	4.385	41	190284	47.024	ug/l	100
15) Acrylonitrile	5.055	53	140620	247.791	ug/l	99
16) Acetone	3.873	43	121409	216.052	ug/l	95
17) Carbon Disulfide	4.104	76	362072	46.140	ug/l	99
18) Methyl Acetate	4.385	43	70320	56.398	ug/l	99
19) Methyl tert-butyl Ether	5.116	73	310956	48.996	ug/l	99
20) Methylene Chloride	4.616	84	128918	43.705	ug/l	94
21) trans-1,2-Dichloroethene	5.110	96	132644	47.301	ug/l	93
22) Diisopropyl ether	6.019	45	418935	48.039	ug/l	98
23) Vinyl Acetate	5.958	43	1222965	245.726	ug/l	99
24) 1,1-Dichloroethane	5.915	63	241734	46.967	ug/l	99
25) 2-Butanone	6.890	43	182977	235.390	ug/l	100
26) 2,2-Dichloropropane	6.884	77	220877	46.640	ug/l	99
27) cis-1,2-Dichloroethene	6.890	96	152664	47.921	ug/l	98
28) Bromochloromethane	7.244	49	103206	47.829	ug/l	99
29) Tetrahydrofuran	7.262	42	121085	252.319	ug/l	99
30) Chloroform	7.421	83	252820	47.304	ug/l	99
31) Cyclohexane	7.701	56	213401	44.226	ug/l	99
32) 1,1,1-Trichloroethane	7.616	97	231730	47.353	ug/l	100
36) 1,1-Dichloropropene	7.835	75	182671	48.852	ug/l	99
37) Ethyl Acetate	6.982	43	83257	50.376	ug/l	99
38) Carbon Tetrachloride	7.817	117	212962	49.521	ug/l	99
39) Methylcyclohexane	9.109	83	225796	49.229	ug/l	99
40) Benzene	8.079	78	541879	49.194	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
 Data File : VY021474.D
 Acq On : 11 Mar 2025 09:42
 Operator : SY/MD
 Sample : VSTDCCC050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 2 Sample Multiplier: 1

Instrument :

MSVOA_Y

ClientSampleId :

VSTDCCC050

Manual Integrations

APPROVED

Reviewed By :Romaben Patel 03/12/2025

Supervised By :Mahesh Dadoda 03/12/2025

Quant Time: Mar 12 01:22:40 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M

Quant Title : SW846 8260

QLast Update : Wed Mar 05 12:42:45 2025

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.220	41	50642	56.275	ug/l #	89
42) 1,2-Dichloroethane	8.158	62	153676	49.870	ug/l	99
43) Isopropyl Acetate	8.195	43	158523	49.410	ug/l	99
44) Trichloroethene	8.866	130	136201	48.932	ug/l	97
45) 1,2-Dichloropropane	9.140	63	129356	49.342	ug/l	97
46) Dibromomethane	9.231	93	74006	50.735	ug/l	99
47) Bromodichloromethane	9.420	83	194205	50.133	ug/l	100
48) Methyl methacrylate	9.219	41	77638	52.699	ug/l	99
49) 1,4-Dioxane	9.231	88	16834	1175.771	ug/l	94
51) 4-Methyl-2-Pentanone	9.999	43	442138	267.090	ug/l	100
52) Toluene	10.170	92	346735	49.929	ug/l	100
53) t-1,3-Dichloropropene	10.396	75	176129	51.607	ug/l	97
54) cis-1,3-Dichloropropene	9.859	75	204113	50.373	ug/l	97
55) 1,1,2-Trichloroethane	10.573	97	97475	51.085	ug/l	97
56) Ethyl methacrylate	10.438	69	131351	53.976	ug/l	98
57) 1,3-Dichloropropane	10.719	76	168838	51.054	ug/l	99
58) 2-Chloroethyl Vinyl ether	9.713	63	311957	277.699	ug/l	99
59) 2-Hexanone	10.762	43	300779	274.788	ug/l	100
60) Dibromochloromethane	10.914	129	133595	51.071	ug/l	99
61) 1,2-Dibromoethane	11.018	107	92057	51.119	ug/l	99
64) Tetrachloroethene	10.646	164	132468	49.184	ug/l	99
65) Chlorobenzene	11.444	112	375353	47.990	ug/l	99
66) 1,1,1,2-Tetrachloroethane	11.518	131	135325	48.937	ug/l	99
67) Ethyl Benzene	11.518	91	673462	49.057	ug/l	99
68) m/p-Xylenes	11.633	106	513472	98.518	ug/l	98
69) o-Xylene	11.956	106	240732	50.116	ug/l	99
70) Styrene	11.969	104	406424	51.002	ug/l	100
71) Bromoform	12.133	173	79790	51.617	ug/l #	100
73) Isopropylbenzene	12.255	105	647673	48.180	ug/l	100
74) N-amyl acetate	12.072	43	147238	50.434	ug/l	99
75) 1,1,2,2-Tetrachloroethane	12.505	83	112883	47.586	ug/l	98
76) 1,2,3-Trichloropropane	12.560	75	87128m	50.666	ug/l	
77) Bromobenzene	12.536	156	151714	48.241	ug/l	97
78) n-propylbenzene	12.597	91	790513	48.420	ug/l	100
79) 2-Chlorotoluene	12.682	91	444946	47.664	ug/l	100
80) 1,3,5-Trimethylbenzene	12.737	105	536685	49.127	ug/l	99
81) trans-1,4-Dichloro-2-b...	12.304	75	35896	47.453	ug/l	99
82) 4-Chlorotoluene	12.780	91	457984	47.377	ug/l	99
83) tert-Butylbenzene	12.999	119	474686	48.707	ug/l	99
84) 1,2,4-Trimethylbenzene	13.042	105	533222	49.160	ug/l	100
85) sec-Butylbenzene	13.176	105	707877	48.819	ug/l	99
86) p-Isopropyltoluene	13.292	119	593071	49.646	ug/l	99
87) 1,3-Dichlorobenzene	13.292	146	298049	47.610	ug/l	99
88) 1,4-Dichlorobenzene	13.371	146	293985	48.018	ug/l	98
89) n-Butylbenzene	13.621	91	552449	50.082	ug/l	99
90) Hexachloroethane	13.883	117	120490	47.280	ug/l	100
91) 1,2-Dichlorobenzene	13.663	146	261963	48.823	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.279	75	17946	50.503	ug/l	96
93) 1,2,4-Trichlorobenzene	14.925	180	156265	53.321	ug/l	99
94) Hexachlorobutadiene	15.029	225	93232	50.750	ug/l	99
95) Naphthalene	15.145	128	266062	53.275	ug/l	100
96) 1,2,3-Trichlorobenzene	15.334	180	131614	53.397	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
Data File : VY021474.D
Acq On : 11 Mar 2025 09:42
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

Reviewed By :Romaben Patel 03/12/2025
Supervised By :Mahesh Dadoda 03/12/2025

Quant Time: Mar 12 01:22:40 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 12:42:45 2025
Response via : Initial Calibration

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

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

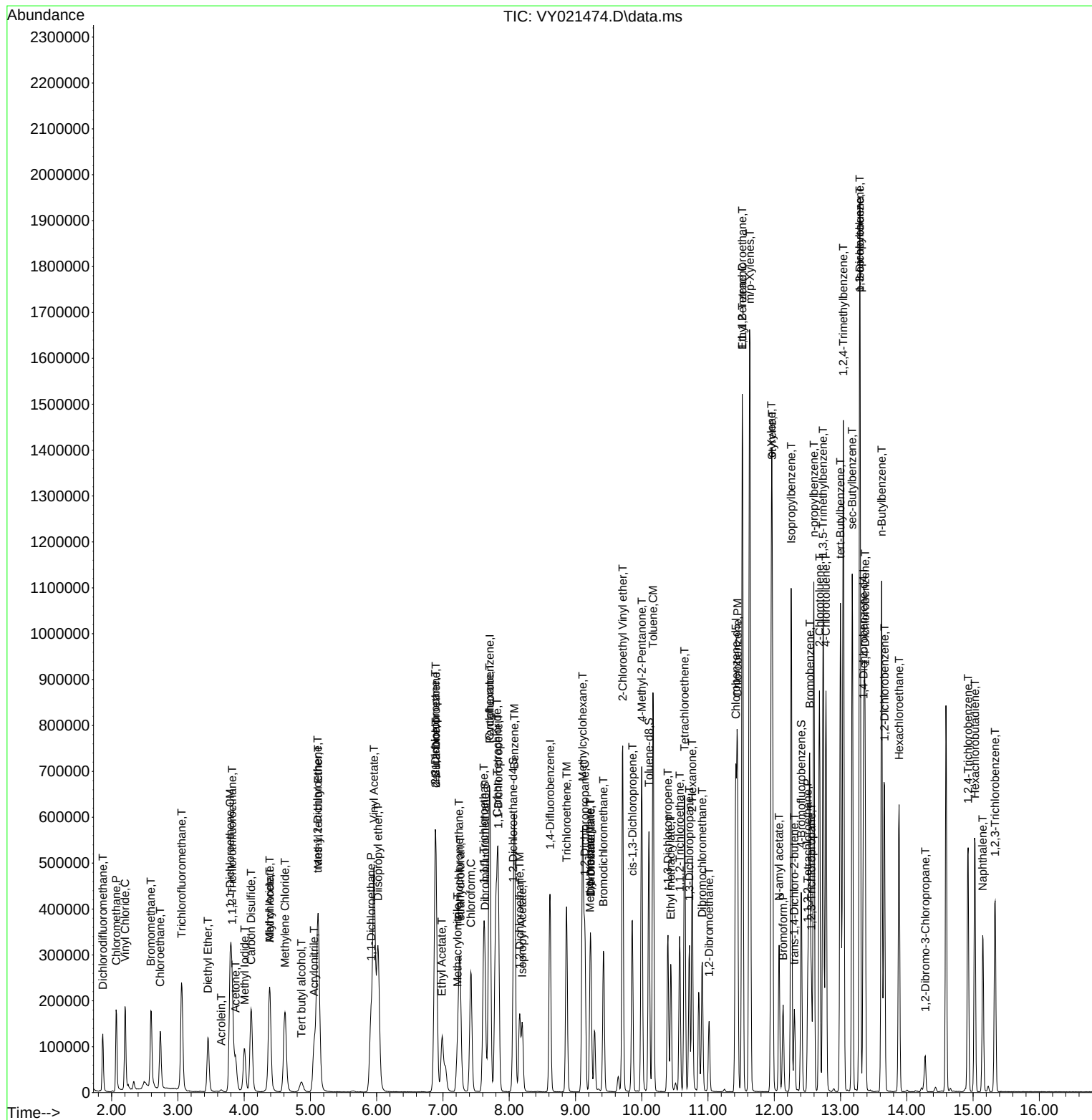
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
 Data File : VY021474.D
 Acq On : 11 Mar 2025 09:42
 Operator : SY/MD
 Sample : VSTDCCC050
 Misc : 5.00g/5.0mL/MSVOA_Y/soil
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDCCC050

Manual Integrations APPROVED

Reviewed By :Romaben Patel 03/12/2025
 Supervised By :Mahesh Dadoda 03/12/2025

Quant Time: Mar 12 01:22:40 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 12:42:45 2025
 Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
 Data File : VY021474.D
 Acq On : 11 Mar 2025 09:42
 Operator : SY/MD
 Sample : VSTDCCC050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 LabSampleId :
 VSTDCCC050

Quant Time: Mar 12 01:22:40 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 12:42:45 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	104	0.00
2 T	Dichlorodifluoromethane	0.459	0.404	12.0	93	0.00
3 P	Chloromethane	0.647	0.619	4.3	104	0.00
4 C	Vinyl Chloride	0.707	0.717	-1.4#	108	0.00
5 T	Bromomethane	0.511	0.467	8.6	103	-0.01
6 T	Chloroethane	0.467	0.485	-3.9	109	0.00
7 T	Trichlorofluoromethane	0.987	0.986	0.1	106	-0.01
8 T	Diethyl Ether	0.273	0.258	5.5	95	0.00
9 T	1,1,2-Trichlorotrifluoroeth	0.563	0.527	6.4	102	-0.01
10 T	Methyl Iodide	0.573	0.602	-5.1	99	0.00
11 T	Tert butyl alcohol	0.041	0.033	19.5	91	0.00
12 CM	1,1-Dichloroethene	0.514	0.478	7.0#	98	-0.01
13 T	Acrolein	0.027	0.004	85.2#	91	-0.01
14 T	Allyl chloride	0.830	0.781	5.9	96	-0.01
15 T	Acrylonitrile	0.116	0.115	0.9	96	-0.01
16 T	Acetone	0.115	0.100	13.0	77	0.00
17 T	Carbon Disulfide	1.610	1.485	7.8	94	-0.01
18 T	Methyl Acetate	0.256	0.288	-12.5	105	0.00
19 T	Methyl tert-butyl Ether	1.302	1.276	2.0	97	0.00
20 T	Methylene Chloride	0.605	0.529	12.6	99	0.00
21 T	trans-1,2-Dichloroethene	0.575	0.544	5.4	100	-0.02
22 T	Diisopropyl ether	1.789	1.719	3.9	96	0.00
23 T	Vinyl Acetate	1.021	1.003	1.8	94	-0.01
24 P	1,1-Dichloroethane	1.056	0.992	6.1	98	-0.01
25 T	2-Butanone	0.159	0.150	5.7	86	0.00
26 T	2,2-Dichloropropane	0.971	0.906	6.7	100	0.00
27 T	cis-1,2-Dichloroethene	0.653	0.626	4.1	99	0.00
28 T	Bromochloromethane	0.443	0.423	4.5	94	0.00
29 T	Tetrahydrofuran	0.098	0.099	-1.0	93	0.00
30 C	Chloroform	1.096	1.037	5.4#	99	0.00
31 T	Cyclohexane	0.990	0.875	11.6	96	0.00
32 T	1,1,1-Trichloroethane	1.004	0.951	5.3	101	0.00
33 S	1,2-Dichloroethane-d4	0.528	0.407	22.9	88	0.00
34 I	1,4-Difluorobenzene	1.000	1.000	0.0	101	0.00
35 S	Dibromofluoromethane	0.329	0.262	20.4	90	0.00
36 T	1,1-Dichloropropene	0.514	0.503	2.1	98	0.00
37 T	Ethyl Acetate	0.227	0.229	-0.9	93	0.00
38 T	Carbon Tetrachloride	0.592	0.586	1.0	101	0.00
39 T	Methylcyclohexane	0.631	0.621	1.6	96	0.00
40 TM	Benzene	1.515	1.491	1.6	98	0.00
41 T	Methacrylonitrile	0.124	0.139	-12.1	107	0.00
42 TM	1,2-Dichloroethane	0.424	0.423	0.2	98	0.00
43 T	Isopropyl Acetate	0.441	0.436	1.1	91	0.00
44 TM	Trichloroethene	0.383	0.375	2.1	99	0.00
45 C	1,2-Dichloropropane	0.361	0.356	1.4#	98	0.00
46 T	Dibromomethane	0.201	0.204	-1.5	97	0.00
47 T	Bromodichloromethane	0.533	0.534	-0.2	98	0.00
48 T	Methyl methacrylate	0.203	0.214	-5.4	94	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
 Data File : VY021474.D
 Acq On : 11 Mar 2025 09:42
 Operator : SY/MD
 Sample : VSTDCCC050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 LabSampleId :
 VSTDCCC050

Quant Time: Mar 12 01:22:40 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 12:42:45 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	0.002	0.002	0.0	104	0.00
50 S	Toluene-d8	1.244	0.971	21.9	86	0.00
51 T	4-Methyl-2-Pentanone	0.228	0.243	-6.6	93	0.00
52 CM	Toluene	0.955	0.954	0.1#	97	0.00
53 T	t-1,3-Dichloropropene	0.470	0.485	-3.2	98	0.00
54 T	cis-1,3-Dichloropropene	0.557	0.562	-0.9	96	0.00
55 T	1,1,2-Trichloroethane	0.263	0.268	-1.9	96	0.00
56 T	Ethyl methacrylate	0.335	0.361	-7.8	95	0.00
57 T	1,3-Dichloropropane	0.455	0.465	-2.2	98	0.00
58 T	2-Chloroethyl Vinyl ether	0.155	0.172	-11.0	100	0.00
59 T	2-Hexanone	0.151	0.166	-9.9	92	0.00
60 T	Dibromochloromethane	0.360	0.368	-2.2	99	0.00
61 T	1,2-Dibromoethane	0.248	0.253	-2.0	98	0.00
62 S	4-Bromofluorobenzene	0.423	0.342	19.1	89	0.00
63 I	Chlorobenzene-d5	1.000	1.000	0.0	103	0.00
64 T	Tetrachloroethene	0.407	0.400	1.7	102	0.00
65 PM	Chlorobenzene	1.181	1.133	4.1	98	0.00
66 T	1,1,1,2-Tetrachloroethane	0.417	0.409	1.9	100	0.00
67 C	Ethyl Benzene	2.072	2.033	1.9#	98	0.00
68 T	m/p-Xylenes	0.787	0.775	1.5	97	0.00
69 T	o-Xylene	0.725	0.727	-0.3	99	0.00
70 T	Styrene	1.203	1.227	-2.0	99	0.00
71 P	Bromoform	0.233	0.241	-3.4	99	0.00
72 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	105	0.00
73 T	Isopropylbenzene	3.939	3.795	3.7	99	0.00
74 T	N-amyl acetate	0.855	0.863	-0.9	95	0.00
75 P	1,1,2,2-Tetrachloroethane	0.695	0.661	4.9	96	0.00
76 T	1,2,3-Trichloropropane	0.504	0.511	-1.4	109	0.00
77 T	Bromobenzene	0.921	0.889	3.5	101	0.00
78 T	n-propylbenzene	4.783	4.632	3.2	99	0.00
79 T	2-Chlorotoluene	2.735	2.607	4.7	100	0.00
80 T	1,3,5-Trimethylbenzene	3.201	3.145	1.7	101	0.00
81 T	trans-1,4-Dichloro-2-butene	0.222	0.210	5.4	93	0.00
82 T	4-Chlorotoluene	2.832	2.684	5.2	99	0.00
83 T	tert-Butylbenzene	2.855	2.782	2.6	100	0.00
84 T	1,2,4-Trimethylbenzene	3.178	3.125	1.7	100	0.00
85 T	sec-Butylbenzene	4.248	4.148	2.4	100	0.00
86 T	p-Isopropyltoluene	3.500	3.475	0.7	102	0.00
87 T	1,3-Dichlorobenzene	1.834	1.747	4.7	101	0.00
88 T	1,4-Dichlorobenzene	1.794	1.723	4.0	102	0.00
89 T	n-Butylbenzene	3.232	3.237	-0.2	100	0.00
90 T	Hexachloroethane	0.747	0.706	5.5	102	0.00
91 T	1,2-Dichlorobenzene	1.572	1.535	2.4	102	0.00
92 T	1,2-Dibromo-3-Chloropropane	0.104	0.105	-1.0	102	0.00
93 T	1,2,4-Trichlorobenzene	0.859	0.916	-6.6	106	0.00
94 T	Hexachlorobutadiene	0.538	0.546	-1.5	104	0.00
95 T	Naphthalene	1.390	1.559	-12.2	104	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
Data File : VY021474.D
Acq On : 11 Mar 2025 09:42
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_Y
LabSampleId :
VSTDCCC050

Quant Time: Mar 12 01:22:40 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 12:42:45 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	0.722	0.771	-6.8	104	0.00

(#) = Out of Range

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
 Data File : VY021474.D
 Acq On : 11 Mar 2025 09:42
 Operator : SY/MD
 Sample : VSTDCCC050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 LabSampleId :
 VSTDCCC050

Quant Time: Mar 12 01:22:40 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 12:42:45 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	104	0.00
2 T	Dichlorodifluoromethane	50.000	43.973	12.1	93	0.00
3 P	Chloromethane	50.000	47.834	4.3	104	0.00
4 C	Vinyl Chloride	50.000	50.709	-1.4#	108	0.00
5 T	Bromomethane	50.000	45.662	8.7	103	-0.01
6 T	Chloroethane	50.000	51.893	-3.8	109	0.00
7 T	Trichlorofluoromethane	50.000	49.950	0.1	106	-0.01
8 T	Diethyl Ether	50.000	47.231	5.5	95	0.00
9 T	1,1,2-Trichlorotrifluoroeth	50.000	46.792	6.4	102	-0.01
10 T	Methyl Iodide	50.000	52.592	-5.2	99	0.00
11 T	Tert butyl alcohol	250.000	240.812	3.7	91	0.00
12 CM	1,1-Dichloroethene	50.000	46.552	6.9#	98	-0.01
13 T	Acrolein	250.000	37.200	85.1#	91	-0.01
14 T	Allyl chloride	50.000	47.024	6.0	96	-0.01
15 T	Acrylonitrile	250.000	247.791	0.9	96	-0.01
16 T	Acetone	250.000	216.052	13.6	77	0.00
17 T	Carbon Disulfide	50.000	46.140	7.7	94	-0.01
18 T	Methyl Acetate	50.000	56.398	-12.8	105	0.00
19 T	Methyl tert-butyl Ether	50.000	48.996	2.0	97	0.00
20 T	Methylene Chloride	50.000	43.705	12.6	99	0.00
21 T	trans-1,2-Dichloroethene	50.000	47.301	5.4	100	-0.02
22 T	Diisopropyl ether	50.000	48.039	3.9	96	0.00
23 T	Vinyl Acetate	250.000	245.726	1.7	94	-0.01
24 P	1,1-Dichloroethane	50.000	46.967	6.1	98	-0.01
25 T	2-Butanone	250.000	235.390	5.8	86	0.00
26 T	2,2-Dichloropropane	50.000	46.640	6.7	100	0.00
27 T	cis-1,2-Dichloroethene	50.000	47.921	4.2	99	0.00
28 T	Bromochloromethane	50.000	47.829	4.3	94	0.00
29 T	Tetrahydrofuran	250.000	252.319	-0.9	93	0.00
30 C	Chloroform	50.000	47.304	5.4#	99	0.00
31 T	Cyclohexane	50.000	44.226	11.5	96	0.00
32 T	1,1,1-Trichloroethane	50.000	47.353	5.3	101	0.00
33 S	1,2-Dichloroethane-d4	50.000	38.532	22.9	88	0.00
34 I	1,4-Difluorobenzene	50.000	50.000	0.0	101	0.00
35 S	Dibromofluoromethane	50.000	39.907	20.2	90	0.00
36 T	1,1-Dichloropropene	50.000	48.852	2.3	98	0.00
37 T	Ethyl Acetate	50.000	50.376	-0.8	93	0.00
38 T	Carbon Tetrachloride	50.000	49.521	1.0	101	0.00
39 T	Methylcyclohexane	50.000	49.229	1.5	96	0.00
40 TM	Benzene	50.000	49.194	1.6	98	0.00
41 T	Methacrylonitrile	50.000	56.275	-12.5	107	0.00
42 TM	1,2-Dichloroethane	50.000	49.870	0.3	98	0.00
43 T	Isopropyl Acetate	50.000	49.410	1.2	91	0.00
44 TM	Trichloroethene	50.000	48.932	2.1	99	0.00
45 C	1,2-Dichloropropane	50.000	49.342	1.3#	98	0.00
46 T	Dibromomethane	50.000	50.735	-1.5	97	0.00
47 T	Bromodichloromethane	50.000	50.133	-0.3	98	0.00
48 T	Methyl methacrylate	50.000	52.699	-5.4	94	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
 Data File : VY021474.D
 Acq On : 11 Mar 2025 09:42
 Operator : SY/MD
 Sample : VSTDCCC050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 LabSampleId :
 VSTDCCC050

Quant Time: Mar 12 01:22:40 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 12:42:45 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	1175.771	-17.6	104	0.00
50 S	Toluene-d8	50.000	39.006	22.0	86	0.00
51 T	4-Methyl-2-Pentanone	250.000	267.090	-6.8	93	0.00
52 CM	Toluene	50.000	49.929	0.1#	97	0.00
53 T	t-1,3-Dichloropropene	50.000	51.607	-3.2	98	0.00
54 T	cis-1,3-Dichloropropene	50.000	50.373	-0.7	96	0.00
55 T	1,1,2-Trichloroethane	50.000	51.085	-2.2	96	0.00
56 T	Ethyl methacrylate	50.000	53.976	-8.0	95	0.00
57 T	1,3-Dichloropropane	50.000	51.054	-2.1	98	0.00
58 T	2-Chloroethyl Vinyl ether	250.000	277.699	-11.1	100	0.00
59 T	2-Hexanone	250.000	274.788	-9.9	92	0.00
60 T	Dibromochloromethane	50.000	51.071	-2.1	99	0.00
61 T	1,2-Dibromoethane	50.000	51.119	-2.2	98	0.00
62 S	4-Bromofluorobenzene	50.000	40.403	19.2	89	0.00
63 I	Chlorobenzene-d5	50.000	50.000	0.0	103	0.00
64 T	Tetrachloroethene	50.000	49.184	1.6	102	0.00
65 PM	Chlorobenzene	50.000	47.990	4.0	98	0.00
66 T	1,1,1,2-Tetrachloroethane	50.000	48.937	2.1	100	0.00
67 C	Ethyl Benzene	50.000	49.057	1.9#	98	0.00
68 T	m/p-Xylenes	100.000	98.518	1.5	97	0.00
69 T	o-Xylene	50.000	50.116	-0.2	99	0.00
70 T	Styrene	50.000	51.002	-2.0	99	0.00
71 P	Bromoform	50.000	51.617	-3.2	99	0.00
72 I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	105	0.00
73 T	Isopropylbenzene	50.000	48.180	3.6	99	0.00
74 T	N-ethyl acetate	50.000	50.434	-0.9	95	0.00
75 P	1,1,2,2-Tetrachloroethane	50.000	47.586	4.8	96	0.00
76 T	1,2,3-Trichloropropane	50.000	50.666	-1.3	109	0.00
77 T	Bromobenzene	50.000	48.241	3.5	101	0.00
78 T	n-propylbenzene	50.000	48.420	3.2	99	0.00
79 T	2-Chlorotoluene	50.000	47.664	4.7	100	0.00
80 T	1,3,5-Trimethylbenzene	50.000	49.127	1.7	101	0.00
81 T	trans-1,4-Dichloro-2-butene	50.000	47.453	5.1	93	0.00
82 T	4-Chlorotoluene	50.000	47.377	5.2	99	0.00
83 T	tert-Butylbenzene	50.000	48.707	2.6	100	0.00
84 T	1,2,4-Trimethylbenzene	50.000	49.160	1.7	100	0.00
85 T	sec-Butylbenzene	50.000	48.819	2.4	100	0.00
86 T	p-Isopropyltoluene	50.000	49.646	0.7	102	0.00
87 T	1,3-Dichlorobenzene	50.000	47.610	4.8	101	0.00
88 T	1,4-Dichlorobenzene	50.000	48.018	4.0	102	0.00
89 T	n-Butylbenzene	50.000	50.082	-0.2	100	0.00
90 T	Hexachloroethane	50.000	47.280	5.4	102	0.00
91 T	1,2-Dichlorobenzene	50.000	48.823	2.4	102	0.00
92 T	1,2-Dibromo-3-Chloropropane	50.000	50.503	-1.0	102	0.00
93 T	1,2,4-Trichlorobenzene	50.000	53.321	-6.6	106	0.00
94 T	Hexachlorobutadiene	50.000	50.750	-1.5	104	0.00
95 T	Naphthalene	50.000	53.275	-6.5	104	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
Data File : VY021474.D
Acq On : 11 Mar 2025 09:42
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_Y
LabSampleId :
VSTDCCC050

Quant Time: Mar 12 01:22:40 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 12:42:45 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	53.397	-6.8	104	0.00

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



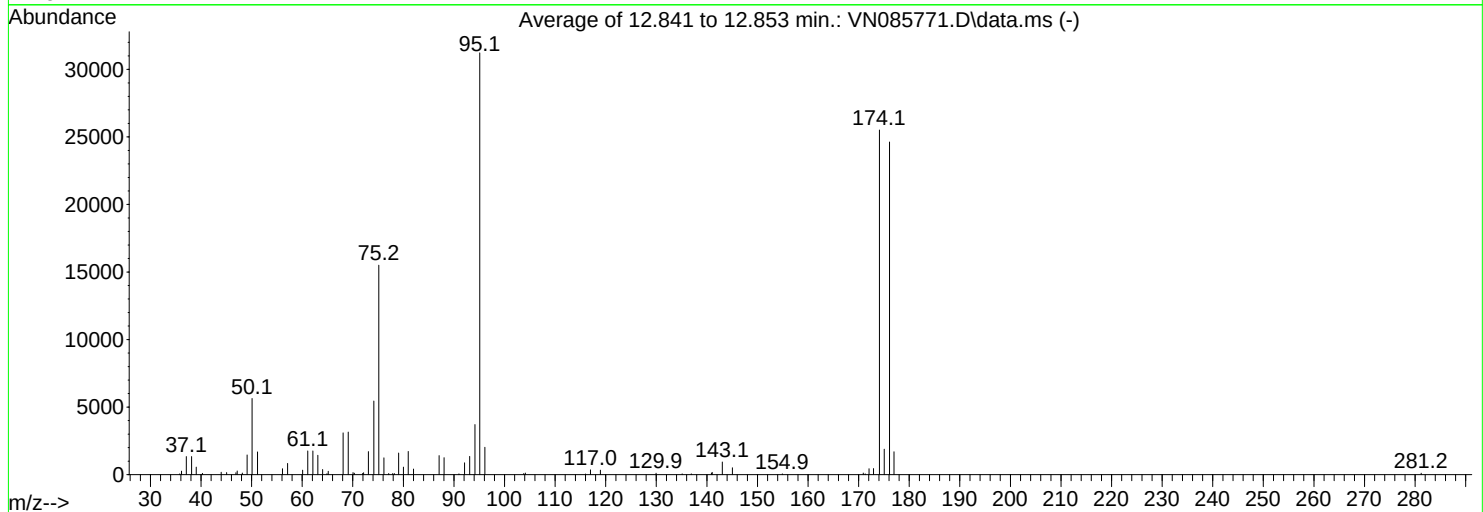
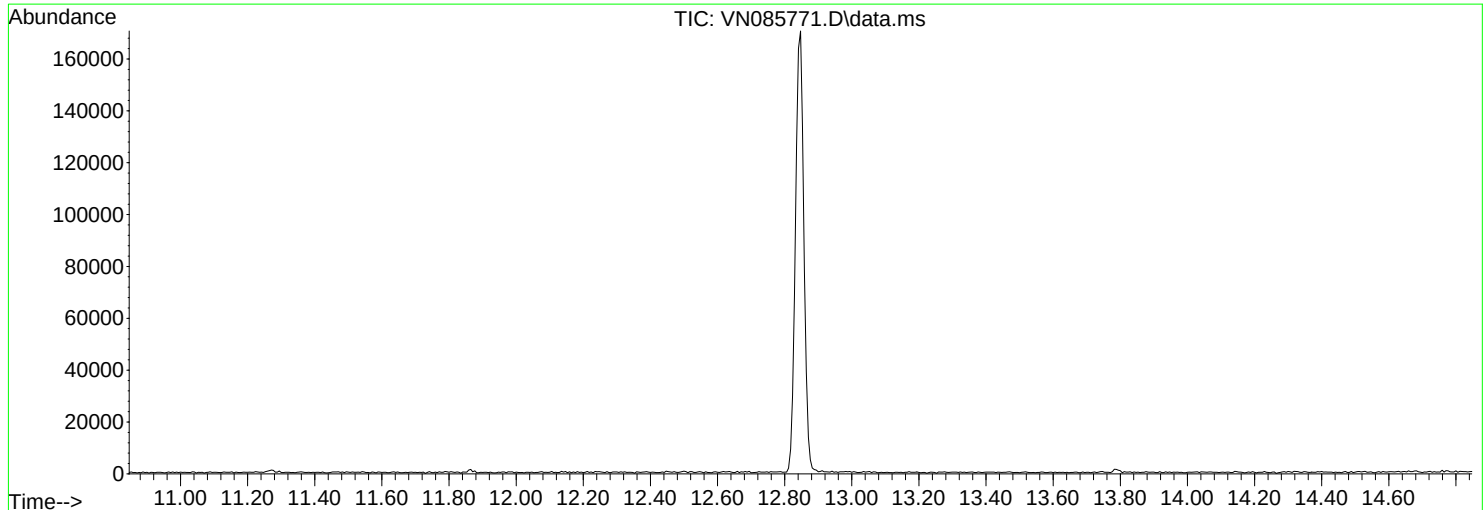
QC SAMPLE DATA

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN021825\
Data File : VN085771.D
Acq On : 18 Feb 2025 10:35
Operator : JC\MD
Sample : BFB
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Title : SW846 8260
Last Update : Wed Feb 19 03:43:32 2025



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

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.1	5643	PASS
75	95	30	60	49.7	15509	PASS
95	95	100	100	100.0	31224	PASS
96	95	5	9	6.5	2024	PASS
173	174	0.00	2	1.8	452	PASS
174	95	50	100	81.7	25509	PASS
175	174	5	9	7.4	1882	PASS
176	174	95	101	96.5	24621	PASS
177	176	5	9	6.9	1699	PASS

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.80	65	48.15	124	64.90	70	76.15	124
36.15	261	49.10	1454	65.15	255	77.10	80
37.10	1338	50.10	5643	68.10	3096	77.90	80
38.15	1335	51.15	1680	69.10	3155	78.20	80
39.05	560	56.10	443	70.05	161	79.05	1595
40.00	21	57.10	824	70.30	106	80.00	557
40.30	99	60.10	333	71.90	80	80.95	1716
44.00	176	61.10	1754	72.15	148	82.00	419
45.05	157	62.10	1754	73.10	1710	87.05	1414
46.90	145	63.10	1428	74.15	5444	88.05	1255
47.15	276	64.05	377	75.15	15509	91.00	59

Average of 12.841 to 12.853 min.: VN085771.D\data.ms

BFB

Modified:subtracted

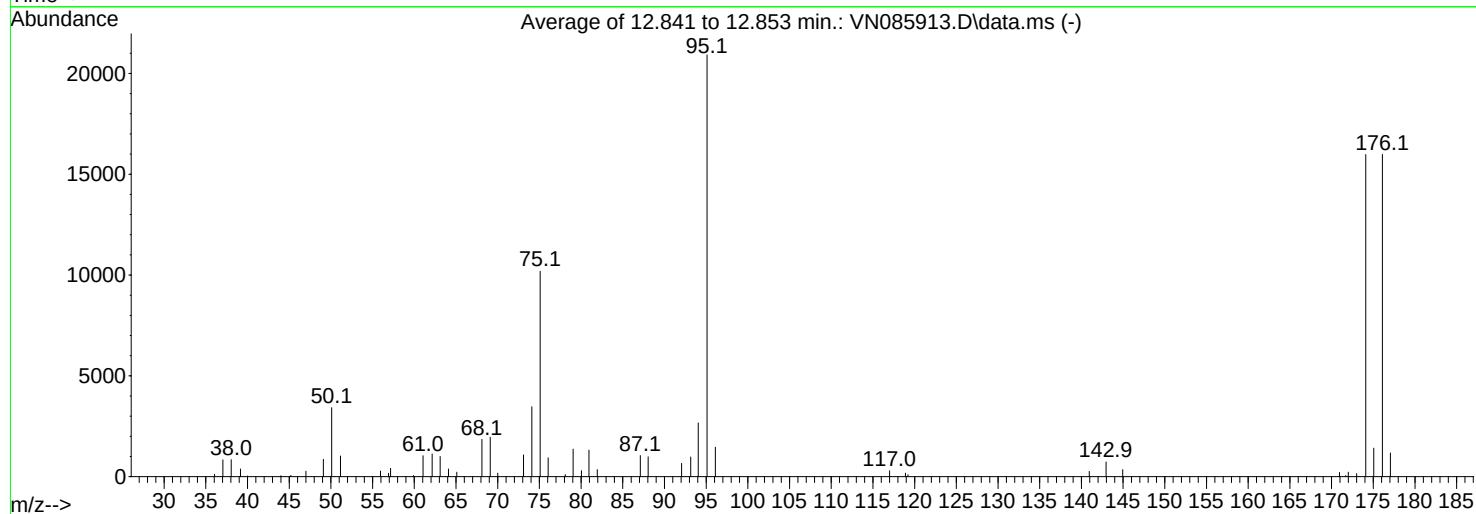
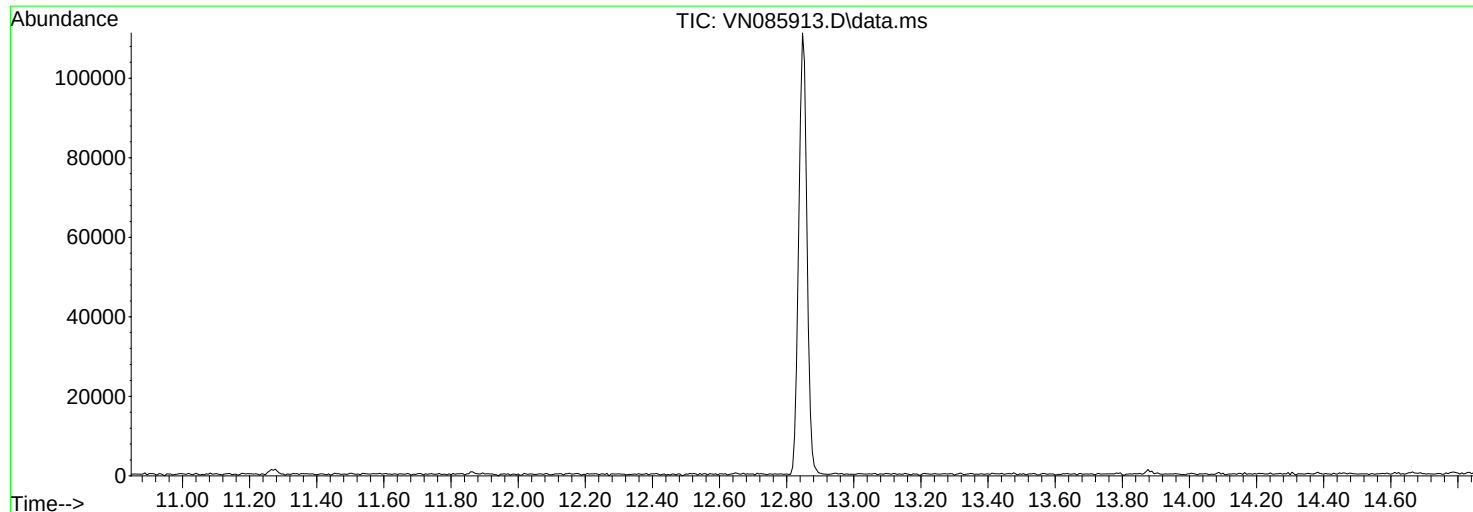
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
92.10	882	135.10	54	174.10	25509		
93.10	1346	136.90	57	175.05	1882		
94.15	3713	140.90	114	176.10	24621		
95.10	31224	141.05	164	177.00	1699		
96.10	2024	143.05	938	281.20	112		
103.80	81	145.05	510				
104.10	121	154.90	54				
116.00	52	170.90	116				
117.00	351	171.30	58				
118.95	331	172.05	440				
129.95	112	172.95	452				

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\
Data File : VN085913.D
Acq On : 10 Mar 2025 10:54
Operator : JC\MD
Sample : BFB
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Title : SW846 8260
Last Update : Wed Feb 19 03:43:32 2025



AutoFind: Scans 1851, 1852, 1853; Background Corrected with Scan 1844

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.3	3418	PASS
75	95	30	60	48.7	10194	PASS
95	95	100	100	100.0	20923	PASS
96	95	5	9	7.0	1459	PASS
173	174	0.00	2	1.0	154	PASS
174	95	50	100	76.4	15975	PASS
175	174	5	9	8.8	1412	PASS
176	174	95	101	100.1	15983	PASS
177	176	5	9	7.4	1178	PASS

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	116	55.95	279	70.00	177	88.05	981
37.05	836	56.90	168	73.10	1077	92.05	651
38.05	842	57.15	413	74.10	3467	93.15	971
39.15	385	59.90	59	75.10	10194	94.05	266
40.00	29	61.05	1036	76.05	933	95.10	20923
44.00	50	62.15	1129	78.10	105	96.10	1459
45.20	60	63.10	1000	79.05	1363	117.00	294
47.00	273	64.10	382	80.05	296	118.90	174
49.10	860	65.10	223	80.95	1319	119.20	98
50.10	3418	68.10	1849	81.95	350	140.95	260
51.15	1028	69.10	1952	87.10	1046	142.95	727

Average of 12.841 to 12.853 min.: VN085913.D\data.ms

BFB

Modified:subtracted

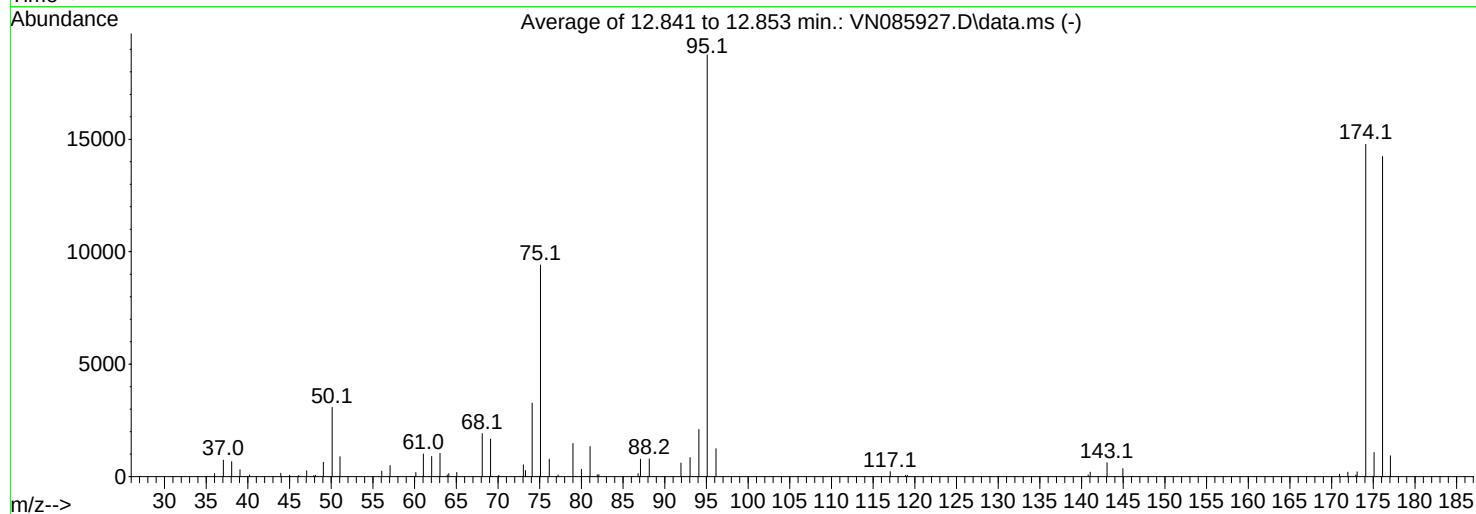
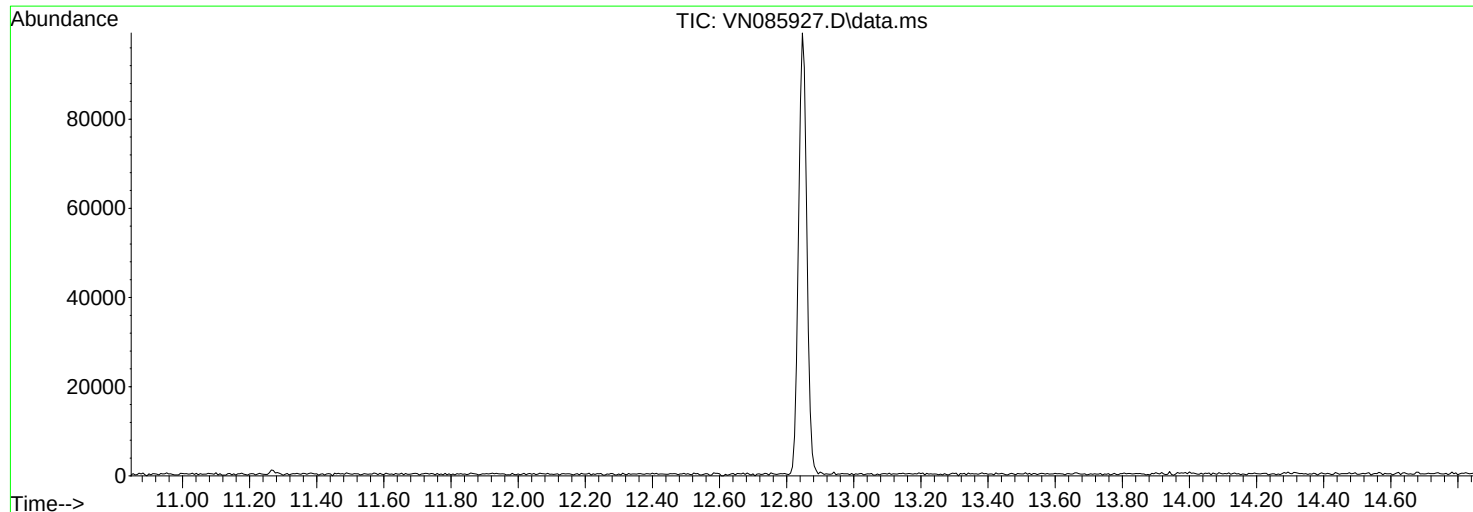
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
144.95	349						
170.95	210						
171.70	56						
172.00	226						
173.00	154						
174.10	15975						
175.05	1412						
176.10	15983						
177.05	1178						

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031125\
Data File : VN085927.D
Acq On : 11 Mar 2025 12:12
Operator : JC\MD
Sample : BFB
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Title : SW846 8260
Last Update : Wed Feb 19 03:43:32 2025



AutoFind: Scans 1851, 1852, 1853; Background Corrected with Scan 1844

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.4	3078	PASS
75	95	30	60	50.2	9414	PASS
95	95	100	100	100.0	18755	PASS
96	95	5	9	6.6	1247	PASS
173	174	0.00	2	1.4	214	PASS
174	95	50	100	78.8	14780	PASS
175	174	5	9	7.3	1076	PASS
176	174	95	101	96.3	14234	PASS
177	176	5	9	6.5	923	PASS

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	136	49.05	643	65.05	193	80.00	321
37.05	733	50.10	3078	68.10	1917	81.05	133
38.05	671	51.05	888	69.10	1669	81.90	8
39.05	309	56.05	249	70.10	57	82.10	9
40.20	75	57.05	488	73.05	525	86.80	136
43.95	149	60.15	182	73.30	268	87.10	777
45.00	66	61.05	1010	74.10	3275	88.15	787
46.10	53	62.05	899	75.10	9414	91.95	607
47.05	266	63.05	1037	76.15	779	93.05	850
47.90	50	63.90	76	77.20	79	94.10	2096
48.10	62	64.10	138	79.00	1472	95.10	18755

Average of 12.841 to 12.853 min.: VN085927.D\data.ms

BFB

Modified:subtracted

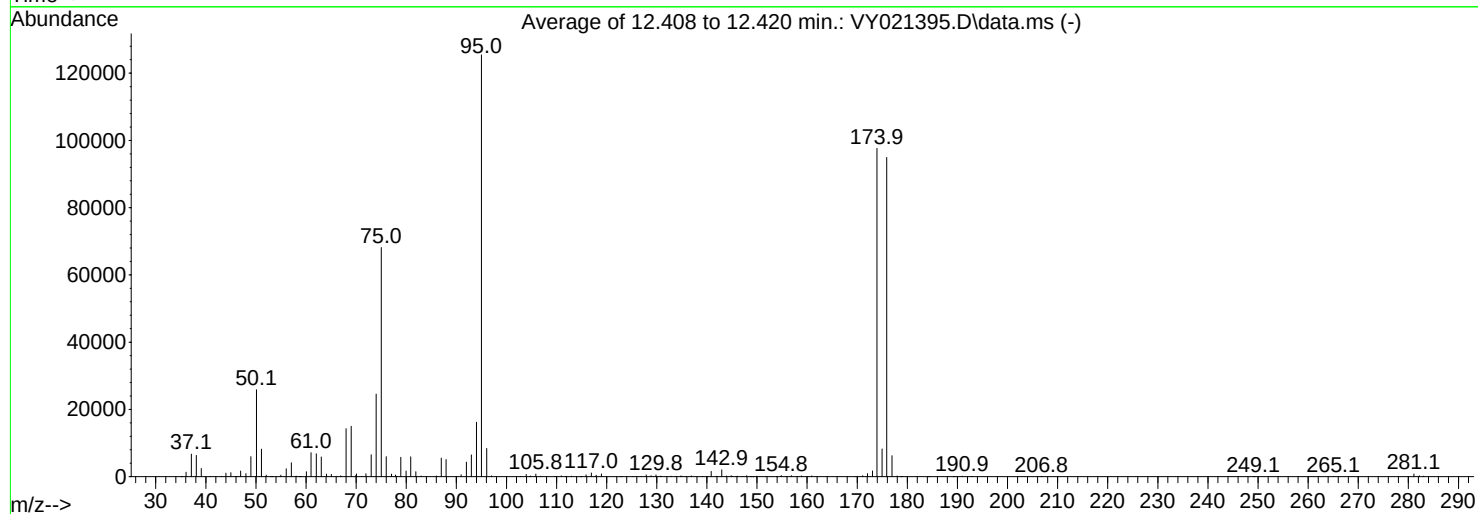
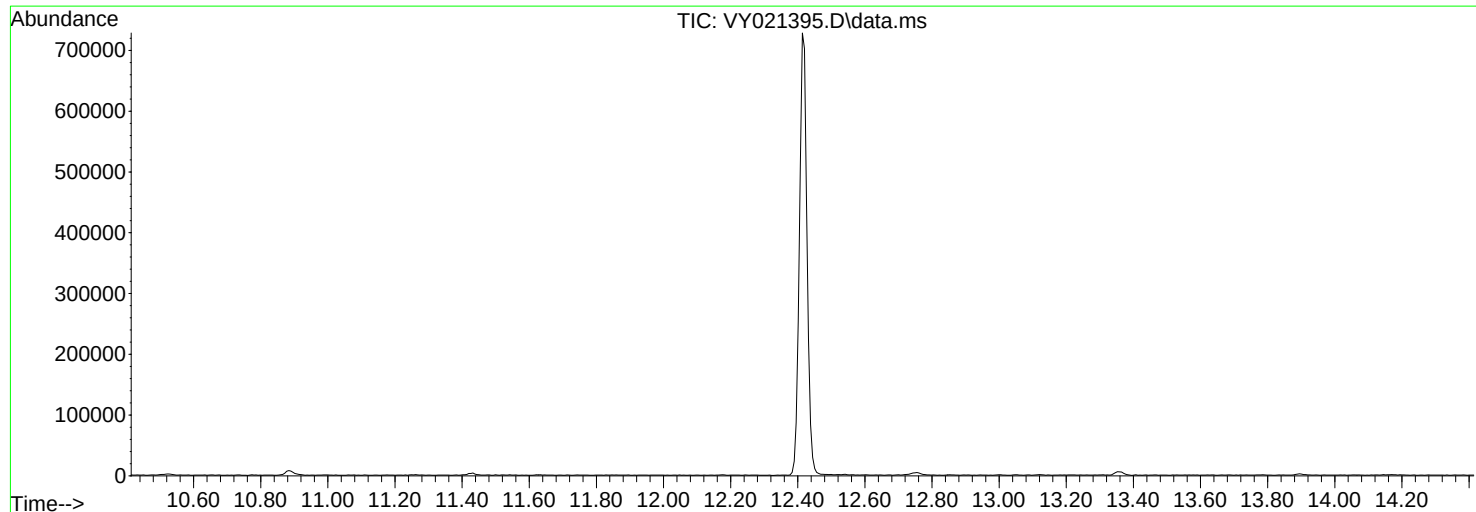
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
96.15	1247	173.05	214				
117.05	223	174.10	14780				
118.90	57	175.10	1076				
119.10	64	176.10	14234				
140.80	78	177.05	923				
141.05	199						
143.05	616						
144.95	358						
170.95	108						
171.95	200						
172.90	72						

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
Data File : VY021395.D
Acq On : 04 Mar 2025 08:52
Operator : SY/MD
Sample : BFB
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Title : SW846 8260
Last Update : Wed Mar 05 12:42:45 2025



AutoFind: Scans 1753, 1754, 1755; Background Corrected with Scan 1745

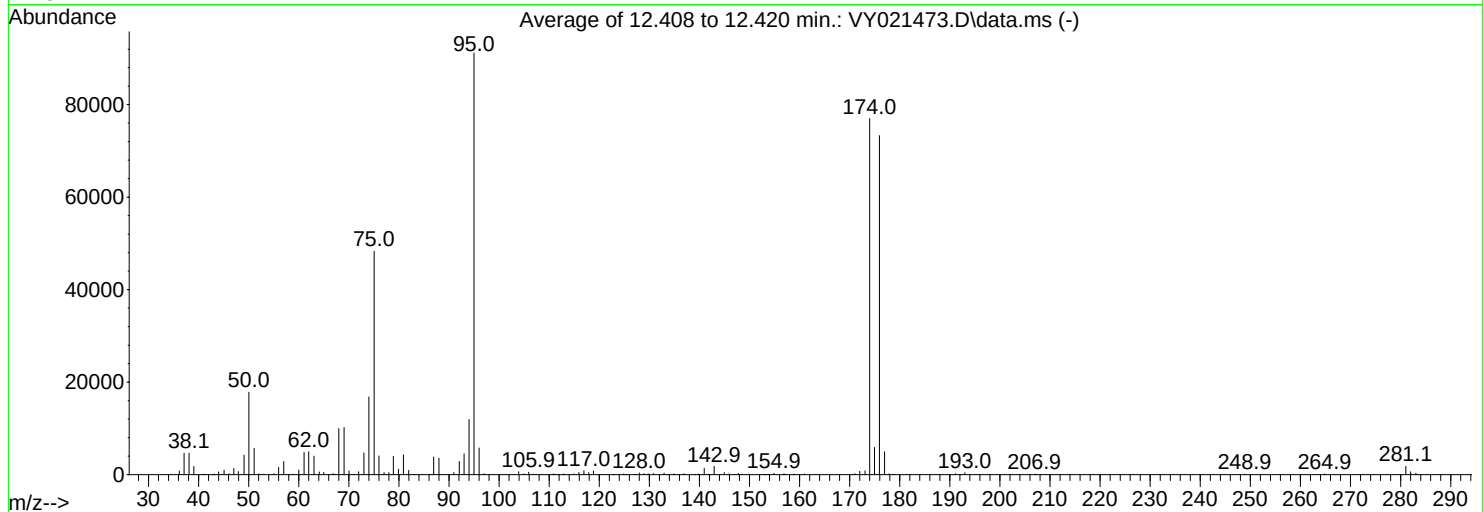
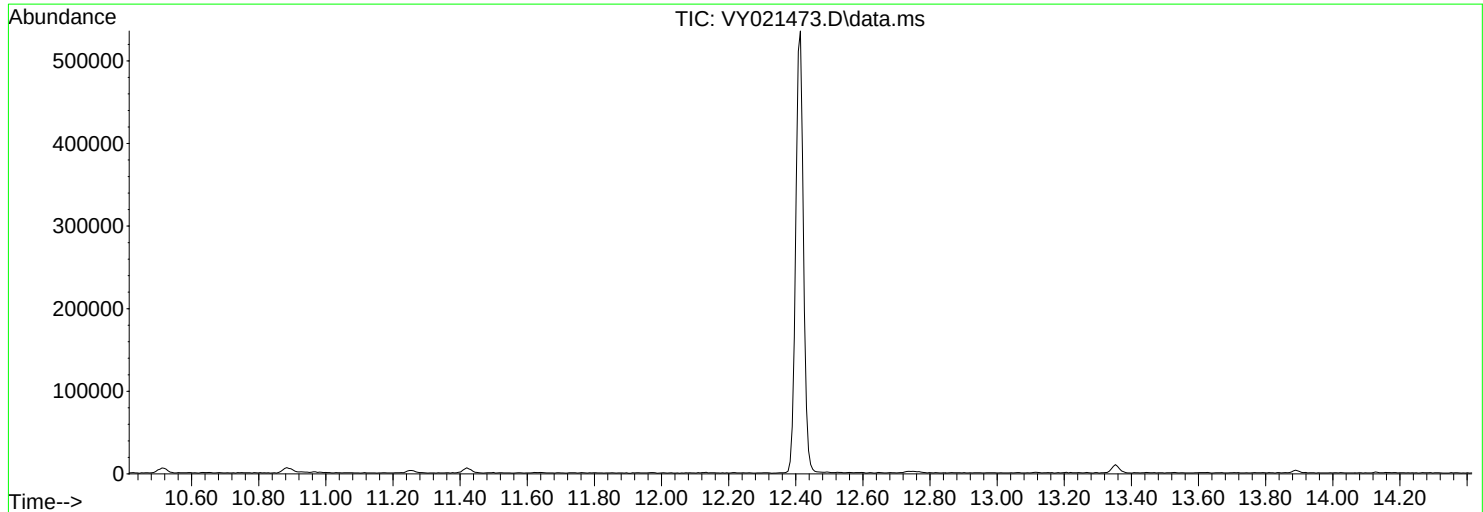
Target	Rel. to	Lower	Upper	Rel.	Raw	Result
Mass	Mass	Limit%	Limit%	Abn%	Abn	Pass/Fail
50	95	15	40	20.6	25853	PASS
75	95	30	60	54.3	68152	PASS
95	95	100	100	100.0	125459	PASS
96	95	5	9	6.7	8382	PASS
173	174	0.00	2	1.8	1721	PASS
174	95	50	100	77.8	97645	PASS
175	174	5	9	8.4	8226	PASS
176	174	95	101	97.2	94957	PASS
177	176	5	9	6.6	6262	PASS

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
Data File : VY021473.D
Acq On : 11 Mar 2025 09:00
Operator : SY/MD
Sample : BFB
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Title : SW846 8260
Last Update : Wed Mar 05 12:42:45 2025



AutoFind: Scans 1753, 1754, 1755; Background Corrected with Scan 1745

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.5	17820	PASS
75	95	30	60	53.0	48325	PASS
95	95	100	100	100.0	91197	PASS
96	95	5	9	6.3	5773	PASS
173	174	0.00	2	1.1	826	PASS
174	95	50	100	84.5	77027	PASS
175	174	5	9	7.6	5877	PASS
176	174	95	101	95.2	73301	PASS
177	176	5	9	6.7	4938	PASS

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	
Client Sample ID:	VN0310WBL01	SDG No.:	Q1514
Lab Sample ID:	VN0310WBL01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085916.D	1		03/10/25 13:22	VN031025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.21	U	0.21	1.00	ug/L
74-87-3	Chloromethane	0.35	U	0.35	1.00	ug/L
75-01-4	Vinyl Chloride	0.34	U	0.34	1.00	ug/L
74-83-9	Bromomethane	1.40	U	1.40	5.00	ug/L
75-00-3	Chloroethane	0.56	U	0.56	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.34	U	0.34	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.25	U	0.25	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.26	U	0.26	1.00	ug/L
67-64-1	Acetone	1.40	U	1.40	5.00	ug/L
75-15-0	Carbon Disulfide	0.32	U	0.32	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	0.16	U	0.16	1.00	ug/L
79-20-9	Methyl Acetate	0.60	U	0.60	1.00	ug/L
75-09-2	Methylene Chloride	0.32	U	0.32	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.25	U	0.25	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.23	U	0.23	1.00	ug/L
110-82-7	Cyclohexane	1.60	U	1.60	5.00	ug/L
78-93-3	2-Butanone	1.30	U	1.30	5.00	ug/L
56-23-5	Carbon Tetrachloride	0.25	U	0.25	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.25	U	0.25	1.00	ug/L
74-97-5	Bromochloromethane	0.18	U	0.18	1.00	ug/L
67-66-3	Chloroform	0.26	U	0.26	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.19	U	0.19	1.00	ug/L
108-87-2	Methylcyclohexane	0.19	U	0.19	1.00	ug/L
71-43-2	Benzene	0.16	U	0.16	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.24	U	0.24	1.00	ug/L
79-01-6	Trichloroethene	0.32	U	0.32	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.19	U	0.19	1.00	ug/L
75-27-4	Bromodichloromethane	0.24	U	0.24	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	0.75	U	0.75	5.00	ug/L
108-88-3	Toluene	0.18	U	0.18	1.00	ug/L

Report of Analysis

Client:	Portal Partners Tri-Venture		Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025		Date Received:	
Client Sample ID:	VN0310WBL01		SDG No.:	Q1514
Lab Sample ID:	VN0310WBL01		Matrix:	Water
Analytical Method:	SW8260		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085916.D	1		03/10/25 13:22	VN031025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.21	U	0.21	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.18	U	0.18	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.21	U	0.21	1.00	ug/L
591-78-6	2-Hexanone	1.10	U	1.10	5.00	ug/L
124-48-1	Dibromochloromethane	0.18	U	0.18	1.00	ug/L
106-93-4	1,2-Dibromoethane	0.16	U	0.16	1.00	ug/L
127-18-4	Tetrachloroethene	0.25	U	0.25	1.00	ug/L
108-90-7	Chlorobenzene	0.13	U	0.13	1.00	ug/L
100-41-4	Ethyl Benzene	0.16	U	0.16	1.00	ug/L
179601-23-1	m/p-Xylenes	0.31	U	0.31	2.00	ug/L
95-47-6	o-Xylene	0.14	U	0.14	1.00	ug/L
100-42-5	Styrene	0.16	U	0.16	1.00	ug/L
75-25-2	Bromoform	0.21	U	0.21	1.00	ug/L
98-82-8	Isopropylbenzene	0.13	U	0.13	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.27	U	0.27	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.24	U	0.24	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.27	U	0.27	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.19	U	0.19	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.46	U	0.46	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.42	U	0.42	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.51	U	0.51	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	54.6		70 (74) - 130 (125)	109%	SPK: 50
1868-53-7	Dibromofluoromethane	50.6		70 (75) - 130 (124)	101%	SPK: 50
2037-26-5	Toluene-d8	46.9		70 (86) - 130 (113)	94%	SPK: 50
460-00-4	4-Bromofluorobenzene	45.0		70 (77) - 130 (121)	90%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	185000	8.224			
540-36-3	1,4-Difluorobenzene	337000	9.1			
3114-55-4	Chlorobenzene-d5	298000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	113000	13.788			

Report of Analysis

Client:	Portal Partners Tri-Venture		Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025		Date Received:	
Client Sample ID:	VN0310WBL01		SDG No.:	Q1514
Lab Sample ID:	VN0310WBL01		Matrix:	Water
Analytical Method:	SW8260		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085916.D	1		03/10/25 13:22	VN031025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\
 Data File : VN085916.D
 Acq On : 10 Mar 2025 13:22
 Operator : JC\MD
 Sample : VN0310WBL01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN0310WBL01

Quant Time: Mar 11 01:37:14 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
 Quant Title : SW846 8260
 QLast Update : Wed Feb 19 03:43:32 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	8.224	168	185188	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	337149	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	297684	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	112686	50.000	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	131135	54.619	ug/l	0.00
Spiked Amount	50.000	Range	74 - 125	Recovery	=	109.240%
35) Dibromofluoromethane	8.165	113	111691	50.627	ug/l	0.00
Spiked Amount	50.000	Range	75 - 124	Recovery	=	101.260%
50) Toluene-d8	10.565	98	376828	46.947	ug/l	0.00
Spiked Amount	50.000	Range	86 - 113	Recovery	=	93.900%
62) 4-Bromofluorobenzene	12.847	95	118920	44.967	ug/l	0.00
Spiked Amount	50.000	Range	77 - 121	Recovery	=	89.940%

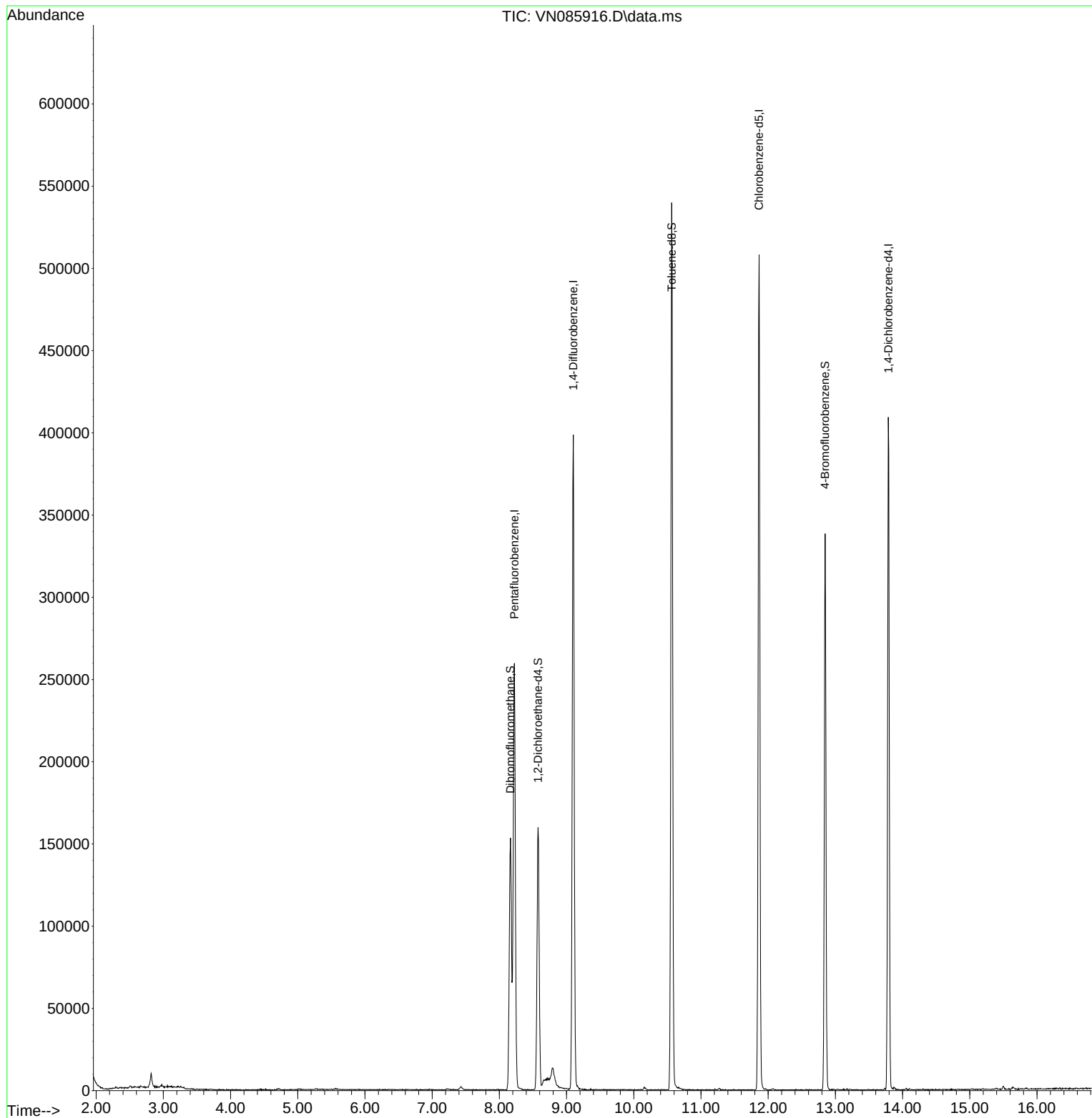
Target Compounds	Qvalue

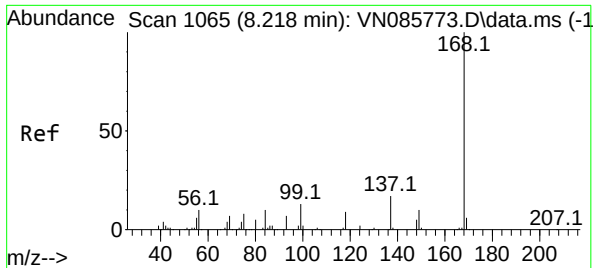
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\
Data File : VN085916.D
Acq On : 10 Mar 2025 13:22
Operator : JC\MD
Sample : VN0310WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0310WBL01

Quant Time: Mar 11 01:37:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260
QLast Update : Wed Feb 19 03:43:32 2025
Response via : Initial Calibration

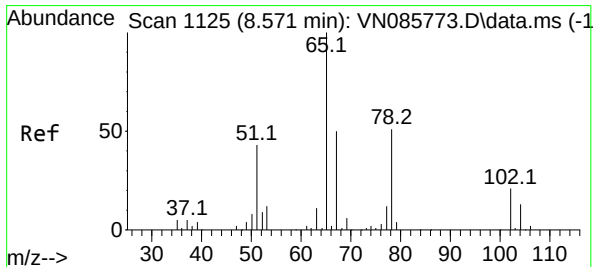
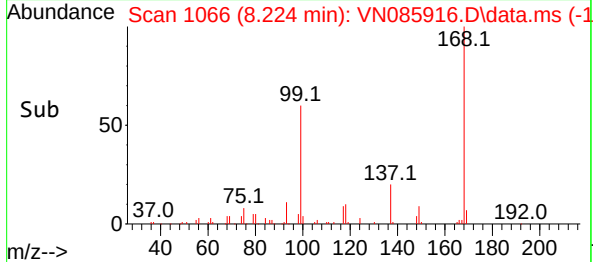
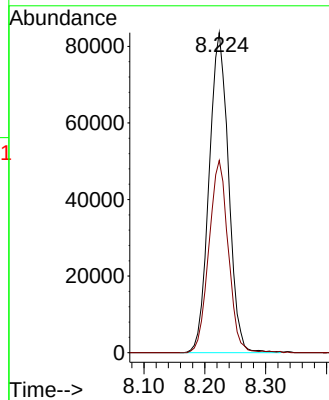
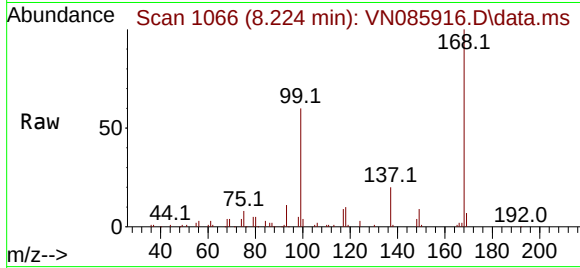




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1066
Delta R.T. 0.006 min
Lab File: VN085916.D
Acq: 10 Mar 2025 13:22

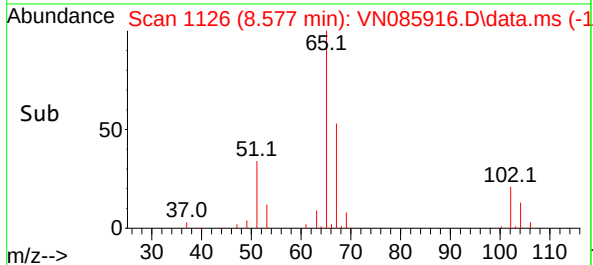
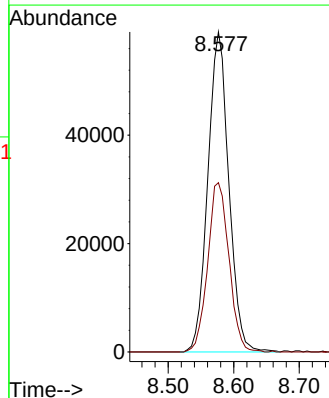
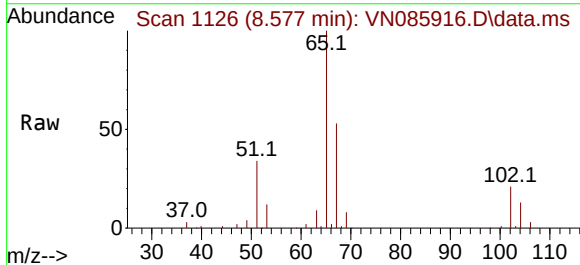
Instrument :
MSVOA_N
ClientSampleId :
VN0310WBL01

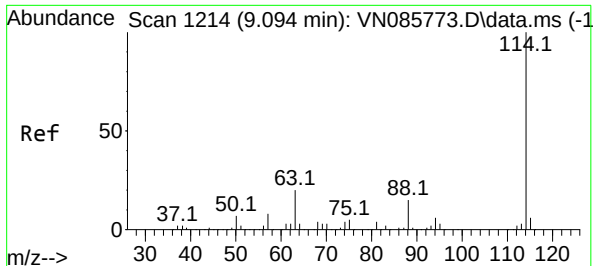
Tgt Ion:168 Resp: 185188
Ion Ratio Lower Upper
168 100
99 60.0 47.9 71.9



#33
1,2-Dichloroethane-d4
Concen: 54.619 ug/l
RT: 8.577 min Scan# 1126
Delta R.T. 0.006 min
Lab File: VN085916.D
Acq: 10 Mar 2025 13:22

Tgt Ion: 65 Resp: 131135
Ion Ratio Lower Upper
65 100
67 53.7 0.0 106.2





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.100 min Scan# 11

Delta R.T. 0.006 min

Lab File: VN085916.D

Acq: 10 Mar 2025 13:22

Instrument :

MSVOA_N

ClientSampleId :

VN0310WBL01

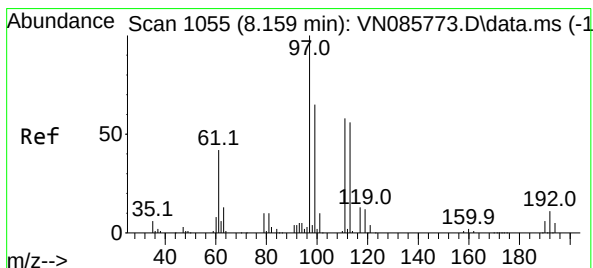
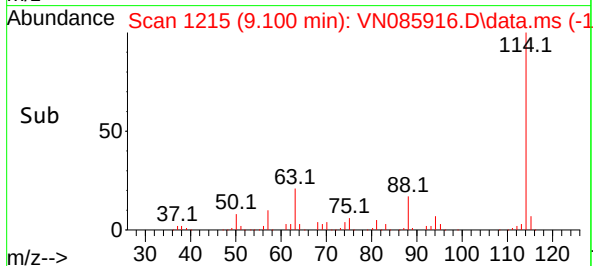
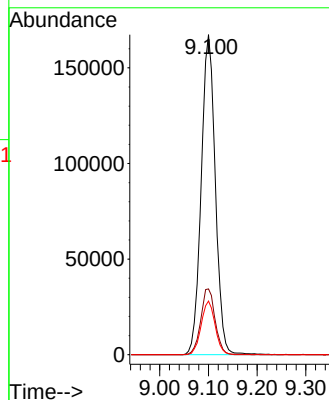
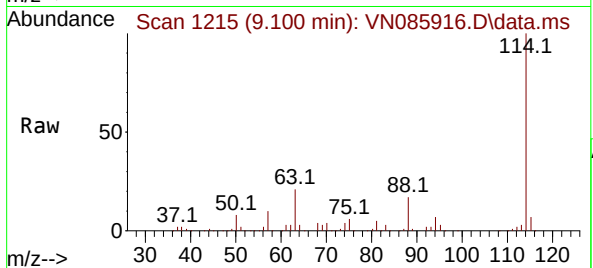
Tgt Ion:114 Resp: 337149

Ion Ratio Lower Upper

114 100

63 20.5 0.0 39.2

88 16.7 0.0 30.0



#35

Dibromofluoromethane

Concen: 50.627 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. 0.006 min

Lab File: VN085916.D

Acq: 10 Mar 2025 13:22

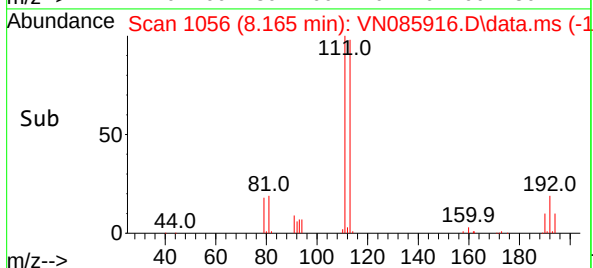
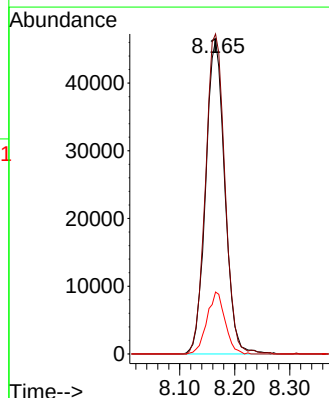
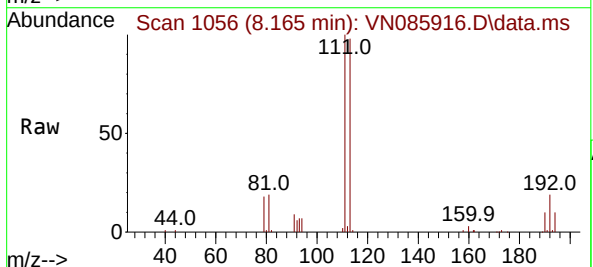
Tgt Ion:113 Resp: 111691

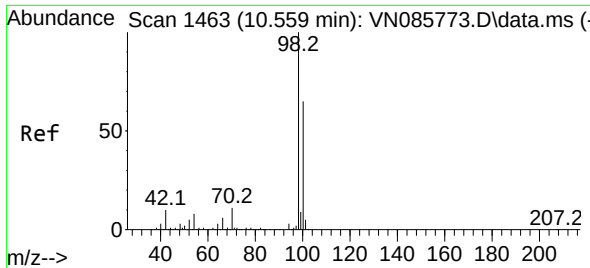
Ion Ratio Lower Upper

113 100

111 103.6 82.2 123.4

192 18.7 14.7 22.1

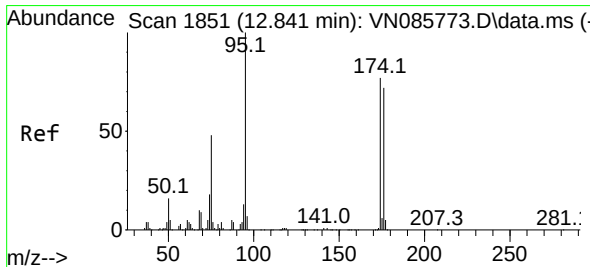
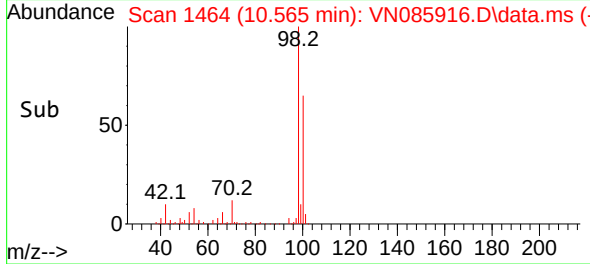
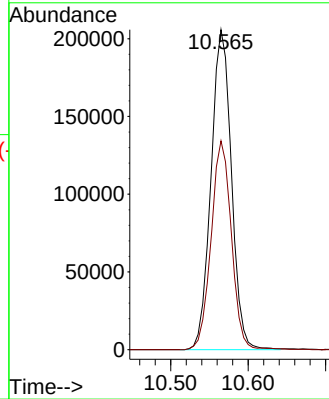
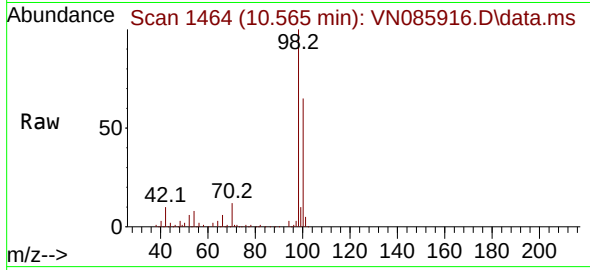




#50
Toluene-d8
Concen: 46.947 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.006 min
Lab File: VN085916.D
Acq: 10 Mar 2025 13:22

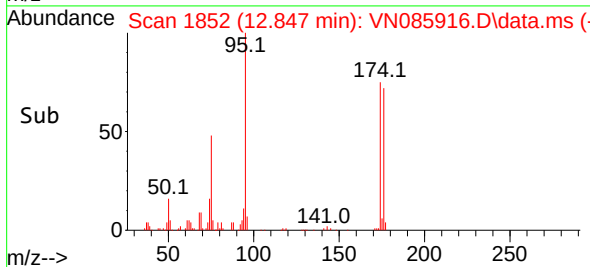
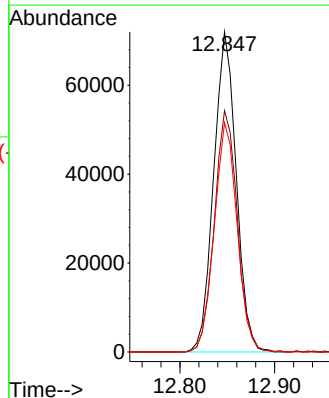
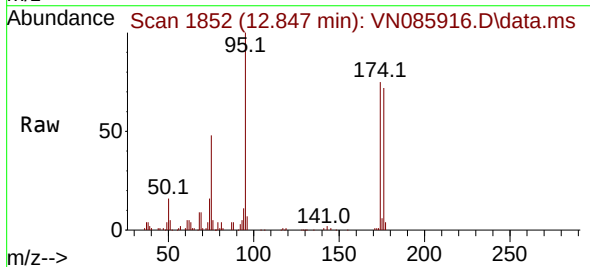
Instrument :
MSVOA_N
ClientSampleId :
VN0310WBL01

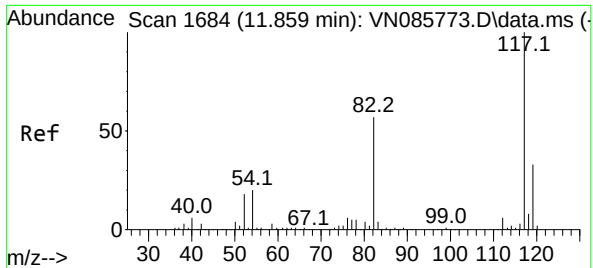
Tgt Ion: 98 Resp: 376828
Ion Ratio Lower Upper
98 100
100 64.8 52.1 78.1



#62
4-Bromofluorobenzene
Concen: 44.967 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.006 min
Lab File: VN085916.D
Acq: 10 Mar 2025 13:22

Tgt Ion: 95 Resp: 118920
Ion Ratio Lower Upper
95 100
174 77.1 0.0 152.4
176 72.7 0.0 146.6

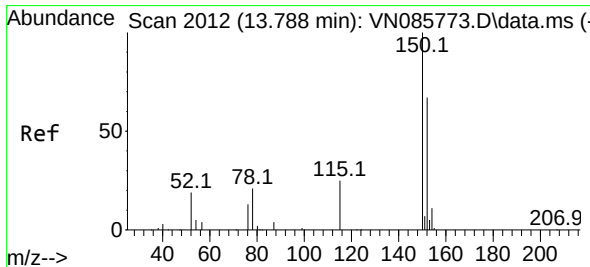
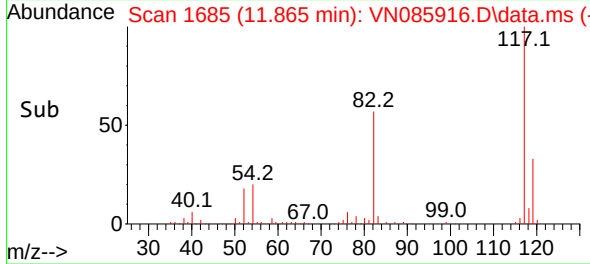
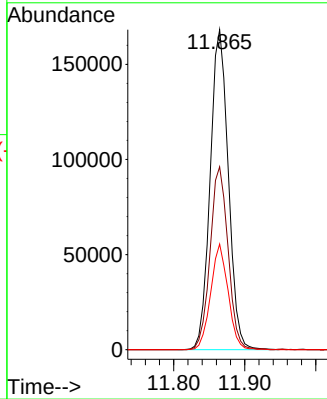
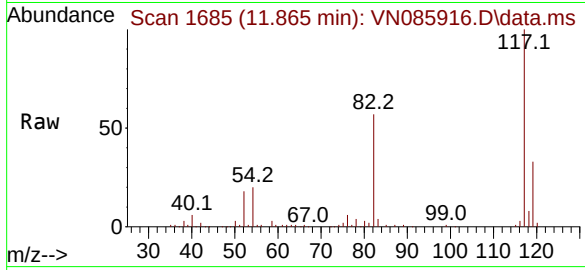




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 117
Delta R.T. 0.006 min
Lab File: VN085916.D
Acq: 10 Mar 2025 13:22

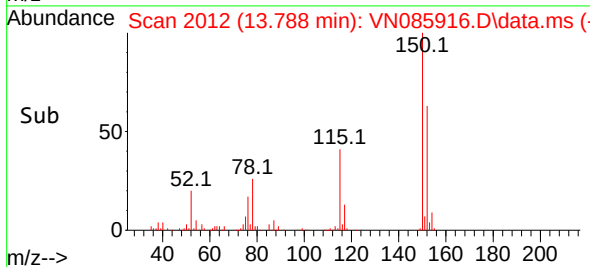
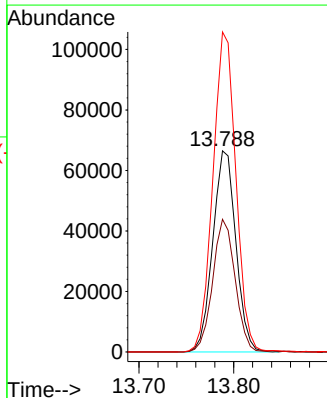
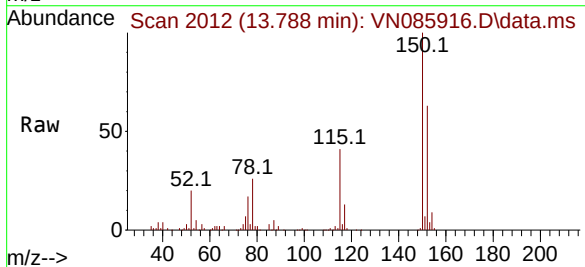
Instrument :
MSVOA_N
ClientSampleId :
VN0310WBL01

Tgt Ion:117 Resp: 297684
Ion Ratio Lower Upper
117 100
82 57.2 45.7 68.5
119 33.0 26.2 39.2



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. 0.000 min
Lab File: VN085916.D
Acq: 10 Mar 2025 13:22

Tgt Ion:152 Resp: 112686
Ion Ratio Lower Upper
152 100
115 64.0 30.4 91.3
150 158.5 0.0 345.4



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\
Data File : VN085916.D
Acq On : 10 Mar 2025 13:22
Operator : JC\MD
Sample : VN0310WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0310WBL01

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Sampling : 1

Start Thrs: 0.2

Stop Thrs : 0

Filtering: 5

Min Area: 3 % of largest Peak

Max Peaks: 100

Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M

Title : SW846 8260

Signal : TIC: VN085916.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.818	140	147	154	rBV5	8438	16723	1.70%	0.317%
2	8.165	1046	1056	1060	rBV	153437	355810	36.10%	6.746%
3	8.224	1060	1066	1079	rVB	258760	577181	58.55%	10.942%
4	8.577	1117	1126	1134	rBV	159381	358486	36.37%	6.796%
5	8.788	1156	1162	1174	rVB3	10705	36078	3.66%	0.684%
6	9.100	1206	1215	1225	rBV	397799	794988	80.65%	15.072%
7	10.565	1455	1464	1479	rBV	539489	985741	100.00%	18.688%
8	11.865	1675	1685	1699	rBV	507861	894725	90.77%	16.963%
9	12.847	1845	1852	1863	rVB	338224	567022	57.52%	10.750%
10	13.788	2005	2012	2022	rBV	408917	687945	69.79%	13.042%

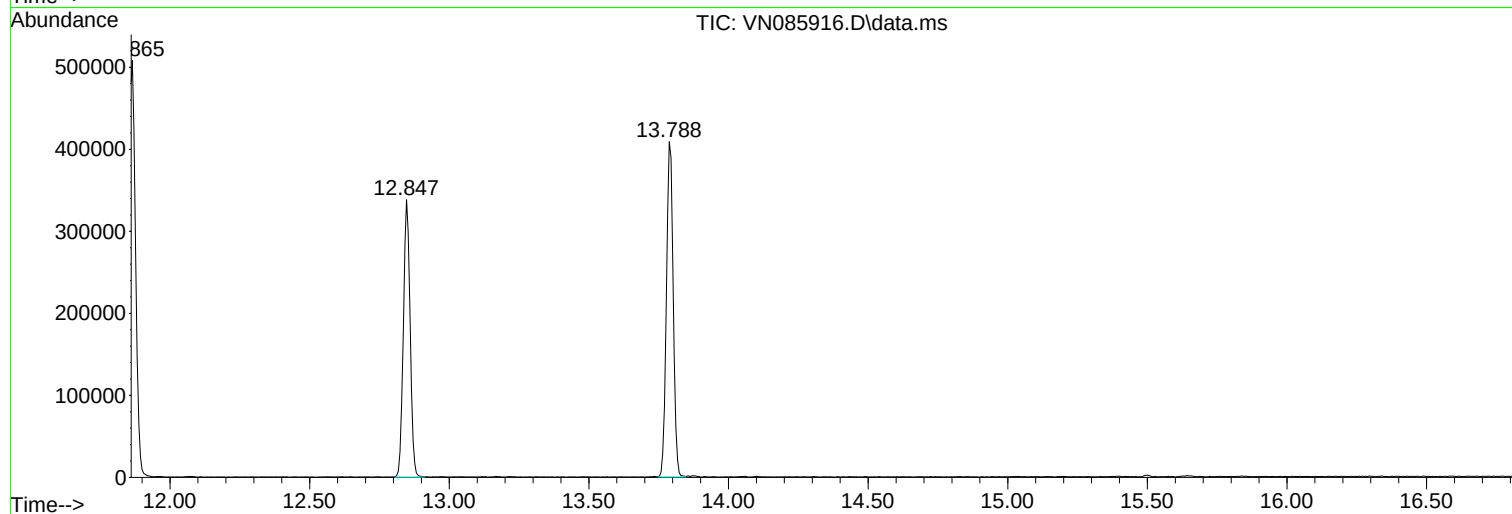
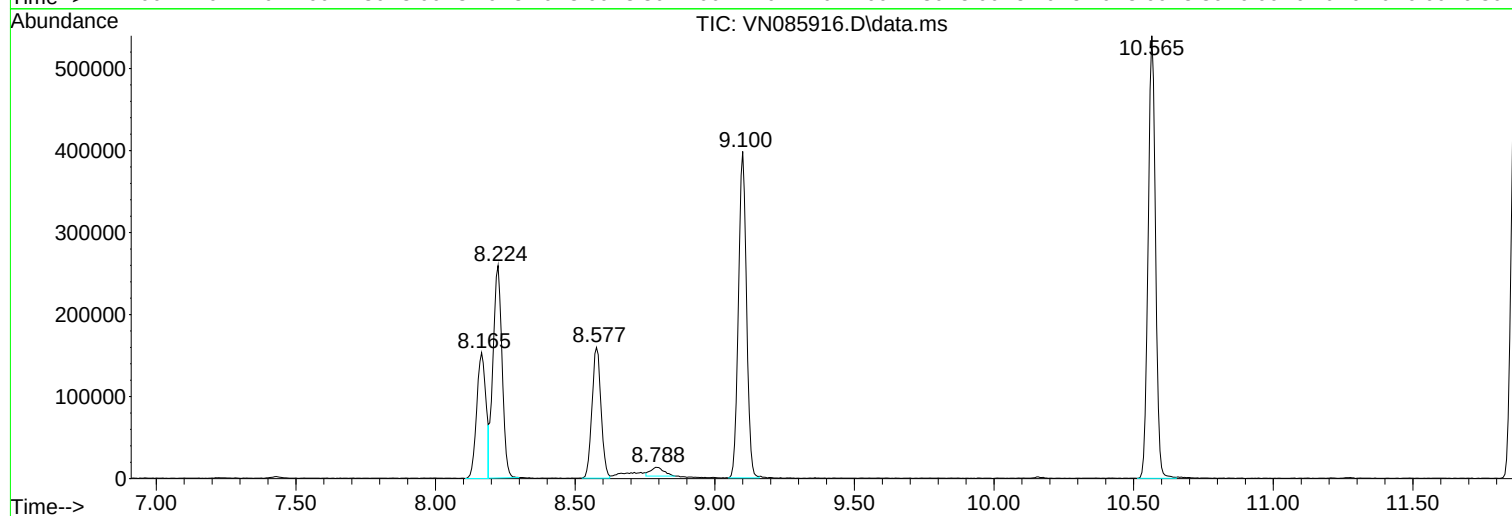
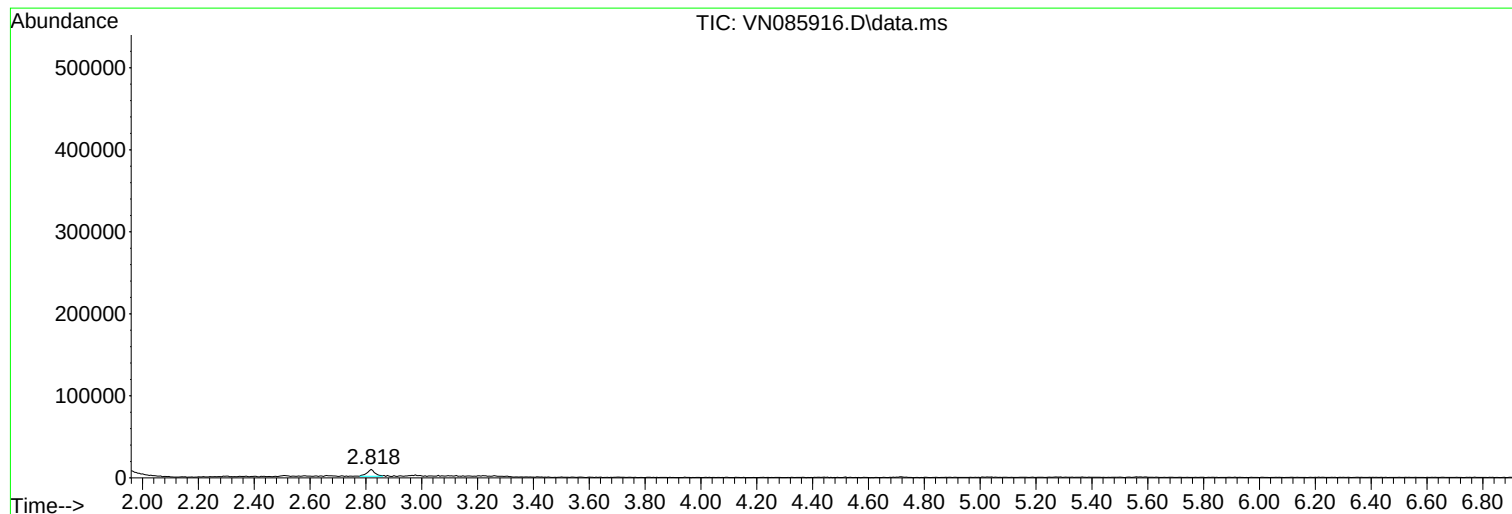
Sum of corrected areas: 5274699

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\
Data File : VN085916.D
Acq On : 10 Mar 2025 13:22
Operator : JC\MD
Sample : VN0310WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0310WBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\
Data File : VN085916.D
Acq On : 10 Mar 2025 13:22
Operator : JC\MD
Sample : VN0310WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0310WBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\
Data File : VN085916.D
Acq On : 10 Mar 2025 13:22
Operator : JC\MD
Sample : VN0310WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0310WBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc

Report of Analysis

Client:	Portal Partners Tri-Venture		Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025		Date Received:	
Client Sample ID:	VN0311WBL01		SDG No.:	Q1514
Lab Sample ID:	VN0311WBL01		Matrix:	Water
Analytical Method:	SW8260		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085930.D	1		03/11/25 14:21	VN031125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.21	U	0.21	1.00	ug/L
74-87-3	Chloromethane	0.35	U	0.35	1.00	ug/L
75-01-4	Vinyl Chloride	0.34	U	0.34	1.00	ug/L
74-83-9	Bromomethane	1.40	U	1.40	5.00	ug/L
75-00-3	Chloroethane	0.56	U	0.56	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.34	U	0.34	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.25	U	0.25	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.26	U	0.26	1.00	ug/L
67-64-1	Acetone	1.40	U	1.40	5.00	ug/L
75-15-0	Carbon Disulfide	0.32	U	0.32	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	0.16	U	0.16	1.00	ug/L
79-20-9	Methyl Acetate	0.60	U	0.60	1.00	ug/L
75-09-2	Methylene Chloride	0.32	U	0.32	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.25	U	0.25	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.23	U	0.23	1.00	ug/L
110-82-7	Cyclohexane	1.60	U	1.60	5.00	ug/L
78-93-3	2-Butanone	1.30	U	1.30	5.00	ug/L
56-23-5	Carbon Tetrachloride	0.25	U	0.25	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.25	U	0.25	1.00	ug/L
74-97-5	Bromochloromethane	0.18	U	0.18	1.00	ug/L
67-66-3	Chloroform	0.26	U	0.26	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.19	U	0.19	1.00	ug/L
108-87-2	Methylcyclohexane	0.19	U	0.19	1.00	ug/L
71-43-2	Benzene	0.16	U	0.16	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.24	U	0.24	1.00	ug/L
79-01-6	Trichloroethene	0.32	U	0.32	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.19	U	0.19	1.00	ug/L
75-27-4	Bromodichloromethane	0.24	U	0.24	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	0.75	U	0.75	5.00	ug/L
108-88-3	Toluene	0.18	U	0.18	1.00	ug/L

Report of Analysis

Client:	Portal Partners Tri-Venture			Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025			Date Received:	
Client Sample ID:	VN0311WBL01			SDG No.:	Q1514
Lab Sample ID:	VN0311WBL01			Matrix:	Water
Analytical Method:	SW8260			% Solid:	0
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000 uL
Soil Aliquot Vol:			uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624	ID :	0.25	Level :	LOW
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085930.D	1		03/11/25 14:21	VN031125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.21	U	0.21	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.18	U	0.18	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.21	U	0.21	1.00	ug/L
591-78-6	2-Hexanone	1.10	U	1.10	5.00	ug/L
124-48-1	Dibromochloromethane	0.18	U	0.18	1.00	ug/L
106-93-4	1,2-Dibromoethane	0.16	U	0.16	1.00	ug/L
127-18-4	Tetrachloroethene	0.25	U	0.25	1.00	ug/L
108-90-7	Chlorobenzene	0.13	U	0.13	1.00	ug/L
100-41-4	Ethyl Benzene	0.16	U	0.16	1.00	ug/L
179601-23-1	m/p-Xylenes	0.31	U	0.31	2.00	ug/L
95-47-6	o-Xylene	0.14	U	0.14	1.00	ug/L
100-42-5	Styrene	0.16	U	0.16	1.00	ug/L
75-25-2	Bromoform	0.21	U	0.21	1.00	ug/L
98-82-8	Isopropylbenzene	0.13	U	0.13	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.27	U	0.27	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.24	U	0.24	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.27	U	0.27	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.19	U	0.19	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.46	U	0.46	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.42	U	0.42	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.51	U	0.51	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	56.1		70 (74) - 130 (125)	112%	SPK: 50
1868-53-7	Dibromofluoromethane	49.0		70 (75) - 130 (124)	98%	SPK: 50
2037-26-5	Toluene-d8	44.5		70 (86) - 130 (113)	89%	SPK: 50
460-00-4	4-Bromofluorobenzene	42.2		70 (77) - 130 (121)	84%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	166000	8.224			
540-36-3	1,4-Difluorobenzene	319000	9.1			
3114-55-4	Chlorobenzene-d5	278000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	106000	13.788			

Report of Analysis

Client:	Portal Partners Tri-Venture		Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025		Date Received:	
Client Sample ID:	VN0311WBL01		SDG No.:	Q1514
Lab Sample ID:	VN0311WBL01		Matrix:	Water
Analytical Method:	SW8260		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085930.D	1		03/11/25 14:21	VN031125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031125\
 Data File : VN085930.D
 Acq On : 11 Mar 2025 14:21
 Operator : JC\MD
 Sample : VN0311WBL01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN0311WBL01

Quant Time: Mar 12 01:19:43 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
 Quant Title : SW846 8260
 QLast Update : Wed Feb 19 03:43:32 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	8.224	168	166099	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	319285	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	277562	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	106492	50.000	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	120828	56.110	ug/l	0.00
Spiked Amount	50.000	Range	74 - 125	Recovery	=	112.220%
35) Dibromofluoromethane	8.165	113	102406	49.016	ug/l	0.00
Spiked Amount	50.000	Range	75 - 124	Recovery	=	98.040%
50) Toluene-d8	10.565	98	338496	44.531	ug/l	0.00
Spiked Amount	50.000	Range	86 - 113	Recovery	=	89.060%
62) 4-Bromofluorobenzene	12.847	95	105788	42.240	ug/l	0.00
Spiked Amount	50.000	Range	77 - 121	Recovery	=	84.480%

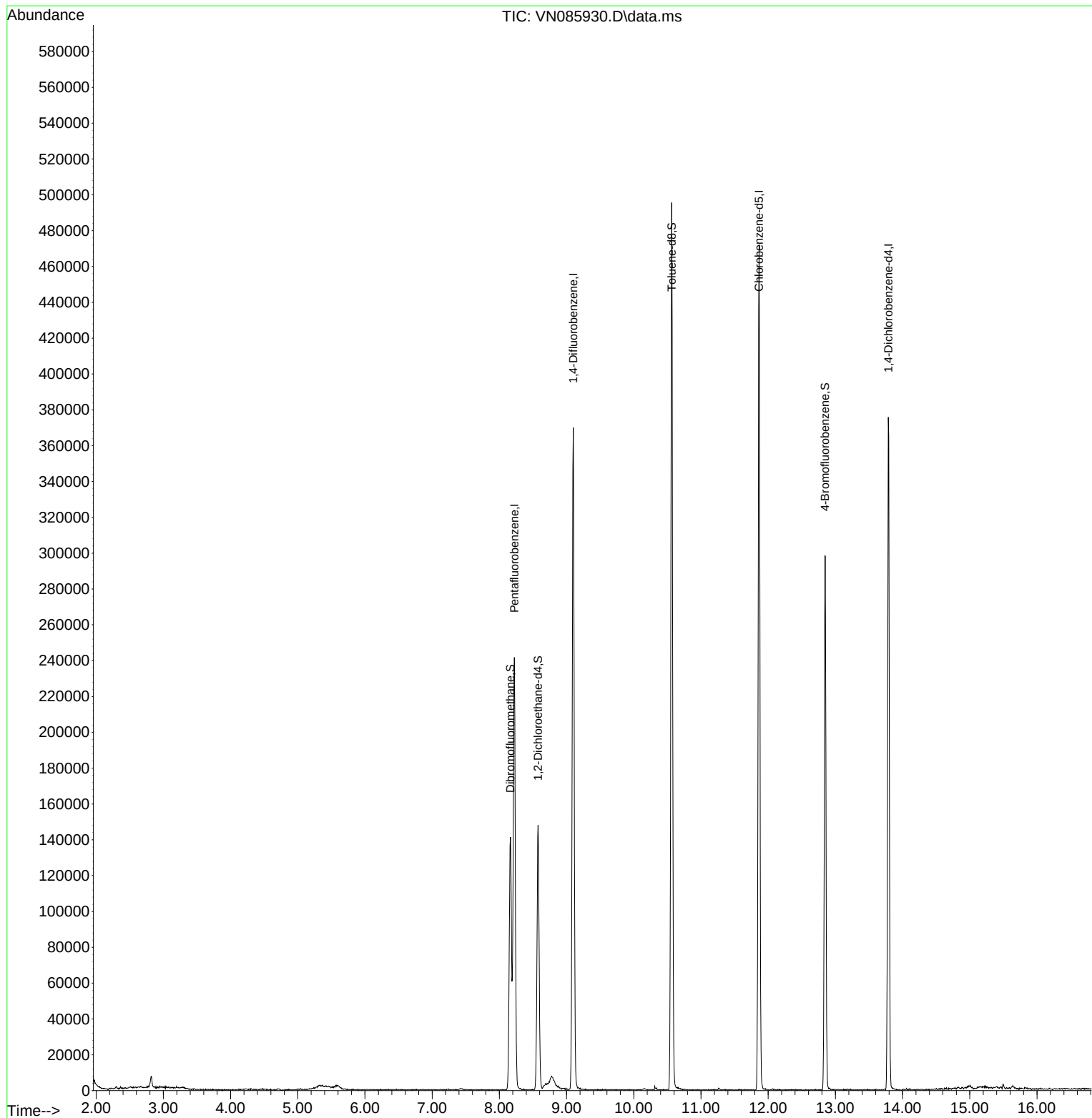
Target Compounds	Qvalue

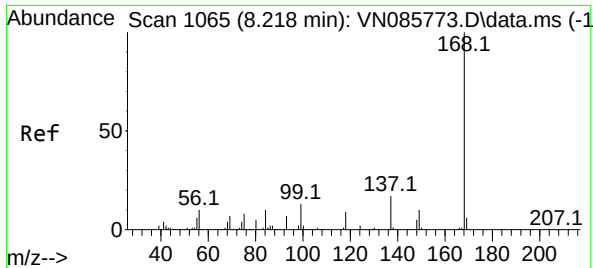
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031125\
Data File : VN085930.D
Acq On : 11 Mar 2025 14:21
Operator : JC\MD
Sample : VN0311WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0311WBL01

Quant Time: Mar 12 01:19:43 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260
QLast Update : Wed Feb 19 03:43:32 2025
Response via : Initial Calibration

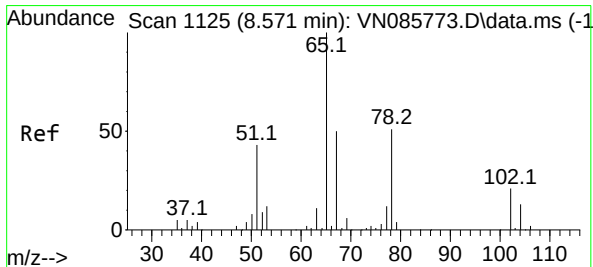
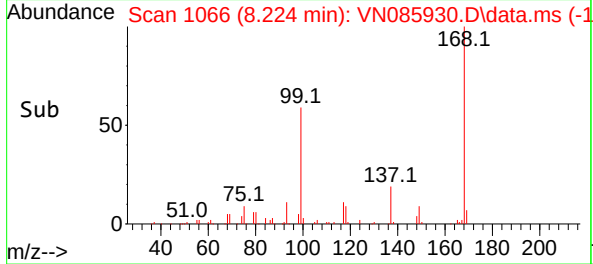
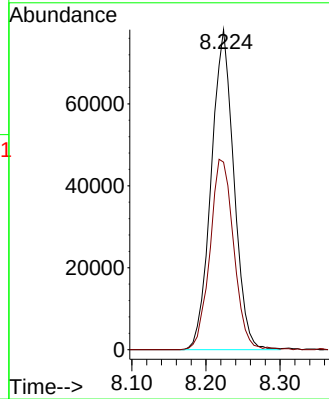
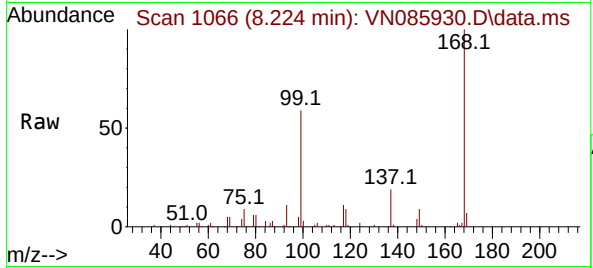




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1066
Delta R.T. 0.006 min
Lab File: VN085930.D
Acq: 11 Mar 2025 14:21

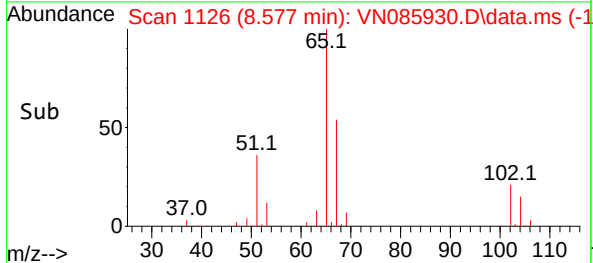
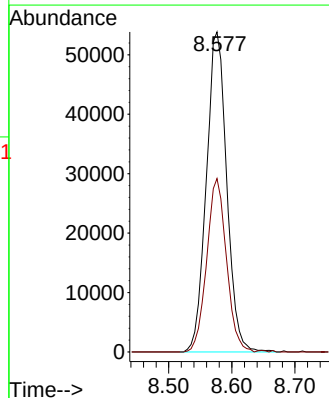
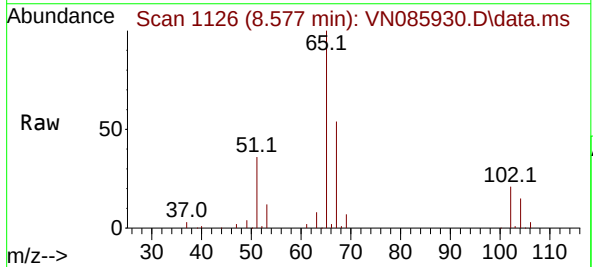
Instrument :
MSVOA_N
ClientSampleId :
VN0311WBL01

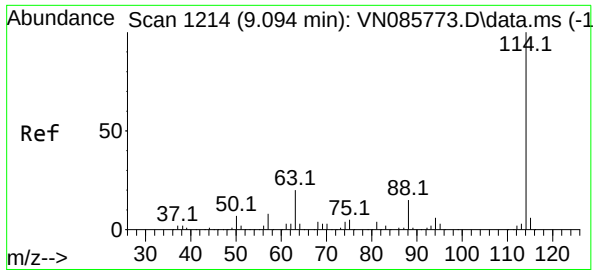
Tgt Ion:168 Resp: 166099
Ion Ratio Lower Upper
168 100
99 58.6 47.9 71.9



#33
1,2-Dichloroethane-d4
Concen: 56.110 ug/l
RT: 8.577 min Scan# 1126
Delta R.T. 0.006 min
Lab File: VN085930.D
Acq: 11 Mar 2025 14:21

Tgt Ion: 65 Resp: 120828
Ion Ratio Lower Upper
65 100
67 52.3 0.0 106.2

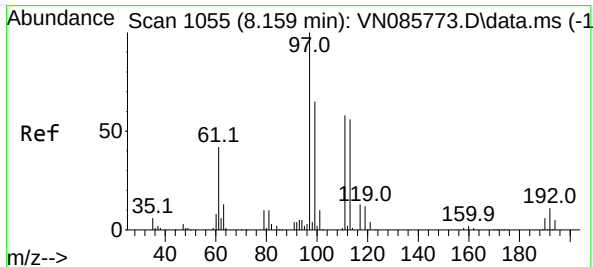
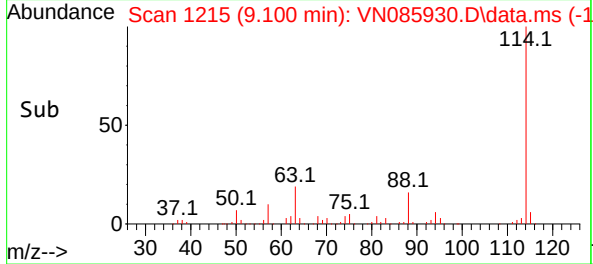
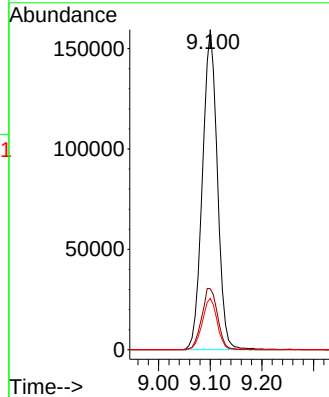
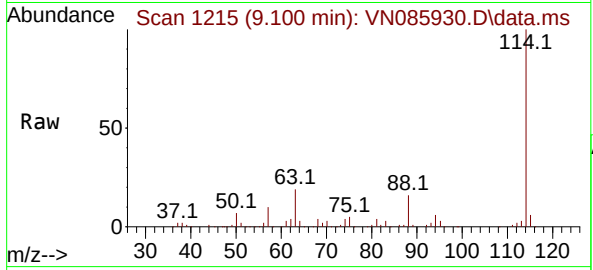




#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 11
Delta R.T. 0.006 min
Lab File: VN085930.D
Acq: 11 Mar 2025 14:21

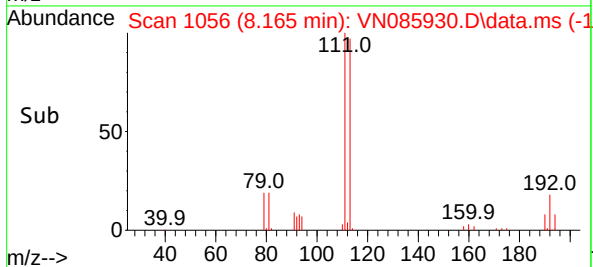
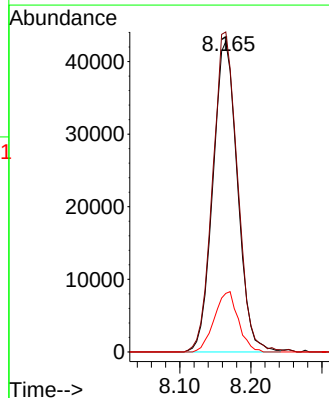
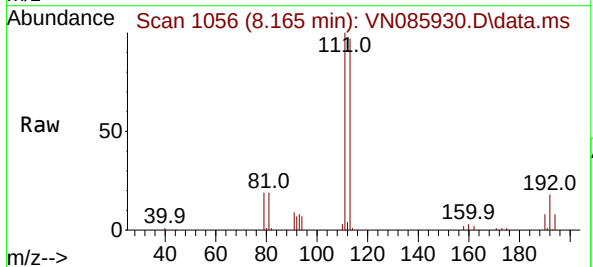
Instrument :
MSVOA_N
ClientSampleId :
VN0311WBL01

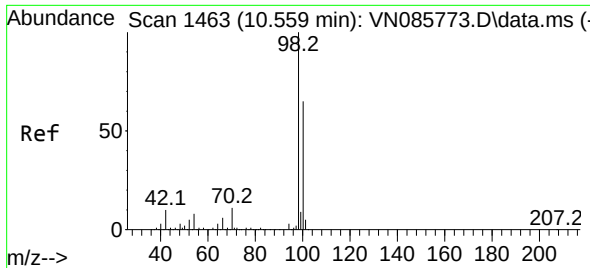
Tgt Ion:114 Resp: 319285
Ion Ratio Lower Upper
114 100
63 19.1 0.0 39.2
88 16.0 0.0 30.0



#35
Dibromofluoromethane
Concen: 49.016 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.006 min
Lab File: VN085930.D
Acq: 11 Mar 2025 14:21

Tgt Ion:113 Resp: 102406
Ion Ratio Lower Upper
113 100
111 104.2 82.2 123.4
192 18.9 14.7 22.1

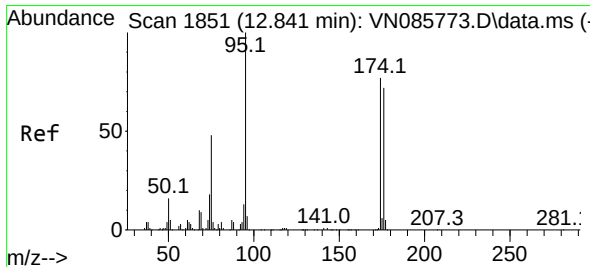
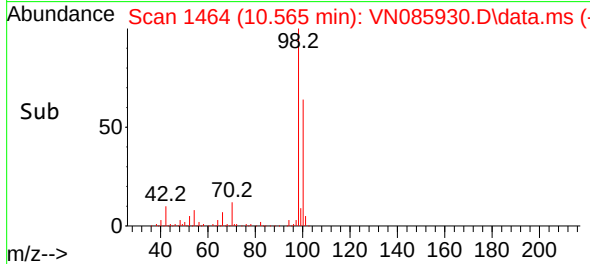
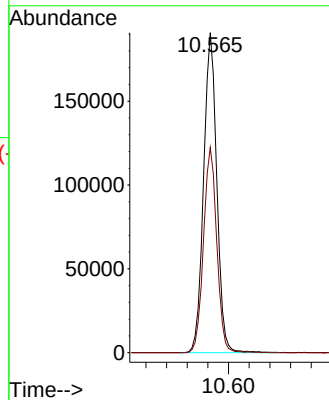
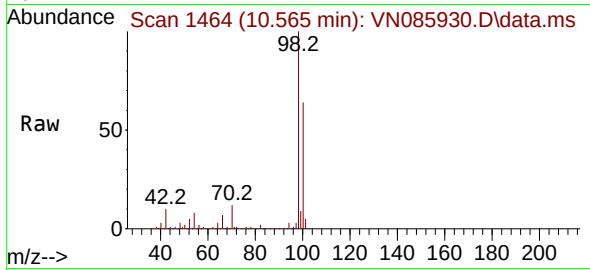




#50
Toluene-d8
Concen: 44.531 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.006 min
Lab File: VN085930.D
Acq: 11 Mar 2025 14:21

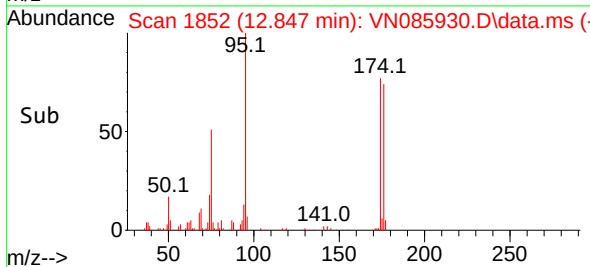
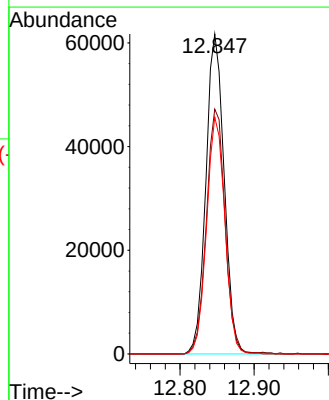
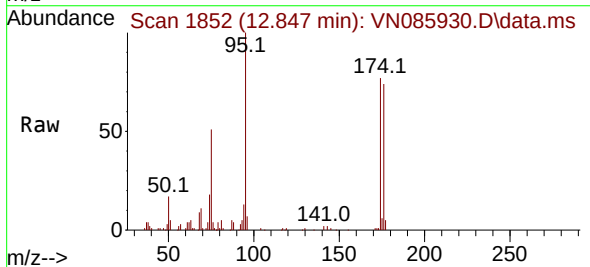
Instrument :
MSVOA_N
ClientSampleId :
VN0311WBL01

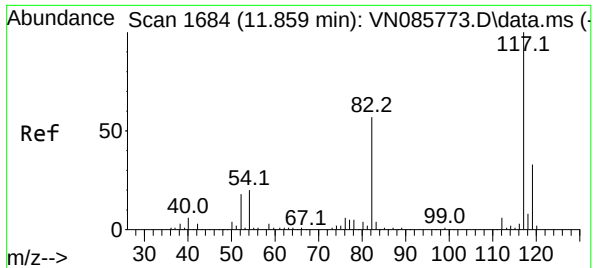
Tgt Ion: 98 Resp: 338496
Ion Ratio Lower Upper
98 100
100 64.5 52.1 78.1



#62
4-Bromofluorobenzene
Concen: 42.240 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.006 min
Lab File: VN085930.D
Acq: 11 Mar 2025 14:21

Tgt Ion: 95 Resp: 105788
Ion Ratio Lower Upper
95 100
174 78.2 0.0 152.4
176 73.8 0.0 146.6

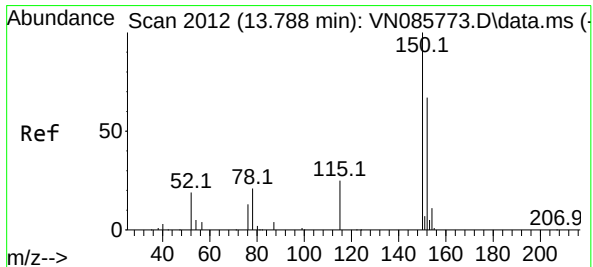
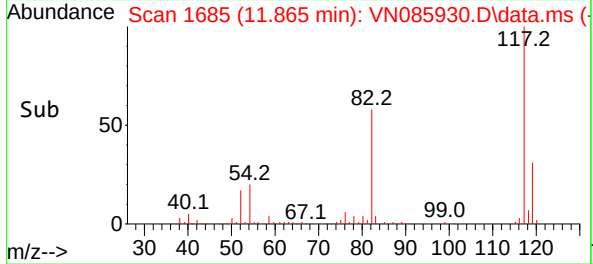
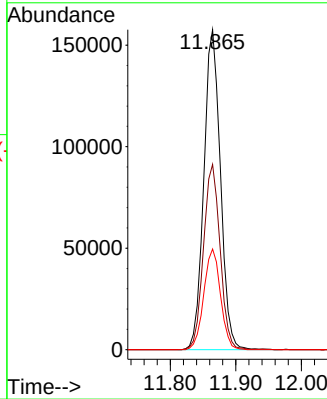
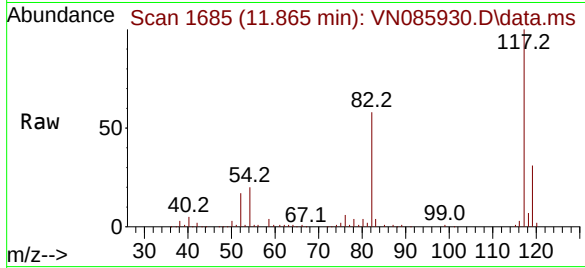




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 117
Delta R.T. 0.006 min
Lab File: VN085930.D
Acq: 11 Mar 2025 14:21

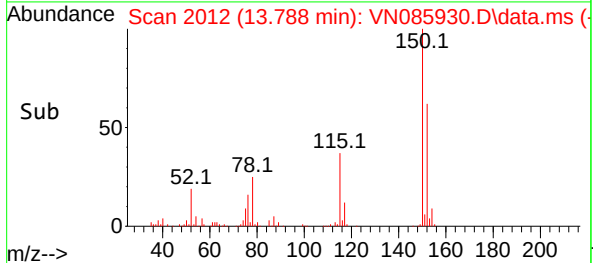
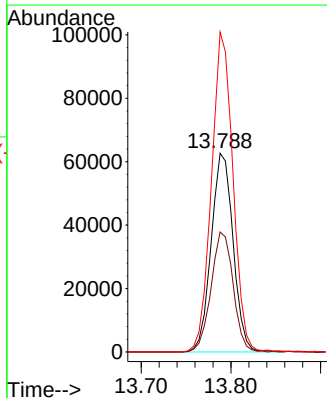
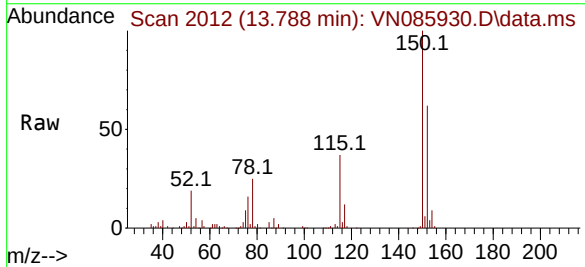
Instrument :
MSVOA_N
ClientSampleId :
VN0311WBL01

Tgt Ion:117 Resp: 277562
Ion Ratio Lower Upper
117 100
82 57.9 45.7 68.5
119 31.5 26.2 39.2



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. -0.000 min
Lab File: VN085930.D
Acq: 11 Mar 2025 14:21

Tgt Ion:152 Resp: 106492
Ion Ratio Lower Upper
152 100
115 60.6 30.4 91.3
150 157.7 0.0 345.4



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031125\
Data File : VN085930.D
Acq On : 11 Mar 2025 14:21
Operator : JC\MD
Sample : VN0311WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0311WBL01

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Sampling : 1

Start Thrs: 0.2

Stop Thrs : 0

Filtering: 5

Min Area: 3 % of largest Peak

Max Peaks: 100

Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M

Title : SW846 8260

Signal : TIC: VN085930.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.818	142	147	153	rVB3	6019	10526	1.20%	0.219%
2	8.165	1045	1056	1060	rBV2	141020	328245	37.55%	6.824%
3	8.224	1060	1066	1079	rVB	240917	531178	60.77%	11.043%
4	8.577	1116	1126	1136	rBV	147778	325384	37.23%	6.764%
5	8.777	1152	1160	1172	rVB3	5365	20987	2.40%	0.436%
6	9.100	1206	1215	1226	rBV	369232	744664	85.20%	15.481%
7	10.565	1456	1464	1477	rBV	495271	874059	100.00%	18.171%
8	11.865	1676	1685	1697	rBV	471739	834111	95.43%	17.341%
9	12.847	1845	1852	1861	rBV	298227	504452	57.71%	10.487%
10	13.788	2005	2012	2022	rBV	375417	636575	72.83%	13.234%

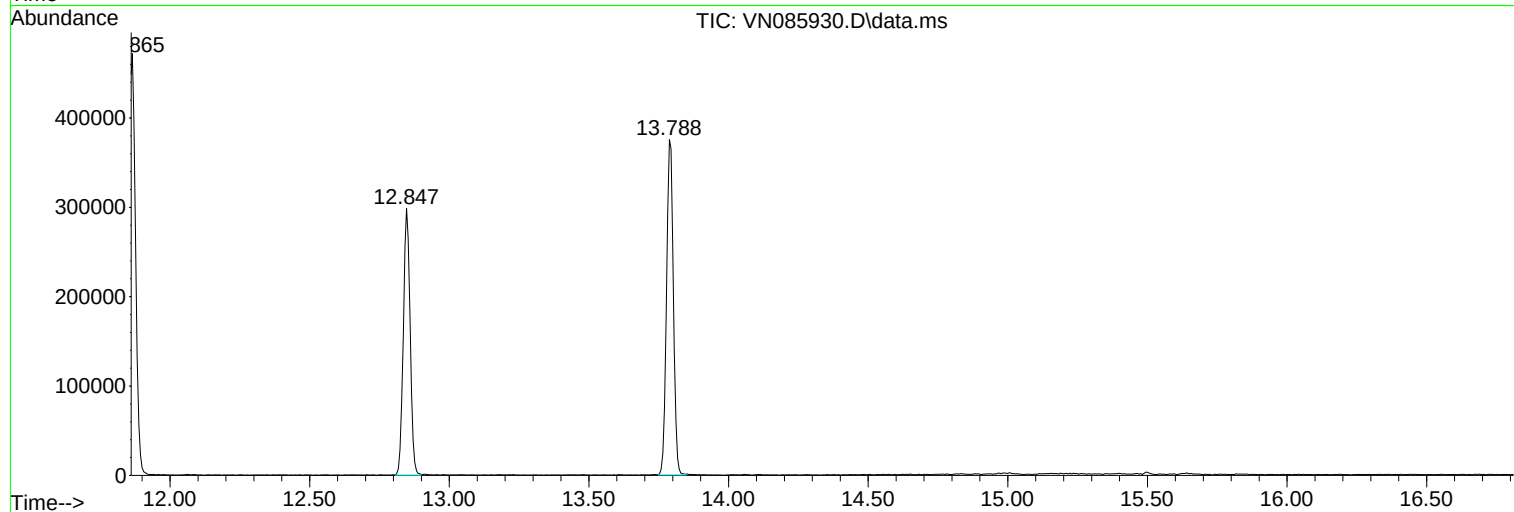
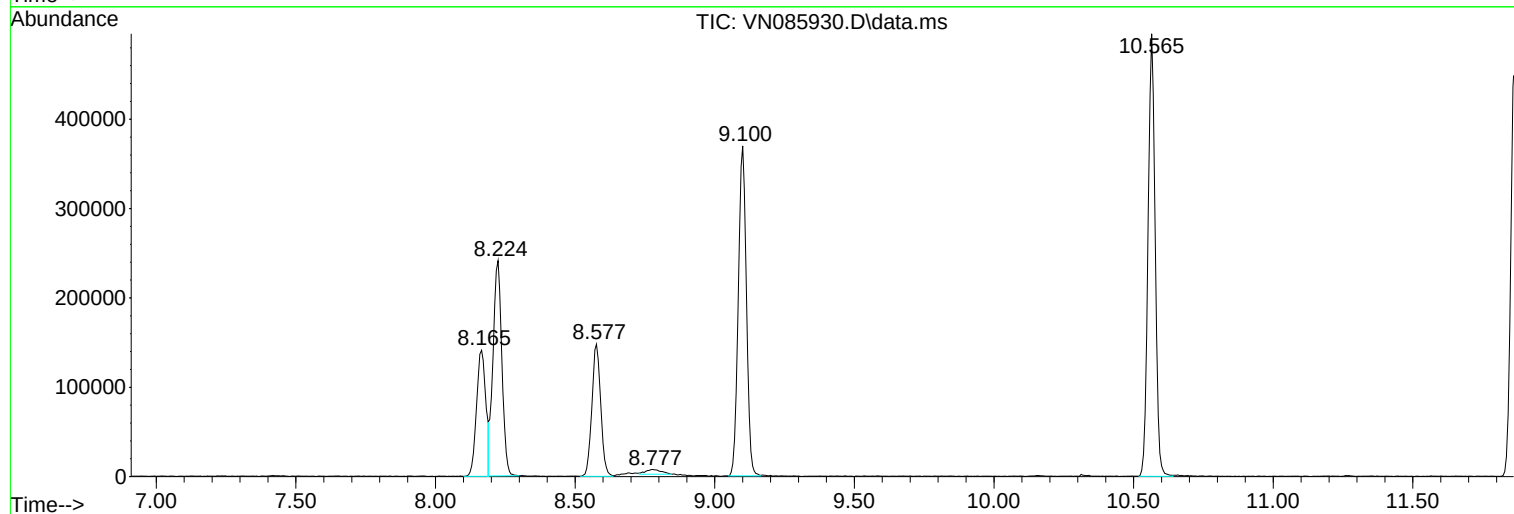
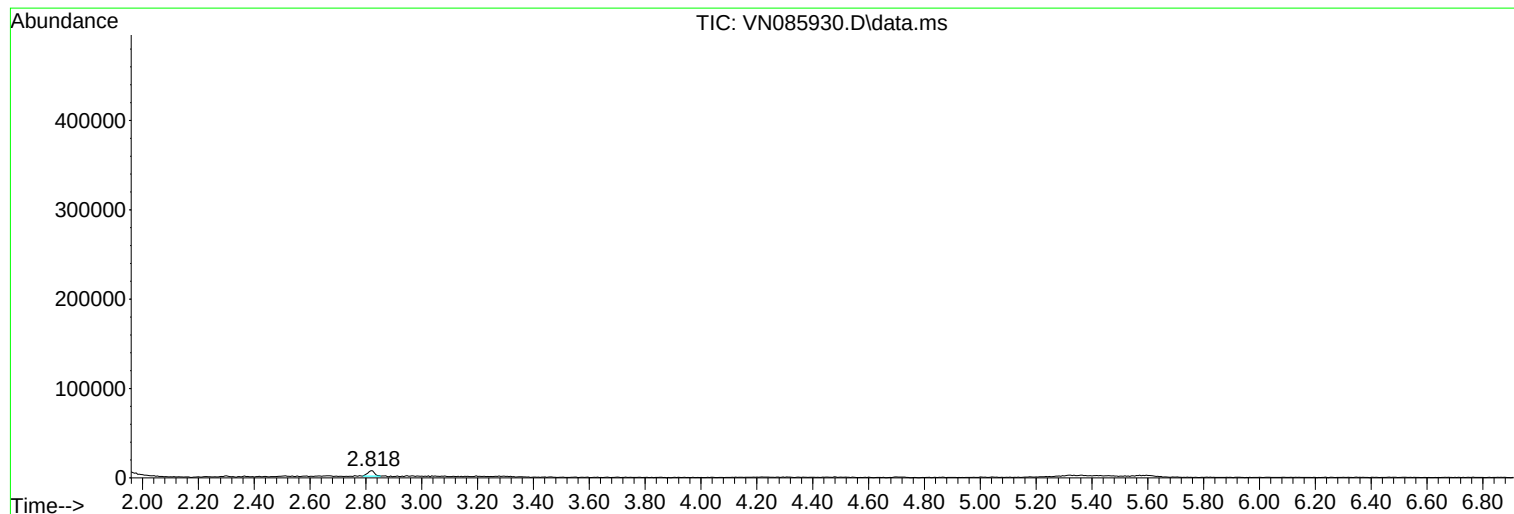
Sum of corrected areas: 4810181

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031125\
Data File : VN085930.D
Acq On : 11 Mar 2025 14:21
Operator : JC\MD
Sample : VN0311WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0311WBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031125\
Data File : VN085930.D
Acq On : 11 Mar 2025 14:21
Operator : JC\MD
Sample : VN0311WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0311WBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031125\
Data File : VN085930.D
Acq On : 11 Mar 2025 14:21
Operator : JC\MD
Sample : VN0311WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0311WBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	
Client Sample ID:	VY0311SBL01	SDG No.:	Q1514
Lab Sample ID:	VY0311SBL01	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	100
Sample Wt/Vol:	5	Units:	g
Soil Aliquot Vol:			uL
GC Column:	RXI-624	ID :	0.25
Prep Method :		Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021475.D	1		03/11/25 10:12	vy031125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	1.70	U	1.70	5.00	ug/Kg
74-87-3	Chloromethane	1.20	U	1.20	5.00	ug/Kg
75-01-4	Vinyl Chloride	0.77	U	0.77	5.00	ug/Kg
74-83-9	Bromomethane	1.00	U	1.00	5.00	ug/Kg
75-00-3	Chloroethane	1.00	U	1.00	5.00	ug/Kg
75-69-4	Trichlorofluoromethane	0.91	U	0.91	5.00	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	1.10	U	1.10	5.00	ug/Kg
75-35-4	1,1-Dichloroethene	0.78	U	0.78	5.00	ug/Kg
67-64-1	Acetone	6.20	U	6.20	25.0	ug/Kg
75-15-0	Carbon Disulfide	1.30	U	1.30	5.00	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.67	U	0.67	5.00	ug/Kg
79-20-9	Methyl Acetate	1.80	U	1.80	5.00	ug/Kg
75-09-2	Methylene Chloride	3.40	U	3.40	10.0	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.84	U	0.84	5.00	ug/Kg
75-34-3	1,1-Dichloroethane	0.63	U	0.63	5.00	ug/Kg
110-82-7	Cyclohexane	0.69	U	0.69	5.00	ug/Kg
78-93-3	2-Butanone	5.70	U	5.70	25.0	ug/Kg
56-23-5	Carbon Tetrachloride	0.87	U	0.87	5.00	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.61	U	0.61	5.00	ug/Kg
74-97-5	Bromochloromethane	2.40	U	2.40	5.00	ug/Kg
67-66-3	Chloroform	0.67	U	0.67	5.00	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.78	U	0.78	5.00	ug/Kg
108-87-2	Methylcyclohexane	0.87	U	0.87	5.00	ug/Kg
71-43-2	Benzene	0.72	U	0.72	5.00	ug/Kg
107-06-2	1,2-Dichloroethane	0.61	U	0.61	5.00	ug/Kg
79-01-6	Trichloroethene	0.75	U	0.75	5.00	ug/Kg
78-87-5	1,2-Dichloropropane	0.66	U	0.66	5.00	ug/Kg
75-27-4	Bromodichloromethane	0.56	U	0.56	5.00	ug/Kg
108-10-1	4-Methyl-2-Pentanone	4.40	U	4.40	25.0	ug/Kg
108-88-3	Toluene	0.67	U	0.67	5.00	ug/Kg

Report of Analysis

Client:	Portal Partners Tri-Venture		Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025		Date Received:	
Client Sample ID:	VY0311SBL01		SDG No.:	Q1514
Lab Sample ID:	VY0311SBL01		Matrix:	SOIL
Analytical Method:	SW8260		% Solid:	100
Sample Wt/Vol:	5	Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021475.D	1		03/11/25 10:12	vy031125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	0.60	U	0.60	5.00	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.57	U	0.57	5.00	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.84	U	0.84	5.00	ug/Kg
591-78-6	2-Hexanone	4.80	U	4.80	25.0	ug/Kg
124-48-1	Dibromochloromethane	0.65	U	0.65	5.00	ug/Kg
106-93-4	1,2-Dibromoethane	0.79	U	0.79	5.00	ug/Kg
127-18-4	Tetrachloroethene	0.89	U	0.89	5.00	ug/Kg
108-90-7	Chlorobenzene	0.74	U	0.74	5.00	ug/Kg
100-41-4	Ethyl Benzene	0.62	U	0.62	5.00	ug/Kg
179601-23-1	m/p-Xylenes	1.40	U	1.40	10.0	ug/Kg
95-47-6	o-Xylene	0.70	U	0.70	5.00	ug/Kg
100-42-5	Styrene	0.60	U	0.60	5.00	ug/Kg
75-25-2	Bromoform	0.81	U	0.81	5.00	ug/Kg
98-82-8	Isopropylbenzene	0.67	U	0.67	5.00	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	1.10	U	1.10	5.00	ug/Kg
541-73-1	1,3-Dichlorobenzene	0.74	U	0.74	5.00	ug/Kg
106-46-7	1,4-Dichlorobenzene	0.80	U	0.80	5.00	ug/Kg
95-50-1	1,2-Dichlorobenzene	0.59	U	0.59	5.00	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	1.60	U	1.60	5.00	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	0.79	U	0.79	5.00	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	0.78	U	0.78	5.00	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	53.3		70 (63) - 130 (155)	107%	SPK: 50
1868-53-7	Dibromofluoromethane	50.4		70 (70) - 130 (134)	101%	SPK: 50
2037-26-5	Toluene-d8	48.5		70 (74) - 130 (123)	97%	SPK: 50
460-00-4	4-Bromofluorobenzene	42.5		70 (38) - 130 (136)	85%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	266000	7.707			
540-36-3	1,4-Difluorobenzene	468000	8.616			
3114-55-4	Chlorobenzene-d5	407000	11.414			
3855-82-1	1,4-Dichlorobenzene-d4	157000	13.346			

Report of Analysis

Client:	Portal Partners Tri-Venture		Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025		Date Received:	
Client Sample ID:	VY0311SBL01		SDG No.:	Q1514
Lab Sample ID:	VY0311SBL01		Matrix:	SOIL
Analytical Method:	SW8260		% Solid:	100
Sample Wt/Vol:	5	Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021475.D	1		03/11/25 10:12	vy031125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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_Y\Data\VY031125\
 Data File : VY021475.D
 Acq On : 11 Mar 2025 10:12
 Operator : SY/MD
 Sample : VY0311SBL01
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VY0311SBL01

Quant Time: Mar 12 01:23:02 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 12:42:45 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	7.707	168	266206	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	468026	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.414	117	406786	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.346	152	157191	50.000	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	150026	53.321	ug/l	0.00
Spiked Amount	50.000	Range	50 - 163	Recovery	=	106.640%
35) Dibromofluoromethane	7.634	113	155103	50.417	ug/l	0.00
Spiked Amount	50.000	Range	54 - 147	Recovery	=	100.840%
50) Toluene-d8	10.109	98	564540	48.466	ug/l	0.00
Spiked Amount	50.000	Range	58 - 134	Recovery	=	96.940%
62) 4-Bromofluorobenzene	12.408	95	168454	42.515	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	=	85.020%

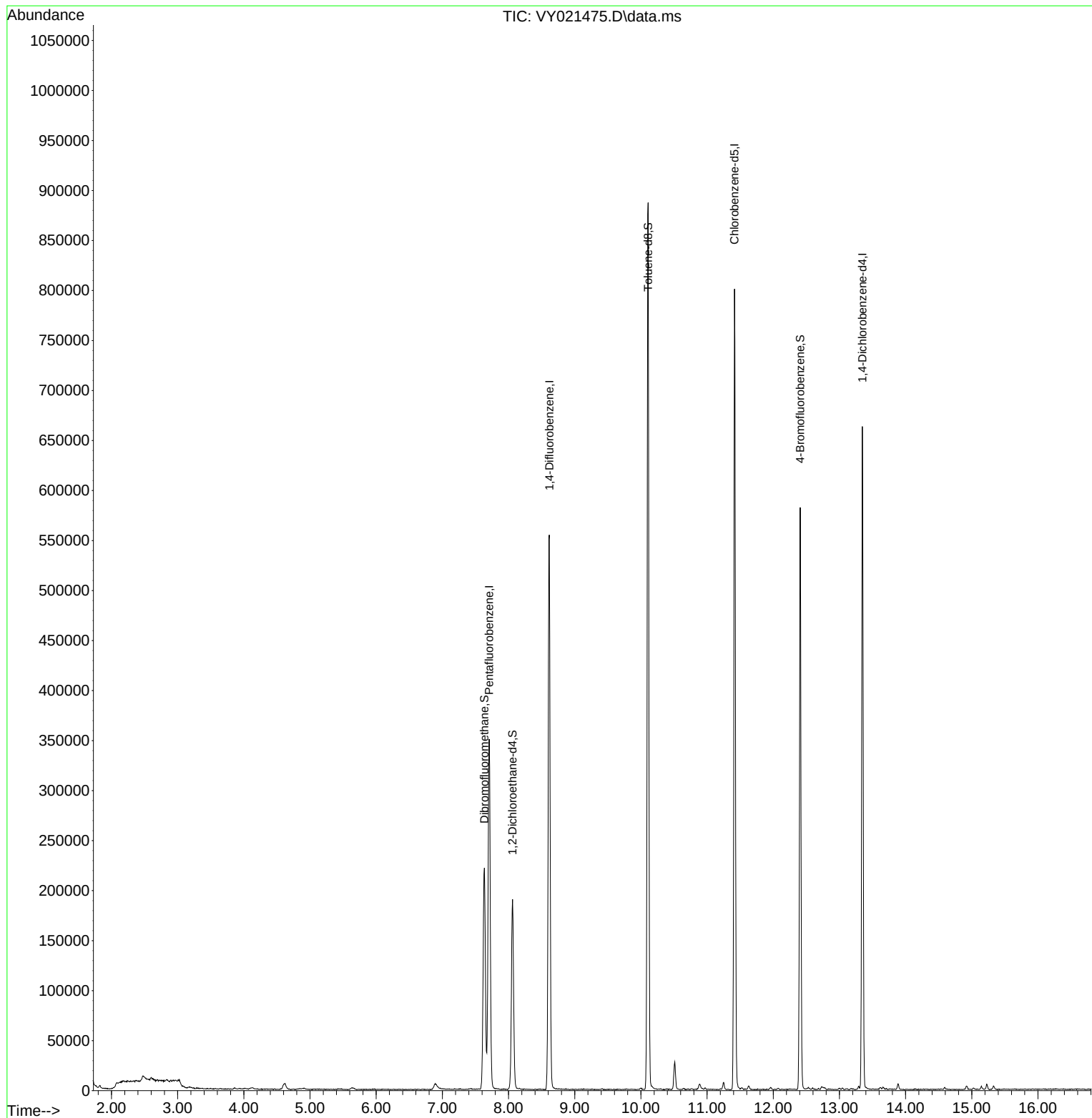
Target Compounds	Qvalue

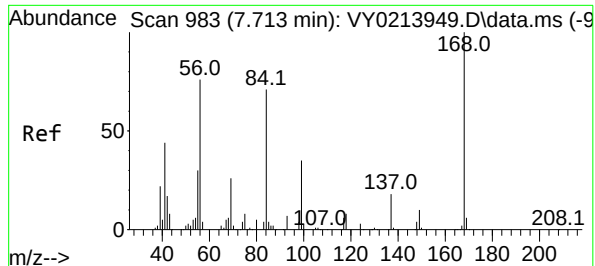
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
Data File : VY021475.D
Acq On : 11 Mar 2025 10:12
Operator : SY/MD
Sample : VY0311SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0311SBL01

Quant Time: Mar 12 01:23:02 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 12:42:45 2025
Response via : Initial Calibration

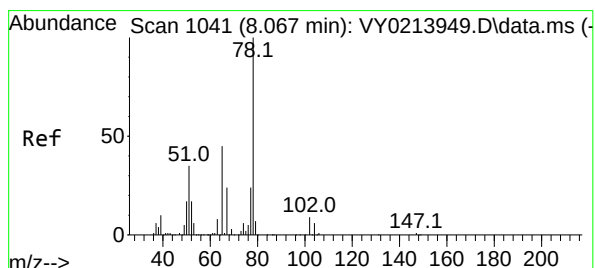
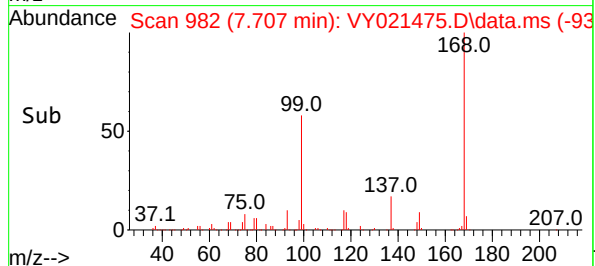
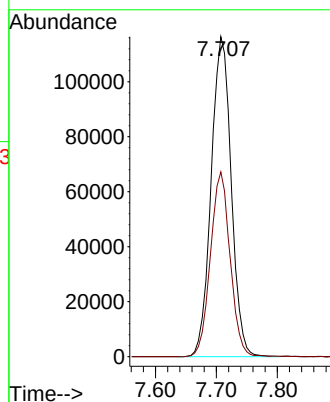
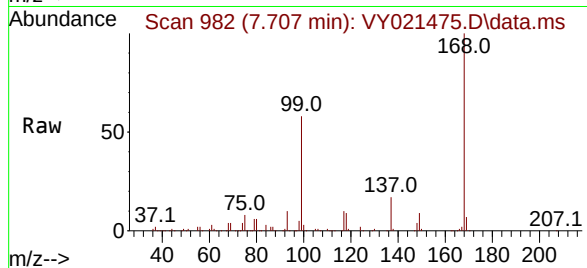




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.707 min Scan# 91
Delta R.T. -0.006 min
Lab File: VY021475.D
Acq: 11 Mar 2025 10:12

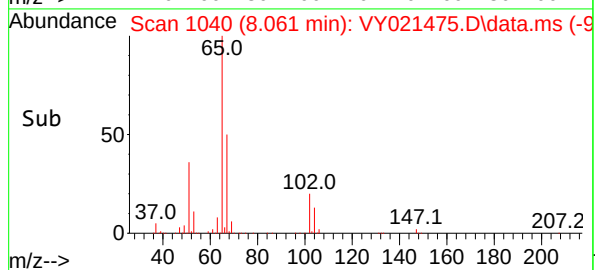
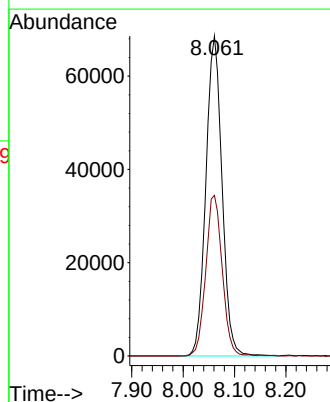
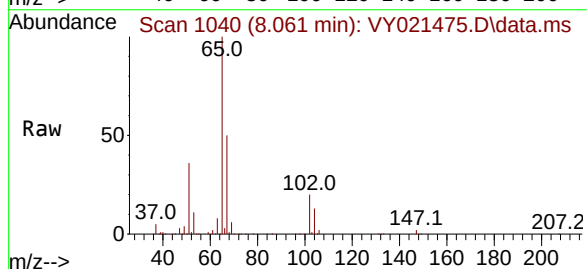
Instrument :
MSVOA_Y
ClientSampleId :
VY0311SBL01

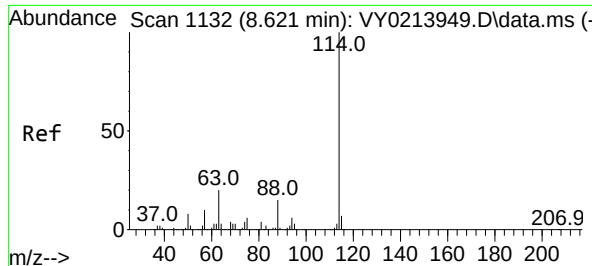
Tgt Ion:168 Resp: 266206
Ion Ratio Lower Upper
168 100
99 57.7 46.0 69.0



#33
1,2-Dichloroethane-d4
Concen: 53.321 ug/l
RT: 8.061 min Scan# 1040
Delta R.T. -0.006 min
Lab File: VY021475.D
Acq: 11 Mar 2025 10:12

Tgt Ion: 65 Resp: 150026
Ion Ratio Lower Upper
65 100
67 51.1 0.0 102.8





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.616 min Scan# 1132

Delta R.T. -0.006 min

Lab File: VY021475.D

Acq: 11 Mar 2025 10:12

Instrument :

MSVOA_Y

ClientSampleId :

VY0311SBL01

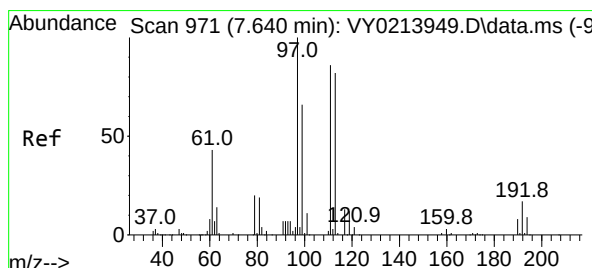
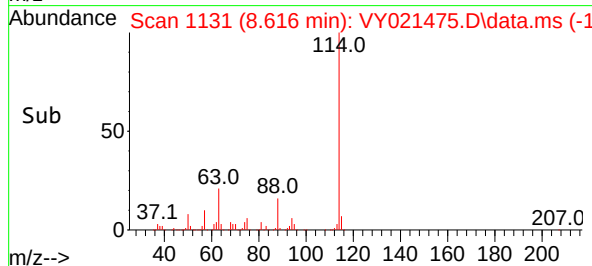
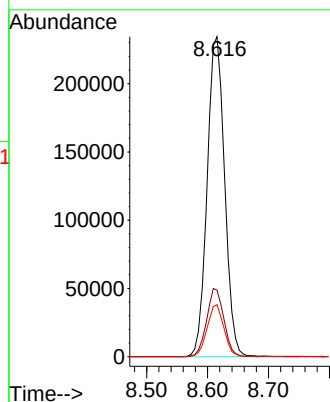
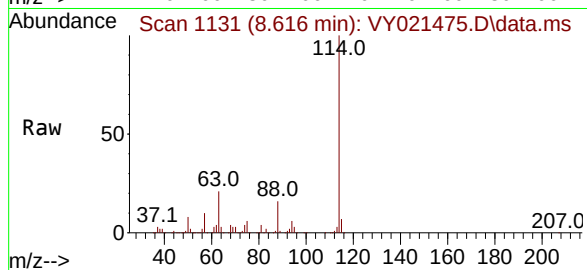
Tgt Ion:114 Resp: 468026

Ion Ratio Lower Upper

114 100

63 20.8 0.0 40.8

88 16.3 0.0 30.8



#35

Dibromofluoromethane

Concen: 50.417 ug/l

RT: 7.634 min Scan# 970

Delta R.T. -0.006 min

Lab File: VY021475.D

Acq: 11 Mar 2025 10:12

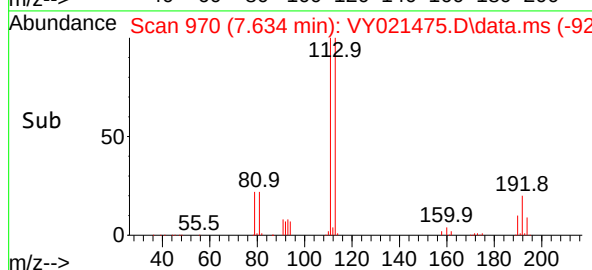
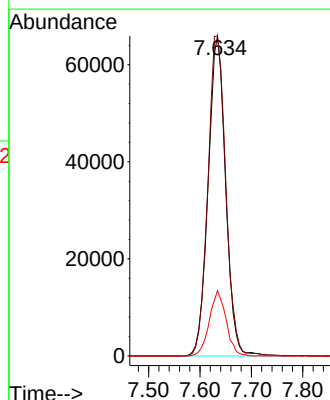
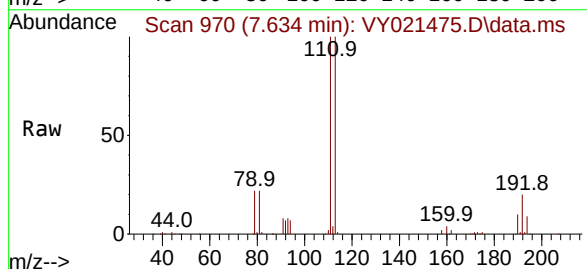
Tgt Ion:113 Resp: 155103

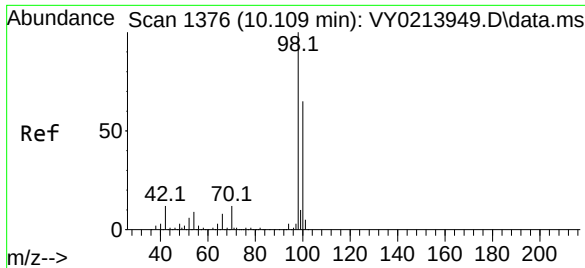
Ion Ratio Lower Upper

113 100

111 103.3 82.0 123.0

192 19.6 15.9 23.9





#50

Toluene-d8

Concen: 48.466 ug/l

RT: 10.109 min Scan# 1376

Delta R.T. 0.000 min

Lab File: VY021475.D

Acq: 11 Mar 2025 10:12

Instrument :

MSVOA_Y

ClientSampleId :

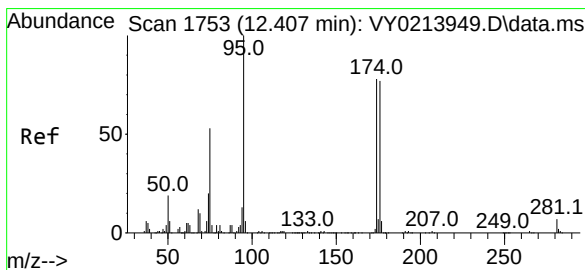
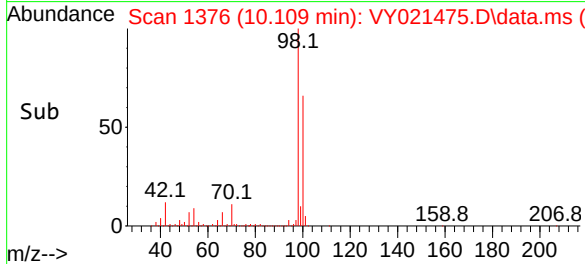
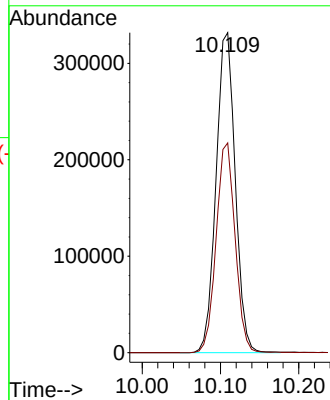
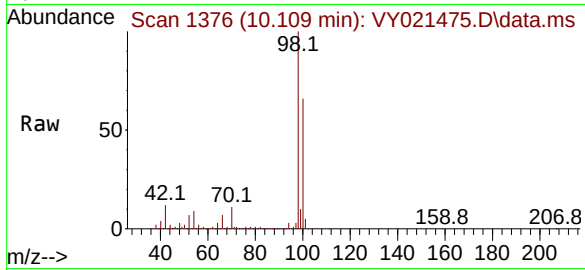
VY0311SBL01

Tgt Ion: 98 Resp: 564540

Ion Ratio Lower Upper

98 100

100 65.0 52.1 78.1



#62

4-Bromofluorobenzene

Concen: 42.515 ug/l

RT: 12.408 min Scan# 1753

Delta R.T. 0.000 min

Lab File: VY021475.D

Acq: 11 Mar 2025 10:12

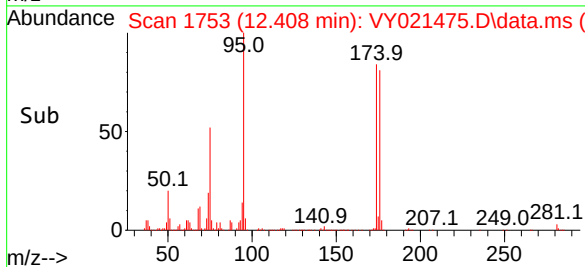
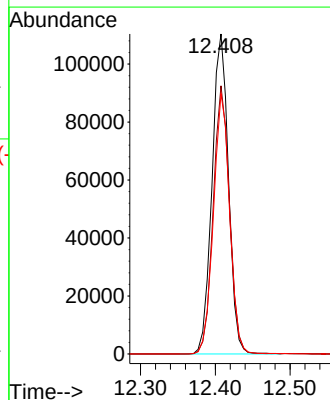
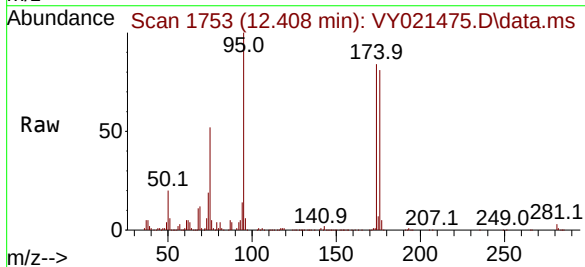
Tgt Ion: 95 Resp: 168454

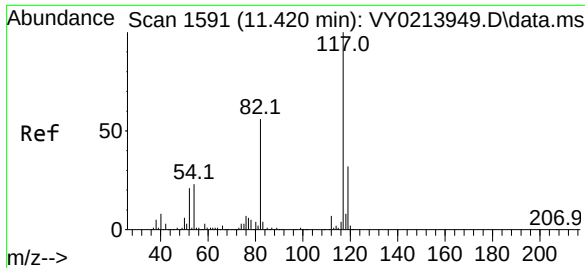
Ion Ratio Lower Upper

95 100

174 83.1 0.0 165.0

176 80.3 0.0 160.0





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.414 min Scan# 11

Delta R.T. -0.006 min

Lab File: VY021475.D

Acq: 11 Mar 2025 10:12

Instrument :

MSVOA_Y

ClientSampleId :

VY0311SBL01

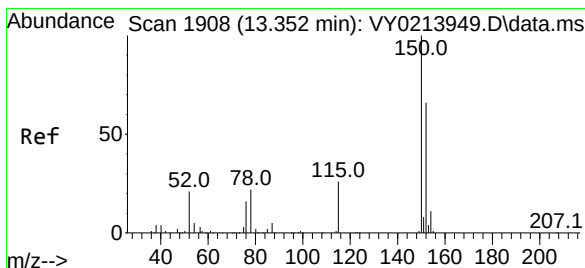
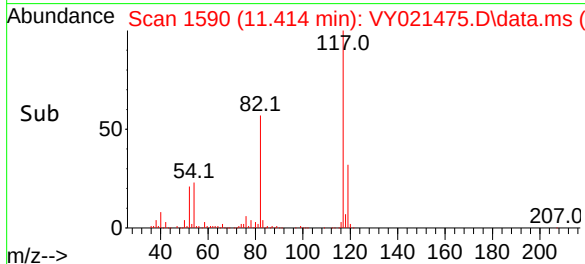
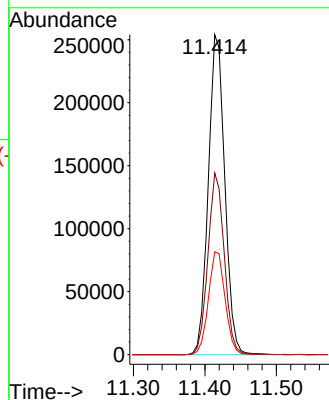
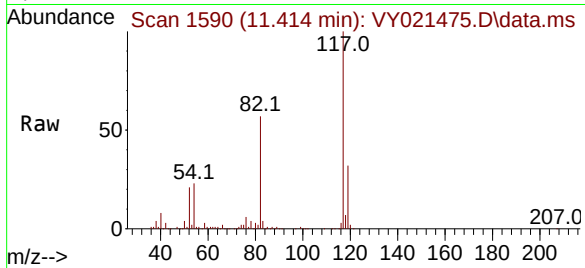
Tgt Ion:117 Resp: 406786

Ion Ratio Lower Upper

117 100

82 56.8 44.6 67.0

119 32.1 25.4 38.0



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.346 min Scan# 1907

Delta R.T. -0.006 min

Lab File: VY021475.D

Acq: 11 Mar 2025 10:12

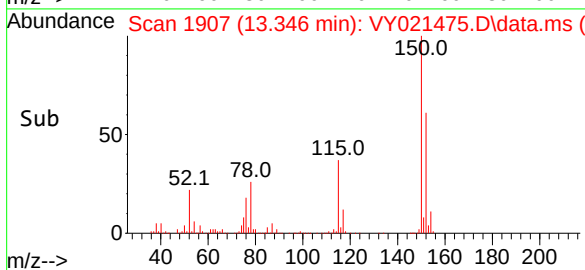
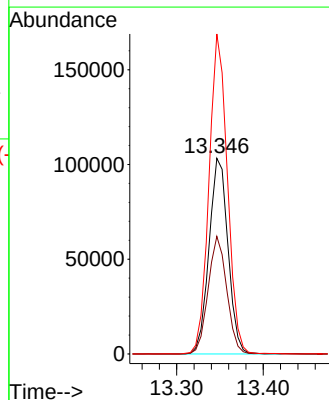
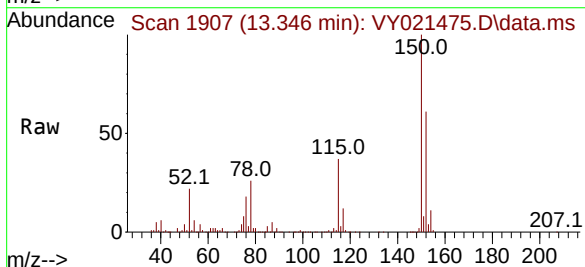
Tgt Ion:152 Resp: 157191

Ion Ratio Lower Upper

152 100

115 59.1 29.0 87.0

150 158.4 0.0 347.2



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
Data File : VY021475.D
Acq On : 11 Mar 2025 10:12
Operator : SY/MD
Sample : VY0311SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0311SBL01

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Sampling : 1

Start Thrs: 0.2

Stop Thrs : 0

Filtering: 5

Min Area: 3 % of largest Peak

Max Peaks: 100

Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M

Title : SW846 8260

Signal : TIC: VY021475.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.080	48	59	62	rBV5	5881	15838	1.04%	0.207%
2	7.634	959	970	976	rBV	221263	533509	35.06%	6.959%
3	7.707	976	982	996	rVB	349729	797482	52.41%	10.402%
4	8.061	1027	1040	1051	rBV	190394	436972	28.72%	5.700%
5	8.616	1122	1131	1146	rBV	554486	1117631	73.45%	14.578%
6	10.109	1366	1376	1384	rBV	886650	1521614	100.00%	19.848%
7	10.512	1434	1442	1455	rVB2	27465	51790	3.40%	0.676%
8	11.414	1579	1590	1604	rBV	800721	1294088	85.05%	16.880%
9	12.408	1745	1753	1764	rBV	581940	909363	59.76%	11.862%
10	13.346	1900	1907	1920	rVB	662019	988037	64.93%	12.888%

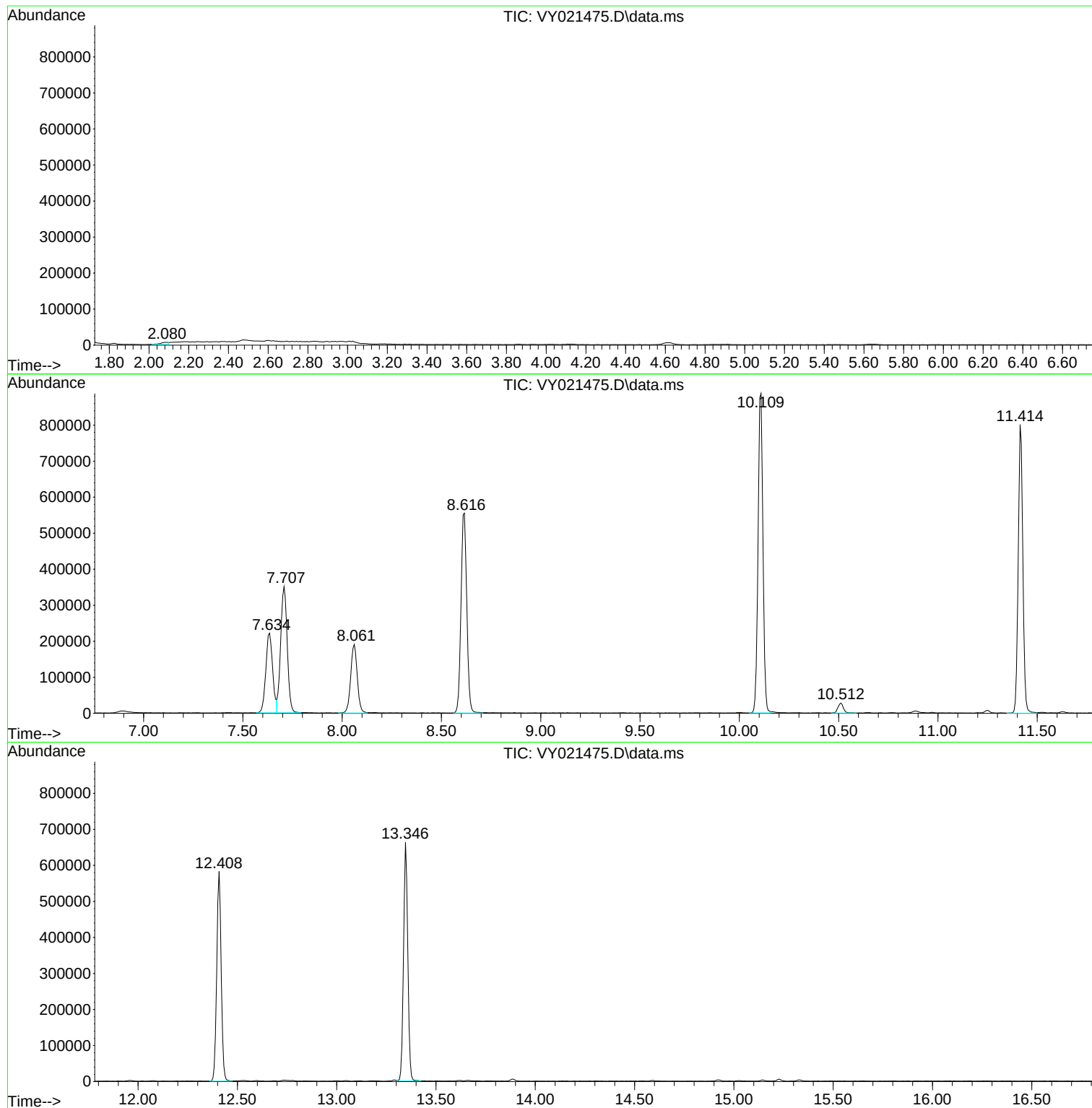
Sum of corrected areas: 7666324

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
Data File : VY021475.D
Acq On : 11 Mar 2025 10:12
Operator : SY/MD
Sample : VY0311SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0311SBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
Data File : VY021475.D
Acq On : 11 Mar 2025 10:12
Operator : SY/MD
Sample : VY0311SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0311SBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
Data File : VY021475.D
Acq On : 11 Mar 2025 10:12
Operator : SY/MD
Sample : VY0311SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0311SBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	
Client Sample ID:	VN0310WBS01	SDG No.:	Q1514
Lab Sample ID:	VN0310WBS01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085917.D	1		03/10/25 16:12	VN031025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	21.1		0.21	1.00	ug/L
74-87-3	Chloromethane	21.1		0.35	1.00	ug/L
75-01-4	Vinyl Chloride	19.7		0.34	1.00	ug/L
74-83-9	Bromomethane	17.8		1.40	5.00	ug/L
75-00-3	Chloroethane	17.5		0.56	1.00	ug/L
75-69-4	Trichlorofluoromethane	19.9		0.34	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	20.0		0.25	1.00	ug/L
75-35-4	1,1-Dichloroethene	20.4		0.26	1.00	ug/L
67-64-1	Acetone	110		1.40	5.00	ug/L
75-15-0	Carbon Disulfide	22.1		0.32	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	21.4		0.16	1.00	ug/L
79-20-9	Methyl Acetate	16.9		0.60	1.00	ug/L
75-09-2	Methylene Chloride	20.5		0.32	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	20.2		0.25	1.00	ug/L
75-34-3	1,1-Dichloroethane	20.9		0.23	1.00	ug/L
110-82-7	Cyclohexane	21.8		1.60	5.00	ug/L
78-93-3	2-Butanone	110		1.30	5.00	ug/L
56-23-5	Carbon Tetrachloride	20.8		0.25	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	20.0		0.25	1.00	ug/L
74-97-5	Bromochloromethane	24.8		0.18	1.00	ug/L
67-66-3	Chloroform	20.6		0.26	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	20.5		0.19	1.00	ug/L
108-87-2	Methylcyclohexane	21.5		0.19	1.00	ug/L
71-43-2	Benzene	20.9		0.16	1.00	ug/L
107-06-2	1,2-Dichloroethane	21.0		0.24	1.00	ug/L
79-01-6	Trichloroethene	19.8		0.32	1.00	ug/L
78-87-5	1,2-Dichloropropane	21.4		0.19	1.00	ug/L
75-27-4	Bromodichloromethane	20.4		0.24	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	110		0.75	5.00	ug/L
108-88-3	Toluene	21.9		0.18	1.00	ug/L

Report of Analysis

Client:	Portal Partners Tri-Venture		Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025		Date Received:	
Client Sample ID:	VN0310WBS01		SDG No.:	Q1514
Lab Sample ID:	VN0310WBS01		Matrix:	Water
Analytical Method:	SW8260		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085917.D	1		03/10/25 16:12	VN031025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	21.6		0.21	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	21.7		0.18	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	20.3		0.21	1.00	ug/L
591-78-6	2-Hexanone	120		1.10	5.00	ug/L
124-48-1	Dibromochloromethane	20.8		0.18	1.00	ug/L
106-93-4	1,2-Dibromoethane	20.7		0.16	1.00	ug/L
127-18-4	Tetrachloroethene	20.9		0.25	1.00	ug/L
108-90-7	Chlorobenzene	20.1		0.13	1.00	ug/L
100-41-4	Ethyl Benzene	21.2		0.16	1.00	ug/L
179601-23-1	m/p-Xylenes	44.9		0.31	2.00	ug/L
95-47-6	o-Xylene	21.6		0.14	1.00	ug/L
100-42-5	Styrene	21.3		0.16	1.00	ug/L
75-25-2	Bromoform	21.2		0.21	1.00	ug/L
98-82-8	Isopropylbenzene	20.6		0.13	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	19.3		0.27	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	19.4		0.24	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	19.5		0.27	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	19.6		0.19	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	18.1		0.46	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	18.7		0.42	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	18.3		0.51	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	50.3		70 (74) - 130 (125)	101%	SPK: 50
1868-53-7	Dibromofluoromethane	49.3		70 (75) - 130 (124)	99%	SPK: 50
2037-26-5	Toluene-d8	50.0		70 (86) - 130 (113)	100%	SPK: 50
460-00-4	4-Bromofluorobenzene	54.4		70 (77) - 130 (121)	109%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	201000	8.218			
540-36-3	1,4-Difluorobenzene	335000	9.1			
3114-55-4	Chlorobenzene-d5	292000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	146000	13.788			

Report of Analysis

Client:	Portal Partners Tri-Venture		Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025		Date Received:	
Client Sample ID:	VN0310WBS01		SDG No.:	Q1514
Lab Sample ID:	VN0310WBS01		Matrix:	Water
Analytical Method:	SW8260		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085917.D	1		03/10/25 16:12	VN031025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\
 Data File : VN085917.D
 Acq On : 10 Mar 2025 16:12
 Operator : JC\MD
 Sample : VN0310WBS01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN0310WBS01

Manual Integrations
 APPROVED

Reviewed By : John Carlone 03/11/2025
 Supervised By : Mahesh Dadoda 03/11/2025

Quant Time: Mar 11 01:37:41 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
 Quant Title : SW846 8260
 QLast Update : Wed Feb 19 03:43:32 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	8.218	168	200845	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	334623	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	292041	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	146257	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	131058	50.332	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 100.660%			
35) Dibromofluoromethane	8.165	113	107868	49.264	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 98.520%			
50) Toluene-d8	10.565	98	398387	50.008	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 100.020%			
62) 4-Bromofluorobenzene	12.847	95	142745	54.384	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 108.760%			
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	2.124	85	57613	21.089	ug/l	100
3) Chloromethane	2.360	50	57722	21.056	ug/l	96
4) Vinyl Chloride	2.512	62	57065	19.660	ug/l	97
5) Bromomethane	2.954	94	32967	17.763	ug/l	100
6) Chloroethane	3.118	64	33612	17.483	ug/l	95
7) Trichlorofluoromethane	3.495	101	83531	19.877	ug/l	95
8) Diethyl Ether	3.959	74	28433	20.911	ug/l	95
9) 1,1,2-Trichlorotrifluo...	4.371	101	48628	20.019	ug/l	98
10) Methyl Iodide	4.589	142	60569	20.228	ug/l	100
11) Tert butyl alcohol	5.512	59	33809	105.567	ug/l	99
12) 1,1-Dichloroethene	4.342	96	44916	20.393	ug/l	99
13) Acrolein	4.177	56	37933	79.872	ug/l	98
14) Allyl chloride	5.024	41	62929m	21.761	ug/l	
15) Acrylonitrile	5.712	53	113350	108.871	ug/l	100
16) Acetone	4.430	43	87841	106.614	ug/l	94
17) Carbon Disulfide	4.712	76	144261	22.100	ug/l	99
18) Methyl Acetate	5.024	43	47804	16.869	ug/l	100
19) Methyl tert-butyl Ether	5.795	73	140217	21.424	ug/l	99
20) Methylene Chloride	5.277	84	54426	20.541	ug/l	97
21) trans-1,2-Dichloroethene	5.783	96	47809	20.159	ug/l	93
22) Diisopropyl ether	6.671	45	148727	22.761	ug/l	96
23) Vinyl Acetate	6.600	43	501410	112.072	ug/l	97
24) 1,1-Dichloroethane	6.565	63	92748	20.880	ug/l	100
25) 2-Butanone	7.477	43	133104	109.810	ug/l	97
26) 2,2-Dichloropropane	7.494	77	79534	20.136	ug/l	100
27) cis-1,2-Dichloroethene	7.483	96	54981	19.994	ug/l	97
28) Bromochloromethane	7.806	49	45217	24.767	ug/l	91
29) Tetrahydrofuran	7.836	42	90483	115.599	ug/l	96
30) Chloroform	7.965	83	95608	20.596	ug/l	98
31) Cyclohexane	8.253	56	81228	21.841	ug/l	96
32) 1,1,1-Trichloroethane	8.165	97	84568	20.483	ug/l	99
36) 1,1-Dichloropropene	8.371	75	65697	21.200	ug/l	100
37) Ethyl Acetate	7.559	43	56201	22.038	ug/l	100
38) Carbon Tetrachloride	8.359	117	76435	20.759	ug/l	94
39) Methylcyclohexane	9.600	83	65571	21.539	ug/l	95
40) Benzene	8.600	78	207478	20.890	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\
 Data File : VN085917.D
 Acq On : 10 Mar 2025 16:12
 Operator : JC\MD
 Sample : VN0310WBS01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN0310WBS01

Manual Integrations
 APPROVED

Reviewed By : John Carlone 03/11/2025
 Supervised By : Mahesh Dadoda 03/11/2025

Quant Time: Mar 11 01:37:41 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
 Quant Title : SW846 8260
 QLast Update : Wed Feb 19 03:43:32 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.777	41	30822	22.609	ug/l	99
42) 1,2-Dichloroethane	8.665	62	67821	20.964	ug/l	99
43) Isopropyl Acetate	8.683	43	99818	21.997	ug/l	97
44) Trichloroethene	9.347	130	48294	19.804	ug/l	98
45) 1,2-Dichloropropane	9.618	63	51217	21.363	ug/l	95
46) Dibromomethane	9.706	93	36115	21.356	ug/l	94
47) Bromodichloromethane	9.883	83	73646	20.356	ug/l	99
48) Methyl methacrylate	9.677	41	41798	22.069	ug/l	99
49) 1,4-Dioxane	9.694	88	16551	459.552	ug/l #	92
51) 4-Methyl-2-Pentanone	10.441	43	279017	113.479	ug/l	99
52) Toluene	10.630	92	127383	21.879	ug/l	99
53) t-1,3-Dichloropropene	10.835	75	72257	21.598	ug/l	95
54) cis-1,3-Dichloropropene	10.306	75	79526	21.678	ug/l	96
55) 1,1,2-Trichloroethane	11.012	97	47012	20.309	ug/l	96
56) Ethyl methacrylate	10.871	69	65527	21.330	ug/l	97
57) 1,3-Dichloropropane	11.159	76	81072	20.980	ug/l	99
58) 2-Chloroethyl Vinyl ether	10.159	63	119007	107.514	ug/l	100
59) 2-Hexanone	11.194	43	195283	115.451	ug/l	100
60) Dibromochloromethane	11.359	129	55963	20.762	ug/l	100
61) 1,2-Dibromoethane	11.465	107	45190	20.662	ug/l	98
64) Tetrachloroethene	11.100	164	47256	20.887	ug/l	98
65) Chlorobenzene	11.888	112	134588	20.117	ug/l	96
66) 1,1,1,2-Tetrachloroethane	11.959	131	48625	20.221	ug/l	99
67) Ethyl Benzene	11.959	91	222002	21.184	ug/l	99
68) m/p-Xylenes	12.071	106	178774	44.909	ug/l	97
69) o-Xylene	12.394	106	81625	21.578	ug/l	97
70) Styrene	12.412	104	139738	21.331	ug/l	99
71) Bromoform	12.576	173	37954	21.241	ug/l #	97
73) Isopropylbenzene	12.694	105	205977	20.557	ug/l	100
74) N-amyl acetate	12.488	43	75965	21.499	ug/l	98
75) 1,1,2,2-Tetrachloroethane	12.935	83	66697	19.344	ug/l	98
76) 1,2,3-Trichloropropane	12.994	75	63325m	19.491	ug/l	
77) Bromobenzene	12.976	156	53582	19.793	ug/l	94
78) n-propylbenzene	13.035	91	245662	21.408	ug/l	100
79) 2-Chlorotoluene	13.124	91	156311	20.387	ug/l	100
80) 1,3,5-Trimethylbenzene	13.171	105	178809	21.907	ug/l	99
81) trans-1,4-Dichloro-2-b...	12.735	75	22842m	20.514	ug/l	
82) 4-Chlorotoluene	13.218	91	161545	21.253	ug/l	98
83) tert-Butylbenzene	13.435	119	142797	20.804	ug/l	98
84) 1,2,4-Trimethylbenzene	13.482	105	178289	22.078	ug/l	99
85) sec-Butylbenzene	13.612	105	206382	21.281	ug/l	99
86) p-Isopropyltoluene	13.729	119	167380	20.150	ug/l	99
87) 1,3-Dichlorobenzene	13.729	146	98140	19.350	ug/l	98
88) 1,4-Dichlorobenzene	13.812	146	101248	19.477	ug/l	99
89) n-Butylbenzene	14.053	91	136007	19.753	ug/l	98
90) Hexachloroethane	14.329	117	35650	19.411	ug/l	99
91) 1,2-Dichlorobenzene	14.106	146	95758	19.634	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.718	75	11464	18.106	ug/l	98
93) 1,2,4-Trichlorobenzene	15.388	180	43547	18.738	ug/l	100
94) Hexachlorobutadiene	15.500	225	25307	17.918	ug/l	99
95) Naphthalene	15.635	128	117761	18.457	ug/l	100
96) 1,2,3-Trichlorobenzene	15.835	180	42653	18.282	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\
Data File : VN085917.D
Acq On : 10 Mar 2025 16:12
Operator : JC\MD
Sample : VN0310WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0310WBS01

Manual Integrations
APPROVED

Reviewed By :John Carlone 03/11/2025
Supervised By :Mahesh Dadoda 03/11/2025

Quant Time: Mar 11 01:37:41 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260
QLast Update : Wed Feb 19 03:43:32 2025
Response via : Initial Calibration

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

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

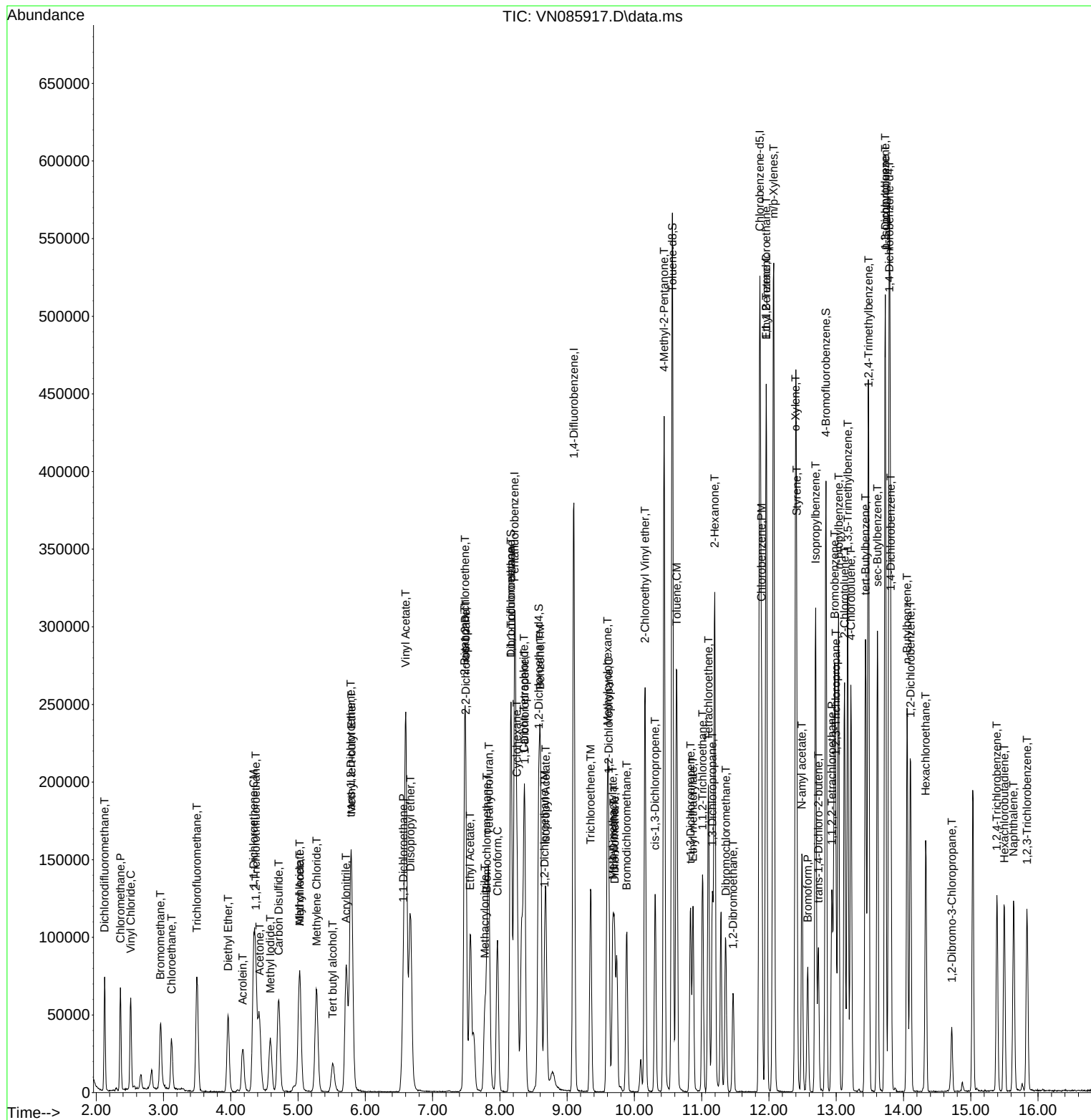
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\
Data File : VN085917.D
Acq On : 10 Mar 2025 16:12
Operator : JC\MD
Sample : VN0310WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0310WBS01

Manual Integrations

Reviewed By :John Carlone 03/11/2025
Supervised By :Mahesh Dadoda 03/11/2025

Quant Time: Mar 11 01:37:41 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260
QLast Update : Wed Feb 19 03:43:32 2025
Response via : Initial Calibration



Report of Analysis

Client:	Portal Partners Tri-Venture		Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025		Date Received:	
Client Sample ID:	VN0311WBS01		SDG No.:	Q1514
Lab Sample ID:	VN0311WBS01		Matrix:	Water
Analytical Method:	SW8260		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085931.D	1		03/11/25 14:54	VN031125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	19.7		0.21	1.00	ug/L
74-87-3	Chloromethane	18.7		0.35	1.00	ug/L
75-01-4	Vinyl Chloride	17.4		0.34	1.00	ug/L
74-83-9	Bromomethane	17.0		1.40	5.00	ug/L
75-00-3	Chloroethane	15.7		0.56	1.00	ug/L
75-69-4	Trichlorofluoromethane	19.0		0.34	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	19.1		0.25	1.00	ug/L
75-35-4	1,1-Dichloroethene	19.0		0.26	1.00	ug/L
67-64-1	Acetone	91.4		1.40	5.00	ug/L
75-15-0	Carbon Disulfide	19.7		0.32	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	18.5		0.16	1.00	ug/L
79-20-9	Methyl Acetate	16.1		0.60	1.00	ug/L
75-09-2	Methylene Chloride	18.7		0.32	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	18.5		0.25	1.00	ug/L
75-34-3	1,1-Dichloroethane	19.1		0.23	1.00	ug/L
110-82-7	Cyclohexane	18.7		1.60	5.00	ug/L
78-93-3	2-Butanone	96.2		1.30	5.00	ug/L
56-23-5	Carbon Tetrachloride	19.7		0.25	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	18.0		0.25	1.00	ug/L
74-97-5	Bromochloromethane	24.1		0.18	1.00	ug/L
67-66-3	Chloroform	19.1		0.26	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	19.1		0.19	1.00	ug/L
108-87-2	Methylcyclohexane	17.7		0.19	1.00	ug/L
71-43-2	Benzene	19.7		0.16	1.00	ug/L
107-06-2	1,2-Dichloroethane	19.8		0.24	1.00	ug/L
79-01-6	Trichloroethene	17.7		0.32	1.00	ug/L
78-87-5	1,2-Dichloropropane	19.6		0.19	1.00	ug/L
75-27-4	Bromodichloromethane	19.3		0.24	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	100		0.75	5.00	ug/L
108-88-3	Toluene	20.5		0.18	1.00	ug/L

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	
Client Sample ID:	VN0311WBS01	SDG No.:	Q1514
Lab Sample ID:	VN0311WBS01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:			uL
GC Column:	RXI-624	ID :	0.25
Prep Method :		Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085931.D	1		03/11/25 14:54	VN031125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	19.1		0.21	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	19.3		0.18	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	19.7		0.21	1.00	ug/L
591-78-6	2-Hexanone	100		1.10	5.00	ug/L
124-48-1	Dibromochloromethane	19.5		0.18	1.00	ug/L
106-93-4	1,2-Dibromoethane	19.4		0.16	1.00	ug/L
127-18-4	Tetrachloroethene	19.1		0.25	1.00	ug/L
108-90-7	Chlorobenzene	18.5		0.13	1.00	ug/L
100-41-4	Ethyl Benzene	18.8		0.16	1.00	ug/L
179601-23-1	m/p-Xylenes	40.3		0.31	2.00	ug/L
95-47-6	o-Xylene	19.0		0.14	1.00	ug/L
100-42-5	Styrene	19.0		0.16	1.00	ug/L
75-25-2	Bromoform	19.5		0.21	1.00	ug/L
98-82-8	Isopropylbenzene	17.4		0.13	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	17.7		0.27	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	17.4		0.24	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	16.8		0.27	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	17.5		0.19	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	15.8		0.46	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	15.3		0.42	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	14.9		0.51	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	46.9		70 (74) - 130 (125)	94%	SPK: 50
1868-53-7	Dibromofluoromethane	46.9		70 (75) - 130 (124)	94%	SPK: 50
2037-26-5	Toluene-d8	46.3		70 (86) - 130 (113)	93%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.7		70 (77) - 130 (121)	97%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	172000	8.218			
540-36-3	1,4-Difluorobenzene	282000	9.1			
3114-55-4	Chlorobenzene-d5	250000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	128000	13.788			

Report of Analysis

Client:	Portal Partners Tri-Venture		Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025		Date Received:	
Client Sample ID:	VN0311WBS01		SDG No.:	Q1514
Lab Sample ID:	VN0311WBS01		Matrix:	Water
Analytical Method:	SW8260		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085931.D	1		03/11/25 14:54	VN031125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031125\
 Data File : VN085931.D
 Acq On : 11 Mar 2025 14:54
 Operator : JC\MD
 Sample : VN0311WBS01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN0311WBS01

Manual Integrations
 APPROVED

Reviewed By : John Carlone 03/12/2025
 Supervised By : Mahesh Dadoda 03/12/2025

Quant Time: Mar 12 01:20:14 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
 Quant Title : SW846 8260
 QLast Update : Wed Feb 19 03:43:32 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	8.218	168	171959	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	282309	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	250243	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	128349	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	104493	46.871	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery =	93.740%		
35) Dibromofluoromethane	8.165	113	86656	46.910	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	93.820%		
50) Toluene-d8	10.565	98	311283	46.315	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery =	92.620%		
62) 4-Bromofluorobenzene	12.847	95	107765	48.665	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery =	97.320%		
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	2.124	85	46040	19.684	ug/l	95
3) Chloromethane	2.359	50	43998	18.746	ug/l	100
4) Vinyl Chloride	2.512	62	43138	17.359	ug/l	98
5) Bromomethane	2.954	94	27066	17.033	ug/l	98
6) Chloroethane	3.118	64	25922	15.748	ug/l	98
7) Trichlorofluoromethane	3.495	101	68309	18.985	ug/l	97
8) Diethyl Ether	3.959	74	20408	17.530	ug/l	91
9) 1,1,2-Trichlorotrifluo...	4.371	101	39761	19.118	ug/l	98
10) Methyl Iodide	4.589	142	46990	18.329	ug/l	97
11) Tert butyl alcohol	5.518	59	24987	91.127	ug/l #	90
12) 1,1-Dichloroethene	4.342	96	35866	19.019	ug/l	97
13) Acrolein	4.171	56	36561	89.914	ug/l	95
14) Allyl chloride	5.024	41	45099	18.215	ug/l	94
15) Acrylonitrile	5.718	53	88991	99.833	ug/l	98
16) Acetone	4.424	43	64479	91.405	ug/l	97
17) Carbon Disulfide	4.712	76	110141	19.707	ug/l	99
18) Methyl Acetate	5.024	43	38972	16.062	ug/l	97
19) Methyl tert-butyl Ether	5.789	73	103840	18.531	ug/l	99
20) Methylene Chloride	5.271	84	42432	18.704	ug/l	91
21) trans-1,2-Dichloroethene	5.789	96	37463	18.450	ug/l	88
22) Diisopropyl ether	6.671	45	111397	19.912	ug/l	98
23) Vinyl Acetate	6.600	43	368840	96.289	ug/l	99
24) 1,1-Dichloroethane	6.571	63	72568	19.081	ug/l	98
25) 2-Butanone	7.477	43	99858	96.221	ug/l	99
26) 2,2-Dichloropropane	7.489	77	62578	18.505	ug/l	98
27) cis-1,2-Dichloroethene	7.483	96	42379	18.000	ug/l	97
28) Bromochloromethane	7.812	49	37741	24.145	ug/l	92
29) Tetrahydrofuran	7.841	42	65823	98.221	ug/l	99
30) Chloroform	7.965	83	75940	19.108	ug/l	99
31) Cyclohexane	8.253	56	59584	18.712	ug/l	98
32) 1,1,1-Trichloroethane	8.165	97	67340	19.050	ug/l	97
36) 1,1-Dichloropropene	8.365	75	49565	18.958	ug/l	99
37) Ethyl Acetate	7.553	43	41433	19.258	ug/l	99
38) Carbon Tetrachloride	8.359	117	61348	19.749	ug/l	93
39) Methylcyclohexane	9.600	83	45454	17.697	ug/l	91
40) Benzene	8.600	78	165147	19.709	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031125\
 Data File : VN085931.D
 Acq On : 11 Mar 2025 14:54
 Operator : JC\MD
 Sample : VN0311WBS01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN0311WBS01

Manual Integrations
 APPROVED

Reviewed By : John Carlone 03/12/2025
 Supervised By : Mahesh Dadoda 03/12/2025

Quant Time: Mar 12 01:20:14 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
 Quant Title : SW846 8260
 QLast Update : Wed Feb 19 03:43:32 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.777	41	22880	19.893	ug/l	98
42) 1,2-Dichloroethane	8.665	62	54080	19.814	ug/l	98
43) Isopropyl Acetate	8.688	43	72385	18.830	ug/l	99
44) Trichloroethene	9.347	130	36357	17.671	ug/l	99
45) 1,2-Dichloropropane	9.618	63	39742	19.649	ug/l	99
46) Dibromomethane	9.706	93	28013	19.635	ug/l	97
47) Bromodichloromethane	9.883	83	58843	19.278	ug/l	98
48) Methyl methacrylate	9.677	41	30151	18.870	ug/l	98
49) 1,4-Dioxane	9.694	88	12170	400.527	ug/l #	92
51) 4-Methyl-2-Pentanone	10.441	43	211308	101.867	ug/l	98
52) Toluene	10.630	92	100609	20.483	ug/l	100
53) t-1,3-Dichloropropene	10.835	75	53811	19.065	ug/l	97
54) cis-1,3-Dichloropropene	10.306	75	59621	19.264	ug/l	97
55) 1,1,2-Trichloroethane	11.012	97	38483	19.705	ug/l	97
56) Ethyl methacrylate	10.871	69	47794	18.623	ug/l	97
57) 1,3-Dichloropropane	11.159	76	63091	19.352	ug/l	100
58) 2-Chloroethyl Vinyl ether	10.159	63	90341	96.936	ug/l	100
59) 2-Hexanone	11.194	43	146567	102.707	ug/l	99
60) Dibromochloromethane	11.353	129	44279	19.471	ug/l	98
61) 1,2-Dibromoethane	11.465	107	35743	19.371	ug/l	100
64) Tetrachloroethene	11.100	164	36978	19.074	ug/l	95
65) Chlorobenzene	11.888	112	106130	18.513	ug/l	95
66) 1,1,1,2-Tetrachloroethane	11.959	131	39196	19.022	ug/l	98
67) Ethyl Benzene	11.959	91	168567	18.771	ug/l	99
68) m/p-Xylenes	12.065	106	137476	40.303	ug/l	99
69) o-Xylene	12.394	106	61515	18.978	ug/l	100
70) Styrene	12.412	104	106050	19.044	ug/l	99
71) Bromoform	12.576	173	29845	19.493	ug/l #	98
73) Isopropylbenzene	12.694	105	153371	17.442	ug/l	100
74) N-amyl acetate	12.494	43	55670	17.953	ug/l	98
75) 1,1,2,2-Tetrachloroethane	12.935	83	53621	17.721	ug/l	99
76) 1,2,3-Trichloropropane	12.988	75	55548m	19.483	ug/l	
77) Bromobenzene	12.976	156	41957	17.661	ug/l	96
78) n-propylbenzene	13.035	91	185851	18.455	ug/l	100
79) 2-Chlorotoluene	13.123	91	119676	17.787	ug/l	100
80) 1,3,5-Trimethylbenzene	13.171	105	135483	18.915	ug/l	99
81) trans-1,4-Dichloro-2-b...	12.735	75	17168	17.570	ug/l	94
82) 4-Chlorotoluene	13.218	91	124042	18.596	ug/l	97
83) tert-Butylbenzene	13.435	119	101170	16.796	ug/l	95
84) 1,2,4-Trimethylbenzene	13.482	105	133778	18.877	ug/l	99
85) sec-Butylbenzene	13.612	105	150326	17.664	ug/l	99
86) p-Isopropyltoluene	13.729	119	121044	16.805	ug/l	98
87) 1,3-Dichlorobenzene	13.729	146	77221	17.350	ug/l	100
88) 1,4-Dichlorobenzene	13.812	146	76516	16.773	ug/l	97
89) n-Butylbenzene	14.053	91	95450	15.797	ug/l	96
90) Hexachloroethane	14.329	117	26658	16.540	ug/l	95
91) 1,2-Dichlorobenzene	14.106	146	74904	17.501	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.717	75	8752	15.752	ug/l	98
93) 1,2,4-Trichlorobenzene	15.388	180	31181	15.289	ug/l	99
94) Hexachlorobutadiene	15.500	225	19246	15.528	ug/l	95
95) Naphthalene	15.641	128	78375	13.998	ug/l	99
96) 1,2,3-Trichlorobenzene	15.835	180	30568	14.930	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031125\
Data File : VN085931.D
Acq On : 11 Mar 2025 14:54
Operator : JC\MD
Sample : VN0311WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0311WBS01

Manual Integrations
APPROVED

Reviewed By :John Carlone 03/12/2025
Supervised By :Mahesh Dadoda 03/12/2025

Quant Time: Mar 12 01:20:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260
QLast Update : Wed Feb 19 03:43:32 2025
Response via : Initial Calibration

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

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

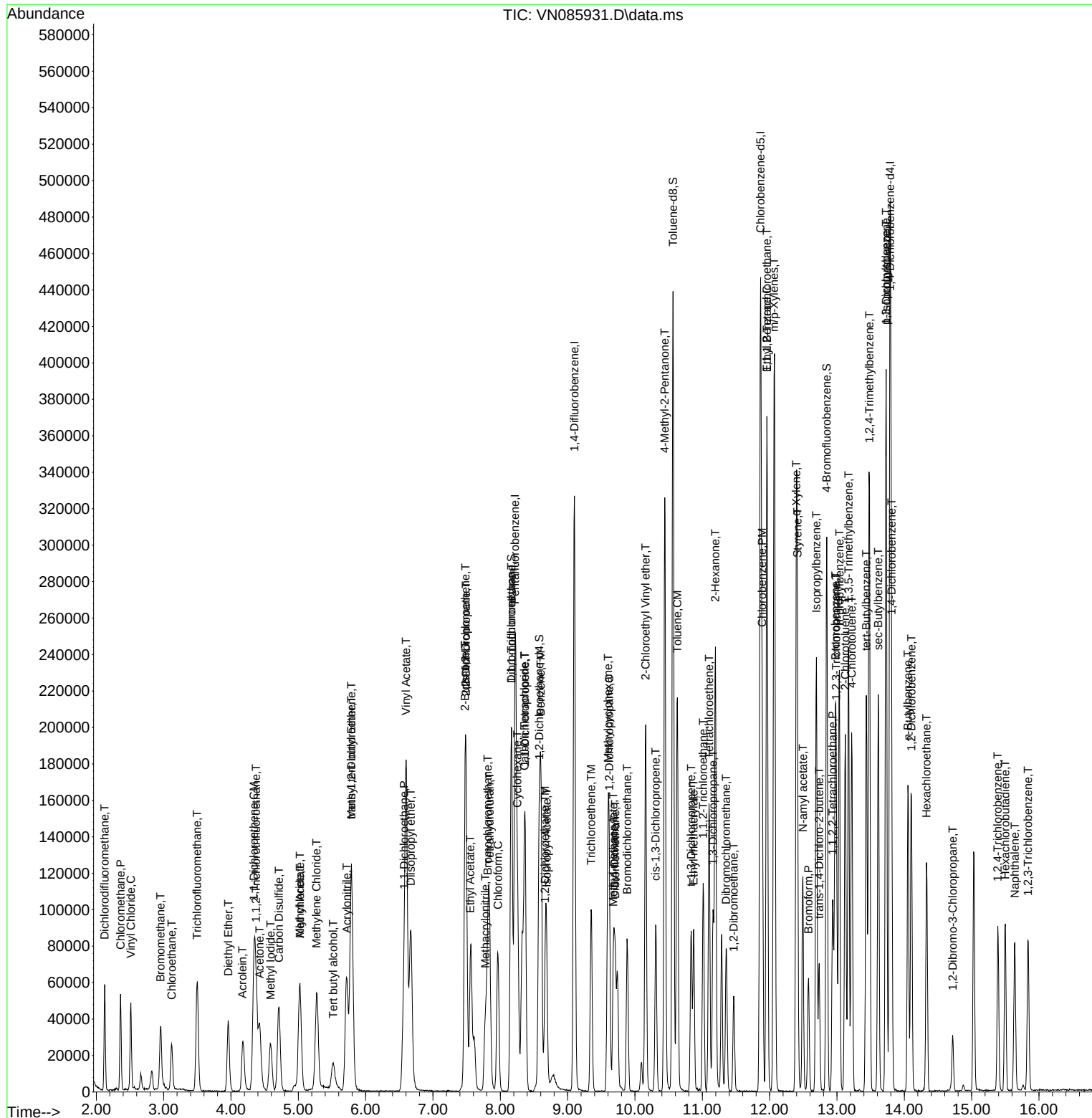
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Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031125\  
Data File : VN085931.D  
Acq On    : 11 Mar 2025  14:54  
Operator  : JC\MD  
Sample    : VN0311WBS01  
Misc      : 5.0mL/MSVOA_N/WATER  
ALS Vial  : 6      Sample Multiplier: 1
```

Instrument :
MSVOA_N
ClientSampleId :
VN0311WBS01

Manual Integrations

Reviewed By :John Carlone 03/12/2025
Supervised By :Mahesh Dadoda 03/12/2025

Quant Time: Mar 12 01:20:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260
QLast Update : Wed Feb 19 03:43:32 2025
Response via : Initial Calibration



Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	
Client Sample ID:	VY0311SBS01	SDG No.:	Q1514
Lab Sample ID:	VY0311SBS01	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021476.D	1		03/11/25 11:03	vy031125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	17.6		1.70	5.00	ug/Kg
74-87-3	Chloromethane	19.6		1.20	5.00	ug/Kg
75-01-4	Vinyl Chloride	19.8		0.77	5.00	ug/Kg
74-83-9	Bromomethane	19.4		1.00	5.00	ug/Kg
75-00-3	Chloroethane	21.4		1.00	5.00	ug/Kg
75-69-4	Trichlorofluoromethane	20.8		0.91	5.00	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	17.6		1.10	5.00	ug/Kg
75-35-4	1,1-Dichloroethene	18.1		0.78	5.00	ug/Kg
67-64-1	Acetone	120		6.20	25.0	ug/Kg
75-15-0	Carbon Disulfide	17.6		1.30	5.00	ug/Kg
1634-04-4	Methyl tert-butyl Ether	17.2		0.67	5.00	ug/Kg
79-20-9	Methyl Acetate	18.7		1.80	5.00	ug/Kg
75-09-2	Methylene Chloride	18.1		3.40	10.0	ug/Kg
156-60-5	trans-1,2-Dichloroethene	17.9		0.84	5.00	ug/Kg
75-34-3	1,1-Dichloroethane	18.6		0.63	5.00	ug/Kg
110-82-7	Cyclohexane	16.7		0.69	5.00	ug/Kg
78-93-3	2-Butanone	99.2		5.70	25.0	ug/Kg
56-23-5	Carbon Tetrachloride	18.0		0.87	5.00	ug/Kg
156-59-2	cis-1,2-Dichloroethene	18.2		0.61	5.00	ug/Kg
74-97-5	Bromochloromethane	19.5		2.40	5.00	ug/Kg
67-66-3	Chloroform	19.1		0.67	5.00	ug/Kg
71-55-6	1,1,1-Trichloroethane	18.5		0.78	5.00	ug/Kg
108-87-2	Methylcyclohexane	16.9		0.87	5.00	ug/Kg
71-43-2	Benzene	18.3		0.72	5.00	ug/Kg
107-06-2	1,2-Dichloroethane	17.9		0.61	5.00	ug/Kg
79-01-6	Trichloroethene	18.6		0.75	5.00	ug/Kg
78-87-5	1,2-Dichloropropane	18.2		0.66	5.00	ug/Kg
75-27-4	Bromodichloromethane	18.6		0.56	5.00	ug/Kg
108-10-1	4-Methyl-2-Pentanone	87.8		4.40	25.0	ug/Kg
108-88-3	Toluene	18.2		0.67	5.00	ug/Kg

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	
Client Sample ID:	VY0311SBS01	SDG No.:	Q1514
Lab Sample ID:	VY0311SBS01	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	100
Sample Wt/Vol:	5	Units:	g
Soil Aliquot Vol:			uL
GC Column:	RXI-624	ID :	0.25
Prep Method :		Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021476.D	1		03/11/25 11:03	vy031125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	18.1		0.60	5.00	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	18.0		0.57	5.00	ug/Kg
79-00-5	1,1,2-Trichloroethane	18.4		0.84	5.00	ug/Kg
591-78-6	2-Hexanone	97.6		4.80	25.0	ug/Kg
124-48-1	Dibromochloromethane	18.0		0.65	5.00	ug/Kg
106-93-4	1,2-Dibromoethane	17.9		0.79	5.00	ug/Kg
127-18-4	Tetrachloroethene	19.5		0.89	5.00	ug/Kg
108-90-7	Chlorobenzene	17.9		0.74	5.00	ug/Kg
100-41-4	Ethyl Benzene	17.5		0.62	5.00	ug/Kg
179601-23-1	m/p-Xylenes	36.0		1.40	10.0	ug/Kg
95-47-6	o-Xylene	17.5		0.70	5.00	ug/Kg
100-42-5	Styrene	17.8		0.60	5.00	ug/Kg
75-25-2	Bromoform	17.8		0.81	5.00	ug/Kg
98-82-8	Isopropylbenzene	17.1		0.67	5.00	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	16.6		1.10	5.00	ug/Kg
541-73-1	1,3-Dichlorobenzene	17.5		0.74	5.00	ug/Kg
106-46-7	1,4-Dichlorobenzene	17.8		0.80	5.00	ug/Kg
95-50-1	1,2-Dichlorobenzene	17.7		0.59	5.00	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	17.2		1.60	5.00	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	18.2		0.79	5.00	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	18.0		0.78	5.00	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	52.4		70 (63) - 130 (155)	105%	SPK: 50
1868-53-7	Dibromofluoromethane	52.9		70 (70) - 130 (134)	106%	SPK: 50
2037-26-5	Toluene-d8	52.2		70 (74) - 130 (123)	104%	SPK: 50
460-00-4	4-Bromofluorobenzene	52.5		70 (38) - 130 (136)	105%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	226000	7.707			
540-36-3	1,4-Difluorobenzene	351000	8.609			
3114-55-4	Chlorobenzene-d5	313000	11.414			
3855-82-1	1,4-Dichlorobenzene-d4	162000	13.346			

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	
Client Sample ID:	VY0311SBS01	SDG No.:	Q1514
Lab Sample ID:	VY0311SBS01	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	100
Sample Wt/Vol:	5	Units:	g
Soil Aliquot Vol:			uL
GC Column:	RXI-624	ID :	0.25
Prep Method :		Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021476.D	1		03/11/25 11:03	vy031125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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_Y\Data\VY031125\
 Data File : VY021476.D
 Acq On : 11 Mar 2025 11:03
 Operator : SY/MD
 Sample : VY0311SBS01
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VY0311SBS01

Manual Integrations
 APPROVED

Reviewed By :Romaben Patel 03/12/2025
 Supervised By :Mahesh Dadoda 03/12/2025

Quant Time: Mar 12 01:23:14 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 12:42:45 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	7.707	168	225793	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.609	114	350967	50.000	ug/l	-0.01
63) Chlorobenzene-d5	11.414	117	312829	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.346	152	162394	50.000	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	8.055	65	125150	52.441	ug/l	-0.01
Spiked Amount	50.000	Range	50 - 163	Recovery	= 104.880%	
35) Dibromofluoromethane	7.634	113	122087	52.921	ug/l	0.00
Spiked Amount	50.000	Range	54 - 147	Recovery	= 105.840%	
50) Toluene-d8	10.103	98	456082	52.214	ug/l	0.00
Spiked Amount	50.000	Range	58 - 134	Recovery	= 104.420%	
62) 4-Bromofluorobenzene	12.407	95	155886	52.465	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	= 104.920%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.861	85	36522	17.626	ug/l	98
3) Chloromethane	2.068	50	57141	19.560	ug/l	98
4) Vinyl Chloride	2.202	62	63319	19.835	ug/l	96
5) Bromomethane	2.586	94	44828	19.429	ug/l	96
6) Chloroethane	2.732	64	45130	21.392	ug/l	98
7) Trichlorofluoromethane	3.049	101	92591	20.780	ug/l	98
8) Diethyl Ether	3.452	74	21657	17.538	ug/l	99
9) 1,1,2-Trichlorotrifluo...	3.811	101	44702	17.571	ug/l	97
10) Methyl Iodide	4.000	142	49215	19.031	ug/l	99
11) Tert butyl alcohol	4.848	59	14756	79.754	ug/l #	72
12) 1,1-Dichloroethene	3.781	96	41993	18.105	ug/l	93
13) Acrolein	3.653	56	14894	122.699	ug/l	92
14) Allyl chloride	4.378	41	67368	17.973	ug/l	99
15) Acrylonitrile	5.055	53	47717	90.776	ug/l	98
16) Acetone	3.860	43	60913	117.024	ug/l	93
17) Carbon Disulfide	4.098	76	128022	17.612	ug/l	100
18) Methyl Acetate	4.385	43	21593	18.696	ug/l	97
19) Methyl tert-butyl Ether	5.110	73	101276	17.228	ug/l	97
20) Methylene Chloride	4.610	84	49393	18.077	ug/l	98
21) trans-1,2-Dichloroethene	5.104	96	46396	17.862	ug/l	98
22) Diisopropyl ether	6.018	45	149058	18.453	ug/l	94
23) Vinyl Acetate	5.957	43	402758	87.365	ug/l	99
24) 1,1-Dichloroethane	5.909	63	88873	18.641	ug/l	99
25) 2-Butanone	6.884	43	71454	99.237	ug/l	95
26) 2,2-Dichloropropane	6.878	77	79429	18.107	ug/l	98
27) cis-1,2-Dichloroethene	6.884	96	53763	18.219	ug/l	99
28) Bromochloromethane	7.238	49	39070	19.547	ug/l	99
29) Tetrahydrofuran	7.262	42	38712	87.089	ug/l	99
30) Chloroform	7.414	83	94319	19.052	ug/l	92
31) Cyclohexane	7.695	56	74535	16.676	ug/l	93
32) 1,1,1-Trichloroethane	7.610	97	83652	18.454	ug/l	99
36) 1,1-Dichloropropene	7.829	75	64167	17.769	ug/l	98
37) Ethyl Acetate	6.975	43	28552	17.889	ug/l	97
38) Carbon Tetrachloride	7.811	117	74788	18.008	ug/l	99
39) Methylcyclohexane	9.109	83	74823	16.892	ug/l	98
40) Benzene	8.073	78	194135	18.250	ug/l	97

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
 Data File : VY021476.D
 Acq On : 11 Mar 2025 11:03
 Operator : SY/MD
 Sample : VY0311SBS01
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VY0311SBS01

Manual Integrations
 APPROVED

Reviewed By :Romaben Patel 03/12/2025
 Supervised By :Mahesh Dadoda 03/12/2025

Quant Time: Mar 12 01:23:14 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 12:42:45 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.213	41	15407m	17.728	ug/l	
42) 1,2-Dichloroethane	8.152	62	53330	17.921	ug/l	98
43) Isopropyl Acetate	8.195	43	53006	17.108	ug/l #	89
44) Trichloroethene	8.865	130	49991	18.597	ug/l	100
45) 1,2-Dichloropropane	9.140	63	46136	18.223	ug/l	97
46) Dibromomethane	9.225	93	26271	18.649	ug/l	100
47) Bromodichloromethane	9.420	83	69491	18.575	ug/l	100
48) Methyl methacrylate	9.219	41	24238	17.036	ug/l	98
49) 1,4-Dioxane	9.219	88	5395	390.187	ug/l #	95
51) 4-Methyl-2-Pentanone	9.999	43	140438	87.848	ug/l	98
52) Toluene	10.170	92	122381	18.248	ug/l	99
53) t-1,3-Dichloropropene	10.390	75	59746	18.127	ug/l	97
54) cis-1,3-Dichloropropene	9.853	75	70322	17.971	ug/l	97
55) 1,1,2-Trichloroethane	10.572	97	33841	18.365	ug/l	96
56) Ethyl methacrylate	10.438	69	40054	17.044	ug/l	99
57) 1,3-Dichloropropane	10.719	76	57273	17.933	ug/l	99
58) 2-Chloroethyl Vinyl ether	9.707	63	99189	91.430	ug/l	98
59) 2-Hexanone	10.761	43	103124	97.556	ug/l	99
60) Dibromochloromethane	10.908	129	45567	18.038	ug/l	99
61) 1,2-Dibromoethane	11.011	107	31157	17.915	ug/l	99
64) Tetrachloroethene	10.646	164	49633	19.511	ug/l	95
65) Chlorobenzene	11.438	112	132210	17.897	ug/l	99
66) 1,1,1,2-Tetrachloroethane	11.517	131	47893	18.337	ug/l	99
67) Ethyl Benzene	11.517	91	226668	17.481	ug/l	98
68) m/p-Xylenes	11.627	106	177439	36.046	ug/l	100
69) o-Xylene	11.956	106	79371	17.495	ug/l	98
70) Styrene	11.969	104	133951	17.797	ug/l	99
71) Bromoform	12.133	173	25988	17.800	ug/l #	97
73) Isopropylbenzene	12.255	105	218412	17.074	ug/l	99
74) N-amyl acetate	12.072	43	44220	15.917	ug/l	96
75) 1,1,2,2-Tetrachloroethane	12.505	83	37463	16.596	ug/l	97
76) 1,2,3-Trichloropropane	12.554	75	32127m	19.633	ug/l	
77) Bromobenzene	12.535	156	52645	17.591	ug/l	97
78) n-propylbenzene	12.596	91	266301	17.141	ug/l	99
79) 2-Chlorotoluene	12.682	91	154633	17.407	ug/l	99
80) 1,3,5-Trimethylbenzene	12.737	105	183525	17.654	ug/l	99
81) trans-1,4-Dichloro-2-b...	12.304	75	11100	15.420	ug/l	98
82) 4-Chlorotoluene	12.779	91	163638	17.789	ug/l	100
83) tert-Butylbenzene	12.999	119	159271	17.174	ug/l	99
84) 1,2,4-Trimethylbenzene	13.041	105	179459	17.387	ug/l	99
85) sec-Butylbenzene	13.176	105	236192	17.117	ug/l	100
86) p-Isopropyltoluene	13.291	119	197171	17.345	ug/l	99
87) 1,3-Dichlorobenzene	13.285	146	104308	17.510	ug/l	99
88) 1,4-Dichlorobenzene	13.365	146	103420	17.751	ug/l	99
89) n-Butylbenzene	13.621	91	182353	17.372	ug/l	99
90) Hexachloroethane	13.883	117	41489	17.108	ug/l	99
91) 1,2-Dichlorobenzene	13.657	146	90389	17.703	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.273	75	5802	17.158	ug/l	96
93) 1,2,4-Trichlorobenzene	14.925	180	50841	18.230	ug/l	99
94) Hexachlorobutadiene	15.023	225	32185	18.411	ug/l	98
95) Naphthalene	15.145	128	73881	17.695	ug/l	100
96) 1,2,3-Trichlorobenzene	15.328	180	42109	17.953	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
Data File : VY021476.D
Acq On : 11 Mar 2025 11:03
Operator : SY/MD
Sample : VY0311SBS01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0311SBS01

Manual Integrations
APPROVED

Reviewed By :Romaben Patel 03/12/2025
Supervised By :Mahesh Dadoda 03/12/2025

Quant Time: Mar 12 01:23:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 12:42:45 2025
Response via : Initial Calibration

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

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

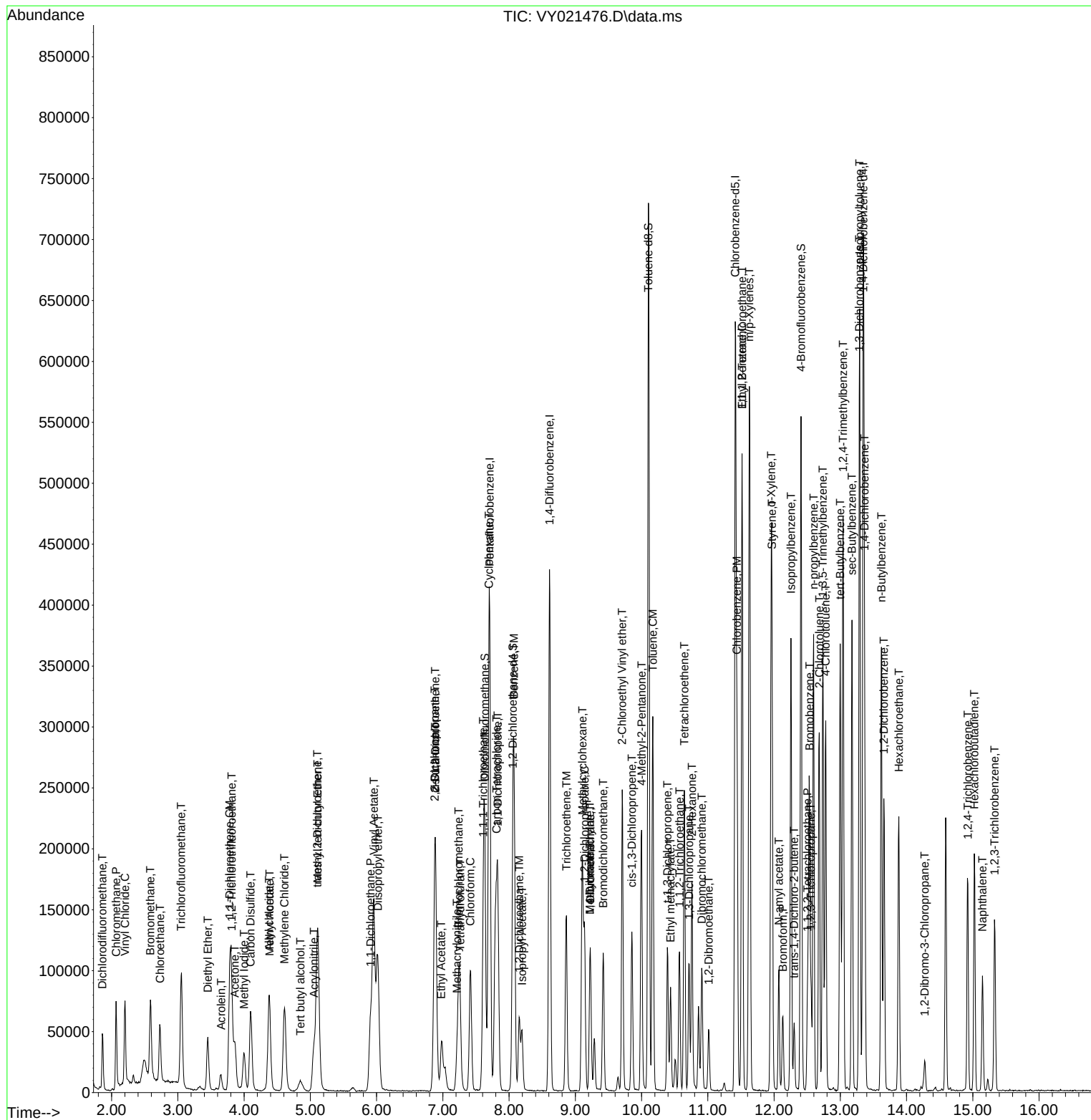
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
Data File : VY021476.D
Acq On : 11 Mar 2025 11:03
Operator : SY/MD
Sample : VY03115BS01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0311SBS01

Manual Integrations

Reviewed By :Romaben Patel 03/12/2025
Supervised By :Mahesh Dadoda 03/12/2025

Quant Time: Mar 12 01:23:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 12:42:45 2025
Response via : Initial Calibration



Report of Analysis

Client:	Portal Partners Tri-Venture		Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025		Date Received:	
Client Sample ID:	VN0310WBSD01		SDG No.:	Q1514
Lab Sample ID:	VN0310WBSD01		Matrix:	Water
Analytical Method:	SW8260		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085918.D	1		03/10/25 16:47	VN031025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	18.8		0.21	1.00	ug/L
74-87-3	Chloromethane	19.1		0.35	1.00	ug/L
75-01-4	Vinyl Chloride	17.4		0.34	1.00	ug/L
74-83-9	Bromomethane	16.7		1.40	5.00	ug/L
75-00-3	Chloroethane	16.0		0.56	1.00	ug/L
75-69-4	Trichlorofluoromethane	18.0		0.34	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	18.3		0.25	1.00	ug/L
75-35-4	1,1-Dichloroethene	18.4		0.26	1.00	ug/L
67-64-1	Acetone	90.0		1.40	5.00	ug/L
75-15-0	Carbon Disulfide	19.7		0.32	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	19.7		0.16	1.00	ug/L
79-20-9	Methyl Acetate	16.5		0.60	1.00	ug/L
75-09-2	Methylene Chloride	18.5		0.32	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	18.4		0.25	1.00	ug/L
75-34-3	1,1-Dichloroethane	18.6		0.23	1.00	ug/L
110-82-7	Cyclohexane	19.1		1.60	5.00	ug/L
78-93-3	2-Butanone	100		1.30	5.00	ug/L
56-23-5	Carbon Tetrachloride	18.7		0.25	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	18.1		0.25	1.00	ug/L
74-97-5	Bromochloromethane	22.8		0.18	1.00	ug/L
67-66-3	Chloroform	18.3		0.26	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	18.3		0.19	1.00	ug/L
108-87-2	Methylcyclohexane	18.6		0.19	1.00	ug/L
71-43-2	Benzene	19.3		0.16	1.00	ug/L
107-06-2	1,2-Dichloroethane	18.9		0.24	1.00	ug/L
79-01-6	Trichloroethene	17.3		0.32	1.00	ug/L
78-87-5	1,2-Dichloropropane	19.3		0.19	1.00	ug/L
75-27-4	Bromodichloromethane	18.7		0.24	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	100		0.75	5.00	ug/L
108-88-3	Toluene	19.8		0.18	1.00	ug/L

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	
Client Sample ID:	VN0310WBSD01	SDG No.:	Q1514
Lab Sample ID:	VN0310WBSD01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:			uL
GC Column:	RXI-624	ID :	0.25
Prep Method :		Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085918.D	1		03/10/25 16:47	VN031025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	19.8		0.21	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	19.7		0.18	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	18.5		0.21	1.00	ug/L
591-78-6	2-Hexanone	100		1.10	5.00	ug/L
124-48-1	Dibromochloromethane	19.1		0.18	1.00	ug/L
106-93-4	1,2-Dibromoethane	19.4		0.16	1.00	ug/L
127-18-4	Tetrachloroethene	18.5		0.25	1.00	ug/L
108-90-7	Chlorobenzene	18.1		0.13	1.00	ug/L
100-41-4	Ethyl Benzene	18.9		0.16	1.00	ug/L
179601-23-1	m/p-Xylenes	38.8		0.31	2.00	ug/L
95-47-6	o-Xylene	19.0		0.14	1.00	ug/L
100-42-5	Styrene	18.5		0.16	1.00	ug/L
75-25-2	Bromoform	19.0		0.21	1.00	ug/L
98-82-8	Isopropylbenzene	17.8		0.13	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	18.0		0.27	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	17.6		0.24	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	16.9		0.27	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	17.3		0.19	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	17.9		0.46	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	16.5		0.42	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	17.3		0.51	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	48.9		70 (74) - 130 (125)	98%	SPK: 50
1868-53-7	Dibromofluoromethane	47.2		70 (75) - 130 (124)	94%	SPK: 50
2037-26-5	Toluene-d8	46.9		70 (86) - 130 (113)	94%	SPK: 50
460-00-4	4-Bromofluorobenzene	50.4		70 (77) - 130 (121)	101%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	183000	8.224			
540-36-3	1,4-Difluorobenzene	304000	9.1			
3114-55-4	Chlorobenzene-d5	267000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	131000	13.788			

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	
Client Sample ID:	VN0310WBSD01	SDG No.:	Q1514
Lab Sample ID:	VN0310WBSD01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN085918.D	1		03/10/25 16:47	VN031025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\
 Data File : VN085918.D
 Acq On : 10 Mar 2025 16:47
 Operator : JC\MD
 Sample : VN0310WBSD01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN0310WBSD01

Manual Integrations
 APPROVED

Reviewed By : John Carlone 03/11/2025
 Supervised By : Mahesh Dadoda 03/11/2025

Quant Time: Mar 11 01:38:45 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
 Quant Title : SW846 8260
 QLast Update : Wed Feb 19 03:43:32 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	8.224	168	183155	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	304090	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	267080	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	130620	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	116174	48.925	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery =	97.840%		
35) Dibromofluoromethane	8.165	113	93986	47.233	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	94.460%		
50) Toluene-d8	10.565	98	339498	46.895	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery =	93.780%		
62) 4-Bromofluorobenzene	12.847	95	120107	50.354	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery =	100.700%		
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	2.124	85	46937	18.841	ug/l	98
3) Chloromethane	2.359	50	47656	19.063	ug/l	94
4) Vinyl Chloride	2.512	62	46041	17.394	ug/l	100
5) Bromomethane	2.959	94	28253	16.693	ug/l	92
6) Chloroethane	3.118	64	28117	16.037	ug/l	96
7) Trichlorofluoromethane	3.495	101	68881	17.974	ug/l	90
8) Diethyl Ether	3.959	74	24195	19.513	ug/l	93
9) 1,1,2-Trichlorotrifluo...	4.371	101	40512	18.288	ug/l	97
10) Methyl Iodide	4.589	142	50184	18.378	ug/l	97
11) Tert butyl alcohol	5.518	59	26820	91.833	ug/l #	92
12) 1,1-Dichloroethene	4.336	96	37035	18.439	ug/l	98
13) Acrolein	4.177	56	35598	82.195	ug/l	99
14) Allyl chloride	5.030	41	50406	19.114	ug/l	94
15) Acrylonitrile	5.718	53	96295	101.423	ug/l	97
16) Acetone	4.424	43	67637	90.021	ug/l	88
17) Carbon Disulfide	4.718	76	117279	19.702	ug/l	97
18) Methyl Acetate	5.030	43	42724	16.532	ug/l	96
19) Methyl tert-butyl Ether	5.795	73	117363	19.664	ug/l	99
20) Methylene Chloride	5.283	84	44771	18.529	ug/l	97
21) trans-1,2-Dichloroethene	5.789	96	39722	18.367	ug/l	90
22) Diisopropyl ether	6.671	45	122278	20.521	ug/l	98
23) Vinyl Acetate	6.600	43	432905m	106.106	ug/l	
24) 1,1-Dichloroethane	6.565	63	75247	18.576	ug/l	99
25) 2-Butanone	7.483	43	110910	100.337	ug/l	100
26) 2,2-Dichloropropane	7.483	77	64399	17.879	ug/l	100
27) cis-1,2-Dichloroethene	7.483	96	45332	18.077	ug/l	96
28) Bromochloromethane	7.812	49	37915	22.774	ug/l	93
29) Tetrahydrofuran	7.841	42	73328	102.731	ug/l	99
30) Chloroform	7.965	83	77346	18.272	ug/l	96
31) Cyclohexane	8.253	56	64840	19.118	ug/l	92
32) 1,1,1-Trichloroethane	8.171	97	69020	18.331	ug/l	97
36) 1,1-Dichloropropene	8.371	75	53538	19.011	ug/l	99
37) Ethyl Acetate	7.559	43	44178	19.063	ug/l	98
38) Carbon Tetrachloride	8.359	117	62407	18.651	ug/l	96
39) Methylcyclohexane	9.600	83	51371	18.568	ug/l	96
40) Benzene	8.606	78	173763	19.252	ug/l	96

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\
 Data File : VN085918.D
 Acq On : 10 Mar 2025 16:47
 Operator : JC\MD
 Sample : VN0310WBSD01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN0310WBSD01

Manual Integrations
 APPROVED

Reviewed By : John Carlone 03/11/2025
 Supervised By : Mahesh Dadoda 03/11/2025

Quant Time: Mar 11 01:38:45 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
 Quant Title : SW846 8260
 QLast Update : Wed Feb 19 03:43:32 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.771	41	24897	20.096	ug/l	98
42) 1,2-Dichloroethane	8.671	62	55432	18.855	ug/l	100
43) Isopropyl Acetate	8.688	43	84853	20.541	ug/l	97
44) Trichloroethene	9.347	130	38294	17.280	ug/l	98
45) 1,2-Dichloropropane	9.624	63	42131	19.338	ug/l	94
46) Dibromomethane	9.706	93	29316	19.076	ug/l	98
47) Bromodichloromethane	9.882	83	61432	18.685	ug/l	99
48) Methyl methacrylate	9.677	41	33611	19.529	ug/l	97
49) 1,4-Dioxane	9.694	88	13683	418.066	ug/l	97
51) 4-Methyl-2-Pentanone	10.441	43	230578	103.195	ug/l	99
52) Toluene	10.630	92	105004	19.846	ug/l	100
53) t-1,3-Dichloropropene	10.835	75	60104	19.770	ug/l	95
54) cis-1,3-Dichloropropene	10.312	75	65714	19.711	ug/l	97
55) 1,1,2-Trichloroethane	11.018	97	38998	18.539	ug/l	96
56) Ethyl methacrylate	10.871	69	55699	20.042	ug/l	98
57) 1,3-Dichloropropane	11.159	76	68287	19.446	ug/l	99
58) 2-Chloroethyl Vinyl ether	10.159	63	121081	119.643	ug/l	100
59) 2-Hexanone	11.194	43	158456	103.085	ug/l	99
60) Dibromochloromethane	11.359	129	46769	19.093	ug/l	99
61) 1,2-Dibromoethane	11.465	107	38641	19.441	ug/l	97
64) Tetrachloroethene	11.100	164	38276	18.499	ug/l	95
65) Chlorobenzene	11.888	112	110875	18.122	ug/l	98
66) 1,1,1,2-Tetrachloroethane	11.959	131	40601	18.462	ug/l	98
67) Ethyl Benzene	11.965	91	180891	18.874	ug/l	100
68) m/p-Xylenes	12.071	106	141229	38.793	ug/l	100
69) o-Xylene	12.394	106	65603	18.963	ug/l	97
70) Styrene	12.412	104	109997	18.542	ug/l	98
71) Bromoform	12.576	173	31071	19.014	ug/l #	97
73) Isopropylbenzene	12.694	105	159608	17.836	ug/l	98
74) N-amyl acetate	12.494	43	61330	19.435	ug/l	99
75) 1,1,2,2-Tetrachloroethane	12.935	83	55549	18.039	ug/l	100
76) 1,2,3-Trichloropropane	12.994	75	46455m	16.011	ug/l	
77) Bromobenzene	12.976	156	42892	17.741	ug/l	92
78) n-propylbenzene	13.035	91	192527	18.786	ug/l	99
79) 2-Chlorotoluene	13.123	91	125420	18.316	ug/l	100
80) 1,3,5-Trimethylbenzene	13.171	105	139100	19.082	ug/l	99
81) trans-1,4-Dichloro-2-b...	12.735	75	18124m	18.225	ug/l	
82) 4-Chlorotoluene	13.218	91	127707	18.813	ug/l	99
83) tert-Butylbenzene	13.435	119	108226	17.655	ug/l	94
84) 1,2,4-Trimethylbenzene	13.482	105	139106	19.288	ug/l	97
85) sec-Butylbenzene	13.612	105	157266	18.158	ug/l	99
86) p-Isopropyltoluene	13.729	119	127223	17.321	ug/l	98
87) 1,3-Dichlorobenzene	13.729	146	79599	17.573	ug/l	99
88) 1,4-Dichlorobenzene	13.812	146	78503	16.910	ug/l	97
89) n-Butylbenzene	14.053	91	104614	17.013	ug/l	97
90) Hexachloroethane	14.335	117	27755	16.921	ug/l	99
91) 1,2-Dichlorobenzene	14.106	146	75492	17.332	ug/l	100
92) 1,2-Dibromo-3-Chloropr...	14.723	75	10101	17.863	ug/l	95
93) 1,2,4-Trichlorobenzene	15.388	180	34346	16.548	ug/l	97
94) Hexachlorobutadiene	15.500	225	19667	15.591	ug/l	98
95) Naphthalene	15.641	128	94244	16.539	ug/l	99
96) 1,2,3-Trichlorobenzene	15.841	180	35969	17.262	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\
Data File : VN085918.D
Acq On : 10 Mar 2025 16:47
Operator : JC\MD
Sample : VN0310WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0310WBSD01

Manual Integrations
APPROVED

Reviewed By :John Carlone 03/11/2025
Supervised By :Mahesh Dadoda 03/11/2025

Quant Time: Mar 11 01:38:45 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260
QLast Update : Wed Feb 19 03:43:32 2025
Response via : Initial Calibration

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

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

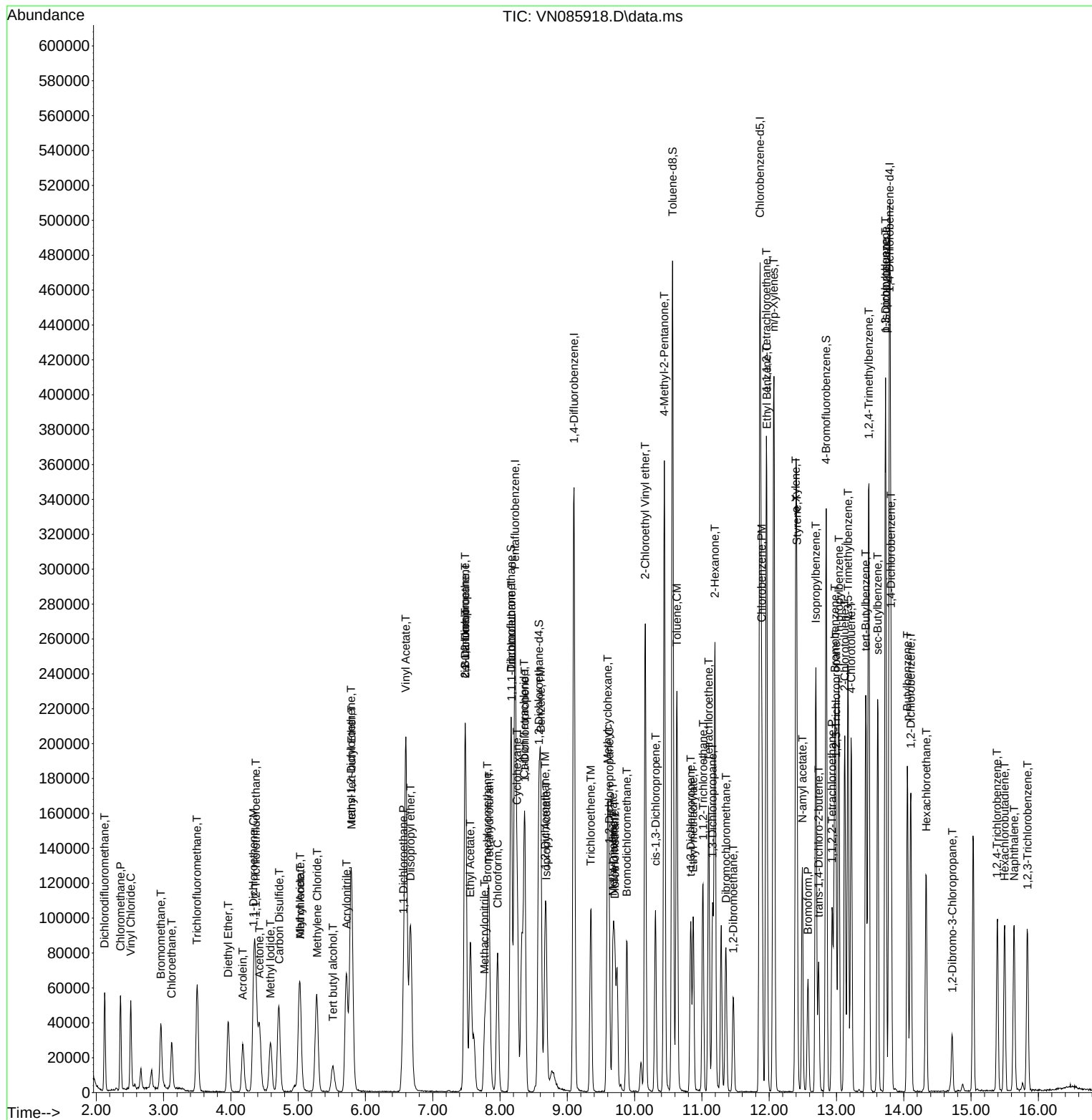

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Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN031025\  
Data File : VN085918.D  
Acq On    : 10 Mar 2025  16:47  
Operator  : JC\MD  
Sample    : VN0310WBSD01  
Misc      : 5.0mL/MSVOA_N/WATER  
ALS Vial  : 7      Sample Multiplier: 1
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Instrument :
MSVOA_N
ClientSampleId :
VN0310WBSD01

Manual Integrations

Reviewed By :John Carlone 03/11/2025
Supervised By :Mahesh Dadoda 03/11/2025

Quant Time: Mar 11 01:38:45 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N021825W.M
Quant Title : SW846 8260
QLast Update : Wed Feb 19 03:43:32 2025
Response via : Initial Calibration



Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	
Client Sample ID:	VY0311SBSD01	SDG No.:	Q1514
Lab Sample ID:	VY0311SBSD01	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	100
Sample Wt/Vol:	5	Units:	g
Soil Aliquot Vol:			uL
GC Column:	RXI-624	ID :	0.25
Prep Method :		Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021477.D	1		03/11/25 11:26	vy031125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	20.4		1.70	5.00	ug/Kg
74-87-3	Chloromethane	21.6		1.20	5.00	ug/Kg
75-01-4	Vinyl Chloride	23.2		0.77	5.00	ug/Kg
74-83-9	Bromomethane	21.7		1.00	5.00	ug/Kg
75-00-3	Chloroethane	23.4		1.00	5.00	ug/Kg
75-69-4	Trichlorofluoromethane	22.4		0.91	5.00	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	21.4		1.10	5.00	ug/Kg
75-35-4	1,1-Dichloroethene	21.3		0.78	5.00	ug/Kg
67-64-1	Acetone	130		6.20	25.0	ug/Kg
75-15-0	Carbon Disulfide	20.1		1.30	5.00	ug/Kg
1634-04-4	Methyl tert-butyl Ether	21.4		0.67	5.00	ug/Kg
79-20-9	Methyl Acetate	24.7		1.80	5.00	ug/Kg
75-09-2	Methylene Chloride	21.2		3.40	10.0	ug/Kg
156-60-5	trans-1,2-Dichloroethene	20.1		0.84	5.00	ug/Kg
75-34-3	1,1-Dichloroethane	21.0		0.63	5.00	ug/Kg
110-82-7	Cyclohexane	19.3		0.69	5.00	ug/Kg
78-93-3	2-Butanone	120		5.70	25.0	ug/Kg
56-23-5	Carbon Tetrachloride	20.6		0.87	5.00	ug/Kg
156-59-2	cis-1,2-Dichloroethene	20.9		0.61	5.00	ug/Kg
74-97-5	Bromochloromethane	21.9		2.40	5.00	ug/Kg
67-66-3	Chloroform	21.6		0.67	5.00	ug/Kg
71-55-6	1,1,1-Trichloroethane	20.8		0.78	5.00	ug/Kg
108-87-2	Methylcyclohexane	19.6		0.87	5.00	ug/Kg
71-43-2	Benzene	20.9		0.72	5.00	ug/Kg
107-06-2	1,2-Dichloroethane	21.8		0.61	5.00	ug/Kg
79-01-6	Trichloroethene	20.8		0.75	5.00	ug/Kg
78-87-5	1,2-Dichloropropane	21.8		0.66	5.00	ug/Kg
75-27-4	Bromodichloromethane	21.0		0.56	5.00	ug/Kg
108-10-1	4-Methyl-2-Pentanone	110		4.40	25.0	ug/Kg
108-88-3	Toluene	21.0		0.67	5.00	ug/Kg

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	
Client Sample ID:	VY0311SBSD01	SDG No.:	Q1514
Lab Sample ID:	VY0311SBSD01	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021477.D	1		03/11/25 11:26	vy031125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	21.5		0.60	5.00	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	21.1		0.57	5.00	ug/Kg
79-00-5	1,1,2-Trichloroethane	21.7		0.84	5.00	ug/Kg
591-78-6	2-Hexanone	120		4.80	25.0	ug/Kg
124-48-1	Dibromochloromethane	21.8		0.65	5.00	ug/Kg
106-93-4	1,2-Dibromoethane	21.7		0.79	5.00	ug/Kg
127-18-4	Tetrachloroethene	21.7		0.89	5.00	ug/Kg
108-90-7	Chlorobenzene	20.5		0.74	5.00	ug/Kg
100-41-4	Ethyl Benzene	19.9		0.62	5.00	ug/Kg
179601-23-1	m/p-Xylenes	40.5		1.40	10.0	ug/Kg
95-47-6	o-Xylene	20.1		0.70	5.00	ug/Kg
100-42-5	Styrene	20.6		0.60	5.00	ug/Kg
75-25-2	Bromoform	21.3		0.81	5.00	ug/Kg
98-82-8	Isopropylbenzene	19.2		0.67	5.00	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	20.0		1.10	5.00	ug/Kg
541-73-1	1,3-Dichlorobenzene	20.1		0.74	5.00	ug/Kg
106-46-7	1,4-Dichlorobenzene	20.4		0.80	5.00	ug/Kg
95-50-1	1,2-Dichlorobenzene	20.6		0.59	5.00	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	21.0		1.60	5.00	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	21.0		0.79	5.00	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	21.2		0.78	5.00	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	54.4		70 (63) - 130 (155)	109%	SPK: 50
1868-53-7	Dibromofluoromethane	53.0		70 (70) - 130 (134)	106%	SPK: 50
2037-26-5	Toluene-d8	52.2		70 (74) - 130 (123)	104%	SPK: 50
460-00-4	4-Bromofluorobenzene	52.7		70 (38) - 130 (136)	105%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	206000	7.707			
540-36-3	1,4-Difluorobenzene	321000	8.615			
3114-55-4	Chlorobenzene-d5	289000	11.414			
3855-82-1	1,4-Dichlorobenzene-d4	151000	13.346			

Report of Analysis

Client:	Portal Partners Tri-Venture		Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025		Date Received:	
Client Sample ID:	VY0311SBSD01		SDG No.:	Q1514
Lab Sample ID:	VY0311SBSD01		Matrix:	SOIL
Analytical Method:	SW8260		% Solid:	100
Sample Wt/Vol:	5	Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021477.D	1		03/11/25 11:26	vy031125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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_Y\Data\VY031125\
 Data File : VY021477.D
 Acq On : 11 Mar 2025 11:26
 Operator : SY/MD
 Sample : VY0311SBS01
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VY0311SBS01

Manual Integrations
 APPROVED

Reviewed By :Romaben Patel 03/12/2025
 Supervised By :Mahesh Dadoda 03/12/2025

Quant Time: Mar 12 01:23:35 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 12:42:45 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	7.707	168	205814	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.615	114	320893	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.414	117	289092	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.346	152	150821	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	118276	54.372	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 108.740%			
35) Dibromofluoromethane	7.634	113	111808	53.008	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 106.020%			
50) Toluene-d8	10.103	98	416806	52.190	ug/l	0.00
Spiked Amount 50.000	Range 58 - 134		Recovery = 104.380%			
62) 4-Bromofluorobenzene	12.407	95	143228	52.722	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery = 105.440%			
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	1.861	85	38513	20.391	ug/l	95
3) Chloromethane	2.068	50	57571	21.621	ug/l	96
4) Vinyl Chloride	2.202	62	67448	23.179	ug/l	96
5) Bromomethane	2.586	94	45581	21.673	ug/l	95
6) Chloroethane	2.726	64	44919	23.359	ug/l	98
7) Trichlorofluoromethane	3.049	101	90844	22.367	ug/l	97
8) Diethyl Ether	3.452	74	24779	22.015	ug/l	92
9) 1,1,2-Trichlorotrifluo...	3.811	101	49556	21.370	ug/l	99
10) Methyl Iodide	4.000	142	51867	22.004	ug/l	98
11) Tert butyl alcohol	4.854	59	17440	110.757	ug/l	100
12) 1,1-Dichloroethene	3.781	96	45043	21.305	ug/l	93
13) Acrolein	3.653	56	16689	150.833	ug/l	90
14) Allyl chloride	4.378	41	70483	20.630	ug/l	100
15) Acrylonitrile	5.055	53	54531	113.809	ug/l	97
16) Acetone	3.860	43	62206	131.109	ug/l	99
17) Carbon Disulfide	4.104	76	133379	20.131	ug/l	100
18) Methyl Acetate	4.378	43	25971	24.670	ug/l	99
19) Methyl tert-butyl Ether	5.110	73	114604	21.387	ug/l	100
20) Methylene Chloride	4.610	84	52722	21.169	ug/l	98
21) trans-1,2-Dichloroethene	5.110	96	47703	20.148	ug/l	98
22) Diisopropyl ether	6.012	45	157492	21.390	ug/l	98
23) Vinyl Acetate	5.957	43	447652	106.530	ug/l	100
24) 1,1-Dichloroethane	5.909	63	91448	21.044	ug/l	99
25) 2-Butanone	6.896	43	78877	120.181	ug/l	100
26) 2,2-Dichloropropane	6.878	77	82324	20.589	ug/l	99
27) cis-1,2-Dichloroethene	6.884	96	56260	20.916	ug/l	98
28) Bromochloromethane	7.238	49	39935	21.920	ug/l	99
29) Tetrahydrofuran	7.256	42	45199	111.553	ug/l	99
30) Chloroform	7.414	83	97353	21.574	ug/l	92
31) Cyclohexane	7.695	56	78605	19.294	ug/l	98
32) 1,1,1-Trichloroethane	7.616	97	86126	20.845	ug/l	99
36) 1,1-Dichloropropene	7.835	75	67500	20.444	ug/l	99
37) Ethyl Acetate	6.988	43	31780	21.778	ug/l	99
38) Carbon Tetrachloride	7.817	117	78099	20.568	ug/l	97
39) Methylcyclohexane	9.103	83	79572	19.648	ug/l	99
40) Benzene	8.079	78	203249	20.897	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
 Data File : VY021477.D
 Acq On : 11 Mar 2025 11:26
 Operator : SY/MD
 Sample : VY0311SBSD01
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VY0311SBSD01

Manual Integrations
 APPROVED

Reviewed By :Romaben Patel 03/12/2025
 Supervised By :Mahesh Dadoda 03/12/2025

Quant Time: Mar 12 01:23:35 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 12:42:45 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.219	41	17550	22.087	ug/l	97
42) 1,2-Dichloroethane	8.158	62	59353	21.814	ug/l	100
43) Isopropyl Acetate	8.195	43	58991	20.824	ug/l #	89
44) Trichloroethene	8.865	130	51146	20.810	ug/l	97
45) 1,2-Dichloropropane	9.140	63	50348	21.750	ug/l	95
46) Dibromomethane	9.231	93	28214	21.906	ug/l	100
47) Bromodichloromethane	9.420	83	71979	21.044	ug/l	96
48) Methyl methacrylate	9.219	41	27850	21.409	ug/l	99
49) 1,4-Dioxane	9.225	88	5956	471.132	ug/l #	94
51) 4-Methyl-2-Pentanone	9.999	43	161289	110.346	ug/l	100
52) Toluene	10.170	92	128907	21.023	ug/l	100
53) t-1,3-Dichloropropene	10.390	75	64650	21.454	ug/l	97
54) cis-1,3-Dichloropropene	9.853	75	75356	21.062	ug/l	97
55) 1,1,2-Trichloroethane	10.572	97	36516	21.674	ug/l	98
56) Ethyl methacrylate	10.438	69	45607	21.225	ug/l	99
57) 1,3-Dichloropropane	10.719	76	62886	21.536	ug/l	100
58) 2-Chloroethyl Vinyl ether	9.707	63	113643	114.571	ug/l	99
59) 2-Hexanone	10.761	43	113250	117.176	ug/l	98
60) Dibromochloromethane	10.908	129	50383	21.813	ug/l	99
61) 1,2-Dibromoethane	11.011	107	34516	21.707	ug/l	100
64) Tetrachloroethene	10.646	164	51084	21.731	ug/l	96
65) Chlorobenzene	11.438	112	139893	20.492	ug/l	98
66) 1,1,1,2-Tetrachloroethane	11.511	131	50679	20.997	ug/l	98
67) Ethyl Benzene	11.517	91	238455	19.900	ug/l	99
68) m/p-Xylenes	11.627	106	184445	40.545	ug/l	100
69) o-Xylene	11.956	106	84386	20.127	ug/l	99
70) Styrene	11.968	104	142938	20.551	ug/l	99
71) Bromoform	12.127	173	28730	21.294	ug/l	97
73) Isopropylbenzene	12.255	105	227543	19.152	ug/l	99
74) N-amyl acetate	12.072	43	50844	19.706	ug/l	98
75) 1,1,2,2-Tetrachloroethane	12.505	83	42002	20.034	ug/l	99
76) 1,2,3-Trichloropropane	12.554	75	30015m	19.749	ug/l	
77) Bromobenzene	12.529	156	55801	20.076	ug/l	97
78) n-propylbenzene	12.596	91	280689	19.454	ug/l	99
79) 2-Chlorotoluene	12.682	91	161689	19.598	ug/l	100
80) 1,3,5-Trimethylbenzene	12.737	105	192316	19.919	ug/l	99
81) trans-1,4-Dichloro-2-b...	12.298	75	12478	18.665	ug/l	98
82) 4-Chlorotoluene	12.779	91	168922	19.773	ug/l	100
83) tert-Butylbenzene	12.999	119	168838	19.603	ug/l	99
84) 1,2,4-Trimethylbenzene	13.041	105	190067	19.827	ug/l	99
85) sec-Butylbenzene	13.176	105	250973	19.584	ug/l	99
86) p-Isopropyltoluene	13.291	119	206101	19.522	ug/l	99
87) 1,3-Dichlorobenzene	13.285	146	111249	20.108	ug/l	100
88) 1,4-Dichlorobenzene	13.365	146	110455	20.414	ug/l	99
89) n-Butylbenzene	13.615	91	193943	19.894	ug/l	100
90) Hexachloroethane	13.883	117	43777	19.437	ug/l	99
91) 1,2-Dichlorobenzene	13.657	146	97785	20.621	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.273	75	6592	20.990	ug/l	96
93) 1,2,4-Trichlorobenzene	14.919	180	54419	21.011	ug/l	98
94) Hexachlorobutadiene	15.023	225	35066	21.598	ug/l	99
95) Naphthalene	15.145	128	84955	21.408	ug/l	99
96) 1,2,3-Trichlorobenzene	15.328	180	46133	21.178	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
Data File : VY021477.D
Acq On : 11 Mar 2025 11:26
Operator : SY/MD
Sample : VY0311SBSD01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0311SBSD01

Manual Integrations
APPROVED

Reviewed By :Romaben Patel 03/12/2025
Supervised By :Mahesh Dadoda 03/12/2025

Quant Time: Mar 12 01:23:35 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 12:42:45 2025
Response via : Initial Calibration

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

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

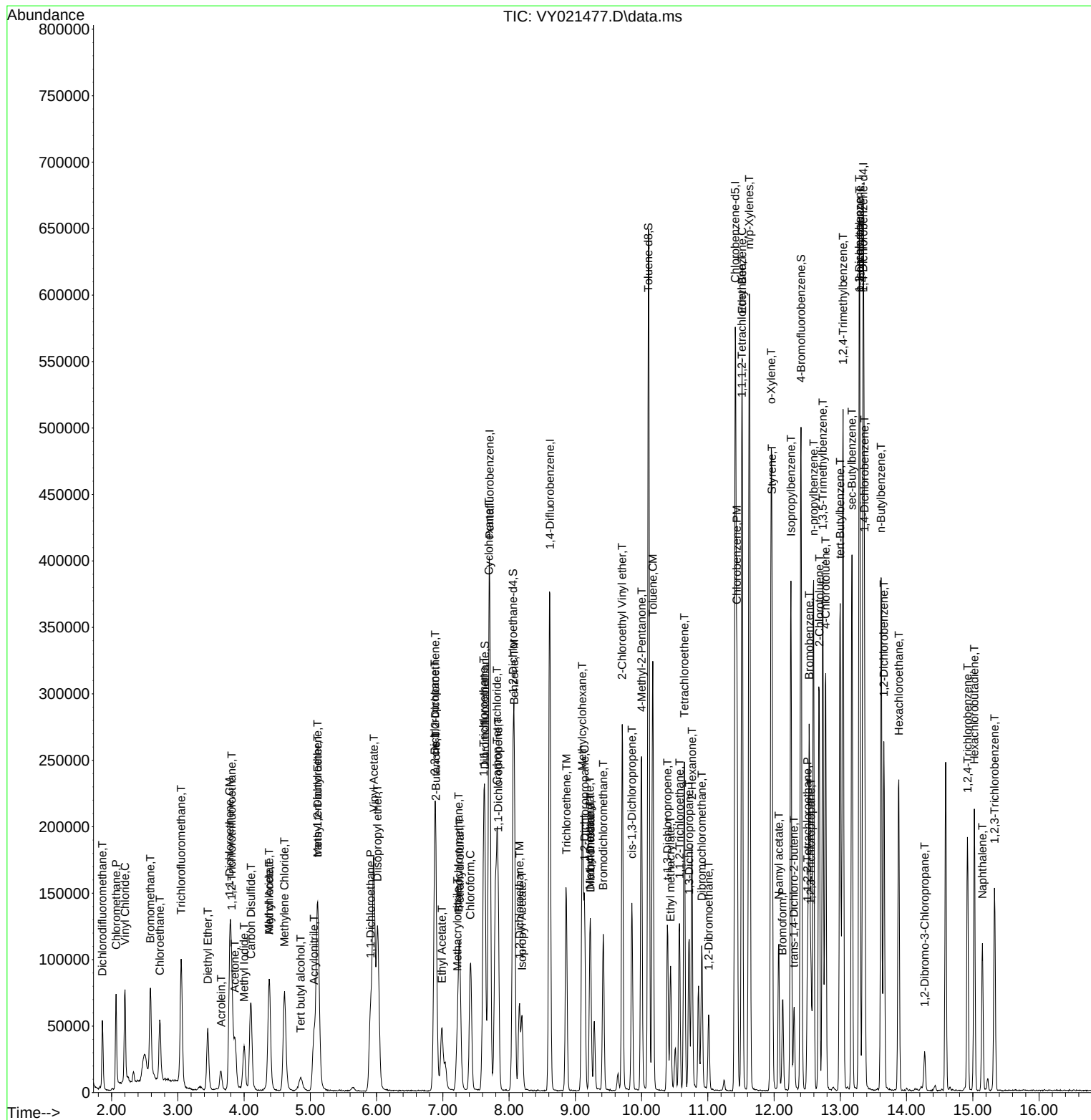
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
Data File : VY021477.D
Acq On : 11 Mar 2025 11:26
Operator : SY/MD
Sample : VY0311SBSD01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0311SBSD01

Manual Integrations APPROVED

Reviewed By :Romaben Patel 03/12/2025
Supervised By :Mahesh Dadoda 03/12/2025

Quant Time: Mar 12 01:23:35 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 12:42:45 2025
Response via : Initial Calibration



Manual Integration Report

Sequence:	VN021825	Instrument	MSVOA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC100	VN085772.D	1,2,3-Trichloropropane	JOHN	2/19/2025 9:44:09 AM	MMDadoda	2/19/2025 12:44:43 PM	Peak Integrated by Software
VSTDICCC050	VN085773.D	1,2,3-Trichloropropane	JOHN	2/19/2025 9:44:14 AM	MMDadoda	2/19/2025 12:44:47 PM	Peak Integrated by Software
VSTDICC010	VN085775.D	1,2,3-Trichloropropane	JOHN	2/19/2025 9:44:23 AM	MMDadoda	2/19/2025 12:44:56 PM	Peak Integrated by Software
VSTDICC010	VN085775.D	Vinyl Acetate	JOHN	2/19/2025 9:44:23 AM	MMDadoda	2/19/2025 12:44:56 PM	Peak Integrated by Software
VSTDICC005	VN085776.D	1,2,3-Trichloropropane	JOHN	2/19/2025 9:44:27 AM	MMDadoda	2/19/2025 12:45:01 PM	Peak Integrated by Software
VSTDICC005	VN085776.D	Vinyl Acetate	JOHN	2/19/2025 9:44:27 AM	MMDadoda	2/19/2025 12:45:01 PM	Peak Integrated by Software
VSTDICC001	VN085777.D	1,2,3-Trichloropropane	JOHN	2/19/2025 9:44:33 AM	MMDadoda	2/19/2025 12:45:05 PM	Peak Integrated by Software
VSTDICC001	VN085777.D	1,4-Dichlorobenzene	JOHN	2/19/2025 9:44:33 AM	MMDadoda	2/19/2025 12:45:05 PM	Peak Integrated by Software
VSTDICC001	VN085777.D	2,2-Dichloropropane	JOHN	2/19/2025 9:44:33 AM	MMDadoda	2/19/2025 12:45:05 PM	Peak Integrated by Software
VSTDICC001	VN085777.D	Allyl chloride	JOHN	2/19/2025 9:44:33 AM	MMDadoda	2/19/2025 12:45:05 PM	Peak Integrated by Software
VSTDICC001	VN085777.D	Diethyl Ether	JOHN	2/19/2025 9:44:33 AM	MMDadoda	2/19/2025 12:45:05 PM	Peak Integrated by Software
VSTDICC001	VN085777.D	Vinyl Acetate	JOHN	2/19/2025 9:44:33 AM	MMDadoda	2/19/2025 12:45:05 PM	Peak Integrated by Software
VSTDICC020	VN085779.D	1,2,3-Trichloropropane	JOHN	2/19/2025 9:44:37 AM	MMDadoda	2/19/2025 12:45:09 PM	Peak Integrated by Software



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Manual Integration Report

Sequence:	VN021825	Instrument	MSVOA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICV050	VN085780.D	1,2,3-Trichloropropane	JOHN	2/19/2025 9:44:42 AM	MMDadoda	2/19/2025 12:45:13 PM	Peak Integrated by Software

Manual Integration Report

Sequence:	VN031025	Instrument	MSVOA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC050	VN085914.D	1,2,3-Trichloropropane	JOHN	3/11/2025 9:51:26 AM	MMDadoda	3/11/2025 3:09:17 PM	Peak Integrated by Software
VSTDCCC050	VN085914.D	trans-1,4-Dichloro-2-but ene	JOHN	3/11/2025 9:51:26 AM	MMDadoda	3/11/2025 3:09:17 PM	Peak Integrated by Software
VN0310WBS01	VN085917.D	1,2,3-Trichloropropane	JOHN	3/11/2025 9:51:33 AM	MMDadoda	3/11/2025 3:08:48 PM	Peak Integrated by Software
VN0310WBS01	VN085917.D	Allyl chloride	JOHN	3/11/2025 9:51:33 AM	MMDadoda	3/11/2025 3:08:48 PM	Peak Integrated by Software
VN0310WBS01	VN085917.D	trans-1,4-Dichloro-2-but ene	JOHN	3/11/2025 9:51:33 AM	MMDadoda	3/11/2025 3:08:48 PM	Peak Integrated by Software
VN0310WBSD01	VN085918.D	1,2,3-Trichloropropane	JOHN	3/11/2025 9:51:38 AM	MMDadoda	3/11/2025 3:08:49 PM	Peak Integrated by Software
VN0310WBSD01	VN085918.D	trans-1,4-Dichloro-2-but ene	JOHN	3/11/2025 9:51:38 AM	MMDadoda	3/11/2025 3:08:49 PM	Peak Integrated by Software
VN0310WBSD01	VN085918.D	Vinyl Acetate	JOHN	3/11/2025 9:51:38 AM	MMDadoda	3/11/2025 3:08:49 PM	Peak Integrated by Software
VSTDCCC050	VN085926.D	1,2,3-Trichloropropane	JOHN	3/11/2025 9:51:48 AM	MMDadoda	3/11/2025 3:08:52 PM	Peak Integrated by Software

Manual Integration Report

Sequence:	VN031125	Instrument	MSVOA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC050	VN085928.D	1,2,3-Trichloropropane	JOHN	3/12/2025 9:46:21 AM	MMDadoda	3/12/2025 3:16:48 PM	Peak Integrated by Software
VN0311WBS01	VN085931.D	1,2,3-Trichloropropane	JOHN	3/12/2025 9:46:26 AM	MMDadoda	3/12/2025 3:16:49 PM	Peak Integrated by Software
VSTDCCC050	VN085952.D	1,2,3-Trichloropropane	JOHN	3/12/2025 9:46:55 AM	MMDadoda	3/12/2025 3:16:58 PM	Peak Integrated by Software

Manual Integration Report

Sequence:	VY030425	Instrument	MSVOA_y

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC010	VY021397.D	1,2,3-Trichloropropane	MMDadoda	3/6/2025 2:55:34 PM	SAM	3/6/2025 3:00:08 PM	Peak Integrated by Software
VSTDICC010	VY021397.D	Methacrylonitrile	MMDadoda	3/6/2025 2:55:34 PM	SAM	3/6/2025 3:00:08 PM	Peak Integrated by Software
VSTDICC010	VY021397.D	Tert butyl alcohol	MMDadoda	3/6/2025 2:55:34 PM	SAM	3/6/2025 3:00:08 PM	Peak Integrated by Software
VSTDICC020	VY021398.D	1,2,3-Trichloropropane	MMDadoda	3/6/2025 2:55:33 PM	SAM	3/6/2025 3:00:07 PM	Peak Integrated by Software
VSTDICC020	VY021398.D	Ethyl Acetate	MMDadoda	3/6/2025 2:55:33 PM	SAM	3/6/2025 3:00:07 PM	Peak Integrated by Software
VSTDICCC050	VY021399.D	1,2,3-Trichloropropane	MMDadoda	3/6/2025 2:55:35 PM	SAM	3/6/2025 3:00:06 PM	Peak Integrated by Software
VSTDICC100	VY021400.D	1,2,3-Trichloropropane	MMDadoda	3/6/2025 2:55:49 PM	SAM	3/6/2025 3:00:09 PM	Peak Integrated by Software
VSTDICC150	VY021401.D	1,2,3-Trichloropropane	MMDadoda	3/6/2025 2:55:42 PM	SAM	3/6/2025 3:00:14 PM	Peak Integrated by Software
VSTDICC005	VY021403.D	1,2,3-Trichloropropane	MMDadoda	3/6/2025 2:55:43 PM	SAM	3/6/2025 3:00:17 PM	Peak Integrated by Software
VSTDICC005	VY021403.D	Ethyl Acetate	MMDadoda	3/6/2025 2:55:43 PM	SAM	3/6/2025 3:00:17 PM	Peak Integrated by Software
VSTDICV050	VY021404.D	1,2,3-Trichloropropane	MMDadoda	3/6/2025 2:55:47 PM	SAM	3/6/2025 3:00:16 PM	Peak Integrated by Software
VSTDICV050	VY021404.D	Methacrylonitrile	MMDadoda	3/6/2025 2:55:47 PM	SAM	3/6/2025 3:00:16 PM	Peak Integrated by Software



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Manual Integration Report

Sequence:

VY030425

Instrument

MSVOA_y

Sample ID

File ID

Parameter

Review By

Review On

Supervised
By

Supervised On

Reason

Manual Integration Report

Sequence:

vy031125

Instrument

MSVOA_y

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC050	VY021474.D	1,2,3-Trichloropropane	Romaben	3/12/2025 2:41:38 PM	MMDadoda	3/12/2025 3:16:21 PM	Peak Integrated by Software
VY0311SBS01	VY021476.D	1,2,3-Trichloropropane	Romaben	3/12/2025 2:41:42 PM	MMDadoda	3/12/2025 3:16:22 PM	Peak Integrated by Software
VY0311SBS01	VY021476.D	Methacrylonitrile	Romaben	3/12/2025 2:41:42 PM	MMDadoda	3/12/2025 3:16:22 PM	Peak Integrated by Software
VY0311SBSD0 1	VY021477.D	1,2,3-Trichloropropane	Romaben	3/12/2025 2:41:46 PM	MMDadoda	3/12/2025 3:16:23 PM	Peak Integrated by Software
VSTDCCC050	VY021499.D	1,2,3-Trichloropropane	Romaben	3/12/2025 2:42:03 PM	MMDadoda	3/12/2025 3:16:30 PM	Peak Integrated by Software

Instrument ID: **MSVOA_N**

Daily Analysis Runlog For Sequence/QC Batch ID # VN021825

Review By	John Carlone	Review On	2/19/2025 9:44:55 AM
Supervise By	Maresh Dadoda	Supervise On	2/19/2025 1:34:51 PM
SubDirectory	VN021825	HP Acquire Method	HP Processing Method 82N021825W.M
STD. NAME	STD REF.#		
Tune/Reschk	VP133068		
Initial Calibration Stds	VP133070,VP133071,VP133072,VP133073,VP133074,VP133075		
CCC			
Internal Standard/PEM			
ICV/I.BLK	VP133076		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VN085771.D	18 Feb 2025 10:35	JC\MD	Ok
2	VSTDICC100	VN085772.D	18 Feb 2025 11:09	JC\MD	Ok,M
3	VSTDICCC050	VN085773.D	18 Feb 2025 11:32	JC\MD	Ok,M
4	VSTDICC020	VN085774.D	18 Feb 2025 11:56	JC\MD	Not Ok
5	VSTDICC010	VN085775.D	18 Feb 2025 12:20	JC\MD	Ok,M
6	VSTDICC005	VN085776.D	18 Feb 2025 12:43	JC\MD	Ok,M
7	VSTDICC001	VN085777.D	18 Feb 2025 13:07	JC\MD	Ok,M
8	IBLK	VN085778.D	18 Feb 2025 13:54	JC\MD	Ok
9	VSTDICC020	VN085779.D	18 Feb 2025 14:18	JC\MD	Ok,M
10	VSTDICV050	VN085780.D	18 Feb 2025 16:28	JC\MD	Ok,M

M : Manual Integration

Instrument ID: **MSVOA_N**

Daily Analysis Runlog For Sequence/QC Batch ID # VN031025

Review By	John Carlone	Review On	3/11/2025 9:56:40 AM
Supervise By	Mahesh Dadoda	Supervise On	3/11/2025 3:08:56 PM
SubDirectory	VN031025	HP Acquire Method	HP Processing Method 82N021825W.M
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	VP133238		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP133239,VP133240		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VN085913.D	10 Mar 2025 10:54	JC\MD	Ok
2	VSTDCCC050	VN085914.D	10 Mar 2025 12:21	JC\MD	Ok,M
3	VN0310MBL01	VN085915.D	10 Mar 2025 12:58	JC\MD	Ok
4	VN0310WBL01	VN085916.D	10 Mar 2025 13:22	JC\MD	Ok
5	VN0310WBS01	VN085917.D	10 Mar 2025 16:12	JC\MD	Ok,M
6	VN0310WBSD01	VN085918.D	10 Mar 2025 16:47	JC\MD	Ok,M
7	Q1514-07	VN085919.D	10 Mar 2025 17:11	JC\MD	Ok
8	Q1514-08	VN085920.D	10 Mar 2025 17:35	JC\MD	Ok
9	Q1514-09	VN085921.D	10 Mar 2025 17:59	JC\MD	ReRun
10	Q1514-10	VN085922.D	10 Mar 2025 18:23	JC\MD	Ok
11	Q1516-03	VN085923.D	10 Mar 2025 18:47	JC\MD	Ok
12	Q1525-01	VN085924.D	10 Mar 2025 19:12	JC\MD	Not Ok
13	Q1522-02	VN085925.D	10 Mar 2025 19:35	JC\MD	Ok
14	VSTDCCC050	VN085926.D	10 Mar 2025 19:59	JC\MD	Ok,M

M : Manual Integration

Instrument ID: **MSVOA_N**

Daily Analysis Runlog For Sequence/QC Batch ID # VN031125

Review By	John Carlone	Review On	3/12/2025 9:49:06 AM
Supervise By	Maresh Dadoda	Supervise On	3/12/2025 3:17:04 PM
SubDirectory	VN031125	HP Acquire Method	HP Processing Method 82N021825W.M
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	VP133247		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP133248,VP133249		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VN085927.D	11 Mar 2025 12:12	JC\MD	Ok
2	VSTDCCC050	VN085928.D	11 Mar 2025 13:22	JC\MD	Ok,M
3	VN0311MBL01	VN085929.D	11 Mar 2025 13:56	JC\MD	Ok
4	VN0311WBL01	VN085930.D	11 Mar 2025 14:21	JC\MD	Ok
5	VN0311WBS01	VN085931.D	11 Mar 2025 14:54	JC\MD	Ok,M
6	VN0311WBSD01	VN085932.D	11 Mar 2025 15:28	JC\MD	Ok,M
7	PB167050TB	VN085933.D	11 Mar 2025 15:52	JC\MD	Ok
8	Q1514-09	VN085934.D	11 Mar 2025 16:16	JC\MD	Ok
9	PB167050ZHE#02	VN085935.D	11 Mar 2025 16:40	JC\MD	Ok
10	PB167050ZHE#03	VN085936.D	11 Mar 2025 17:04	JC\MD	Ok
11	PB167050ZHE#04	VN085937.D	11 Mar 2025 17:28	JC\MD	Ok
12	PB167050ZHE#05	VN085938.D	11 Mar 2025 17:52	JC\MD	Ok
13	PB167050ZHE#06	VN085939.D	11 Mar 2025 18:16	JC\MD	Ok
14	PB167050ZHE#07	VN085940.D	11 Mar 2025 18:40	JC\MD	Ok
15	PB167050ZHE#08	VN085941.D	11 Mar 2025 19:04	JC\MD	Ok
16	PB167050ZHE#09	VN085942.D	11 Mar 2025 19:29	JC\MD	Ok
17	Q1534-06	VN085943.D	11 Mar 2025 19:53	JC\MD	Ok,M
18	Q1534-12	VN085944.D	11 Mar 2025 20:17	JC\MD	Ok,M
19	Q1534-18	VN085945.D	11 Mar 2025 20:41	JC\MD	Ok,M
20	Q1534-24	VN085946.D	11 Mar 2025 21:05	JC\MD	Ok,M
21	Q1514-02	VN085947.D	11 Mar 2025 21:29	JC\MD	Ok

Instrument ID: **MSVOA_N**

Daily Analysis Runlog For Sequence/QC Batch ID # VN031125

Review By	John Carlone	Review On	3/12/2025 9:49:06 AM
Supervise By	Mahesh Dadoda	Supervise On	3/12/2025 3:17:04 PM
SubDirectory	VN031125	HP Acquire Method	HP Processing Method 82N021825W.M
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	VP133247		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP133248,VP133249		

22	Q1514-04	VN085948.D	11 Mar 2025 21:53	JC\MD	Ok
23	Q1514-06	VN085949.D	11 Mar 2025 22:17	JC\MD	Ok
24	Q1523-01	VN085950.D	11 Mar 2025 22:41	JC\MD	Ok
25	Q1523-04	VN085951.D	11 Mar 2025 23:05	JC\MD	Ok
26	VSTDCCC050	VN085952.D	11 Mar 2025 23:29	JC\MD	Ok,M

M : Manual Integration

Instrument ID: **MSVOA_Y**

Daily Analysis Runlog For Sequence/QC Batch ID # VY030425

Review By	Mahesh Dadoda	Review On	3/5/2025 12:14:39 PM		
Supervise By	Semsettin Yesilyurt	Supervise On	3/5/2025 12:18:08 PM		
SubDirectory	VY030425	HP Acquire Method	MSVOA_Y	HP Processing Method	82y030425s.m
STD. NAME		STD REF.#			
Tune/Reschk		VP133216			
Initial Calibration Stds		VP133207,VP133208,VP133209,VP133210,VP133211,VP133212			
CCC		VP133214,VP133215			
Internal Standard/PEM		VP131783			
ICV/I.BLK		VP133213			
Surrogate Standard					
MS/MSD Standard					
LCS Standard					

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VY021395.D	04 Mar 2025 08:52	SY/MD	Ok
2	VSTDIC005	VY021396.D	04 Mar 2025 09:23	SY/MD	Not Ok
3	VSTDIC010	VY021397.D	04 Mar 2025 09:46	SY/MD	Ok,M
4	VSTDIC020	VY021398.D	04 Mar 2025 10:09	SY/MD	Ok,M
5	VSTDIC050	VY021399.D	04 Mar 2025 10:30	SY/MD	Ok,M
6	VSTDIC100	VY021400.D	04 Mar 2025 11:06	SY/MD	Ok,M
7	VSTDIC150	VY021401.D	04 Mar 2025 11:29	SY/MD	Ok,M
8	VIBLK	VY021402.D	04 Mar 2025 11:52	SY/MD	Ok
9	VSTDIC005	VY021403.D	04 Mar 2025 12:15	SY/MD	Ok,M
10	VSTDICV050	VY021404.D	04 Mar 2025 13:12	SY/MD	Ok,M

M : Manual Integration

Instrument ID: **MSVOA_Y**

Daily Analysis Runlog For Sequence/QC Batch ID # VY031125

Review By	Maresh Dadoda	Review On	3/12/2025 3:16:35 PM
Supervise By	Semsettin Yesilyurt	Supervise On	3/12/2025 3:17:58 PM
SubDirectory	VY031125	HP Acquire Method	MSVOA_Y
		HP Processing Method	82y030425s.m
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	VP133241		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP133242,VP133243 VP131783		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VY021473.D	11 Mar 2025 09:00	SY/MD	Ok
2	VSTDCCC050	VY021474.D	11 Mar 2025 09:42	SY/MD	Ok,M
3	VY0311SBL01	VY021475.D	11 Mar 2025 10:12	SY/MD	Ok
4	VY0311SBS01	VY021476.D	11 Mar 2025 11:03	SY/MD	Ok,M
5	VY0311SBSD01	VY021477.D	11 Mar 2025 11:26	SY/MD	Ok,M
6	Q1463-02	VY021478.D	11 Mar 2025 12:01	SY/MD	Ok,M
7	Q1507-01	VY021479.D	11 Mar 2025 12:24	SY/MD	Not Ok
8	Q1514-05	VY021480.D	11 Mar 2025 12:48	SY/MD	Ok
9	Q1514-03	VY021481.D	11 Mar 2025 13:11	SY/MD	Ok
10	Q1514-01	VY021482.D	11 Mar 2025 13:35	SY/MD	Ok
11	Q1515-02	VY021483.D	11 Mar 2025 13:58	SY/MD	Not Ok
12	Q1508-01RE	VY021484.D	11 Mar 2025 14:21	SY/MD	Confirms
13	Q1535-01	VY021485.D	11 Mar 2025 14:45	SY/MD	Not Ok
14	Q1524-01	VY021486.D	11 Mar 2025 15:08	SY/MD	ReRun
15	Q1524-02	VY021487.D	11 Mar 2025 15:32	SY/MD	ReRun
16	Q1494-05	VY021488.D	11 Mar 2025 15:55	SY/MD	Not Ok
17	Q1524-01RE	VY021489.D	11 Mar 2025 16:18	SY/MD	Confirms
18	Q1524-02RE	VY021490.D	11 Mar 2025 16:42	SY/MD	Confirms
19	Q1494-03	VY021491.D	11 Mar 2025 17:05	SY/MD	Not Ok
20	Q1494-07	VY021492.D	11 Mar 2025 17:29	SY/MD	Not Ok
21	Q1508-01	VY021493.D	11 Mar 2025 17:52	SY/MD	Not Ok

Instrument ID: **MSVOA_Y**

Daily Analysis Runlog For Sequence/QC Batch ID # VY031125

Review By	Mahesh Dadoda	Review On	3/12/2025 3:16:35 PM		
Supervise By	Semsettin Yesilyurt	Supervise On	3/12/2025 3:17:58 PM		
SubDirectory	VY031125	HP Acquire Method	MSVOA_Y	HP Processing Method	82y030425s.m
STD. NAME	STD REF.#				
Tune/Reschk Initial Calibration Stds	VP133241				
CCC	VP133242,VP133243				
Internal Standard/PEM	VP131783				
ICV/I.BLK					
Surrogate Standard					
MS/MSD Standard					
LCS Standard					

22	Q1534-02	VY021494.D	11 Mar 2025 18:16	SY/MD	Ok
23	Q1534-08	VY021495.D	11 Mar 2025 18:39	SY/MD	Ok
24	Q1534-14	VY021496.D	11 Mar 2025 19:02	SY/MD	Ok
25	Q1534-20	VY021497.D	11 Mar 2025 19:26	SY/MD	Ok
26	VY0311SBS02	VY021498.D	11 Mar 2025 19:49	SY/MD	Not Ok
27	VSTDCCC050	VY021499.D	11 Mar 2025 20:11	SY/MD	Ok,M

M : Manual Integration

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QC Batch ID # VN021825

Review By	John Carlone	Review On	2/19/2025 9:44:55 AM
Supervise By	Maresh Dadoda	Supervise On	2/19/2025 1:34:51 PM
SubDirectory	VN021825	HP Acquire Method	HP Processing Method 82N021825W.M

STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP133068 VP133070,VP133071,VP133072,VP133073,VP133074,VP133075 VP133076

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VN085771.D	18 Feb 2025 10:35		JC\MD	Ok
2	VSTDICC100	VSTDICC100	VN085772.D	18 Feb 2025 11:09	Comp.#43 is on Linear Regression	JC\MD	Ok,M
3	VSTDICCC050	VSTDICCC050	VN085773.D	18 Feb 2025 11:32	Comp.#56,58,70,86 is on Quadratic Regression	JC\MD	Ok,M
4	VSTDICC020	VSTDICC020	VN085774.D	18 Feb 2025 11:56	Not used	JC\MD	Not Ok
5	VSTDICC010	VSTDICC010	VN085775.D	18 Feb 2025 12:20		JC\MD	Ok,M
6	VSTDICC005	VSTDICC005	VN085776.D	18 Feb 2025 12:43	%D failed for Comp. #58 in 01PPB, 05PPB and 20PPB	JC\MD	Ok,M
7	VSTDICC001	VSTDICC001	VN085777.D	18 Feb 2025 13:07		JC\MD	Ok,M
8	IBLK	IBLK	VN085778.D	18 Feb 2025 13:54		JC\MD	Ok
9	VSTDICC020	VSTDICC020	VN085779.D	18 Feb 2025 14:18		JC\MD	Ok,M
10	VSTDICV050	ICVVN021825	VN085780.D	18 Feb 2025 16:28	ICV Failed for comp. #95	JC\MD	Ok,M

M : Manual Integration

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QC Batch ID # VN031025

Review By	John Carlone	Review On	3/11/2025 9:56:40 AM
Supervise By	Maresh Dadoda	Supervise On	3/11/2025 3:08:56 PM
SubDirectory	VN031025	HP Acquire Method	HP Processing Method 82N021825W.M
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	VP133238		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP133239,VP133240		

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VN085913.D	10 Mar 2025 10:54		JC\MD	Ok
2	VSTDCCC050	VSTDCCC050	VN085914.D	10 Mar 2025 12:21	CCAL failed high for comp. #68,69	JC\MD	Ok,M
3	VN0310MBL01	VN0310MBL01	VN085915.D	10 Mar 2025 12:58		JC\MD	Ok
4	VN0310WBL01	VN0310WBL01	VN085916.D	10 Mar 2025 13:22		JC\MD	Ok
5	VN0310WBS01	VN0310WBS01	VN085917.D	10 Mar 2025 16:12	BS failed high for comp. #68	JC\MD	Ok,M
6	VN0310WBSD01	VN0310WBSD01	VN085918.D	10 Mar 2025 16:47		JC\MD	Ok,M
7	Q1514-07	ENV-105-GW01	VN085919.D	10 Mar 2025 17:11	vial A pH<2	JC\MD	Ok
8	Q1514-08	ENV-103-GW01	VN085920.D	10 Mar 2025 17:35	vial A pH<2	JC\MD	Ok
9	Q1514-09	FB03062025	VN085921.D	10 Mar 2025 17:59	vial A pH<2 FB;Hit of comp.#16	JC\MD	ReRun
10	Q1514-10	TB03062025	VN085922.D	10 Mar 2025 18:23	vial A pH<2 TB	JC\MD	Ok
11	Q1516-03	GAS-AUD-25-0026	VN085923.D	10 Mar 2025 18:47	vial A pH<2	JC\MD	Ok
12	Q1525-01	MW10	VN085924.D	10 Mar 2025 19:12	vial A pH<2 RT shifted; CCAL failed high for comp. #68,69;	JC\MD	Not Ok
13	Q1522-02	TW-WTS-04	VN085925.D	10 Mar 2025 19:35	vial A pH<2	JC\MD	Ok
14	VSTDCCC050	VSTDCCC050EC	VN085926.D	10 Mar 2025 19:59		JC\MD	Ok,M

M : Manual Integration

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QC Batch ID # VN031125

Review By	John Carlone	Review On	3/12/2025 9:49:06 AM
Supervise By	Mahesh Dadoda	Supervise On	3/12/2025 3:17:04 PM
SubDirectory	VN031125	HP Acquire Method	HP Processing Method 82N021825W.M

STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds	VP133247
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP133248,VP133249

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VN085927.D	11 Mar 2025 12:12		JC\MD	Ok
2	VSTDCCC050	VSTDCCC050	VN085928.D	11 Mar 2025 13:22	pH#Lot#V12668	JC\MD	Ok,M
3	VN0311MBL01	VN0311MBL01	VN085929.D	11 Mar 2025 13:56		JC\MD	Ok
4	VN0311WBL01	VN0311WBL01	VN085930.D	11 Mar 2025 14:21		JC\MD	Ok
5	VN0311WBS01	VN0311WBS01	VN085931.D	11 Mar 2025 14:54		JC\MD	Ok,M
6	VN0311WBSD01	VN0311WBSD01	VN085932.D	11 Mar 2025 15:28		JC\MD	Ok,M
7	PB167050TB	PB167050TB	VN085933.D	11 Mar 2025 15:52		JC\MD	Ok
8	Q1514-09	FB03062025	VN085934.D	11 Mar 2025 16:16	vial B pH<2 FB	JC\MD	Ok
9	PB167050ZHE#02	PB167050ZHE#02	VN085935.D	11 Mar 2025 16:40		JC\MD	Ok
10	PB167050ZHE#03	PB167050ZHE#03	VN085936.D	11 Mar 2025 17:04		JC\MD	Ok
11	PB167050ZHE#04	PB167050ZHE#04	VN085937.D	11 Mar 2025 17:28		JC\MD	Ok
12	PB167050ZHE#05	PB167050ZHE#05	VN085938.D	11 Mar 2025 17:52		JC\MD	Ok
13	PB167050ZHE#06	PB167050ZHE#06	VN085939.D	11 Mar 2025 18:16		JC\MD	Ok
14	PB167050ZHE#07	PB167050ZHE#07	VN085940.D	11 Mar 2025 18:40		JC\MD	Ok
15	PB167050ZHE#08	PB167050ZHE#08	VN085941.D	11 Mar 2025 19:04		JC\MD	Ok
16	PB167050ZHE#09	PB167050ZHE#09	VN085942.D	11 Mar 2025 19:29		JC\MD	Ok
17	Q1534-06	OR-363-COMP-16	VN085943.D	11 Mar 2025 19:53	vial A pH#5.0	JC\MD	Ok,M
18	Q1534-12	OR-363-COMP-17	VN085944.D	11 Mar 2025 20:17	vial A pH#5.0	JC\MD	Ok,M

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QC Batch ID # VN031125

Review By	John Carlone	Review On	3/12/2025 9:49:06 AM
Supervise By	Maresh Dadoda	Supervise On	3/12/2025 3:17:04 PM
SubDirectory	VN031125	HP Acquire Method	HP Processing Method 82N021825W.M
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	VP133247		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP133248,VP133249		

19	Q1534-18	OR-363-COMP-18	VN085945.D	11 Mar 2025 20:41	vial A pH#5.0	JC\MD	Ok,M
20	Q1534-24	OR-363OR-363-COMP	VN085946.D	11 Mar 2025 21:05	vial A pH#5.0	JC\MD	Ok,M
21	Q1514-02	ENV-105-SB01	VN085947.D	11 Mar 2025 21:29	vial A pH#5.0	JC\MD	Ok
22	Q1514-04	ENV-105-SB02	VN085948.D	11 Mar 2025 21:53	vial A pH#5.0	JC\MD	Ok
23	Q1514-06	ENV-103-SB01	VN085949.D	11 Mar 2025 22:17	vial A pH#5.0	JC\MD	Ok
24	Q1523-01	WC-A1-01-G	VN085950.D	11 Mar 2025 22:41	vial A pH#5.0	JC\MD	Ok
25	Q1523-04	WC-A1-02-G	VN085951.D	11 Mar 2025 23:05	vial A pH#5.0	JC\MD	Ok
26	VSTDCCC050	VSTDCCC050EC	VN085952.D	11 Mar 2025 23:29		JC\MD	Ok,M

M : Manual Integration

Instrument ID: MSVOA_Y

Daily Analysis Runlog For Sequence/QC Batch ID # VY030425

Review By	Mahesh Dadoda	Review On	3/5/2025 12:14:39 PM		
Supervise By	Semsettin Yesilyurt	Supervise On	3/5/2025 12:18:08 PM		
SubDirectory	VY030425	HP Acquire Method	MSVOA_Y	HP Processing Method	82y030425s.m

STD. NAME	STD REF.#
Tune/Reschk	VP133216
Initial Calibration Stds	VP133207,VP133208,VP133209,VP133210,VP133211,VP133212
CCC	VP133214,VP133215
Internal Standard/PEM	VP131783
ICV/I.BLK	VP133213
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VY021395.D	04 Mar 2025 08:52		SY/MD	Ok
2	VSTDICC005	VSTDICC005	VY021396.D	04 Mar 2025 09:23	not used	SY/MD	Not Ok
3	VSTDICC010	VSTDICC010	VY021397.D	04 Mar 2025 09:46		SY/MD	Ok,M
4	VSTDICC020	VSTDICC020	VY021398.D	04 Mar 2025 10:09	Comp.#11 is on Linear Regression	SY/MD	Ok,M
5	VSTDICCC050	VSTDICCC050	VY021399.D	04 Mar 2025 10:30	Comp.#95 is on Quadratic Regression	SY/MD	Ok,M
6	VSTDICC100	VSTDICC100	VY021400.D	04 Mar 2025 11:06		SY/MD	Ok,M
7	VSTDICC150	VSTDICC150	VY021401.D	04 Mar 2025 11:29	Method fail for comp.#13	SY/MD	Ok,M
8	VIBLK	VIBLK	VY021402.D	04 Mar 2025 11:52		SY/MD	Ok
9	VSTDICC005	VSTDICC005	VY021403.D	04 Mar 2025 12:15		SY/MD	Ok,M
10	VSTDICV050	ICVVY030425	VY021404.D	04 Mar 2025 13:12		SY/MD	Ok,M

M : Manual Integration

Instrument ID: MSVOA_Y

Daily Analysis Runlog For Sequence/QC Batch ID # VY031125

Review By	Maresh Dadoda	Review On	3/12/2025 3:16:35 PM
Supervise By	Semsettin Yesilyurt	Supervise On	3/12/2025 3:17:58 PM
SubDirectory	VY031125	HP Acquire Method	MSVOA_Y HP Processing Method 82y030425s.m

STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds	VP133241
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP133242,VP133243 VP131783

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VY021473.D	11 Mar 2025 09:00		SY/MD	Ok
2	VSTDCCC050	VSTDCCC050	VY021474.D	11 Mar 2025 09:42		SY/MD	Ok,M
3	VY0311SBL01	VY0311SBL01	VY021475.D	11 Mar 2025 10:12		SY/MD	Ok
4	VY0311SBS01	VY0311SBS01	VY021476.D	11 Mar 2025 11:03		SY/MD	Ok,M
5	VY0311SBSD01	VY0311SBSD01	VY021477.D	11 Mar 2025 11:26		SY/MD	Ok,M
6	Q1463-02	T2	VY021478.D	11 Mar 2025 12:01	Vial-B	SY/MD	Ok,M
7	Q1507-01	50-MIDDLESEX-AVE	VY021479.D	11 Mar 2025 12:24	Vial-B Not purge	SY/MD	Not Ok
8	Q1514-05	ENV-103-SB01	VY021480.D	11 Mar 2025 12:48	Vial-B	SY/MD	Ok
9	Q1514-03	ENV-105-SB02	VY021481.D	11 Mar 2025 13:11	Vial-B	SY/MD	Ok
10	Q1514-01	ENV-105-SB01	VY021482.D	11 Mar 2025 13:35	Vial-B	SY/MD	Ok
11	Q1515-02	AU-06-030625-E2	VY021483.D	11 Mar 2025 13:58	Vial-B Not purge	SY/MD	Not Ok
12	Q1508-01RE	RBR251372RE	VY021484.D	11 Mar 2025 14:21	Vial-B Internal Standard Fail; Surrogate Fail	SY/MD	Confirms
13	Q1535-01	SU-03-03102025	VY021485.D	11 Mar 2025 14:45	Vial-A Not purge	SY/MD	Not Ok
14	Q1524-01	72-11930-343-COMP	VY021486.D	11 Mar 2025 15:08	Vial-A ISTD Fail	SY/MD	ReRun
15	Q1524-02	VNJ-241	VY021487.D	11 Mar 2025 15:32	Vial-A ISTD Fail	SY/MD	ReRun
16	Q1494-05	SOIL	VY021488.D	11 Mar 2025 15:55	Vial-B Not purge	SY/MD	Not Ok
17	Q1524-01RE	72-11930-343-COMPRI	VY021489.D	11 Mar 2025 16:18	Vial-B ISTD Fail	SY/MD	Confirms

Instrument ID: MSVOA_Y

Daily Analysis Runlog For Sequence/QC Batch ID # VY031125

Review By	Mahesh Dadoda	Review On	3/12/2025 3:16:35 PM		
Supervise By	Semsettin Yesilyurt	Supervise On	3/12/2025 3:17:58 PM		
SubDirectory	VY031125	HP Acquire Method	MSVOA_Y	HP Processing Method	82y030425s.m
STD. NAME		STD REF.#			
Tune/Reschk Initial Calibration Stds		VP133241			
CCC		VP133242,VP133243			
Internal Standard/PEM		VP131783			
ICV/I.BLK					
Surrogate Standard					
MS/MSD Standard					
LCS Standard					

18	Q1524-02RE	VNJ-241RE	VY021490.D	11 Mar 2025 16:42	Vial-B ISTD Fail	SY/MD	Confirms
19	Q1494-03	ASPHALT-SOIL	VY021491.D	11 Mar 2025 17:05	Vial-B Not purge	SY/MD	Not Ok
20	Q1494-07	SOIL-COMP	VY021492.D	11 Mar 2025 17:29	Vial-B Not purge	SY/MD	Not Ok
21	Q1508-01	RBR251372	VY021493.D	11 Mar 2025 17:52	Not purge	SY/MD	Not Ok
22	Q1534-02	OR-363-VOC-16	VY021494.D	11 Mar 2025 18:16	Vial-A	SY/MD	Ok
23	Q1534-08	OR-363-VOC-17	VY021495.D	11 Mar 2025 18:39	Vial-A	SY/MD	Ok
24	Q1534-14	OR-363-VOC-18	VY021496.D	11 Mar 2025 19:02	Vial-A	SY/MD	Ok
25	Q1534-20	OR-363-VOC-19	VY021497.D	11 Mar 2025 19:26	Vial-A	SY/MD	Ok
26	VY0311SBS02	VY0311SBS02	VY021498.D	11 Mar 2025 19:49	Not Required	SY/MD	Not Ok
27	VSTDCCC050	VSTDCCC050EC	VY021499.D	11 Mar 2025 20:11		SY/MD	Ok,M

M : Manual Integration



PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 3/7/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:30
In Date: 03/06/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:41
Out Date: 03/07/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB134919

Lab ID	Client SampleID	Dish #	Dish Wt(g) (A)	Sample Wt(g)	Dish + Sample Wt(g) (B)	Dish+Dry Sample Wt(g) (C)	% Solid	Comments
Q1433-03	K084-1C	1	1.12	8.76	9.88	5.68	52.1	
Q1433-06	K084-2C	2	1.15	8.48	9.63	7.29	72.4	
Q1433-09	K084-3C	3	1.15	8.80	9.95	7.89	76.6	
Q1434-02	K084-4C	4	1.15	8.62	9.77	7.38	72.3	
Q1434-05	K084-5C	5	1.16	8.81	9.97	8.68	85.4	
Q1434-07	K084-6C	6	1.12	8.70	9.82	7.49	73.2	
Q1434-10	K084-7C	7	1.12	8.76	9.88	7.23	69.7	
Q1436-02	K084-8B	8	1.17	8.80	9.97	8.01	77.7	
Q1436-03	K084-8C	9	1.16	8.82	9.98	7.63	73.4	
Q1436-05	K084-9B	10	1.16	8.82	9.98	7.12	67.6	
Q1436-06	K084-9C	11	1.16	8.67	9.83	6.26	58.8	
Q1436-08	K084-10B	12	1.16	8.57	9.73	7.16	70.0	
Q1436-09	K084-10C	13	1.16	8.80	9.96	6.66	62.5	
Q1437-01	K084-11B	14	1.13	8.80	9.93	7.54	72.8	
Q1437-02	K084-11C	15	1.15	8.82	9.97	6.59	61.7	
Q1437-04	K084-12B	16	1.13	8.74	9.87	7.61	74.1	
Q1437-05	K084-12C	17	1.15	8.82	9.97	7.03	66.7	
Q1437-07	K084-13B	18	1.19	8.72	9.91	7.45	71.8	
Q1437-08	K084-13C	19	1.16	8.45	9.61	6.95	68.5	
Q1437-10	K084-14B	20	1.16	8.80	9.96	7.03	66.7	
Q1438-01	K084-14C	21	1.15	8.62	9.77	7.03	68.2	
Q1438-03	K084-15C	22	1.14	8.80	9.94	7.71	74.7	
Q1438-05	K084-16C	23	1.19	8.53	9.72	7.56	74.7	
Q1438-09	K084-DUP4	24	1.18	8.81	9.99	6.93	65.3	
Q1507-01	50-MIDDLESEX-AVE	25	1.15	8.83	9.98	8.92	88.0	
Q1507-02	50-MIDDLESEX-AVE-E2	26	1.15	8.80	9.95	8.41	82.5	
Q1508-01	RBR251372	27	1.12	8.87	9.99	7.42	71.0	
Q1508-02	RBR251372-E2	28	1.19	8.75	9.94	7.76	75.1	



PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 3/7/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:30
In Date: 03/06/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:41
Out Date: 03/07/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB134919

Lab ID	Client SampleID	Dish #	Dish Wt(g) (A)	Sample Wt(g)	Dish + Sample Wt(g) (B)	Dish+Dry Sample Wt(g) (C)	% Solid	Comments
Q1509-01	HIH088X-1-1	29	1.00	1.00	2.00	2.00	100.0	oilc
Q1509-02	HIH088X-1-2	30	1.00	1.00	2.00	2.00	100.0	oilc
Q1510-01	FMC-25-0001-0005	31	1.16	8.50	9.66	7.99	80.4	
Q1510-02	FMC-25-0006	32	1.00	1.00	2.00	2.00	100.0	oil sample
Q1514-01	ENV-105-SB01	39	1.15	8.84	9.99	9.25	91.6	
Q1514-03	ENV-105-SB02	40	1.13	8.84	9.97	8.29	81.0	
Q1514-05	ENV-103-SB01	41	1.14	8.81	9.95	8.99	89.1	
Q1515-01	AU-06-030625	42	1.15	8.81	9.96	8.88	87.7	
Q1515-02	AU-06-030625-E2	43	1.16	8.82	9.98	8.62	84.6	
Q1516-01	GAS-AUD-25-0004	44	1.17	8.58	9.75	9.24	94.1	
Q1516-02	GAS-AUD-25-0025	45	1.16	8.68	9.84	9.7	98.4	
Q1518-01	OILY-DEBRIS-COMP	46	1.15	8.83	9.98	9.29	92.2	
Q1520-01	BC248121-1-1	33	1.00	1.00	2.00	2.00	100.0	oilc
Q1520-02	BC248121-1-2	34	1.00	1.00	2.00	2.00	100.0	oilc
Q1520-03	BC260492-1-1	35	1.00	1.00	2.00	2.00	100.0	oilc
Q1520-04	BC260492-1-2	36	1.00	1.00	2.00	2.00	100.0	oilc
Q1520-05	JEH488H-1-1	37	1.00	1.00	2.00	2.00	100.0	oilc
Q1520-06	JEH488H-1-2	38	1.00	1.00	2.00	2.00	100.0	oilc

$$\% \text{ Solid} = \frac{(C-A) * 100}{(B-A)}$$

WORKLIST(Hardcopy Internal Chain)

UB34919

WorkList Name : %1-030625 WorkList ID : 188063 Department : Wet-Chemistry Date : 03-06-2025 08:23:42

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1433-03	K084-1C	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1433-06	K084-2C	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1433-09	K084-3C	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1434-02	K084-4C	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1434-05	K084-5C	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1434-07	K084-6C	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1434-10	K084-7C	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1436-02	K084-8B	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1436-03	K084-8C	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1436-05	K084-9B	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1436-06	K084-9C	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1436-08	K084-10B	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1436-09	K084-10C	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1437-01	K084-11B	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1437-02	K084-11C	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1437-04	K084-12B	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1437-05	K084-12C	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1437-07	K084-13B	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1437-08	K084-13C	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1437-10	K084-14B	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1438-01	K084-14C	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO

Date/Time 03/06/26 16:10 Date/Time 03/06/26 17:40
 Raw Sample Received by: JWC Raw Sample Received by: C. S. M.
 Raw Sample Relinquished by: C. S. M. Raw Sample Relinquished by: JWC

WORKLIST(Hardcopy Internal Chain)

134919

WorkList Name : %1-030625 WorkList ID : 188063 Department : Wet-Chemistry Date : 03-06-2025 08:23:42

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1438-03	K084-15C	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1438-05	K084-16C	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1438-09	K084-DUP4	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1507-01	50-MIDDLESEX-AVE	Solid	Percent Solids	Cool 4 deg C	PSEG03	I21	03/06/2025	Chemtech -SO
Q1507-02	50-MIDDLESEX-AVE-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	I21	03/06/2025	Chemtech -SO
Q1508-01	RBR251372	Solid	Percent Solids	Cool 4 deg C	PSEG03	I21	03/06/2025	Chemtech -SO
Q1508-02	RBR251372-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	I21	03/06/2025	Chemtech -SO
Q1509-01	HIH088X-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	I21	03/06/2025	Chemtech -SO
Q1509-02	HIH088X-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	I21	03/06/2025	Chemtech -SO
Q1510-01	FMC-25-0001-0005	Solid	Percent Solids	Cool 4 deg C	PSEG03	I21	03/06/2025	Chemtech -SO
Q1510-02	FMC-25-0006	Solid	Percent Solids	Cool 4 deg C	PSEG03	I21	03/06/2025	Chemtech -SO
Q1514-01	ENV-105-SB01	Solid	Percent Solids	Cool 4 deg C	PORT06	I31	03/05/2025	Chemtech -SO
Q1514-03	ENV-105-SB02	Solid	Percent Solids	Cool 4 deg C	PORT06	I31	03/05/2025	Chemtech -SO
Q1514-05	ENV-103-SB01	Solid	Percent Solids	Cool 4 deg C	PORT06	I31	03/05/2025	Chemtech -SO
Q1515-01	AU-06-030625	Solid	Percent Solids	Cool 4 deg C	PSEG05	I21	03/06/2025	Chemtech -SO
Q1515-02	AU-06-030625-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	I21	03/06/2025	Chemtech -SO
Q1516-01	GAS-AUD-25-0004	Solid	Percent Solids	Cool 4 deg C	PSEG03	I21	03/06/2025	Chemtech -SO
Q1516-02	GAS-AUD-25-0025	Solid	Percent Solids	Cool 4 deg C	PSEG03	I21	03/06/2025	Chemtech -SO
Q1518-01	OILY-DEBRIS-COMP	Solid	Percent Solids	Cool 4 deg C	PSEG03	I21	03/06/2025	Chemtech -SO
Q1520-01	BC248121-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	I21	03/06/2025	Chemtech -SO
Q1520-02	BC248121-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	I21	03/06/2025	Chemtech -SO

Date/Time: 03/06/25 17:40
 Raw Sample Received by: CP SM
 Raw Sample Relinquished by: JG Carc
 134919

WORKLIST(Hardcopy Internal Chain)

134919

WorkList Name : %1-030625 WorkList ID : 188063 Department : Wet-Chemistry Date : 03-06-2025 08:23:42

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1520-03	BC260492-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	I21	03/06/2025	Chemtech -SO
Q1520-04	BC260492-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	I21	03/06/2025	Chemtech -SO
Q1520-05	JEH488H-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	I21	03/06/2025	Chemtech -SO
Q1520-06	JEH488H-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	I21	03/06/2025	Chemtech -SO

Date/Time 03/06/25 16:10
 Raw Sample Received by: JP awc
 Raw Sample Relinquished by: CP sm

Date/Time 03/06/25 17:40
 Raw Sample Received by: CP sm
 Raw Sample Relinquished by: JP awc

Prep Standard - Chemical Standard Summary

Order ID : Q1514

Test : VOC-TCLVOA-10

Prepbatch ID :

Sequence ID/Qc Batch ID: VN031025,VN031125,vy031125,

Standard ID :

VP131746,VP131767,VP131783,VP132035,VP132036,VP132096,VP132098,VP133036,VP133037,VP133174,VP133175,VP133178,VP133179,VP133238,VP133239,VP133240,VP133241,VP133242,VP133243,VP133247,VP133248,VP133249,

Chemical ID :

V13391,V13457,V13460,V13465,V13466,V13706,V14154,V14175,V14176,V14289,V14433,V14439,V14521,V14522,V14613,V14614,V14624,V14630,V14631,V14632,V14633,V14722,V14723,V14724,V14744,V14754,V14809,V14814,V14842,V14872,V14873,V14874,V14875,W3112,

VOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
247	8260 Internal Standard, 250PPM	VP131746	11/22/2024	05/18/2025	Semsettin Yesilyurt	None	None	Maresh Dadoda
								11/23/2024

FROM 0.50000ml of V14289 + 49.50000ml of V14154 = Final Quantity: 50.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
218	BFB, 25PPM	VP131767	11/22/2024	05/18/2025	Semsettin Yesilyurt	None	None	Maresh Dadoda
								11/27/2024

FROM 0.50000ml of V13391 + 49.50000ml of V14154 = Final Quantity: 50.000 ml

VOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1917	8260 Internal standard 50 ppm	VP131783	11/22/2024	05/18/2025	Semsettin Yesilyurt	None	None	Maresh Dadoda
								11/27/2024

FROM 0.02000ml of V14289 + 9.98000ml of V14154 = Final Quantity: 10.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1810	8260 Working Std(2-CVE)-800ppm	VP132035	12/10/2024	06/10/2025	Semsettin Yesilyurt	None	None	Maresh Dadoda
								12/12/2024

FROM 1.00000ml of V14630 + 1.00000ml of V14631 + 1.00000ml of V14632 + 1.00000ml of V14633 + 46.00000ml of V14614 = Final Quantity: 50.000 ml

VOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1811	8260 Working Std(2-CVE)-500ppm	VP132036	12/10/2024	06/10/2025	Semsettin Yesilyurt	None	None	Maresh Dadoda
								12/12/2024

FROM 7.50000ml of V14614 + 12.50000ml of VP132035 = Final Quantity: 20.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
719	8260 Working STD (BCM)-First source, 400PPM	VP132096	12/12/2024	06/10/2025	Semsettin Yesilyurt	None	None	Maresh Dadoda
								12/19/2024

FROM 1.00000ml of V13465 + 1.00000ml of V13466 + 1.50000ml of V13457 + 1.50000ml of V13460 + 20.00000ml of V14614 = Final Quantity: 25.000 ml

VOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
252	8260 Working STD (BCM)-First source, 100PPM	VP132098	12/12/2024	06/10/2025	Semsettin Yesilyurt	None	None	Maresh Dadoda
								12/19/2024

FROM 1.25000ml of V13466 + 23.75000ml of V14614 = Final Quantity: 25.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
51	8260 Working STD (Acrolein) -first source, 800PPM	VP133036	02/14/2025	03/13/2025	Semsettin Yesilyurt	None	None	Maresh Dadoda
								02/18/2025

FROM 1.00000ml of V14872 + 1.00000ml of V14873 + 1.00000ml of V14874 + 1.00000ml of V14875 + 21.00000ml of V14624 = Final Quantity: 25.000 ml

VOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
56	8260 Working STD (Acrolein) -first source, 500PPM	VP133037	02/14/2025	03/13/2025	Semsettin Yesilyurt	None	None	Maresh Dadoda
								02/18/2025

FROM 5.62500ml of V14624 + 9.37500ml of VP133036 = Final Quantity: 15.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
617	8260 Surrogate, 400PPM	VP133174	02/27/2025	08/27/2025	Semsettin Yesilyurt	None	None	Maresh Dadoda
								03/04/2025

FROM 0.40000ml of V13706 + 24.60000ml of V14613 = Final Quantity: 25.000 ml

VOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
249	8260 Surrogate, 100PPM	VP133175	02/27/2025	08/27/2025	Semsettin Yesilyurt	None	None	Maresh Dadoda
								03/04/2025

FROM 0.10000ml of V13706 + 24.90000ml of V14613 = Final Quantity: 25.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
257	8260 Calibration Working STD Mix-First source, 160PPM	VP133178	02/27/2025	03/31/2025	Semsettin Yesilyurt	None	None	Maresh Dadoda
								03/04/2025

FROM 0.40000ml of V14842 + 1.00000ml of V14175 + 1.00000ml of V14176 + 1.00000ml of V14433 + 1.00000ml of V14439 + 1.00000ml of V14521 + 1.00000ml of V14522 + 1.00000ml of V14724 + 1.00000ml of V14744 + 1.00000ml of V14754 + 1.00000ml of V14809 + 1.00000ml of V14814 + 1.50000ml of V14722 + 1.50000ml of V14723 + 10.60000ml of V14613 = Final Quantity: 25.000 ml

VOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
244	8260 Calibration Working STD Mix-First source, 100PPM	VP133179	02/27/2025	03/31/2025	Semsettin Yesilyurt	None	None	Maresh Dadoda 03/04/2025

FROM 5.62500ml of V14613 + 9.37500ml of VP133178 = Final Quantity: 15.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
589	BFB TUNE CHECK	VP133238	03/10/2025	03/11/2025	John Carlone	None	None	Romaben Patel 03/11/2025

FROM 39.98400ml of W3112 + 0.01600ml of VP131767 = Final Quantity: 40.000 ml

[illegible]

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
620	50 PPB CCC, 8260-Water	VP133240	03/10/2025	03/11/2025	John Carlone	None	None	Romaben Patel 03/11/2025
<u>FROM</u> 39.94450ml of W3112 + 0.00500ml of VP132096 + 0.00500ml of VP133174 + 0.00800ml of VP131746 + 0.01250ml of VP132035 + 0.01250ml of VP133036 + 0.01250ml of VP133178 = Final Quantity: 40.000 ml								

VOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
732	BFB TUNE CHECK - SOIL	VP133241	03/11/2025	03/12/2025	Amit Patel	None	None	Romaben Patel
								03/11/2025

FROM 4.99800ml of W3112 + 0.00200ml of VP131767 = Final Quantity: 5.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
773	50 PPB CCC, 8260-SOIL	VP133242	03/11/2025	03/12/2025	Amit Patel	None	None	Romaben Patel
								03/11/2025

FROM 4.98000ml of W3112 + 0.00250ml of VP132036 + 0.00250ml of VP132098 + 0.00250ml of VP133037 + 0.00250ml of VP133175
+ 0.00250ml of VP133179 + 0.00500ml of VP131783 = Final Quantity: 5.000 ml

VOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
773	50 PPB CCC, 8260-SOIL	VP133243	03/11/2025	03/12/2025	Amit Patel	None	None	Romaben Patel
								03/11/2025

FROM 4.98000ml of W3112 + 0.00250ml of VP132036 + 0.00250ml of VP132098 + 0.00250ml of VP133037 + 0.00250ml of VP133175
+ 0.00250ml of VP133179 + 0.00500ml of VP131783 = Final Quantity: 5.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
589	BFB TUNE CHECK	VP133247	03/11/2025	03/12/2025	John Carlone	None	None	Romaben Patel
								03/11/2025

FROM 39.98400ml of W3112 + 0.01600ml of VP131767 = Final Quantity: 40.000 ml



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
620	50 PPB CCC, 8260-Water	VP133248	03/11/2025	03/12/2025	John Carlone	None	None	Romaben Patel 03/11/2025
<u>FROM</u>	39.94450ml of W3112 + 0.00500ml of VP132096 + 0.00500ml of VP133174 + 0.00800ml of VP131746 + 0.01250ml of VP132035 + 0.01250ml of VP133036 + 0.01250ml of VP133178 = Final Quantity: 40.000 ml							

[illegible]

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	30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul	A0193071	06/12/2025	12/12/2024 / SAM	01/27/2023 / SAM	V13457

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	A0193071	06/12/2025	12/12/2024 / SAM	01/27/2023 / SAM	V13460

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	A0193071	06/12/2025	12/12/2024 / SAM	01/27/2023 / SAM	V13465

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	A0193071	06/12/2025	12/12/2024 / SAM	01/27/2023 / SAM	V13466

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]	A0196865	02/27/2026	02/27/2025 / SAM	04/12/2023 / SAM	V13706

CHEMICAL RECEIPT LOG BOOK

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)	22L0562016	05/18/2025	11/18/2024 / pedro	02/06/2024 / SAM	V14154

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	07/10/2025	01/10/2025 / SAM	02/20/2024 / SAM	V14175

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	07/10/2025	01/10/2025 / SAM	02/20/2024 / SAM	V14176

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	11/22/2025	11/22/2024 / SAM	04/15/2024 / SAM	V14289

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	A0209618	07/10/2025	01/10/2025 / SAM	08/15/2024 / SAM	V14433

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	A0209618	07/10/2025	01/10/2025 / SAM	08/15/2024 / SAM	V14439

CHEMICAL RECEIPT LOG BOOK

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	07/10/2025	01/10/2025 / SAM	09/18/2024 / SAM	V14521

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	07/10/2025	01/10/2025 / SAM	09/18/2024 / SAM	V14522

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)	22L0562016	08/27/2025	02/27/2025 / SAM	11/26/2024 / SAM	V14613

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)	22L0562016	06/10/2025	12/10/2024 / SAM	11/26/2024 / SAM	V14614

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	07/13/2025	01/13/2025 / SAM	11/26/2024 / SAM	V14624

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	06/10/2025	12/10/2024 / SAM	12/06/2024 / SAM	V14630

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	06/10/2025	12/10/2024 / SAM	12/06/2024 / SAM	V14631

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	06/10/2025	12/10/2024 / SAM	12/06/2024 / SAM	V14632

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	06/10/2025	12/10/2024 / SAM	12/06/2024 / SAM	V14633

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	A02110618	07/10/2025	01/10/2025 / SAM	12/17/2024 / SAM	V14722

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	A02110618	07/10/2025	01/10/2025 / SAM	12/17/2024 / SAM	V14723

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	A02110618	07/10/2025	01/10/2025 / SAM	12/17/2024 / SAM	V14724

CHEMICAL RECEIPT LOG BOOK

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	08/27/2025	02/27/2025 / SAM	12/17/2024 / SAM	V14744

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	05/31/2031	01/10/2025 / SAM	12/17/2024 / SAM	V14754

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	A0220471	07/10/2025	01/10/2025 / SAM	01/08/2025 / SAM	V14809

LOTS

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	A0220471	07/10/2025	01/10/2025 / SAM	01/08/2025 / SAM	V14814

LOTS

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	08/27/2025	02/27/2025 / SAM	01/21/2025 / SAM	V14842

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	021325	03/13/2025	02/14/2025 / SAM	02/14/2025 / SAM	V14872

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	021325	03/13/2025	02/14/2025 / SAM	02/14/2025 / SAM	V14873

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	021325	03/13/2025	02/14/2025 / SAM	02/14/2025 / SAM	V14874

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	021325	03/13/2025	02/14/2025 / SAM	02/14/2025 / SAM	V14875

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 / lwona	07/03/2024 / lwona	W3112

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis



Material No.: 9077-02
Batch No.: 23I0762004
Manufactured Date: 2023-08-11
Expiration Date: 2026-08-10
Revision No.: 0

Certificate of Analysis

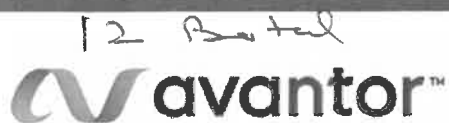
Test	Specification	Result
Assay (CH ₃ OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.5 ppm
Titration Acid (μeq/g)	≤ 0.3	0.2
Titration Base (μeq/g)	≤ 0.10	0.01
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis – Below EPA 8260B CRQL	Conforms	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



Material No.: 9077-02
Batch No.: 22L0562016
Manufactured Date: 2022-10-26
Expiration Date: 2025-10-25
Revision No.: 0

Certificate of Analysis

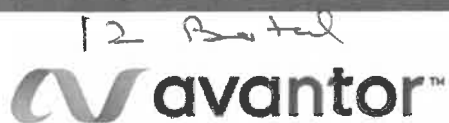
Test	Specification	Result
Assay (CH ₃ OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.2 ppm
Titration Acid (μeq/g)	≤ 0.3	0.2
Titration Base (μeq/g)	≤ 0.10	0.03
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis – Below EPA 8260B CRQL	Conforms	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

Jamie Ethier
Vice President Global Quality

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis



Material No.: 9077-02
Batch No.: 22L0562016
Manufactured Date: 2022-10-26
Expiration Date: 2025-10-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (CH ₃ OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.2 ppm
Titration Acid (μeq/g)	≤ 0.3	0.2
Titration 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

Jamie Ethier
Vice President Global Quality



5 JUL



CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 021325
Description: Acrolein

Expiration Date: 031325
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

Solvent(s): Water
Lot# 072324Q

✓ 14872 to
✓ 14876

5E-05 Balance Uncertainty
0.001 Flask Uncertainty

Weight(s) shown below were combined and diluted to (mL): 10.0

Formulated By:	Anthony Mahoney	021325	DATE
Reviewed By:	Pedro L. Rentas	021325	DATE

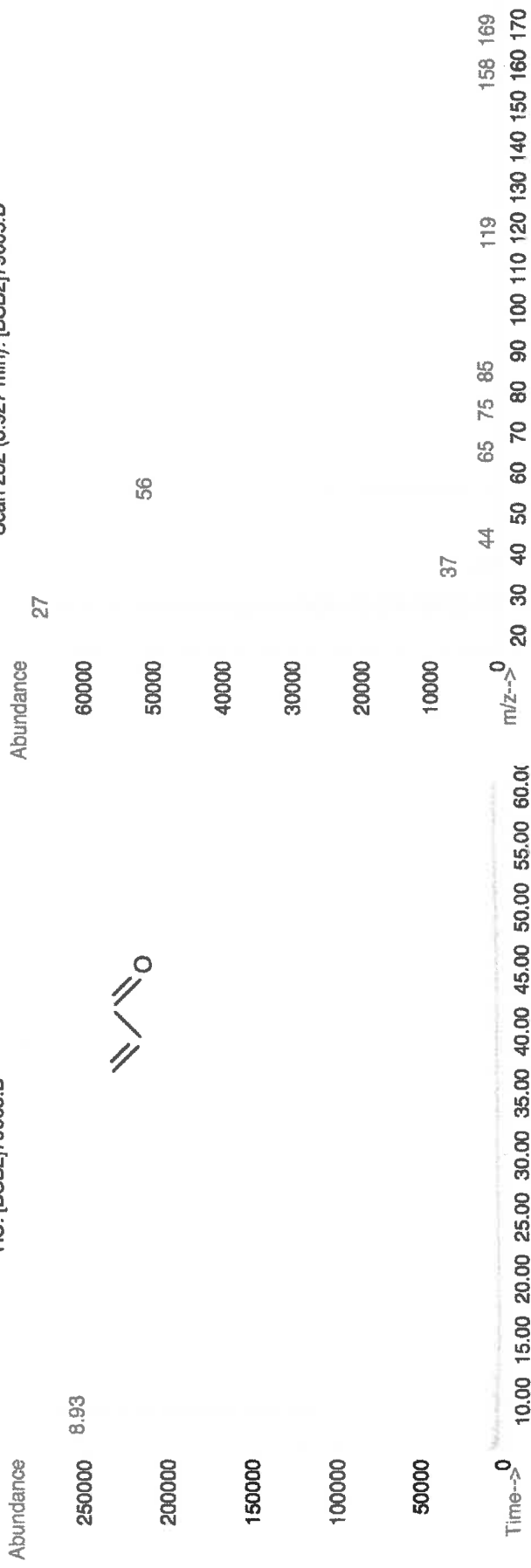
SDS Information			
Expanded			
Compound	Uncertainty	(Solvent Safety Info. On Attached pg.)	LDSO
	(+/-) (µg/mL)	CAS#	OSHA PEL (TWA)

1. Acrolein	5	103755V10F	5000	0.05166	0.05178	5011.8	52.6	107-02-8	0.1 ppm	ori-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.

TIC: [BSB2]79005.D

Scan 232 (8.927 min): [BSB2]79005.D



• 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).

Safety Data Sheet (SDS)
GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY
ANALYTICAL STANDARD DISSOLVED IN WATER

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

P271	Use in ventilated area	GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)	H315
P302,332	If on skin, wash with soap and water	Causes skin and eye irritation.	P280
		Use gloves, eye protection/face shield	P305,351,338
		If in eyes, remove contacts, rinse with water	

Signal Word: DANGER



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

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice
If inhaled
If in case of skin contact
If in case of eye contact
If swallowed

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

Section V. FIREFIGHTING MEASURES

Suitable extinguishing media
Protective equipment for fire
Hazardous Decomposition products

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Wear self contained breathing apparatus for fire fighting if necessary.
Carbon oxides

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions
Environmental precautions
Clean up

Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
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
Storage Conditions

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.
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

Water
CAS#: 7732-18-5
TWA: 500 ppm

Personal protective equipment
Respiratory protection
Handle with gloves. Gloves must be inspected prior to use.
Eye protection.

Section IX - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point	100°C	Specific Gravity (H2O = 1)	1
Vapor Pressure (mm Hg)		Melting Point	

Vapor Density (AIR = 1)		NA	Evaporation rate (Butyl Acetate = 1)	0°C
Solubility in Water		NA		NA
Appearance and Odor		CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR.		

CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

NA

Conditions to avoid

NA

Materials to avoid

NA

Hazardous decomposition products - No data available

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - Rat

NA

LC50 Inhalation - Rat

NA

LD50 Dermal - Guinea pig

NA

Causes skin irritation.

Eye irritation

Section XII. ECOLOGICAL INFORMATION

LC50

NA

EC50

NA

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)

Not dangerous goods

Proper shipping name: Water

IATA

Not dangerous goods

Proper shipping name: Water

Section XV. REGULATORY INFORMATION

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 users 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 Material Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.



Certified Reference Material CRM

5 J14



CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 021325
Description: Acrolein

Expiration Date: 031325
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

Solvent(s): Water
Lot# 072324Q

✓ 14872 to
✓ 14876

5E-05 Balance Uncertainty
0.001 Flask Uncertainty

Weight(s) shown below were combined and diluted to (mL): 10.0

Formulated By:	Anthony Mahoney	021325	DATE
Reviewed By:	Pedro L. Rentas	021325	DATE

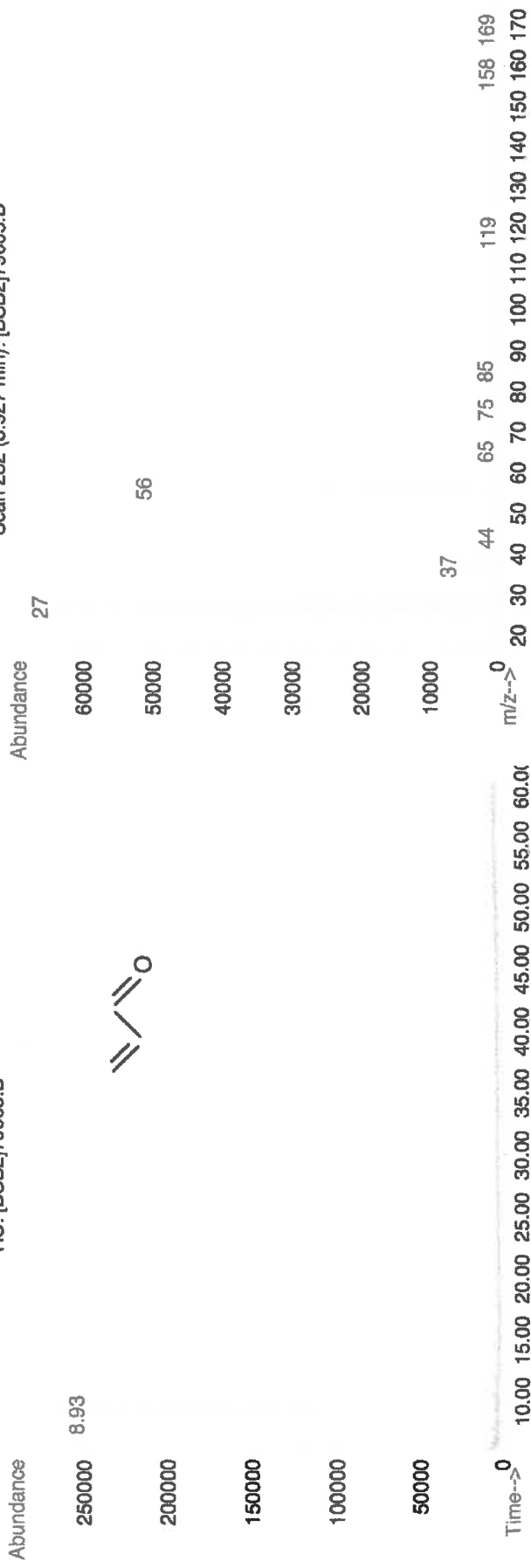
SDS Information			
Compound	Expanded Uncertainty (±) (µg/mL)	CAS#	OSHA PEL (TWA)
Acrolein	52.6	107-02-8	0.1 ppm

1. Acrolein 5 10375SV10F 5000 0.05166 0.05178 5011.8 0.1 ppm ori-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.

TIC: [BSB2]79005.D

Scan 232 (8.927 min): [BSB2]79005.D



• 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).

Safety Data Sheet (SDS)
GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY ANALYTICAL STANDARD DISSOLVED IN WATER

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

P271 P302,332		Signal Word: DANGER
GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)		
H315 P280 P305,351,338		
Causes skin and eye irritation. Use gloves, eye protection/face shield If in eyes, remove contacts, rinse with water		
P271 P302,332		
Use in ventilated area If on skin, wash with soap and water		

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

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

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

Section V. FIREFIGHTING MEASURES

Suitable extinguishing media
Protective equipment for fire
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Wear self contained breathing apparatus for fire fighting if necessary.
Carbon oxides

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.
Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).
Clean up

Section VII. HANDLING AND STORAGE

Precautions for safe handling
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
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

Water
CAS#: 7732-18-5
TWA: 500 ppm
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	100°C
Specific Gravity (H2O = 1)	
Melting Point	1

Vapor Pressure (mm Hg)

Vapor Density (AIR = 1)		NA	Evaporation rate (Butyl Acetate = 1)	0°C
Solubility in Water		Completely miscible		
Appearance and Odor				

CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
NA

Conditions to avoid
NA

Materials to avoid
NA

Hazardous decomposition products - No data available

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - Rat
NA

LC50 Inhalation - Rat
NA

LD50 Dermal - Guinea pig
NA

Causes skin irritation.

Eye irritation

Section XII. ECOLOGICAL INFORMATION

LC50
NA

EC50
NA

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
Not dangerous goods
Proper shipping name: Water

IATA
Not dangerous goods
Proper shipping name: Water

Section XV. REGULATORY INFORMATION

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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5 JUL



CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 021325
Description: Acrolein

Expiration Date: 031325
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

Solvent(s): Lot#
Water 072324Q

✓ 14872 to
✓ 14876

5E-05 Balance Uncertainty
0.001 Flask Uncertainty

Weight(s) shown below were combined and diluted to (mL): 10.0

Formulated By:	Anthony Mahoney	021325	DATE
Reviewed By:	Pedro L. Rentas	021325	DATE

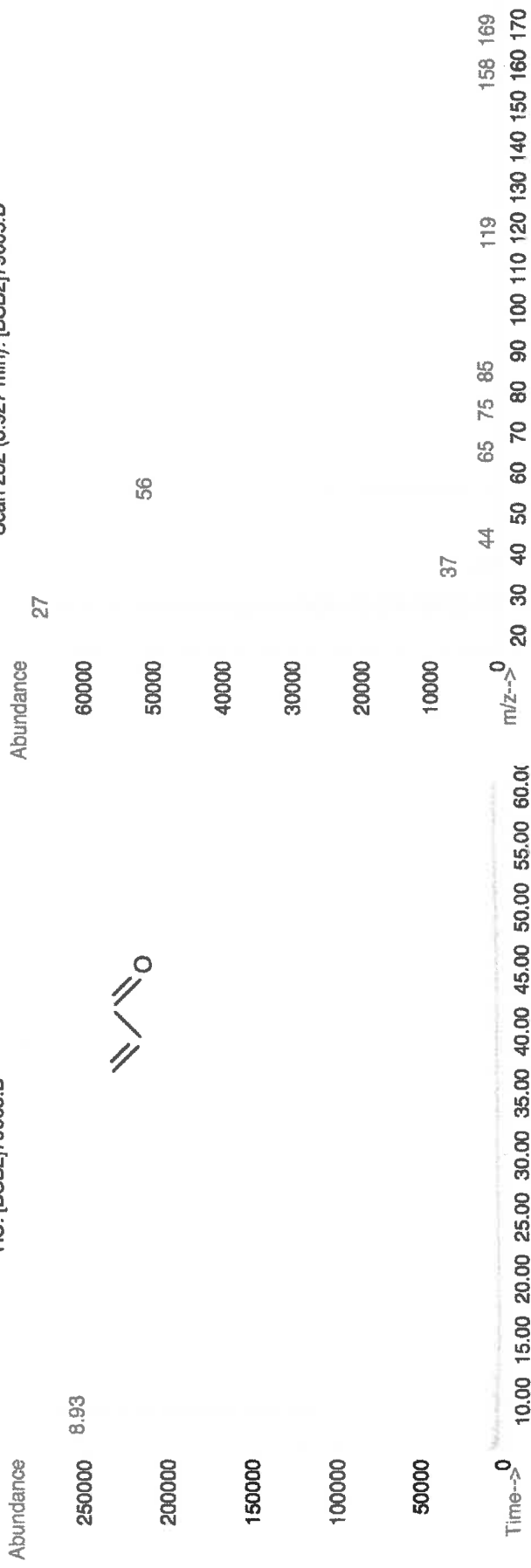
SDS Information			
Expanded			
Compound	Uncertainty	(Solvent Safety Info. On Attached pg.)	LDSO
	(+/-) (µg/mL)	CAS#	OSHA PEL (TWA)

1. Acrolein 5 103755V10F 5000 0.05166 0.05178 5011.8 52.6 107-02-8 0.1 ppm ori-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.

TIC: [BSB2]79005.D

Scan 232 (8.927 min): [BSB2]79005.D



• 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).

Safety Data Sheet (SDS)
GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY ANALYTICAL STANDARD DISSOLVED IN WATER

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

P271 P302,332		Signal Word: DANGER
GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)		
H315 P280 P305,351,338		
Causes skin and eye irritation. Use gloves, eye protection/face shield If in eyes, remove contacts, rinse with water		
P271 P302,332		
Use in ventilated area If on skin, wash with soap and water		

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

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

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

Section V. FIREFIGHTING MEASURES

Suitable extinguishing media
Protective equipment for fire
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Wear self contained breathing apparatus for fire fighting if necessary.
Carbon oxides

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions
Environmental precautions
Clean up
Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
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
Storage Conditions
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.
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

Water
CAS#: 7732-18-5
TWA: 500 ppm
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	100°C
Specific Gravity (H2O = 1)	
Melting Point	1

Vapor Pressure (mm Hg)

Vapor Density (AIR = 1)		NA	Evaporation rate (Butyl Acetate = 1)	0°C
Solubility in Water		Completely miscible		
Appearance and Odor				

CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
NA

Conditions to avoid
NA

Materials to avoid
NA

Hazardous decomposition products - No data available

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - Rat
NA

LC50 Inhalation - Rat
NA

LD50 Dermal - Guinea pig
NA

Causes skin irritation.

Eye irritation

Section XII. ECOLOGICAL INFORMATION

LC50
NA

EC50
NA

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
Not dangerous goods
Proper shipping name: Water

IATA
Not dangerous goods
Proper shipping name: Water

Section XV. REGULATORY INFORMATION

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 users 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 Material Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.



Certified Reference Material CRM

5 J14



CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 021325
Description: Acrolein

Expiration Date: 031325
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

Solvent(s): Water
Lot# 072324Q

✓ 14872 to
✓ 14876

5E-05 Balance Uncertainty
0.001 Flask Uncertainty

Weight(s) shown below were combined and diluted to (mL): 10.0

Formulated By:	Anthony Mahoney	021325	DATE
Reviewed By:	Pedro L. Rentas	021325	DATE

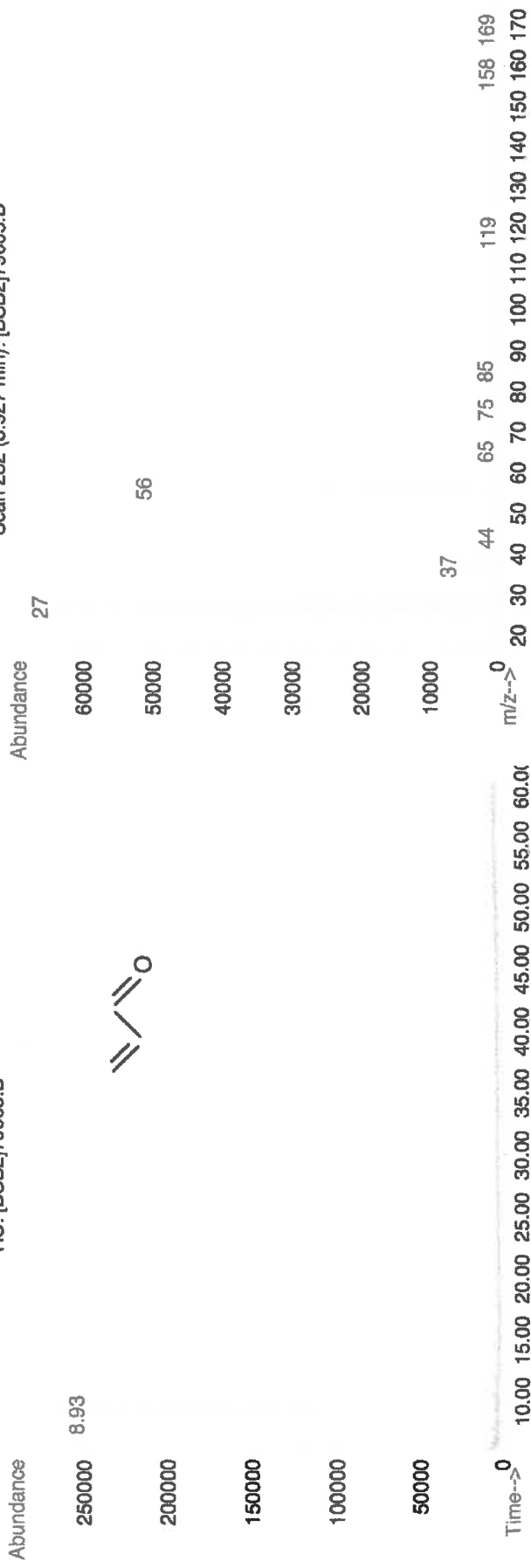
SDS Information			
Compound	Expanded Uncertainty (+/-) (µg/mL)	CAS#	OSHA PEL (TWA)
Acrolein	52.6	107-02-8	0.1 ppm

1. Acrolein 5 10375SV10F 5000 0.05166 0.05178 5011.8 52.6 107-02-8 0.1 ppm ori-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.

TIC: [BSB2]79005.D

Scan 232 (8.927 min): [BSB2]79005.D



• 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).

Safety Data Sheet (SDS)
GHS/OSHA Compliant

Section I Product and Company Identification

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Address	44 Rossotto Dr. Hamden CT, 06514	Emergency Telephone International	1-352-323-3500
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P271 P302,332		
Use in ventilated area If on skin, wash with soap and water		

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

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

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

Section V. FIREFIGHTING MEASURES

Suitable extinguishing media
Protective equipment for fire
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Wear self contained breathing apparatus for fire fighting if necessary.
Carbon oxides

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions
Environmental precautions
Clean up
Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
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
Storage Conditions
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.
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

Water
CAS#: 7732-18-5
TWA: 500 ppm
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	100°C
Specific Gravity (H2O = 1)	
Melting Point	1

Vapor Pressure (mm Hg)

Vapor Density (AIR = 1)		NA	Evaporation rate (Butyl Acetate = 1)	0°C
Solubility in Water		Completely miscible		
Appearance and Odor				

CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
NA

Conditions to avoid
NA

Materials to avoid
NA

Hazardous decomposition products - No data available

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - Rat
NA

LC50 Inhalation - Rat
NA

LD50 Dermal - Guinea pig
NA

Causes skin irritation.

Eye irritation

Section XII. ECOLOGICAL INFORMATION

LC50
NA

EC50
NA

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
Not dangerous goods
Proper shipping name: Water

IATA
Not dangerous goods
Proper shipping name: Water

Section XV. REGULATORY INFORMATION

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

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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#: 8UTB

Solvent(s): **Methanol**
Lot#: **EG359-USQ12**

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

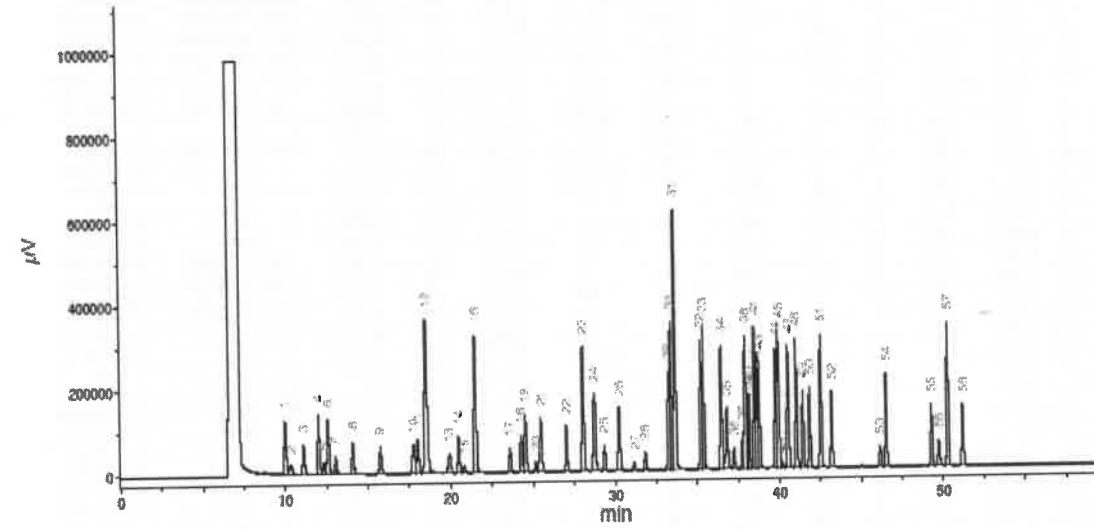
		021624
Formulated By:	Prashant Chauhan	DATE
		021624
Reviewed By:	Pedro L. Rentes	DATE

Compound	(RM#)	Lot	Di.	Initial	Initial	Nominal	Purity	Purity	Uncertainty	Target	Actual	Actual	Expanded	SDS Information		
	Part Number	Number	Factor	Vol. (mL)	Conc. (µg/mL)	Conc. (µg/mL)	(%)	Uncertainty	Pipette (mL)	Weight(g)	Weight(g)	Conc (µg/mL)	(+/-) (µg/mL)	CAS#	(Solvent Safety Info. On Attached pg.)	
															OSHA PEL (TWA)	LD50
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)	or-rat 2400mg/kg
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)	or-rat 700mg/kg
Carbon disulfide	(0060)	MKCR8581	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)	or-rat 1200mg/kg
cis-1,4-Dichloro-2-butene	(1198)	14718EF	NA	NA	NA	2000	95	0.2	NA	0.21058	0.21069	2001.1	8.5	1476-11-5	N/A	N/A
trans-1,4-Dichloro-2-butene	(0486)	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
Diethyl ether	(0153)	IK18CA5000K	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20040	2001.5	8.1	60-29-7	N/A	N/A
Ethyl methacrylate	(0381)	06126PK	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20230	2002.3	8.2	97-63-2	N/A	or-rat 14800mg/kg
Iodomethane	(0489)	5HBF8718V	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)	or-rat 70mg/kg
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)	or-rat 3480mg/kg
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)	or-rat 1200mg/kg
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)	or-rat 277mg/kg
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)	or-rat 7872mg/kg
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)	or-rat 700mg/kg
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)	or-rat 720mg/kg
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
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 (7800mg/m3/8H)	or-rat 43g/kg
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	or-rat 910mg/kg
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	or-rat 840mg/kg
cis-1,2-Dichloroethane	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
trans-1,2-Dichloroethane	35171	101623	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.6	23.0	156-60-5	N/A	N/A
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	or-rat 1235mg/kg
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)	or-rat 200mg/kg
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)	or-rat 930mg/kg
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)	or-rat 2350mg/kg
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)	or-rat 900mg/kg
Dibromomethane	95321	020724	0.10	10.00	20002.9	2000	NA	NA	0.042	NA	NA	1999.8	20.5	74-85-3	N/A	or-rat 105mg/kg
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	or-rat 725mg/kg
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
Tetrachloroethane	95321	020724	0.10	10.00	20201.1	2000	NA	NA	0.042	NA	NA	2019.6	20.8	127-18-4	25 ppm (170mg/m3/8H) (final)	or-rat 2629mg/kg
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)	or-rat 10300mg/kg
1,2-Dibromo-3-chloropropane	35161	112322	0.05	5.00	40016.5	2000	NA	NA	0.017	NA	NA	2000.3	22.9	96-12-6	0.001 ppm	or-rat 170mg/kg
1,2-Dibromomethane	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)	or-rat 108mg/kg
1,2-Dichloroethane	35161	112322	0.05	5.00	40018.0	2000	NA	NA	0.017	NA	NA	2000.4	22.9	107-08-2	50 ppm (8H)	or-rat 870mg/kg
1,2-Dichloropropane	35161	112322	0.05	5.00	40051.0	2000	NA	NA	0.017	NA	NA	2000.2	22.9	78-57-5	75 ppm (350mg/m3/8H)	or-rat 1947mg/kg
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	un-rat 3600mg/kg
1,1-Dichloropropane	35161	112322	0.05	5.00	40012.1	2000	NA	NA	0.017	NA	NA	2000.1	22.9	563-56-6	N/A	N/A
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
trans-1,3-Dichloropropene	35161	112322	0.05	5.00	40017.8	2000	NA	NA	0.017	NA	NA	2000.4	23.0	10061-02-6	N/A	N/A
Hexachloro-1,3-butadiene	35161	112322	0.05	5.00	40021.9	2000	NA	NA	0.017	NA	NA	2000.6	22.9	87-68-3	0.02 ppm (0.24mg/m3/8H)	or-rat 82mg/kg
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	or-rat 670mg/kg
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)	or-rat 800mg/kg
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 (46mg/m3/8H) (skin)	or-rat 630mg/kg
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)	or-rat 2400mg/kg
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 (50mg/m3/8H)	or-rat 149.6mg/kg
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	or-rat 4694mg/kg
Bromobenzene	35162	050823	0.05	5.00	40006.9	2000	NA	NA	0.017	NA	NA	1999.7	22.9	104-51-8	N/A	or-rat 2650mg/kg
n-Butyl benzene	35162	050823	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	100-41-4	100 ppm (435mg/m3/8H)	or-rat >2000mg/kg
Ethyl benzene	35162	050823	0.05	5.00	40004.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	99-87-6	N/A	or-rat 4750mg/kg
p-Isopropyl toluene	35162	050823	0.05	5.00	40005.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	91-20-3	10 ppm (50mg/m3/8H)	or-rat 490mg/kg
Naphthalene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.7	22.9	100-42-5	100 ppm	or-rat 5000mg/kg
Styrene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	106-98-3	200 ppm	or-rat 5000mg/kg
Toluene	35162	050823	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.7	22.9	87-61-6	N/A	or-rat 1390mg/kg
1,2,3-Trichlorobenzene	35162	050823	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.7	22.9	120-82-1	5 ppm (CL) (40mg/m3)	or-rat 750mg/kg
1,2,4-Trichlorobenzene	35162	050823	0.05	5.00	40006.8	2000	NA	NA	0.017	NA	NA	1999.8	23.0	95-63-6	N/A	or-rat 5g/kg
1,2,4-Trimethylbenzene	35162	050823	0.05	5.00	40001.6	2000	NA	NA	0.017	NA	NA	1999.8	22.9	106-67-8	N/A	or-rat 5000mg/kg
1,3,5-Trimethylbenzene	35162	050823	0.05	5.00	40006.7	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-38-3	100 ppm (435mg/m3/8H)	or-rat 5g/kg
m-Xylene	35162	050823	0.05	5.00	40005.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	98-06-6	N/A	N/A
tert-Butyl benzene	35163	101923	0.05	5.00	40001.2	2000	NA	NA	0.017	NA	NA	1999.6	22.9	135-98-8	N/A	or-rat 2240mg/kg
sec-Butyl benzene	35163	101923	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.7	22.9	108-90-7	75 ppm (350mg/m3/8H)	or-rat 2290mg/kg
Chlorobenzene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.5	22.9	95-49-8	50 ppm (250mg/m3/8H)	or-rat 3900mg/kg
Chlorotoluene	35163	101923	0.05	5.00	40000.3	2000	NA	NA	0.017	NA	NA	1999.7	22.9	106-43-4	N/A	or-rat 2100mg/kg
Chlorotoluene	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)	or-rat 500mg/kg
1,2-Dichlorobenzene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.6	23.0	541-73-1	N/A	or-rat 1063mg/kg
1,3-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)	or-rat 500mg/kg
1,4-Dichlorobenzene	35163	101923	0.05	5.00	40001.7	2000	NA	NA	0.017	NA	NA					

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., Hydrogen(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-1,2,2-trifluoroethane	10.33
3	1,1-Dichloroethane	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-Dichloroethane	14.07
9	1,1-Dichloroethane	15.74
10	2,2-Dichloropropane	17.24
11	cis-1,2-Dichloroethane	18.00
12	Methacrylonitrile/methyl acrylate/Chloroform	18.46
13	Isobutane/1,1,1-Trichloroethane	19.01
14	1,1-Dichloropropane	20.46
15	Carbon tetrachloride	20.79
16	Benzene/1,2-Dichloroethane	21.49
17	Trichloroethane	23.58
18	1,2-Dichloropropane	24.38
19	Methyl methacrylate	24.52
20	Bromochloromethane	25.13
21	Dibromomethane/2-Hitropropane	25.46
22	cis-1,3-Dichloropropane	27.02
23	Toluene	28.05
24	Ethyl methacrylate/trans-1,3-Dichloropropane	28.73
25	1,1,2-Trichloroethane	29.34
26	Tetrachloroethene/1,3-Dichloropropane	30.24
27	Dibromochloromethane	31.16
28	1,2-Dibromomethane	31.84
29	Chlorobenzene	33.26
30	Ethylbenzene/1,1,1,2-Tetrachloroethane	33.40
31	m-Xylene/p-Xylene	33.66
32	o-Xylene	35.22
33	Styrene	35.39
34	Isopropylbenzene/Bromoforn	36.18
35	cis-1,4-Dichloro-3-butene	36.48
36	1,1,2,2-Tetrachloroethane	37.23
37	1,2,3-Trichloropropane	37.77
38	n-Propylbenzene	37.93
39	trans-1,4-Dichloro-3-butene	38.05
40	Bromobenzene	38.14
41	1,3,5-Trimethylbenzene	38.80
42	2-Chlorotoluene	38.82
43	4-Chlorotoluene	38.77
44	tert-Butylbenzene	39.74
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	41.42
50	1,4-Dichlorobenzene	41.83
51	n-Butylbenzene	42.53
52	1,2-Dichlorobenzene	43.18
53	1,2-Dibromo-3-chloropropane	46.12
54	Nitrobenzene	46.46
55	1,2,4-Trichlorobenzene	49.26
56	Hexachlorobutadiene	49.72
57	Naphthalene	50.26
58	1,2,3-Trichlorobenzene	51.16

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, 2023

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 shield
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.
Storage Conditions	Use ventilation. Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge. 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 (H ₂ O = 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)	IATA
UN number: 1230 Class: 3 Packing group: II	UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol	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.



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#: 8UTB

Solvent(s): **Methanol**
Lot#: **EG359-USQ12**

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

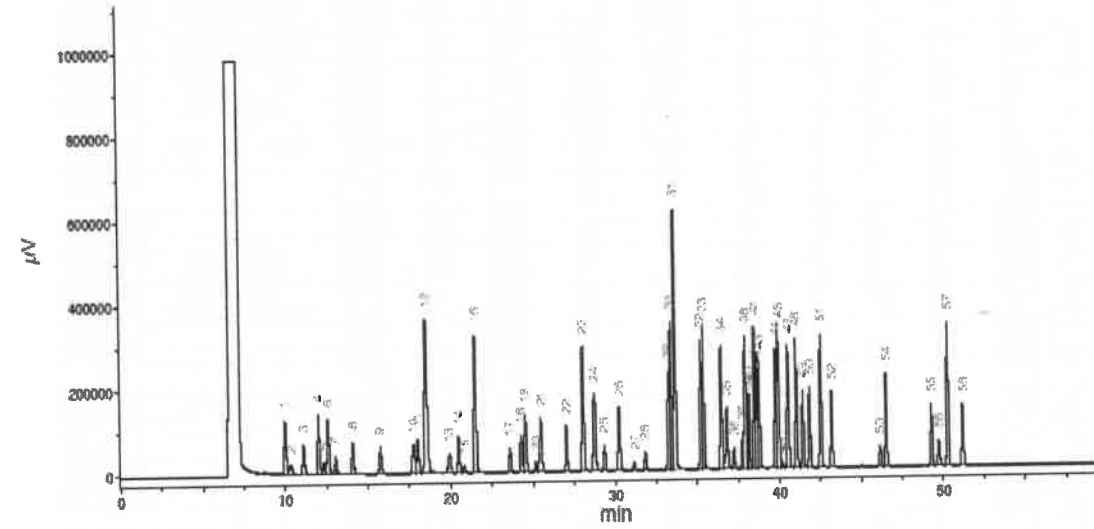
		021624
Formulated By:	Prashant Chauhan	DATE
		021624
Reviewed By:	Pedro L. Rentes	DATE

Compound	(RM#)	Lot	Di.	Initial	Initial	Nominal	Purity	Purity	Uncertainty	Target	Actual	Actual	Expanded	SDS Information		
	Part Number	Number	Factor	Vol. (mL)	Conc. (µg/mL)	Conc. (µg/mL)	(%)	Uncertainty	Pipette (mL)	Weight(g)	Weight(g)	Conc (µg/mL)	(+/-) (µg/mL)	(Solvent Safety Info. On Attached pg.)		
														CAS#	OSHA PEL (TWA)	LD50
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)	or-rat 2400mg/kg
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)	or-rat 700mg/kg
Carbon disulfide	(0060)	MKCR8581	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)	or-rat 1200mg/kg
cis-1,4-Dichloro-2-butene	(1198)	14718EF	NA	NA	NA	2000	95	0.2	NA	0.21058	0.21069	2001.1	8.5	1476-11-5	N/A	N/A
trans-1,4-Dichloro-2-butene	(0486)	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
Diethyl ether	(0153)	IK18CA5000K	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20040	2001.5	8.1	60-29-7	N/A	N/A
Ethyl methacrylate	(0381)	06126PK	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20230	2002.3	8.2	97-63-2	N/A	or-rat 14800mg/kg
Iodomethane	(0489)	5HBF8718V	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)	or-rat 70mg/kg
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)	or-rat 3480mg/kg
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)	or-rat 1200mg/kg
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)	or-rat 277mg/kg
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)	or-rat 7872mg/kg
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)	or-rat 700mg/kg
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)	or-rat 720mg/kg
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
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 (7800mg/m3/8H)	or-rat 43g/kg
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	or-rat 910mg/kg
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	or-rat 840mg/kg
cis-1,2-Dichloroethane	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
trans-1,2-Dichloroethane	35171	101623	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.6	23.0	156-60-5	N/A	N/A
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	or-rat 1235mg/kg
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)	or-rat 200mg/kg
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)	or-rat 930mg/kg
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)	or-rat 2350mg/kg
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)	or-rat 900mg/kg
Dibromomethane	95321	020724	0.10	10.00	20002.9	2000	NA	NA	0.042	NA	NA	1999.8	20.5	74-85-3	N/A	or-rat 105mg/kg
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	or-rat 725mg/kg
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
Tetrachloroethane	95321	020724	0.10	10.00	20201.1	2000	NA	NA	0.042	NA	NA	2019.6	20.8	127-18-4	25 ppm (170mg/m3/8H) (final)	or-rat 2629mg/kg
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)	or-rat 10300mg/kg
1,2-Dibromo-3-chloropropane	35161	112322	0.05	5.00	40016.5	2000	NA	NA	0.017	NA	NA	2000.3	22.9	96-12-6	0.001 ppm	or-rat 170mg/kg
1,2-Dibromomethane	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)	or-rat 108mg/kg
1,2-Dichloroethane	35161	112322	0.05	5.00	40018.0	2000	NA	NA	0.017	NA	NA	2000.4	22.9	107-08-2	50 ppm (8H)	or-rat 870mg/kg
1,2-Dichloropropane	35161	112322	0.05	5.00	40051.0	2000	NA	NA	0.017	NA	NA	2000.2	22.9	78-57-5	75 ppm (350mg/m3/8H)	or-rat 1947mg/kg
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	un-rat 3600mg/kg
1,1-Dichloropropane	35161	112322	0.05	5.00	40012.1	2000	NA	NA	0.017	NA	NA	2000.1	22.9	563-56-6	N/A	N/A
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
trans-1,3-Dichloropropene	35161	112322	0.05	5.00	40017.8	2000	NA	NA	0.017	NA	NA	2000.4	23.0	10061-02-6	N/A	N/A
Hexachloro-1,3-butadiene	35161	112322	0.05	5.00	40021.9	2000	NA	NA	0.017	NA	NA	2000.6	22.9	87-68-3	0.02 ppm (0.24mg/m3/8H)	or-rat 82mg/kg
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	or-rat 670mg/kg
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)	or-rat 800mg/kg
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 (46mg/m3/8H) (skin)	or-rat 830mg/kg
Trichloroethene	35161	112322	0.05	5.00	40029.0	2000	NA	NA	0.017	NA	NA	2000.9	22.9	79-01-6	80 ppm (270mg/m3/8H)	or-rat 2400mg/kg
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 (50mg/m3/8H)	or-rat 149.6mg/kg
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	or-rat 4694mg/kg
Bromobenzene	35162	050823	0.05	5.00	40006.9	2000	NA	NA	0.017	NA	NA	1999.7	22.9	104-51-8	N/A	or-rat 2650mg/kg
n-Butyl benzene	35162	050823	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	100-41-4	100 ppm (435mg/m3/8H)	or-rat >2000mg/kg
Ethyl benzene	35162	050823	0.05	5.00	40004.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	99-87-6	N/A	or-rat 4750mg/kg
p-Isopropyl toluene	35162	050823	0.05	5.00	40005.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	91-20-3	10 ppm (50mg/m3/8H)	or-rat 490mg/kg
Naphthalene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.7	22.9	100-42-5	100 ppm	or-rat 5000mg/kg
Styrene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-98-3	200 ppm	or-rat 5000mg/kg
Toluene	35162	050823	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.7	22.9	87-61-6	N/A	or-rat 1390mg/kg
1,2,3-Trichlorobenzene	35162	050823	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.7	22.9	120-82-1	5 ppm (CL) (40mg/m3)	or-rat 750mg/kg
1,2,4-Trichlorobenzene	35162	050823	0.05	5.00	40006.8	2000	NA	NA	0.017	NA	NA	1999.8	23.0	95-63-6	N/A	or-rat 5g/kg
1,2,4-Trimethylbenzene	35162	050823	0.05	5.00	40001.6	2000	NA	NA	0.017	NA	NA	1999.8	22.9	106-67-8	N/A	or-rat 5000mg/kg
1,3,5-Trimethylbenzene	35162	050823	0.05	5.00	40006.7	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-38-3	100 ppm (435mg/m3/8H)	or-rat 5g/kg
m-Xylene	35162	050823	0.05	5.00	40005.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	98-06-6	N/A	N/A
tert-Butyl benzene	35163	101923	0.05	5.00	40001.2	2000	NA	NA	0.017	NA	NA	1999.6	22.9	135-98-8	N/A	or-rat 2240mg/kg
sec-Butyl benzene	35163	101923	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.7	22.9	108-90-7	75 ppm (350mg/m3/8H)	or-rat 2290mg/kg
Chlorobenzene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.5	22.9	95-49-8	50 ppm (250mg/m3/8H)	or-rat 3900mg/kg
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	or-rat 2100mg/kg
Chlorotoluene	35163	101923	0.05	5.00	40003.3	2000	NA	NA	0.017	NA	NA	1999.7	22.9	541-73-1	50 ppm (300mg/m3) (CL)	or-rat 500mg/kg
1,2-Dichlorobenzene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.6	23.0	96-46-7	78 ppm (450mg/m3/8H)	or-rat 900mg/kg
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	or-rat 1065mg/kg
1,4-Dichlorobenzene	35163	101923	0.05	5.00	40001.8	2000	NA	NA	0.017	NA						

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., Hydrogen(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-1,2,2-trifluoroethane	10.33
3	1,1-Dichloroethane	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-Dichloroethane	14.07
9	1,1-Dichloroethane	15.74
10	2,2-Dichloropropane	17.24
11	cis-1,2-Dichloroethane	18.00
12	Methacrylonitrile/methyl acrylate/Chloroform	18.46
13	Isobutane/1,1,1-Trichloroethane	19.01
14	1,1-Dichloropropane	20.46
15	Carbon tetrachloride	20.79
16	Benzene/1,2-Dichloroethane	21.49
17	Trichloroethane	23.58
18	1,2-Dichloropropane	24.38
19	Methyl methacrylate	24.52
20	Bromochloromethane	25.13
21	Dibromomethane/2-Hitropropane	25.46
22	cis-1,3-Dichloropropane	27.02
23	Toluene	28.05
24	Ethyl methacrylate/trans-1,3-Dichloropropane	28.73
25	1,1,2-Trichloroethane	29.34
26	Tetrachloroethene/1,3-Dichloropropane	30.24
27	Dibromochloromethane	31.16
28	1,2-Dibromomethane	31.84
29	Chlorobenzene	33.26
30	Ethylbenzene/1,1,1,2-Tetrachloroethane	33.40
31	m-Xylene/p-Xylene	33.66
32	o-Xylene	35.22
33	Styrene	35.39
34	Isopropylbenzene/Bromoforn	36.18
35	cis-1,4-Dichloro-3-butene	36.80
36	1,1,2,2-Tetrachloroethane	37.23
37	1,2,3-Trichloropropane	37.77
38	n-Propylbenzene	37.93
39	trans-1,4-Dichloro-3-butene	38.05
40	Bromobenzene	38.14
41	1,3,5-Trimethylbenzene	38.80
42	2-Chlorotoluene	38.82
43	4-Chlorotoluene	38.77
44	tert-Butylbenzene	39.74
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	41.42
50	1,4-Dichlorobenzene	41.83
51	n-Butylbenzene	42.53
52	1,2-Dichlorobenzene	43.18
53	1,2-Dibromo-3-chloropropane	46.12
54	Nitrobenzene	46.46
55	1,2,4-Trichlorobenzene	49.26
56	Hexachlorobutadiene	49.72
57	Naphthalene	50.26
58	1,2,3-Trichlorobenzene	51.16

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, 2023

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 shield
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.
Storage Conditions	Use ventilation. Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge. 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 (H ₂ O = 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)	IATA
UN number: 1230 Class: 3 Packing group: II	UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol	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.



Certified Reference Material CRM



Dec 09/17/24

CERTIFIED WEIGHT REPORT

Part Number:

91980

Lot Number:

091424

Description:

Acrolein

Solvent(s):

Water

Lot#

072324Q

Expiration Date:

101424

Recommended Storage:

Refrigerate (4 °C)

Nominal Concentration (µg/mL):

5000

NIST Test ID#:

6UTB

Weight(s) shown below were combined and diluted to (mL):

10.0

5E-05 Balance Uncertainty

0.001 Flask Uncertainty

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (±) (µg/mL)	(Solvent Safety Info. On Attached pg.)	CAS#	OSHA PEL (TWA)	LD50

1. Acrolein	5	103755V10F	5000	97	0.5	0.05186	0.05175	5008.9	52.5	107-02-8	0.1 ppm	ori-rat 46mg/kg

Method: GC/MSD-1, Detector: Mass Selective Detector (Scan mode). Columns: Vocol (60m X 0.25mm ID X 1.5µm film thickness), Oven Profile: Temp. 1 = 35°C (Time 1 = 0min.), 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 thereof, should be used immediately. Long term storage is not recommended. Please contact our technical department if further information is required.

TIC: [BSB2]79005.D

Scan 232 (8.927 min): [BSB2]79005.D

Abundance

27

250000

8.93

200000

56

150000

40000

30000

100000

20000

50000

10000

Time-->

10.00 15.00 20.00 25.00 30.00 35.00 40.00 45.00 50.00 55.00 60.00

m/z-->

20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170

44 65 75 85 119 158 169

* 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).



Certified Reference Material CRM



Dec 09/17/24

CERTIFIED WEIGHT REPORT

Part Number:

91980

Lot Number:

091424

Description:

Acrolein

Solvent(s):

Water

Lot#

072324Q

Expiration Date:

101424

Recommended Storage:

Refrigerate (4 °C)

Nominal Concentration (µg/mL):

5000

NIST Test ID#:

6UTB

5E-05 Balance Uncertainty

0.001 Flask Uncertainty

10.0

Weight(s) shown below were combined and diluted to (mL):

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	(Solvent Safety Info. On Attached pg.)	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	ori-rat 46mg/kg

Method: GC/MSD-1, Detector: Mass Selective Detector (Scan mode). Columns: Vocol (60m X 0.25mm ID X 1.5µm film thickness), Oven Profile: Temp. 1 = 35°C (Time 1 = 0min.), 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 thereof, should be used immediately. Long term storage is not recommended. Please contact our technical department if further information is required.

TIC: [BSB2]79005.D

Scan 232 (8.927 min): [BSB2]79005.D

Abundance 27

250000 8.93



200000 56

150000

100000

50000

Time-->

10.00 15.00 20.00 25.00 30.00 35.00 40.00 45.00 50.00 55.00 60.00 65.00 70.00 75.00 80.00 85.00 90.00 100.00 110.00 120.00 130.00 140.00 150.00 160.00 170.00

- 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).



Dec 12/6/24
20 vial

CERTIFIED WEIGHT REPORT

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

Solvent(s): Lot#
Methanol EJ143-US

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

✓ 14630 to
✓ 14649

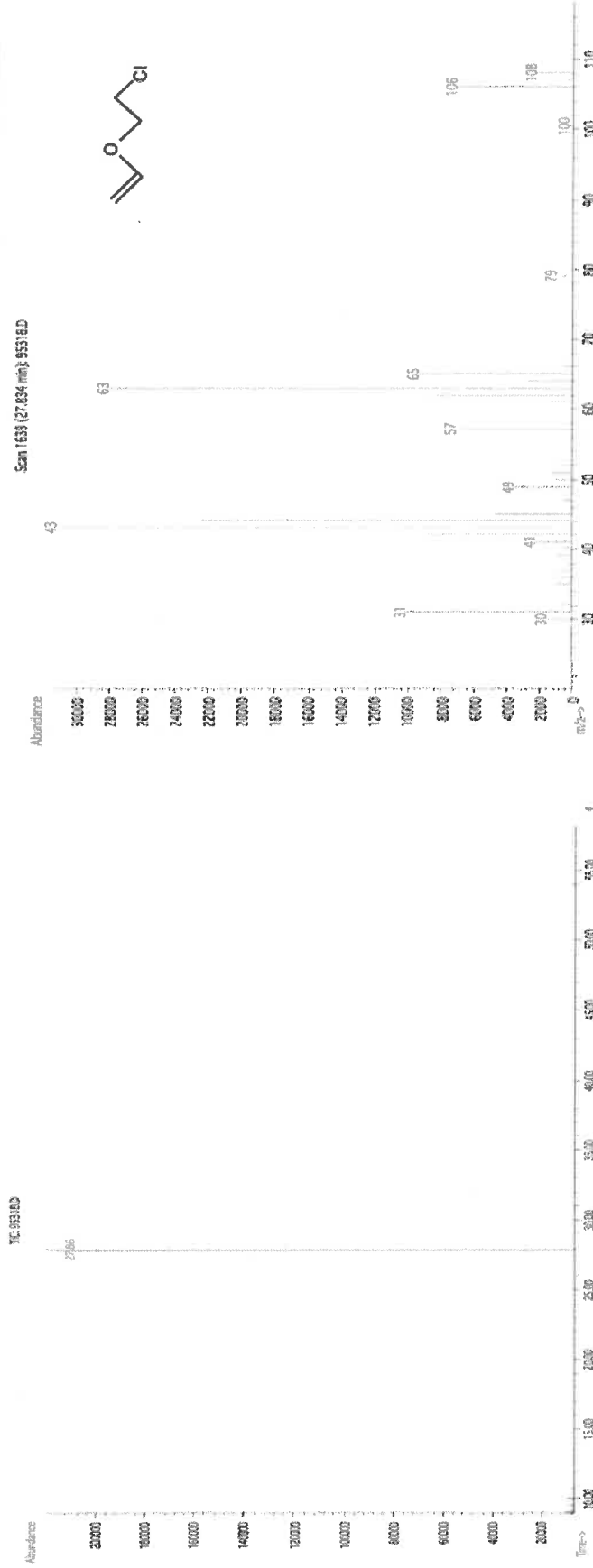
Weight(s) shown below were combined and diluted to (mL):

5E-05 Balance Uncertainty
0.001 Flask Uncertainty

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Purity Uncertainty	Target Weight (g)	Actual Weight (g)	Actual Conc (µg/mL)	Expanded Uncertainty (Solvent Safety Info. On Attached pg.)	SDS Information
										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	or-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 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).

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.	Emergency Telephone International	1-352-323-3500
	Hamden CT, 06514	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 shield
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	> 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	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 (H ₂ O = 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)	IATA
UN number: 1230 Class: 3 Packing group: II	UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol	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.



See 1216124
20 vial

CERTIFIED WEIGHT REPORT

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

Solvent(s): Lot#
Methanol EJ143-US

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

✓ 14630 to
✓ 14649

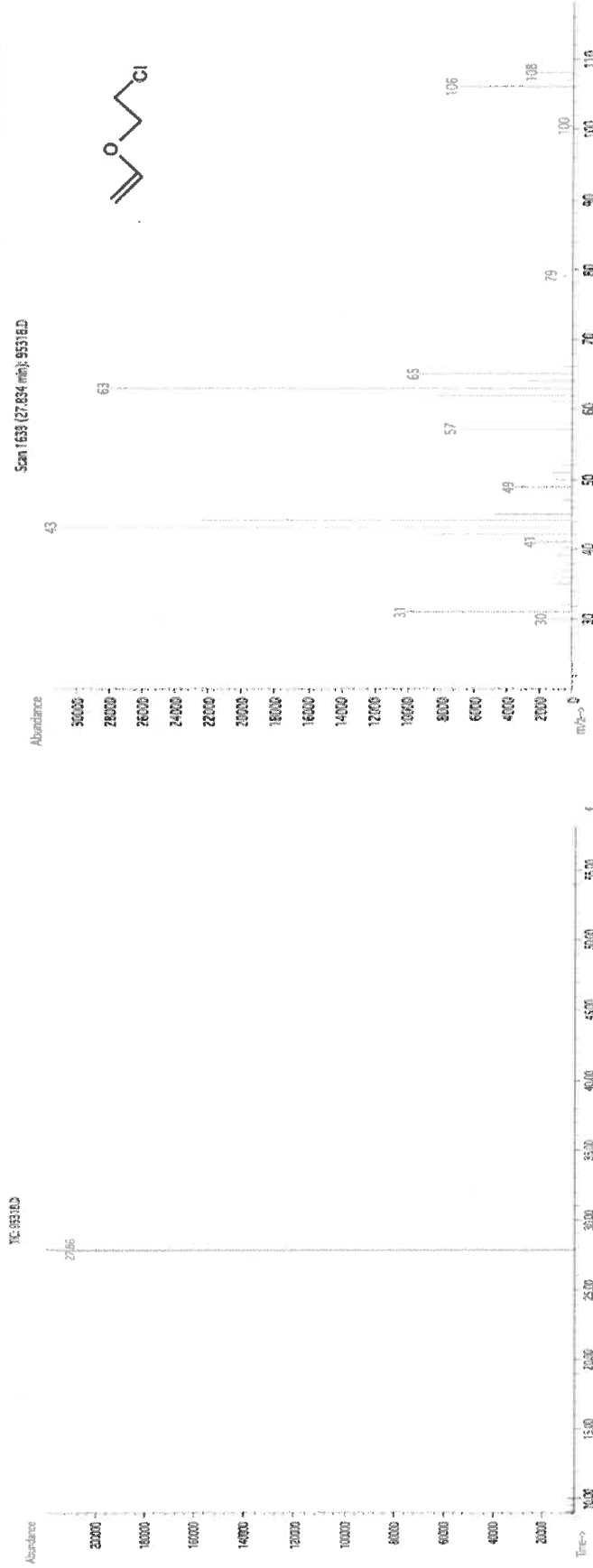
Weight(s) shown below were combined and diluted to (mL):

5E-05 Balance Uncertainty
0.001 Flask Uncertainty

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Purity Uncertainty	Target Weight (g)	Actual Weight (g)	Actual Conc (µg/mL)	Expanded Uncertainty (±) (µg/mL)	(Solvent Safety Info. On Attached pg.)	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	or-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 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).

GHS/OSHA Compliant

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

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 shield
P302,332	If on skin, wash with soap and water	P305,351,338	If in eyes, remove contacts, rinse with water



Signal Word: DANGER

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

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.

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.

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).

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.

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 (H ₂ O = 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)	IATA
UN number: 1230 Class: 3 Packing group: II	UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol	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.



Dec 12/6/24
20 vial

CERTIFIED WEIGHT REPORT

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

Solvent(s): Lot#
Methanol EJ143-US

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

Weight(s) shown below were combined and diluted to (mL):

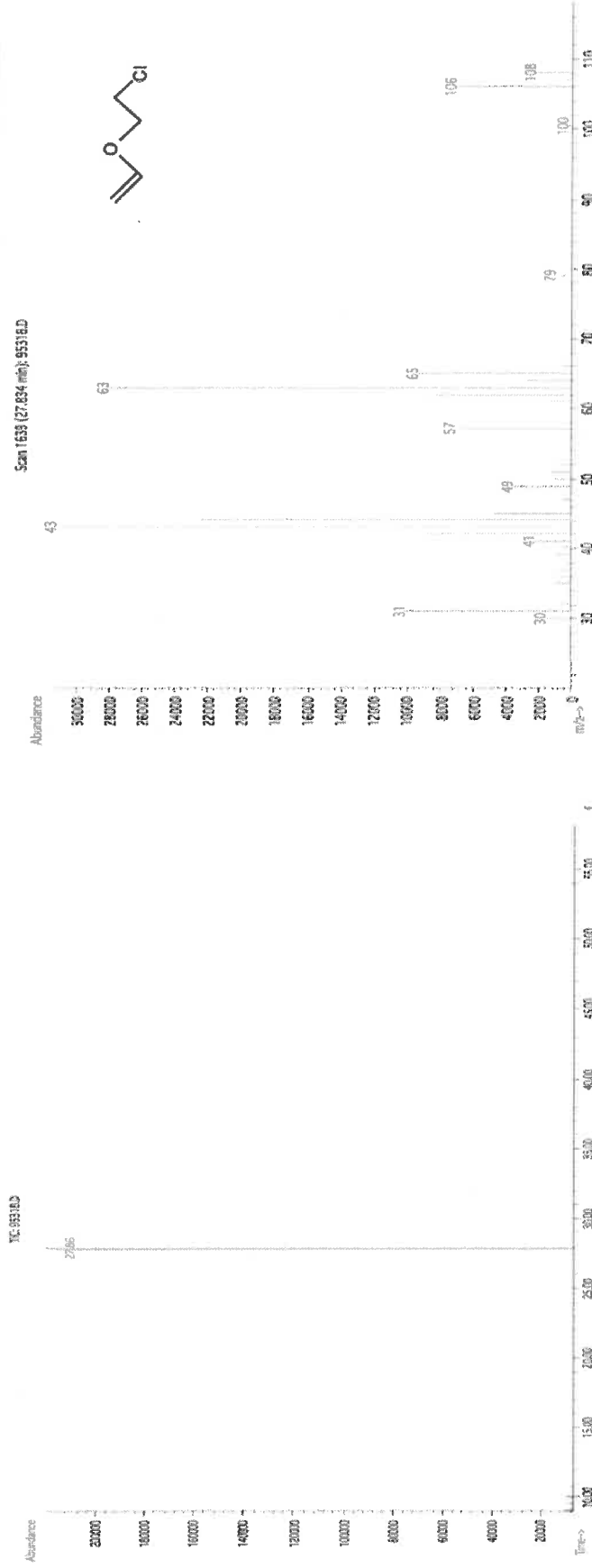
5E-05 Balance Uncertainty
0.001 Flask Uncertainty

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

Boiling Point	65°C	Specific Gravity (H ₂ O = 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)	IATA
UN number: 1230 Class: 3 Packing group: II	UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol	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

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Dec 12/16/24
20 vial

CERTIFIED WEIGHT REPORT

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

Solvent(s): Lot#
Methanol EJ143-US

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

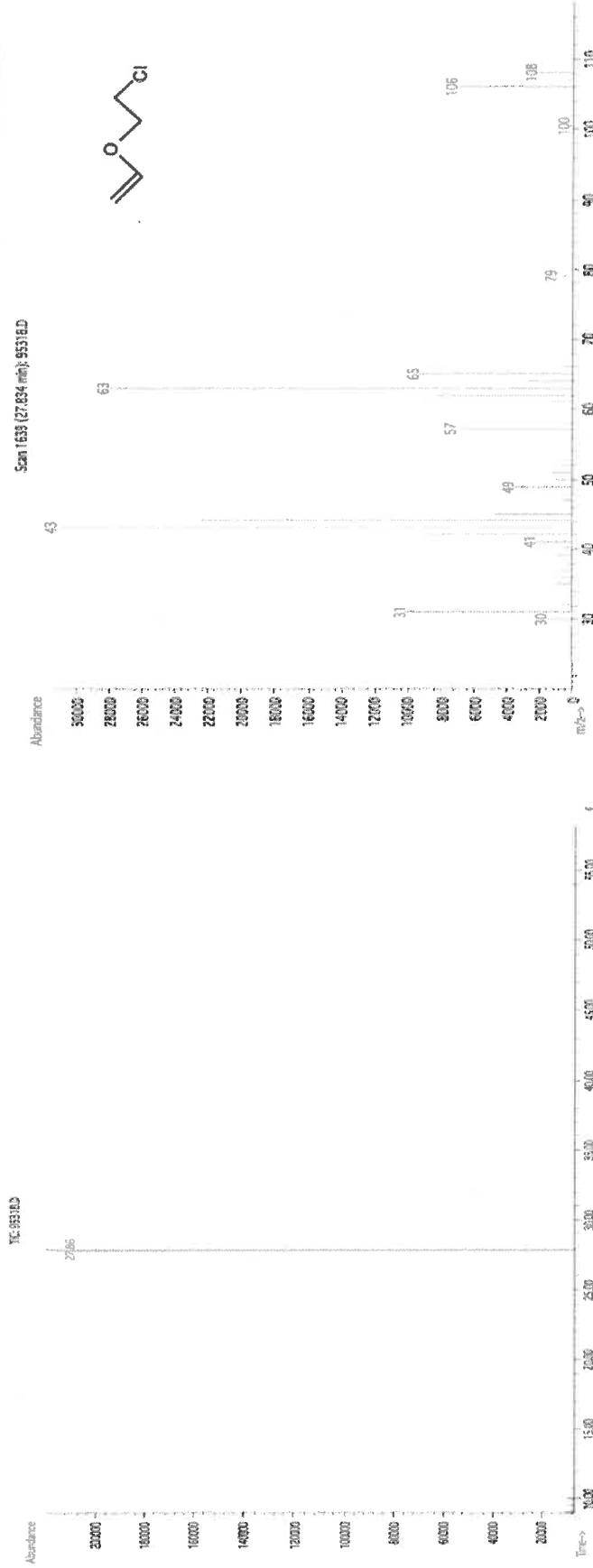
✓ 14630 to
✓ 14649

Weight(s) shown below were combined and diluted to (mL):

5E-05 Balance Uncertainty
0.001 Flask Uncertainty

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Purity Uncertainty	Target Weight (g)	Actual Weight (g)	Actual Conc (µg/mL)	Expanded Uncertainty (±) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.)
1. 2-Chloroethyl vinyl ether	74	MKCD0033	10000	99	0.2	0.50536	0.50550	10002.9	40.5	110-75-8 N/A or-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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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.	Emergency Telephone International	1-352-323-3500
	Hamden CT, 06514	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 shield
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	> 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).

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Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol	67-56-1	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.			

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Boiling Point	65°C	Specific Gravity (H ₂ O = 1)	0.79
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Chemical stability	Stable under recommended storage conditions.
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Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

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



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:

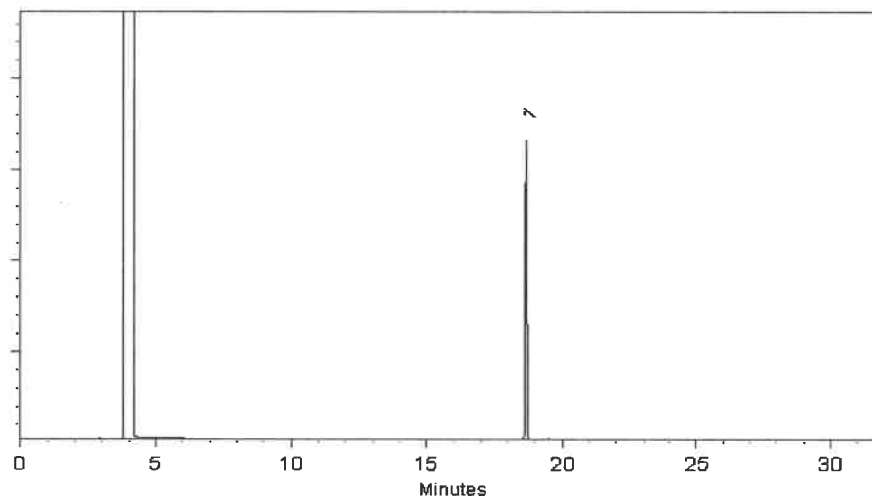
FID

Split Vent:

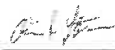
40 ml/min

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:

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

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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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.:** A0193071

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

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

Expiration Date : December 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	Bromochloromethane	74-97-5	00008541	99%	2,018.0 µg/mL	+/- 113.3890

* 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:

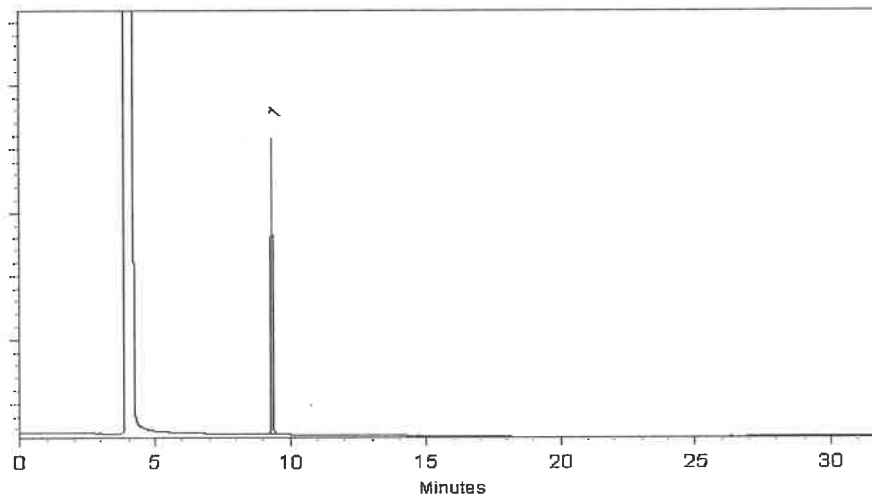
FID

Split Vent:

40 ml/min

Inj. Vol

1µl



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Tom Suckar - Mix Technician

Date Mixed: 29-Dec-2022 Balance Serial # B707717271


Christie Mills - Operations Tech II - ARM QC

Date Passed: 03-Jan-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:

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- Purity values are rounded to the nearest whole number.

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Manufacturing Notes:

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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.:** A0193071
Description : Bromochloromethane Standard
Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : December 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	Bromochloromethane	74-97-5	00008541	99%	2,018.0 µg/mL	+/- 113.3890

* 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:

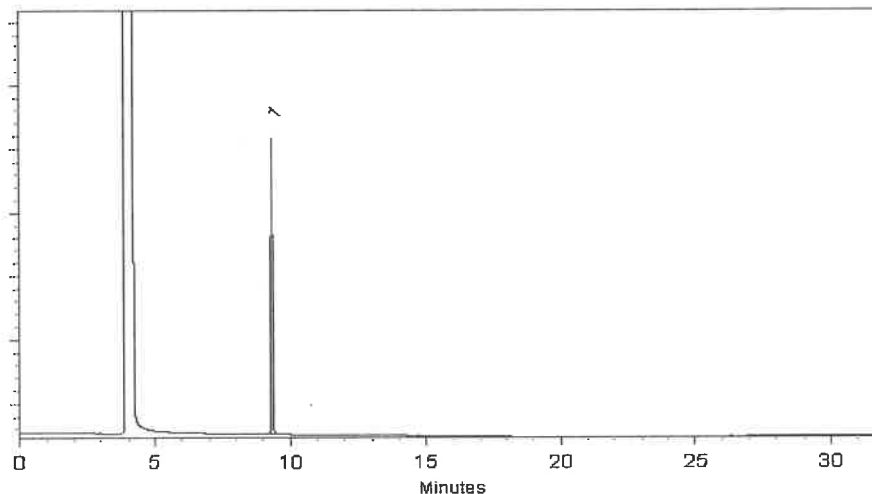
FID

Split Vent:

40 ml/min

Inj. Vol

1µl



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Tom Suckar - Mix Technician

Date Mixed: 29-Dec-2022 Balance Serial # B707717271


Christie Mills - Operations Tech II - ARM QC

Date Passed: 03-Jan-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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Purity Notes:

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Manufacturing Notes:

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Handling Notes:

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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Catalog No. : 30225 **Lot No.:** A0193071

Description : Bromochloromethane Standard

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

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

Expiration Date : December 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	Bromochloromethane	74-97-5	00008541	99%	2,018.0 µg/mL	+/- 113.3890

* 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:

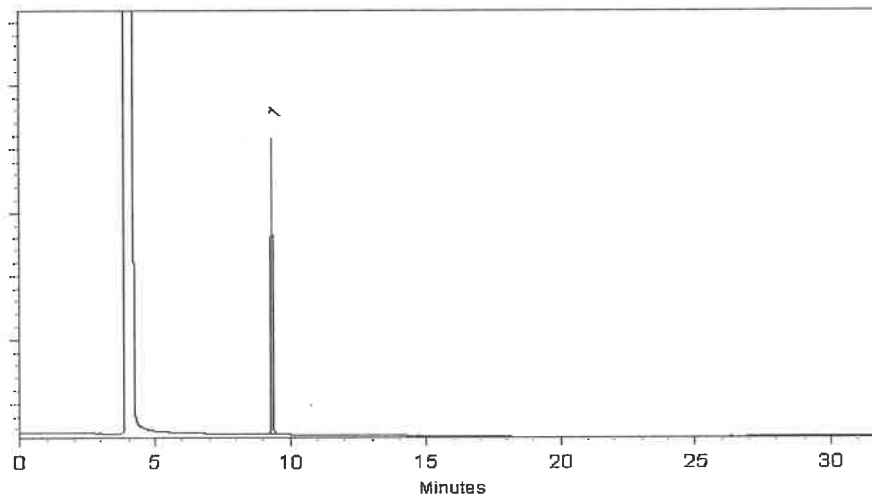
FID

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.


Tom Suckar - Mix Technician

Date Mixed: 29-Dec-2022 Balance Serial # B707717271


Christie Mills - Operations Tech II - ARM QC

Date Passed: 03-Jan-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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Manufacturing Notes:

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Handling Notes:

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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Catalog No. : 30225 **Lot No.:** A0193071
Description : Bromochloromethane Standard
Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : December 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	Bromochloromethane	74-97-5	00008541	99%	2,018.0 µg/mL	+/- 113.3890

* 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:

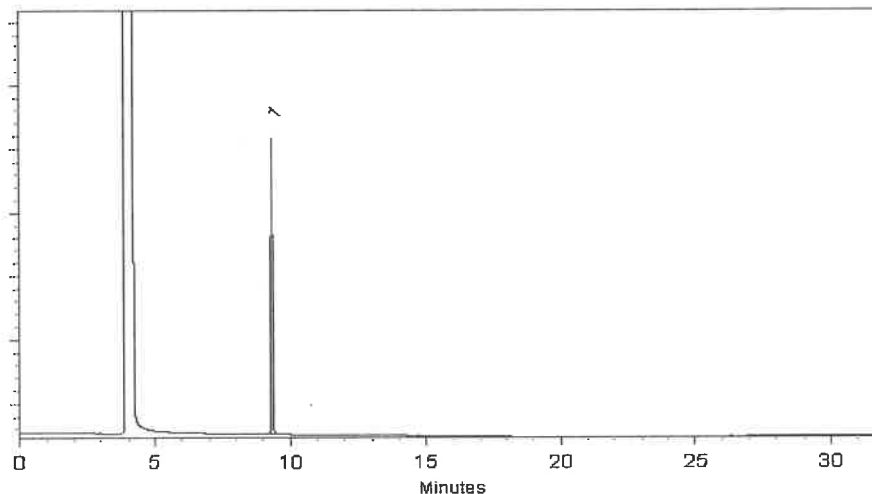
FID

Split Vent:

40 ml/min

Inj. Vol

1µl



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Tom Suckar - Mix Technician

Date Mixed: 29-Dec-2022 Balance Serial # B707717271


Christie Mills - Operations Tech II - ARM QC

Date Passed: 03-Jan-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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Manufacturing Notes:

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Handling Notes:

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gravimetric



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.:** A0196865

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 : April 30, 2026 **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-32845	99%	25,036.0 µg/mL	+/- 1,417.9179
2	1-Bromo-4-fluorobenzene (BFB)	460-00-4	184975	99%	25,132.0 µg/mL	+/- 1,423.3549
3	Dibromofluoromethane	1868-53-7	022013	99%	25,040.0 µg/mL	+/- 1,418.1445
4	Toluene-d8	2037-26-5	PR-33397	99%	25,028.0 µg/mL	+/- 1,417.4648

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

Russ Bookhamer - Operations Technician I

Date Mixed: 11-Apr-2023

Balance: 1127510105

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

General Certified Reference Material Notes

Expiration 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:

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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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chromatographic plus



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.:** A0209618

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 : September 30, 2025 **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	SHBP3100	99%	2,019.3 µg/mL	+/- 69.7974
2	Vinyl acetate	108-05-4	RP231030CTH	98%	2,016.8 µg/mL	+/- 69.7112
3	Ethyl acetate	141-78-6	SHBQ9682	99%	2,010.7 µg/mL	+/- 69.4979
4	Isopropyl acetate	108-21-4	BCCG7069	99%	2,016.0 µg/mL	+/- 69.6822
5	Propyl acetate	109-60-4	P8XLN	99%	2,008.0 µg/mL	+/- 69.4057
6	Butyl acetate	123-86-4	SHBP6314	99%	2,007.3 µg/mL	+/- 69.3826
7	Amyl acetate	628-63-7	41325/1	97%	2,004.7 µg/mL	+/- 69.2905

* 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:

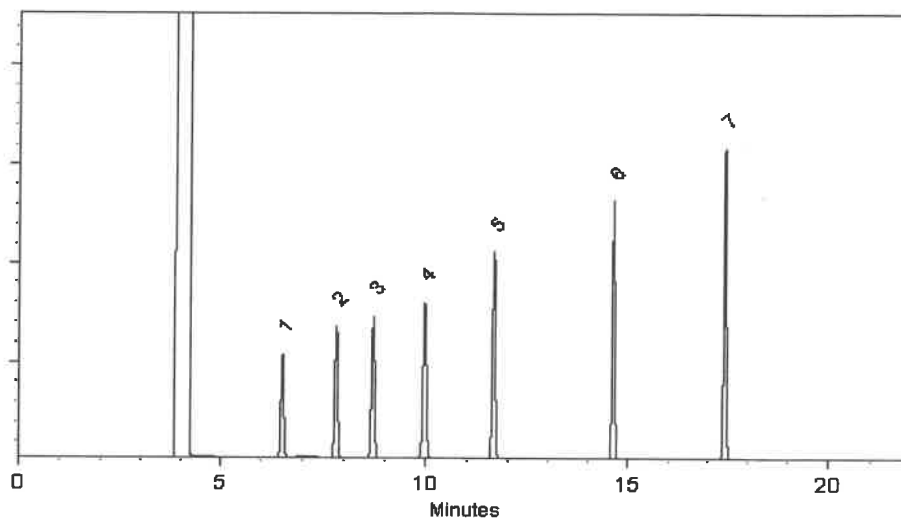
FID

Split Vent:

40 ml/min

Inj. Vol

1µl



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.

Sam Moodler
Sam Moodler - Operations Tech I

Date Mixed: 28-Mar-2024

Balance Serial # B707717271

Dillon Murphy
Dillon Murphy - Operations Technician I

Date Passed: 01-Apr-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:

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

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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chromatographic plus



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.:** A0209618

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 : September 30, 2025 **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	SHBP3100	99%	2,019.3 µg/mL	+/- 69.7974
2	Vinyl acetate	108-05-4	RP231030CTH	98%	2,016.8 µg/mL	+/- 69.7112
3	Ethyl acetate	141-78-6	SHBQ9682	99%	2,010.7 µg/mL	+/- 69.4979
4	Isopropyl acetate	108-21-4	BCCG7069	99%	2,016.0 µg/mL	+/- 69.6822
5	Propyl acetate	109-60-4	P8XLN	99%	2,008.0 µg/mL	+/- 69.4057
6	Butyl acetate	123-86-4	SHBP6314	99%	2,007.3 µg/mL	+/- 69.3826
7	Amyl acetate	628-63-7	41325/1	97%	2,004.7 µg/mL	+/- 69.2905

* 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:

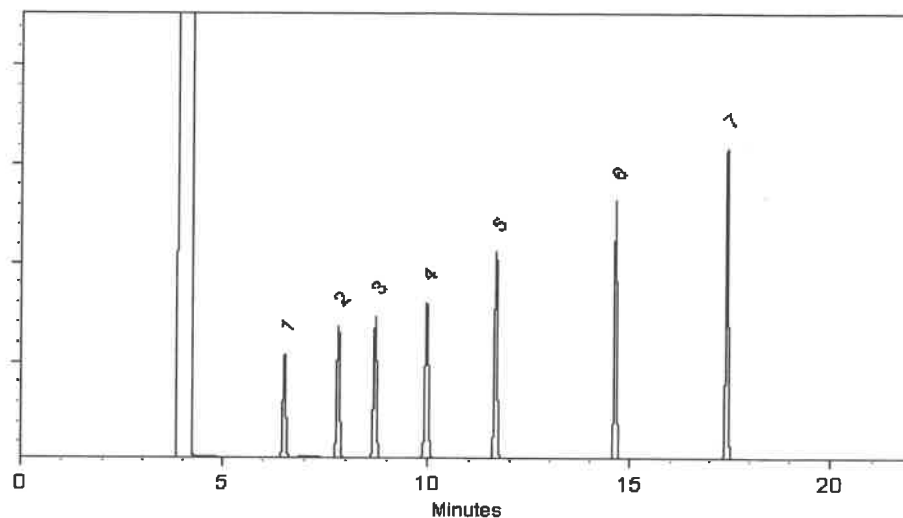
FID

Split Vent:

40 ml/min

Inj. Vol

1µl



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.

Sam Moodler
Sam Moodler - Operations Tech I

Date Mixed: 28-Mar-2024

Balance Serial # B707717271

Dillon Murphy
Dillon Murphy - Operations Technician I

Date Passed: 01-Apr-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:

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

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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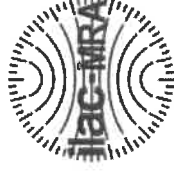
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gravimetric



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:** 11275.10105



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%.

- 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:

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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. : 30006 **Lot No.:** A0210618
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 : July 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	Acetone	67-64-1	SHBQ8504	99%	5,014.8 µg/mL	+/- 173.2883
2	2-Butanone (MEK)	78-93-3	SHBQ4704	99%	5,012.4 µg/mL	+/- 173.2054
3	4-Methyl-2-pentanone (MIBK)	108-10-1	SHBP9200	99%	5,011.6 µg/mL	+/- 173.1777
4	2-Hexanone	591-78-6	MKCQ6663	99%	5,013.0 µg/mL	+/- 173.2261

* 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:

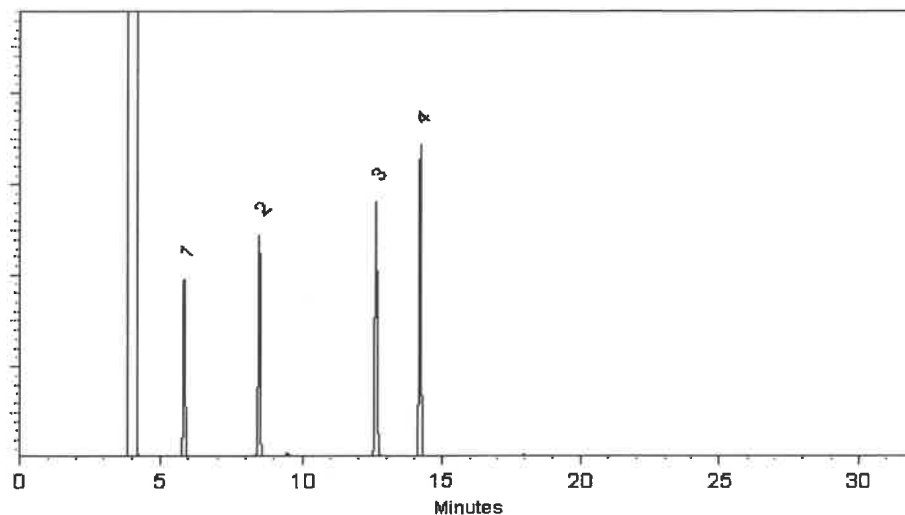
FID

Split Vent:

40 ml/min

Inj. Vol

1µl

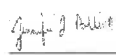


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Dakota Parson - Operations Technician I

Date Mixed: 22-Apr-2024

Balance Serial # B707717271


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 24-Apr-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:

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

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. : 30006 **Lot No.:** A0210618
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 : July 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	Acetone	67-64-1	SHBQ8504	99%	5,014.8 µg/mL	+/- 173.2883
2	2-Butanone (MEK)	78-93-3	SHBQ4704	99%	5,012.4 µg/mL	+/- 173.2054
3	4-Methyl-2-pentanone (MIBK)	108-10-1	SHBP9200	99%	5,011.6 µg/mL	+/- 173.1777
4	2-Hexanone	591-78-6	MKCQ6663	99%	5,013.0 µg/mL	+/- 173.2261

* 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:

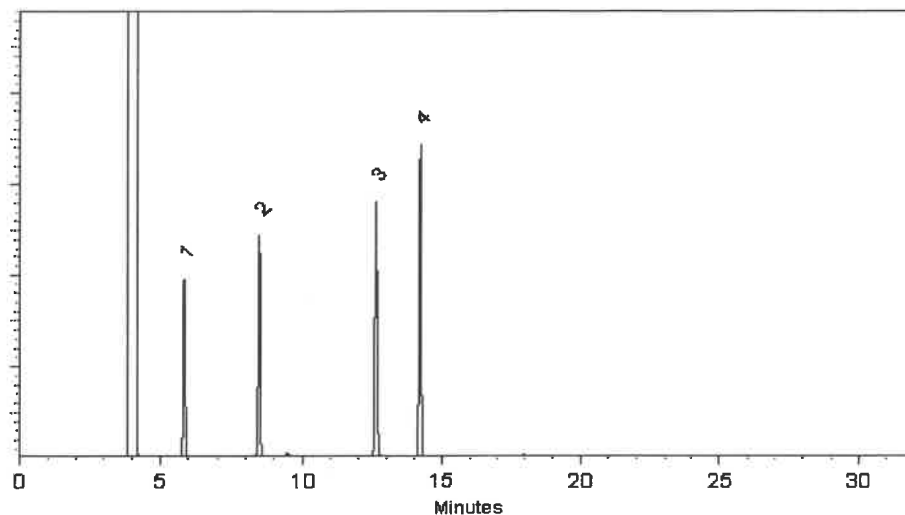
FID

Split Vent:

40 ml/min

Inj. Vol

1µl

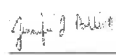


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Dakota Parson - Operations Technician I

Date Mixed: 22-Apr-2024

Balance Serial # B707717271


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 24-Apr-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:

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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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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.:** A0210618
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 : July 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	Acetone	67-64-1	SHBQ8504	99%	5,014.8 µg/mL	+/- 173.2883
2	2-Butanone (MEK)	78-93-3	SHBQ4704	99%	5,012.4 µg/mL	+/- 173.2054
3	4-Methyl-2-pentanone (MIBK)	108-10-1	SHBP9200	99%	5,011.6 µg/mL	+/- 173.1777
4	2-Hexanone	591-78-6	MKCQ6663	99%	5,013.0 µg/mL	+/- 173.2261

* 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:

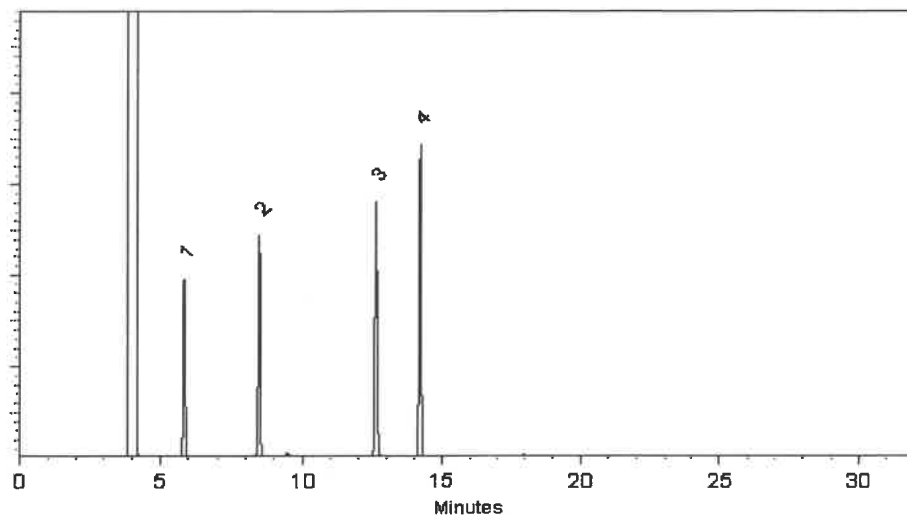
FID

Split Vent:

40 ml/min

Inj. Vol

1µl

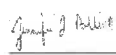


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Dakota Parson - Operations Technician I

Date Mixed: 22-Apr-2024

Balance Serial # B707717271


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 24-Apr-2024

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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V14756



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:

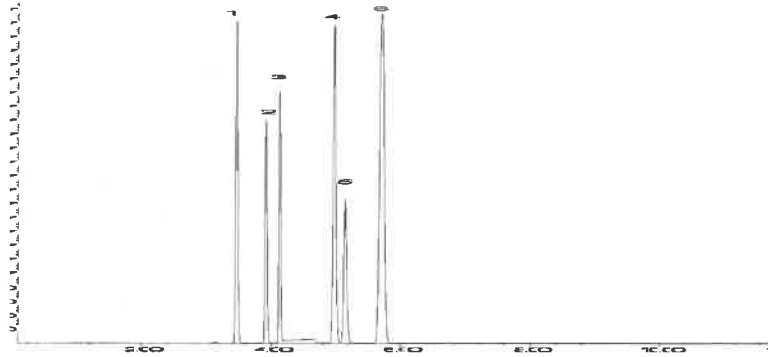
MSD

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 Suckal - 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:

- 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:

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

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.



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

www.restek.com

Rec 12/17/24
CERTIFIED REFERENCE MATERIAL

30 ml
Certificate of Analysis
chromatographic plus

V14727 to
V14756



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:

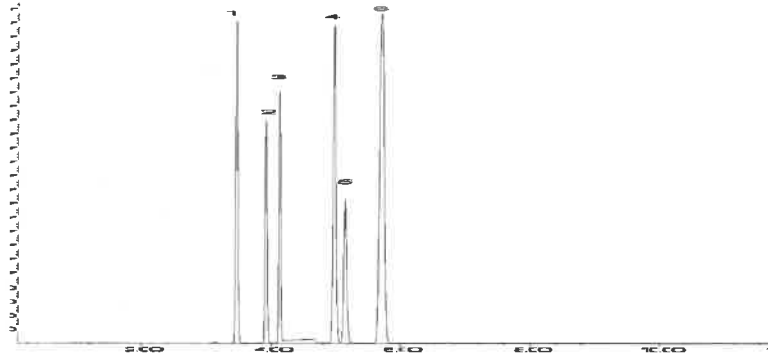
MSD

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 Suckal - 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:

- 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:

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

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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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

✓ 14842 to 14846



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:

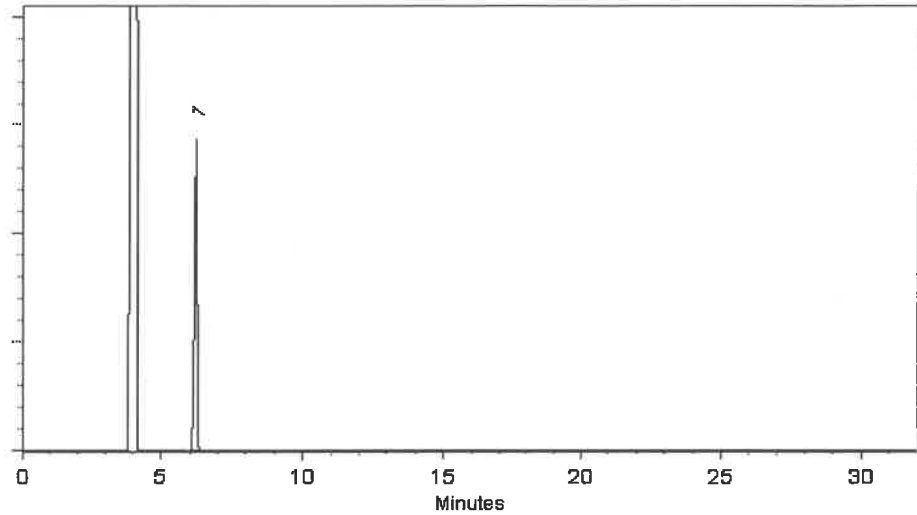
FID

Split Vent:

40 ml/min

Inj. Vol

1µl



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.

A. O. E.
Aaron Enyart - Operations Tech I

Date Mixed: 07-Oct-2024

Balance Serial # B251644995

Brittany Federinko
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/ μ ECD, 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:

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

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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2014 Dec 01/08/21
CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

V14803 - V14822



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:

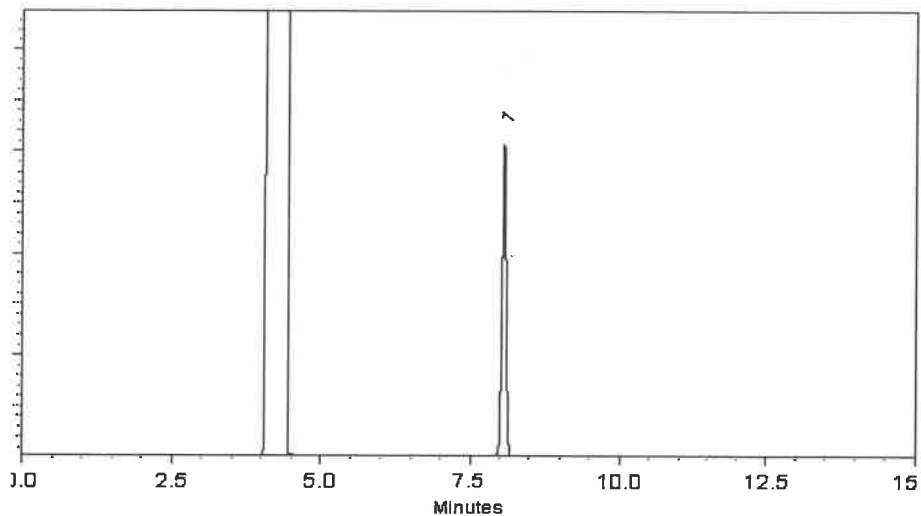
FID

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
By Jennifer Pollock at 7:12 am, Jan 05, 2025

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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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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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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2014 Dec 01/08/21
CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

V14803 - V14822



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:

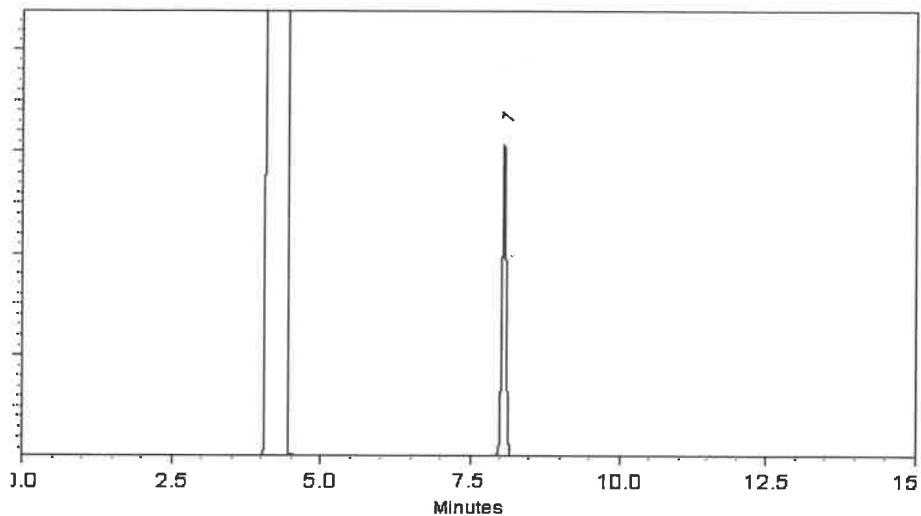
FID

Split Vent:

40 ml/min

Inj. Vol

1µl



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.

Ethan Winiarski - Operations Tech I

Date Mixed: 24-Dec-2024

Balance Serial # 1127510105

Dillan Murphy - Operations Technician I

Date Passed: 02-Jan-2025

REVIEWED
By Jennifer Pollock at 7:12 am, Jan 05, 2025

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

General Certified Reference Material Notes

Expiration Notes:

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Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis



Material No.: 9077-02
Batch No.: 22L0562016
Manufactured Date: 2022-10-26
Expiration Date: 2025-10-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (CH ₃ OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.2 ppm
Titration Acid (μeq/g)	≤ 0.3	0.2
Titration 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

Jamie Ethier
Vice President Global Quality



SHIPPING DOCUMENTS

CLIENT INFORMATION

CLIENT PROJECT INFORMATION

CLIENT BILLING INFORMATION

REPORT TO BE SENT TO:

COMPANY: Gannett Fleming
ADDRESS: 1010 Adams Ave
CITY: Audubon STATE: PA ZIP: 19405
ATTENTION: Joe Krupansky
PHONE: 610-301-8342 FAX:

PROJECT NAME: Amtrak Improvement of SB
PROJECT NO.: 9500 000888 LOCATION: Kearny, NJ
PROJECT MANAGER: Joe Krupansky
e-mail: QAQC@BEMSYS.COM
PHONE: 610-301-8342 FAX:

BILL TO: Alliance PO#: 07093
ADDRESS: 284 Sheffield St
CITY: Mountainside STATE: NJ ZIP: 07093
ATTENTION: Samantha Gentry PHONE: 908-789-3148

ANALYSIS

DATA TURNAROUND INFORMATION

FAX (RUSH) _____ DAYS*
HARDCOPY (DATA PACKAGE): 10 DAYS*
EDD: 10 DAYS*

*TO BE APPROVED BY CHEMTECH

STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

DATA DELIVERABLE INFORMATION

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

1. PCBs 2. TAL Metals 3. TCL-VOC +10 4. VOCs 5. TCL-SVOCs-BW120 6. EPH 7. RCRA 8. TCLP 9.

PRESERVATIVES

COMMENTS

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES										← Specify Preservatives A-HCl D-NaOH B-HNO3 E-ICE C-H2SO4 F-OTHER
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9	
1.	ENV-105-SB01	S		X	3/5/25	745	9	X	X	X	X	X	X	X	X		
2.	ENV-105-SB02	S		X		800	9			X	X	X	X	X	X		
3.	ENV-105-GW01	GW		X		815	8			X	X	X	X				
4.	ENV-103-SB01	S		X		1025	9			X	X	X	X	X	X		
5.	ENV-103-GW01	GW		X		1040	8			X	X	X	X				
6.	FB03062025	W			3/6/25			X	X	X	X	X	X				
7.	TB 03062025				NA	NA				X							
8.																	
9.																	
10.																	

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

RELINQUISHED BY SAMPLER:	DATE/TIME: <u>1205</u>	RECEIVED BY:	DATE/TIME: <u>1205</u>	Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP <u>29</u> °C
1. <u>[Signature]</u>	<u>3-6-25</u>	1. <u>[Signature]</u>	<u>3-6-25</u>	Comments:
RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:		
2.		2.		
RELINQUISHED BY SAMPLER:	DATE/TIME: <u>1515</u>	RECEIVED BY:		
3. <u>[Signature]</u>	<u>3-6-25</u>	3.		

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1514 PORT06

Client Name : Portal Partners Tri-Venture

Client Contact : Joseph Krupansky

Invoice Name : Portal Partners Tri-Venture

Invoice Contact : Joseph Krupansky

Order Date : 3/6/2025 2:08:00 PM

Project Name : Amtrak Sawtooth Bridges 2

Receive DateTime : 3/6/2025 12:00:00 AM

Purchase Order :

15:15

Project Mgr :

Report Type : NJ Reduced

EDD Type : EXCEL NJCLEANUP

Hard Copy Date :

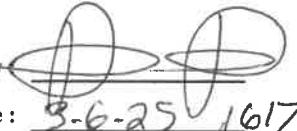
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q1514-01	ENV-105-SB01	Solid	03/05/2025	07:45					
					VOC-TCLVOA-10		8260D	10 Bus. Days	
Q1514-03	ENV-105-SB02	Solid	03/05/2025	08:00					
					VOC-TCLVOA-10		8260D	10 Bus. Days	
Q1514-05	ENV-103-SB01	Solid	03/05/2025	10:25					
					VOC-TCLVOA-10		8260D	10 Bus. Days	
Q1514-07	ENV-105-GW01	Water	03/05/2025	08:15					
					VOC-TCLVOA-10		8260-Low	10 Bus. Days	
Q1514-08	ENV-103-GW01	Water	03/05/2025	10:40					
					VOC-TCLVOA-10		8260-Low	10 Bus. Days	
Q1514-09	FB03062025	Water	03/05/2025	00:00					
			03/06/2025		VOC-TCLVOA-10		8260-Low	10 Bus. Days	
Q1514-10	TB03062025	Water	03/05/2025	00:00					
					VOC-TCLVOA-10		8260-Low	10 Bus. Days	

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1514	PORT06	Order Date : 3/6/2025 2:08:00 PM	Project Mgr :
Client Name : Portal Partners Tri-Venture		Project Name : Amtrak Sawtooth Bridges 2	Report Type : NJ Reduced
Client Contact : Joseph Krupansky		Receive DateTime : 3/6/2025 12:00:00 AM	EDD Type : EXCEL NJCLEANUP
Invoice Name : Portal Partners Tri-Venture		Purchase Order : 15:15	Hard Copy Date :
Invoice Contact : Joseph Krupansky			Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES

Relinquished By: 

Date / Time : 3-6-25 16:17

Received By: 

Date / Time : 3-6-25 16:17

Storage Area : VOA Refridgerator Room