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

DATA REPORTING QUALIFIERS- ORGANIC

For reporting results, the following " Results Qualifiers" are used:

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

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LAB CHRONICLE

OrderID:	Q2372	**OrderDate:**	6/19/2025 2:53:00 PM
Client:	G Environmental	**Project:**	Ave B
Contact:	Gary Landis	**Location:**	D51,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2372-01	**GAV1W**	**Water**			**06/19/25**			**06/19/25**
			VOCMS Group1	8260-Low			06/19/25	
Q2372-02	**GAV2W**	**Water**			**06/19/25**			**06/19/25**
			VOCMS Group1	8260-Low			06/19/25	

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Hit Summary Sheet
SW-846

SDG No.: Q2372

Client: G Environmental

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID:	**GAV1W**							
Q2372-01	GAV1W	Water	Acetone	110		1.50	5.00	ug/L
			Total Voc :	110				
			Total Concentration:	110				
Client ID:	**GAV2W**							
Q2372-02	GAV2W	Water	Acetone	3.30	J	1.50	5.00	ug/L
			Total Voc :	3.30				
			Total Concentration:	3.30				

QC SUMMARY

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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Surrogate Summary

SDG No.: Q2372

Client: G Environmental

Analytical Method: SW8260-Low

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits Low	Limits High
Q2372-01	GAV1W	1,2-Dichloroethane-d4	50	48.8	98	70 (74)	130 (125)
		Dibromofluoromethane	50	48.9	98	70 (75)	130 (124)
		Toluene-d8	50	50.3	101	70 (86)	130 (113)
		4-Bromofluorobenzene	50	51.6	103	70 (77)	130 (121)
Q2372-02	GAV2W	1,2-Dichloroethane-d4	50	48.7	97	70 (74)	130 (125)
		Dibromofluoromethane	50	48.6	97	70 (75)	130 (124)
		Toluene-d8	50	49.8	100	70 (86)	130 (113)
		4-Bromofluorobenzene	50	51.4	103	70 (77)	130 (121)
VX0619WBL01	VX0619WBL01	1,2-Dichloroethane-d4	50	48.3	97	70 (74)	130 (125)
		Dibromofluoromethane	50	49.0	98	70 (75)	130 (124)
		Toluene-d8	50	50.0	100	70 (86)	130 (113)
		4-Bromofluorobenzene	50	49.4	99	70 (77)	130 (121)
VX0619WBS01	VX0619WBS01	1,2-Dichloroethane-d4	50	49.8	100	70 (74)	130 (125)
		Dibromofluoromethane	50	52.0	104	70 (75)	130 (124)
		Toluene-d8	50	52.3	105	70 (86)	130 (113)
		4-Bromofluorobenzene	50	54.1	108	70 (77)	130 (121)
VX0619WBSD0	VX0619WBSD01	1,2-Dichloroethane-d4	50	51.5	103	70 (74)	130 (125)
		Dibromofluoromethane	50	52.8	106	70 (75)	130 (124)
		Toluene-d8	50	52.7	105	70 (86)	130 (113)
		4-Bromofluorobenzene	50	54.9	110	70 (77)	130 (121)

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2372

Client: G Environmental

Analytical Method: SW8260-Low **Datafile :** VX046762.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VX0619WBS01	Dichlorodifluoromethane	20	19.1	ug/L	96			40 (69)	160 (116)	
	Chloromethane	20	18.7	ug/L	94			40 (65)	160 (116)	
	Vinyl chloride	20	18.9	ug/L	95			70 (65)	130 (117)	
	Bromomethane	20	21.2	ug/L	106			40 (58)	160 (125)	
	Chloroethane	20	19.9	ug/L	100			40 (56)	160 (128)	
	Trichlorofluoromethane	20	18.4	ug/L	92			40 (73)	160 (115)	
	1,1,2-Trichlorotrifluoroethane	20	18.5	ug/L	93			70 (80)	130 (112)	
	1,1-Dichloroethene	20	18.6	ug/L	93			70 (74)	130 (110)	
	Acetone	100	74.1	ug/L	74			40 (60)	160 (125)	
	Carbon disulfide	20	17.0	ug/L	85			40 (64)	160 (112)	
	Methyl tert-butyl Ether	20	17.0	ug/L	85			70 (78)	130 (114)	
	Methyl Acetate	20	16.0	ug/L	80			70 (67)	130 (125)	
	Methylene Chloride	20	18.1	ug/L	91			70 (72)	130 (114)	
	trans-1,2-Dichloroethene	20	18.3	ug/L	92			70 (75)	130 (108)	
	1,1-Dichloroethane	20	18.5	ug/L	93			70 (78)	130 (112)	
	Cyclohexane	20	18.8	ug/L	94			70 (75)	130 (110)	
	2-Butanone	100	78.9	ug/L	79			40 (65)	160 (122)	
	Carbon Tetrachloride	20	18.0	ug/L	90			70 (77)	130 (113)	
	cis-1,2-Dichloroethene	20	18.6	ug/L	93			70 (77)	130 (110)	
	Bromochloromethane	20	20.8	ug/L	104			70 (70)	130 (124)	
	Chloroform	20	19.0	ug/L	95			70 (79)	130 (113)	
	1,1,1-Trichloroethane	20	17.7	ug/L	89			70 (80)	130 (108)	
	Methylcyclohexane	20	18.5	ug/L	93			70 (72)	130 (115)	
	Benzene	20	18.9	ug/L	95			70 (82)	130 (109)	
	1,2-Dichloroethane	20	18.5	ug/L	93			70 (80)	130 (115)	
	Trichloroethene	20	18.4	ug/L	92			70 (77)	130 (113)	
	1,2-Dichloropropane	20	18.4	ug/L	92			70 (83)	130 (111)	
	Bromodichloromethane	20	18.9	ug/L	95			70 (83)	130 (110)	
	4-Methyl-2-Pentanone	100	81.6	ug/L	82			40 (74)	160 (118)	
	Toluene	20	19.0	ug/L	95			70 (82)	130 (110)	
	t-1,3-Dichloropropene	20	18.0	ug/L	90			70 (79)	130 (110)	
	cis-1,3-Dichloropropene	20	18.2	ug/L	91			70 (82)	130 (110)	
	1,1,2-Trichloroethane	20	18.5	ug/L	93			70 (83)	130 (112)	
	2-Hexanone	100	78.9	ug/L	79			40 (73)	160 (117)	
	Dibromochloromethane	20	18.4	ug/L	92			70 (82)	130 (110)	
	1,2-Dibromoethane	20	18.0	ug/L	90			70 (81)	130 (110)	
	Tetrachloroethene	20	17.7	ug/L	89			70 (67)	130 (123)	
	Chlorobenzene	20	18.0	ug/L	90			70 (82)	130 (109)	
	Ethyl Benzene	20	18.0	ug/L	90			70 (83)	130 (109)	
	m/p-Xylenes	40	37.2	ug/L	93			70 (82)	130 (110)	
	o-Xylene	20	18.6	ug/L	93			70 (83)	130 (109)	
	Styrene	20	18.3	ug/L	92			70 (80)	130 (111)	
	Bromoform	20	16.7	ug/L	84			70 (79)	130 (109)	
	Isopropylbenzene	20	18.1	ug/L	91			70 (83)	130 (112)	
	1,1,2,2-Tetrachloroethane	20	17.3	ug/L	86			70 (76)	130 (118)	
	1,3-Dichlorobenzene	20	17.8	ug/L	89			70 (82)	130 (108)	
	1,4-Dichlorobenzene	20	17.5	ug/L	88			70 (82)	130 (107)	
	1,2-Dichlorobenzene	20	18.1	ug/L	91			70 (82)	130 (109)	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2372

Client: G Environmental

Analytical Method: SW8260-Low **Datafile :** VX046762.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	Limits RPD
VX0619WBS01	1,2-Dibromo-3-Chloropropane	20	15.1	ug/L	76			40 (68)	160 (112)	
	1,2,4-Trichlorobenzene	20	17.1	ug/L	86			70 (75)	130 (113)	
	1,2,3-Trichlorobenzene	20	17.6	ug/L	88			70 (76)	130 (114)	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2372

Client: G Environmental

Analytical Method: SW8260-Low **Datafile :** VX046763.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	Limits RPD
VX0619WBSD01	Dichlorodifluoromethane	20	19.8	ug/L	99	3		40 (69)	160 (116)	20 (19)
	Chloromethane	20	19.5	ug/L	98	4		40 (65)	160 (116)	20 (21)
	Vinyl chloride	20	19.7	ug/L	99	4		70 (65)	130 (117)	20 (19)
	Bromomethane	20	22.2	ug/L	111	5		40 (58)	160 (125)	20 (20)
	Chloroethane	20	20.6	ug/L	103	3		40 (56)	160 (128)	20 (20)
	Trichlorofluoromethane	20	19.3	ug/L	97	5		40 (73)	160 (115)	20 (16)
	1,1,2-Trichlorotrifluoroethane	20	19.7	ug/L	99	6		70 (80)	130 (112)	20 (15)
	1,1-Dichloroethene	20	19.5	ug/L	98	5		70 (74)	130 (110)	20 (20)
	Acetone	100	81.5	ug/L	82	10		40 (60)	160 (125)	20 (20)
	Carbon disulfide	20	18.0	ug/L	90	6		40 (64)	160 (112)	20 (20)
	Methyl tert-butyl Ether	20	18.7	ug/L	94	10		70 (78)	130 (114)	20 (20)
	Methyl Acetate	20	17.8	ug/L	89	11		70 (67)	130 (125)	20 (20)
	Methylene Chloride	20	19.3	ug/L	97	6		70 (72)	130 (114)	20 (20)
	trans-1,2-Dichloroethene	20	19.2	ug/L	96	4		70 (75)	130 (108)	20 (16)
	1,1-Dichloroethane	20	19.4	ug/L	97	4		70 (78)	130 (112)	20 (20)
	Cyclohexane	20	19.7	ug/L	99	5		70 (75)	130 (110)	20 (20)
	2-Butanone	100	87.0	ug/L	87	10		40 (65)	160 (122)	20 (26)
	Carbon Tetrachloride	20	19.1	ug/L	96	6		70 (77)	130 (113)	20 (15)
	cis-1,2-Dichloroethene	20	19.4	ug/L	97	4		70 (77)	130 (110)	20 (20)
	Bromochloromethane	20	23.1	ug/L	116	11		70 (70)	130 (124)	20 (20)
	Chloroform	20	20.5	ug/L	103	8		70 (79)	130 (113)	20 (20)
	1,1,1-Trichloroethane	20	19.3	ug/L	97	9		70 (80)	130 (108)	20 (20)
	Methylcyclohexane	20	19.0	ug/L	95	2		70 (72)	130 (115)	20 (20)
	Benzene	20	20.0	ug/L	100	5		70 (82)	130 (109)	20 (15)
	1,2-Dichloroethane	20	20.1	ug/L	101	8		70 (80)	130 (115)	20 (20)
	Trichloroethene	20	19.3	ug/L	97	5		70 (77)	130 (113)	20 (15)
	1,2-Dichloropropane	20	20.3	ug/L	102	10		70 (83)	130 (111)	20 (16)
	Bromodichloromethane	20	20.1	ug/L	101	6		70 (83)	130 (110)	20 (16)
	4-Methyl-2-Pentanone	100	91.8	ug/L	92	11		40 (74)	160 (118)	20 (25)
	Toluene	20	20.3	ug/L	102	7		70 (82)	130 (110)	20 (16)
	t-1,3-Dichloropropene	20	19.5	ug/L	98	9		70 (79)	130 (110)	20 (20)
	cis-1,3-Dichloropropene	20	19.9	ug/L	100	9		70 (82)	130 (110)	20 (16)
	1,1,2-Trichloroethane	20	20.4	ug/L	102	9		70 (83)	130 (112)	20 (20)
	2-Hexanone	100	88.8	ug/L	89	12		40 (73)	160 (117)	20 (25)
	Dibromochloromethane	20	19.9	ug/L	100	8		70 (82)	130 (110)	20 (20)
	1,2-Dibromoethane	20	20.1	ug/L	101	12		70 (81)	130 (110)	20 (20)
	Tetrachloroethene	20	18.8	ug/L	94	5		70 (67)	130 (123)	20 (15)
	Chlorobenzene	20	19.4	ug/L	97	7		70 (82)	130 (109)	20 (15)
	Ethyl Benzene	20	19.1	ug/L	96	6		70 (83)	130 (109)	20 (16)
	m/p-Xylenes	40	38.8	ug/L	97	4		70 (82)	130 (110)	20 (15)
	o-Xylene	20	19.8	ug/L	99	6		70 (83)	130 (109)	20 (20)
	Styrene	20	19.7	ug/L	99	7		70 (80)	130 (111)	20 (17)
	Bromoform	20	18.4	ug/L	92	9		70 (79)	130 (109)	20 (20)
	Isopropylbenzene	20	18.6	ug/L	93	2		70 (83)	130 (112)	20 (29)
	1,1,2,2-Tetrachloroethane	20	18.4	ug/L	92	7		70 (76)	130 (118)	20 (20)
	1,3-Dichlorobenzene	20	18.6	ug/L	93	4		70 (82)	130 (108)	20 (20)
	1,4-Dichlorobenzene	20	17.8	ug/L	89	1		70 (82)	130 (107)	20 (15)
	1,2-Dichlorobenzene	20	19.0	ug/L	95	4		70 (82)	130 (109)	20 (20)

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2372

Client: G Environmental

Analytical Method: SW8260-Low **Datafile :** VX046763.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	Limits RPD
VX0619WBSD01	1,2-Dibromo-3-Chloropropane	20	16.1	ug/L	81	6		40 (68)	160 (112)	20 (20)
	1,2,4-Trichlorobenzene	20	18.3	ug/L	92	7		70 (75)	130 (113)	20 (29)
	1,2,3-Trichlorobenzene	20	18.2	ug/L	91	3		70 (76)	130 (114)	20 (29)

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VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VX0619WBL01

Lab Name: CHEMTECH Contract: GENV01

Lab Code: CHEM Case No.: Q2372 SAS No.: Q2372 SDG NO.: Q2372

Lab File ID: VX046760.D Lab Sample ID: VX0619WBL01

Date Analyzed: 06/19/2025 Time Analyzed: 10:33

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

Instrument ID: MSVOA_X

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VX0619WBS01	VX0619WBS01	VX046762.D	06/19/2025
VX0619WBSD01	VX0619WBSD01	VX046763.D	06/19/2025
GAV2W	Q2372-02	VX046772.D	06/19/2025
GAV1W	Q2372-01	VX046773.D	06/19/2025

COMMENTS:

Raw Data: **VX046715.D**

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: GENV01

Lab Code: CHEM Case No.: Q2372 SAS No.: Q2372 SDG NO.: Q2372

Lab File ID: VX046715.D BFB Injection Date: 06/17/2025

Instrument ID: MSVOA_X BFB Injection Time: 08:46

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.7
75	30.0 - 60.0% of mass 95	50.7
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.5 (0.7) 1
174	50.0 - 100.0% of mass 95	74.8
175	5.0 - 9.0% of mass 174	5.5 (7.4) 1
176	95.0 - 101.0% of mass 174	72 (96.2) 1
177	5.0 - 9.0% of mass 176	4.3 (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
VSTDICC005	VSTDICC005	VX046718.D	06/17/2025	11:19
VSTDICC020	VSTDICC020	VX046719.D	06/17/2025	13:59
VSTDICCC050	VSTDICCC050	VX046720.D	06/17/2025	14:20
VSTDICC100	VSTDICC100	VX046721.D	06/17/2025	14:41
VSTDICC150	VSTDICC150	VX046722.D	06/17/2025	15:02
VSTDICC001	VSTDICC001	VX046725.D	06/17/2025	17:18

Raw Data: **VX046757.D**

Alliance TECHNICAL GROUP
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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: GENV01

Lab Code: CHEM Case No.: Q2372 SAS No.: Q2372 SDG NO.: Q2372

Lab File ID: VX046757.D BFB Injection Date: 06/19/2025

Instrument ID: MSVOA_X BFB Injection Time: 08:42

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.8
75	30.0 - 60.0% of mass 95	50.7
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.3
173	Less than 2.0% of mass 174	0.7 (1) 1
174	50.0 - 100.0% of mass 95	72.6
175	5.0 - 9.0% of mass 174	5.7 (7.8) 1
176	95.0 - 101.0% of mass 174	71.1 (97.9) 1
177	5.0 - 9.0% of mass 176	4.5 (6.3) 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	VX046758.D	06/19/2025	09:43
VX0619WBL01	VX0619WBL01	VX046760.D	06/19/2025	10:33
VX0619WBS01	VX0619WBS01	VX046762.D	06/19/2025	11:24
VX0619WBSD01	VX0619WBSD01	VX046763.D	06/19/2025	11:51
GAV2W	Q2372-02	VX046772.D	06/19/2025	16:06
GAV1W	Q2372-01	VX046773.D	06/19/2025	16:27

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: GENV01

Lab Code: CHEM Case No.: Q2372 SAS No.: Q2372 SDG NO.: Q2372

Lab File ID: VX046758.D Date Analyzed: 06/19/2025

Instrument ID: MSVOA_X Time Analyzed: 09:43

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

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	137182	5.56	224265	6.76	197740	10.05
UPPER LIMIT	274364	6.056	448530	7.263	395480	10.549
LOWER LIMIT	68591	5.056	112133	6.263	98870	9.549
EPA SAMPLE NO.						
GAV1W	139696	5.56	239120	6.77	216781	10.06
GAV2W	168816	5.56	291352	6.77	260859	10.05
VX0619WBL01	124937	5.56	212303	6.77	191555	10.06
VX0619WBS01	137936	5.56	227140	6.77	207463	10.06
VX0619WBSD01	120371	5.56	199496	6.76	183807	10.06

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

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

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

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: GENV01

Lab Code: CHEM Case No.: Q2372 SAS No.: Q2372 SDG NO.: Q2372

Lab File ID: VX046758.D Date Analyzed: 06/19/2025

Instrument ID: MSVOA_X Time Analyzed: 09:43

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

	IS4 AREA #	RT #				
12 HOUR STD	96867	12.018				
UPPER LIMIT	193734	12.518				
LOWER LIMIT	48433.5	11.518				
EPA SAMPLE NO.						
GAV1W	109489	12.02				
GAV2W	131317	12.02				
VX0619WBL01	93040	12.02				
VX0619WBS01	104652	12.02				
VX0619WBSD01	94851	12.02				

IS4 = 1,4-Dichlorobenzene-d4

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

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

SAMPLE DATA

Raw Data: **VX046773.D**

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Report of Analysis

Client:	G Environmental	Date Collected:	06/19/25
Project:	Ave B	Date Received:	06/19/25
Client Sample ID:	GAV1W	SDG No.:	Q2372
Lab Sample ID:	Q2372-01	Matrix:	Water
Analytical Method:	8260D	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX046773.D	1		06/19/25 16:27	VX061925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.22	U	0.22	1.00	ug/L
74-87-3	Chloromethane	0.32	U	0.32	1.00	ug/L
75-01-4	Vinyl Chloride	0.26	U	0.26	1.00	ug/L
74-83-9	Bromomethane	1.40	U	1.40	5.00	ug/L
75-00-3	Chloroethane	0.47	U	0.47	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.33	U	0.33	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	0.23	U	0.23	1.00	ug/L
67-64-1	Acetone	110		1.50	5.00	ug/L
75-15-0	Carbon Disulfide	0.21	U	0.21	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	0.27	U	0.27	1.00	ug/L
75-09-2	Methylene Chloride	0.28	U	0.28	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.23	U	0.23	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.23	U	0.23	1.00	ug/L
110-82-7	Cyclohexane	1.50	U	1.50	5.00	ug/L
78-93-3	2-Butanone	0.98	U	0.98	5.00	ug/L
56-23-5	Carbon Tetrachloride	0.25	U	0.25	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.19	U	0.19	1.00	ug/L
74-97-5	Bromochloromethane	0.22	U	0.22	1.00	ug/L
67-66-3	Chloroform	0.25	U	0.25	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.20	U	0.20	1.00	ug/L
108-87-2	Methylcyclohexane	0.16	U	0.16	1.00	ug/L
71-43-2	Benzene	0.15	U	0.15	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.22	U	0.22	1.00	ug/L
79-01-6	Trichloroethene	0.090	U	0.090	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.20	U	0.20	1.00	ug/L
75-27-4	Bromodichloromethane	0.22	U	0.22	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	0.68	U	0.68	5.00	ug/L
108-88-3	Toluene	0.14	U	0.14	1.00	ug/L

Raw Data: **VX046773.D**

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Fax : 908 789 8922

Report of Analysis

Client:	G Environmental	Date Collected:	06/19/25
Project:	Ave B	Date Received:	06/19/25
Client Sample ID:	GAV1W	SDG No.:	Q2372
Lab Sample ID:	Q2372-01	Matrix:	Water
Analytical Method:	8260D	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX046773.D	1		06/19/25 16:27	VX061925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.17	U	0.17	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.16	U	0.16	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	0.89	U	0.89	5.00	ug/L
124-48-1	Dibromochloromethane	0.18	U	0.18	1.00	ug/L
106-93-4	1,2-Dibromoethane	0.15	U	0.15	1.00	ug/L
127-18-4	Tetrachloroethene	0.23	U	0.23	1.00	ug/L
108-90-7	Chlorobenzene	0.12	U	0.12	1.00	ug/L
100-41-4	Ethyl Benzene	0.13	U	0.13	1.00	ug/L
179601-23-1	m/p-Xylenes	0.24	U	0.24	2.00	ug/L
95-47-6	o-Xylene	0.12	U	0.12	1.00	ug/L
100-42-5	Styrene	0.15	U	0.15	1.00	ug/L
75-25-2	Bromoform	0.19	U	0.19	1.00	ug/L
98-82-8	Isopropylbenzene	0.12	U	0.12	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.26	U	0.26	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.16	U	0.16	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.19	U	0.19	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.16	U	0.16	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.53	U	0.53	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.20	U	0.20	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.20	U	0.20	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	48.8		70 (74) - 130 (125)	98%	SPK: 50
1868-53-7	Dibromofluoromethane	48.9		70 (75) - 130 (124)	98%	SPK: 50
2037-26-5	Toluene-d8	50.3		70 (86) - 130 (113)	101%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.6		70 (77) - 130 (121)	103%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	140000	5.562			
540-36-3	1,4-Difluorobenzene	239000	6.769			
3114-55-4	Chlorobenzene-d5	217000	10.055			
3855-82-1	1,4-Dichlorobenzene-d4	109000	12.018			

Raw Data: **VX046773.D**

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Fax : 908 789 8922

Report of Analysis

Client:	G Environmental		Date Collected:	06/19/25	
Project:	Ave B		Date Received:	06/19/25	
Client Sample ID:	GAV1W		SDG No.:	Q2372	
Lab Sample ID:	Q2372-01		Matrix:	Water	
Analytical Method:	8260D		% Solid:	0	
Sample Wt/Vol:	5 Units:	mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	DB-624UI ID :	0.18	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX046773.D	1		06/19/25 16:27	VX061925

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_X\Data\VX061925\
Data File : VX046773.D
Acq On : 19 Jun 2025 16:27
Operator : JC/MD
Sample : Q2372-01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 17 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
GAV1W

Quant Time: Jun 20 05:22:11 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 03:09:16 2025
Response via : Initial Calibration

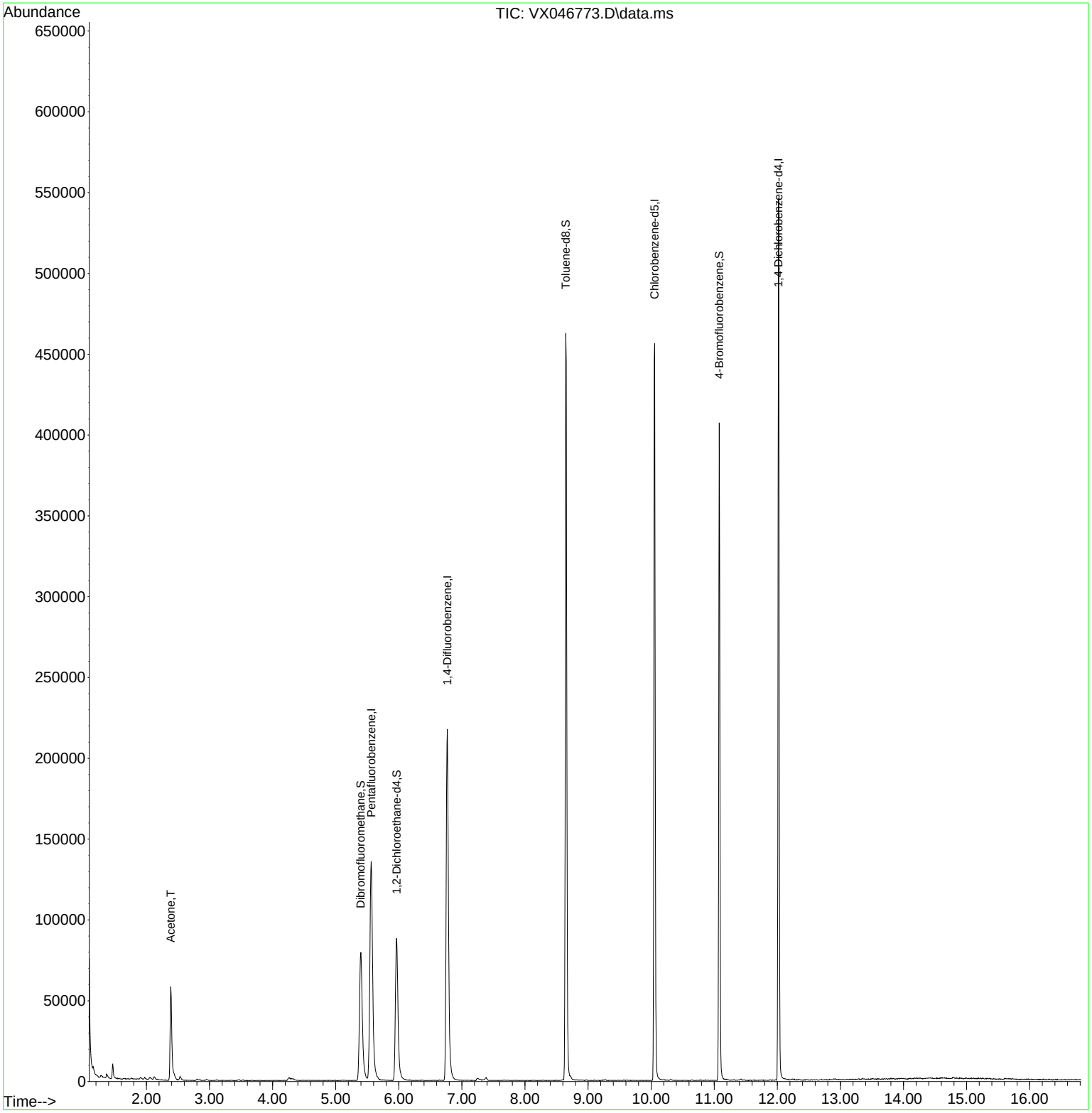
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.562	168	139696	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.769	114	239120	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	216781	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	109489	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.964	65	94288	48.797	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 97.600%			
35) Dibromofluoromethane	5.397	113	77297	48.857	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 97.720%			
50) Toluene-d8	8.647	98	286020	50.319	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 100.640%			
62) 4-Bromofluorobenzene	11.079	95	109386	51.626	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 103.260%			
Target Compounds						Qvalue
16) Acetone	2.386	43	71832	111.479	ug/l	99

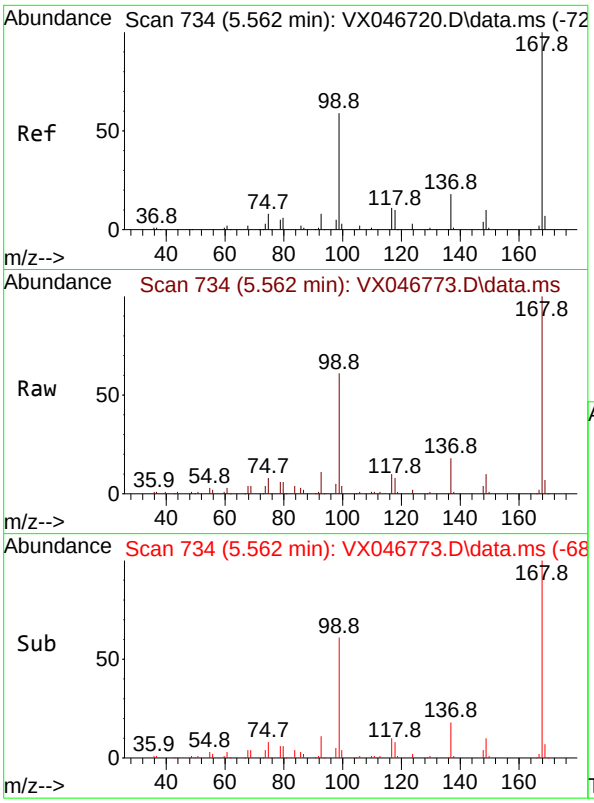
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061925\
Data File : VX046773.D
Acq On : 19 Jun 2025 16:27
Operator : JC/MD
Sample : Q2372-01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 17 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
GAV1W

Quant Time: Jun 20 05:22:11 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 03:09:16 2025
Response via : Initial Calibration



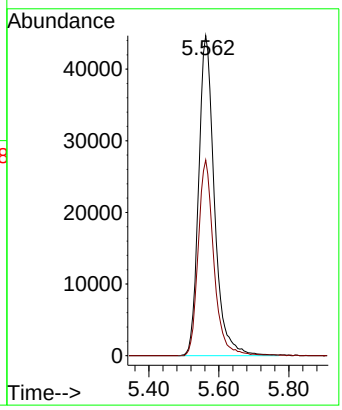


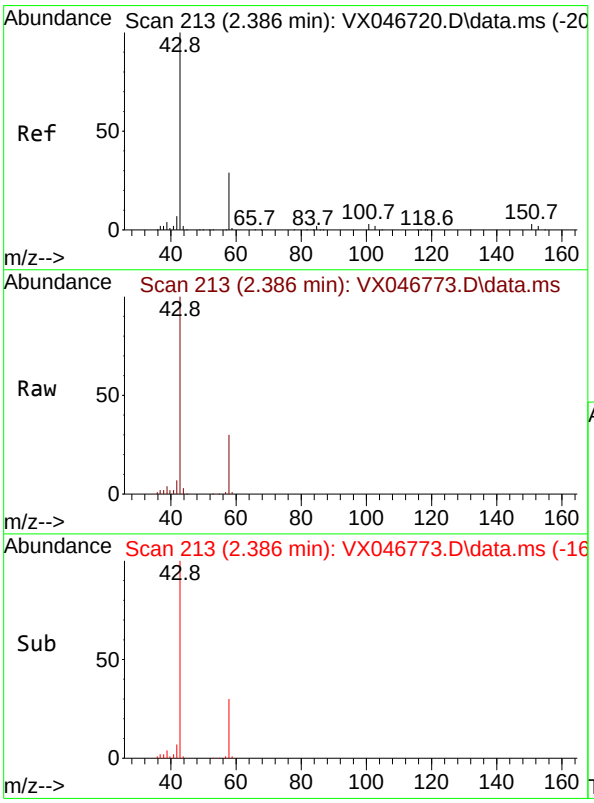
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.562 min Scan# 7
Delta R.T. 0.000 min
Lab File: VX046773.D
Acq: 19 Jun 2025 16:27

Instrument :
MSVOA_X
ClientSampleId :
GAV1W

Tgt Ion:168 Resp: 139696

Ion	Ratio	Lower	Upper
168	100		
99	61.1	48.5	72.7

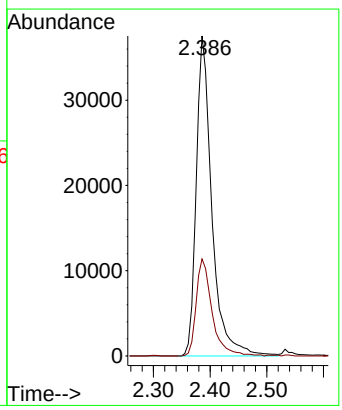


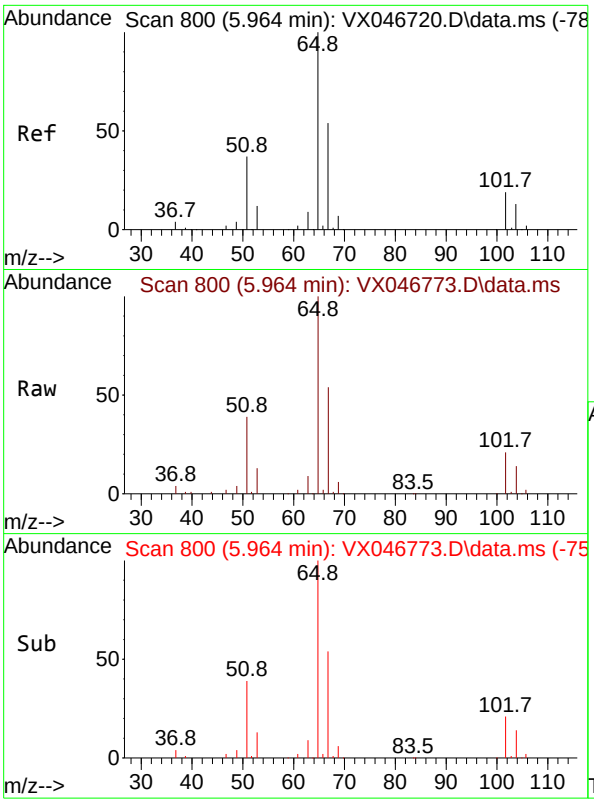


#16
Acetone
Concen: 111.479 ug/l
RT: 2.386 min Scan# 213
Delta R.T. 0.000 min
Lab File: VX046773.D
Acq: 19 Jun 2025 16:27

Tgt Ion: 43 Resp: 71832

Ion	Ratio	Lower	Upper
43	100		
58	30.3	24.5	36.7



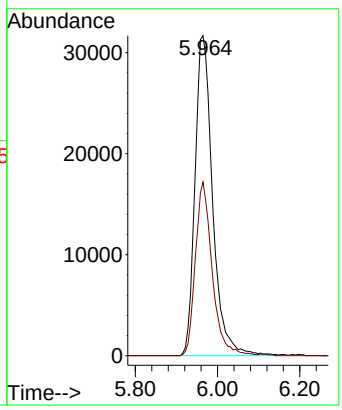


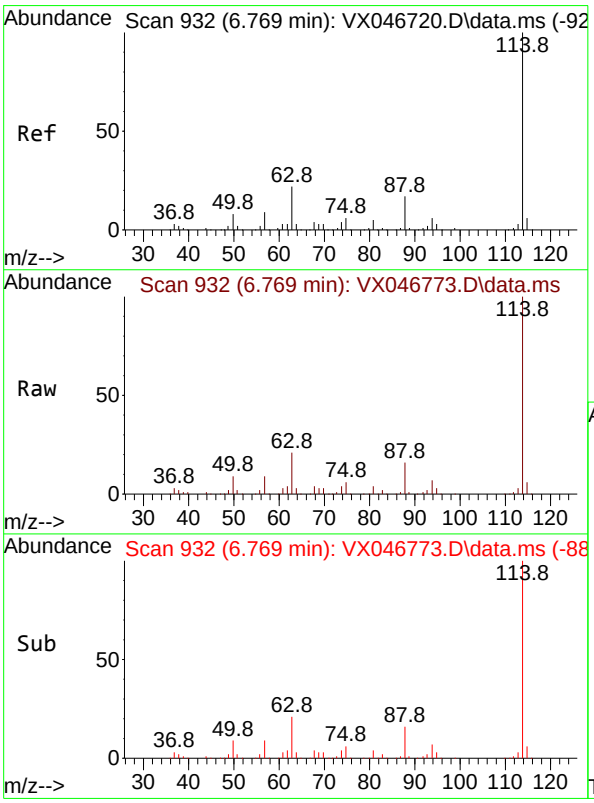
#33
1,2-Dichloroethane-d4
Concen: 48.797 ug/l
RT: 5.964 min Scan# 8
Delta R.T. 0.000 min
Lab File: VX046773.D
Acq: 19 Jun 2025 16:27

Instrument :
MSVOA_X
ClientSampleId :
GAV1W

Tgt Ion: 65 Resp: 94288

Ion	Ratio	Lower	Upper
65	100		
67	51.8	0.0	105.4

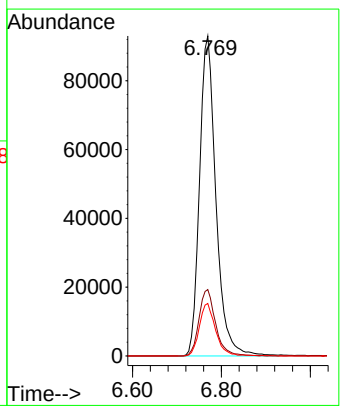


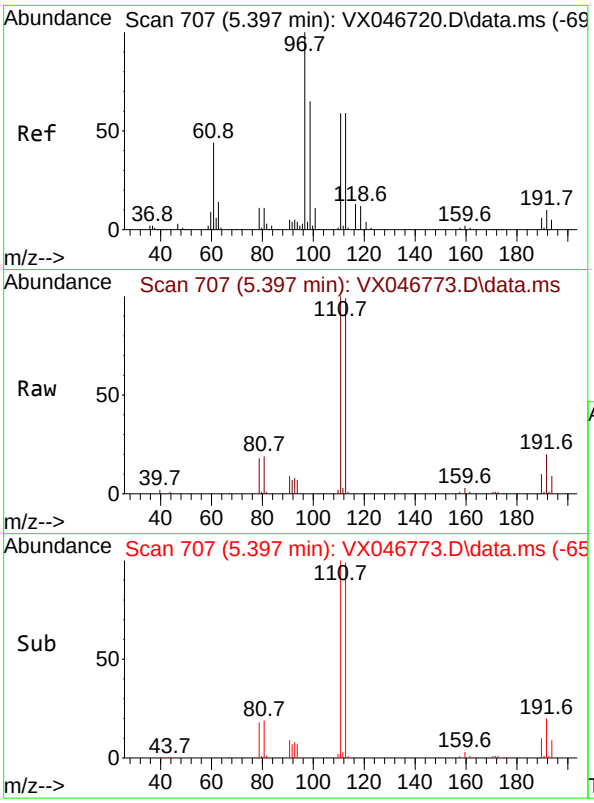


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.769 min Scan# 932
Delta R.T. 0.000 min
Lab File: VX046773.D
Acq: 19 Jun 2025 16:27

Tgt Ion:114 Resp: 239120

Ion	Ratio	Lower	Upper
114	100		
63	20.7	0.0	44.2
88	16.4	0.0	33.2



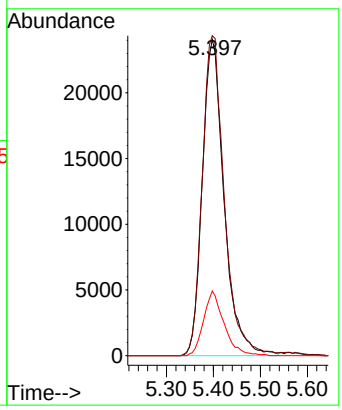


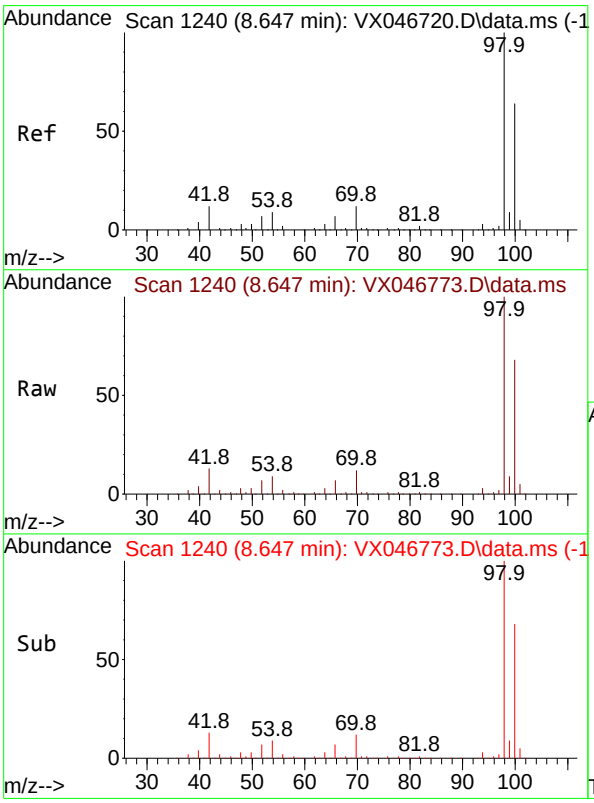
#35
Dibromofluoromethane
Concen: 48.857 ug/l
RT: 5.397 min Scan# 7
Delta R.T. 0.000 min
Lab File: VX046773.D
Acq: 19 Jun 2025 16:27

Instrument :
MSVOA_X
ClientSampleId :
GAV1W

Tgt Ion:113 Resp: 77297

Ion	Ratio	Lower	Upper
113	100		
111	102.7	82.0	123.0
192	19.2	15.3	22.9

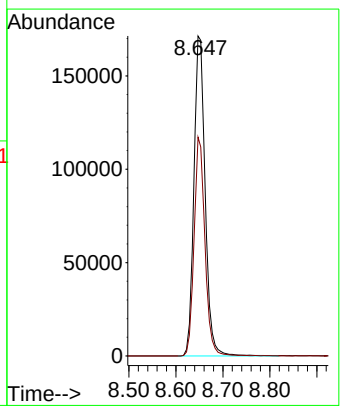


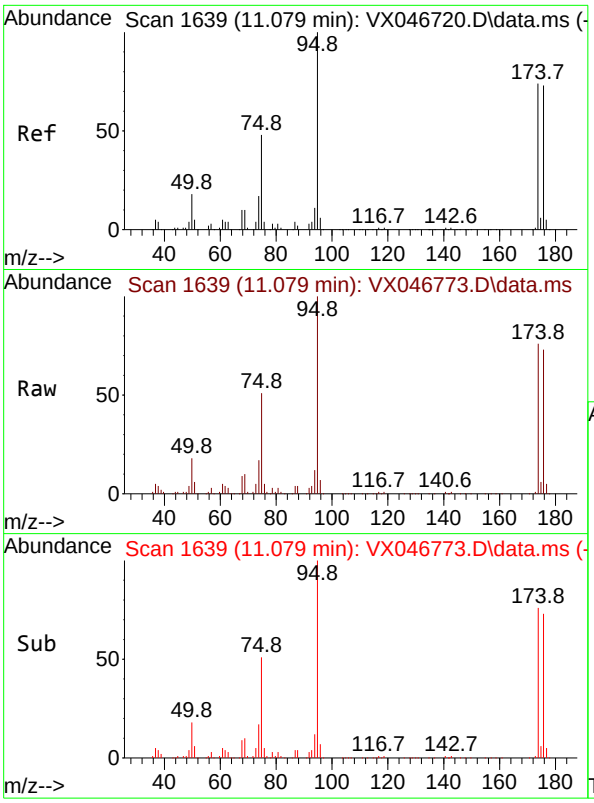


#50
Toluene-d8
Concen: 50.319 ug/l
RT: 8.647 min Scan# 1240
Delta R.T. 0.000 min
Lab File: VX046773.D
Acq: 19 Jun 2025 16:27

Tgt Ion: 98 Resp: 286020

Ion	Ratio	Lower	Upper
98	100		
100	66.2	53.0	79.4



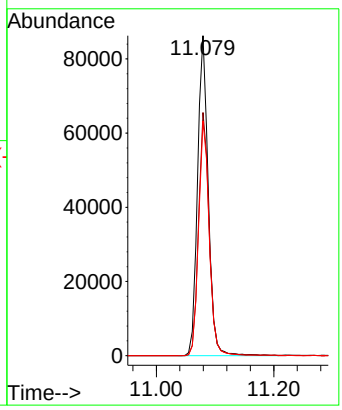


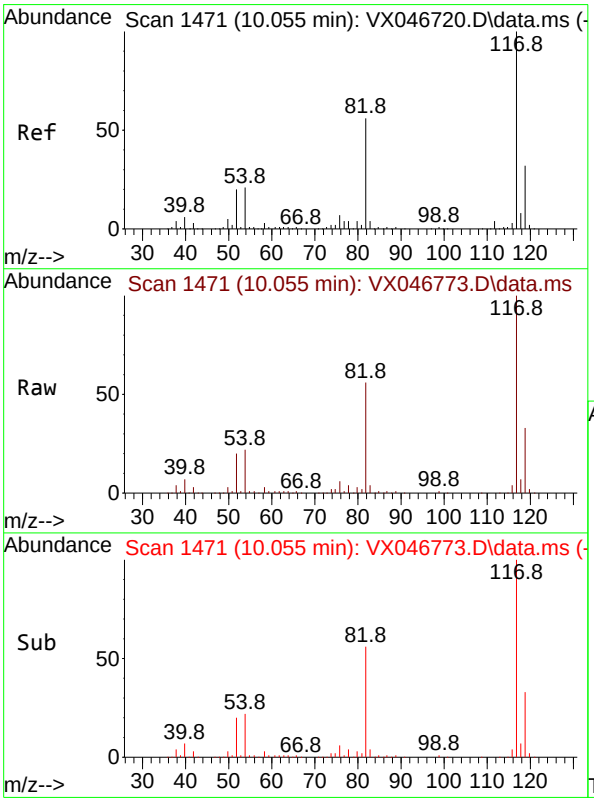
#62
4-Bromofluorobenzene
Concen: 51.626 ug/l
RT: 11.079 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX046773.D
Acq: 19 Jun 2025 16:27

Instrument :
MSVOA_X
ClientSampleId :
GAV1W

Tgt Ion: 95 Resp: 109386

Ion	Ratio	Lower	Upper
95	100		
174	75.6	0.0	150.4
176	72.7	0.0	145.0

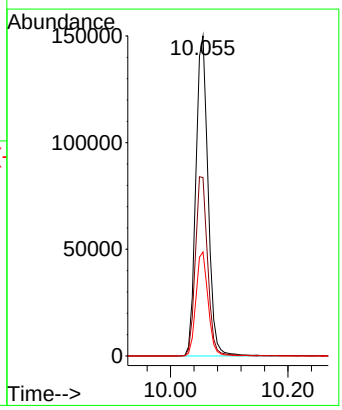


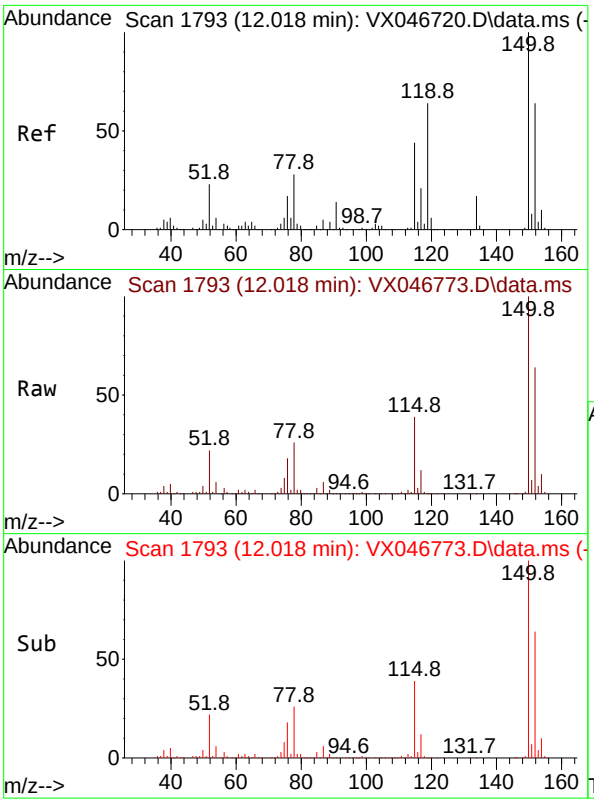


#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.055 min Scan# 1471
Delta R.T. 0.000 min
Lab File: VX046773.D
Acq: 19 Jun 2025 16:27

Tgt Ion:117 Resp: 216781

Ion	Ratio	Lower	Upper
117	100		
82	55.8	44.6	66.8
119	32.5	25.8	38.8



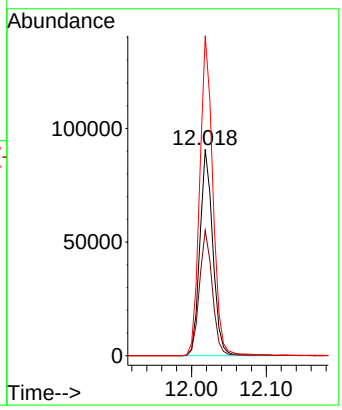


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.018 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX046773.D
Acq: 19 Jun 2025 16:27

Instrument :
MSVOA_X
ClientSampleId :
GAV1W

Tgt Ion:152 Resp: 109489

Ion	Ratio	Lower	Upper
152	100		
115	60.4	43.2	129.6
150	157.2	0.0	346.8



Sample Results: **VX046773.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061925\
Data File : VX046773.D
Acq On : 19 Jun 2025 16:27
Operator : JC/MD
Sample : Q2372-01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 17 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
GAV1W

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_X\Method\82X061725W.M
Title : SW846 8260

Signal : TIC: VX046773.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.465	58	62	74	rVB	9269	13158	1.73%	0.312%
2	2.386	207	213	229	rBV	57917	113267	14.89%	2.686%
3	5.397	696	707	724	rBV3	79221	251261	33.04%	5.959%
4	5.562	724	734	760	rVB	135360	417949	54.96%	9.912%
5	5.964	791	800	822	rBV	87943	256422	33.72%	6.081%
6	6.769	921	932	957	rBV	217507	558411	73.42%	13.243%
7	8.647	1234	1240	1263	rVB	462103	760525	100.00%	18.036%
8	10.055	1465	1471	1492	rBV	456002	665976	87.57%	15.794%
9	11.079	1634	1639	1655	rBV	406915	514099	67.60%	12.192%
10	12.018	1788	1793	1808	rBV	545419	665653	87.53%	15.786%

Sum of corrected areas: 4216721

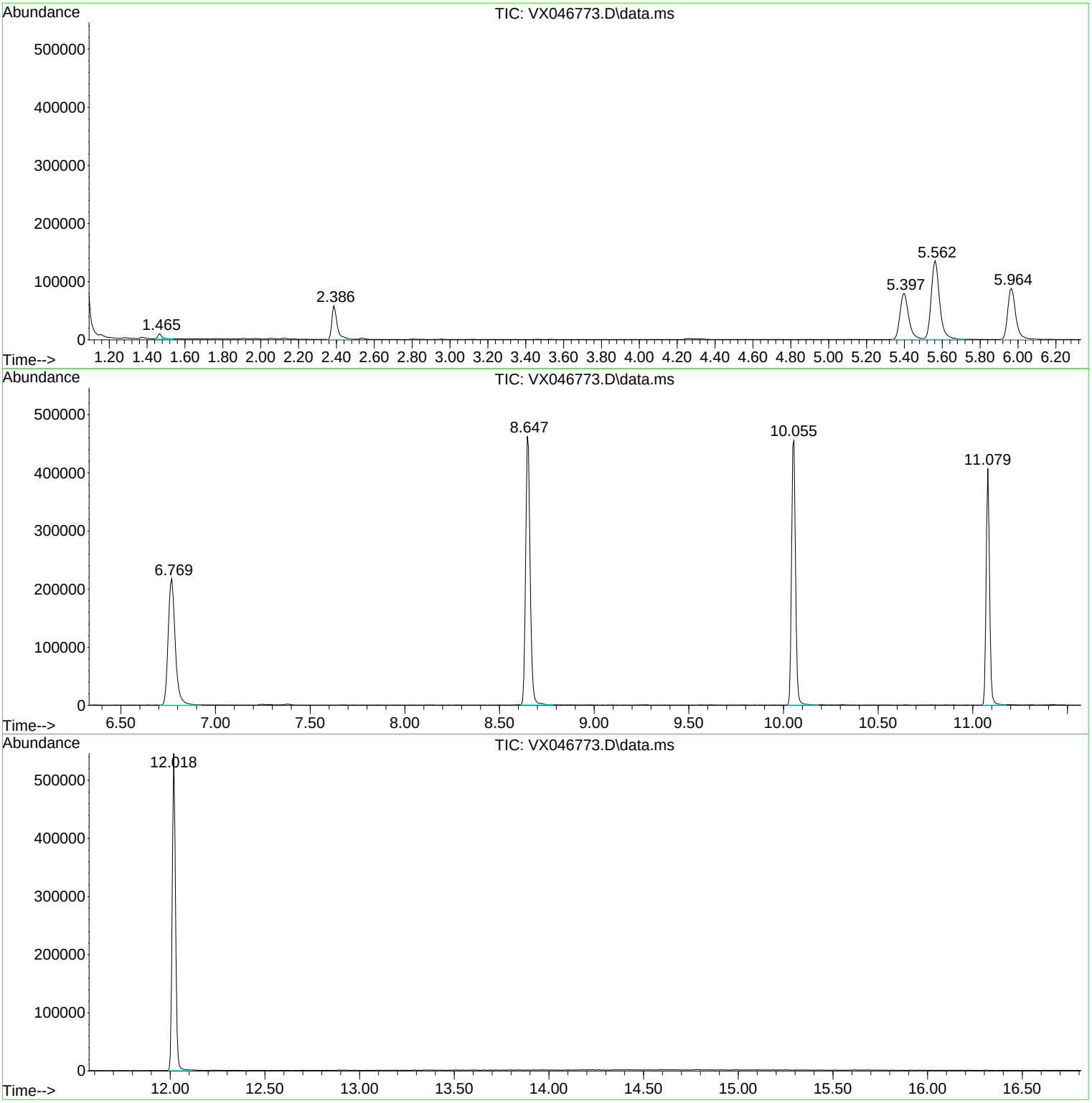
Sample Results: **VX046773.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061925\
Data File : VX046773.D
Acq On : 19 Jun 2025 16:27
Operator : JC/MD
Sample : Q2372-01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 17 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
GAV1W

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260

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



Library Search Compound Report

Sample Results: **VX046773.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061925\
Data File : VX046773.D
Acq On : 19 Jun 2025 16:27
Operator : JC/MD
Sample : Q2372-01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 17 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
GAV1W

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.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_X\Data\VX061925\
Data File : VX046773.D
Acq On : 19 Jun 2025 16:27
Operator : JC/MD
Sample : Q2372-01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 17 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
GAV1W

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260

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

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

Raw Data: **VX046772.D**

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

Report of Analysis

Client:	G Environmental	Date Collected:	06/19/25
Project:	Ave B	Date Received:	06/19/25
Client Sample ID:	GAV2W	SDG No.:	Q2372
Lab Sample ID:	Q2372-02	Matrix:	Water
Analytical Method:	8260D	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX046772.D	1		06/19/25 16:06	VX061925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.22	U	0.22	1.00	ug/L
74-87-3	Chloromethane	0.32	U	0.32	1.00	ug/L
75-01-4	Vinyl Chloride	0.26	U	0.26	1.00	ug/L
74-83-9	Bromomethane	1.40	U	1.40	5.00	ug/L
75-00-3	Chloroethane	0.47	U	0.47	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.33	U	0.33	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	0.23	U	0.23	1.00	ug/L
67-64-1	Acetone	3.30	J	1.50	5.00	ug/L
75-15-0	Carbon Disulfide	0.21	U	0.21	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	0.27	U	0.27	1.00	ug/L
75-09-2	Methylene Chloride	0.28	U	0.28	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.23	U	0.23	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.23	U	0.23	1.00	ug/L
110-82-7	Cyclohexane	1.50	U	1.50	5.00	ug/L
78-93-3	2-Butanone	0.98	U	0.98	5.00	ug/L
56-23-5	Carbon Tetrachloride	0.25	U	0.25	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.19	U	0.19	1.00	ug/L
74-97-5	Bromochloromethane	0.22	U	0.22	1.00	ug/L
67-66-3	Chloroform	0.25	U	0.25	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.20	U	0.20	1.00	ug/L
108-87-2	Methylcyclohexane	0.16	U	0.16	1.00	ug/L
71-43-2	Benzene	0.15	U	0.15	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.22	U	0.22	1.00	ug/L
79-01-6	Trichloroethene	0.090	U	0.090	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.20	U	0.20	1.00	ug/L
75-27-4	Bromodichloromethane	0.22	U	0.22	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	0.68	U	0.68	5.00	ug/L
108-88-3	Toluene	0.14	U	0.14	1.00	ug/L

Raw Data: **VX046772.D**

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

Report of Analysis

Client:	G Environmental	Date Collected:	06/19/25
Project:	Ave B	Date Received:	06/19/25
Client Sample ID:	GAV2W	SDG No.:	Q2372
Lab Sample ID:	Q2372-02	Matrix:	Water
Analytical Method:	8260D	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX046772.D	1		06/19/25 16:06	VX061925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.17	U	0.17	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.16	U	0.16	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	0.89	U	0.89	5.00	ug/L
124-48-1	Dibromochloromethane	0.18	U	0.18	1.00	ug/L
106-93-4	1,2-Dibromoethane	0.15	U	0.15	1.00	ug/L
127-18-4	Tetrachloroethene	0.23	U	0.23	1.00	ug/L
108-90-7	Chlorobenzene	0.12	U	0.12	1.00	ug/L
100-41-4	Ethyl Benzene	0.13	U	0.13	1.00	ug/L
179601-23-1	m/p-Xylenes	0.24	U	0.24	2.00	ug/L
95-47-6	o-Xylene	0.12	U	0.12	1.00	ug/L
100-42-5	Styrene	0.15	U	0.15	1.00	ug/L
75-25-2	Bromoform	0.19	U	0.19	1.00	ug/L
98-82-8	Isopropylbenzene	0.12	U	0.12	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.26	U	0.26	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.16	U	0.16	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.19	U	0.19	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.16	U	0.16	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.53	U	0.53	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.20	U	0.20	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.20	U	0.20	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	48.7		70 (74) - 130 (125)	97%	SPK: 50
1868-53-7	Dibromofluoromethane	48.6		70 (75) - 130 (124)	97%	SPK: 50
2037-26-5	Toluene-d8	49.8		70 (86) - 130 (113)	100%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.4		70 (77) - 130 (121)	103%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	169000	5.562			
540-36-3	1,4-Difluorobenzene	291000	6.769			
3114-55-4	Chlorobenzene-d5	261000	10.049			
3855-82-1	1,4-Dichlorobenzene-d4	131000	12.018			

Raw Data: **VX046772.D**

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

Report of Analysis

Client:	G Environmental			Date Collected:	06/19/25
Project:	Ave B			Date Received:	06/19/25
Client Sample ID:	GAV2W			SDG No.:	Q2372
Lab Sample ID:	Q2372-02			Matrix:	Water
Analytical Method:	8260D			% Solid:	0
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000 uL
Soil Aliquot Vol:			uL	Test:	VOCMS Group1
GC Column:	DB-624UI	ID :	0.18	Level :	LOW
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX046772.D	1		06/19/25 16:06	VX061925

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_X\Data\VX061925\
Data File : VX046772.D
Acq On : 19 Jun 2025 16:06
Operator : JC/MD
Sample : Q2372-02
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 16 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
GAV2W

Quant Time: Jun 20 05:21:50 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 03:09:16 2025
Response via : Initial Calibration

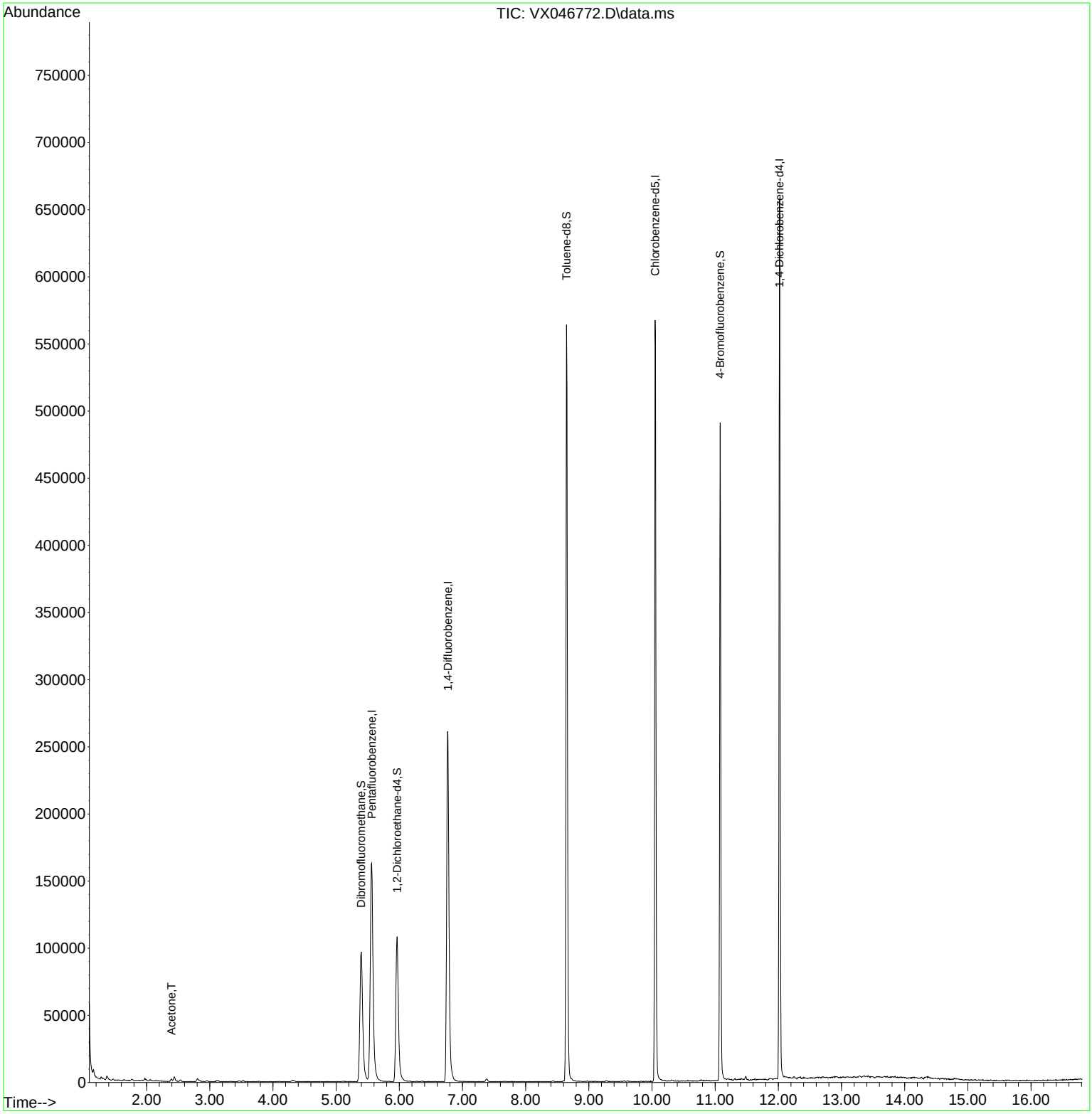
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.562	168	168816	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.769	114	291352	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.049	117	260859	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	131317	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.964	65	113764	48.721	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 97.440%			
35) Dibromofluoromethane	5.397	113	93762	48.640	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 97.280%			
50) Toluene-d8	8.647	98	344634	49.762	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 99.520%			
62) 4-Bromofluorobenzene	11.079	95	132598	51.362	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 102.720%			
Target Compounds						Qvalue
16) Acetone	2.392	43	2557	3.284	ug/l #	85

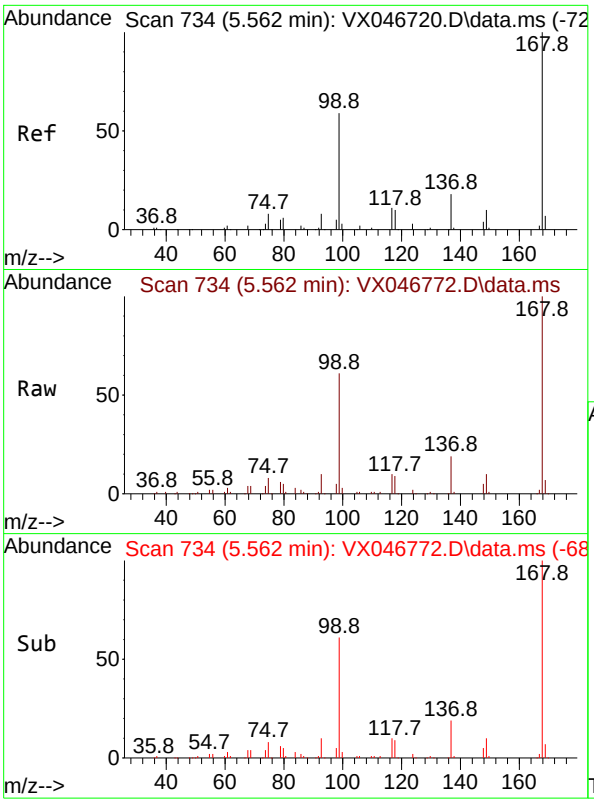
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061925\
Data File : VX046772.D
Acq On : 19 Jun 2025 16:06
Operator : JC/MD
Sample : Q2372-02
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 16 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
GAV2W

Quant Time: Jun 20 05:21:50 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 03:09:16 2025
Response via : Initial Calibration



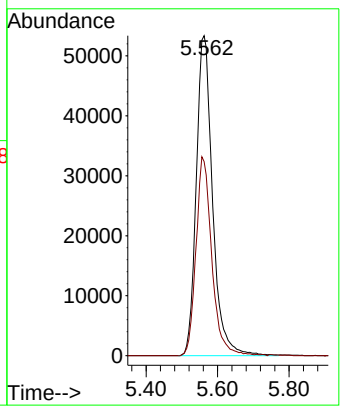


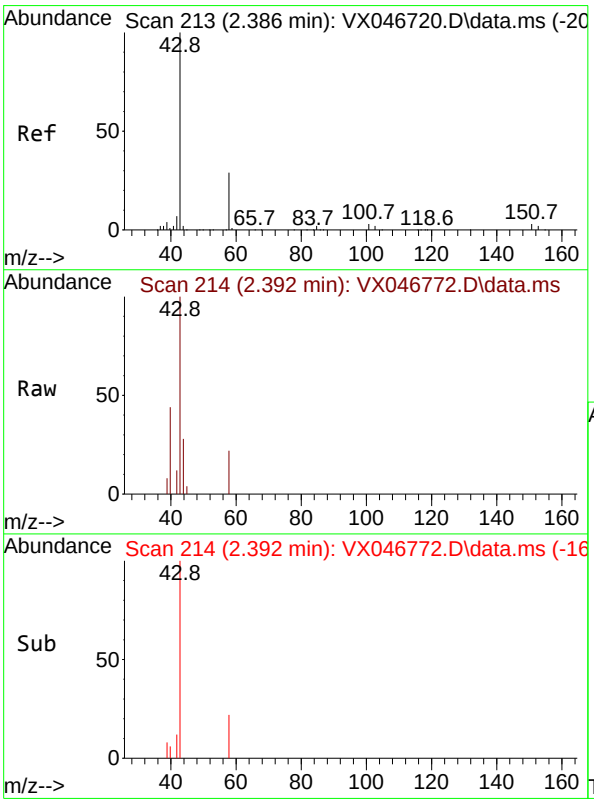
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.562 min Scan# 7
Delta R.T. 0.000 min
Lab File: VX046772.D
Acq: 19 Jun 2025 16:06

Instrument :
MSVOA_X
ClientSampleId :
GAV2W

Tgt Ion:168 Resp: 168816

Ion	Ratio	Lower	Upper
168	100		
99	60.7	48.5	72.7

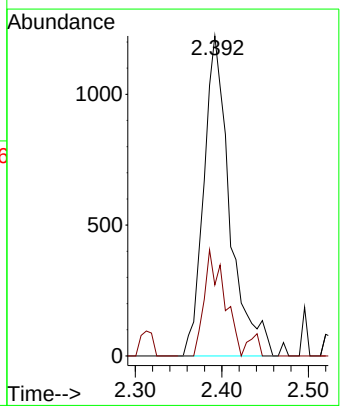


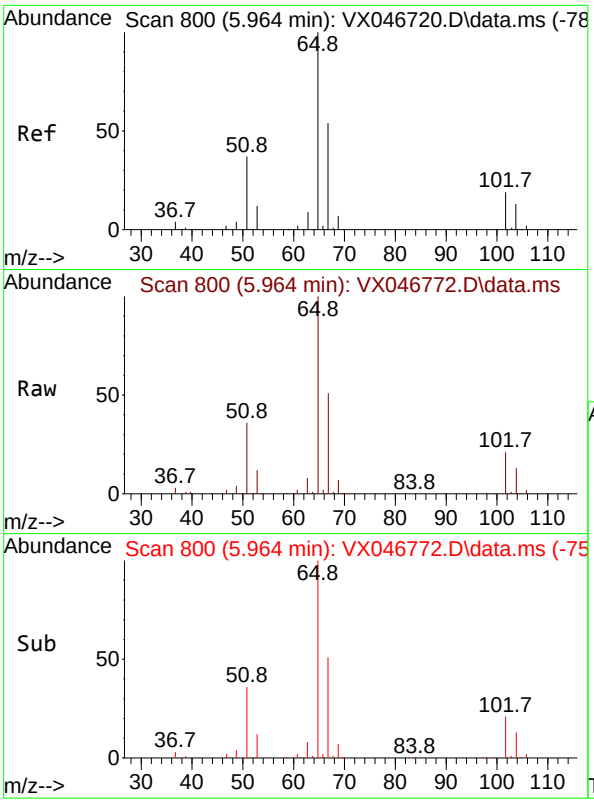


#16
Acetone
Concen: 3.284 ug/l
RT: 2.392 min Scan# 214
Delta R.T. 0.006 min
Lab File: VX046772.D
Acq: 19 Jun 2025 16:06

Tgt Ion: 43 Resp: 2557

Ion	Ratio	Lower	Upper
43	100		
58	22.2	24.5	36.7#



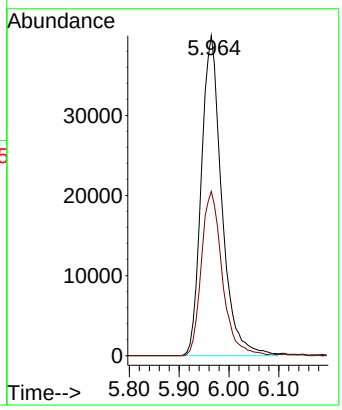


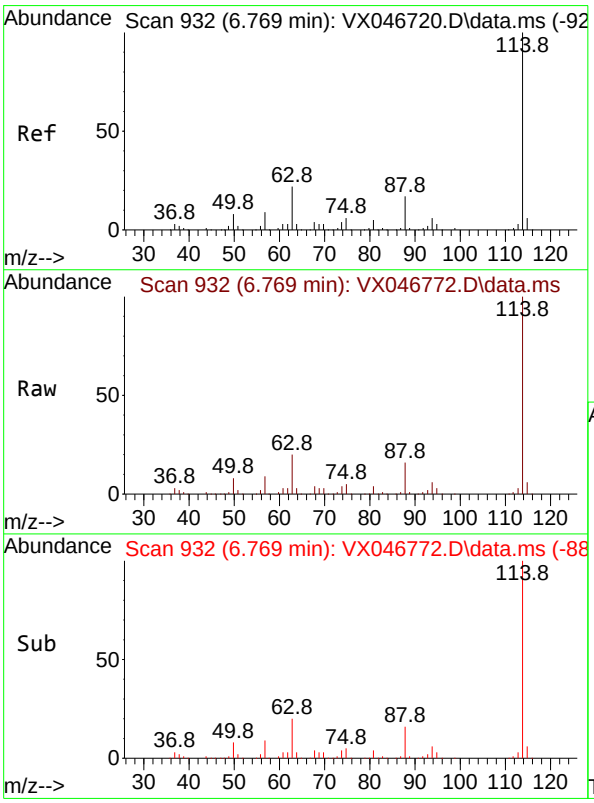
#33
1,2-Dichloroethane-d4
Concen: 48.721 ug/l
RT: 5.964 min Scan# 8
Delta R.T. 0.000 min
Lab File: VX046772.D
Acq: 19 Jun 2025 16:06

Instrument :
MSVOA_X
ClientSampleId :
GAV2W

Tgt Ion: 65 Resp: 113764

Ion	Ratio	Lower	Upper
65	100		
67	52.5	0.0	105.4

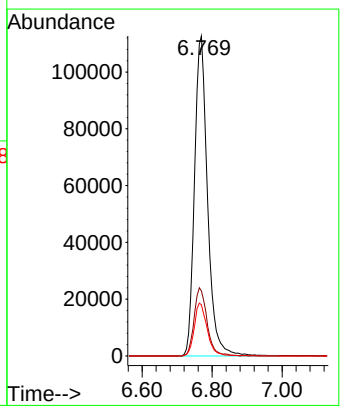


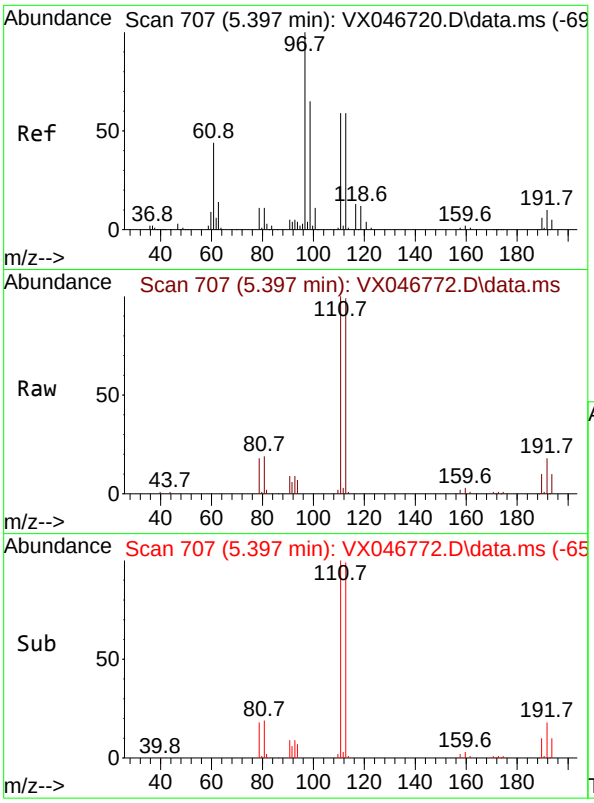


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.769 min Scan# 932
Delta R.T. 0.000 min
Lab File: VX046772.D
Acq: 19 Jun 2025 16:06

Tgt Ion:114 Resp: 291352

Ion	Ratio	Lower	Upper
114	100		
63	20.3	0.0	44.2
88	16.0	0.0	33.2



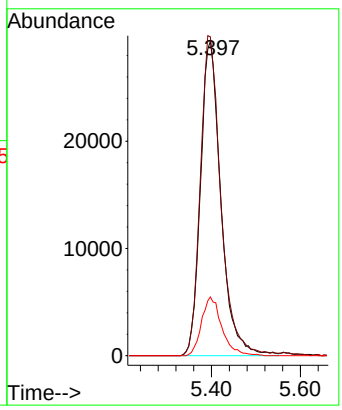


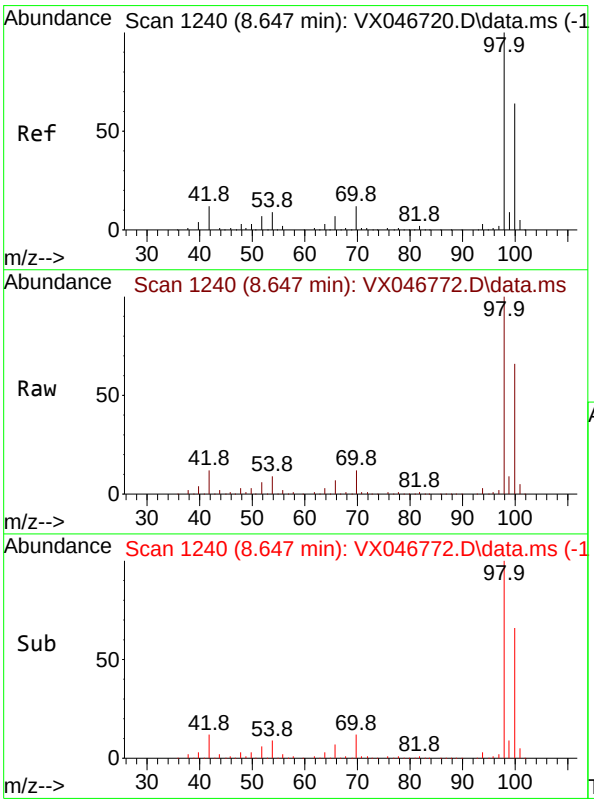
#35
Dibromofluoromethane
Concen: 48.640 ug/l
RT: 5.397 min Scan# 7
Delta R.T. 0.000 min
Lab File: VX046772.D
Acq: 19 Jun 2025 16:06

Instrument :
MSVOA_X
ClientSampleId :
GAV2W

Tgt Ion:113 Resp: 93762

Ion	Ratio	Lower	Upper
113	100		
111	102.0	82.0	123.0
192	18.6	15.3	22.9

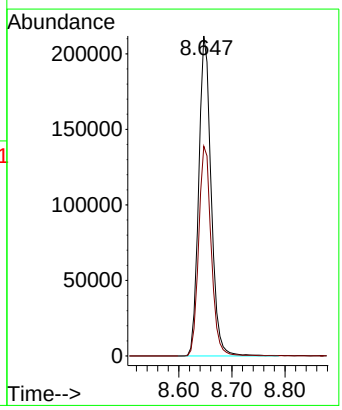


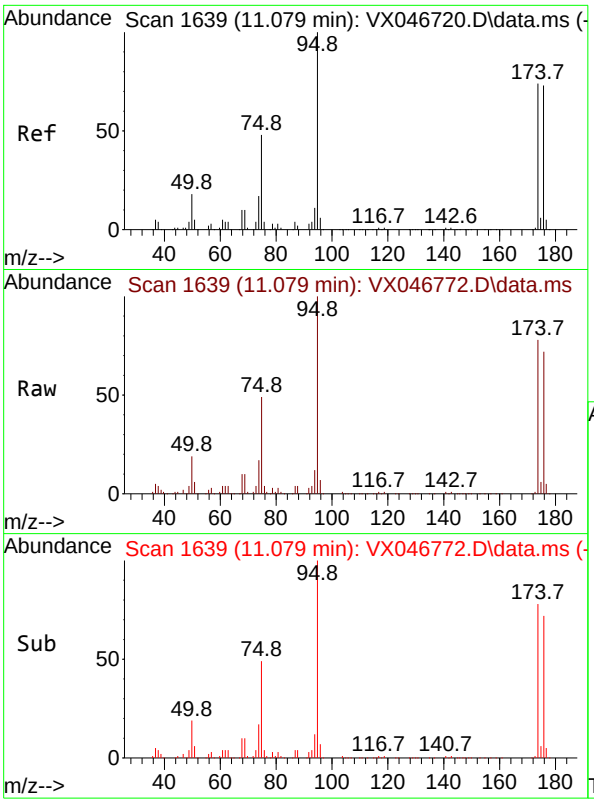


#50
Toluene-d8
Concen: 49.762 ug/l
RT: 8.647 min Scan# 1240
Delta R.T. 0.000 min
Lab File: VX046772.D
Acq: 19 Jun 2025 16:06

Tgt Ion: 98 Resp: 344634

Ion	Ratio	Lower	Upper
98	100		
100	66.4	53.0	79.4



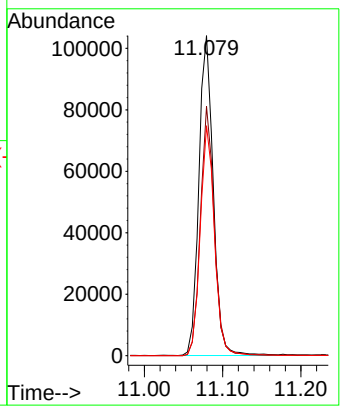


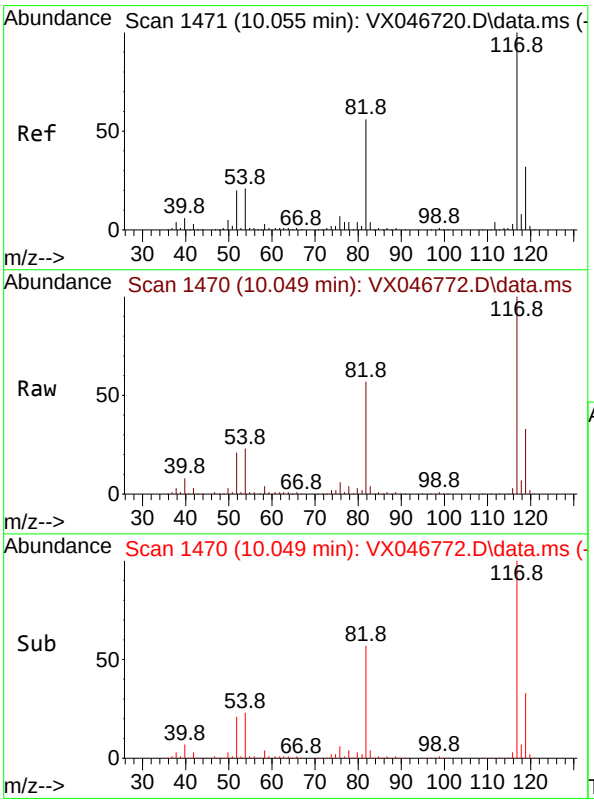
#62
4-Bromofluorobenzene
Concen: 51.362 ug/l
RT: 11.079 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX046772.D
Acq: 19 Jun 2025 16:06

Instrument :
MSVOA_X
ClientSampleId :
GAV2W

Tgt Ion: 95 Resp: 132598

Ion	Ratio	Lower	Upper
95	100		
174	75.4	0.0	150.4
176	71.3	0.0	145.0

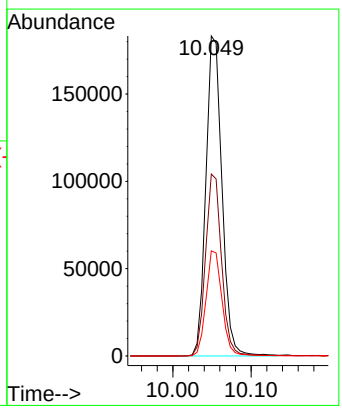


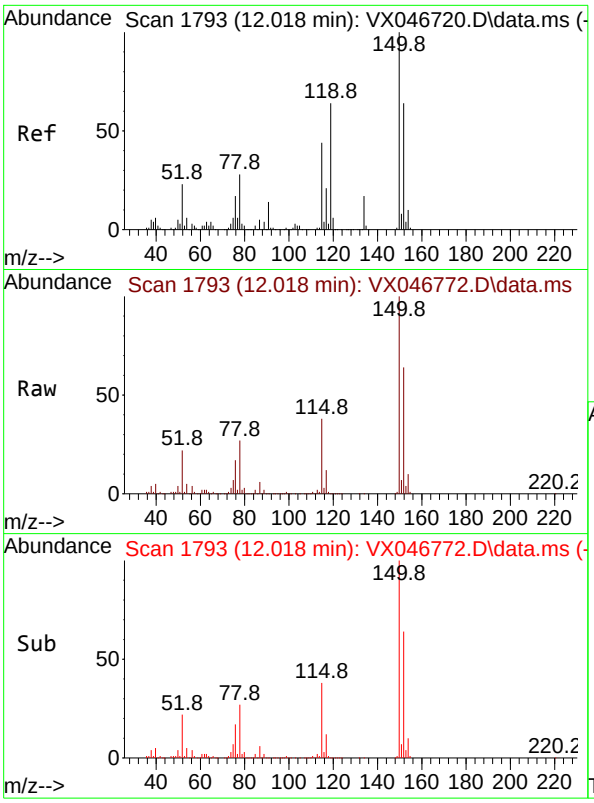


#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.049 min Scan# 1470
Delta R.T. -0.006 min
Lab File: VX046772.D
Acq: 19 Jun 2025 16:06

Tgt Ion:117 Resp: 260859

Ion	Ratio	Lower	Upper
117	100		
82	56.8	44.6	66.8
119	32.8	25.8	38.8



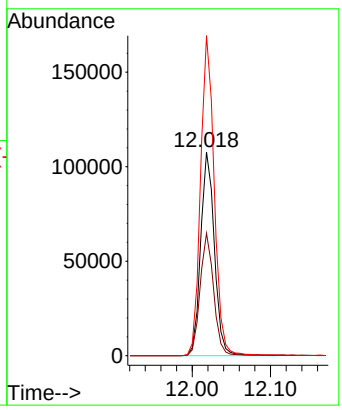


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.018 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX046772.D
Acq: 19 Jun 2025 16:06

Instrument :
MSVOA_X
ClientSampleId :
GAV2W

Tgt Ion:152 Resp: 131317

Ion	Ratio	Lower	Upper
152	100		
115	59.5	43.2	129.6
150	156.6	0.0	346.8



Sample Results: **VX046772.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061925\
Data File : VX046772.D
Acq On : 19 Jun 2025 16:06
Operator : JC/MD
Sample : Q2372-02
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 16 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
GAV2W

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_X\Method\82X061725W.M
Title : SW846 8260

Signal : TIC: VX046772.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.397	696	707	723	rBV3	96478	304344	33.17%	6.170%
2	5.562	723	734	758	rVB	162214	503606	54.88%	10.210%
3	5.964	790	800	823	rBV	107964	311710	33.97%	6.320%
4	6.763	922	931	951	rBV	260741	674410	73.50%	13.673%
5	8.647	1234	1240	1259	rBV	563100	917584	100.00%	18.604%
6	10.049	1465	1470	1485	rBV	566611	803385	87.55%	16.288%
7	11.079	1634	1639	1650	rBV	489888	620409	67.61%	12.579%
8	12.018	1788	1793	1804	rBV	655359	796808	86.84%	16.155%

Sum of corrected areas: 4932256

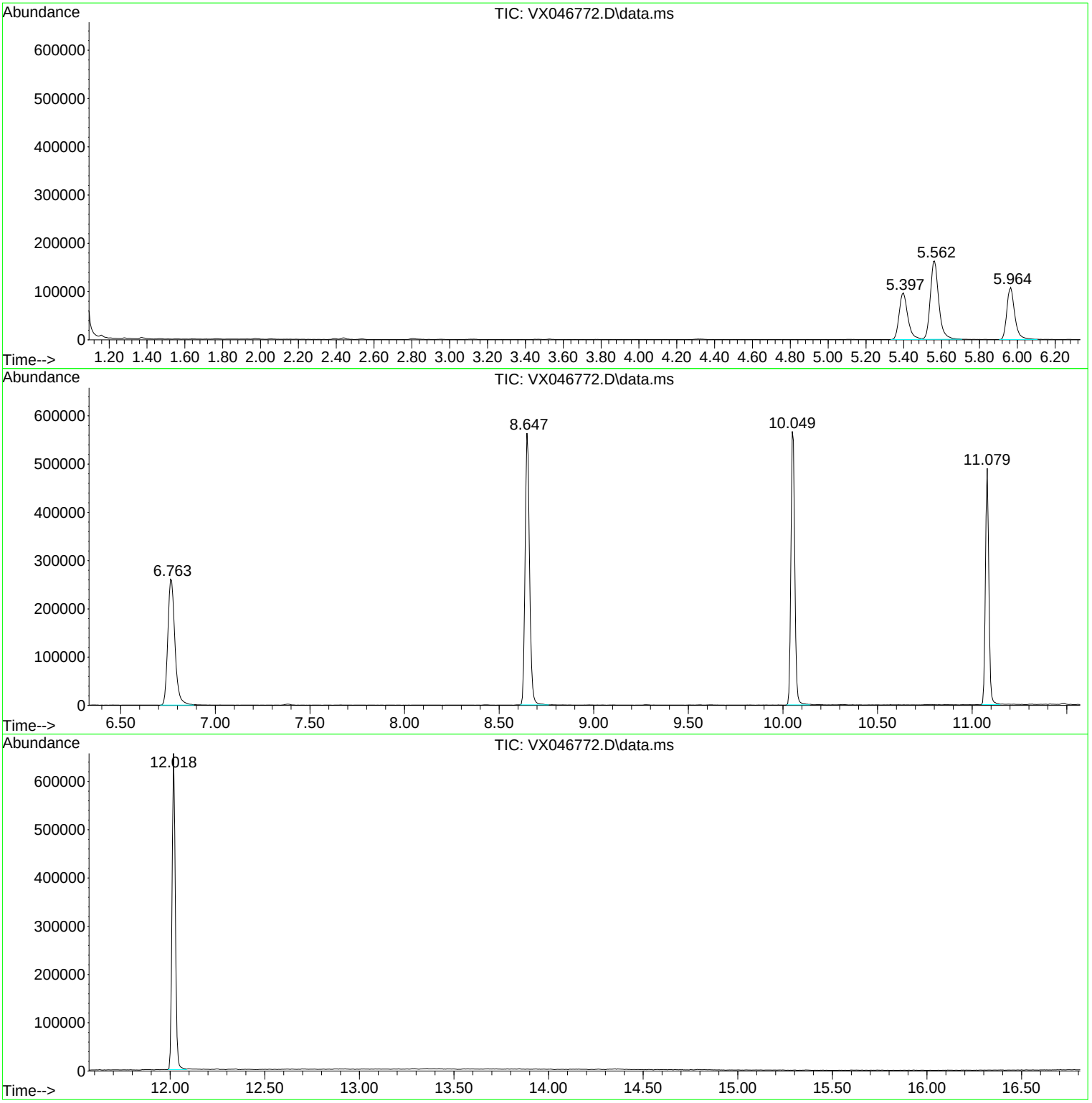
Sample Results: **VX046772.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061925\
Data File : VX046772.D
Acq On : 19 Jun 2025 16:06
Operator : JC/MD
Sample : Q2372-02
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 16 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
GAV2W

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260

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



Library Search Compound Report

Sample Results: **VX046772.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061925\
Data File : VX046772.D
Acq On : 19 Jun 2025 16:06
Operator : JC/MD
Sample : Q2372-02
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 16 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
GAV2W

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.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_X\Data\VX061925\
Data File : VX046772.D
Acq On : 19 Jun 2025 16:06
Operator : JC/MD
Sample : Q2372-02
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 16 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
GAV2W

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260

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

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

CALIBRATION SUMMARY

Raw Data

Alliance TECHNICAL GROUP

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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: GENV01

Lab Code: CHEM Case No.: Q2372 SAS No.: Q2372 SDG No.: Q2372

Instrument ID: MSVOA_X Calibration Date(s): 06/17/2025 06/17/2025

Heated Purge: (Y/N) N Calibration Time(s): 11:19 17:18

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

LAB FILE ID: RRF005 = VX046718.D RRF020 = VX046719.D RRF050 = VX046720.D
RRF100 = VX046721.D RRF150 = VX046722.D RRF001 = VX046725.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF150	RRF001	$\overline{RRF}$	% RSD
Dichlorodifluoromethane	0.464	0.507	0.583	0.627	0.598	0.425	0.534	15.1
Chloromethane	0.541	0.570	0.593	0.641	0.627	0.485	0.576	10
Vinyl Chloride	0.569	0.632	0.634	0.687	0.644	0.521	0.614	9.7
Bromomethane	0.371	0.367	0.369	0.341	0.280		0.346	11.1
Chloroethane	0.350	0.388	0.377	0.405	0.381	0.332	0.372	7.1
Trichlorofluoromethane	0.897	0.974	0.967	1.030	0.972	0.757	0.933	10.3
1,1,2-Trichlorotrifluoroethane	0.563	0.608	0.576	0.623	0.594	0.470	0.572	9.6
1,1-Dichloroethene	0.527	0.574	0.569	0.609	0.583	0.451	0.552	10.2
Acetone	0.219	0.222	0.220	0.238	0.234	0.251	0.231	5.6
Carbon Disulfide	1.503	1.644	1.599	1.735	1.656	1.869	1.668	7.5
Methyl tert-butyl Ether	1.628	1.803	1.752	1.898	1.808	1.427	1.720	9.8
Methyl Acetate	0.577	0.590	0.581	0.650	0.647	0.470	0.586	11.2
Methylene Chloride	0.655	0.655	0.610	0.666	0.624	0.637	0.641	3.3
trans-1,2-Dichloroethene	0.569	0.627	0.589	0.637	0.595	0.529	0.591	6.7
1,1-Dichloroethane	1.054	1.153	1.088	1.170	1.114	0.972	1.092	6.6
Cyclohexane	0.983	1.086	1.013	1.074	1.021		1.036	4.2
2-Butanone	0.319	0.325	0.338	0.371	0.353	0.251	0.326	12.7
Carbon Tetrachloride	0.509	0.537	0.515	0.548	0.531	0.470	0.518	5.4
cis-1,2-Dichloroethene	0.681	0.731	0.686	0.741	0.704	0.623	0.694	6.1
Bromochloromethane	0.527	0.459	0.485	0.519	0.500	0.480	0.495	5.2
Chloroform	1.102	1.190	1.114	1.181	1.109	0.857	1.092	11.1
1,1,1-Trichloroethane	0.931	1.012	0.956	1.046	0.990	0.812	0.958	8.6
Methylcyclohexane	0.631	0.642	0.629	0.672	0.647	0.550	0.628	6.6
Benzene	1.431	1.477	1.417	1.509	1.427	1.218	1.413	7.2
1,2-Dichloroethane	0.508	0.523	0.495	0.528	0.497	0.429	0.497	7.2
Trichloroethene	0.355	0.374	0.356	0.389	0.366	0.320	0.360	6.5
1,2-Dichloropropane	0.347	0.372	0.346	0.374	0.357	0.305	0.350	7.2
Bromodichloromethane	0.510	0.545	0.522	0.562	0.540	0.404	0.514	11.1
4-Methyl-2-Pentanone	0.408	0.414	0.426	0.460	0.439	0.322	0.411	11.6
Toluene	0.884	0.927	0.888	0.927	0.881	0.750	0.876	7.4

* 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.

Raw Data

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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: GENV01

Lab Code: CHEM Case No.: Q2372 SAS No.: Q2372 SDG No.: Q2372

Instrument ID: MSVOA_X Calibration Date(s): 06/17/2025 06/17/2025

Heated Purge: (Y/N) N Calibration Time(s): 11:19 17:18

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

LAB FILE ID: RRF005 = VX046718.D RRF020 = VX046719.D RRF050 = VX046720.D
RRF100 = VX046721.D RRF150 = VX046722.D RRF001 = VX046725.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF150	RRF001	$\overline{RRF}$	% RSD
t-1,3-Dichloropropene	0.438	0.484	0.488	0.555	0.540	0.355	0.477	15.3
cis-1,3-Dichloropropene	0.516	0.555	0.548	0.603	0.589	0.436	0.541	11.1
1,1,2-Trichloroethane	0.330	0.341	0.326	0.347	0.329	0.287	0.327	6.4
2-Hexanone	0.285	0.285	0.297	0.320	0.305	0.214	0.284	13
Dibromochloromethane	0.380	0.402	0.388	0.419	0.402	0.318	0.385	9.3
1,2-Dibromoethane	0.333	0.348	0.335	0.363	0.346	0.267	0.332	10.1
Tetrachloroethene	0.345	0.353	0.340	0.360	0.339	0.341	0.346	2.4
Chlorobenzene	1.114	1.148	1.091	1.165	1.100	1.005	1.104	5.1
Ethyl Benzene	1.905	2.030	1.933	2.062	1.945	1.696	1.929	6.7
m/p-Xylenes	0.705	0.764	0.724	0.765	0.718	0.635	0.719	6.7
o-Xylene	0.686	0.729	0.692	0.739	0.698	0.498	0.673	13.1
Styrene	1.144	1.256	1.208	1.267	1.203	0.993	1.179	8.6
Bromoform	0.268	0.295	0.287	0.315	0.304	0.226	0.282	11.3
Isopropylbenzene	3.593	3.914	3.723	4.004	3.814	3.048	3.682	9.3
1,1,2,2-Tetrachloroethane	1.037	1.075	1.044	1.124	1.074	0.816	1.028	10.6
1,3-Dichlorobenzene	1.703	1.787	1.678	1.786	1.719	1.694	1.728	2.7
1,4-Dichlorobenzene	1.743	1.830	1.653	1.789	1.702	1.932	1.775	5.6
1,2-Dichlorobenzene	1.604	1.701	1.592	1.703	1.628	1.460	1.615	5.5
1,2-Dibromo-3-Chloropropane	0.196	0.205	0.211	0.235	0.237	0.134	0.203	18.6
1,2,4-Trichlorobenzene	1.040	1.138	1.127	1.253	1.160	1.170	1.148	6
1,2,3-Trichlorobenzene	1.062	1.129	1.082	1.207	1.153	0.957	1.098	7.9
1,2-Dichloroethane-d4	0.801	0.567	0.649	0.726	0.714		0.692	12.7
Dibromofluoromethane	0.362	0.267	0.320	0.354	0.351		0.331	11.9
Toluene-d8	1.342	0.973	1.144	1.250	1.234		1.189	11.7
4-Bromofluorobenzene	0.513	0.354	0.426	0.466	0.456		0.443	13.3

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

Response Factor Report MSVOA_X2

Method Path : Z:\voasrv\HPCHEM1\MSVOA_X\Method\
Method File : 82X061725W.M
Title : SW846 8260
Last Update : Wed Jun 18 03:09:16 2025
Response Via : Initial Calibration

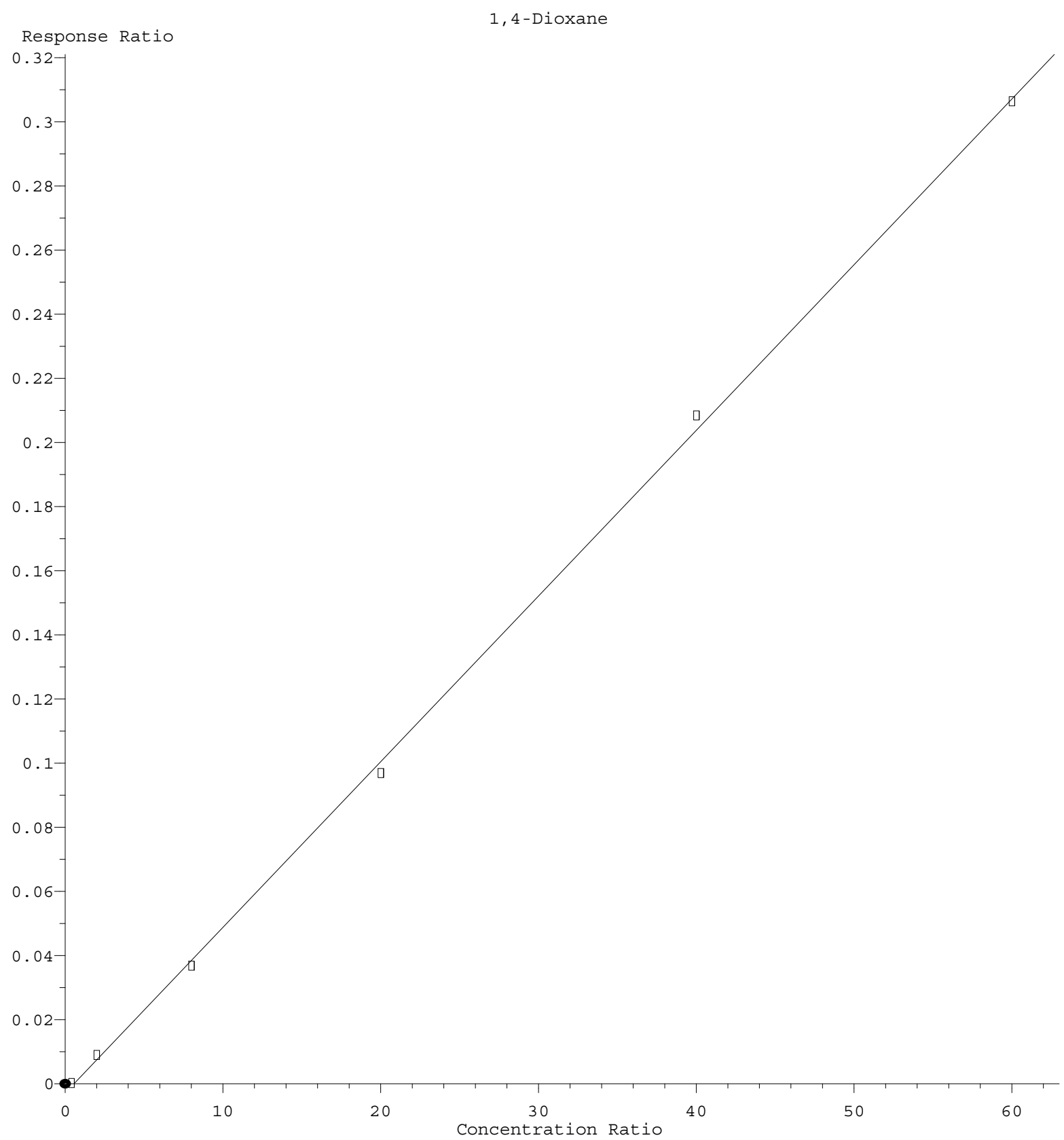
Calibration Files
1 =VX046725.D 5 =VX046718.D 20 =VX046719.D 50 =VX046720.D 100 =VX046721.D 150 =VX046722.D

		Compound	1	5	20	50	100	150	Avg	%RSD
1)	I	Pentafluorobenzene	----------ISTD----------							
2)	T	Dichlorodifluo...	0.425	0.464	0.507	0.583	0.627	0.598	0.534	15.13
3)	P	Chloromethane	0.485	0.541	0.570	0.593	0.641	0.627	0.576	9.97
4)	C	Vinyl Chloride	0.521	0.569	0.632	0.634	0.687	0.644	0.614	9.68#
5)	T	Bromomethane		0.371	0.367	0.369	0.341	0.280	0.346	11.13
6)	T	Chloroethane	0.332	0.350	0.388	0.377	0.405	0.381	0.372	7.12
7)	T	Trichlorofluor...	0.757	0.897	0.974	0.967	1.030	0.972	0.933	10.30
8)	T	Diethyl Ether	0.265	0.309	0.337	0.322	0.352	0.336	0.320	9.58
9)	T	1,1,2-Trichlor...	0.470	0.563	0.608	0.576	0.623	0.594	0.572	9.55
10)	T	Methyl Iodide		0.447	0.566	0.654	0.788	0.752	0.642	21.71
11)	T	Tert butyl alc...		0.048	0.061	0.062	0.071	0.069	0.062	14.45
12)	CM	1,1-Dichloroet...	0.451	0.527	0.574	0.569	0.609	0.583	0.552	10.21#
13)	T	Acrolein		0.095	0.074	0.087	0.098	0.097	0.090	11.04
14)	T	Allyl chloride	0.876	0.934	1.042	0.999	1.102	1.051	1.001	8.30
15)	T	Acrylonitrile	0.226	0.270	0.287	0.285	0.312	0.295	0.279	10.61
16)	T	Acetone	0.251	0.219	0.222	0.220	0.238	0.234	0.231	5.60
17)	T	Carbon Disulfide	1.869	1.503	1.644	1.599	1.735	1.656	1.668	7.46
18)	T	Methyl Acetate	0.470	0.577	0.590	0.581	0.650	0.647	0.586	11.17
19)	T	Methyl tert-bu...	1.427	1.628	1.803	1.752	1.898	1.808	1.720	9.79
20)	T	Methylene Chlo...	0.637	0.655	0.655	0.610	0.666	0.624	0.641	3.32
21)	T	trans-1,2-Dich...	0.529	0.569	0.627	0.589	0.637	0.595	0.591	6.68
22)	T	Diisopropyl ether	1.531	1.883	2.073	1.967	2.113	1.973	1.923	10.87
23)	T	Vinyl Acetate	1.138	1.423	1.608	1.596	1.747	1.664	1.529	14.33
24)	P	1,1-Dichloroet...	0.972	1.054	1.153	1.088	1.170	1.114	1.092	6.63
25)	T	2-Butanone	0.251	0.319	0.325	0.338	0.371	0.353	0.326	12.66
26)	T	2,2-Dichloropr...	0.688	0.768	0.798	0.761	0.878	0.886	0.796	9.49
27)	T	cis-1,2-Dichlo...	0.623	0.681	0.731	0.686	0.741	0.704	0.694	6.06
28)	T	Bromochloromet...	0.480	0.527	0.459	0.485	0.519	0.500	0.495	5.18
29)	T	Tetrahydrofuran	0.162	0.205	0.211	0.216	0.240	0.229	0.211	12.74
30)	C	Chloroform	0.857	1.102	1.190	1.114	1.181	1.109	1.092	11.08#
31)	T	Cyclohexane		0.983	1.086	1.013	1.074	1.021	1.036	4.20
32)	T	1,1,1-Trichlor...	0.812	0.931	1.012	0.956	1.046	0.990	0.958	8.58
33)	S	1,2-Dichloroet...		0.801	0.567	0.649	0.726	0.714	0.692	12.70
34)	I	1,4-Difluorobenzene	----------ISTD----------							
35)	S	Dibromofluorom...		0.362	0.267	0.320	0.354	0.351	0.331	11.89
36)	T	1,1-Dichloropr...	0.446	0.477	0.486	0.477	0.500	0.480	0.478	3.73
37)	T	Ethyl Acetate	0.443	0.404	0.440	0.431	0.468	0.459	0.441	5.11
38)	T	Carbon Tetrach...	0.470	0.509	0.537	0.515	0.548	0.531	0.518	5.37
39)	T	Methylcyclohexane	0.550	0.631	0.642	0.629	0.672	0.647	0.628	6.61
40)	TM	Benzene	1.218	1.431	1.477	1.417	1.509	1.427	1.413	7.22
41)	T	Methacrylonitrile	0.190	0.207	0.242	0.239	0.267	0.266	0.235	13.31
42)	TM	1,2-Dichloroet...	0.429	0.508	0.523	0.495	0.528	0.497	0.497	7.23
43)	T	Isopropyl Acetate	0.491	0.678	0.689	0.716	0.795	0.770	0.690	15.63
44)	TM	Trichloroethene	0.320	0.355	0.374	0.356	0.389	0.366	0.360	6.47
45)	C	1,2-Dichloropr...	0.305	0.347	0.372	0.346	0.374	0.357	0.350	7.18#
46)	T	Dibromomethane	0.228	0.243	0.260	0.251	0.270	0.259	0.252	5.92
47)	T	Bromodichlorom...	0.404	0.510	0.545	0.522	0.562	0.540	0.514	11.07
48)	T	Methyl methacr...	0.232	0.316	0.352	0.370	0.409	0.396	0.346	18.71
49)	T	1,4-Dioxane	0.001	0.004	0.005	0.005	0.005	0.005	0.004	42.21
50)	S	Toluene-d8		1.342	0.973	1.144	1.250	1.234	1.189	11.72
51)	T	4-Methyl-2-Pen...	0.322	0.408	0.414	0.426	0.460	0.439	0.411	11.62
52)	CM	Toluene	0.750	0.884	0.927	0.888	0.927	0.881	0.876	7.43#
53)	T	t-1,3-Dichloro...	0.355	0.438	0.484	0.488	0.555	0.540	0.477	15.29
54)	T	cis-1,3-Dichlo...	0.436	0.516	0.555	0.548	0.603	0.589	0.541	11.13
55)	T	1,1,2-Trichlor...	0.287	0.330	0.341	0.326	0.347	0.329	0.327	6.43
56)	T	Ethyl methacry...	0.327	0.465	0.493	0.507	0.560	0.540	0.482	17.24

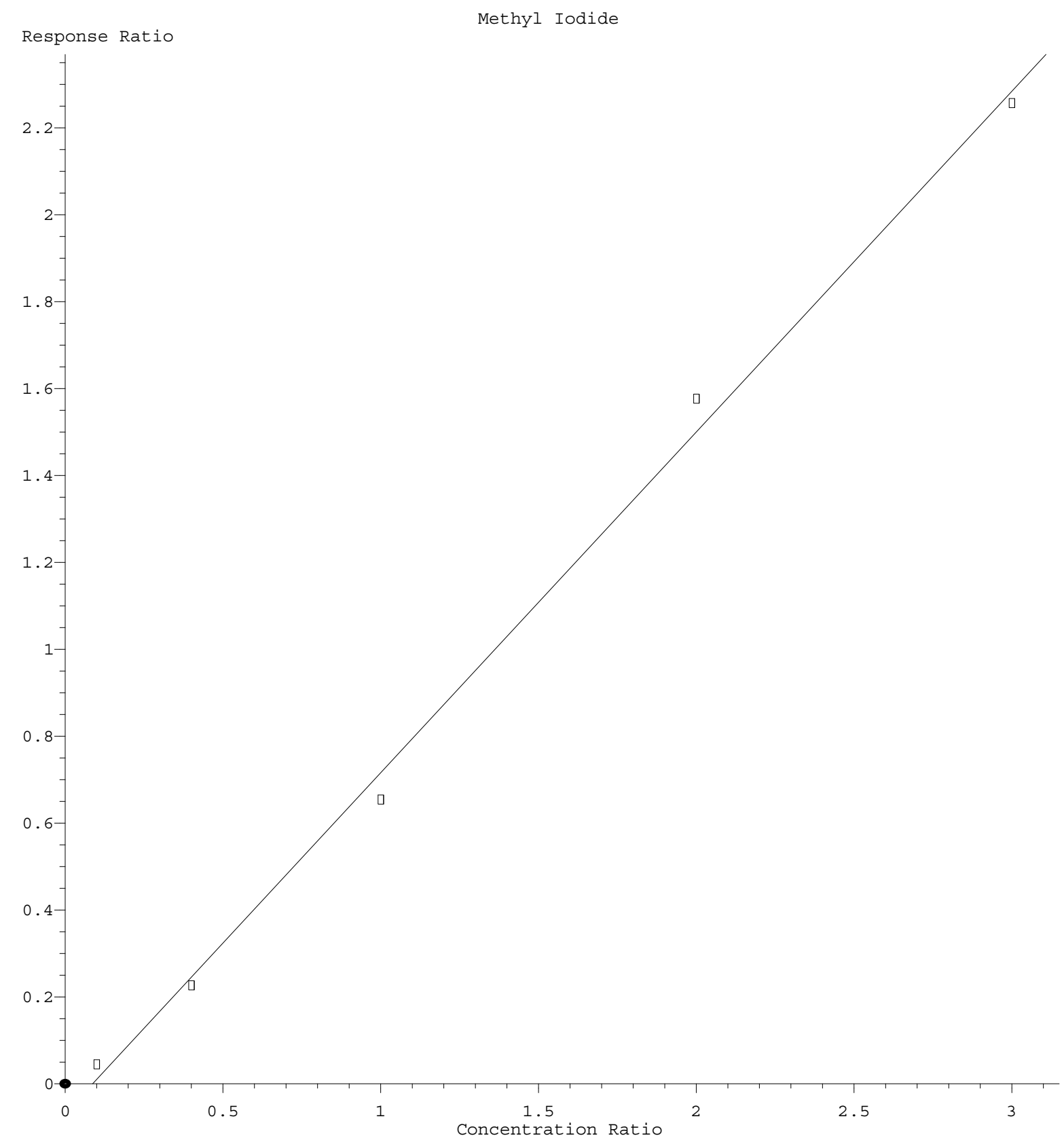
Method Path : Z:\voasrv\HPCHEM1\MSVOA_X\Method\
Method File : 82X061725W.M

57)	T	1,3-Dichloropr...	0.497	0.575	0.576	0.562	0.600	0.563	0.562	6.16
58)	T	2-Chloroethyl ...	0.167	0.241	0.235	0.281	0.296	0.282	0.250	18.96
59)	T	2-Hexanone	0.214	0.285	0.285	0.297	0.320	0.305	0.284	13.04
60)	T	Dibromochlorom...	0.318	0.380	0.402	0.388	0.419	0.402	0.385	9.25
61)	T	1,2-Dibromoethane	0.267	0.333	0.348	0.335	0.363	0.346	0.332	10.10
62)	S	4-Bromofluorob...		0.513	0.354	0.426	0.466	0.456	0.443	13.28
63)	I	Chlorobenzene-d5	----------ISTD----------							
64)	T	Tetrachloroethene	0.341	0.345	0.353	0.340	0.360	0.339	0.346	2.43
65)	PM	Chlorobenzene	1.005	1.114	1.148	1.091	1.165	1.100	1.104	5.09
66)	T	1,1,1,2-Tetrac...	0.302	0.358	0.398	0.373	0.408	0.386	0.371	10.22
67)	C	Ethyl Benzene	1.696	1.905	2.030	1.933	2.062	1.945	1.929	6.68#
68)	T	m/p-Xylenes	0.635	0.705	0.764	0.724	0.765	0.718	0.719	6.68
69)	T	o-Xylene	0.498	0.686	0.729	0.692	0.739	0.698	0.673	13.15
70)	T	Styrene	0.993	1.144	1.256	1.208	1.267	1.203	1.179	8.57
71)	P	Bromoform	0.226	0.268	0.295	0.287	0.315	0.304	0.282	11.35
72)	I	1,4-Dichlorobenzen...	----------ISTD----------							
73)	T	Isopropylbenzene	3.048	3.593	3.914	3.723	4.004	3.814	3.682	9.31
74)	T	N-amyl acetate	0.927	1.237	1.455	1.467	1.660	1.625	1.395	19.64
75)	P	1,1,2,2-Tetrac...	0.816	1.037	1.075	1.044	1.124	1.074	1.028	10.56
76)	T	1,2,3-Trichlor...	0.650	0.959	1.066	0.990	0.938	0.892	0.916	15.58
77)	T	Bromobenzene	0.744	0.861	0.953	0.892	0.956	0.911	0.886	8.87
78)	T	n-propylbenzene	3.642	4.243	4.682	4.430	4.737	4.509	4.374	9.16
79)	T	2-Chlorotoluene	2.363	2.596	2.736	2.586	2.770	2.618	2.611	5.50
80)	T	1,3,5-Trimethy...	2.497	2.888	3.297	3.072	3.294	3.108	3.026	9.94
81)	T	trans-1,4-Dich...		0.264	0.297	0.311	0.367	0.381	0.324	15.12
82)	T	4-Chlorotoluene	2.734	2.980	3.255	3.024	3.227	3.066	3.048	6.21
83)	T	tert-Butylbenzene	2.658	3.043	3.316	3.122	3.395	3.234	3.128	8.41
84)	T	1,2,4-Trimethy...	2.455	2.992	3.270	3.061	3.302	3.162	3.040	10.20
85)	T	sec-Butylbenzene	3.301	3.920	4.198	3.999	4.272	4.030	3.953	8.73
86)	T	p-Isopropyltol...	2.905	3.275	3.526	3.340	3.574	3.394	3.336	7.17
87)	T	1,3-Dichlorobe...	1.694	1.703	1.787	1.678	1.786	1.719	1.728	2.74
88)	T	1,4-Dichlorobe...	1.932	1.743	1.830	1.653	1.789	1.702	1.775	5.59
89)	T	n-Butylbenzene	2.986	2.970	3.284	3.154	3.415	3.194	3.167	5.43
90)	T	Hexachloroethane	0.522	0.523	0.601	0.584	0.647	0.627	0.584	8.97
91)	T	1,2-Dichlorobe...	1.460	1.604	1.701	1.592	1.703	1.627	1.615	5.55
92)	T	1,2-Dibromo-3-...	0.134	0.196	0.205	0.211	0.235	0.237	0.203	18.57
93)	T	1,2,4-Trichlor...	1.170	1.040	1.138	1.127	1.253	1.160	1.148	5.99
94)	T	Hexachlorobuta...	0.495	0.490	0.501	0.479	0.512	0.420	0.483	6.78
95)	T	Naphthalene	2.636	2.887	3.301	3.335	3.744	3.720	3.270	13.54
96)	T	1,2,3-Trichlor...	0.957	1.062	1.129	1.082	1.206	1.153	1.098	7.87

(#) = Out of Range



Response = 5.178e-003 * Amt - 2.920e-003
Coef of Det (r^2) = 0.999471 Curve Fit: Linear
Method Name: Z:\voasrv\HPCHEM1\MSVOA X\Method\82X061725W.M
Calibration Table Last Updated: Wed Jun 18 03:09:16 2025



Response = 7.844e-001 * Amt - 6.799e-002
Coef of Det (r^2) = 0.996612 Curve Fit: Linear
Method Name: Z:\voasrv\HPCHEM1\MSVOA X\Method\82X061725W.M
Calibration Table Last Updated: Wed Jun 18 03:09:16 2025

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061725\
Data File : VX046718.D
Acq On : 17 Jun 2025 11:19
Operator : JC/MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 18 02:37:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 02:34:13 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 06/18/2025
Supervised By :Mahesh Dadoda 06/18/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.562	168	130530	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.769	114	217019	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	195782	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	100990	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.964	65	10456	5.791	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery =	11.580%#		
35) Dibromofluoromethane	5.403	113	7865	5.478	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	10.960%#		
50) Toluene-d8	8.653	98	29120	5.645	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery =	11.280%#		
62) 4-Bromofluorobenzene	11.079	95	11137	5.791	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery =	11.580%#		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.179	85	6051	4.342	ug/l	99
3) Chloromethane	1.307	50	7066	4.698	ug/l	90
4) Vinyl Chloride	1.386	62	7425	4.629	ug/l	99
5) Bromomethane	1.617	94	4837	5.360	ug/l	95
6) Chloroethane	1.703	64	4575	4.706	ug/l	92
7) Trichlorofluoromethane	1.904	101	11714	4.810	ug/l	92
8) Diethyl Ether	2.148	74	4038	4.831	ug/l	98
9) 1,1,2-Trichlorotrifluo...	2.349	101	7353	4.921	ug/l	96
10) Methyl Iodide	2.465	142	5830	7.181	ug/l	99
11) Tert butyl alcohol	2.959	59	3134	19.340	ug/l	99
12) 1,1-Dichloroethene	2.337	96	6884	4.775	ug/l	91
13) Acrolein	2.251	56	6208	26.301	ug/l	100
14) Allyl chloride	2.678	41	12195	4.668	ug/l	99
15) Acrylonitrile	3.081	53	17611	24.169	ug/l	99
16) Acetone	2.392	43	14275	23.710	ug/l	98
17) Carbon Disulfide	2.526	76	19624	4.507	ug/l	100
18) Methyl Acetate	2.721	43	7530	4.924	ug/l	100
19) Methyl tert-butyl Ether	3.123	73	21254	4.734	ug/l	97
20) Methylene Chloride	2.800	84	8556	5.110	ug/l	97
21) trans-1,2-Dichloroethene	3.111	96	7425	4.813	ug/l	97
22) Diisopropyl ether	3.769	45	24580	4.895	ug/l #	67
23) Vinyl Acetate	3.739	43	92889	23.264	ug/l	98
24) 1,1-Dichloroethane	3.623	63	13761	4.827	ug/l	99
25) 2-Butanone	4.580	43	20821	24.452	ug/l	97
26) 2,2-Dichloropropane	4.483	77	10020	4.819	ug/l	96
27) cis-1,2-Dichloroethene	4.507	96	8891	4.906	ug/l	99
28) Bromochloromethane	4.910	49	6884	5.326	ug/l #	96
29) Tetrahydrofuran	5.025	42	13402	24.367	ug/l	99
30) Chloroform	5.099	83	14385	5.046	ug/l	86
31) Cyclohexane	5.483	56	12835	4.748	ug/l	94
32) 1,1,1-Trichloroethane	5.397	97	12150	4.859	ug/l	97
36) 1,1-Dichloropropene	5.702	75	10359	4.998	ug/l	99
37) Ethyl Acetate	4.733	43	8763	4.580	ug/l	96
38) Carbon Tetrachloride	5.690	117	11043	4.909	ug/l	98
39) Methylcyclohexane	7.391	83	13704	5.024	ug/l #	87
40) Benzene	6.050	78	31061	5.064	ug/l	97

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061725\
Data File : VX046718.D
Acq On : 17 Jun 2025 11:19
Operator : JC/MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 18 02:37:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 02:34:13 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 06/18/2025
Supervised By :Mahesh Dadoda 06/18/2025

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
41) Methacrylonitrile	4.940	41	4488	4.400 ug/l #	92
42) 1,2-Dichloroethane	6.104	62	11029	5.116 ug/l	98
43) Isopropyl Acetate	6.348	43	14711	4.914 ug/l	97
44) Trichloroethene	7.135	130	7703	4.927 ug/l	93
45) 1,2-Dichloropropane	7.433	63	7529	4.952 ug/l	97
46) Dibromomethane	7.592	93	5267	4.821 ug/l	95
47) Bromodichloromethane	7.824	83	11072	4.966 ug/l	96
48) Methyl methacrylate	7.702	41	6864	4.571 ug/l	99
49) 1,4-Dioxane	7.671	88	1949	113.091 ug/l	95
51) 4-Methyl-2-Pentanone	8.574	43	44282	24.800 ug/l	97
52) Toluene	8.720	92	19190	5.046 ug/l	99
53) t-1,3-Dichloropropene	8.982	75	9497	4.591 ug/l	99
54) cis-1,3-Dichloropropene	8.372	75	11188	4.764 ug/l	95
55) 1,1,2-Trichloroethane	9.153	97	7151	5.046 ug/l	95
56) Ethyl methacrylate	9.122	69	10101	4.828 ug/l	99
57) 1,3-Dichloropropane	9.311	76	12483	5.115 ug/l	99
58) 2-Chloroethyl Vinyl ether	8.244	63	26158	24.071 ug/l	100
59) 2-Hexanone	9.433	43	30938	25.062 ug/l	99
60) Dibromochloromethane	9.518	129	8249	4.939 ug/l	99
61) 1,2-Dibromoethane	9.610	107	7221	5.009 ug/l	98
64) Tetrachloroethene	9.275	164	6755	4.980 ug/l	97
65) Chlorobenzene	10.079	112	21807	5.046 ug/l	99
66) 1,1,1,2-Tetrachloroethane	10.165	131	7006	4.823 ug/l	98
67) Ethyl Benzene	10.195	91	37295	4.939 ug/l	98
68) m/p-Xylenes	10.299	106	27609	9.812 ug/l	96
69) o-Xylene	10.640	106	13421	5.090 ug/l	97
70) Styrene	10.659	104	22403	4.855 ug/l	100
71) Bromoform	10.799	173	5248	4.744 ug/l #	100
73) Isopropylbenzene	10.963	105	36281	4.878 ug/l	99
74) N-amyl acetate	10.841	43	12496	4.434 ug/l	99
75) 1,1,2,2-Tetrachloroethane	11.213	83	10468	5.040 ug/l	99
76) 1,2,3-Trichloropropane	11.238	75	9687m	4.722 ug/l	
77) Bromobenzene	11.201	156	8694	4.857 ug/l	95
78) n-propylbenzene	11.305	91	42848	4.850 ug/l	100
79) 2-Chlorotoluene	11.366	91	26221	4.971 ug/l	100
80) 1,3,5-Trimethylbenzene	11.451	105	29167	4.772 ug/l	99
81) trans-1,4-Dichloro-2-b...	11.018	75	2663	4.070 ug/l	94
82) 4-Chlorotoluene	11.457	91	30097	4.889 ug/l	99
83) tert-Butylbenzene	11.713	119	30728	4.864 ug/l	99
84) 1,2,4-Trimethylbenzene	11.750	105	30213	4.920 ug/l	98
85) sec-Butylbenzene	11.890	105	39588	4.958 ug/l	100
86) p-Isopropyltoluene	12.006	119	33076	4.909 ug/l	99
87) 1,3-Dichlorobenzene	11.969	146	17198	4.928 ug/l	99
88) 1,4-Dichlorobenzene	12.036	146	17600	4.910 ug/l	95
89) n-Butylbenzene	12.329	91	29990	4.688 ug/l	98
90) Hexachloroethane	12.536	117	5285	4.480 ug/l	97
91) 1,2-Dichlorobenzene	12.335	146	16203	4.968 ug/l	99
92) 1,2-Dibromo-3-Chloropr...	12.939	75	1982	4.834 ug/l	94
93) 1,2,4-Trichlorobenzene	13.585	180	10507	4.532 ug/l	99
94) Hexachlorobutadiene	13.725	225	4953	5.078 ug/l	95
95) Naphthalene	13.774	128	29158	4.414 ug/l	99
96) 1,2,3-Trichlorobenzene	13.963	180	10725	4.835 ug/l	96

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061725\
Data File : VX046718.D
Acq On : 17 Jun 2025 11:19
Operator : JC/MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 06/18/2025
Supervised By :Mahesh Dadoda 06/18/2025

Quant Time: Jun 18 02:37:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 02:34:13 2025
Response via : Initial Calibration

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

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

ICAL Form

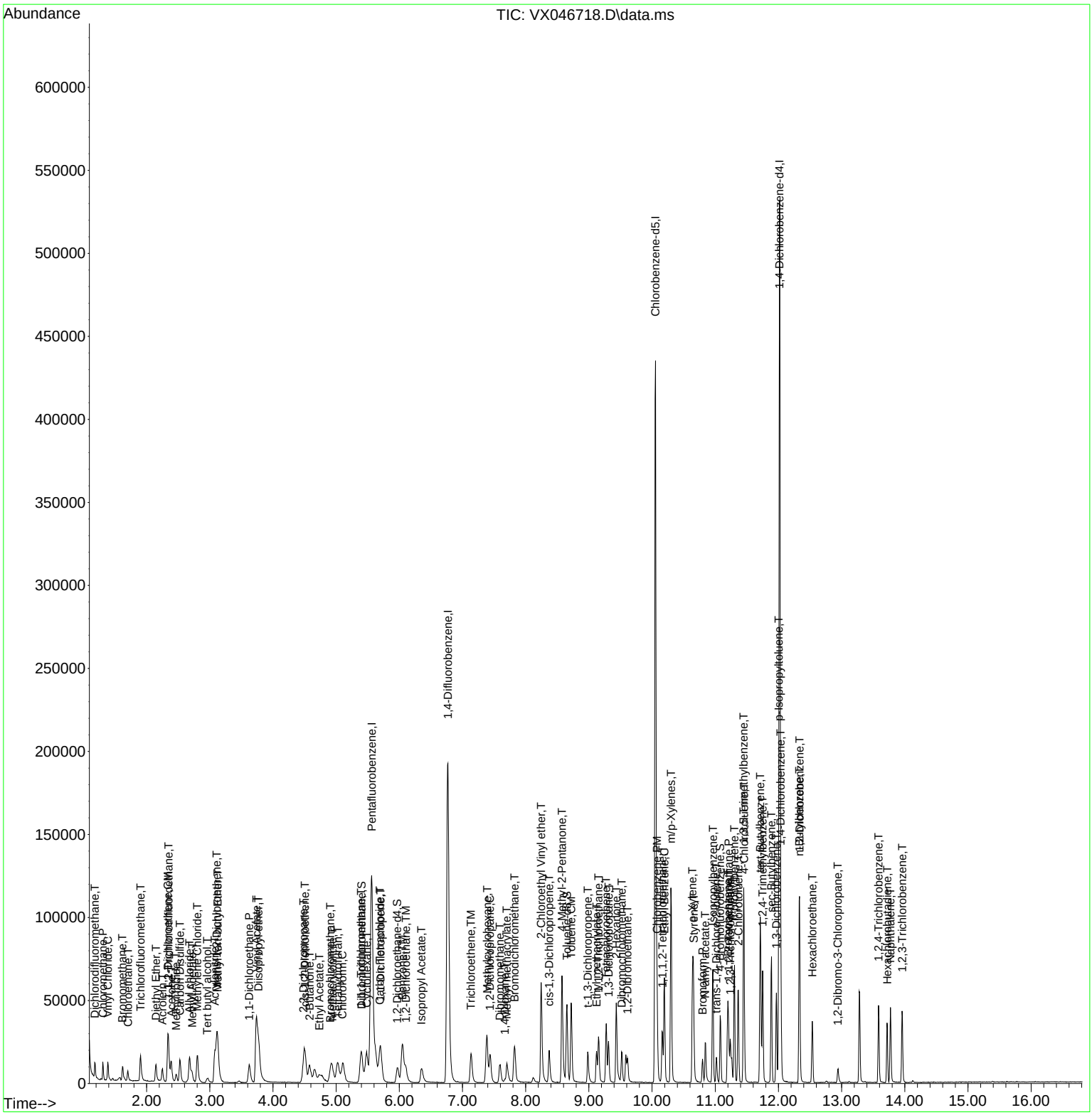
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061725\
Data File : VX046718.D
Acq On : 17 Jun 2025 11:19
Operator : JC/MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 18 02:37:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 02:34:13 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 06/18/2025
Supervised By :Mahesh Dadoda 06/18/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061725\
Data File : VX046719.D
Acq On : 17 Jun 2025 13:59
Operator : JC/MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 18 02:38:27 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 02:34:13 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 06/18/2025
Supervised By :Mahesh Dadoda 06/18/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.556	168	134732	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.757	114	226567	50.000	ug/l	-0.01
63) Chlorobenzene-d5	10.049	117	197947	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	98285	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.964	65	30582	16.410	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery =	32.820%#		
35) Dibromofluoromethane	5.385	113	24156	16.114	ug/l	-0.01
Spiked Amount 50.000	Range 75 - 124		Recovery =	32.220%#		
50) Toluene-d8	8.647	98	88197	16.376	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery =	32.760%#		
62) 4-Bromofluorobenzene	11.079	95	32067	15.973	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery =	31.940%#		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.185	85	27297	18.977	ug/l	97
3) Chloromethane	1.307	50	30731	19.793	ug/l	98
4) Vinyl Chloride	1.386	62	34049	20.565	ug/l	96
5) Bromomethane	1.618	94	19805	21.261	ug/l	91
6) Chloroethane	1.697	64	20911	20.838	ug/l	97
7) Trichlorofluoromethane	1.904	101	52480	20.875	ug/l	99
8) Diethyl Ether	2.142	74	18139	21.024	ug/l	100
9) 1,1,2-Trichlorotrifluo...	2.343	101	32778	21.253	ug/l	98
10) Methyl Iodide	2.465	142	30525	18.775	ug/l	99
11) Tert butyl alcohol	2.953	59	16360	97.808	ug/l	96
12) 1,1-Dichloroethene	2.331	96	30924	20.780	ug/l	92
13) Acrolein	2.246	56	20036	82.237	ug/l	98
14) Allyl chloride	2.672	41	56147	20.823	ug/l	99
15) Acrylonitrile	3.069	53	77278	102.746	ug/l	99
16) Acetone	2.386	43	59747	96.140	ug/l	97
17) Carbon Disulfide	2.526	76	88625	19.721	ug/l	99
18) Methyl Acetate	2.709	43	31812	20.154	ug/l	99
19) Methyl tert-butyl Ether	3.117	73	97187	20.974	ug/l	95
20) Methylene Chloride	2.800	84	35302	20.426	ug/l	99
21) trans-1,2-Dichloroethene	3.105	96	33796	21.224	ug/l	95
22) Diisopropyl ether	3.764	45	111712	21.555	ug/l	95
23) Vinyl Acetate	3.727	43	433313	105.140	ug/l	100
24) 1,1-Dichloroethane	3.617	63	62164	21.126	ug/l	98
25) 2-Butanone	4.556	43	87671	99.748	ug/l	99
26) 2,2-Dichloropropane	4.483	77	42992	20.032	ug/l	99
27) cis-1,2-Dichloroethene	4.495	96	39374	21.047	ug/l	99
28) Bromochloromethane	4.904	49	24738	18.544	ug/l	100
29) Tetrahydrofuran	5.007	42	56765	99.990	ug/l	98
30) Chloroform	5.093	83	64109	21.785	ug/l	100
31) Cyclohexane	5.477	56	58552	20.982	ug/l	98
32) 1,1,1-Trichloroethane	5.385	97	54542	21.133	ug/l	99
36) 1,1-Dichloropropene	5.696	75	44023	20.344	ug/l	99
37) Ethyl Acetate	4.715	43	39916	19.984	ug/l	99
38) Carbon Tetrachloride	5.684	117	48694	20.735	ug/l	97
39) Methylcyclohexane	7.379	83	58170	20.428	ug/l	97
40) Benzene	6.038	78	133872	20.904	ug/l	100

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061725\
Data File : VX046719.D
Acq On : 17 Jun 2025 13:59
Operator : JC/MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 18 02:38:27 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 02:34:13 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 06/18/2025
Supervised By :Mahesh Dadoda 06/18/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	4.922	41	21970	20.632	ug/l		97
42) 1,2-Dichloroethane	6.086	62	47430	21.076	ug/l		99
43) Isopropyl Acetate	6.342	43	62432	19.975	ug/l		100
44) Trichloroethene	7.129	130	33927	20.788	ug/l		100
45) 1,2-Dichloropropane	7.428	63	33688	21.226	ug/l		94
46) Dibromomethane	7.580	93	23569	20.663	ug/l		99
47) Bromodichloromethane	7.818	83	49411	21.227	ug/l		98
48) Methyl methacrylate	7.690	41	31856	20.322	ug/l		98
49) 1,4-Dioxane	7.659	88	8340	382.035	ug/l		93
51) 4-Methyl-2-Pentanone	8.568	43	187509	100.586	ug/l		99
52) Toluene	8.714	92	84030	21.166	ug/l		100
53) t-1,3-Dichloropropene	8.976	75	43852	20.304	ug/l		99
54) cis-1,3-Dichloropropene	8.366	75	50326	20.526	ug/l		98
55) 1,1,2-Trichloroethane	9.147	97	30865	20.862	ug/l		94
56) Ethyl methacrylate	9.116	69	44702	20.468	ug/l		99
57) 1,3-Dichloropropane	9.305	76	52181	20.480	ug/l		99
58) 2-Chloroethyl Vinyl ether	8.238	63	106505	93.878	ug/l		99
59) 2-Hexanone	9.427	43	129218	100.265	ug/l		99
60) Dibromochloromethane	9.519	129	36392	20.872	ug/l		99
61) 1,2-Dibromoethane	9.604	107	31507	20.936	ug/l		100
64) Tetrachloroethene	9.269	164	27988	20.408	ug/l		97
65) Chlorobenzene	10.073	112	90868	20.796	ug/l		100
66) 1,1,1,2-Tetrachloroethane	10.159	131	31508	21.455	ug/l		100
67) Ethyl Benzene	10.189	91	160761	21.056	ug/l		99
68) m/p-Xylenes	10.299	106	121014	42.539	ug/l		99
69) o-Xylene	10.640	106	57689	21.638	ug/l		100
70) Styrene	10.653	104	99462	21.318	ug/l		99
71) Bromoform	10.799	173	23372	20.898	ug/l	#	100
73) Isopropylbenzene	10.957	105	153861	21.255	ug/l		99
74) N-amyl acetate	10.842	43	57185	20.851	ug/l		99
75) 1,1,2,2-Tetrachloroethane	11.207	83	42272	20.914	ug/l		100
76) 1,2,3-Trichloropropane	11.238	75	41901m	20.989	ug/l		
77) Bromobenzene	11.195	156	37464	21.507	ug/l		99
78) n-propylbenzene	11.299	91	184078	21.410	ug/l		100
79) 2-Chlorotoluene	11.360	91	107552	20.952	ug/l		99
80) 1,3,5-Trimethylbenzene	11.451	105	129635	21.793	ug/l		99
81) trans-1,4-Dichloro-2-b...	11.018	75	11694	18.362	ug/l		98
82) 4-Chlorotoluene	11.451	91	127954	21.358	ug/l		100
83) tert-Butylbenzene	11.713	119	130359	21.201	ug/l		99
84) 1,2,4-Trimethylbenzene	11.750	105	128566	21.512	ug/l		99
85) sec-Butylbenzene	11.890	105	165047	21.239	ug/l		99
86) p-Isopropyltoluene	12.006	119	138623	21.142	ug/l		100
87) 1,3-Dichlorobenzene	11.969	146	70243	20.681	ug/l		99
88) 1,4-Dichlorobenzene	12.036	146	71953	20.625	ug/l		99
89) n-Butylbenzene	12.329	91	129101	20.738	ug/l		100
90) Hexachloroethane	12.536	117	23645	20.594	ug/l		97
91) 1,2-Dichlorobenzene	12.329	146	66883	21.073	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	12.939	75	8071	20.226	ug/l		98
93) 1,2,4-Trichlorobenzene	13.585	180	44726	19.821	ug/l		97
94) Hexachlorobutadiene	13.725	225	19698	20.752	ug/l		99
95) Naphthalene	13.774	128	129768	20.186	ug/l		100
96) 1,2,3-Trichlorobenzene	13.957	180	44380	20.558	ug/l		100

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061725\
Data File : VX046719.D
Acq On : 17 Jun 2025 13:59
Operator : JC/MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 06/18/2025
Supervised By :Mahesh Dadoda 06/18/2025

Quant Time: Jun 18 02:38:27 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 02:34:13 2025
Response via : Initial Calibration

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

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

ICAL Form

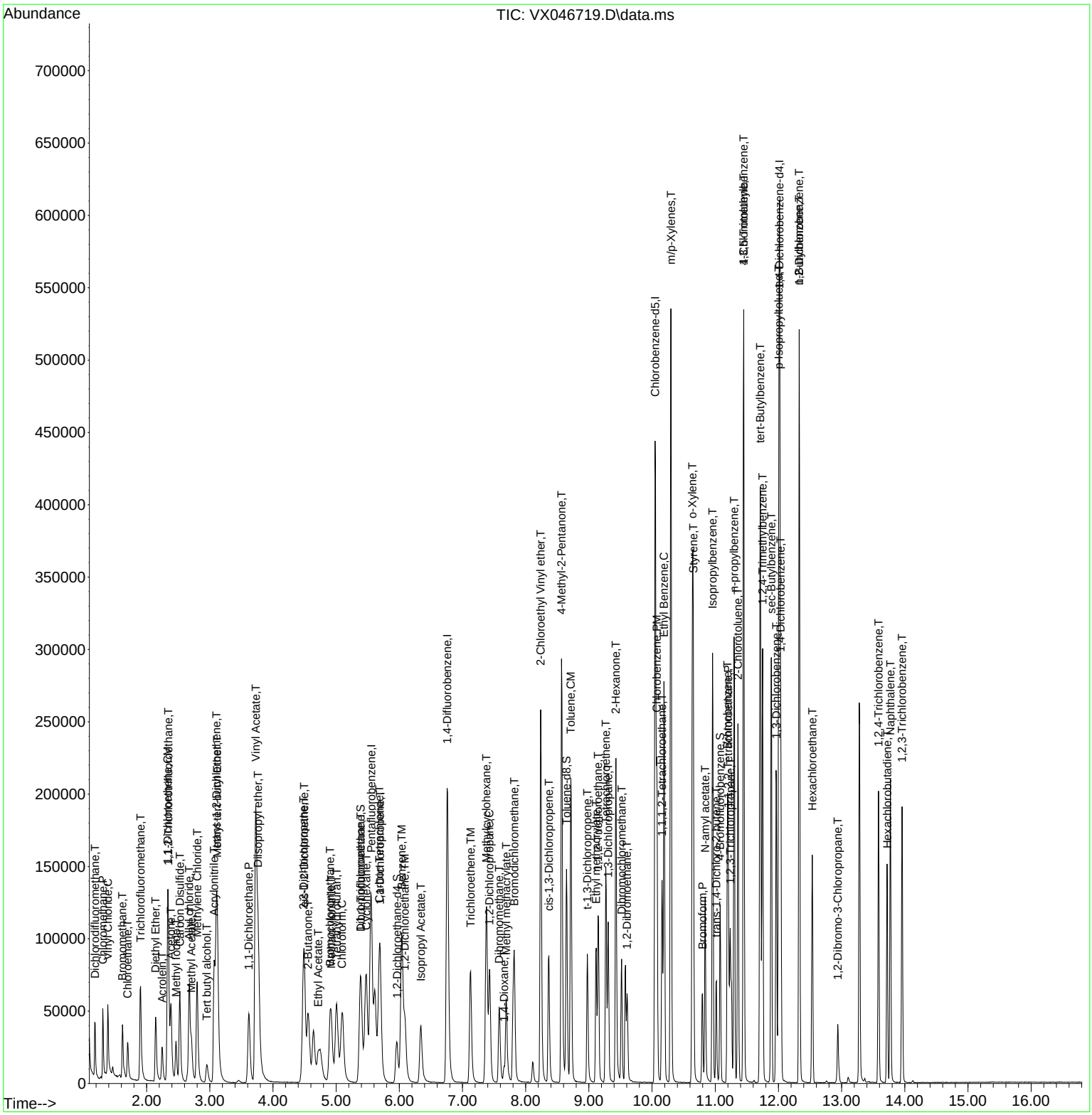
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061725\
Data File : VX046719.D
Acq On : 17 Jun 2025 13:59
Operator : JC/MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 18 02:38:27 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 02:34:13 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 06/18/2025
Supervised By :Mahesh Dadoda 06/18/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061725\
Data File : VX046720.D
Acq On : 17 Jun 2025 14:20
Operator : JC/MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 06/18/2025
Supervised By :Mahesh Dadoda 06/18/2025

Quant Time: Jun 18 02:39:23 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 02:34:13 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.562	168	123412	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.769	114	204400	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	179407	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	89016	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.964	65	80133	46.944	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 93.880%			
35) Dibromofluoromethane	5.397	113	65447	48.394	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 96.780%			
50) Toluene-d8	8.647	98	233825	48.124	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 96.240%			
62) 4-Bromofluorobenzene	11.079	95	87131	48.107	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 96.220%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.185	85	71910	54.577	ug/l	100
3) Chloromethane	1.307	50	73175	51.454	ug/l	100
4) Vinyl Chloride	1.386	62	78242	51.592	ug/l	100
5) Bromomethane	1.624	94	45535	53.367	ug/l	100
6) Chloroethane	1.703	64	46570	50.665	ug/l	100
7) Trichlorofluoromethane	1.904	101	119335	51.823	ug/l	100
8) Diethyl Ether	2.148	74	39712	50.251	ug/l	100
9) 1,1,2-Trichlorotrifluo...	2.343	101	71037	50.285	ug/l	100
10) Methyl Iodide	2.471	142	80710	46.019	ug/l	100
11) Tert butyl alcohol	2.959	59	38256	249.692	ug/l	100
12) 1,1-Dichloroethene	2.337	96	70202	51.500	ug/l	100
13) Acrolein	2.246	56	53791	241.036	ug/l	100
14) Allyl chloride	2.678	41	123265	49.909	ug/l	100
15) Acrylonitrile	3.075	53	175846	255.243	ug/l	100
16) Acetone	2.386	43	135683	238.356	ug/l	100
17) Carbon Disulfide	2.526	76	197344	47.941	ug/l	100
18) Methyl Acetate	2.715	43	71685	49.582	ug/l	100
19) Methyl tert-butyl Ether	3.123	73	216266	50.953	ug/l	100
20) Methylene Chloride	2.800	84	75315	47.576	ug/l	100
21) trans-1,2-Dichloroethene	3.105	96	72648	49.807	ug/l	100
22) Diisopropyl ether	3.770	45	242789	51.143	ug/l	100
23) Vinyl Acetate	3.733	43	985040	260.935	ug/l	100
24) 1,1-Dichloroethane	3.623	63	134324	49.835	ug/l	100
25) 2-Butanone	4.562	43	208346	258.788	ug/l	100
26) 2,2-Dichloropropane	4.489	77	93956	47.794	ug/l	100
27) cis-1,2-Dichloroethene	4.501	96	84638	49.392	ug/l	100
28) Bromochloromethane	4.910	49	59857	48.984	ug/l	100
29) Tetrahydrofuran	5.013	42	133555	256.831	ug/l	100
30) Chloroform	5.105	83	137459	50.996	ug/l	100
31) Cyclohexane	5.483	56	125014	48.909	ug/l	100
32) 1,1,1-Trichloroethane	5.397	97	117954	49.895	ug/l	100
36) 1,1-Dichloropropene	5.702	75	97413	49.899	ug/l	100
37) Ethyl Acetate	4.721	43	88076	48.877	ug/l	100
38) Carbon Tetrachloride	5.690	117	105202	49.656	ug/l	100
39) Methylcyclohexane	7.385	83	128553	50.041	ug/l	100
40) Benzene	6.044	78	289724	50.146	ug/l	100

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061725\
Data File : VX046720.D
Acq On : 17 Jun 2025 14:20
Operator : JC/MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 18 02:39:23 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 02:34:13 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 06/18/2025
Supervised By :Mahesh Dadoda 06/18/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	4.928	41	48765	50.762	ug/l		100
42) 1,2-Dichloroethane	6.092	62	101218	49.855	ug/l		100
43) Isopropyl Acetate	6.342	43	146377	51.911	ug/l		100
44) Trichloroethene	7.129	130	72796	49.441	ug/l		100
45) 1,2-Dichloropropane	7.434	63	70702	49.378	ug/l		100
46) Dibromomethane	7.586	93	51288	49.840	ug/l		100
47) Bromodichloromethane	7.824	83	106651	50.787	ug/l		100
48) Methyl methacrylate	7.696	41	75708	53.535	ug/l		100
49) 1,4-Dioxane	7.659	88	19802	962.534	ug/l		100
51) 4-Methyl-2-Pentanone	8.574	43	435000	258.656	ug/l		100
52) Toluene	8.720	92	181414	50.650	ug/l		100
53) t-1,3-Dichloropropene	8.976	75	99727	51.183	ug/l		100
54) cis-1,3-Dichloropropene	8.366	75	111917	50.598	ug/l		100
55) 1,1,2-Trichloroethane	9.153	97	66688	49.963	ug/l		100
56) Ethyl methacrylate	9.116	69	103697	52.629	ug/l		100
57) 1,3-Dichloropropane	9.305	76	114824	49.955	ug/l		100
58) 2-Chloroethyl Vinyl ether	8.245	63	287531	280.927	ug/l		100
59) 2-Hexanone	9.427	43	303322	260.883	ug/l		100
60) Dibromochloromethane	9.519	129	79227	50.368	ug/l		100
61) 1,2-Dibromoethane	9.610	107	68515	50.464	ug/l		100
64) Tetrachloroethene	9.275	164	61048	49.115	ug/l		100
65) Chlorobenzene	10.080	112	195752	49.429	ug/l		100
66) 1,1,1,2-Tetrachloroethane	10.159	131	67004	50.341	ug/l		100
67) Ethyl Benzene	10.189	91	346812	50.119	ug/l		100
68) m/p-Xylenes	10.299	106	259899	100.800	ug/l		100
69) o-Xylene	10.640	106	124120	51.366	ug/l		100
70) Styrene	10.653	104	216738	51.254	ug/l		100
71) Bromoform	10.799	173	51485	50.792	ug/l	#	100
73) Isopropylbenzene	10.957	105	331391	50.548	ug/l		100
74) N-amyl acetate	10.842	43	130606	52.581	ug/l		100
75) 1,1,2,2-Tetrachloroethane	11.207	83	92893	50.745	ug/l		100
76) 1,2,3-Trichloropropane	11.238	75	88091m	48.721	ug/l		
77) Bromobenzene	11.195	156	79404	50.331	ug/l		100
78) n-propylbenzene	11.299	91	394375	50.646	ug/l		100
79) 2-Chlorotoluene	11.360	91	230178	49.509	ug/l		100
80) 1,3,5-Trimethylbenzene	11.451	105	273477	50.761	ug/l		100
81) trans-1,4-Dichloro-2-b...	11.018	75	27677	47.984	ug/l		100
82) 4-Chlorotoluene	11.451	91	269198	49.613	ug/l		100
83) tert-Butylbenzene	11.713	119	277915	49.905	ug/l		100
84) 1,2,4-Trimethylbenzene	11.750	105	272510	50.345	ug/l		100
85) sec-Butylbenzene	11.890	105	355947	50.574	ug/l		100
86) p-Isopropyltoluene	12.006	119	297314	50.067	ug/l		100
87) 1,3-Dichlorobenzene	11.969	146	149402	48.568	ug/l		100
88) 1,4-Dichlorobenzene	12.037	146	147146	46.571	ug/l		100
89) n-Butylbenzene	12.329	91	280794	49.801	ug/l		100
90) Hexachloroethane	12.536	117	51961	49.968	ug/l		100
91) 1,2-Dichlorobenzene	12.329	146	141743	49.309	ug/l		100
92) 1,2-Dibromo-3-Chloropr...	12.939	75	18747	51.873	ug/l		100
93) 1,2,4-Trichlorobenzene	13.585	180	100346	49.101	ug/l		100
94) Hexachlorobutadiene	13.719	225	42659	49.621	ug/l		100
95) Naphthalene	13.774	128	296912	50.994	ug/l		100
96) 1,2,3-Trichlorobenzene	13.957	180	96318	49.263	ug/l		100

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061725\
Data File : VX046720.D
Acq On : 17 Jun 2025 14:20
Operator : JC/MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 06/18/2025
Supervised By :Mahesh Dadoda 06/18/2025

Quant Time: Jun 18 02:39:23 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 02:34:13 2025
Response via : Initial Calibration

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

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

ICAL Form

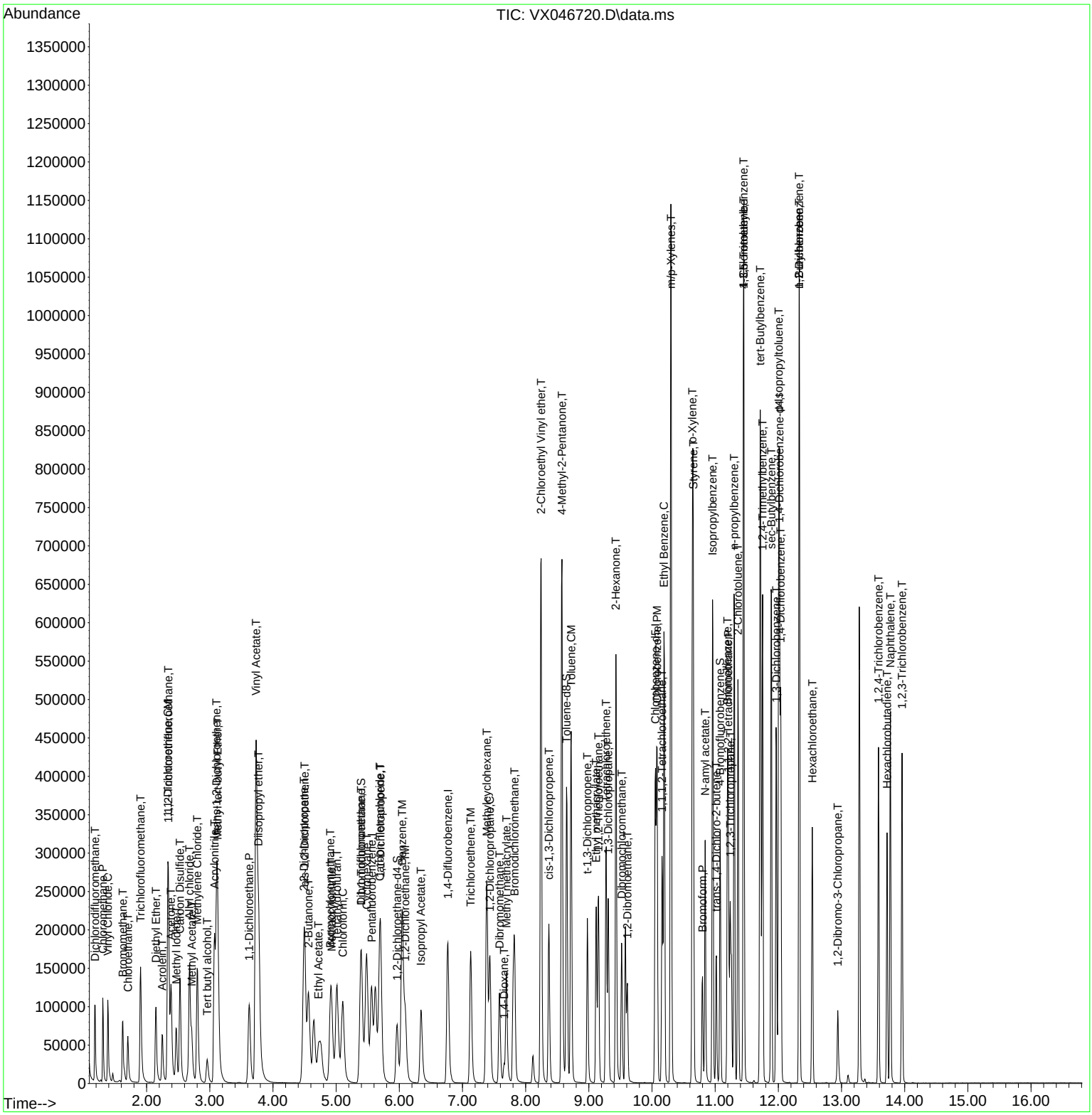
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061725\
Data File : VX046720.D
Acq On : 17 Jun 2025 14:20
Operator : JC/MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 18 02:39:23 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 02:34:13 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 06/18/2025
Supervised By :Mahesh Dadoda 06/18/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061725\
Data File : VX046721.D
Acq On : 17 Jun 2025 14:41
Operator : JC/MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 06/18/2025
Supervised By :Mahesh Dadoda 06/18/2025

Quant Time: Jun 18 02:40:16 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 02:34:13 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.556	168	110482	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.763	114	183300	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	160869	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	78522	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.958	65	160514	105.037	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 210.080%#			
35) Dibromofluoromethane	5.391	113	129932	107.136	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 214.280%#			
50) Toluene-d8	8.647	98	458174	105.153	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 210.300%#			
62) 4-Bromofluorobenzene	11.079	95	170795	105.156	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 210.320%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.179	85	138589	117.494	ug/l	99
3) Chloromethane	1.307	50	141568	111.195	ug/l	99
4) Vinyl Chloride	1.386	62	151879	111.868	ug/l	97
5) Bromomethane	1.611	94	75361	98.660	ug/l	94
6) Chloroethane	1.697	64	89532	108.805	ug/l	96
7) Trichlorofluoromethane	1.898	101	227688	110.449	ug/l	98
8) Diethyl Ether	2.148	74	77791	109.956	ug/l	96
9) 1,1,2-Trichlorotrifluo...	2.343	101	137759	108.929	ug/l	99
10) Methyl Iodide	2.465	142	174182	104.824	ug/l	99
11) Tert butyl alcohol	2.965	59	78366	571.345	ug/l	99
12) 1,1-Dichloroethene	2.331	96	134660	110.347	ug/l	98
13) Acrolein	2.246	56	108796	544.566	ug/l	99
14) Allyl chloride	2.678	41	243477	110.119	ug/l	100
15) Acrylonitrile	3.075	53	344981	559.348	ug/l	100
16) Acetone	2.386	43	263024	516.133	ug/l	99
17) Carbon Disulfide	2.526	76	383348	104.026	ug/l	98
18) Methyl Acetate	2.709	43	143551	110.909	ug/l	100
19) Methyl tert-butyl Ether	3.123	73	419445	110.387	ug/l	98
20) Methylene Chloride	2.800	84	147144	103.828	ug/l	98
21) trans-1,2-Dichloroethene	3.105	96	140792	107.824	ug/l	97
22) Diisopropyl ether	3.770	45	466831	109.846	ug/l	98
23) Vinyl Acetate	3.733	43	1930136	571.126	ug/l	99
24) 1,1-Dichloroethane	3.623	63	258546	107.149	ug/l	98
25) 2-Butanone	4.562	43	409960	568.810	ug/l	99
26) 2,2-Dichloropropane	4.489	77	194006	110.239	ug/l	99
27) cis-1,2-Dichloroethene	4.501	96	163672	106.691	ug/l	99
28) Bromochloromethane	4.910	49	114720	104.869	ug/l	99
29) Tetrahydrofuran	5.013	42	265233	569.746	ug/l	100
30) Chloroform	5.105	83	260888	108.113	ug/l	96
31) Cyclohexane	5.477	56	237424	103.757	ug/l	96
32) 1,1,1-Trichloroethane	5.391	97	231101	109.198	ug/l	99
36) 1,1-Dichloropropene	5.702	75	183355	104.733	ug/l	98
37) Ethyl Acetate	4.721	43	171444	106.094	ug/l	97
38) Carbon Tetrachloride	5.690	117	200914	105.749	ug/l	98
39) Methylcyclohexane	7.385	83	246277	106.902	ug/l	99
40) Benzene	6.044	78	553336	106.798	ug/l	99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061725\
Data File : VX046721.D
Acq On : 17 Jun 2025 14:41
Operator : JC/MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 18 02:40:16 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 02:34:13 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 06/18/2025
Supervised By :Mahesh Dadoda 06/18/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	4.928	41	97782	113.502	ug/l		97
42) 1,2-Dichloroethane	6.092	62	193498	106.278	ug/l		99
43) Isopropyl Acetate	6.342	43	291467	115.264	ug/l		100
44) Trichloroethene	7.129	130	142659	108.043	ug/l		96
45) 1,2-Dichloropropane	7.434	63	137291	106.920	ug/l		96
46) Dibromomethane	7.586	93	98964	107.240	ug/l		99
47) Bromodichloromethane	7.824	83	205870	109.319	ug/l		100
48) Methyl methacrylate	7.696	41	150002	118.279	ug/l		99
49) 1,4-Dioxane	7.659	88	38203	2040.447	ug/l		95
51) 4-Methyl-2-Pentanone	8.574	43	843944	559.584	ug/l		100
52) Toluene	8.720	92	339735	105.772	ug/l		99
53) t-1,3-Dichloropropene	8.976	75	203470	116.448	ug/l		99
54) cis-1,3-Dichloropropene	8.366	75	221241	111.537	ug/l		98
55) 1,1,2-Trichloroethane	9.153	97	127195	106.264	ug/l		99
56) Ethyl methacrylate	9.116	69	205153	116.106	ug/l		100
57) 1,3-Dichloropropane	9.305	76	220021	106.740	ug/l		100
58) 2-Chloroethyl Vinyl ether	8.244	63	541734	590.219	ug/l		100
59) 2-Hexanone	9.427	43	587221	563.200	ug/l		100
60) Dibromochloromethane	9.519	129	153731	108.983	ug/l		99
61) 1,2-Dibromoethane	9.610	107	133253	109.444	ug/l		99
64) Tetrachloroethene	9.275	164	115774	103.876	ug/l		98
65) Chlorobenzene	10.079	112	374913	105.577	ug/l		100
66) 1,1,1,2-Tetrachloroethane	10.159	131	131134	109.876	ug/l		99
67) Ethyl Benzene	10.189	91	663369	106.914	ug/l		100
68) m/p-Xylenes	10.299	106	492448	213.003	ug/l		100
69) o-Xylene	10.640	106	237631	109.675	ug/l		99
70) Styrene	10.653	104	407566	107.488	ug/l		99
71) Bromoform	10.799	173	101329	111.485	ug/l	#	99
73) Isopropylbenzene	10.957	105	628803	108.731	ug/l		100
74) N-amyl acetate	10.842	43	260620	118.945	ug/l		99
75) 1,1,2,2-Tetrachloroethane	11.207	83	176523	109.317	ug/l		100
76) 1,2,3-Trichloropropane	11.238	75	147349m	92.387	ug/l		
77) Bromobenzene	11.195	156	150110	107.864	ug/l		99
78) n-propylbenzene	11.299	91	743979	108.310	ug/l		100
79) 2-Chlorotoluene	11.360	91	434989	106.065	ug/l		100
80) 1,3,5-Trimethylbenzene	11.451	105	517286	108.848	ug/l		100
81) trans-1,4-Dichloro-2-b...	11.018	75	57608	113.225	ug/l		96
82) 4-Chlorotoluene	11.451	91	506852	105.896	ug/l		99
83) tert-Butylbenzene	11.713	119	533235	108.548	ug/l		100
84) 1,2,4-Trimethylbenzene	11.750	105	518524	108.598	ug/l		100
85) sec-Butylbenzene	11.890	105	670896	108.062	ug/l		99
86) p-Isopropyltoluene	12.006	119	561258	107.145	ug/l		100
87) 1,3-Dichlorobenzene	11.969	146	280540	103.388	ug/l		99
88) 1,4-Dichlorobenzene	12.036	146	280884	100.779	ug/l		99
89) n-Butylbenzene	12.329	91	536268	107.822	ug/l		100
90) Hexachloroethane	12.536	117	101647	110.811	ug/l		96
91) 1,2-Dichlorobenzene	12.335	146	267432	105.466	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	12.939	75	36858	115.616	ug/l		95
93) 1,2,4-Trichlorobenzene	13.585	180	196715	109.119	ug/l		99
94) Hexachlorobutadiene	13.725	225	80407	106.029	ug/l		98
95) Naphthalene	13.774	128	587914	114.468	ug/l		100
96) 1,2,3-Trichlorobenzene	13.957	180	189473	109.861	ug/l		100

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061725\
Data File : VX046721.D
Acq On : 17 Jun 2025 14:41
Operator : JC/MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 06/18/2025
Supervised By :Mahesh Dadoda 06/18/2025

Quant Time: Jun 18 02:40:16 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 02:34:13 2025
Response via : Initial Calibration

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

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

ICAL Form

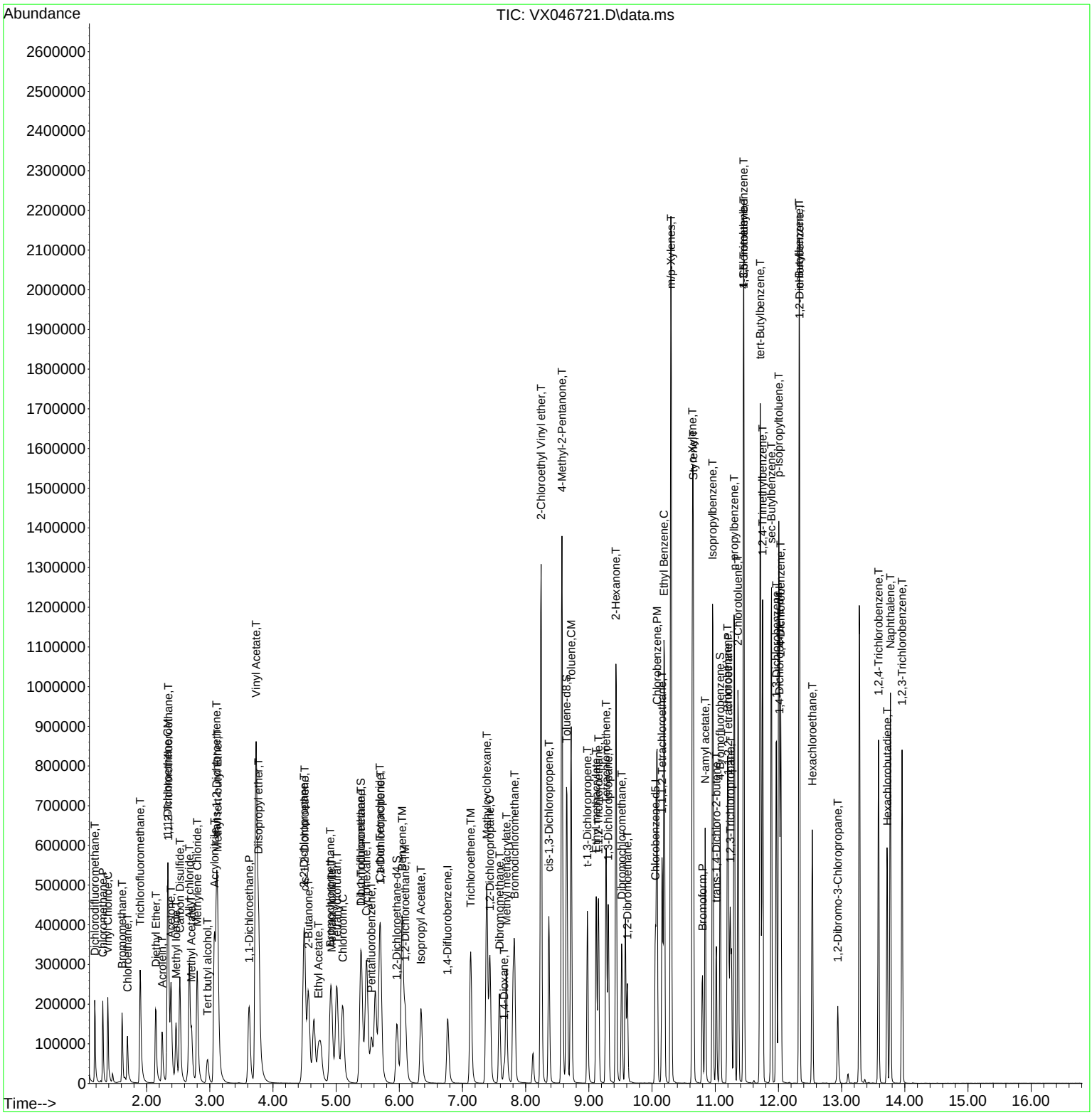
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061725\
Data File : VX046721.D
Acq On : 17 Jun 2025 14:41
Operator : JC/MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 18 02:40:16 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 02:34:13 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 06/18/2025
Supervised By :Mahesh Dadoda 06/18/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061725\
Data File : VX046722.D
Acq On : 17 Jun 2025 15:02
Operator : JC/MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 18 02:41:13 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 02:34:13 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 06/18/2025
Supervised By :Mahesh Dadoda 06/18/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.562	168	107848	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.769	114	178346	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	156970	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	75829	50.000	ug/l	# 0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.964	65	230915	154.797	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 309.600%#			
35) Dibromofluoromethane	5.397	113	187536	158.930	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 317.860%#			
50) Toluene-d8	8.653	98	660221	155.733	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 311.460%#			
62) 4-Bromofluorobenzene	11.079	95	244007	154.404	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 308.800%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.179	85	193321	167.898	ug/l	99
3) Chloromethane	1.307	50	202755	163.144	ug/l	97
4) Vinyl Chloride	1.386	62	208285	157.161	ug/l	96
5) Bromomethane	1.612	94	90708	121.652	ug/l	97
6) Chloroethane	1.691	64	123323	153.530	ug/l	96
7) Trichlorofluoromethane	1.898	101	314552	156.313	ug/l	98
8) Diethyl Ether	2.142	74	108801	157.544	ug/l	97
9) 1,1,2-Trichlorotrifluo...	2.343	101	192071	155.583	ug/l	99
10) Methyl Iodide	2.465	142	243423	148.201	ug/l	99
11) Tert butyl alcohol	2.971	59	111150	830.155	ug/l	99
12) 1,1-Dichloroethene	2.331	96	188770	158.466	ug/l	97
13) Acrolein	2.246	56	156844	804.238	ug/l	99
14) Allyl chloride	2.678	41	340117	157.583	ug/l	99
15) Acrylonitrile	3.075	53	477449	793.036	ug/l	99
16) Acetone	2.386	43	378554	760.980	ug/l	99
17) Carbon Disulfide	2.526	76	535657	148.907	ug/l	99
18) Methyl Acetate	2.715	43	209349	165.695	ug/l	99
19) Methyl tert-butyl Ether	3.123	73	585091	157.742	ug/l	99
20) Methylene Chloride	2.800	84	201983	146.004	ug/l	99
21) trans-1,2-Dichloroethene	3.105	96	192490	151.016	ug/l	99
22) Diisopropyl ether	3.770	45	638477	153.904	ug/l	99
23) Vinyl Acetate	3.733	43	2691267	815.794	ug/l	99
24) 1,1-Dichloroethane	3.623	63	360395	153.006	ug/l	98
25) 2-Butanone	4.562	43	570672	811.132	ug/l	99
26) 2,2-Dichloropropane	4.483	77	286713	166.896	ug/l	99
27) cis-1,2-Dichloroethene	4.495	96	227788	152.112	ug/l	99
28) Bromochloromethane	4.910	49	161801	151.520	ug/l	100
29) Tetrahydrofuran	5.013	42	370760	815.879	ug/l	100
30) Chloroform	5.105	83	358782	152.312	ug/l	99
31) Cyclohexane	5.483	56	330235	147.842	ug/l	98
32) 1,1,1-Trichloroethane	5.397	97	320382	155.082	ug/l	99
36) 1,1-Dichloropropene	5.702	75	256619	150.653	ug/l	99
37) Ethyl Acetate	4.721	43	245724	156.284	ug/l	99
38) Carbon Tetrachloride	5.684	117	284066	153.668	ug/l	99
39) Methylcyclohexane	7.385	83	346118	154.413	ug/l	100
40) Benzene	6.044	78	763341	151.423	ug/l	100

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061725\
Data File : VX046722.D
Acq On : 17 Jun 2025 15:02
Operator : JC/MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 06/18/2025
Supervised By :Mahesh Dadoda 06/18/2025

Quant Time: Jun 18 02:41:13 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 02:34:13 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	4.928	41	142283	169.745	ug/l	94
42) 1,2-Dichloroethane	6.092	62	265740	150.011	ug/l	99
43) Isopropyl Acetate	6.342	43	412067	167.483	ug/l	99
44) Trichloroethene	7.129	130	195943	152.520	ug/l	99
45) 1,2-Dichloropropane	7.434	63	191181	153.025	ug/l	95
46) Dibromomethane	7.580	93	138541	154.297	ug/l	99
47) Bromodichloromethane	7.824	83	288826	157.630	ug/l	100
48) Methyl methacrylate	7.696	41	211908	171.734	ug/l	99
49) 1,4-Dioxane	7.659	88	54646	2987.386	ug/l	96
51) 4-Methyl-2-Pentanone	8.574	43	1173666	799.825	ug/l	100
52) Toluene	8.720	92	471273	150.800	ug/l	99
53) t-1,3-Dichloropropene	8.976	75	288893	169.929	ug/l	99
54) cis-1,3-Dichloropropene	8.366	75	314965	163.198	ug/l	98
55) 1,1,2-Trichloroethane	9.153	97	175973	151.099	ug/l	99
56) Ethyl methacrylate	9.116	69	288720	167.940	ug/l	99
57) 1,3-Dichloropropane	9.305	76	301418	150.290	ug/l	99
58) 2-Chloroethyl Vinyl ether	8.244	63	754730	845.118	ug/l	100
59) 2-Hexanone	9.433	43	816655	805.005	ug/l	99
60) Dibromochloromethane	9.519	129	215347	156.904	ug/l	99
61) 1,2-Dibromoethane	9.610	107	185268	156.392	ug/l	99
64) Tetrachloroethene	9.275	164	159752	146.895	ug/l	98
65) Chlorobenzene	10.080	112	517859	149.453	ug/l	100
66) 1,1,1,2-Tetrachloroethane	10.165	131	181981	156.268	ug/l	99
67) Ethyl Benzene	10.195	91	915724	151.251	ug/l	98
68) m/p-Xylenes	10.299	106	676085	299.697	ug/l	99
69) o-Xylene	10.640	106	328782	155.514	ug/l	98
70) Styrene	10.653	104	566606	153.143	ug/l	100
71) Bromoform	10.799	173	143229	161.498	ug/l	100
73) Isopropylbenzene	10.964	105	867728	155.374	ug/l	100
74) N-amyl acetate	10.842	43	369757	174.748	ug/l	99
75) 1,1,2,2-Tetrachloroethane	11.207	83	244406	156.730	ug/l	99
76) 1,2,3-Trichloropropane	11.238	75	202926m	131.753	ug/l	
77) Bromobenzene	11.195	156	207348	154.285	ug/l	98
78) n-propylbenzene	11.305	91	1025742	154.633	ug/l	100
79) 2-Chlorotoluene	11.366	91	595555	150.373	ug/l	100
80) 1,3,5-Trimethylbenzene	11.451	105	707005	154.053	ug/l	99
81) trans-1,4-Dichloro-2-b...	11.018	75	86677	176.408	ug/l	93
82) 4-Chlorotoluene	11.451	91	697556	150.915	ug/l	99
83) tert-Butylbenzene	11.713	119	735750	155.093	ug/l	100
84) 1,2,4-Trimethylbenzene	11.750	105	719283	155.994	ug/l	100
85) sec-Butylbenzene	11.890	105	916769	152.910	ug/l	99
86) p-Isopropyltoluene	12.006	119	771998	152.610	ug/l	100
87) 1,3-Dichlorobenzene	11.969	146	391049	149.232	ug/l	100
88) 1,4-Dichlorobenzene	12.036	146	387139	143.836	ug/l	99
89) n-Butylbenzene	12.329	91	726563	151.271	ug/l	100
90) Hexachloroethane	12.536	117	142663	161.049	ug/l	98
91) 1,2-Dichlorobenzene	12.329	146	370234	151.192	ug/l	100
92) 1,2-Dibromo-3-Chloropr...	12.939	75	54014	175.448	ug/l	97
93) 1,2,4-Trichlorobenzene	13.585	180	263803	151.531	ug/l	97
94) Hexachlorobutadiene	13.725	225	95520	130.431	ug/l	100
95) Naphthalene	13.774	128	846206	170.609	ug/l	100
96) 1,2,3-Trichlorobenzene	13.957	180	262348	157.517	ug/l	98

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061725\
Data File : VX046722.D
Acq On : 17 Jun 2025 15:02
Operator : JC/MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 06/18/2025
Supervised By :Mahesh Dadoda 06/18/2025

Quant Time: Jun 18 02:41:13 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 02:34:13 2025
Response via : Initial Calibration

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

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

ICAL Form

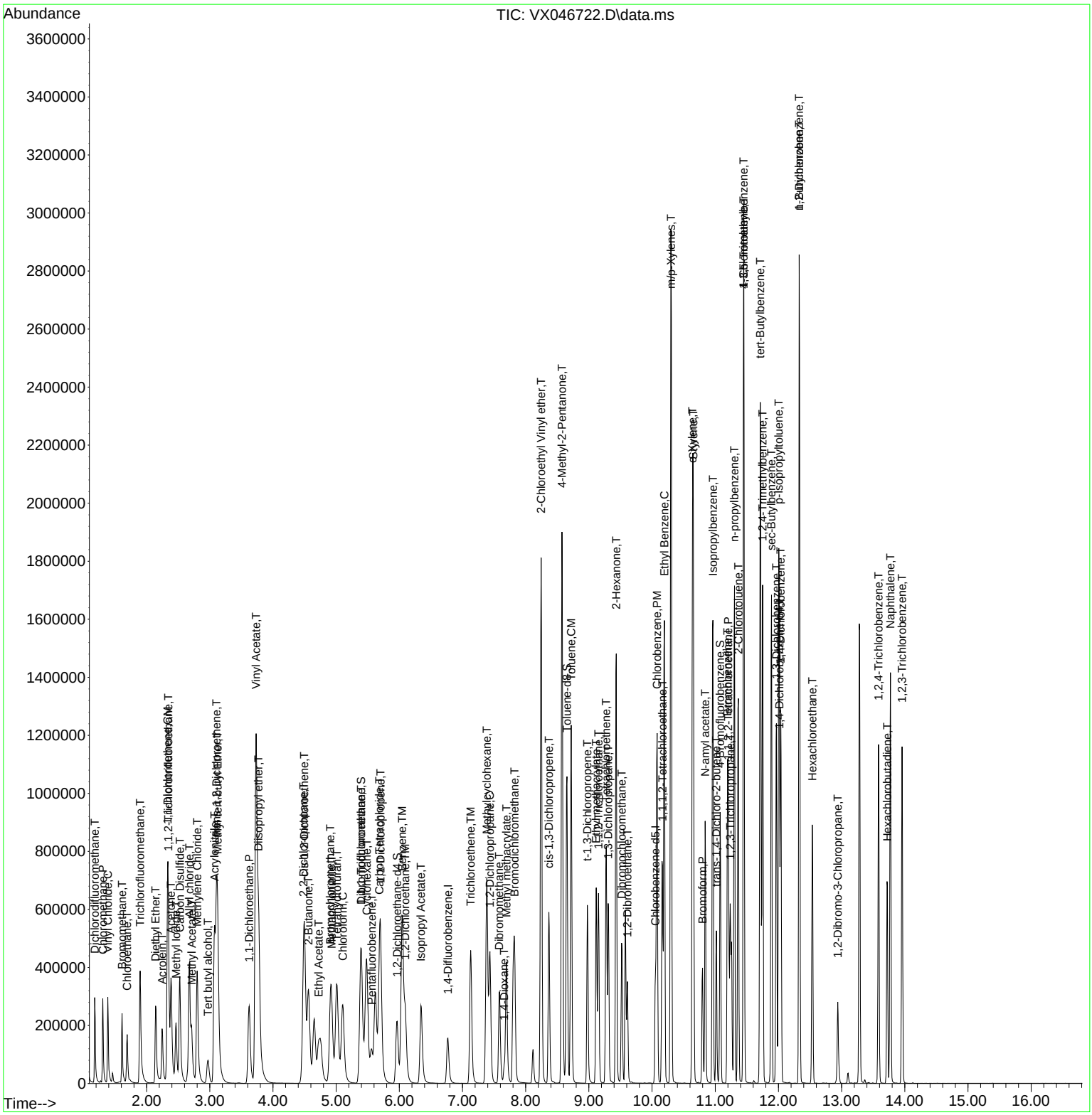
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061725\
Data File : VX046722.D
Acq On : 17 Jun 2025 15:02
Operator : JC/MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 18 02:41:13 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 02:34:13 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 06/18/2025
Supervised By :Mahesh Dadoda 06/18/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061725\
Data File : VX046725.D
Acq On : 17 Jun 2025 17:18
Operator : JC/MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 06/18/2025
Supervised By :Mahesh Dadoda 06/18/2025

Quant Time: Jun 18 02:42:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 02:34:13 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.556	168	136219	50.000	ug/l		0.00
34) 1,4-Difluorobenzene	6.763	114	226094	50.000	ug/l		0.00
63) Chlorobenzene-d5	10.049	117	205370	50.000	ug/l		0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	103593	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	1.179	85	1159	0.797	ug/l		83
3) Chloromethane	1.307	50	1322	0.842	ug/l		93
4) Vinyl Chloride	1.386	62	1419	0.848	ug/l		89
6) Chloroethane	1.703	64	905	0.892	ug/l		90
7) Trichlorofluoromethane	1.904	101	2062	0.811	ug/l		97
8) Diethyl Ether	2.148	74	722	0.828	ug/l		87
9) 1,1,2-Trichlorotrifluo...	2.343	101	1280	0.821	ug/l		99
12) 1,1-Dichloroethene	2.337	96	1228	0.816	ug/l	#	76
14) Allyl chloride	2.672	41	2386	0.875	ug/l		96
15) Acrylonitrile	3.081	53	3075	4.044	ug/l		96
16) Acetone	2.386	43	3424	5.449	ug/l	#	80
17) Carbon Disulfide	2.526	76	5092	1.121	ug/l		96
18) Methyl Acetate	2.721	43	1280	0.802	ug/l	#	87
19) Methyl tert-butyl Ether	3.129	73	3888	0.830	ug/l	#	89
20) Methylene Chloride	2.800	84	1736	0.994	ug/l		91
21) trans-1,2-Dichloroethene	3.111	96	1441	0.895	ug/l	#	81
22) Diisopropyl ether	3.770	45	4170	0.796	ug/l	#	71
23) Vinyl Acetate	3.745	43	15507	3.722	ug/l		95
24) 1,1-Dichloroethane	3.617	63	2648	0.890	ug/l	#	79
25) 2-Butanone	4.593	43	3422	3.851	ug/l		93
26) 2,2-Dichloropropane	4.489	77	1874m	0.864	ug/l		
27) cis-1,2-Dichloroethene	4.507	96	1698	0.898	ug/l		97
28) Bromochloromethane	4.922	49	1307	0.969	ug/l	#	91
29) Tetrahydrofuran	5.032	42	2212	3.854	ug/l	#	54
30) Chloroform	5.105	83	2336m	0.785	ug/l		
32) 1,1,1-Trichloroethane	5.391	97	2212	0.848	ug/l	#	50
36) 1,1-Dichloropropene	5.708	75	2016	0.934	ug/l		90
37) Ethyl Acetate	4.739	43	2002m	1.004	ug/l		
38) Carbon Tetrachloride	5.684	117	2124	0.906	ug/l		92
39) Methylcyclohexane	7.379	83	2485	0.875	ug/l		87
40) Benzene	6.044	78	5507	0.862	ug/l		97
41) Methacrylonitrile	4.965	41	857m	0.806	ug/l		
42) 1,2-Dichloroethane	6.098	62	1938	0.863	ug/l	#	75
43) Isopropyl Acetate	6.367	43	2218	0.711	ug/l	#	83
44) Trichloroethene	7.135	130	1448	0.889	ug/l		87
45) 1,2-Dichloropropane	7.434	63	1380	0.871	ug/l	#	89

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061725\
Data File : VX046725.D
Acq On : 17 Jun 2025 17:18
Operator : JC/MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 18 02:42:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 02:34:13 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 06/18/2025
Supervised By :Mahesh Dadoda 06/18/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) Dibromomethane	7.592	93	1030	0.905	ug/l		89
47) Bromodichloromethane	7.824	83	1825	0.786	ug/l	#	82
48) Methyl methacrylate	7.720	41	1050	0.671	ug/l	#	80
49) 1,4-Dioxane	7.671	88	56	28.694	ug/l	#	77
51) 4-Methyl-2-Pentanone	8.580	43	7273	3.910	ug/l		97
52) Toluene	8.726	92	3393	0.856	ug/l		96
53) t-1,3-Dichloropropene	8.994	75	1607	0.746	ug/l	#	87
54) cis-1,3-Dichloropropene	8.372	75	1971	0.806	ug/l	#	57
55) 1,1,2-Trichloroethane	9.153	97	1297	0.878	ug/l	#	83
56) Ethyl methacrylate	9.122	69	1477	0.678	ug/l		93
57) 1,3-Dichloropropane	9.311	76	2249	0.885	ug/l		95
58) 2-Chloroethyl Vinyl ether	8.251	63	3778	3.337	ug/l		92
59) 2-Hexanone	9.439	43	4833	3.758	ug/l		94
60) Dibromochloromethane	9.525	129	1436	0.825	ug/l		99
61) 1,2-Dibromoethane	9.610	107	1209	0.805	ug/l		90
64) Tetrachloroethene	9.275	164	1399	0.983	ug/l		95
65) Chlorobenzene	10.073	112	4127	0.910	ug/l		99
66) 1,1,1,2-Tetrachloroethane	10.159	131	1242	0.815	ug/l	#	64
67) Ethyl Benzene	10.195	91	6967	0.880	ug/l		98
68) m/p-Xylenes	10.305	106	5214	1.767	ug/l		98
69) o-Xylene	10.646	106	2045	0.739	ug/l		80
70) Styrene	10.659	104	4077	0.842	ug/l		98
71) Bromoform	10.799	173	927	0.799	ug/l	#	96
73) Isopropylbenzene	10.963	105	6314	0.828	ug/l		97
74) N-amyl acetate	10.848	43	1921	0.665	ug/l	#	85
75) 1,1,2,2-Tetrachloroethane	11.213	83	1690	0.793	ug/l		93
76) 1,2,3-Trichloropropane	11.238	75	1346m	0.640	ug/l		
77) Bromobenzene	11.201	156	1541	0.839	ug/l		95
78) n-propylbenzene	11.305	91	7545	0.833	ug/l		98
79) 2-Chlorotoluene	11.366	91	4896	0.905	ug/l		93
80) 1,3,5-Trimethylbenzene	11.451	105	5174	0.825	ug/l		94
82) 4-Chlorotoluene	11.457	91	5664	0.897	ug/l		99
83) tert-Butylbenzene	11.713	119	5507	0.850	ug/l		95
84) 1,2,4-Trimethylbenzene	11.750	105	5087	0.808	ug/l		99
85) sec-Butylbenzene	11.890	105	6839	0.835	ug/l		98
86) p-Isopropyltoluene	12.006	119	6018	0.871	ug/l		92
87) 1,3-Dichlorobenzene	11.969	146	3509	0.980	ug/l		96
88) 1,4-Dichlorobenzene	12.036	146	4003m	1.089	ug/l		
89) n-Butylbenzene	12.335	91	6186	0.943	ug/l		96
90) Hexachloroethane	12.536	117	1081	0.893	ug/l		90
91) 1,2-Dichlorobenzene	12.335	146	3024	0.904	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	12.951	75	277	0.659	ug/l		95
93) 1,2,4-Trichlorobenzene	13.591	180	2424	1.019	ug/l		99
94) Hexachlorobutadiene	13.725	225	1025	1.025	ug/l		97
95) Naphthalene	13.780	128	5461	0.806	ug/l		96
96) 1,2,3-Trichlorobenzene	13.963	180	1982	0.871	ug/l		96

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

ICAL Form

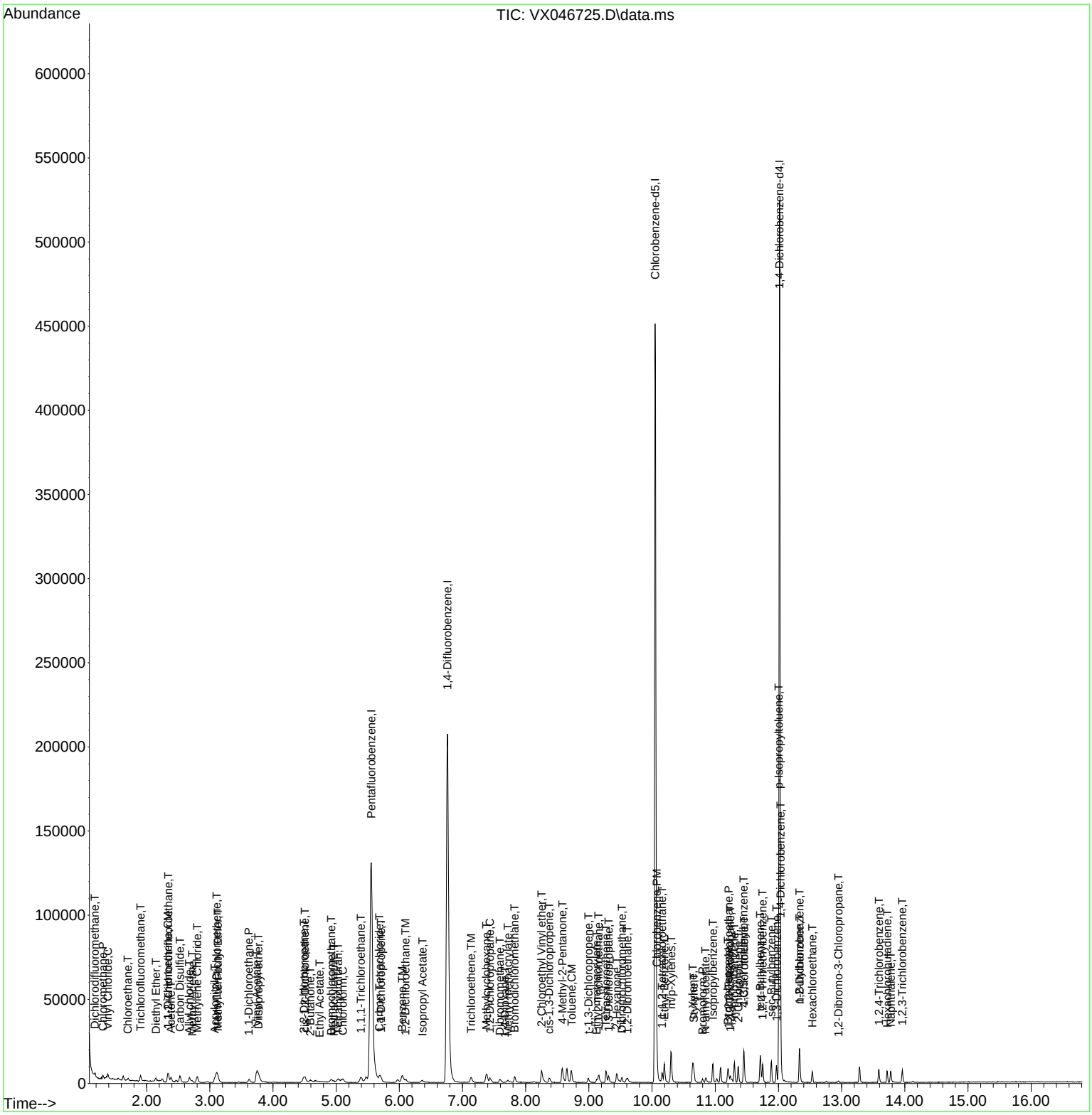
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061725\
Data File : VX046725.D
Acq On : 17 Jun 2025 17:18
Operator : JC/MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 18 02:42:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 02:34:13 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 06/18/2025
Supervised By :Mahesh Dadoda 06/18/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061725\
Data File : VX046726.D
Acq On : 17 Jun 2025 18:00
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 14 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX061725

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 06/18/2025
Supervised By :Mahesh Dadoda 06/18/2025

Quant Time: Jun 18 07:50:18 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 03:09:16 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.562	168	129144	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.769	114	209541	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	184761	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	91992	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.958	65	81629	45.697	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 91.400%			
35) Dibromofluoromethane	5.397	113	66647	48.072	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 96.140%			
50) Toluene-d8	8.647	98	236781	47.537	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 95.080%			
62) 4-Bromofluorobenzene	11.079	95	88588	47.712	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 95.420%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.179	85	75554	54.798	ug/l	100
3) Chloromethane	1.307	50	76483	51.393	ug/l	99
4) Vinyl Chloride	1.386	62	82156	51.768	ug/l	95
5) Bromomethane	1.618	94	48957	54.831	ug/l	96
6) Chloroethane	1.703	64	49931	51.911	ug/l	99
7) Trichlorofluoromethane	1.904	101	123768	51.363	ug/l	98
8) Diethyl Ether	2.148	74	42437	51.316	ug/l	99
9) 1,1,2-Trichlorotrifluo...	2.343	101	75525	51.089	ug/l	99
10) Methyl Iodide	2.465	142	84139	45.861	ug/l	99
11) Tert butyl alcohol	2.959	59	40385	251.888	ug/l	100
12) 1,1-Dichloroethene	2.337	96	74097	51.945	ug/l	99
13) Acrolein	2.246	56	59544	254.972	ug/l	99
14) Allyl chloride	2.678	41	131610	50.922	ug/l	99
15) Acrylonitrile	3.075	53	187601	260.219	ug/l	98
16) Acetone	2.386	43	146745	246.347	ug/l	98
17) Carbon Disulfide	2.526	76	205516	47.710	ug/l	98
18) Methyl Acetate	2.715	43	80049	52.909	ug/l	98
19) Methyl tert-butyl Ether	3.123	73	226557	51.008	ug/l	99
20) Methylene Chloride	2.800	84	80668	48.696	ug/l	99
21) trans-1,2-Dichloroethene	3.105	96	76889	50.375	ug/l	98
22) Diisopropyl ether	3.770	45	257775	51.890	ug/l	99
23) Vinyl Acetate	3.733	43	1044679	264.451	ug/l	100
24) 1,1-Dichloroethane	3.623	63	142442	50.502	ug/l	99
25) 2-Butanone	4.562	43	222870	264.542	ug/l	98
26) 2,2-Dichloropropane	4.483	77	104151	50.629	ug/l	99
27) cis-1,2-Dichloroethene	4.501	96	89665	50.003	ug/l	99
28) Bromochloromethane	4.904	49	64330	50.308	ug/l	99
29) Tetrahydrofuran	5.013	42	143570	263.836	ug/l	99
30) Chloroform	5.105	83	144108	51.089	ug/l	98
31) Cyclohexane	5.483	56	132301	49.462	ug/l	99
32) 1,1,1-Trichloroethane	5.391	97	123796	50.042	ug/l	99
36) 1,1-Dichloropropene	5.702	75	100241	50.088	ug/l	99
37) Ethyl Acetate	4.721	43	94953	51.401	ug/l	99
38) Carbon Tetrachloride	5.690	117	109471	50.403	ug/l	98
39) Methylcyclohexane	7.385	83	132086	50.155	ug/l	97
40) Benzene	6.044	78	304346	51.385	ug/l	100

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061725\
Data File : VX046726.D
Acq On : 17 Jun 2025 18:00
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 14 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX061725

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 06/18/2025
Supervised By :Mahesh Dadoda 06/18/2025

Quant Time: Jun 18 07:50:18 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 03:09:16 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	4.928	41	54501	55.341	ug/l		97
42) 1,2-Dichloroethane	6.099	62	106085	50.970	ug/l		99
43) Isopropyl Acetate	6.342	43	155773	53.888	ug/l		99
44) Trichloroethene	7.129	130	76981	51.000	ug/l		97
45) 1,2-Dichloropropane	7.434	63	74773	50.940	ug/l		94
46) Dibromomethane	7.586	93	54149	51.329	ug/l		100
47) Bromodichloromethane	7.824	83	110823	51.479	ug/l		100
48) Methyl methacrylate	7.696	41	79868	55.091	ug/l		99
49) 1,4-Dioxane	7.659	88	20314	964.253	ug/l		97
51) 4-Methyl-2-Pentanone	8.574	43	470527	272.916	ug/l		99
52) Toluene	8.720	92	188131	51.237	ug/l		99
53) t-1,3-Dichloropropene	8.976	75	105435	52.785	ug/l		99
54) cis-1,3-Dichloropropene	8.366	75	117487	51.813	ug/l		97
55) 1,1,2-Trichloroethane	9.153	97	70739	51.698	ug/l		99
56) Ethyl methacrylate	9.116	69	109612	54.266	ug/l		100
57) 1,3-Dichloropropane	9.305	76	121649	51.625	ug/l		100
58) 2-Chloroethyl Vinyl ether	8.244	63	293709	279.922	ug/l		100
59) 2-Hexanone	9.427	43	326564	273.982	ug/l		99
60) Dibromochloromethane	9.519	129	82234	50.997	ug/l		99
61) 1,2-Dibromoethane	9.610	107	72749	52.268	ug/l		98
64) Tetrachloroethene	9.275	164	62943	49.172	ug/l		98
65) Chlorobenzene	10.079	112	203947	50.006	ug/l		99
66) 1,1,1,2-Tetrachloroethane	10.159	131	69709	50.856	ug/l		99
67) Ethyl Benzene	10.195	91	359779	50.487	ug/l		98
68) m/p-Xylenes	10.299	106	272935	102.789	ug/l		99
69) o-Xylene	10.640	106	130980	52.635	ug/l		97
70) Styrene	10.653	104	227060	52.139	ug/l		100
71) Bromoform	10.799	173	53660	51.404	ug/l	#	100
73) Isopropylbenzene	10.957	105	346098	51.083	ug/l		100
74) N-amyl acetate	10.842	43	138890	54.107	ug/l		100
75) 1,1,2,2-Tetrachloroethane	11.207	83	98960	52.310	ug/l		99
76) 1,2,3-Trichloropropane	11.238	75	81355m	48.286	ug/l		
77) Bromobenzene	11.195	156	82515	50.611	ug/l		99
78) n-propylbenzene	11.305	91	412345	51.240	ug/l		100
79) 2-Chlorotoluene	11.360	91	239904	49.931	ug/l		99
80) 1,3,5-Trimethylbenzene	11.451	105	288104	51.746	ug/l		99
81) trans-1,4-Dichloro-2-b...	11.018	75	29929	50.210	ug/l		99
82) 4-Chlorotoluene	11.451	91	280848	50.085	ug/l		98
83) tert-Butylbenzene	11.713	119	287513	49.958	ug/l		98
84) 1,2,4-Trimethylbenzene	11.750	105	286365	51.193	ug/l		99
85) sec-Butylbenzene	11.890	105	371523	51.079	ug/l		100
86) p-Isopropyltoluene	12.006	119	311698	50.791	ug/l		100
87) 1,3-Dichlorobenzene	11.969	146	154181	48.501	ug/l		99
88) 1,4-Dichlorobenzene	12.036	146	153158	46.906	ug/l		100
89) n-Butylbenzene	12.329	91	296174	50.829	ug/l		100
90) Hexachloroethane	12.536	117	52831	49.161	ug/l		98
91) 1,2-Dichlorobenzene	12.335	146	147561	49.672	ug/l		100
92) 1,2-Dibromo-3-Chloropr...	12.939	75	19851	53.151	ug/l		97
93) 1,2,4-Trichlorobenzene	13.585	180	104267	49.369	ug/l		99
94) Hexachlorobutadiene	13.719	225	45958	51.729	ug/l		98
95) Naphthalene	13.774	128	315669	52.462	ug/l		100
96) 1,2,3-Trichlorobenzene	13.957	180	103451	51.200	ug/l		99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061725\
Data File : VX046726.D
Acq On : 17 Jun 2025 18:00
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 14 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX061725

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 06/18/2025
Supervised By :Mahesh Dadoda 06/18/2025

Quant Time: Jun 18 07:50:18 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 03:09:16 2025
Response via : Initial Calibration

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

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

ICAL Form

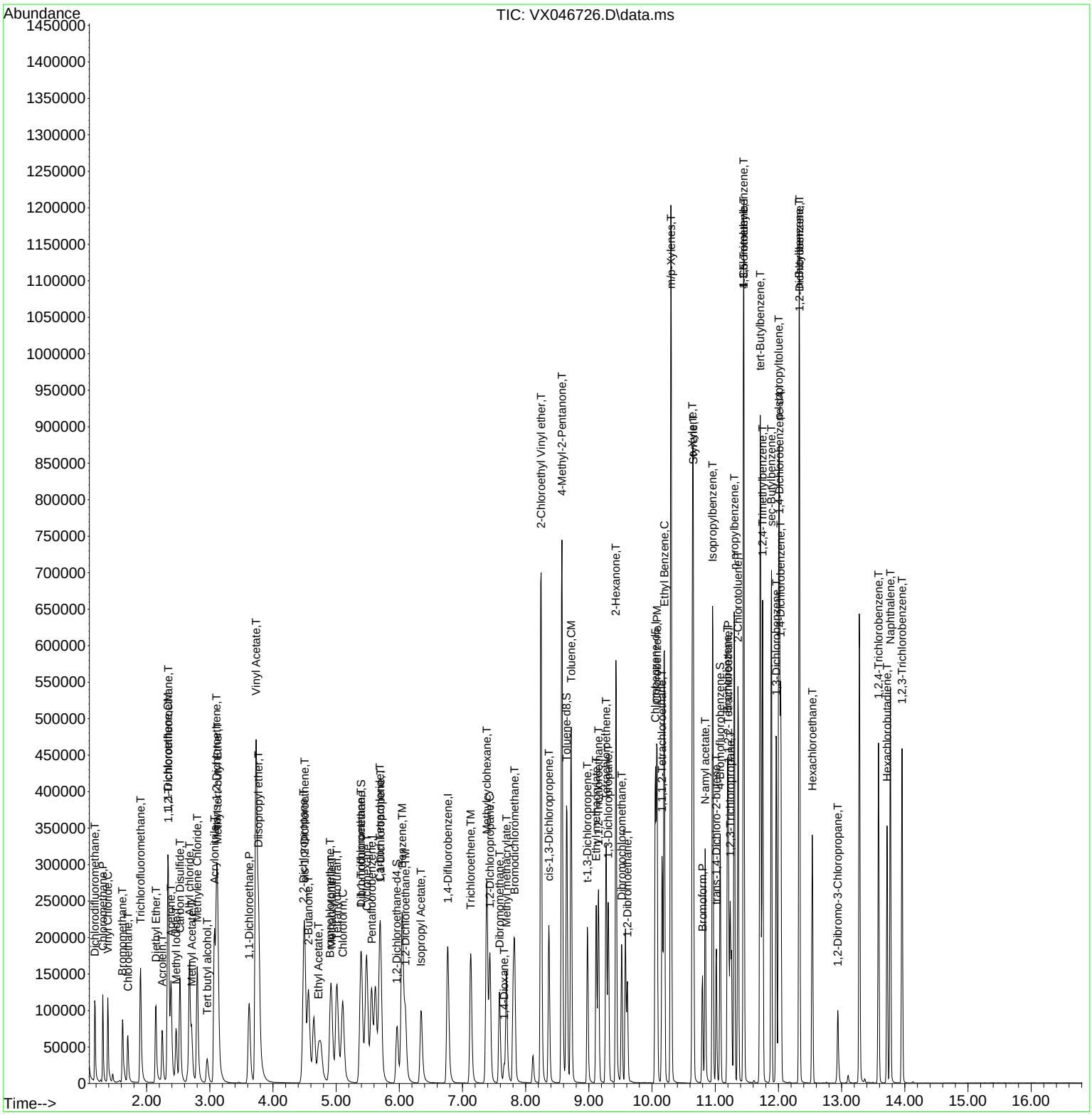
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061725\
Data File : VX046726.D
Acq On : 17 Jun 2025 18:00
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 18 07:50:18 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 03:09:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
ICVVX061725

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 06/18/2025
Supervised By :Mahesh Dadoda 06/18/2025



Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061725\
Data File : VX046726.D
Acq On : 17 Jun 2025 18:00
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 14 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX061725

Quant Time: Jun 18 07:50:18 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 03:09:16 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	105	0.00
2	T	Dichlorodifluoromethane	0.534	0.585	-9.6	105	0.00
3	P	Chloromethane	0.576	0.592	-2.8	105	0.00
4	C	Vinyl Chloride	0.614	0.636	-3.6#	105	0.00
5	T	Bromomethane	0.346	0.379	-9.5	108	0.00
6	T	Chloroethane	0.372	0.387	-4.0	107	0.00
7	T	Trichlorofluoromethane	0.933	0.958	-2.7	104	0.00
8	T	Diethyl Ether	0.320	0.329	-2.8	107	0.00
9	T	1,1,2-Trichlorotrifluoroeth	0.572	0.585	-2.3	106	0.00
10	T	Methyl Iodide	0.642	0.652	-1.6	104	0.00
11	T	Tert butyl alcohol	0.062	0.063	-1.6	106	0.00
12	CM	1,1-Dichloroethene	0.552	0.574	-4.0#	106	0.00
13	T	Acrolein	0.090	0.092	-2.2	111	0.00
14	T	Allyl chloride	1.001	1.019	-1.8	107	0.00
15	T	Acrylonitrile	0.279	0.291	-4.3	107	0.00
16	T	Acetone	0.231	0.227	1.7	108	0.00
17	T	Carbon Disulfide	1.668	1.591	4.6	104	0.00
18	T	Methyl Acetate	0.586	0.620	-5.8	112	0.00
19	T	Methyl tert-butyl Ether	1.720	1.754	-2.0	105	0.00
20	T	Methylene Chloride	0.641	0.625	2.5	107	0.00
21	T	trans-1,2-Dichloroethene	0.591	0.595	-0.7	106	0.00
22	T	Diisopropyl ether	1.923	1.996	-3.8	106	0.00
23	T	Vinyl Acetate	1.529	1.618	-5.8	106	0.00
24	P	1,1-Dichloroethane	1.092	1.103	-1.0	106	0.00
25	T	2-Butanone	0.326	0.345	-5.8	107	0.00
26	T	2,2-Dichloropropane	0.796	0.806	-1.3	111	0.00
27	T	cis-1,2-Dichloroethene	0.694	0.694	0.0	106	0.00
28	T	Bromochloromethane	0.495	0.498	-0.6	107	0.00
29	T	Tetrahydrofuran	0.211	0.222	-5.2	107	0.00
30	C	Chloroform	1.092	1.116	-2.2#	105	0.00
31	T	Cyclohexane	1.036	1.024	1.2	106	0.00
32	T	1,1,1-Trichloroethane	0.958	0.959	-0.1	105	0.00
33	S	1,2-Dichloroethane-d4	0.692	0.632	8.7	102	0.00
34	I	1,4-Difluorobenzene	1.000	1.000	0.0	103	0.00
35	S	Dibromofluoromethane	0.331	0.318	3.9	102	0.00
36	T	1,1-Dichloropropene	0.478	0.478	0.0	103	0.00
37	T	Ethyl Acetate	0.441	0.453	-2.7	108	0.00
38	T	Carbon Tetrachloride	0.518	0.522	-0.8	104	0.00
39	T	Methylcyclohexane	0.628	0.630	-0.3	103	0.00
40	TM	Benzene	1.413	1.452	-2.8	105	0.00
41	T	Methacrylonitrile	0.235	0.260	-10.6	112	0.00
42	TM	1,2-Dichloroethane	0.497	0.506	-1.8	105	0.00
43	T	Isopropyl Acetate	0.690	0.743	-7.7	106	0.00
44	TM	Trichloroethene	0.360	0.367	-1.9	106	0.00
45	C	1,2-Dichloropropane	0.350	0.357	-2.0#	106	0.00
46	T	Dibromomethane	0.252	0.258	-2.4	106	0.00
47	T	Bromodichloromethane	0.514	0.529	-2.9	104	0.00
48	T	Methyl methacrylate	0.346	0.381	-10.1	105	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061725\
Data File : VX046726.D
Acq On : 17 Jun 2025 18:00
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 14 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX061725

Quant Time: Jun 18 07:50:18 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 03:09:16 2025
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	T	1,4-Dioxane	0.004	0.005	-25.0	103	0.00
50	S	Toluene-d8	1.189	1.130	5.0	101	0.00
51	T	4-Methyl-2-Pentanone	0.411	0.449	-9.2	108	0.00
52	CM	Toluene	0.876	0.898	-2.5#	104	0.00
53	T	t-1,3-Dichloropropene	0.477	0.503	-5.5	106	0.00
54	T	cis-1,3-Dichloropropene	0.541	0.561	-3.7	105	0.00
55	T	1,1,2-Trichloroethane	0.327	0.338	-3.4	106	0.00
56	T	Ethyl methacrylate	0.482	0.523	-8.5	106	0.00
57	T	1,3-Dichloropropane	0.562	0.581	-3.4	106	0.00
58	T	2-Chloroethyl Vinyl ether	0.250	0.280	-12.0	102	0.00
59	T	2-Hexanone	0.284	0.312	-9.9	108	0.00
60	T	Dibromochloromethane	0.385	0.392	-1.8	104	0.00
61	T	1,2-Dibromoethane	0.332	0.347	-4.5	106	0.00
62	S	4-Bromofluorobenzene	0.443	0.423	4.5	102	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	103	0.00
64	T	Tetrachloroethene	0.346	0.341	1.4	103	0.00
65	PM	Chlorobenzene	1.104	1.104	0.0	104	0.00
66	T	1,1,1,2-Tetrachloroethane	0.371	0.377	-1.6	104	0.00
67	C	Ethyl Benzene	1.929	1.947	-0.9#	104	0.00
68	T	m/p-Xylenes	0.719	0.739	-2.8	105	0.00
69	T	o-Xylene	0.673	0.709	-5.3	106	0.00
70	T	Styrene	1.179	1.229	-4.2	105	0.00
71	P	Bromoform	0.282	0.290	-2.8	104	0.00
72	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	103	0.00
73	T	Isopropylbenzene	3.682	3.762	-2.2	104	0.00
74	T	N-amyl acetate	1.395	1.510	-8.2	106	0.00
75	P	1,1,2,2-Tetrachloroethane	1.028	1.076	-4.7	107	0.00
76	T	1,2,3-Trichloropropane	0.916	0.884	3.5	92	0.00
77	T	Bromobenzene	0.886	0.897	-1.2	104	0.00
78	T	n-propylbenzene	4.374	4.482	-2.5	105	0.00
79	T	2-Chlorotoluene	2.611	2.608	0.1	104	0.00
80	T	1,3,5-Trimethylbenzene	3.026	3.132	-3.5	105	0.00
81	T	trans-1,4-Dichloro-2-butene	0.324	0.325	-0.3	108	0.00
82	T	4-Chlorotoluene	3.048	3.053	-0.2	104	0.00
83	T	tert-Butylbenzene	3.128	3.125	0.1	103	0.00
84	T	1,2,4-Trimethylbenzene	3.040	3.113	-2.4	105	0.00
85	T	sec-Butylbenzene	3.953	4.039	-2.2	104	0.00
86	T	p-Isopropyltoluene	3.336	3.388	-1.6	105	0.00
87	T	1,3-Dichlorobenzene	1.728	1.676	3.0	103	0.00
88	T	1,4-Dichlorobenzene	1.775	1.665	6.2	104	0.00
89	T	n-Butylbenzene	3.167	3.220	-1.7	105	0.00
90	T	Hexachloroethane	0.584	0.574	1.7	102	0.00
91	T	1,2-Dichlorobenzene	1.615	1.604	0.7	104	0.00
92	T	1,2-Dibromo-3-Chloropropane	0.203	0.216	-6.4	106	0.00
93	T	1,2,4-Trichlorobenzene	1.148	1.133	1.3	104	0.00
94	T	Hexachlorobutadiene	0.483	0.500	-3.5	108	0.00
95	T	Naphthalene	3.270	3.431	-4.9	106	0.00

Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061725\
Data File : VX046726.D
Acq On : 17 Jun 2025 18:00
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 14 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX061725

Quant Time: Jun 18 07:50:18 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 03:09:16 2025
Response via : Initial Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	1.098	1.125	-2.5	107	0.00

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

Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061725\
Data File : VX046726.D
Acq On : 17 Jun 2025 18:00
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 14 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX061725

Quant Time: Jun 18 07:50:18 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 03:09:16 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	105	0.00
2	T	Dichlorodifluoromethane	50.000	54.798	-9.6	105	0.00
3	P	Chloromethane	50.000	51.393	-2.8	105	0.00
4	C	Vinyl Chloride	50.000	51.768	-3.5#	105	0.00
5	T	Bromomethane	50.000	54.831	-9.7	108	0.00
6	T	Chloroethane	50.000	51.911	-3.8	107	0.00
7	T	Trichlorofluoromethane	50.000	51.363	-2.7	104	0.00
8	T	Diethyl Ether	50.000	51.316	-2.6	107	0.00
9	T	1,1,2-Trichlorotrifluoroeth	50.000	51.089	-2.2	106	0.00
10	T	Methyl Iodide	50.000	45.861	8.3	104	0.00
11	T	Tert butyl alcohol	250.000	251.888	-0.8	106	0.00
12	CM	1,1-Dichloroethene	50.000	51.945	-3.9#	106	0.00
13	T	Acrolein	250.000	254.972	-2.0	111	0.00
14	T	Allyl chloride	50.000	50.922	-1.8	107	0.00
15	T	Acrylonitrile	250.000	260.219	-4.1	107	0.00
16	T	Acetone	250.000	246.347	1.5	108	0.00
17	T	Carbon Disulfide	50.000	47.710	4.6	104	0.00
18	T	Methyl Acetate	50.000	52.909	-5.8	112	0.00
19	T	Methyl tert-butyl Ether	50.000	51.008	-2.0	105	0.00
20	T	Methylene Chloride	50.000	48.696	2.6	107	0.00
21	T	trans-1,2-Dichloroethene	50.000	50.375	-0.8	106	0.00
22	T	Diisopropyl ether	50.000	51.890	-3.8	106	0.00
23	T	Vinyl Acetate	250.000	264.451	-5.8	106	0.00
24	P	1,1-Dichloroethane	50.000	50.502	-1.0	106	0.00
25	T	2-Butanone	250.000	264.542	-5.8	107	0.00
26	T	2,2-Dichloropropane	50.000	50.629	-1.3	111	0.00
27	T	cis-1,2-Dichloroethene	50.000	50.003	-0.0	106	0.00
28	T	Bromochloromethane	50.000	50.308	-0.6	107	0.00
29	T	Tetrahydrofuran	250.000	263.836	-5.5	107	0.00
30	C	Chloroform	50.000	51.089	-2.2#	105	0.00
31	T	Cyclohexane	50.000	49.462	1.1	106	0.00
32	T	1,1,1-Trichloroethane	50.000	50.042	-0.1	105	0.00
33	S	1,2-Dichloroethane-d4	50.000	45.697	8.6	102	0.00
34	I	1,4-Difluorobenzene	50.000	50.000	0.0	103	0.00
35	S	Dibromofluoromethane	50.000	48.072	3.9	102	0.00
36	T	1,1-Dichloropropene	50.000	50.088	-0.2	103	0.00
37	T	Ethyl Acetate	50.000	51.401	-2.8	108	0.00
38	T	Carbon Tetrachloride	50.000	50.403	-0.8	104	0.00
39	T	Methylcyclohexane	50.000	50.155	-0.3	103	0.00
40	TM	Benzene	50.000	51.385	-2.8	105	0.00
41	T	Methacrylonitrile	50.000	55.341	-10.7	112	0.00
42	TM	1,2-Dichloroethane	50.000	50.970	-1.9	105	0.00
43	T	Isopropyl Acetate	50.000	53.888	-7.8	106	0.00
44	TM	Trichloroethene	50.000	51.000	-2.0	106	0.00
45	C	1,2-Dichloropropane	50.000	50.940	-1.9#	106	0.00
46	T	Dibromomethane	50.000	51.329	-2.7	106	0.00
47	T	Bromodichloromethane	50.000	51.479	-3.0	104	0.00
48	T	Methyl methacrylate	50.000	55.091	-10.2	105	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061725\
Data File : VX046726.D
Acq On : 17 Jun 2025 18:00
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 14 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX061725

Quant Time: Jun 18 07:50:18 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 03:09:16 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	964.253	3.6	103	0.00
50	S	Toluene-d8	50.000	47.537	4.9	101	0.00
51	T	4-Methyl-2-Pentanone	250.000	272.916	-9.2	108	0.00
52	CM	Toluene	50.000	51.237	-2.5#	104	0.00
53	T	t-1,3-Dichloropropene	50.000	52.785	-5.6	106	0.00
54	T	cis-1,3-Dichloropropene	50.000	51.813	-3.6	105	0.00
55	T	1,1,2-Trichloroethane	50.000	51.698	-3.4	106	0.00
56	T	Ethyl methacrylate	50.000	54.266	-8.5	106	0.00
57	T	1,3-Dichloropropane	50.000	51.625	-3.3	106	0.00
58	T	2-Chloroethyl Vinyl ether	250.000	279.922	-12.0	102	0.00
59	T	2-Hexanone	250.000	273.982	-9.6	108	0.00
60	T	Dibromochloromethane	50.000	50.997	-2.0	104	0.00
61	T	1,2-Dibromoethane	50.000	52.268	-4.5	106	0.00
62	S	4-Bromofluorobenzene	50.000	47.712	4.6	102	0.00
63	I	Chlorobenzene-d5	50.000	50.000	0.0	103	0.00
64	T	Tetrachloroethene	50.000	49.172	1.7	103	0.00
65	PM	Chlorobenzene	50.000	50.006	-0.0	104	0.00
66	T	1,1,1,2-Tetrachloroethane	50.000	50.856	-1.7	104	0.00
67	C	Ethyl Benzene	50.000	50.487	-1.0#	104	0.00
68	T	m/p-Xylenes	100.000	102.789	-2.8	105	0.00
69	T	o-Xylene	50.000	52.635	-5.3	106	0.00
70	T	Styrene	50.000	52.139	-4.3	105	0.00
71	P	Bromoform	50.000	51.404	-2.8	104	0.00
72	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	103	0.00
73	T	Isopropylbenzene	50.000	51.083	-2.2	104	0.00
74	T	N-amyl acetate	50.000	54.107	-8.2	106	0.00
75	P	1,1,2,2-Tetrachloroethane	50.000	52.310	-4.6	107	0.00
76	T	1,2,3-Trichloropropane	50.000	48.286	3.4	92	0.00
77	T	Bromobenzene	50.000	50.611	-1.2	104	0.00
78	T	n-propylbenzene	50.000	51.240	-2.5	105	0.00
79	T	2-Chlorotoluene	50.000	49.931	0.1	104	0.00
80	T	1,3,5-Trimethylbenzene	50.000	51.746	-3.5	105	0.00
81	T	trans-1,4-Dichloro-2-butene	50.000	50.210	-0.4	108	0.00
82	T	4-Chlorotoluene	50.000	50.085	-0.2	104	0.00
83	T	tert-Butylbenzene	50.000	49.958	0.1	103	0.00
84	T	1,2,4-Trimethylbenzene	50.000	51.193	-2.4	105	0.00
85	T	sec-Butylbenzene	50.000	51.079	-2.2	104	0.00
86	T	p-Isopropyltoluene	50.000	50.791	-1.6	105	0.00
87	T	1,3-Dichlorobenzene	50.000	48.501	3.0	103	0.00
88	T	1,4-Dichlorobenzene	50.000	46.906	6.2	104	0.00
89	T	n-Butylbenzene	50.000	50.829	-1.7	105	0.00
90	T	Hexachloroethane	50.000	49.161	1.7	102	0.00
91	T	1,2-Dichlorobenzene	50.000	49.672	0.7	104	0.00
92	T	1,2-Dibromo-3-Chloropropane	50.000	53.151	-6.3	106	0.00
93	T	1,2,4-Trichlorobenzene	50.000	49.369	1.3	104	0.00
94	T	Hexachlorobutadiene	50.000	51.729	-3.5	108	0.00
95	T	Naphthalene	50.000	52.462	-4.9	106	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061725\
Data File : VX046726.D
Acq On : 17 Jun 2025 18:00
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 14 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX061725

Quant Time: Jun 18 07:50:18 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 03:09:16 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	51.200	-2.4	107	0.00

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

Raw Data: **VX046758.D**

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: GENV01

Lab Code: CHEM Case No.: Q2372 SAS No.: Q2372 SDG No.: Q2372

Instrument ID: MSVOA_X Calibration Date/Time: 06/19/2025 09:43

Lab File ID: VX046758.D Init. Calib. Date(s): 06/17/2025 06/17/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 11:19 17:18

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Dichlorodifluoromethane	0.534	0.565		5.8	20
Chloromethane	0.576	0.595	0.1	3.3	20
Vinyl Chloride	0.614	0.641		4.4	20
Bromomethane	0.346	0.384		10.98	20
Chloroethane	0.372	0.387		4.03	20
Trichlorofluoromethane	0.933	0.957		2.57	20
1,1,2-Trichlorotrifluoroethane	0.572	0.592		3.5	20
1,1-Dichloroethene	0.552	0.572		3.62	20
Acetone	0.231	0.185		-19.91	20
Carbon Disulfide	1.668	1.595		-4.38	20
Methyl tert-butyl Ether	1.720	1.569		-8.78	20
Methyl Acetate	0.586	0.480		-18.09	20
Methylene Chloride	0.641	0.618		-3.59	20
trans-1,2-Dichloroethene	0.591	0.587		-0.68	20
1,1-Dichloroethane	1.092	1.081	0.1	-1.01	20
Cyclohexane	1.036	1.018		-1.74	20
2-Butanone	0.326	0.263		-19.33	20
Carbon Tetrachloride	0.518	0.515		-0.58	20
cis-1,2-Dichloroethene	0.694	0.686		-1.15	20
Bromochloromethane	0.495	0.476		-3.84	20
Chloroform	1.092	1.093		0.09	20
1,1,1-Trichloroethane	0.958	0.939		-1.98	20
Methylcyclohexane	0.628	0.627		-0.32	20
Benzene	1.413	1.415		0.14	20
1,2-Dichloroethane	0.497	0.481		-3.22	20
Trichloroethene	0.360	0.357		-0.83	20
1,2-Dichloropropane	0.350	0.353		0.86	20
Bromodichloromethane	0.514	0.521		1.36	20
4-Methyl-2-Pentanone	0.411	0.339		-17.52	20
Toluene	0.876	0.877		0.11	20
t-1,3-Dichloropropene	0.477	0.481		0.84	20
cis-1,3-Dichloropropene	0.541	0.545		0.74	20
1,1,2-Trichloroethane	0.327	0.311		-4.89	20
2-Hexanone	0.284	0.229		-19.37	20
Dibromochloromethane	0.385	0.377		-2.08	20
1,2-Dibromoethane	0.332	0.317		-4.52	20
Tetrachloroethene	0.346	0.344		-0.58	20
Chlorobenzene	1.104	1.089	0.3	-1.36	20

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

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: GENV01

Lab Code: CHEM Case No.: Q2372 SAS No.: Q2372 SDG No.: Q2372

Instrument ID: MSVOA_X Calibration Date/Time: 06/19/2025 09:43

Lab File ID: VX046758.D Init. Calib. Date(s): 06/17/2025 06/17/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 11:19 17:18

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Ethyl Benzene	1.929	1.918		-0.57	20
m/p-Xylenes	0.719	0.724		0.69	20
o-Xylene	0.673	0.687		2.08	20
Styrene	1.179	1.192		1.1	20
Bromoform	0.282	0.263	0.1	-6.74	20
Isopropylbenzene	3.682	3.747		1.76	20
1,1,2,2-Tetrachloroethane	1.028	0.933	0.3	-9.24	20
1,3-Dichlorobenzene	1.728	1.670		-3.36	20
1,4-Dichlorobenzene	1.775	1.693		-4.62	20
1,2-Dichlorobenzene	1.615	1.598		-1.05	20
1,2-Dibromo-3-Chloropropane	0.203	0.164		-19.21	20
1,2,4-Trichlorobenzene	1.148	1.111		-3.22	20
1,2,3-Trichlorobenzene	1.098	1.064		-3.1	20
1,2-Dichloroethane-d4	0.692	0.639		-7.66	20
Dibromofluoromethane	0.331	0.327		-1.21	20
Toluene-d8	1.189	1.166		-1.93	20
4-Bromofluorobenzene	0.443	0.433		-2.26	20

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061925\
Data File : VX046758.D
Acq On : 19 Jun 2025 09:43
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 20 05:14:38 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 03:09:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 06/20/2025
Supervised By :Mahesh Dadoda 06/21/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.556	168	137182	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.763	114	224265	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.049	117	197740	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	96867	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.958	65	87638	46.187	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 92.380%			
35) Dibromofluoromethane	5.391	113	73413	49.476	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 98.960%			
50) Toluene-d8	8.647	98	261576	49.067	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 98.140%			
62) 4-Bromofluorobenzene	11.079	95	97021	48.823	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 97.640%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.185	85	77571	52.964	ug/l	99
3) Chloromethane	1.307	50	81669	51.662	ug/l	96
4) Vinyl Chloride	1.386	62	87898	52.141	ug/l	96
5) Bromomethane	1.624	94	52745	55.612	ug/l	94
6) Chloroethane	1.703	64	53086	51.957	ug/l	98
7) Trichlorofluoromethane	1.904	101	131261	51.280	ug/l	99
8) Diethyl Ether	2.142	74	44511	50.670	ug/l	99
9) 1,1,2-Trichlorotrifluo...	2.343	101	81171	51.691	ug/l	98
10) Methyl Iodide	2.465	142	94903	48.429	ug/l	99
11) Tert butyl alcohol	2.947	59	26783	157.262	ug/l	100
12) 1,1-Dichloroethene	2.337	96	78427	51.759	ug/l	97
13) Acrolein	2.245	56	50116	202.026	ug/l	98
14) Allyl chloride	2.678	41	136507	49.722	ug/l	99
15) Acrylonitrile	3.068	53	162714	212.474	ug/l	99
16) Acetone	2.380	43	127043	200.776	ug/l	99
17) Carbon Disulfide	2.526	76	218810	47.820	ug/l	99
18) Methyl Acetate	2.709	43	65851	40.975	ug/l	99
19) Methyl tert-butyl Ether	3.117	73	215275	45.628	ug/l	100
20) Methylene Chloride	2.800	84	84742	48.158	ug/l	99
21) trans-1,2-Dichloroethene	3.105	96	80577	49.698	ug/l	96
22) Diisopropyl ether	3.763	45	269978	51.162	ug/l	97
23) Vinyl Acetate	3.727	43	1003345	239.105	ug/l	100
24) 1,1-Dichloroethane	3.623	63	148260	49.484	ug/l	100
25) 2-Butanone	4.556	43	180589m	201.795	ug/l	
26) 2,2-Dichloropropane	4.483	77	112913	51.672	ug/l	99
27) cis-1,2-Dichloroethene	4.495	96	94126	49.415	ug/l	99
28) Bromochloromethane	4.904	49	65263	48.047	ug/l	100
29) Tetrahydrofuran	5.007	42	116160	200.958	ug/l	99
30) Chloroform	5.099	83	149922	50.036	ug/l	95
31) Cyclohexane	5.477	56	139626	49.142	ug/l	97
32) 1,1,1-Trichloroethane	5.385	97	128769	49.003	ug/l	100
36) 1,1-Dichloropropene	5.702	75	106011	49.493	ug/l	99
37) Ethyl Acetate	4.715	43	79324	40.121	ug/l	99
38) Carbon Tetrachloride	5.684	117	115565	49.715	ug/l	98
39) Methylcyclohexane	7.379	83	140502	49.848	ug/l	96
40) Benzene	6.044	78	317423	50.074	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061925\
Data File : VX046758.D
Acq On : 19 Jun 2025 09:43
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 20 05:14:38 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 03:09:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 06/20/2025
Supervised By :Mahesh Dadoda 06/21/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	4.922	41	47871	45.417	ug/l		95
42) 1,2-Dichloroethane	6.086	62	107931	48.452	ug/l		99
43) Isopropyl Acetate	6.336	43	132833	42.935	ug/l		99
44) Trichloroethene	7.129	130	80127	49.599	ug/l		96
45) 1,2-Dichloropropane	7.427	63	79156	50.385	ug/l		95
46) Dibromomethane	7.580	93	53399	47.295	ug/l		99
47) Bromodichloromethane	7.818	83	116822	50.703	ug/l		100
48) Methyl methacrylate	7.690	41	70314	45.316	ug/l		99
49) 1,4-Dioxane	7.659	88	15950	714.909	ug/l		96
51) 4-Methyl-2-Pentanone	8.568	43	379704	205.777	ug/l		100
52) Toluene	8.714	92	196587	50.025	ug/l		97
53) t-1,3-Dichloropropene	8.976	75	107788	50.420	ug/l		99
54) cis-1,3-Dichloropropene	8.366	75	122151	50.333	ug/l		99
55) 1,1,2-Trichloroethane	9.147	97	69729	47.614	ug/l		98
56) Ethyl methacrylate	9.116	69	99225	45.899	ug/l		100
57) 1,3-Dichloropropane	9.305	76	122083	48.408	ug/l		99
58) 2-Chloroethyl Vinyl ether	8.238	63	279394	248.797	ug/l		100
59) 2-Hexanone	9.427	43	257015	201.475	ug/l		100
60) Dibromochloromethane	9.519	129	84603	49.021	ug/l		99
61) 1,2-Dibromoethane	9.610	107	70987	47.653	ug/l		100
64) Tetrachloroethene	9.275	164	67934	49.587	ug/l		98
65) Chlorobenzene	10.073	112	215423	49.352	ug/l		99
66) 1,1,1,2-Tetrachloroethane	10.159	131	73797	50.304	ug/l		100
67) Ethyl Benzene	10.189	91	379202	49.719	ug/l		100
68) m/p-Xylenes	10.299	106	286180	100.703	ug/l		99
69) o-Xylene	10.640	106	135837	51.004	ug/l		99
70) Styrene	10.652	104	235709	50.573	ug/l		100
71) Bromoform	10.799	173	51917	46.470	ug/l	#	100
73) Isopropylbenzene	10.957	105	362998	50.881	ug/l		100
74) N-amyl acetate	10.841	43	120822	44.699	ug/l		99
75) 1,1,2,2-Tetrachloroethane	11.207	83	90340	45.350	ug/l		99
76) 1,2,3-Trichloropropane	11.238	75	74859m	42.194	ug/l		
77) Bromobenzene	11.195	156	86326	50.284	ug/l		98
78) n-propylbenzene	11.299	91	434668	51.296	ug/l		100
79) 2-Chlorotoluene	11.360	91	250583	49.529	ug/l		99
80) 1,3,5-Trimethylbenzene	11.445	105	294565	50.244	ug/l		99
81) trans-1,4-Dichloro-2-b...	11.018	75	27012	43.036	ug/l		98
82) 4-Chlorotoluene	11.451	91	294491	49.875	ug/l		100
83) tert-Butylbenzene	11.713	119	302344	49.891	ug/l		99
84) 1,2,4-Trimethylbenzene	11.750	105	298590	50.692	ug/l		100
85) sec-Butylbenzene	11.890	105	389381	50.841	ug/l		99
86) p-Isopropyltoluene	12.006	119	324490	50.214	ug/l		100
87) 1,3-Dichlorobenzene	11.963	146	161807	48.338	ug/l		100
88) 1,4-Dichlorobenzene	12.036	146	164023	47.705	ug/l		98
89) n-Butylbenzene	12.329	91	310154	50.550	ug/l		100
90) Hexachloroethane	12.536	117	55264	48.837	ug/l		96
91) 1,2-Dichlorobenzene	12.329	146	154832	49.496	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	12.939	75	15868	40.348	ug/l		97
93) 1,2,4-Trichlorobenzene	13.585	180	107660	48.410	ug/l		98
94) Hexachlorobutadiene	13.719	225	46034	49.207	ug/l		99
95) Naphthalene	13.774	128	286491	45.216	ug/l		100
96) 1,2,3-Trichlorobenzene	13.957	180	103088	48.453	ug/l		99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061925\
Data File : VX046758.D
Acq On : 19 Jun 2025 09:43
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 20 05:14:38 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 03:09:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 06/20/2025
Supervised By :Mahesh Dadoda 06/21/2025

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

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

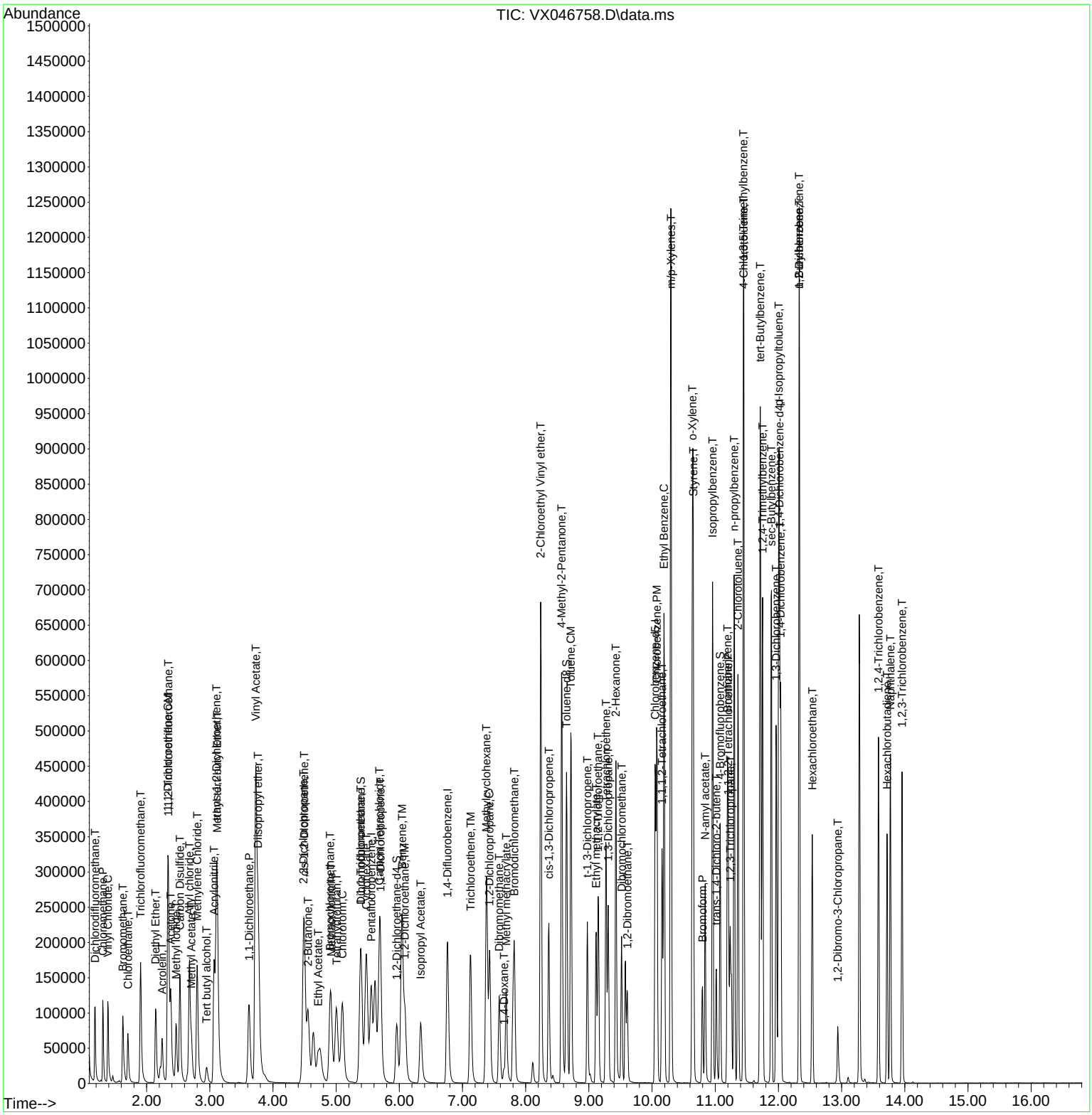
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061925\
Data File : VX046758.D
Acq On : 19 Jun 2025 09:43
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 20 05:14:38 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 03:09:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 06/20/2025
Supervised By :Mahesh Dadoda 06/21/2025



Sample Results: **VX046758.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061925\
Data File : VX046758.D
Acq On : 19 Jun 2025 09:43
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Jun 20 05:14:38 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 03:09:16 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	111	0.00
2	T	Dichlorodifluoromethane	0.534	0.565	-5.8	108	0.00
3	P	Chloromethane	0.576	0.595	-3.3	112	0.00
4	C	Vinyl Chloride	0.614	0.641	-4.4#	112	0.00
5	T	Bromomethane	0.346	0.384	-11.0	116	0.00
6	T	Chloroethane	0.372	0.387	-4.0	114	0.00
7	T	Trichlorofluoromethane	0.933	0.957	-2.6	110	0.00
8	T	Diethyl Ether	0.320	0.324	-1.3	112	0.00
9	T	1,1,2-Trichlorotrifluoroeth	0.572	0.592	-3.5	114	0.00
10	T	Methyl Iodide	0.642	0.692	-7.8	118	0.00
11	T	Tert butyl alcohol	0.062	0.039	37.1#	70	-0.01
12	CM	1,1-Dichloroethene	0.552	0.572	-3.6#	112	0.00
13	T	Acrolein	0.090	0.073	18.9	93	0.00
14	T	Allyl chloride	1.001	0.995	0.6	111	0.00
15	T	Acrylonitrile	0.279	0.237	15.1	93	0.00
16	T	Acetone	0.231	0.185	19.9	94	0.00
17	T	Carbon Disulfide	1.668	1.595	4.4	111	0.00
18	T	Methyl Acetate	0.586	0.480	18.1	92	0.00
19	T	Methyl tert-butyl Ether	1.720	1.569	8.8	100	0.00
20	T	Methylene Chloride	0.641	0.618	3.6	113	0.00
21	T	trans-1,2-Dichloroethene	0.591	0.587	0.7	111	0.00
22	T	Diisopropyl ether	1.923	1.968	-2.3	111	0.00
23	T	Vinyl Acetate	1.529	1.463	4.3	102	0.00
24	P	1,1-Dichloroethane	1.092	1.081	1.0	110	0.00
25	T	2-Butanone	0.326	0.263	19.3	87	0.00
26	T	2,2-Dichloropropane	0.796	0.823	-3.4	120	0.00
27	T	cis-1,2-Dichloroethene	0.694	0.686	1.2	111	0.00
28	T	Bromochloromethane	0.495	0.476	3.8	109	0.00
29	T	Tetrahydrofuran	0.211	0.169	19.9	87	0.00
30	C	Chloroform	1.092	1.093	-0.1#	109	0.00
31	T	Cyclohexane	1.036	1.018	1.7	112	0.00
32	T	1,1,1-Trichloroethane	0.958	0.939	2.0	109	-0.01
33	S	1,2-Dichloroethane-d4	0.692	0.639	7.7	109	0.00
34	I	1,4-Difluorobenzene	1.000	1.000	0.0	110	0.00
35	S	Dibromofluoromethane	0.331	0.327	1.2	112	0.00
36	T	1,1-Dichloropropene	0.478	0.473	1.0	109	0.00
37	T	Ethyl Acetate	0.441	0.354	19.7	90	0.00
38	T	Carbon Tetrachloride	0.518	0.515	0.6	110	0.00
39	T	Methylcyclohexane	0.628	0.626	0.3	109	0.00
40	TM	Benzene	1.413	1.415	-0.1	110	0.00
41	T	Methacrylonitrile	0.235	0.213	9.4	98	0.00
42	TM	1,2-Dichloroethane	0.497	0.481	3.2	107	0.00
43	T	Isopropyl Acetate	0.690	0.592	14.2	91	0.00
44	TM	Trichloroethene	0.360	0.357	0.8	110	0.00
45	C	1,2-Dichloropropane	0.350	0.353	-0.9#	112	0.00
46	T	Dibromomethane	0.252	0.238	5.6	104	0.00
47	T	Bromodichloromethane	0.514	0.521	-1.4	110	0.00
48	T	Methyl methacrylate	0.346	0.314	9.2	93	0.00

Sample Results: **VX046758.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061925\
Data File : VX046758.D
Acq On : 19 Jun 2025 09:43
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Jun 20 05:14:38 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 03:09:16 2025
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	T	1,4-Dioxane	0.004	0.004	0.0	81	0.00
50	S	Toluene-d8	1.189	1.166	1.9	112	0.00
51	T	4-Methyl-2-Pentanone	0.411	0.339	17.5	87	0.00
52	CM	Toluene	0.876	0.877	-0.1#	108	0.00
53	T	t-1,3-Dichloropropene	0.477	0.481	-0.8	108	0.00
54	T	cis-1,3-Dichloropropene	0.541	0.545	-0.7	109	0.00
55	T	1,1,2-Trichloroethane	0.327	0.311	4.9	105	0.00
56	T	Ethyl methacrylate	0.482	0.442	8.3	96	0.00
57	T	1,3-Dichloropropane	0.562	0.544	3.2	106	0.00
58	T	2-Chloroethyl Vinyl ether	0.250	0.249	0.4	97	0.00
59	T	2-Hexanone	0.284	0.229	19.4	85	0.00
60	T	Dibromochloromethane	0.385	0.377	2.1	107	0.00
61	T	1,2-Dibromoethane	0.332	0.317	4.5	104	0.00
62	S	4-Bromofluorobenzene	0.443	0.433	2.3	111	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	110	0.00
64	T	Tetrachloroethene	0.346	0.344	0.6	111	0.00
65	PM	Chlorobenzene	1.104	1.089	1.4	110	0.00
66	T	1,1,1,2-Tetrachloroethane	0.371	0.373	-0.5	110	0.00
67	C	Ethyl Benzene	1.929	1.918	0.6#	109	0.00
68	T	m/p-Xylenes	0.719	0.724	-0.7	110	0.00
69	T	o-Xylene	0.673	0.687	-2.1	109	0.00
70	T	Styrene	1.179	1.192	-1.1	109	0.00
71	P	Bromoform	0.282	0.263	6.7	101	0.00
72	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	109	0.00
73	T	Isopropylbenzene	3.682	3.747	-1.8	110	0.00
74	T	N-amyl acetate	1.395	1.247	10.6	93	0.00
75	P	1,1,2,2-Tetrachloroethane	1.028	0.933	9.2	97	0.00
76	T	1,2,3-Trichloropropane	0.916	0.773	15.6	85	0.00
77	T	Bromobenzene	0.886	0.891	-0.6	109	0.00
78	T	n-propylbenzene	4.374	4.487	-2.6	110	0.00
79	T	2-Chlorotoluene	2.611	2.587	0.9	109	0.00
80	T	1,3,5-Trimethylbenzene	3.026	3.041	-0.5	108	0.00
81	T	trans-1,4-Dichloro-2-butene	0.324	0.279	13.9	98	0.00
82	T	4-Chlorotoluene	3.048	3.040	0.3	109	0.00
83	T	tert-Butylbenzene	3.128	3.121	0.2	109	0.00
84	T	1,2,4-Trimethylbenzene	3.040	3.082	-1.4	110	0.00
85	T	sec-Butylbenzene	3.953	4.020	-1.7	109	0.00
86	T	p-Isopropyltoluene	3.336	3.350	-0.4	109	0.00
87	T	1,3-Dichlorobenzene	1.728	1.670	3.4	108	0.00
88	T	1,4-Dichlorobenzene	1.775	1.693	4.6	111	0.00
89	T	n-Butylbenzene	3.167	3.202	-1.1	110	0.00
90	T	Hexachloroethane	0.584	0.571	2.2	106	0.00
91	T	1,2-Dichlorobenzene	1.615	1.598	1.1	109	0.00
92	T	1,2-Dibromo-3-Chloropropane	0.203	0.164	19.2	85	0.00
93	T	1,2,4-Trichlorobenzene	1.148	1.111	3.2	107	0.00
94	T	Hexachlorobutadiene	0.483	0.475	1.7	108	0.00
95	T	Naphthalene	3.270	2.958	9.5	96	0.00

Sample Results: **VX046758.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061925\
Data File : VX046758.D
Acq On : 19 Jun 2025 09:43
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Jun 20 05:14:38 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 03:09:16 2025
Response via : Initial Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	1.098	1.064	3.1	107	0.00

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

Sample Results: **VX046758.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061925\
Data File : VX046758.D
Acq On : 19 Jun 2025 09:43
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Jun 20 05:14:38 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 03:09:16 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	111	0.00
2	T	Dichlorodifluoromethane	50.000	52.964	-5.9	108	0.00
3	P	Chloromethane	50.000	51.662	-3.3	112	0.00
4	C	Vinyl Chloride	50.000	52.141	-4.3#	112	0.00
5	T	Bromomethane	50.000	55.612	-11.2	116	0.00
6	T	Chloroethane	50.000	51.957	-3.9	114	0.00
7	T	Trichlorofluoromethane	50.000	51.280	-2.6	110	0.00
8	T	Diethyl Ether	50.000	50.670	-1.3	112	0.00
9	T	1,1,2-Trichlorotrifluoroeth	50.000	51.691	-3.4	114	0.00
10	T	Methyl Iodide	50.000	48.429	3.1	118	0.00
11	T	Tert butyl alcohol	250.000	157.262	37.1#	70	-0.01
12	CM	1,1-Dichloroethene	50.000	51.759	-3.5#	112	0.00
13	T	Acrolein	250.000	202.026	19.2	93	0.00
14	T	Allyl chloride	50.000	49.722	0.6	111	0.00
15	T	Acrylonitrile	250.000	212.474	15.0	93	0.00
16	T	Acetone	250.000	200.776	19.7	94	0.00
17	T	Carbon Disulfide	50.000	47.820	4.4	111	0.00
18	T	Methyl Acetate	50.000	40.975	18.0	92	0.00
19	T	Methyl tert-butyl Ether	50.000	45.628	8.7	100	0.00
20	T	Methylene Chloride	50.000	48.158	3.7	113	0.00
21	T	trans-1,2-Dichloroethene	50.000	49.698	0.6	111	0.00
22	T	Diisopropyl ether	50.000	51.162	-2.3	111	0.00
23	T	Vinyl Acetate	250.000	239.105	4.4	102	0.00
24	P	1,1-Dichloroethane	50.000	49.484	1.0	110	0.00
25	T	2-Butanone	250.000	201.795	19.3	87	0.00
26	T	2,2-Dichloropropane	50.000	51.672	-3.3	120	0.00
27	T	cis-1,2-Dichloroethene	50.000	49.415	1.2	111	0.00
28	T	Bromochloromethane	50.000	48.047	3.9	109	0.00
29	T	Tetrahydrofuran	250.000	200.958	19.6	87	0.00
30	C	Chloroform	50.000	50.036	-0.1#	109	0.00
31	T	Cyclohexane	50.000	49.142	1.7	112	0.00
32	T	1,1,1-Trichloroethane	50.000	49.003	2.0	109	-0.01
33	S	1,2-Dichloroethane-d4	50.000	46.187	7.6	109	0.00
34	I	1,4-Difluorobenzene	50.000	50.000	0.0	110	0.00
35	S	Dibromofluoromethane	50.000	49.476	1.0	112	0.00
36	T	1,1-Dichloropropene	50.000	49.493	1.0	109	0.00
37	T	Ethyl Acetate	50.000	40.121	19.8	90	0.00
38	T	Carbon Tetrachloride	50.000	49.715	0.6	110	0.00
39	T	Methylcyclohexane	50.000	49.848	0.3	109	0.00
40	TM	Benzene	50.000	50.074	-0.1	110	0.00
41	T	Methacrylonitrile	50.000	45.417	9.2	98	0.00
42	TM	1,2-Dichloroethane	50.000	48.452	3.1	107	0.00
43	T	Isopropyl Acetate	50.000	42.935	14.1	91	0.00
44	TM	Trichloroethene	50.000	49.599	0.8	110	0.00
45	C	1,2-Dichloropropane	50.000	50.385	-0.8#	112	0.00
46	T	Dibromomethane	50.000	47.295	5.4	104	0.00
47	T	Bromodichloromethane	50.000	50.703	-1.4	110	0.00
48	T	Methyl methacrylate	50.000	45.316	9.4	93	0.00

Sample Results: **VX046758.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061925\
Data File : VX046758.D
Acq On : 19 Jun 2025 09:43
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Jun 20 05:14:38 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 03:09:16 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	714.909	28.5#	81	0.00
50	S	Toluene-d8	50.000	49.067	1.9	112	0.00
51	T	4-Methyl-2-Pentanone	250.000	205.777	17.7	87	0.00
52	CM	Toluene	50.000	50.025	-0.0#	108	0.00
53	T	t-1,3-Dichloropropene	50.000	50.420	-0.8	108	0.00
54	T	cis-1,3-Dichloropropene	50.000	50.333	-0.7	109	0.00
55	T	1,1,2-Trichloroethane	50.000	47.614	4.8	105	0.00
56	T	Ethyl methacrylate	50.000	45.899	8.2	96	0.00
57	T	1,3-Dichloropropane	50.000	48.408	3.2	106	0.00
58	T	2-Chloroethyl Vinyl ether	250.000	248.797	0.5	97	0.00
59	T	2-Hexanone	250.000	201.475	19.4	85	0.00
60	T	Dibromochloromethane	50.000	49.021	2.0	107	0.00
61	T	1,2-Dibromoethane	50.000	47.653	4.7	104	0.00
62	S	4-Bromofluorobenzene	50.000	48.823	2.4	111	0.00
63	I	Chlorobenzene-d5	50.000	50.000	0.0	110	0.00
64	T	Tetrachloroethene	50.000	49.587	0.8	111	0.00
65	PM	Chlorobenzene	50.000	49.352	1.3	110	0.00
66	T	1,1,1,2-Tetrachloroethane	50.000	50.304	-0.6	110	0.00
67	C	Ethyl Benzene	50.000	49.719	0.6#	109	0.00
68	T	m/p-Xylenes	100.000	100.703	-0.7	110	0.00
69	T	o-Xylene	50.000	51.004	-2.0	109	0.00
70	T	Styrene	50.000	50.573	-1.1	109	0.00
71	P	Bromoform	50.000	46.470	7.1	101	0.00
72	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	109	0.00
73	T	Isopropylbenzene	50.000	50.881	-1.8	110	0.00
74	T	N-amyl acetate	50.000	44.699	10.6	93	0.00
75	P	1,1,2,2-Tetrachloroethane	50.000	45.350	9.3	97	0.00
76	T	1,2,3-Trichloropropane	50.000	42.194	15.6	85	0.00
77	T	Bromobenzene	50.000	50.284	-0.6	109	0.00
78	T	n-propylbenzene	50.000	51.296	-2.6	110	0.00
79	T	2-Chlorotoluene	50.000	49.529	0.9	109	0.00
80	T	1,3,5-Trimethylbenzene	50.000	50.244	-0.5	108	0.00
81	T	trans-1,4-Dichloro-2-butene	50.000	43.036	13.9	98	0.00
82	T	4-Chlorotoluene	50.000	49.875	0.3	109	0.00
83	T	tert-Butylbenzene	50.000	49.891	0.2	109	0.00
84	T	1,2,4-Trimethylbenzene	50.000	50.692	-1.4	110	0.00
85	T	sec-Butylbenzene	50.000	50.841	-1.7	109	0.00
86	T	p-Isopropyltoluene	50.000	50.214	-0.4	109	0.00
87	T	1,3-Dichlorobenzene	50.000	48.338	3.3	108	0.00
88	T	1,4-Dichlorobenzene	50.000	47.705	4.6	111	0.00
89	T	n-Butylbenzene	50.000	50.550	-1.1	110	0.00
90	T	Hexachloroethane	50.000	48.837	2.3	106	0.00
91	T	1,2-Dichlorobenzene	50.000	49.496	1.0	109	0.00
92	T	1,2-Dibromo-3-Chloropropane	50.000	40.348	19.3	85	0.00
93	T	1,2,4-Trichlorobenzene	50.000	48.410	3.2	107	0.00
94	T	Hexachlorobutadiene	50.000	49.207	1.6	108	0.00
95	T	Naphthalene	50.000	45.216	9.6	96	0.00

Sample Results: **VX046758.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061925\
Data File : VX046758.D
Acq On : 19 Jun 2025 09:43
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Jun 20 05:14:38 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 03:09:16 2025
Response via : Initial Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	50.000	48.453	3.1	107	0.00

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

QC SAMPLE DATA

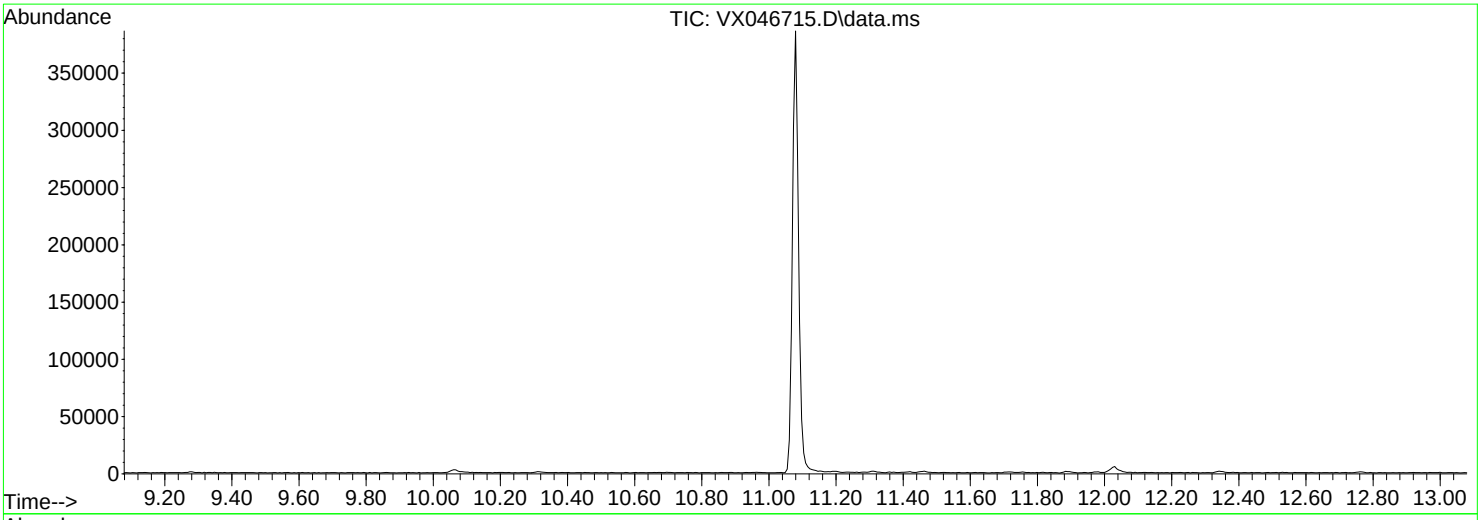
Sample Results: **VX046715.D**

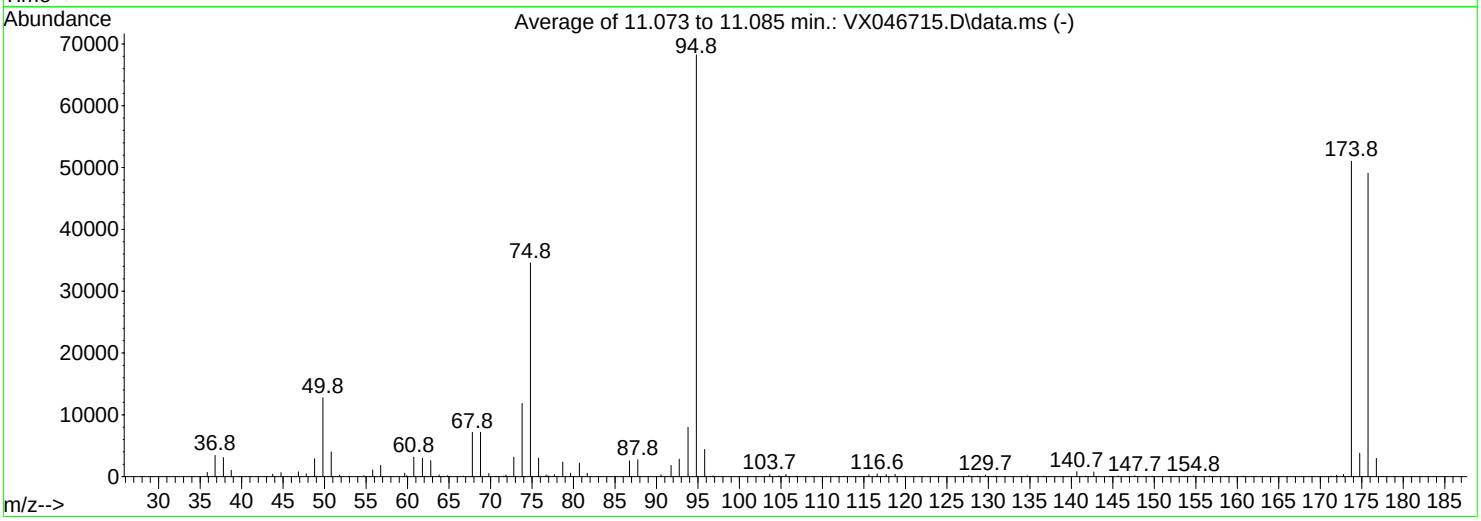
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061725\
Data File : VX046715.D
Acq On : 17 Jun 2025 08:46
Operator : JC/MD
Sample : BFB
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Title : SW846 8260
Last Update : Wed Jun 18 03:09:16 2025





AutoFind: Scans 1638, 1639, 1640; Background Corrected with Scan 1631

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.7	12764	PASS
75	95	30	60	50.7	34573	PASS
95	95	100	100	100.0	68235	PASS
96	95	5	9	6.5	4402	PASS
173	174	0.00	2	0.7	374	PASS
174	95	50	100	74.8	51016	PASS
175	174	5	9	7.4	3785	PASS
176	174	95	101	96.2	49101	PASS
177	176	5	9	6.0	2956	PASS

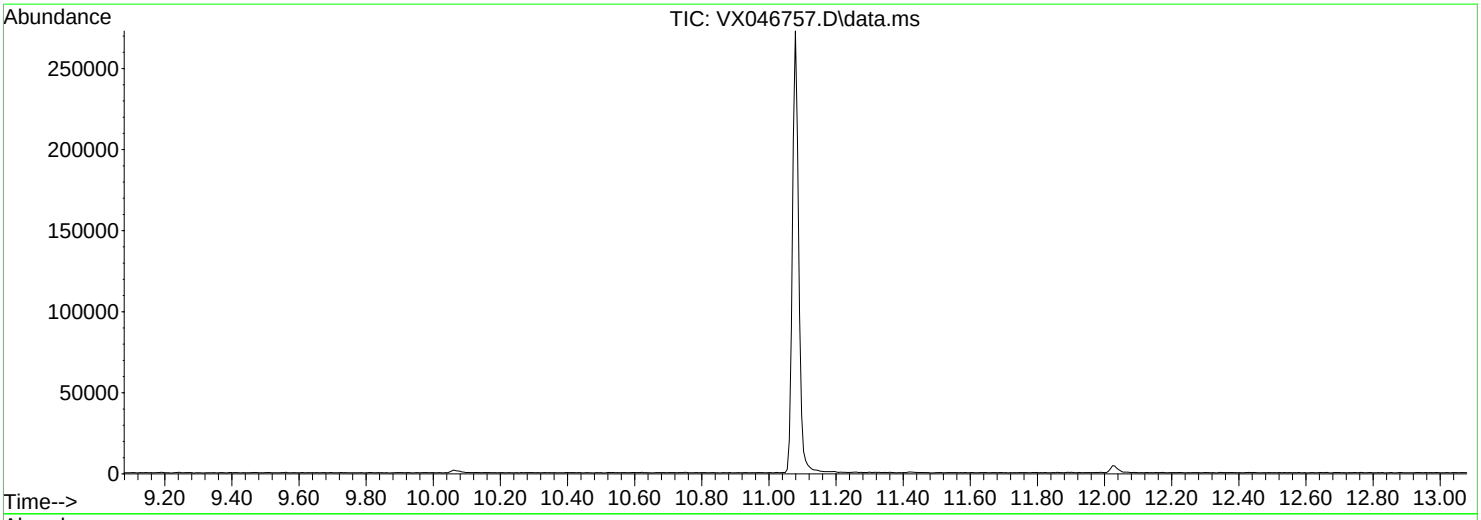
Sample Results: **VX046757.D**

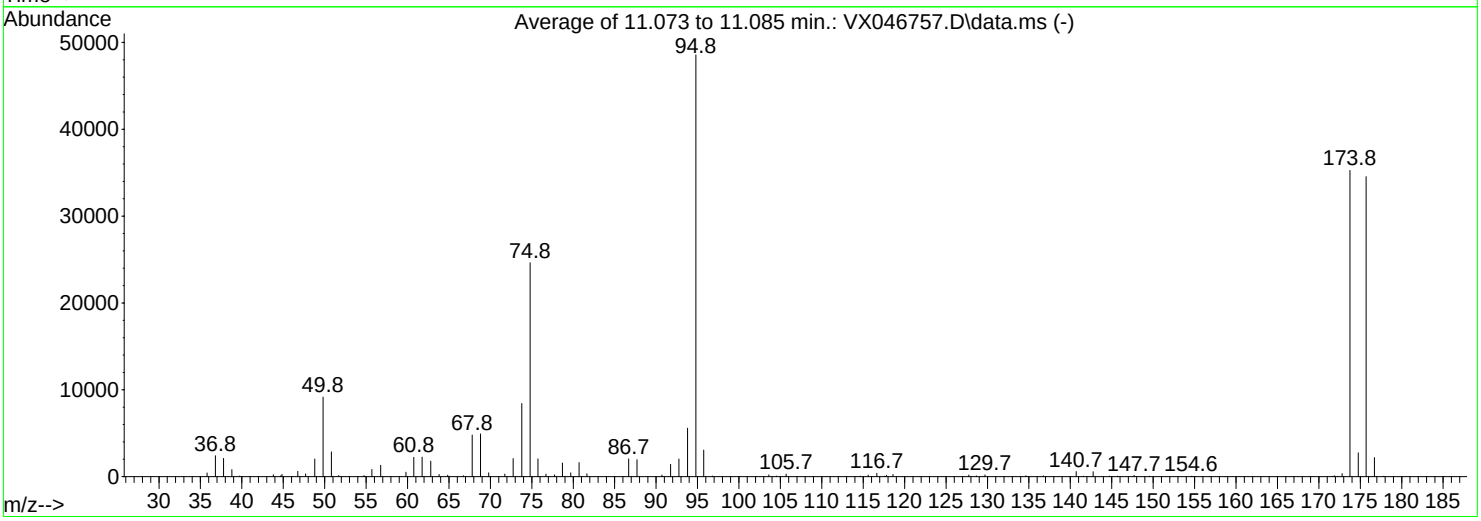
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061925\
Data File : VX046757.D
Acq On : 19 Jun 2025 08:42
Operator : JC/MD
Sample : BFB
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Title : SW846 8260
Last Update : Wed Jun 18 03:09:16 2025





AutoFind: Scans 1638, 1639, 1640; Background Corrected with Scan 1632

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.8	9154	PASS
75	95	30	60	50.7	24627	PASS
95	95	100	100	100.0	48571	PASS
96	95	5	9	6.3	3061	PASS
173	174	0.00	2	1.0	352	PASS
174	95	50	100	72.6	35267	PASS
175	174	5	9	7.8	2745	PASS
176	174	95	101	97.9	34539	PASS
177	176	5	9	6.3	2186	PASS

Raw Data: **VX046760.D**

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

Report of Analysis

Client:	G Environmental		Date Collected:		
Project:	Ave B		Date Received:		
Client Sample ID:	VX0619WBL01		SDG No.:	Q2372	
Lab Sample ID:	VX0619WBL01		Matrix:	Water	
Analytical Method:	8260D		% Solid:	0	
Sample Wt/Vol:	5 Units:	mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	DB-624UI ID :	0.18	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX046760.D	1		06/19/25 10:33	VX061925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.22	U	0.22	1.00	ug/L
74-87-3	Chloromethane	0.32	U	0.32	1.00	ug/L
75-01-4	Vinyl Chloride	0.26	U	0.26	1.00	ug/L
74-83-9	Bromomethane	1.40	U	1.40	5.00	ug/L
75-00-3	Chloroethane	0.47	U	0.47	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.33	U	0.33	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	0.23	U	0.23	1.00	ug/L
67-64-1	Acetone	1.50	U	1.50	5.00	ug/L
75-15-0	Carbon Disulfide	0.21	U	0.21	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	0.27	U	0.27	1.00	ug/L
75-09-2	Methylene Chloride	0.28	U	0.28	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.23	U	0.23	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.23	U	0.23	1.00	ug/L
110-82-7	Cyclohexane	1.50	U	1.50	5.00	ug/L
78-93-3	2-Butanone	0.98	U	0.98	5.00	ug/L
56-23-5	Carbon Tetrachloride	0.25	U	0.25	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.19	U	0.19	1.00	ug/L
74-97-5	Bromochloromethane	0.22	U	0.22	1.00	ug/L
67-66-3	Chloroform	0.25	U	0.25	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.20	U	0.20	1.00	ug/L
108-87-2	Methylcyclohexane	0.16	U	0.16	1.00	ug/L
71-43-2	Benzene	0.15	U	0.15	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.22	U	0.22	1.00	ug/L
79-01-6	Trichloroethene	0.090	U	0.090	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.20	U	0.20	1.00	ug/L
75-27-4	Bromodichloromethane	0.22	U	0.22	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	0.68	U	0.68	5.00	ug/L
108-88-3	Toluene	0.14	U	0.14	1.00	ug/L

Raw Data: **VX046760.D**

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

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Ave B	Date Received:	
Client Sample ID:	VX0619WBL01	SDG No.:	Q2372
Lab Sample ID:	VX0619WBL01	Matrix:	Water
Analytical Method:	8260D	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX046760.D	1		06/19/25 10:33	VX061925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.17	U	0.17	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.16	U	0.16	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	0.89	U	0.89	5.00	ug/L
124-48-1	Dibromochloromethane	0.18	U	0.18	1.00	ug/L
106-93-4	1,2-Dibromoethane	0.15	U	0.15	1.00	ug/L
127-18-4	Tetrachloroethene	0.23	U	0.23	1.00	ug/L
108-90-7	Chlorobenzene	0.12	U	0.12	1.00	ug/L
100-41-4	Ethyl Benzene	0.13	U	0.13	1.00	ug/L
179601-23-1	m/p-Xylenes	0.24	U	0.24	2.00	ug/L
95-47-6	o-Xylene	0.12	U	0.12	1.00	ug/L
100-42-5	Styrene	0.15	U	0.15	1.00	ug/L
75-25-2	Bromoform	0.19	U	0.19	1.00	ug/L
98-82-8	Isopropylbenzene	0.12	U	0.12	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.26	U	0.26	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.16	U	0.16	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.19	U	0.19	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.16	U	0.16	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.53	U	0.53	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.20	U	0.20	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.20	U	0.20	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	48.3		70 (74) - 130 (125)	97%	SPK: 50
1868-53-7	Dibromofluoromethane	49.0		70 (75) - 130 (124)	98%	SPK: 50
2037-26-5	Toluene-d8	50.0		70 (86) - 130 (113)	100%	SPK: 50
460-00-4	4-Bromofluorobenzene	49.4		70 (77) - 130 (121)	99%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	125000	5.562			
540-36-3	1,4-Difluorobenzene	212000	6.769			
3114-55-4	Chlorobenzene-d5	192000	10.055			
3855-82-1	1,4-Dichlorobenzene-d4	93000	12.018			

Raw Data: **VX046760.D**

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

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Ave B	Date Received:	
Client Sample ID:	VX0619WBL01	SDG No.:	Q2372
Lab Sample ID:	VX0619WBL01	Matrix:	Water
Analytical Method:	8260D	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX046760.D	1		06/19/25 10:33	VX061925

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_X\Data\VX061925\
Data File : VX046760.D
Acq On : 19 Jun 2025 10:33
Operator : JC/MD
Sample : VX0619WBL01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VX0619WBL01

Quant Time: Jun 20 05:15:59 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 03:09:16 2025
Response via : Initial Calibration

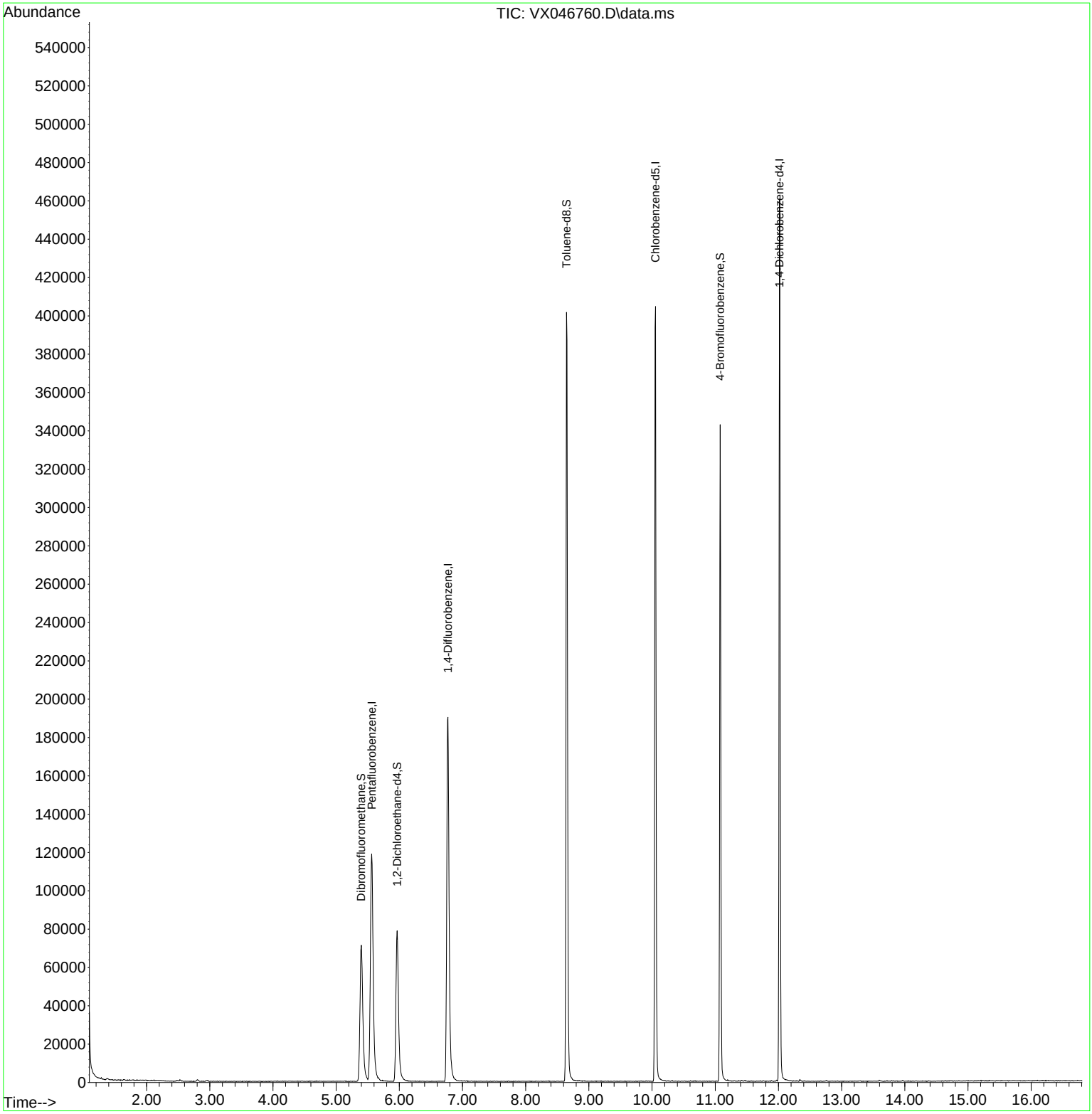
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.562	168	124937	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.769	114	212303	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	191555	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	93040	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.964	65	83430	48.278	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery =	96.560%		
35) Dibromofluoromethane	5.397	113	68758	48.950	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	97.900%		
50) Toluene-d8	8.647	98	252224	49.979	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery =	99.960%		
62) 4-Bromofluorobenzene	11.079	95	92918	49.393	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery =	98.780%		
Target Compounds						Qvalue

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

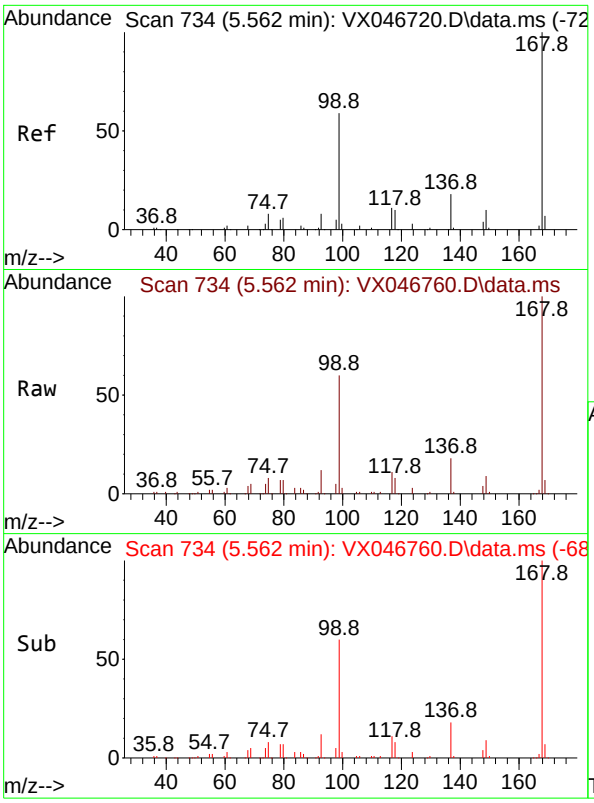
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061925\
Data File : VX046760.D
Acq On : 19 Jun 2025 10:33
Operator : JC/MD
Sample : VX0619WBL01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VX0619WBL01

Quant Time: Jun 20 05:15:59 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 03:09:16 2025
Response via : Initial Calibration



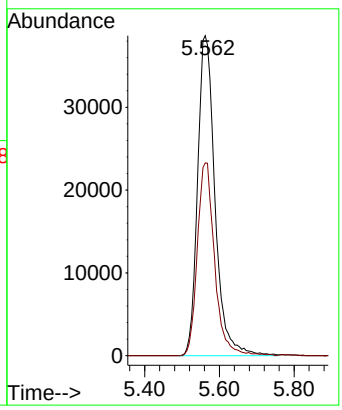
Instrument :
MSVOA_X
ClientSampleId :
VX0619WBL01

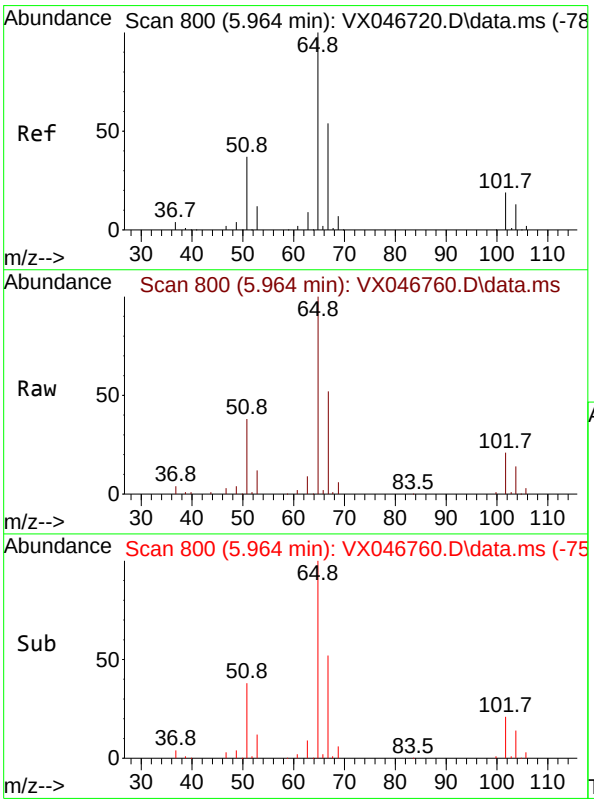


#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.562 min Scan# 7
Delta R.T. 0.000 min
Lab File: VX046760.D
Acq: 19 Jun 2025 10:33

Tgt Ion:168 Resp: 124937

Ion	Ratio	Lower	Upper
168	100		
99	60.2	48.5	72.7

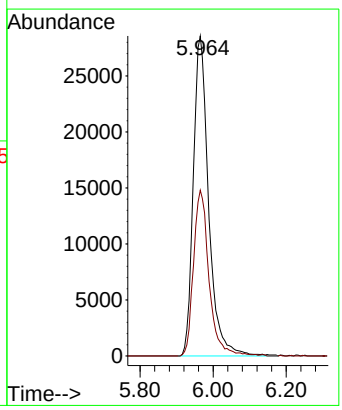


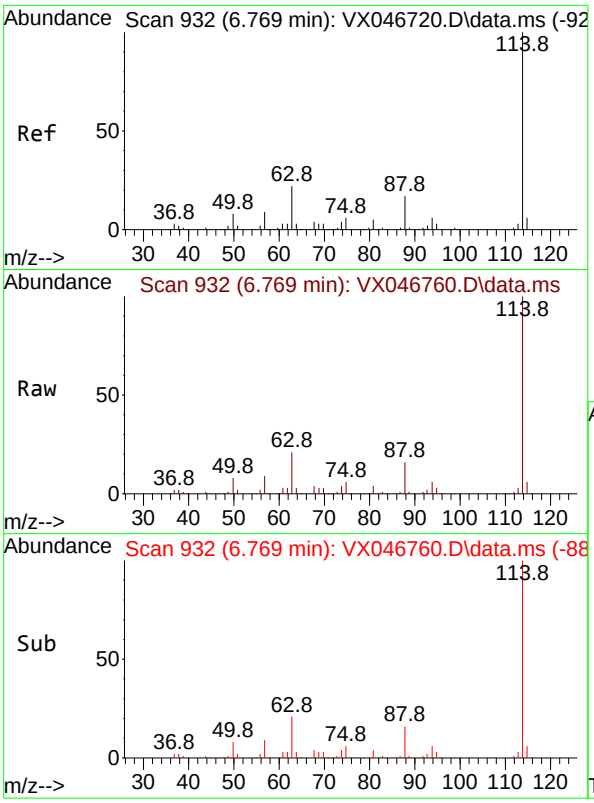


#33
1,2-Dichloroethane-d4
Concen: 48.278 ug/l
RT: 5.964 min Scan# 800
Delta R.T. -0.000 min
Lab File: VX046760.D
Acq: 19 Jun 2025 10:33

Tgt Ion: 65 Resp: 83430

Ion	Ratio	Lower	Upper
65	100		
67	52.4	0.0	105.4



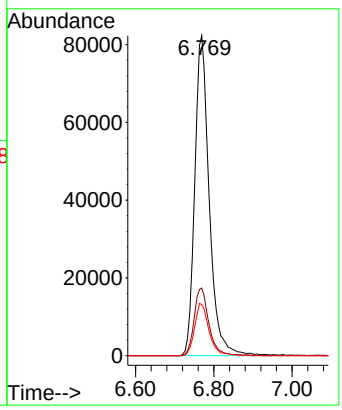


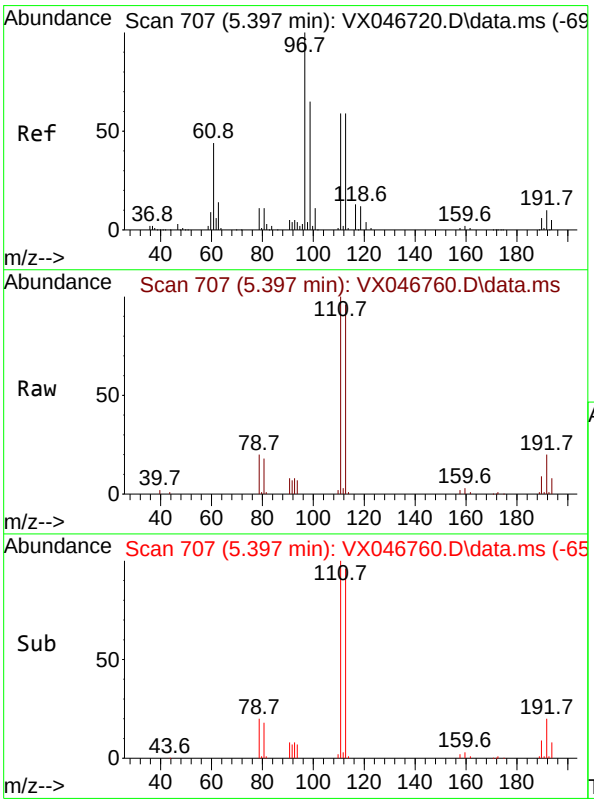
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.769 min Scan# 9
Delta R.T. 0.000 min
Lab File: VX046760.D
Acq: 19 Jun 2025 10:33

Instrument :
MSVOA_X
ClientSampleId :
VX0619WBL01

Tgt Ion:114 Resp: 212303

Ion	Ratio	Lower	Upper
114	100		
63	21.2	0.0	44.2
88	16.0	0.0	33.2

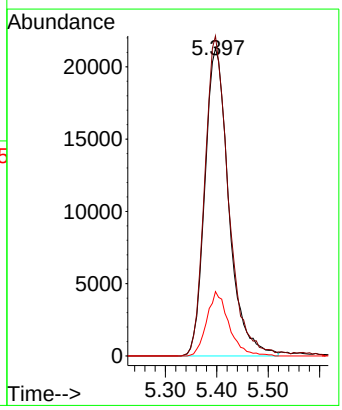


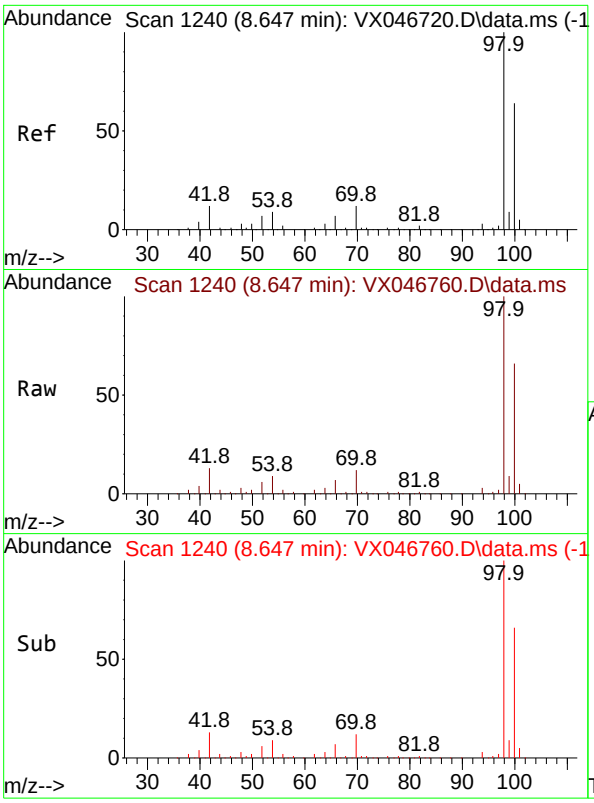


#35
Dibromofluoromethane
Concen: 48.950 ug/l
RT: 5.397 min Scan# 707
Delta R.T. -0.000 min
Lab File: VX046760.D
Acq: 19 Jun 2025 10:33

Tgt Ion:113 Resp: 68758

Ion	Ratio	Lower	Upper
113	100		
111	103.2	82.0	123.0
192	19.4	15.3	22.9



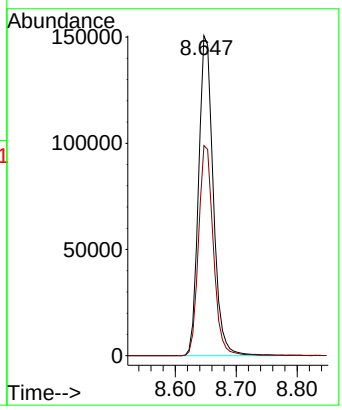


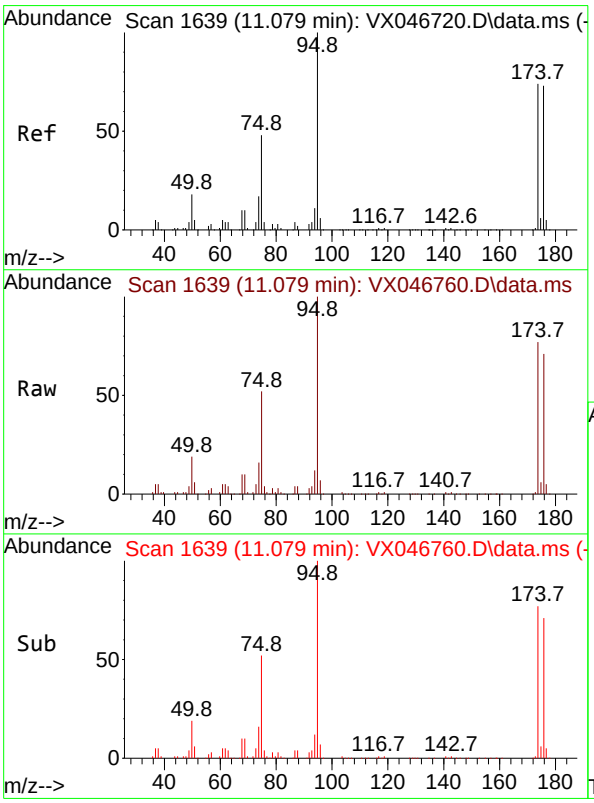
#50
Toluene-d8
Concen: 49.979 ug/l
RT: 8.647 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX046760.D
Acq: 19 Jun 2025 10:33

Instrument :
MSVOA_X
ClientSampleId :
VX0619WBL01

Tgt Ion: 98 Resp: 252224

Ion	Ratio	Lower	Upper
98	100		
100	66.3	53.0	79.4

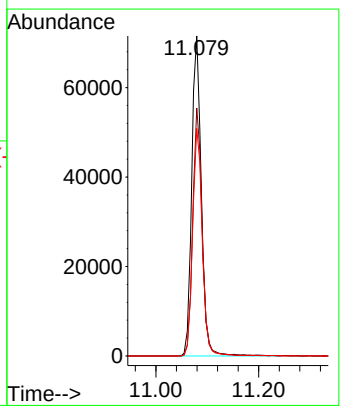


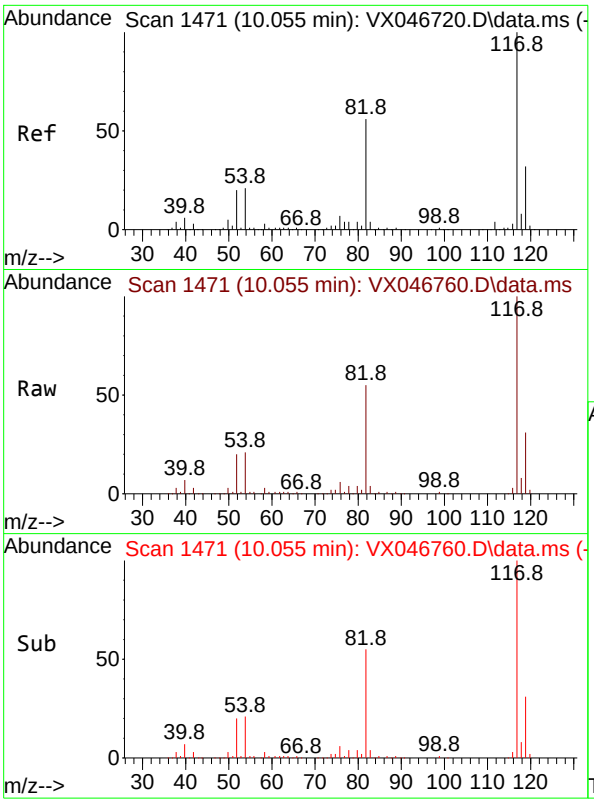


#62
4-Bromofluorobenzene
Concen: 49.393 ug/l
RT: 11.079 min Scan# 1639
Delta R.T. -0.000 min
Lab File: VX046760.D
Acq: 19 Jun 2025 10:33

Tgt Ion: 95 Resp: 92918

Ion	Ratio	Lower	Upper
95	100		
174	75.8	0.0	150.4
176	71.2	0.0	145.0



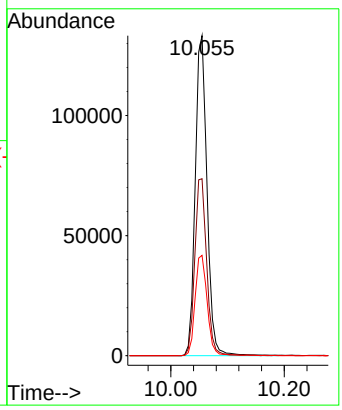


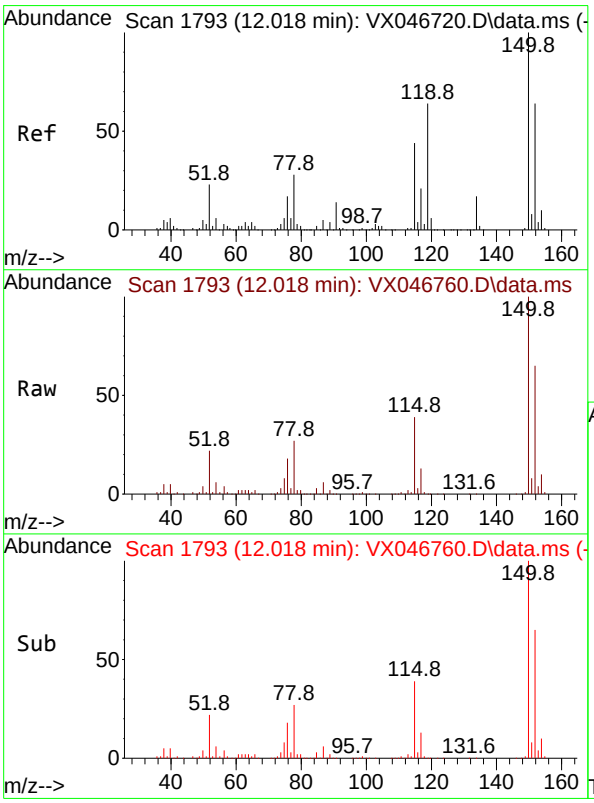
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.055 min Scan# 14
Delta R.T. -0.000 min
Lab File: VX046760.D
Acq: 19 Jun 2025 10:33

Instrument :
MSVOA_X
ClientSampleId :
VX0619WBL01

Tgt Ion:117 Resp: 191555

Ion	Ratio	Lower	Upper
117	100		
82	55.3	44.6	66.8
119	31.4	25.8	38.8

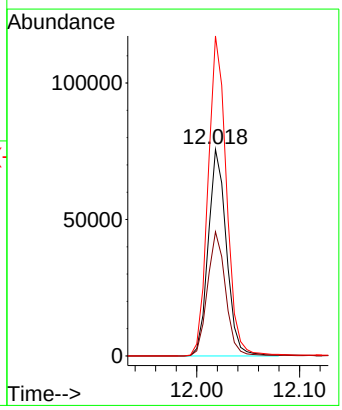




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.018 min Scan# 1793
Delta R.T. -0.000 min
Lab File: VX046760.D
Acq: 19 Jun 2025 10:33

Tgt Ion:152 Resp: 93040

Ion	Ratio	Lower	Upper
152	100		
115	60.1	43.2	129.6
150	157.7	0.0	346.8



Sample Results: **VX046760.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061925\
Data File : VX046760.D
Acq On : 19 Jun 2025 10:33
Operator : JC/MD
Sample : VX0619WBL01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VX0619WBL01

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_X\Method\82X061725W.M
Title : SW846 8260

Signal : TIC: VX046760.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.397	694	707	724	rBV2	71138	226401	33.63%	6.316%
2	5.562	724	734	757	rVB2	118344	370009	54.96%	10.322%
3	5.964	791	800	818	rBV	78654	226828	33.69%	6.328%
4	6.769	923	932	954	rBV	190158	495034	73.53%	13.809%
5	8.647	1234	1240	1259	rBV	401216	673238	100.00%	18.781%
6	10.055	1465	1471	1483	rBV	404279	586443	87.11%	16.359%
7	11.079	1634	1639	1654	rBV	342631	438043	65.07%	12.220%
8	12.018	1788	1793	1808	rBV	460324	568770	84.48%	15.866%

Sum of corrected areas: 3584766

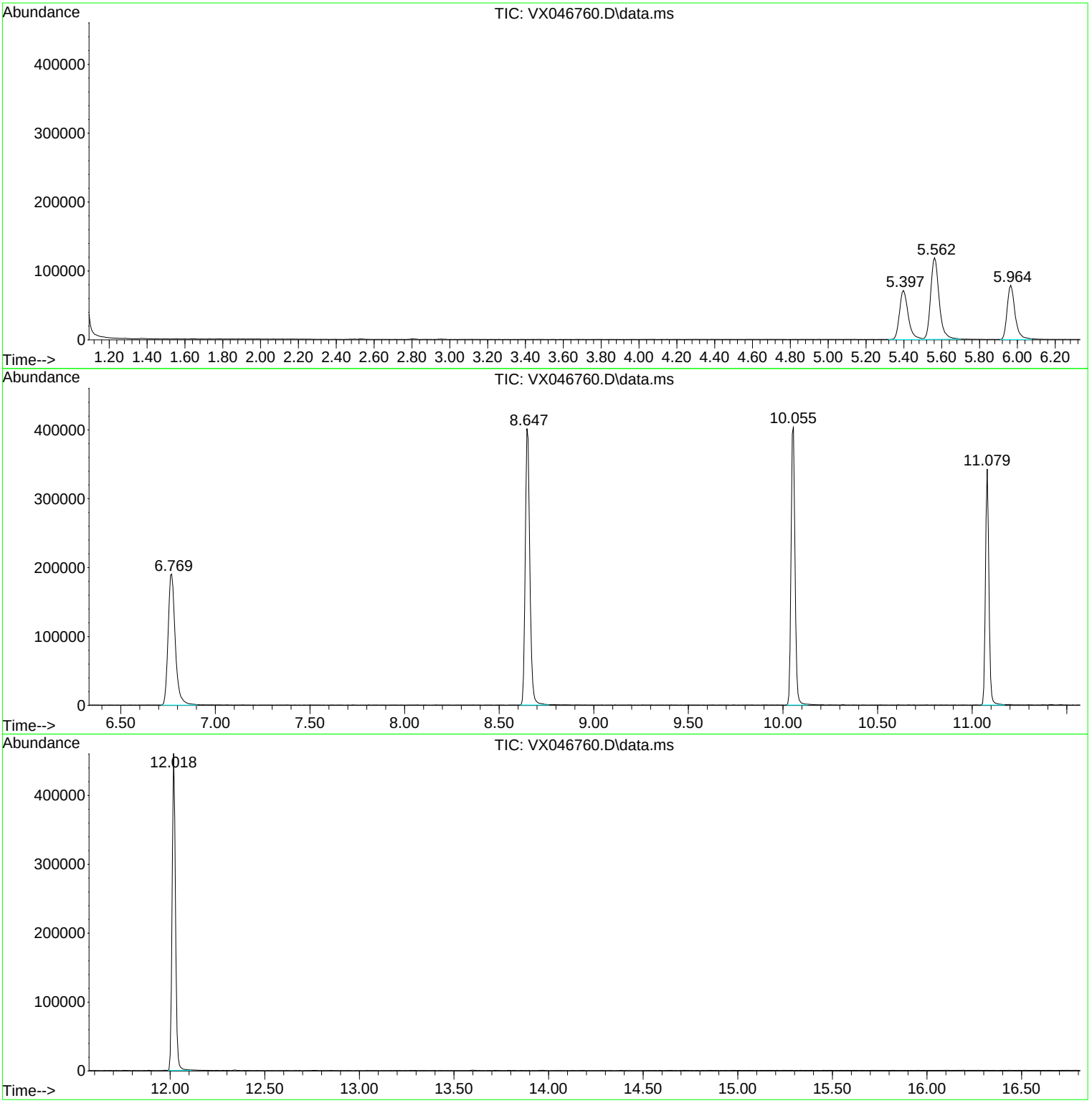
Sample Results: **VX046760.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061925\
Data File : VX046760.D
Acq On : 19 Jun 2025 10:33
Operator : JC/MD
Sample : VX0619WBL01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VX0619WBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260

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



Library Search Compound Report

Sample Results: **VX046760.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061925\
Data File : VX046760.D
Acq On : 19 Jun 2025 10:33
Operator : JC/MD
Sample : VX0619WBL01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VX0619WBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.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_X\Data\VX061925\
Data File : VX046760.D
Acq On : 19 Jun 2025 10:33
Operator : JC/MD
Sample : VX0619WBL01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VX0619WBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260

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

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

Raw Data: **VX046762.D**

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

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Ave B	Date Received:	
Client Sample ID:	VX0619WBS01	SDG No.:	Q2372
Lab Sample ID:	VX0619WBS01	Matrix:	Water
Analytical Method:	8260D	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX046762.D	1		06/19/25 11:24	VX061925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	19.1		0.22	1.00	ug/L
74-87-3	Chloromethane	18.7		0.32	1.00	ug/L
75-01-4	Vinyl Chloride	18.9		0.26	1.00	ug/L
74-83-9	Bromomethane	21.2		1.40	5.00	ug/L
75-00-3	Chloroethane	19.9		0.47	1.00	ug/L
75-69-4	Trichlorofluoromethane	18.4		0.33	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	18.5		0.25	1.00	ug/L
75-35-4	1,1-Dichloroethene	18.6		0.23	1.00	ug/L
67-64-1	Acetone	74.1		1.50	5.00	ug/L
75-15-0	Carbon Disulfide	17.0		0.21	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	17.0		0.16	1.00	ug/L
79-20-9	Methyl Acetate	16.0		0.27	1.00	ug/L
75-09-2	Methylene Chloride	18.1		0.28	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	18.3		0.23	1.00	ug/L
75-34-3	1,1-Dichloroethane	18.5		0.23	1.00	ug/L
110-82-7	Cyclohexane	18.8		1.50	5.00	ug/L
78-93-3	2-Butanone	78.9		0.98	5.00	ug/L
56-23-5	Carbon Tetrachloride	18.0		0.25	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	18.6		0.19	1.00	ug/L
74-97-5	Bromochloromethane	20.8		0.22	1.00	ug/L
67-66-3	Chloroform	19.0		0.25	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	17.7		0.20	1.00	ug/L
108-87-2	Methylcyclohexane	18.5		0.16	1.00	ug/L
71-43-2	Benzene	18.9		0.15	1.00	ug/L
107-06-2	1,2-Dichloroethane	18.5		0.22	1.00	ug/L
79-01-6	Trichloroethene	18.4		0.090	1.00	ug/L
78-87-5	1,2-Dichloropropane	18.4		0.20	1.00	ug/L
75-27-4	Bromodichloromethane	18.9		0.22	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	81.6		0.68	5.00	ug/L
108-88-3	Toluene	19.0		0.14	1.00	ug/L

Raw Data: **VX046762.D**

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

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Ave B	Date Received:	
Client Sample ID:	VX0619WBS01	SDG No.:	Q2372
Lab Sample ID:	VX0619WBS01	Matrix:	Water
Analytical Method:	8260D	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX046762.D	1		06/19/25 11:24	VX061925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	18.0		0.17	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	18.2		0.16	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	18.5		0.21	1.00	ug/L
591-78-6	2-Hexanone	78.9		0.89	5.00	ug/L
124-48-1	Dibromochloromethane	18.4		0.18	1.00	ug/L
106-93-4	1,2-Dibromoethane	18.0		0.15	1.00	ug/L
127-18-4	Tetrachloroethene	17.7		0.23	1.00	ug/L
108-90-7	Chlorobenzene	18.0		0.12	1.00	ug/L
100-41-4	Ethyl Benzene	18.0		0.13	1.00	ug/L
179601-23-1	m/p-Xylenes	37.2		0.24	2.00	ug/L
95-47-6	o-Xylene	18.6		0.12	1.00	ug/L
100-42-5	Styrene	18.3		0.15	1.00	ug/L
75-25-2	Bromoform	16.7		0.19	1.00	ug/L
98-82-8	Isopropylbenzene	18.1		0.12	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	17.3		0.26	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	17.8		0.16	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	17.5		0.19	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	18.1		0.16	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	15.1		0.53	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	17.1		0.20	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	17.6		0.20	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	49.8		70 (74) - 130 (125)	100%	SPK: 50
1868-53-7	Dibromofluoromethane	52.0		70 (75) - 130 (124)	104%	SPK: 50
2037-26-5	Toluene-d8	52.3		70 (86) - 130 (113)	105%	SPK: 50
460-00-4	4-Bromofluorobenzene	54.1		70 (77) - 130 (121)	108%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	138000	5.562			
540-36-3	1,4-Difluorobenzene	227000	6.769			
3114-55-4	Chlorobenzene-d5	207000	10.055			
3855-82-1	1,4-Dichlorobenzene-d4	105000	12.018			

Raw Data: **VX046762.D**

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

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Ave B	Date Received:	
Client Sample ID:	VX0619WBS01	SDG No.:	Q2372
Lab Sample ID:	VX0619WBS01	Matrix:	Water
Analytical Method:	8260D	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX046762.D	1		06/19/25 11:24	VX061925

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_X\Data\VX061925\
Data File : VX046762.D
Acq On : 19 Jun 2025 11:24
Operator : JC/MD
Sample : VX0619WBS01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 20 05:16:39 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 03:09:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX0619WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 06/20/2025
Supervised By :Mahesh Dadoda 06/21/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.562	168	137936	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.769	114	227140	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	207463	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	104652	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.964	65	94946	49.765	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 99.520%			
35) Dibromofluoromethane	5.397	113	78196	52.032	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 104.060%			
50) Toluene-d8	8.647	98	282602	52.340	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 104.680%			
62) 4-Bromofluorobenzene	11.079	95	108869	54.092	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 108.180%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.185	85	28069	19.060	ug/l	97
3) Chloromethane	1.307	50	29736	18.707	ug/l	99
4) Vinyl Chloride	1.386	62	32033	18.898	ug/l	93
5) Bromomethane	1.630	94	20191	21.172	ug/l	93
6) Chloroethane	1.709	64	20468	19.923	ug/l	98
7) Trichlorofluoromethane	1.910	101	47476	18.446	ug/l	99
8) Diethyl Ether	2.148	74	16252	18.400	ug/l	99
9) 1,1,2-Trichlorotrifluo...	2.349	101	29254	18.528	ug/l	99
10) Methyl Iodide	2.471	142	29614	18.018	ug/l	99
11) Tert butyl alcohol	2.959	59	10810	63.126	ug/l	97
12) 1,1-Dichloroethene	2.337	96	28292	18.570	ug/l	97
13) Acrolein	2.251	56	18186	72.910	ug/l	98
14) Allyl chloride	2.684	41	49324	17.868	ug/l	99
15) Acrylonitrile	3.075	53	62463	81.119	ug/l	98
16) Acetone	2.386	43	47143	74.096	ug/l	96
17) Carbon Disulfide	2.532	76	78405	17.041	ug/l	98
18) Methyl Acetate	2.715	43	25862	16.004	ug/l	98
19) Methyl tert-butyl Ether	3.123	73	80635	16.997	ug/l	98
20) Methylene Chloride	2.806	84	32048	18.113	ug/l	98
21) trans-1,2-Dichloroethene	3.111	96	29757	18.253	ug/l	99
22) Diisopropyl ether	3.769	45	100392	18.921	ug/l	94
23) Vinyl Acetate	3.733	43	365712	86.676	ug/l	100
24) 1,1-Dichloroethane	3.623	63	55663	18.477	ug/l	99
25) 2-Butanone	4.568	43	70964m	78.864	ug/l	
26) 2,2-Dichloropropane	4.489	77	39442	17.951	ug/l	99
27) cis-1,2-Dichloroethene	4.507	96	35547	18.560	ug/l	98
28) Bromochloromethane	4.910	49	28430	20.816	ug/l	99
29) Tetrahydrofuran	5.013	42	44591	76.721	ug/l	99
30) Chloroform	5.105	83	57187	18.982	ug/l	93
31) Cyclohexane	5.483	56	53811	18.836	ug/l	96
32) 1,1,1-Trichloroethane	5.391	97	46675	17.665	ug/l	98
36) 1,1-Dichloropropene	5.702	75	40684	18.754	ug/l	99
37) Ethyl Acetate	4.727	43	31829	15.895	ug/l	98
38) Carbon Tetrachloride	5.690	117	42451	18.031	ug/l	99
39) Methylcyclohexane	7.385	83	52931	18.541	ug/l	99
40) Benzene	6.050	78	121111	18.864	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061925\
Data File : VX046762.D
Acq On : 19 Jun 2025 11:24
Operator : JC/MD
Sample : VX0619WBS01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 20 05:16:39 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 03:09:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX0619WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 06/20/2025
Supervised By :Mahesh Dadoda 06/21/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	4.928	41	17227	16.137	ug/l		99
42) 1,2-Dichloroethane	6.092	62	41780	18.518	ug/l		100
43) Isopropyl Acetate	6.348	43	51032	16.286	ug/l		99
44) Trichloroethene	7.135	130	30093	18.392	ug/l		99
45) 1,2-Dichloropropane	7.433	63	29323	18.429	ug/l		95
46) Dibromomethane	7.592	93	20791	18.181	ug/l		99
47) Bromodichloromethane	7.824	83	44034	18.870	ug/l		99
48) Methyl methacrylate	7.696	41	25618	16.301	ug/l		98
49) 1,4-Dioxane	7.659	88	6374	299.149	ug/l		94
51) 4-Methyl-2-Pentanone	8.573	43	152568	81.636	ug/l		98
52) Toluene	8.720	92	75814	19.048	ug/l		98
53) t-1,3-Dichloropropene	8.982	75	38942	17.985	ug/l		99
54) cis-1,3-Dichloropropene	8.366	75	44663	18.171	ug/l		98
55) 1,1,2-Trichloroethane	9.153	97	27505	18.544	ug/l		99
56) Ethyl methacrylate	9.116	69	37095	16.942	ug/l		98
57) 1,3-Dichloropropane	9.311	76	47213	18.484	ug/l		100
58) 2-Chloroethyl Vinyl ether	8.244	63	101869	89.565	ug/l		99
59) 2-Hexanone	9.427	43	101986	78.935	ug/l		100
60) Dibromochloromethane	9.518	129	32154	18.395	ug/l		100
61) 1,2-Dibromoethane	9.610	107	27221	18.042	ug/l		100
64) Tetrachloroethene	9.275	164	25376	17.655	ug/l		95
65) Chlorobenzene	10.079	112	82392	17.991	ug/l		98
66) 1,1,1,2-Tetrachloroethane	10.159	131	27463	17.843	ug/l		98
67) Ethyl Benzene	10.195	91	144047	18.002	ug/l		97
68) m/p-Xylenes	10.299	106	111044	37.244	ug/l		100
69) o-Xylene	10.640	106	51894	18.572	ug/l		98
70) Styrene	10.652	104	89289	18.260	ug/l		99
71) Bromoform	10.799	173	19576	16.701	ug/l	#	98
73) Isopropylbenzene	10.957	105	139510	18.100	ug/l		99
74) N-amyl acetate	10.841	43	46412	15.893	ug/l		99
75) 1,1,2,2-Tetrachloroethane	11.207	83	37312	17.337	ug/l		100
76) 1,2,3-Trichloropropane	11.238	75	29393m	15.335	ug/l		
77) Bromobenzene	11.195	156	33896	18.275	ug/l		99
78) n-propylbenzene	11.299	91	168589	18.415	ug/l		99
79) 2-Chlorotoluene	11.360	91	99687	18.238	ug/l		99
80) 1,3,5-Trimethylbenzene	11.451	105	115409	18.221	ug/l		99
81) trans-1,4-Dichloro-2-b...	11.018	75	10102	14.897	ug/l		96
82) 4-Chlorotoluene	11.451	91	116713	18.296	ug/l		99
83) tert-Butylbenzene	11.713	119	118027	18.027	ug/l		99
84) 1,2,4-Trimethylbenzene	11.750	105	116817	18.357	ug/l		99
85) sec-Butylbenzene	11.890	105	153043	18.496	ug/l		100
86) p-Isopropyltoluene	12.006	119	127841	18.312	ug/l		99
87) 1,3-Dichlorobenzene	11.969	146	64330	17.788	ug/l		99
88) 1,4-Dichlorobenzene	12.036	146	64856	17.460	ug/l		99
89) n-Butylbenzene	12.329	91	118756	17.915	ug/l		100
90) Hexachloroethane	12.536	117	20652	16.893	ug/l		98
91) 1,2-Dichlorobenzene	12.335	146	61156	18.096	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	12.939	75	6425	15.122	ug/l		97
93) 1,2,4-Trichlorobenzene	13.585	180	41109	17.110	ug/l		98
94) Hexachlorobutadiene	13.719	225	17833	17.644	ug/l		96
95) Naphthalene	13.774	128	110507	16.144	ug/l		100
96) 1,2,3-Trichlorobenzene	13.957	180	40546	17.639	ug/l		99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061925\
Data File : VX046762.D
Acq On : 19 Jun 2025 11:24
Operator : JC/MD
Sample : VX0619WBS01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 20 05:16:39 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 03:09:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX0619WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 06/20/2025
Supervised By :Mahesh Dadoda 06/21/2025

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

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

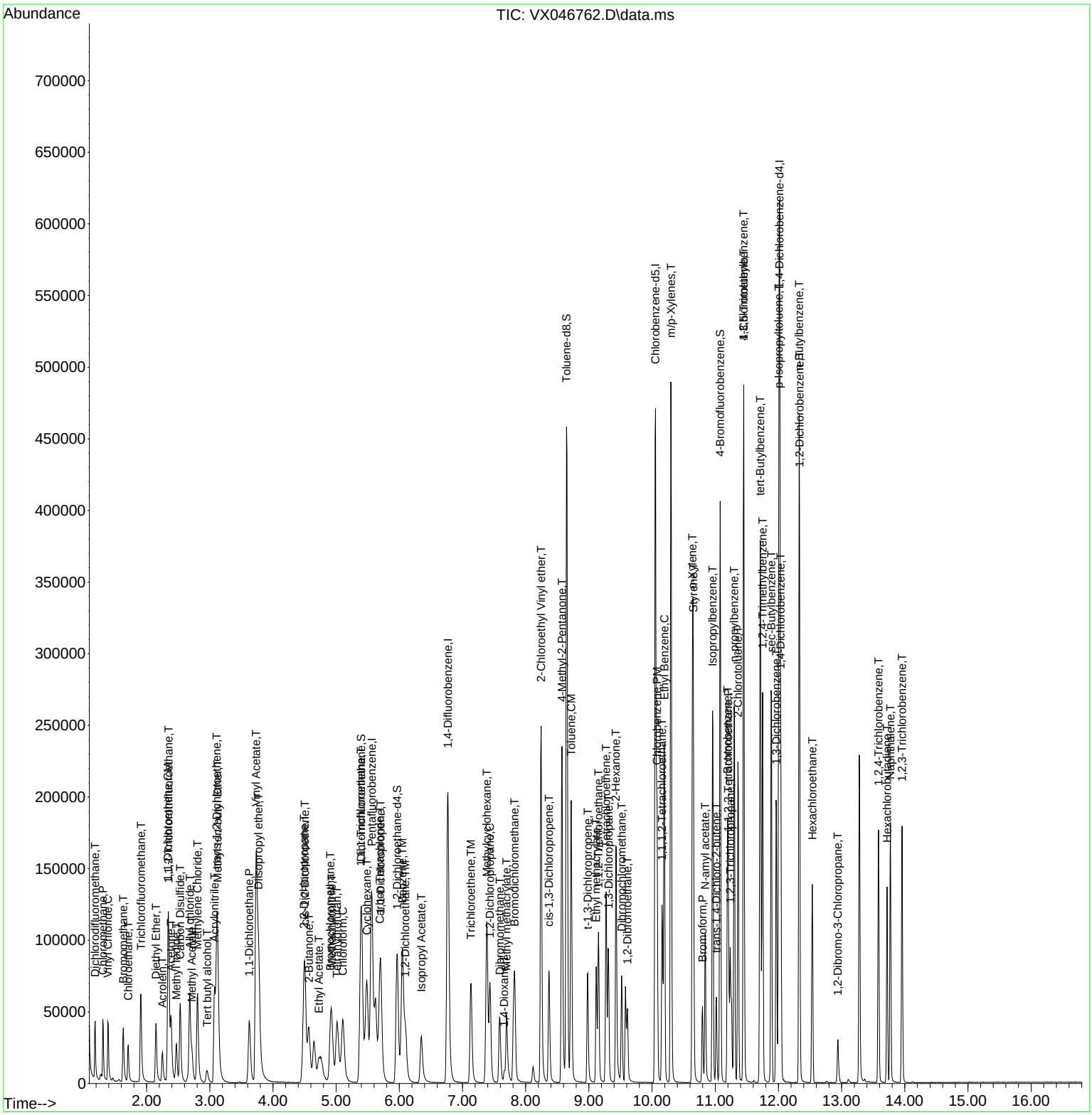
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061925\
Data File : VX046762.D
Acq On : 19 Jun 2025 11:24
Operator : JC/MD
Sample : VX0619WBS01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 20 05:16:39 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 03:09:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX0619WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 06/20/2025
Supervised By :Mahesh Dadoda 06/21/2025



Raw Data: **VX046763.D**

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

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Ave B	Date Received:	
Client Sample ID:	VX0619WBSD01	SDG No.:	Q2372
Lab Sample ID:	VX0619WBSD01	Matrix:	Water
Analytical Method:	8260D	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX046763.D	1		06/19/25 11:51	VX061925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	19.8		0.22	1.00	ug/L
74-87-3	Chloromethane	19.5		0.32	1.00	ug/L
75-01-4	Vinyl Chloride	19.7		0.26	1.00	ug/L
74-83-9	Bromomethane	22.2		1.40	5.00	ug/L
75-00-3	Chloroethane	20.6		0.47	1.00	ug/L
75-69-4	Trichlorofluoromethane	19.3		0.33	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	19.7		0.25	1.00	ug/L
75-35-4	1,1-Dichloroethene	19.5		0.23	1.00	ug/L
67-64-1	Acetone	81.5		1.50	5.00	ug/L
75-15-0	Carbon Disulfide	18.0		0.21	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	18.7		0.16	1.00	ug/L
79-20-9	Methyl Acetate	17.8		0.27	1.00	ug/L
75-09-2	Methylene Chloride	19.3		0.28	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	19.2		0.23	1.00	ug/L
75-34-3	1,1-Dichloroethane	19.4		0.23	1.00	ug/L
110-82-7	Cyclohexane	19.7		1.50	5.00	ug/L
78-93-3	2-Butanone	87.0		0.98	5.00	ug/L
56-23-5	Carbon Tetrachloride	19.1		0.25	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	19.4		0.19	1.00	ug/L
74-97-5	Bromochloromethane	23.1		0.22	1.00	ug/L
67-66-3	Chloroform	20.5		0.25	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	19.3		0.20	1.00	ug/L
108-87-2	Methylcyclohexane	19.0		0.16	1.00	ug/L
71-43-2	Benzene	20.0		0.15	1.00	ug/L
107-06-2	1,2-Dichloroethane	20.1		0.22	1.00	ug/L
79-01-6	Trichloroethene	19.3		0.090	1.00	ug/L
78-87-5	1,2-Dichloropropane	20.3		0.20	1.00	ug/L
75-27-4	Bromodichloromethane	20.1		0.22	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	91.8		0.68	5.00	ug/L
108-88-3	Toluene	20.3		0.14	1.00	ug/L

Raw Data: **VX046763.D**

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

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Ave B	Date Received:	
Client Sample ID:	VX0619WBSD01	SDG No.:	Q2372
Lab Sample ID:	VX0619WBSD01	Matrix:	Water
Analytical Method:	8260D	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX046763.D	1		06/19/25 11:51	VX061925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	19.5		0.17	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	19.9		0.16	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	20.4		0.21	1.00	ug/L
591-78-6	2-Hexanone	88.8		0.89	5.00	ug/L
124-48-1	Dibromochloromethane	19.9		0.18	1.00	ug/L
106-93-4	1,2-Dibromoethane	20.1		0.15	1.00	ug/L
127-18-4	Tetrachloroethene	18.8		0.23	1.00	ug/L
108-90-7	Chlorobenzene	19.4		0.12	1.00	ug/L
100-41-4	Ethyl Benzene	19.1		0.13	1.00	ug/L
179601-23-1	m/p-Xylenes	38.8		0.24	2.00	ug/L
95-47-6	o-Xylene	19.8		0.12	1.00	ug/L
100-42-5	Styrene	19.7		0.15	1.00	ug/L
75-25-2	Bromoform	18.4		0.19	1.00	ug/L
98-82-8	Isopropylbenzene	18.6		0.12	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	18.4		0.26	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	18.6		0.16	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	17.8		0.19	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	19.0		0.16	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	16.1		0.53	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	18.3		0.20	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	18.2		0.20	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	51.5		70 (74) - 130 (125)	103%	SPK: 50
1868-53-7	Dibromofluoromethane	52.8		70 (75) - 130 (124)	106%	SPK: 50
2037-26-5	Toluene-d8	52.7		70 (86) - 130 (113)	105%	SPK: 50
460-00-4	4-Bromofluorobenzene	54.9		70 (77) - 130 (121)	110%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	120000	5.562			
540-36-3	1,4-Difluorobenzene	199000	6.763			
3114-55-4	Chlorobenzene-d5	184000	10.055			
3855-82-1	1,4-Dichlorobenzene-d4	94900	12.018			

Raw Data: **VX046763.D**

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

Report of Analysis

Client:	G Environmental		Date Collected:		
Project:	Ave B		Date Received:		
Client Sample ID:	VX0619WBSD01		SDG No.:	Q2372	
Lab Sample ID:	VX0619WBSD01		Matrix:	Water	
Analytical Method:	8260D		% Solid:	0	
Sample Wt/Vol:	5 Units:	mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	DB-624UI ID :	0.18	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX046763.D	1		06/19/25 11:51	VX061925

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_X\Data\VX061925\
Data File : VX046763.D
Acq On : 19 Jun 2025 11:51
Operator : JC/MD
Sample : VX0619WBSD01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 20 05:17:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 03:09:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX0619WBSD01

Manual Integrations APPROVED

Reviewed By :John Carlone 06/20/2025
Supervised By :Mahesh Dadoda 06/21/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.562	168	120371	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.763	114	199496	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	183807	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	94851	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.958	65	85794	51.530	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 103.060%			
35) Dibromofluoromethane	5.391	113	69686	52.795	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 105.600%			
50) Toluene-d8	8.647	98	249730	52.661	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 105.320%			
62) 4-Bromofluorobenzene	11.079	95	97074	54.915	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 109.820%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.185	85	25471	19.820	ug/l	99
3) Chloromethane	1.307	50	27061	19.509	ug/l	96
4) Vinyl Chloride	1.386	62	29098	19.672	ug/l	95
5) Bromomethane	1.630	94	18436	22.153	ug/l	93
6) Chloroethane	1.703	64	18444	20.573	ug/l	95
7) Trichlorofluoromethane	1.904	101	43435	19.339	ug/l	97
8) Diethyl Ether	2.148	74	15726	20.402	ug/l	99
9) 1,1,2-Trichlorotrifluo...	2.349	101	27115	19.679	ug/l	98
10) Methyl Iodide	2.465	142	30018	20.229	ug/l	98
11) Tert butyl alcohol	2.959	59	10932	73.154	ug/l	96
12) 1,1-Dichloroethene	2.337	96	25867	19.455	ug/l	98
13) Acrolein	2.245	56	18810	86.416	ug/l	97
14) Allyl chloride	2.678	41	45893	19.051	ug/l	100
15) Acrylonitrile	3.068	53	61358	91.312	ug/l	99
16) Acetone	2.386	43	45269	81.534	ug/l	95
17) Carbon Disulfide	2.526	76	72150	17.970	ug/l	99
18) Methyl Acetate	2.709	43	25035	17.753	ug/l	100
19) Methyl tert-butyl Ether	3.117	73	77256	18.661	ug/l	98
20) Methylene Chloride	2.800	84	29836	19.323	ug/l	99
21) trans-1,2-Dichloroethene	3.105	96	27280	19.176	ug/l	97
22) Diisopropyl ether	3.764	45	94092	20.321	ug/l	87
23) Vinyl Acetate	3.733	43	359723	97.697	ug/l	100
24) 1,1-Dichloroethane	3.623	63	50927	19.372	ug/l	100
25) 2-Butanone	4.562	43	68340	87.030	ug/l	97
26) 2,2-Dichloropropane	4.489	77	36206	18.883	ug/l	99
27) cis-1,2-Dichloroethene	4.501	96	32489	19.438	ug/l	100
28) Bromochloromethane	4.910	49	27522	23.092	ug/l	97
29) Tetrahydrofuran	5.013	42	43894	86.542	ug/l	99
30) Chloroform	5.099	83	53771	20.452	ug/l	97
31) Cyclohexane	5.477	56	49014	19.660	ug/l	98
32) 1,1,1-Trichloroethane	5.391	97	44445	19.276	ug/l	99
36) 1,1-Dichloropropene	5.702	75	35819	18.799	ug/l	97
37) Ethyl Acetate	4.721	43	31001	17.627	ug/l	98
38) Carbon Tetrachloride	5.684	117	39531	19.117	ug/l	99
39) Methylcyclohexane	7.385	83	47544	18.962	ug/l	99
40) Benzene	6.044	78	112866	20.015	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061925\
Data File : VX046763.D
Acq On : 19 Jun 2025 11:51
Operator : JC/MD
Sample : VX0619WBSD01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 20 05:17:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 03:09:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX0619WBSD01

Manual Integrations APPROVED

Reviewed By :John Carlone 06/20/2025
Supervised By :Mahesh Dadoda 06/21/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	4.928	41	17801	18.985	ug/l		96
42) 1,2-Dichloroethane	6.092	62	39829	20.100	ug/l		99
43) Isopropyl Acetate	6.342	43	50813	18.463	ug/l		99
44) Trichloroethene	7.129	130	27765	19.321	ug/l		89
45) 1,2-Dichloropropane	7.427	63	28336	20.276	ug/l		92
46) Dibromomethane	7.580	93	19978	19.891	ug/l		99
47) Bromodichloromethane	7.824	83	41221	20.112	ug/l		99
48) Methyl methacrylate	7.696	41	26092	18.904	ug/l		100
49) 1,4-Dioxane	7.659	88	6068	321.885	ug/l		97
51) 4-Methyl-2-Pentanone	8.574	43	150700	91.811	ug/l		98
52) Toluene	8.720	92	70998	20.310	ug/l		99
53) t-1,3-Dichloropropene	8.976	75	37151	19.536	ug/l		98
54) cis-1,3-Dichloropropene	8.366	75	43044	19.939	ug/l		100
55) 1,1,2-Trichloroethane	9.153	97	26588	20.409	ug/l		98
56) Ethyl methacrylate	9.116	69	35838	18.636	ug/l		97
57) 1,3-Dichloropropane	9.305	76	45490	20.277	ug/l		99
58) 2-Chloroethyl Vinyl ether	8.238	63	100239	100.344	ug/l		99
59) 2-Hexanone	9.427	43	100820	88.846	ug/l		100
60) Dibromochloromethane	9.519	129	30624	19.947	ug/l		99
61) 1,2-Dibromoethane	9.610	107	26614	20.084	ug/l		98
64) Tetrachloroethene	9.275	164	23913	18.778	ug/l		98
65) Chlorobenzene	10.079	112	78801	19.421	ug/l		100
66) 1,1,1,2-Tetrachloroethane	10.159	131	26522	19.449	ug/l		100
67) Ethyl Benzene	10.195	91	135702	19.141	ug/l		99
68) m/p-Xylenes	10.299	106	102519	38.810	ug/l		99
69) o-Xylene	10.640	106	49068	19.820	ug/l		99
70) Styrene	10.653	104	85333	19.696	ug/l		98
71) Bromoform	10.799	173	19127	18.418	ug/l	#	98
73) Isopropylbenzene	10.957	105	129881	18.592	ug/l		100
74) N-amyl acetate	10.842	43	45562	17.214	ug/l		99
75) 1,1,2,2-Tetrachloroethane	11.207	83	35939	18.425	ug/l		100
76) 1,2,3-Trichloropropane	11.238	75	29301m	16.867	ug/l		
77) Bromobenzene	11.195	156	31899	18.976	ug/l		98
78) n-propylbenzene	11.299	91	156018	18.803	ug/l		100
79) 2-Chlorotoluene	11.360	91	92310	18.633	ug/l		99
80) 1,3,5-Trimethylbenzene	11.451	105	108639	18.925	ug/l		99
81) trans-1,4-Dichloro-2-b...	11.018	75	9561	15.556	ug/l		95
82) 4-Chlorotoluene	11.451	91	108666	18.795	ug/l		99
83) tert-Butylbenzene	11.713	119	108810	18.337	ug/l		100
84) 1,2,4-Trimethylbenzene	11.750	105	108849	18.872	ug/l		100
85) sec-Butylbenzene	11.890	105	141281	18.839	ug/l		100
86) p-Isopropyltoluene	12.006	119	118528	18.732	ug/l		99
87) 1,3-Dichlorobenzene	11.969	146	60812	18.553	ug/l		99
88) 1,4-Dichlorobenzene	12.036	146	59834	17.772	ug/l		98
89) n-Butylbenzene	12.329	91	111302	18.526	ug/l		99
90) Hexachloroethane	12.536	117	19081	17.220	ug/l		96
91) 1,2-Dichlorobenzene	12.335	146	58188	18.997	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	12.939	75	6206	16.116	ug/l		97
93) 1,2,4-Trichlorobenzene	13.585	180	39871	18.309	ug/l		99
94) Hexachlorobutadiene	13.719	225	17144	18.715	ug/l		96
95) Naphthalene	13.774	128	107578	17.340	ug/l		99
96) 1,2,3-Trichlorobenzene	13.957	180	37893	18.189	ug/l		99

Sample Results: **VX046763.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061925\
Data File : VX046763.D
Acq On : 19 Jun 2025 11:51
Operator : JC/MD
Sample : VX0619WBSD01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 20 05:17:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 03:09:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX0619WBSD01

Manual Integrations APPROVED

Reviewed By :John Carlone 06/20/2025
Supervised By :Mahesh Dadoda 06/21/2025

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

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

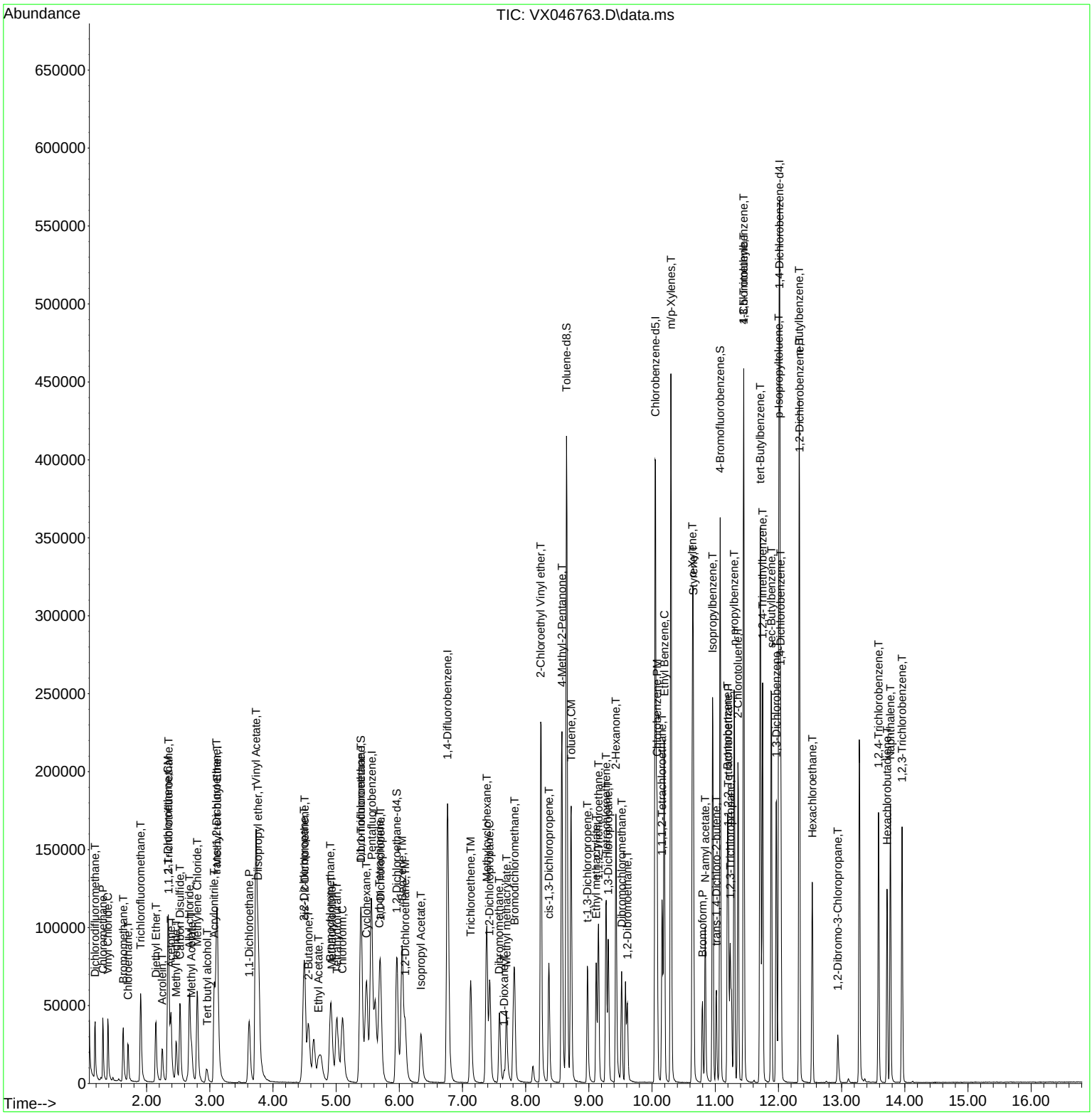
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX061925\
Data File : VX046763.D
Acq On : 19 Jun 2025 11:51
Operator : JC/MD
Sample : VX0619WBSD01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 20 05:17:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X061725W.M
Quant Title : SW846 8260
QLast Update : Wed Jun 18 03:09:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX0619WBSD01

Manual Integrations APPROVED

Reviewed By :John Carlone 06/20/2025
Supervised By :Mahesh Dadoda 06/21/2025



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

Manual Integration Report

Sequence:	vx061725	Instrument	MSVOA_x

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC005	VX046718.D	1,2,3-Trichloropropane	Sam	6/18/2025 5:26:54 PM	MMDadoda	6/18/2025 6:21:14 PM	Peak Integrated by Software
VSTDICC020	VX046719.D	1,2,3-Trichloropropane	Sam	6/18/2025 5:27:04 PM	MMDadoda	6/18/2025 6:21:20 PM	Peak Integrated by Software
VSTDICCC050	VX046720.D	1,2,3-Trichloropropane	Sam	6/18/2025 5:27:12 PM	MMDadoda	6/18/2025 6:21:32 PM	Peak Integrated by Software
VSTDICC100	VX046721.D	1,2,3-Trichloropropane	Sam	6/18/2025 5:27:20 PM	MMDadoda	6/18/2025 6:21:40 PM	Peak Integrated by Software
VSTDICC150	VX046722.D	1,2,3-Trichloropropane	Sam	6/18/2025 5:27:27 PM	MMDadoda	6/18/2025 6:21:48 PM	Peak Integrated by Software
VSTDICC001	VX046725.D	1,2,3-Trichloropropane	Sam	6/18/2025 5:27:40 PM	MMDadoda	6/18/2025 6:22:02 PM	Peak Integrated by Software
VSTDICC001	VX046725.D	1,4-Dichlorobenzene	Sam	6/18/2025 5:27:40 PM	MMDadoda	6/18/2025 6:22:02 PM	Peak Integrated by Software
VSTDICC001	VX046725.D	2,2-Dichloropropane	Sam	6/18/2025 5:27:40 PM	MMDadoda	6/18/2025 6:22:02 PM	Peak Integrated by Software
VSTDICC001	VX046725.D	Chloroform	Sam	6/18/2025 5:27:40 PM	MMDadoda	6/18/2025 6:22:02 PM	Peak Integrated by Software
VSTDICC001	VX046725.D	Ethyl Acetate	Sam	6/18/2025 5:27:40 PM	MMDadoda	6/18/2025 6:22:02 PM	Peak Integrated by Software
VSTDICC001	VX046725.D	Methacrylonitrile	Sam	6/18/2025 5:27:40 PM	MMDadoda	6/18/2025 6:22:02 PM	Peak Integrated by Software
VSTDICV050	VX046726.D	1,2,3-Trichloropropane	Sam	6/18/2025 5:27:47 PM	MMDadoda	6/18/2025 6:22:09 PM	Peak Integrated by Software

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

Manual Integration Report

Sequence:	vx061725	Instrument	MSVOA_x

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason

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

Manual Integration Report

Sequence:	VX061925	Instrument	MSVOA_x

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC050	VX046758.D	1,2,3-Trichloropropane	JOHN	6/20/2025 8:42:24 AM	MMdadoda	6/21/2025 12:20:44 AM	Peak Integrated by Software
VSTDCCC050	VX046758.D	2-Butanone	JOHN	6/20/2025 8:42:24 AM	MMdadoda	6/21/2025 12:20:44 AM	Peak Integrated by Software
VX0619WBS01	VX046762.D	1,2,3-Trichloropropane	JOHN	6/20/2025 8:42:30 AM	MMdadoda	6/21/2025 12:20:48 AM	Peak Integrated by Software
VX0619WBS01	VX046762.D	2-Butanone	JOHN	6/20/2025 8:42:30 AM	MMdadoda	6/21/2025 12:20:48 AM	Peak Integrated by Software
VX0619WBSD01	VX046763.D	1,2,3-Trichloropropane	JOHN	6/20/2025 8:42:34 AM	MMdadoda	6/21/2025 12:20:52 AM	Peak Integrated by Software
VSTDCCC050	VX046775.D	1,2,3-Trichloropropane	JOHN	6/20/2025 8:42:59 AM	MMdadoda	6/21/2025 12:21:03 AM	Peak Integrated by Software

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

Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QCBatch ID # VX061725

Review By	Semsettin Yesilyurt	Review On	6/18/2025 5:28:16 PM		
Supervise By	Mahesh Dadoda	Supervise On	6/18/2025 6:22:48 PM		
SubDirectory	VX061725	HP Acquire Method		HP Processing Method	82X061725W.M

STD. NAME	STD REF.#
Tune/Reschk	VP134389
Initial Calibration Stds	VP134390,VP134391,VP134392,VP134393,VP134394,VP134395
CCC	
Internal Standard/PEM	
ICV/I.BLK	VP134396
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VX046715.D	17 Jun 2025 08:46	JC/MD	Ok
2	VSTDICC001	VX046716.D	17 Jun 2025 10:09	JC/MD	Not Ok
3	VSTDICC001	VX046717.D	17 Jun 2025 10:58	JC/MD	ReRun
4	VSTDICC005	VX046718.D	17 Jun 2025 11:19	JC/MD	Ok,M
5	VSTDICC020	VX046719.D	17 Jun 2025 13:59	JC/MD	Ok,M
6	VSTDICCC050	VX046720.D	17 Jun 2025 14:20	JC/MD	Ok,M
7	VSTDICC100	VX046721.D	17 Jun 2025 14:41	JC/MD	Ok,M
8	VSTDICC150	VX046722.D	17 Jun 2025 15:02	JC/MD	Ok,M
9	IBLK	VX046723.D	17 Jun 2025 15:23	JC/MD	Ok
10	VSTDICC001	VX046724.D	17 Jun 2025 16:20	JC/MD	Not Ok
11	VSTDICC001	VX046725.D	17 Jun 2025 17:18	JC/MD	Ok,M
12	VSTDICV050	VX046726.D	17 Jun 2025 18:00	JC/MD	Ok,M

M : Manual Integration

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

Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QCBatch ID # VX061925

Review By	John Carlone	Review On	6/20/2025 8:46:07 AM		
Supervise By	Mahesh Dadoda	Supervise On	6/21/2025 12:21:16 AM		
SubDirectory	VX061925	HP Acquire Method		HP Processing Method	82X061725W.M

STD. NAME	STD REF.#
Tune/Reschk	VP134428
Initial Calibration Stds	
CCC	VP134429,VP134430
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VX046757.D	19 Jun 2025 08:42	JC/MD	Ok
2	VSTDCCC050	VX046758.D	19 Jun 2025 09:43	JC/MD	Ok,M
3	VX0619MBL01	VX046759.D	19 Jun 2025 10:12	JC/MD	Ok
4	VX0619WBL01	VX046760.D	19 Jun 2025 10:33	JC/MD	Ok
5	Q2345-01	VX046761.D	19 Jun 2025 11:03	JC/MD	Ok
6	VX0619WBS01	VX046762.D	19 Jun 2025 11:24	JC/MD	Ok,M
7	VX0619WBSD01	VX046763.D	19 Jun 2025 11:51	JC/MD	Ok,M
8	Q2361-01	VX046764.D	19 Jun 2025 12:12	JC/MD	Ok
9	Q2334-01	VX046765.D	19 Jun 2025 12:33	JC/MD	Ok
10	Q2334-02	VX046766.D	19 Jun 2025 12:54	JC/MD	Ok
11	Q2334-03	VX046767.D	19 Jun 2025 13:15	JC/MD	Ok
12	Q2363-02	VX046768.D	19 Jun 2025 13:36	JC/MD	Dilution
13	IBLK	VX046769.D	19 Jun 2025 13:57	JC/MD	Ok
14	IBLK	VX046770.D	19 Jun 2025 14:18	JC/MD	Ok
15	Q2351-01	VX046771.D	19 Jun 2025 15:45	JC/MD	Ok
16	Q2372-02	VX046772.D	19 Jun 2025 16:06	JC/MD	Ok
17	Q2372-01	VX046773.D	19 Jun 2025 16:27	JC/MD	Ok
18	IBLK	VX046774.D	19 Jun 2025 16:49	JC/MD	Ok
19	VSTDCCC050	VX046775.D	19 Jun 2025 17:10	JC/MD	Ok,M

M : Manual Integration

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Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QCBatch ID # VX061725

Review By	Semsettin Yesilyurt	Review On	6/18/2025 5:28:16 PM		
Supervise By	Mahesh Dadoda	Supervise On	6/18/2025 6:22:48 PM		
SubDirectory	VX061725	HP Acquire Method		HP Processing Method	82X061725W.M

STD. NAME	STD REF.#
Tune/Reschk	VP134389
Initial Calibration Stds	VP134390,VP134391,VP134392,VP134393,VP134394,VP134395
CCC	
Internal Standard/PEM	
ICV/I.BLK	VP134396
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VX046715.D	17 Jun 2025 08:46		JC/MD	Ok
2	VSTDICC001	VSTDICC001	VX046716.D	17 Jun 2025 10:09	RRF check	JC/MD	Not Ok
3	VSTDICC001	VSTDICC001	VX046717.D	17 Jun 2025 10:58	low response	JC/MD	ReRun
4	VSTDICC005	VSTDICC005	VX046718.D	17 Jun 2025 11:19		JC/MD	Ok,M
5	VSTDICC020	VSTDICC020	VX046719.D	17 Jun 2025 13:59	LR- 10,49	JC/MD	Ok,M
6	VSTDICCC050	VSTDICCC050	VX046720.D	17 Jun 2025 14:20		JC/MD	Ok,M
7	VSTDICC100	VSTDICC100	VX046721.D	17 Jun 2025 14:41		JC/MD	Ok,M
8	VSTDICC150	VSTDICC150	VX046722.D	17 Jun 2025 15:02		JC/MD	Ok,M
9	IBLK	IBLK	VX046723.D	17 Jun 2025 15:23		JC/MD	Ok
10	VSTDICC001	VSTDICC001	VX046724.D	17 Jun 2025 16:20	spike error	JC/MD	Not Ok
11	VSTDICC001	VSTDICC001	VX046725.D	17 Jun 2025 17:18		JC/MD	Ok,M
12	VSTDICV050	ICVVX061725	VX046726.D	17 Jun 2025 18:00		JC/MD	Ok,M

M : Manual Integration

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Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QCBatch ID # VX061925

Review By	John Carlone	Review On	6/20/2025 8:46:07 AM		
Supervise By	Mahesh Dadoda	Supervise On	6/21/2025 12:21:16 AM		
SubDirectory	VX061925	HP Acquire Method		HP Processing Method	82X061725W.M

STD. NAME	STD REF.#
Tune/Reschk	VP134428
Initial Calibration Stds	
CCC	VP134429,VP134430
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VX046757.D	19 Jun 2025 08:42		JC/MD	Ok
2	VSTDCCC050	VSTDCCC050	VX046758.D	19 Jun 2025 09:43	pH#Lot#V12668	JC/MD	Ok,M
3	VX0619MBL01	VX0619MBL01	VX046759.D	19 Jun 2025 10:12		JC/MD	Ok
4	VX0619WBL01	VX0619WBL01	VX046760.D	19 Jun 2025 10:33		JC/MD	Ok
5	Q2345-01	EB02-20250616	VX046761.D	19 Jun 2025 11:03	vial B pH<2 EB	JC/MD	Ok
6	VX0619WBS01	VX0619WBS01	VX046762.D	19 Jun 2025 11:24		JC/MD	Ok,M
7	VX0619WBSD01	VX0619WBSD01	VX046763.D	19 Jun 2025 11:51		JC/MD	Ok,M
8	Q2361-01	TT205S1-20250617	VX046764.D	19 Jun 2025 12:12	vial A pH<2	JC/MD	Ok
9	Q2334-01	MW3	VX046765.D	19 Jun 2025 12:33	vial A pH<2	JC/MD	Ok
10	Q2334-02	MW4	VX046766.D	19 Jun 2025 12:54	vial A pH<2	JC/MD	Ok
11	Q2334-03	GBTW1	VX046767.D	19 Jun 2025 13:15	vial A pH<2	JC/MD	Ok
12	Q2363-02	GCAP1W	VX046768.D	19 Jun 2025 13:36	vial A pH<2 Need 20X	JC/MD	Dilution
13	IBLK	IBLK	VX046769.D	19 Jun 2025 13:57		JC/MD	Ok
14	IBLK	IBLK	VX046770.D	19 Jun 2025 14:18		JC/MD	Ok
15	Q2351-01	FAIRLAWN-SUMP	VX046771.D	19 Jun 2025 15:45	vial A pH<2 oily sample	JC/MD	Ok
16	Q2372-02	GAV2W	VX046772.D	19 Jun 2025 16:06	vial A pH<2	JC/MD	Ok
17	Q2372-01	GAV1W	VX046773.D	19 Jun 2025 16:27	vial A pH<2	JC/MD	Ok
18	IBLK	IBLK	VX046774.D	19 Jun 2025 16:49		JC/MD	Ok

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Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QCBatch ID # VX061925

Review By	John Carlone	Review On	6/20/2025 8:46:07 AM		
Supervise By	Mahesh Dadoda	Supervise On	6/21/2025 12:21:16 AM		
SubDirectory	VX061925	HP Acquire Method		HP Processing Method	82X061725W.M

STD. NAME	STD REF.#
Tune/Reschk	VP134428
Initial Calibration Stds	
CCC	VP134429,VP134430
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

19	VSTDCCC050	VSTDCCC050EC	VX046775.D	19 Jun 2025 17:10		JC/MD	Ok,M

M : Manual Integration

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Prep Standard - Chemical Standard Summary

Order ID : Q2372

Test : VOCMS Group1

Prepbatch ID :

Sequence ID/Qc Batch ID: VX061925,

Standard ID :
VP133174,VP133887,VP133935,VP133953,VP133991,VP134142,VP134149,VP134428,VP134429,VP134430,

Chemical ID :
V13391,V13706,V14290,V14432,V14435,V14503,V14504,V14525,V14526,V14613,V14620,V14626,V14636,V14637,V14638,V14639,V14668,V14671,V14673,V14675,V14711,V14717,V14718,V14721,V14749,V14750,V14811,V14812,V14843,V14921,V14929,V14944,V14945,V14946,V14947,W3112,

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
617	8260 Surrogate, 400PPM	VP133174	02/27/2025	08/27/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 03/04/2025

FROM 0.40000ml of V13706 + 24.60000ml of V14613 = Final Quantity: 25.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
257	8260 Calibration Working STD Mix-First source, 160PPM	VP133887	05/12/2025	06/23/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 05/14/2025

FROM 0.40000ml of V14843 + 1.00000ml of V14432 + 1.00000ml of V14435 + 1.00000ml of V14503 + 1.00000ml of V14504 + 1.00000ml of V14525 + 1.00000ml of V14526 + 1.00000ml of V14711 + 1.00000ml of V14717 + 1.00000ml of V14718 + 1.00000ml of V14721 + 1.00000ml of V14749 + 1.00000ml of V14750 + 1.00000ml of V14811 + 1.00000ml of V14812 + 10.60000ml of V14921 = Final Quantity: 25.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
247	8260 Internal Standard, 250PPM	VP133935	05/16/2025	11/12/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 05/21/2025

FROM 0.25000ml of V14290 + 24.75000ml of V14921 = Final Quantity: 25.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
218	BFB, 25PPM	VP133953	05/19/2025	11/09/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 05/21/2025

FROM 0.25000ml of V13391 + 24.75000ml of V14626 = Final Quantity: 25.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
51	8260 Working STD (Acrolein) -first source, 800PPM	VP133991	05/22/2025	06/19/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 05/24/2025

FROM 1.00000ml of V14944 + 1.00000ml of V14945 + 1.00000ml of V14946 + 1.00000ml of V14947 + 21.00000ml of V14620 = Final Quantity: 25.000 ml

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

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

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VOC STANDARD PREPARATION LOG

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

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

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
589	BFB TUNE CHECK	VP134428	06/19/2025	06/20/2025	John Carlone	None	None	Mahesh Dadoda 06/23/2025

FROM 39.98400ml of W3112 + 0.01600ml of VP133953 = Final Quantity: 40.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
620	50 PPB CCC, 8260-Water	VP134429	06/19/2025	06/19/2025	John Carlone	None	None	Mahesh Dadoda 06/23/2025

FROM 39.94450ml of W3112 + 0.00500ml of VP133174 + 0.00500ml of VP134142 + 0.00800ml of VP133935 + 0.01250ml of VP133887 + 0.01250ml of VP133991 + 0.01250ml of VP134149 = Final Quantity: 40.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
620	50 PPB CCC, 8260-Water	VP134430	06/19/2025	06/19/2025	John Carlone	None	None	Mahesh Dadoda 06/23/2025

FROM 39.94450ml of W3112 + 0.00500ml of VP133174 + 0.00500ml of VP134142 + 0.00800ml of VP133935 + 0.01250ml of VP133887 + 0.01250ml of VP133991 + 0.01250ml of VP134149 = Final Quantity: 40.000 ml

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CHEMICAL RECEIPT LOG BOOK

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555582 / Custom Mixture, 8260 A/B Surrogate Mix [CS 5179-2]	A0196865	02/27/2026	02/27/2025 / SAM	04/12/2023 / SAM	V13706

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30489 / VOA Mix, 8260B Acetates Mix, P&TM, 1mL	A0209618	09/30/2025	05/12/2025 / SAM	08/15/2024 / SAM	V14432

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	09/20/2025	03/20/2025 / SAM	08/15/2024 / SAM	V14435

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	11/12/2025	05/12/2025 / SAM	09/17/2024 / SAM	V14503

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95317 / Universal VOA Mega Mix (Min order = 5)	021624	11/12/2025	05/12/2025 / SAM	09/17/2024 / SAM	V14504

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	11/12/2025	05/12/2025 / SAM	09/18/2024 / SAM	V14525

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	11/12/2025	05/12/2025 / SAM	09/18/2024 / SAM	V14526

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	10/25/2025	05/09/2025 / SAM	11/26/2024 / SAM	V14620

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

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CHEMICAL RECEIPT LOG BOOK

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

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

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

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

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

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

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CHEMICAL RECEIPT LOG BOOK

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

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml	A02110618	11/12/2025	05/12/2025 / SAM	12/17/2024 / SAM	V14711

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	11/12/2025	05/12/2025 / SAM	12/17/2024 / SAM	V14717

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	11/12/2025	05/12/2025 / SAM	12/17/2024 / SAM	V14718

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	11/12/2025	05/12/2025 / SAM	12/17/2024 / SAM	V14721

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30042 / VOA Mix,500 series method 502.2 Calibration Std #1 gases, 2000uq/ml, PTM, 1ml	A0216826	11/13/2025	05/12/2025 / SAM	12/17/2024 / SAM	V14749

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	11/12/2025	05/12/2025 / SAM	12/17/2024 / SAM	V14750

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555408 / Custom Standard, Vinyl Acetate Standard w/ Grav [CS 5066-6] TWO SEPARATE LOTS	A0220471	11/12/2025	05/12/2025 / SAM	01/08/2025 / SAM	V14811

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555408 / Custom Standard, Vinyl Acetate Standard w/ Grav [CS 5066-6] TWO SEPARATE LOTS	A0220471	06/30/2026	05/12/2025 / SAM	01/08/2025 / SAM	V14812

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	11/12/2025	05/12/2025 / SAM	01/21/2025 / SAM	V14843

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	24G0262002	11/12/2025	05/12/2025 / SAM	05/09/2025 / SAM	V14921

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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)	24G0262002	12/06/2025	06/06/2025 / SAM	05/09/2025 / SAM	V14929

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	051925	06/19/2025	05/22/2025 / SAM	05/21/2025 / SAM	V14944

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	051925	06/19/2025	05/22/2025 / SAM	05/21/2025 / SAM	V14945

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	051925	06/19/2025	05/22/2025 / SAM	05/21/2025 / SAM	V14946

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	051925	06/19/2025	05/22/2025 / SAM	05/21/2025 / SAM	V14947

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

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

avantor™ | J.T.Baker®

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

Certificate of Analysis

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

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

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

Ken Koehnlein
Sr. Manager, Quality Assurance

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

12 Bottles

avantor™ | J.T.Baker®

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_3OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.2 ppm
Titrable Acid (µeq/g)	≤ 0.3	0.2
Titrable Base (µeq/g)	≤ 0.10	0.03
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis – Below EPA 8260B CRQL	Conforms	Conforms

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

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

James Ethier

Jamie Ethier
Vice President Global Quality

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

12 Bottles

avantor™ | J.T.Baker®

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_3OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.2 ppm
Titrable Acid (µeq/g)	≤ 0.3	0.2
Titrable Base (µeq/g)	≤ 0.10	0.03
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis – Below EPA 8260B CRQL	Conforms	Conforms

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

James Ethier

Jamie Ethier
Vice President Global Quality

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

Certified Reference Material CRM

Rec 09/17/24

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

CERTIFIED WEIGHT REPORT

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

Solvent(s): Lot#
Methanol EG359-USQ12

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

Formulated By: Prashant Chauhan 021624 DATE

Reviewed By: Pedro L. Rentas 021624 DATE

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

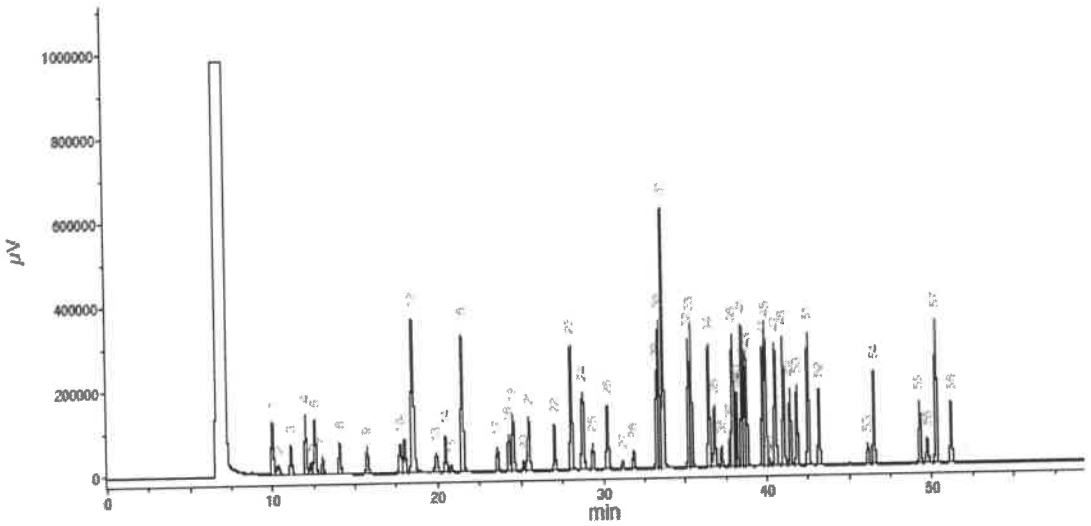
- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value,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

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

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

Comments

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



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

Absolute Standards Inc.

PO Box 5585
Hamden, CT 06518-0585

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

Safety Data Sheet (SDS) GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

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

Section II - Hazards Identification

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

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

Signal Word: DANGER

Section III - Composition

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

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

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

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

Section V. FIREFIGHTING MEASURES

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

Section VI. ACCIDENTAL RELEASE MEASURES

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

Section VII. HANDLING AND STORAGE

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

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Section IX - Physical/Chemical Characteristics

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

Solubility in Water COMPLETE

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

Section X. STABILITY AND REACTIVITY

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

Section XI. TOXICOLOGICAL INFORMATION

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

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

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

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

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

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

Section XV. REGULATORY INFORMATION

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

Section XVI. Misc. INFORMATION

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

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

Certified Reference Material CRM

Rec 09/17/24

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

CERTIFIED WEIGHT REPORT

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

Solvent(s): Lot#
Methanol EG359-USQ12

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

Formulated By: Prashant Chauhan 021624 DATE

Reviewed By: Pedro L. Rentas 021624 DATE

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

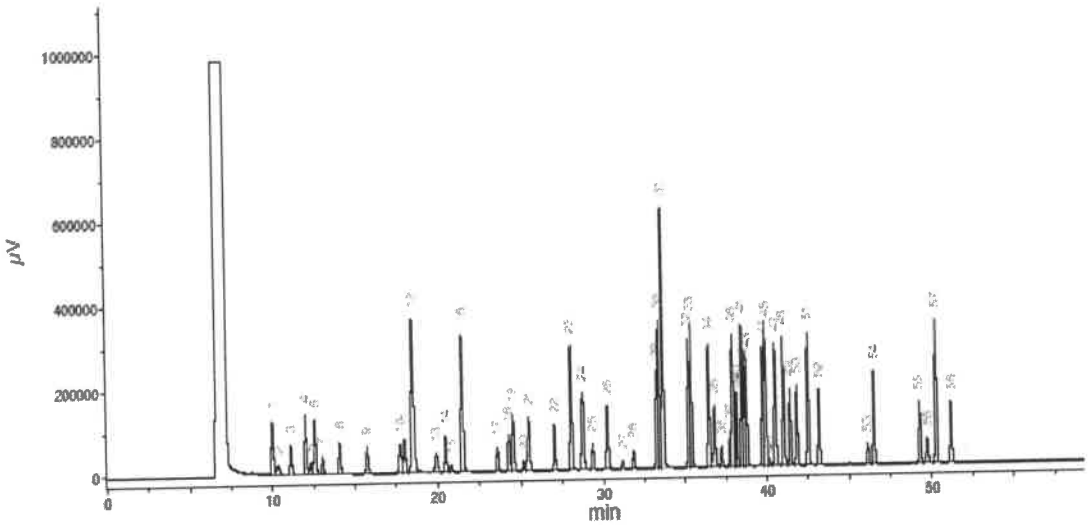
- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value,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

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

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

Comments

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



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

Absolute Standards Inc.

PO Box 5585
Hamden, CT 06518-0585

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

Safety Data Sheet (SDS) GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

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

Section II - Hazards Identification

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

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

Signal Word: DANGER

Section III - Composition

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

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

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

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

Section V. FIREFIGHTING MEASURES

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

Section VI. ACCIDENTAL RELEASE MEASURES

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

Section VII. HANDLING AND STORAGE

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

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Section IX - Physical/Chemical Characteristics

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

Solubility in Water COMPLETE

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

Section X. STABILITY AND REACTIVITY

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

Section XI. TOXICOLOGICAL INFORMATION

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

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

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

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

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

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

Section XV. REGULATORY INFORMATION

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

Section XVI. Misc. INFORMATION

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

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

Certified Reference Material CRM

Rec 09/16/24 2 Vials

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

CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 091424
Description: Acrolein

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

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

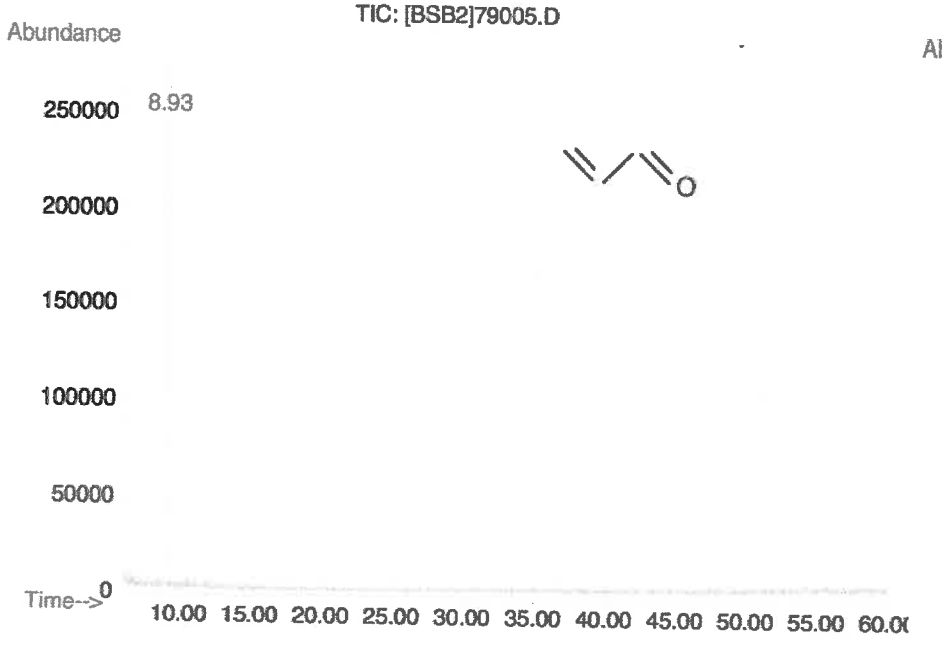
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

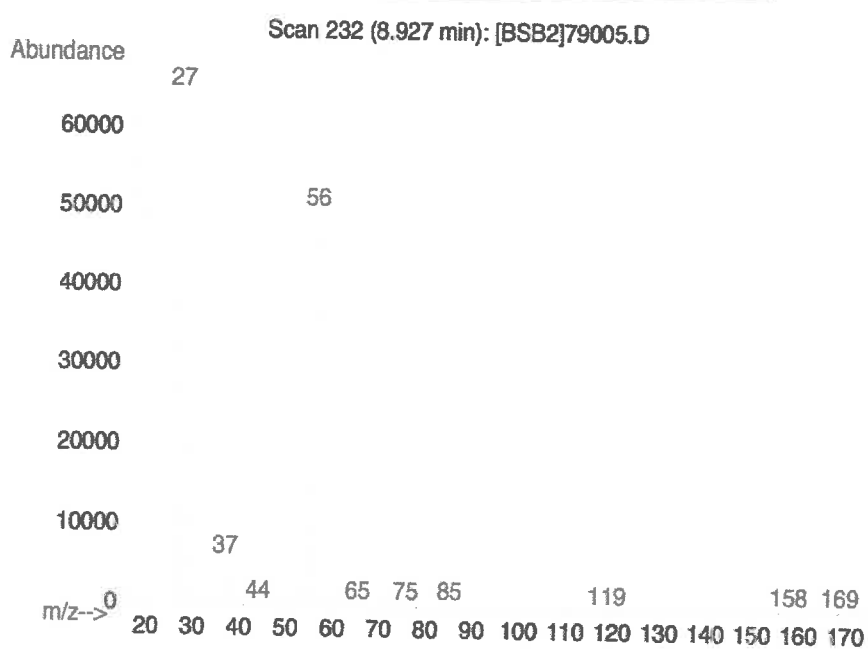
Formulated By: Justin Dippold 091424 DATE

Reviewed By: Pedro L. Rentas 091424 DATE

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

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





- 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).

Absolute Standards, Inc.
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Certified Reference Material CRM

Rec 09/16/24 2 Vials

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

CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 091424
Description: Acrolein

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

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

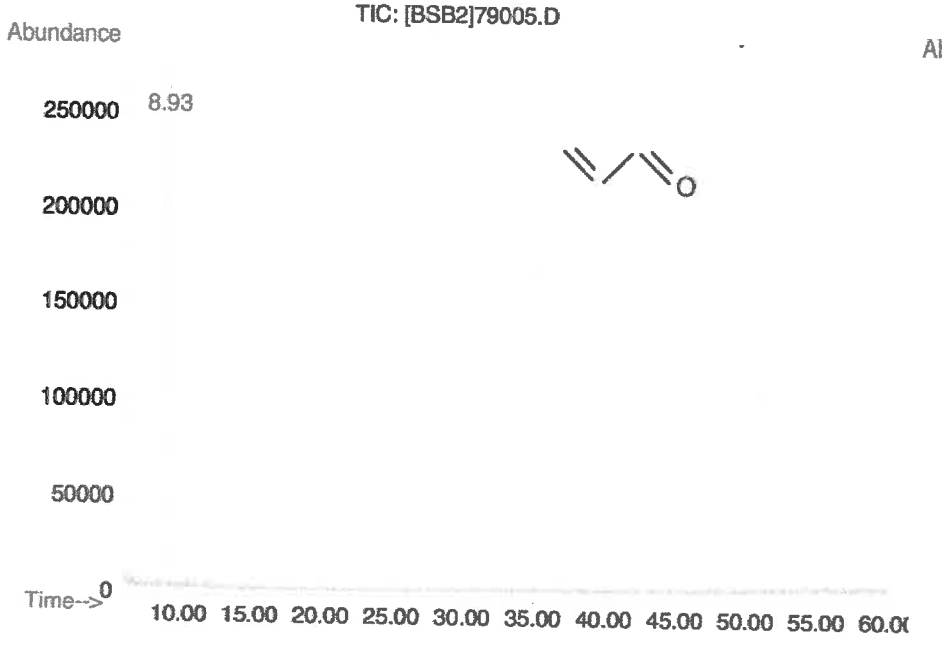
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

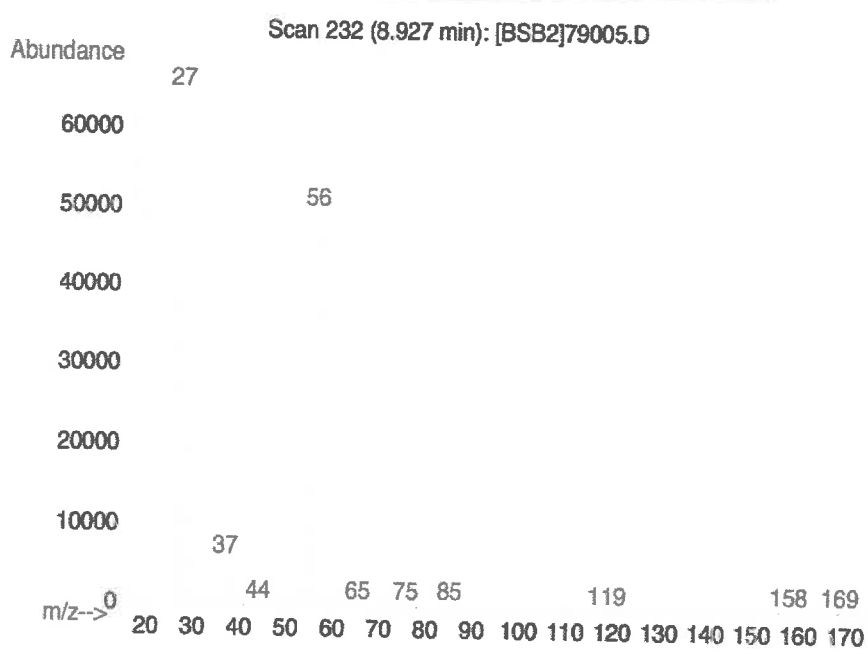
Formulated By: Justin Dippold 091424 DATE

Reviewed By: Pedro L. Rentas 091424 DATE

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

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





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Certified Reference Material CRM

Rec 12/6/24
20 vial

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

CERTIFIED WEIGHT REPORT

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

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

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

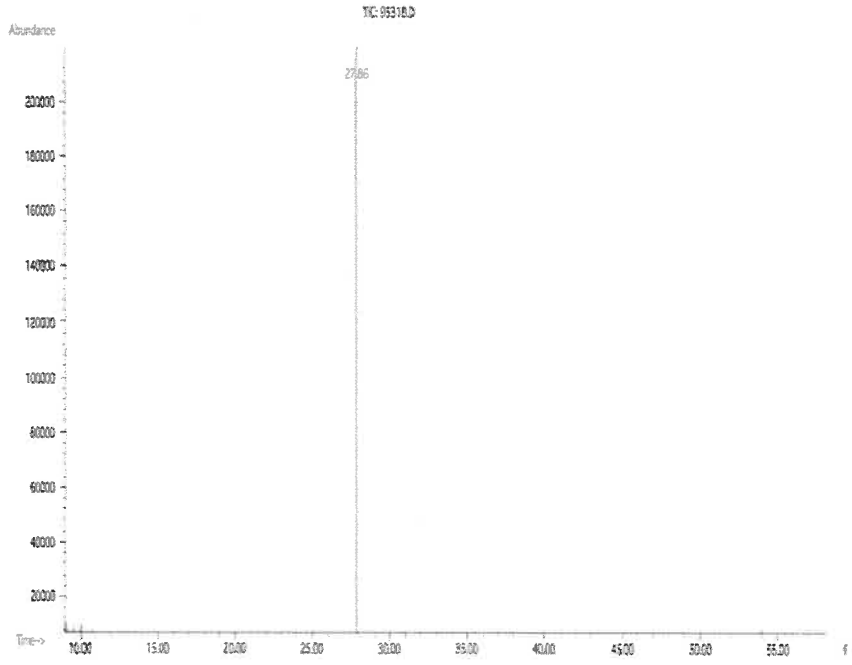
V14630 to V14649

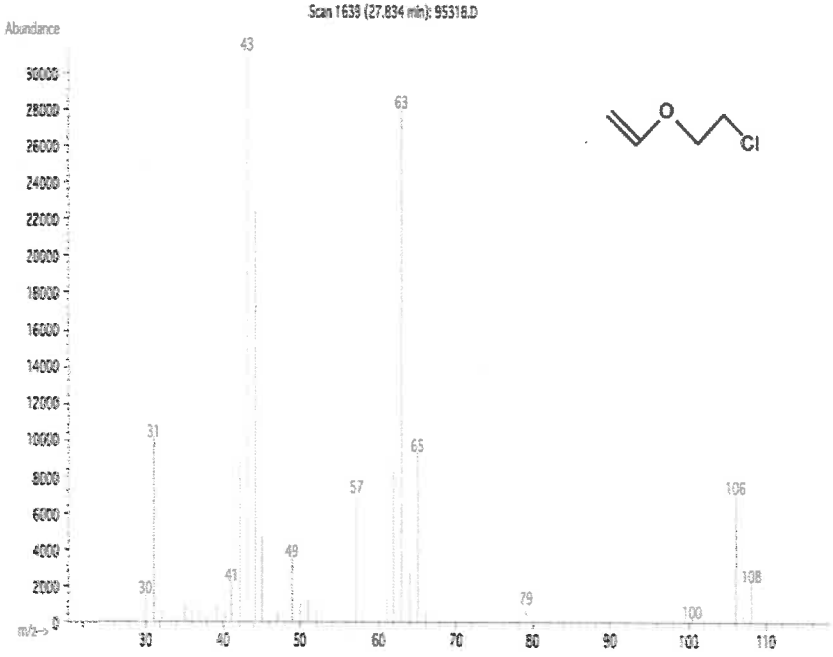
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 50.0 0.001 Flask Uncertainty

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

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

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





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

Safety Data Sheet (SDS) GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

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

Section II - Hazards Identification

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

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

Signal Word: DANGER

Section III - Composition

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

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

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

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

Section V. FIREFIGHTING MEASURES

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

Section VI. ACCIDENTAL RELEASE MEASURES

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

Section VII. HANDLING AND STORAGE

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

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Section IX - Physical/Chemical Characteristics

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

Solubility in Water COMPLETE

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

Section X. STABILITY AND REACTIVITY

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

Section XI. TOXICOLOGICAL INFORMATION

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

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

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

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

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

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

Section XV. REGULATORY INFORMATION

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

Section XVI. Misc. INFORMATION

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

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Certified Reference Material CRM

Rec 12/6/24
20 vial

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

CERTIFIED WEIGHT REPORT

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

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

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

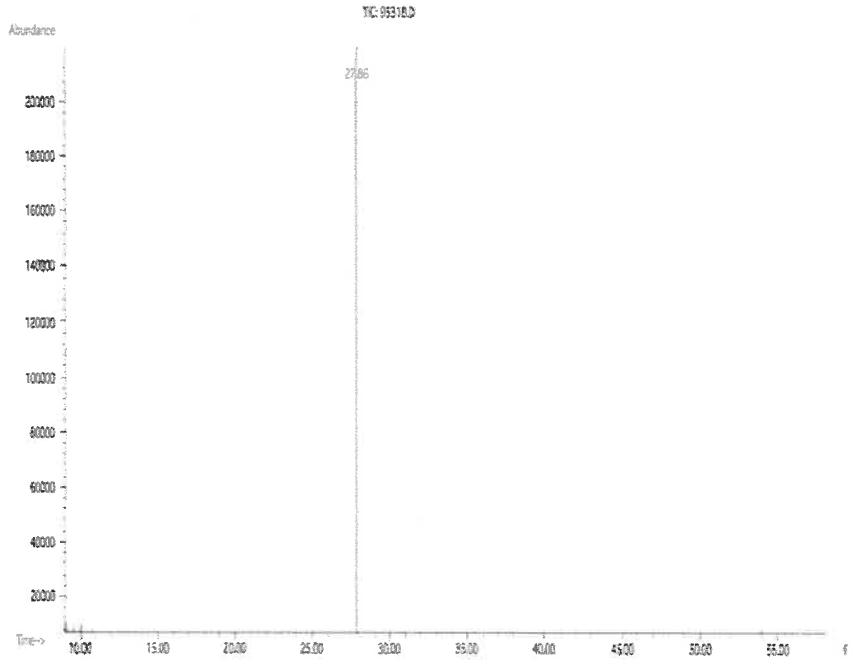
V14630 to V14649

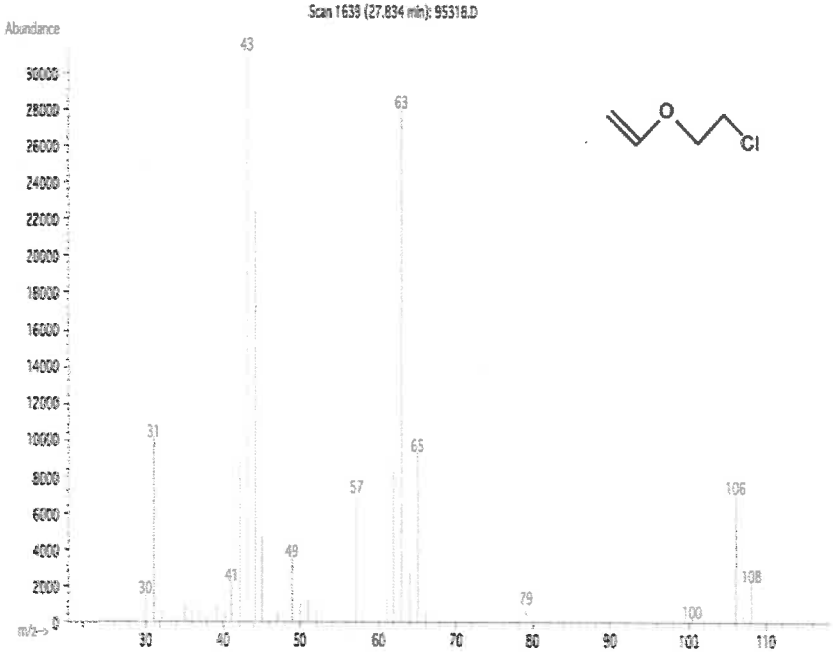
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 50.0 0.001 Flask Uncertainty

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

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

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





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

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

Safety Data Sheet (SDS) GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

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

Section II - Hazards Identification

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

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

Signal Word: DANGER

Section III - Composition

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

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

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

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

Section V. FIREFIGHTING MEASURES

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

Section VI. ACCIDENTAL RELEASE MEASURES

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

Section VII. HANDLING AND STORAGE

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

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Section IX - Physical/Chemical Characteristics

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

Solubility in Water COMPLETE

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

Section X. STABILITY AND REACTIVITY

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

Section XI. TOXICOLOGICAL INFORMATION

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

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

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

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

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

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

Section XV. REGULATORY INFORMATION

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

Section XVI. Misc. INFORMATION

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

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www.absolutestandards.com

Certified Reference Material CRM

Rec 12/6/24
20 vial

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

CERTIFIED WEIGHT REPORT

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

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

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

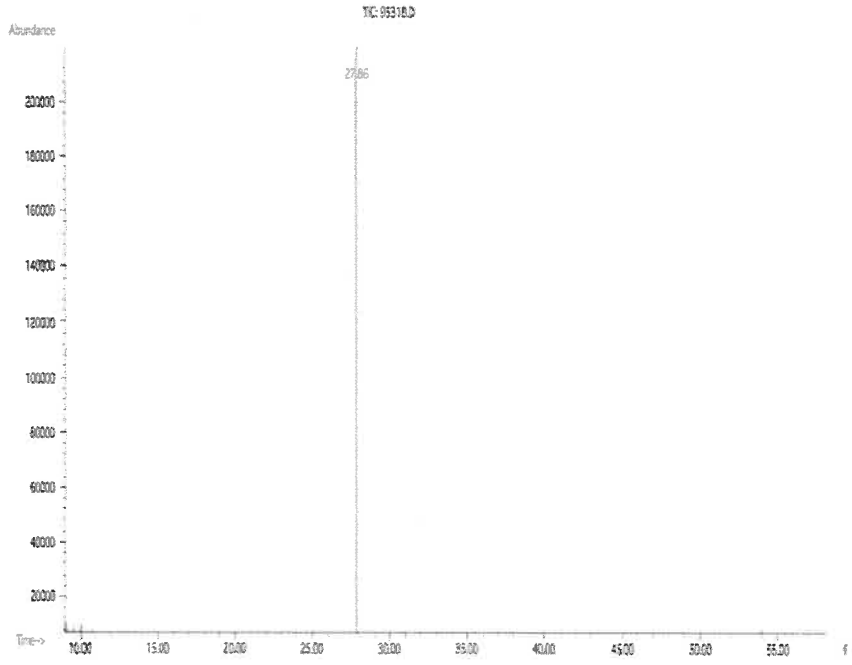
V14630 to V14649

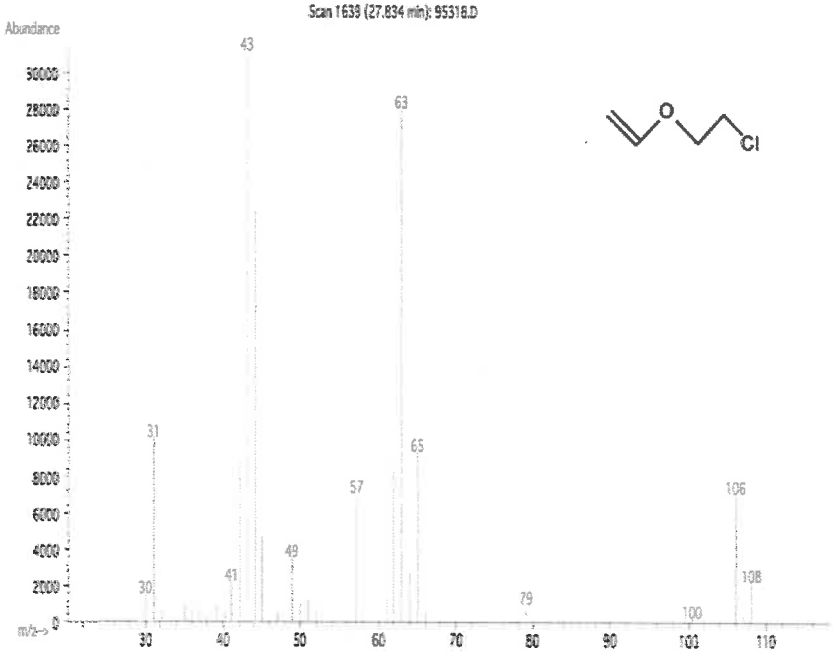
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 50.0 0.001 Flask Uncertainty

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

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

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





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Safety Data Sheet (SDS) GHS/OSHA Compliant

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

Section II - Hazards Identification

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

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

Signal Word: DANGER

Section III - Composition

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

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

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

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

Section V. FIREFIGHTING MEASURES

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

Section VI. ACCIDENTAL RELEASE MEASURES

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

Section VII. HANDLING AND STORAGE

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

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Section IX - Physical/Chemical Characteristics

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

Solubility in Water COMPLETE

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

Section X. STABILITY AND REACTIVITY

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

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
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Toxic if absorbed through skin. Causes skin irritation.
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Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

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

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

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

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

Section XV. REGULATORY INFORMATION

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

Section XVI. Misc. INFORMATION

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

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

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

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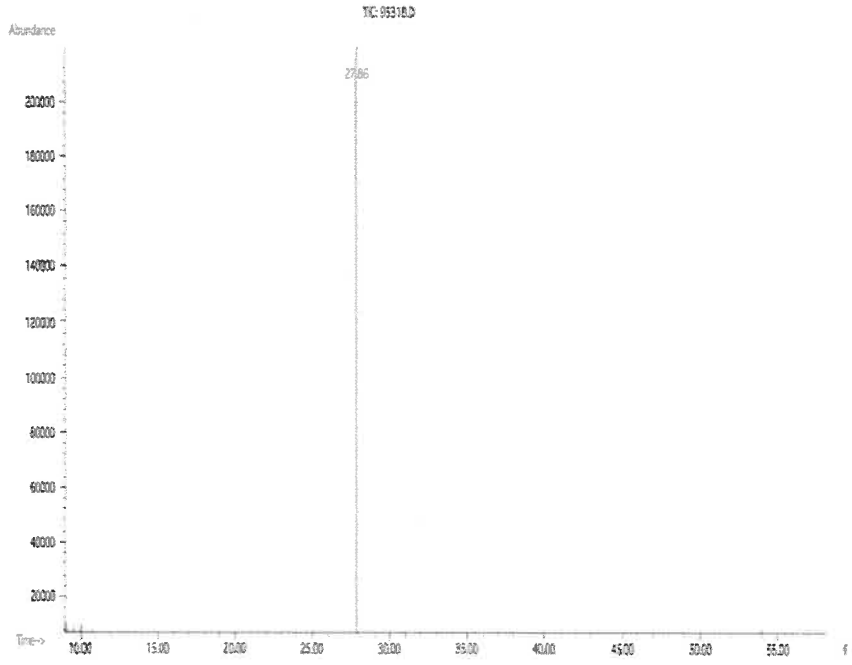

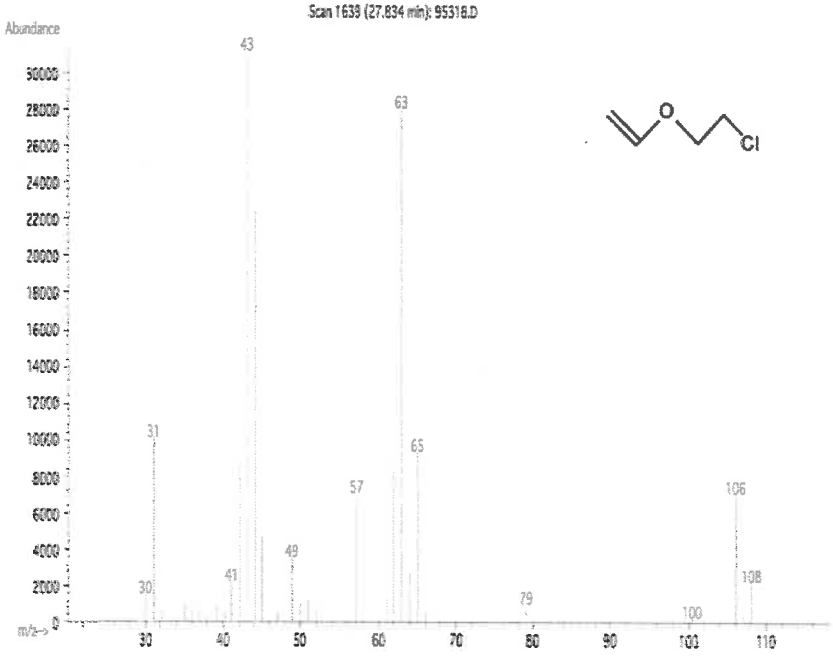

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Signal Word: DANGER

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Section XIV. TRANSPORT INFORMATION

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

IATA
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SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

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

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : 4-Bromofluorobenzene Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

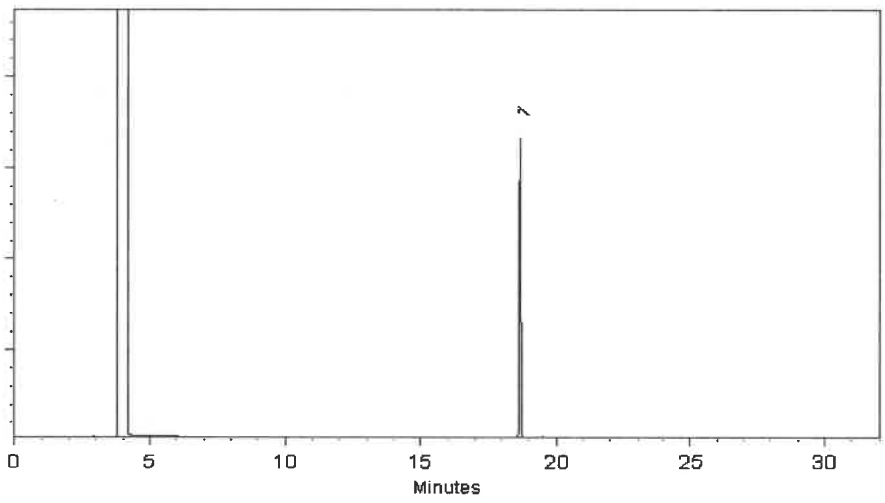
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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

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

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

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

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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. : 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:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

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

Catalog No. : 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.)

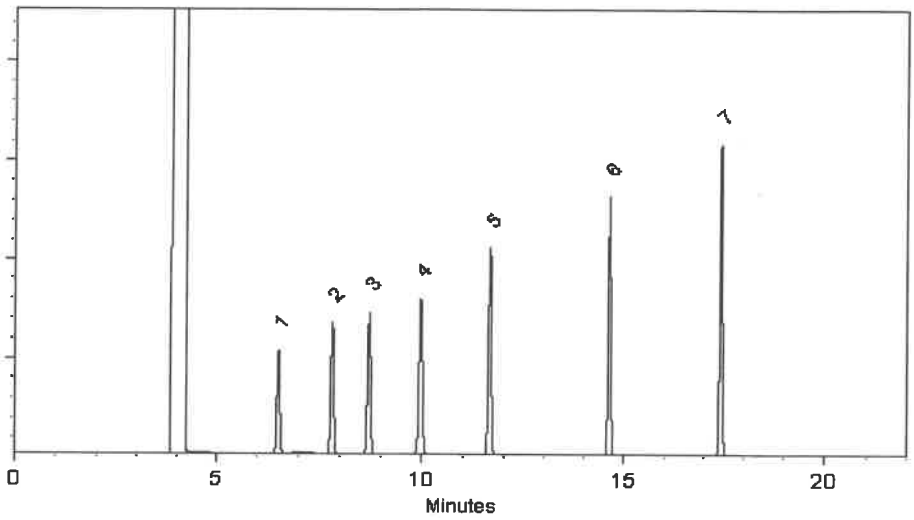
Inj. Temp:
200°C

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 - Operations Tech I

Date Mixed: 28-Mar-2024 **Balance Serial #** B707717271

Dillan 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.
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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:

- 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. : 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.)

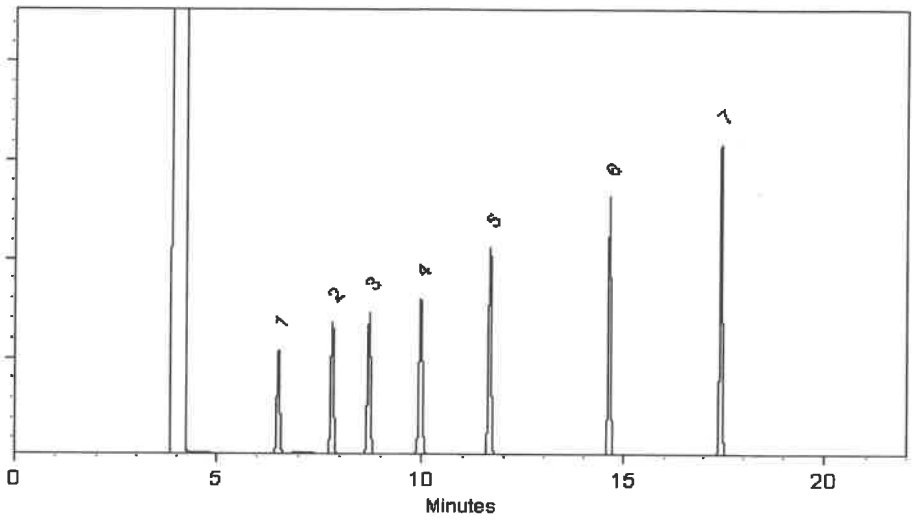
Inj. Temp:
200°C

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 - Operations Tech I

Date Mixed: 28-Mar-2024 **Balance Serial #** B707717271

Dillan 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.
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- 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:

- 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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Certificate #3222.02

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

Description : Custom 8260 Internal Standard Mix

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

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

John Friedline - Operations Technician I

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

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

General Certified Reference Material Notes

Expiration Notes:

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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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.)

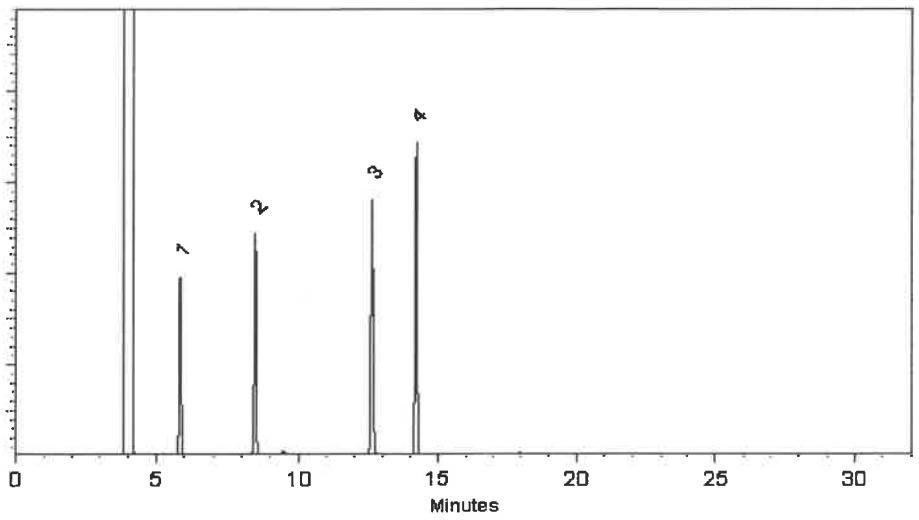
Inj. Temp:
200°C

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:

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

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

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30006 **Lot No.:** 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.)

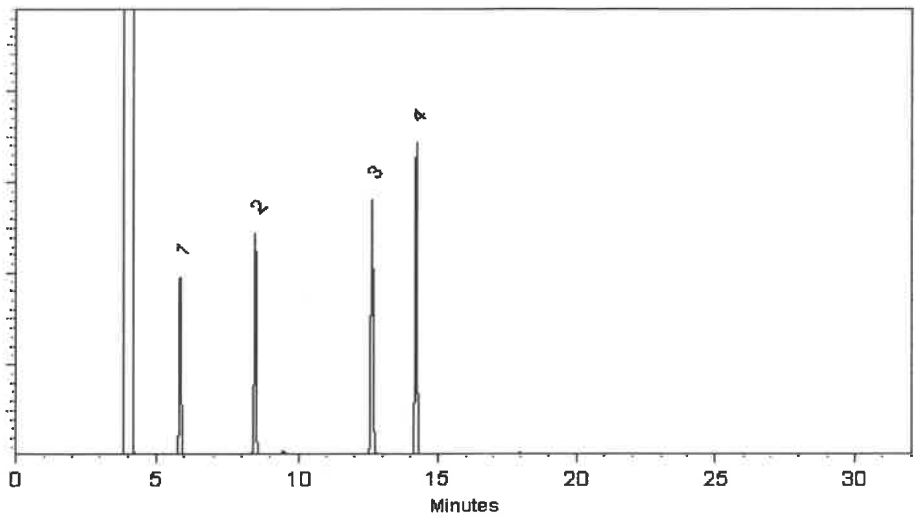
Inj. Temp:
200°C

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:

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

Purity Notes:

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

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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:

- 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.)

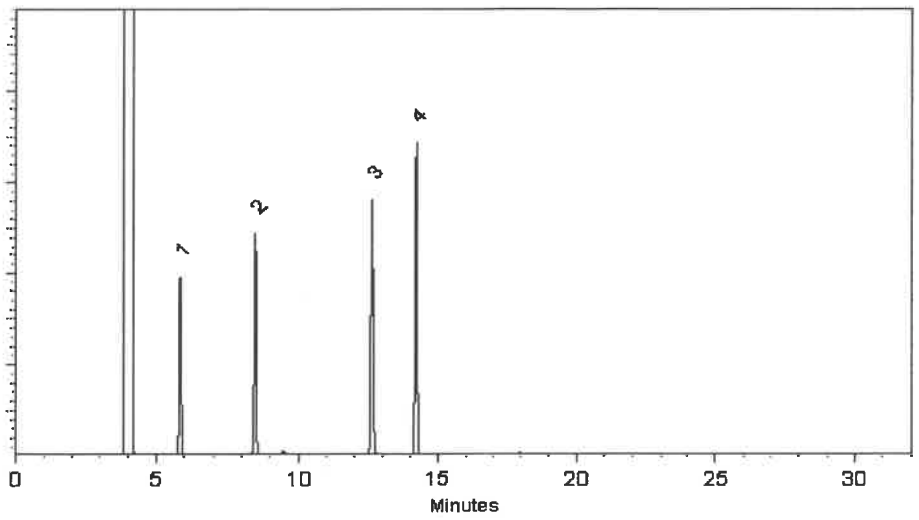
Inj. Temp:
200°C

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.
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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:

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

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

Catalog No. : 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.)

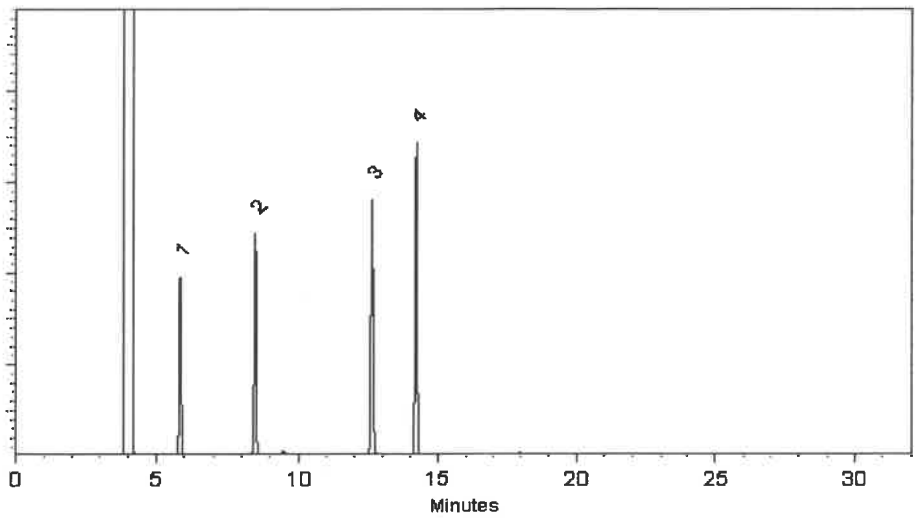
Inj. Temp:
200°C

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:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

CERTIFIED REFERENCE MATERIAL

Dec: 12/09/24

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Reference Material Producer
Certificate #3222.01

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : Bromochloromethane Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

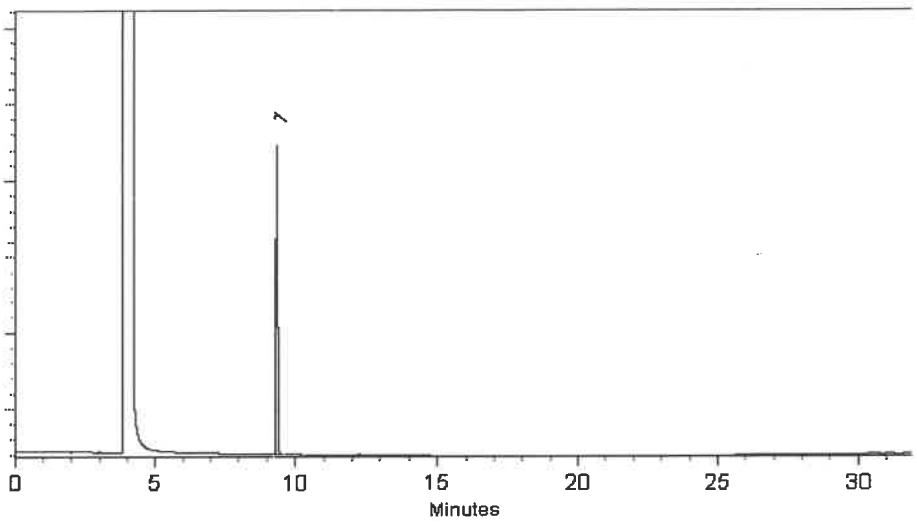
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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

Stacey Wanner - Operations Technician I

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

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Aug-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

  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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10 vial.

CERTIFIED REFERENCE MATERIAL

Dec: 12/09/24

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

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

Description : Bromochloromethane Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

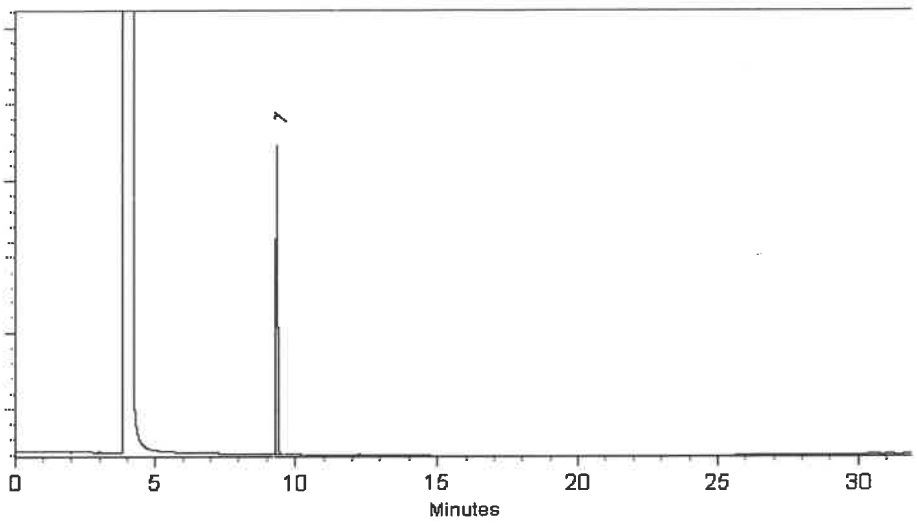
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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Stacey Wanner - Operations Technician I

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

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Aug-2024

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

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
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Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : Bromochloromethane Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

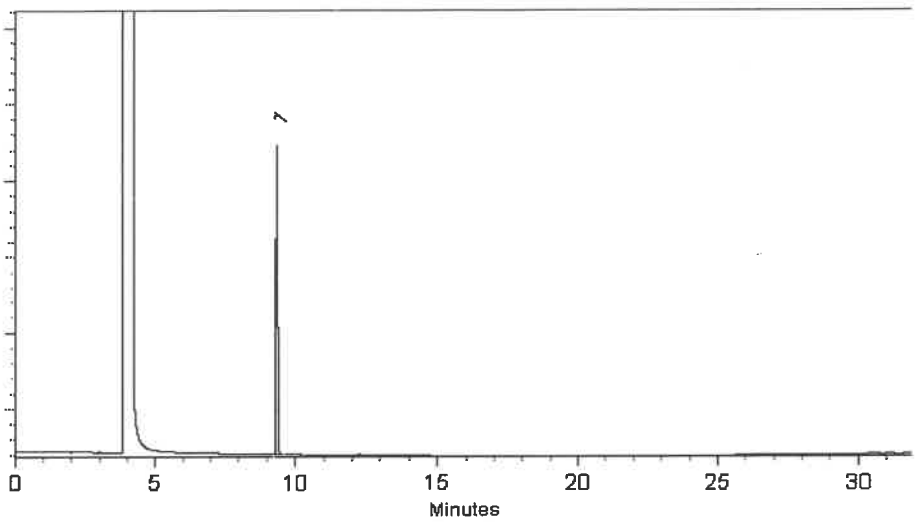
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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

Stacey Wanner - Operations Technician I

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

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Aug-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

  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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Dec: 12/09/24

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : Bromochloromethane Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

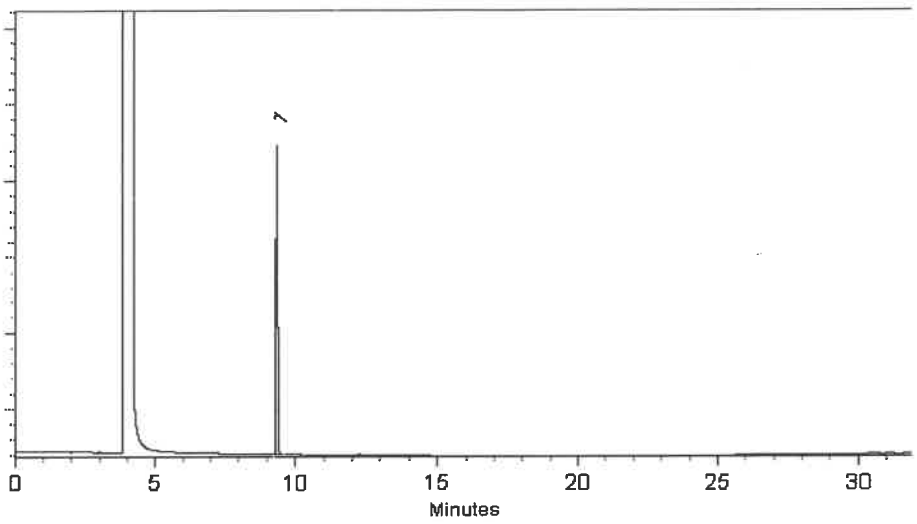
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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

Stacey Wanner - Operations Technician I

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

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Aug-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

Manufacturing Notes:

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

Handling Notes:

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

30 Vial

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

Description : 502.2 Calibration Mix #1

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

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

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

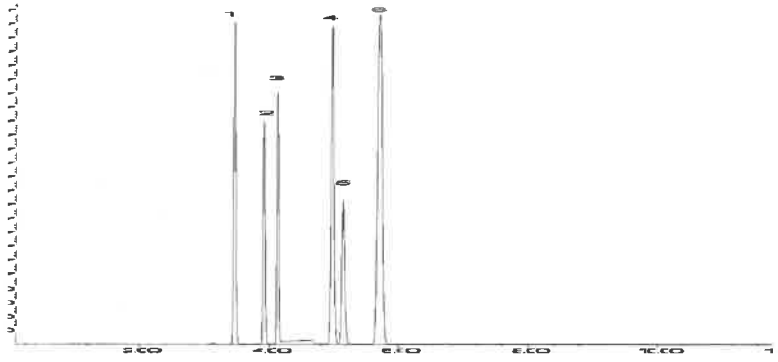
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD

Split Vent:
Split ratio 10:1

Inj. Vol
1µl



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

Tom Suckar - Mix Technician

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

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 04-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

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

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

Description : 502.2 Calibration Mix #1

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

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

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

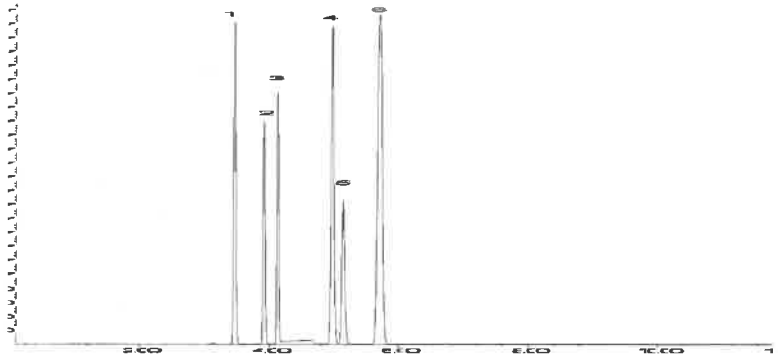
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD

Split Vent:
Split ratio 10:1

Inj. Vol
1µl



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

Tom Suckar - Mix Technician

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

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 04-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30470 **Lot No.:** A0217535

Description : tert-Butanol Standard

tert-Butanol Std 50,000µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : October 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	tert-Butanol (TBA)	75-65-0	SHBQ8002-1	99%	50,007.5 µg/mL	+/- 717.6137

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

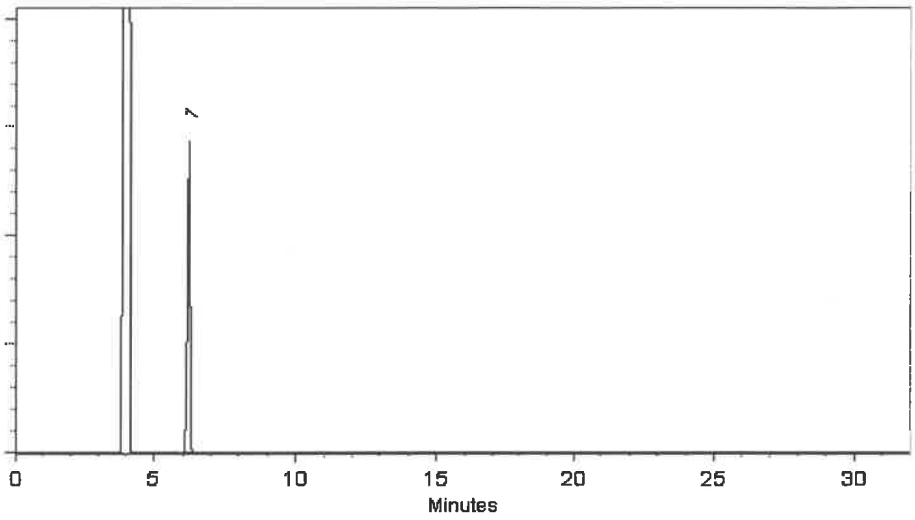
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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.

Aaron Enyart - Operations Tech I

Date Mixed: 07-Oct-2024 **Balance Serial #** B251644995

Brittany Federinko - Operations Tech I

Date Passed: 09-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
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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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- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Zoviny Rec 01/08/21

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Certificate of Analysis

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V14803 - V14822

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 555408-SL **Lot No.:** A0220471

Description : Custom Vinyl Acetate Standard

Custom Vinyl Acetate Standard 8,000µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : June 30, 2026 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Vinyl acetate	108-05-4	RD240423RSR	99%	8,066.0 µg/mL	+/- 278.7979

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

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

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

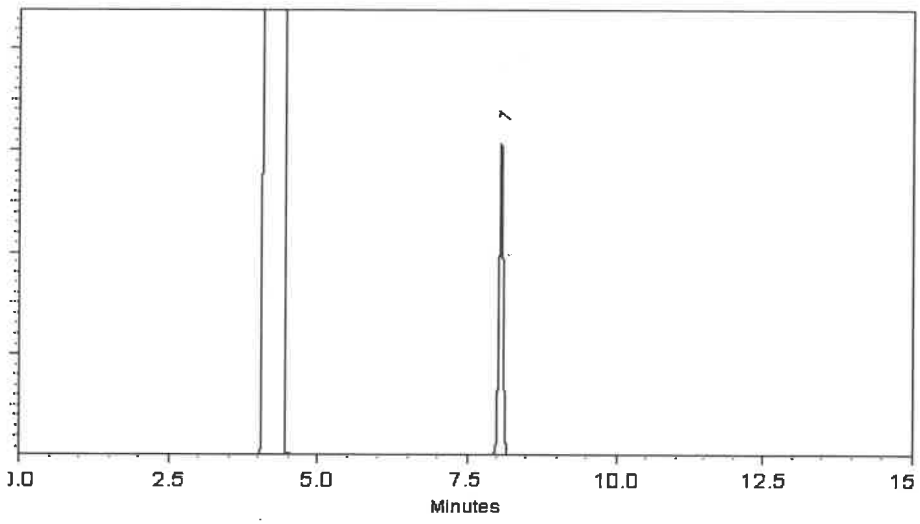
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Zoviny Rec 01/08/21

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

V14803 - V14822

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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Catalog No. : 555408-SL **Lot No.:** A0220471

Description : Custom Vinyl Acetate Standard

Custom Vinyl Acetate Standard 8,000µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : June 30, 2026 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Vinyl acetate	108-05-4	RD240423RSR	99%	8,066.0 µg/mL	+/- 278.7979

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

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

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

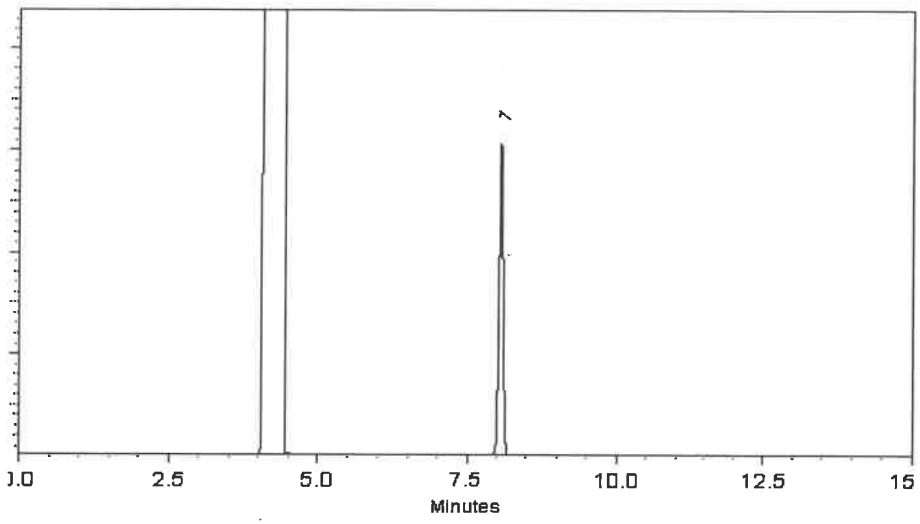
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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

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.
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- 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:

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

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

Rec 05/09/25

avantor™ | J.T.Baker®

V14921 to
V14938

Material No.: 9077-02
Batch No.: 24G0262002
Manufactured Date: 2024-05-14
Expiration Date: 2027-05-14
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (CH_3OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.3 ppm
Titrable Acid (µeq/g)	≤ 0.3	0.3
Titrable Base (µeq/g)	≤ 0.10	0.03
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis - Below EPA 8260B CRQL	Conforms	Conforms

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

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

JCroak

Jamie Croak
Director Quality Operations, Bioscience Production

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

Rec 05/09/25

avantor™ | J.T.Baker®

V14921 to
V14938

Material No.: 9077-02
Batch No.: 24G0262002
Manufactured Date: 2024-05-14
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Test	Specification	Result
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Residue after Evaporation	≤ 1.0 ppm	0.3 ppm
Titrable Acid (µeq/g)	≤ 0.3	0.3
Titrable Base (µeq/g)	≤ 0.10	0.03
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis - Below EPA 8260B CRQL	Conforms	Conforms

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

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

JCroak

Jamie Croak
Director Quality Operations, Bioscience Production

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

Certified Reference Material CRM

Rec 05/21/25

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

CERTIFIED WEIGHT REPORT

5.014

Part Number:	91980
Lot Number:	051925
Description:	Acrolein
Expiration Date:	061925
Recommended Storage:	Refrigerate (4 °C)
Nominal Concentration (µg/mL):	5000
NIST Test ID#:	6UTB

Solvent(s): Water **Lot#** 041725Q

J14944-V14948

5E-05 Balance Uncertainty

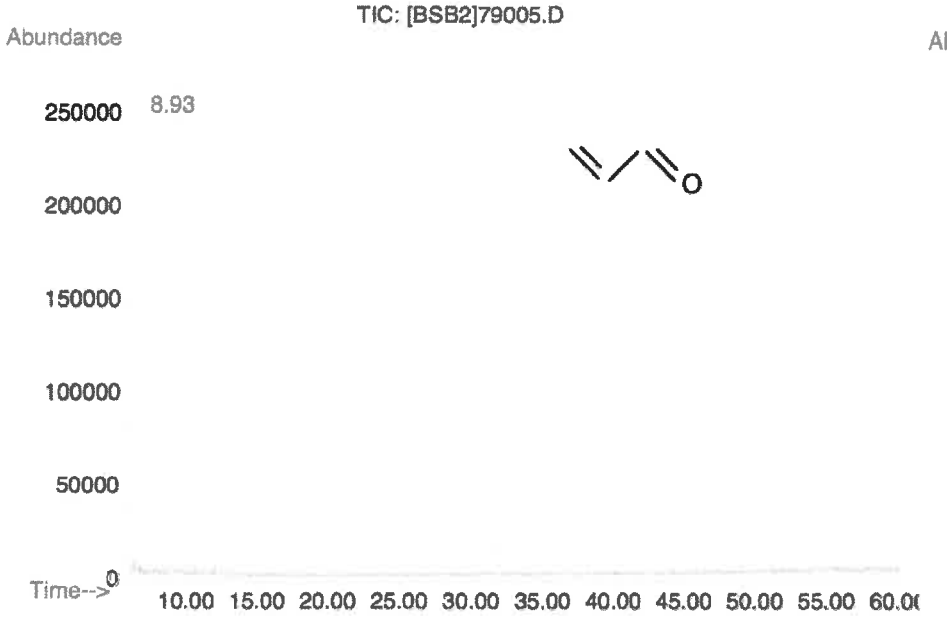
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

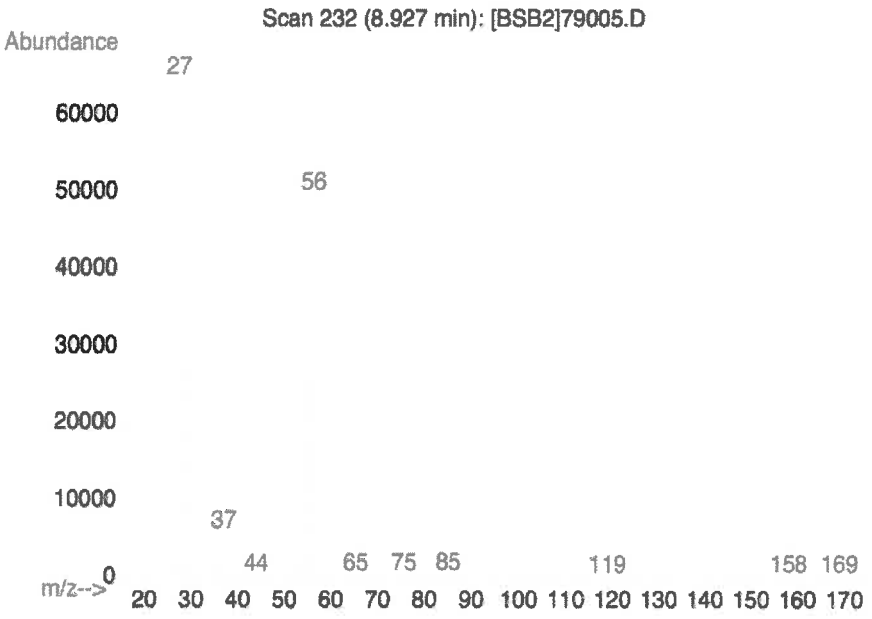
Lawrence Barry 051925
Formulated By: Lawrence Barry DATE

Pedro Rentas 051925
Reviewed By: Pedro L. Rentas DATE

	Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1.	Acrolein	5	103755V10F	5000	97	0.5	0.05166	0.05170	5004.1	52.5	107-02-8	0.1 ppm	orl-rat 46mg/kg

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





- **The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.**
- **Standards are prepared gravimetrically using balances that are calibrated by an ISO 17025 certified organization with weights traceable through NIST to the SI kilogram (see above).**
- **Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.**
- **All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.**
- **Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).**
  Rev 1.0, 2/25/2025

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Certified Reference Material CRM

Rec 05/21/25

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

CERTIFIED WEIGHT REPORT

5.014

Part Number:	91980
Lot Number:	051925
Description:	Acrolein
Expiration Date:	061925
Recommended Storage:	Refrigerate (4 °C)
Nominal Concentration (µg/mL):	5000
NIST Test ID#:	6UTB

Solvent(s): Water **Lot#** 041725Q

J14944-V14948

5E-05 Balance Uncertainty

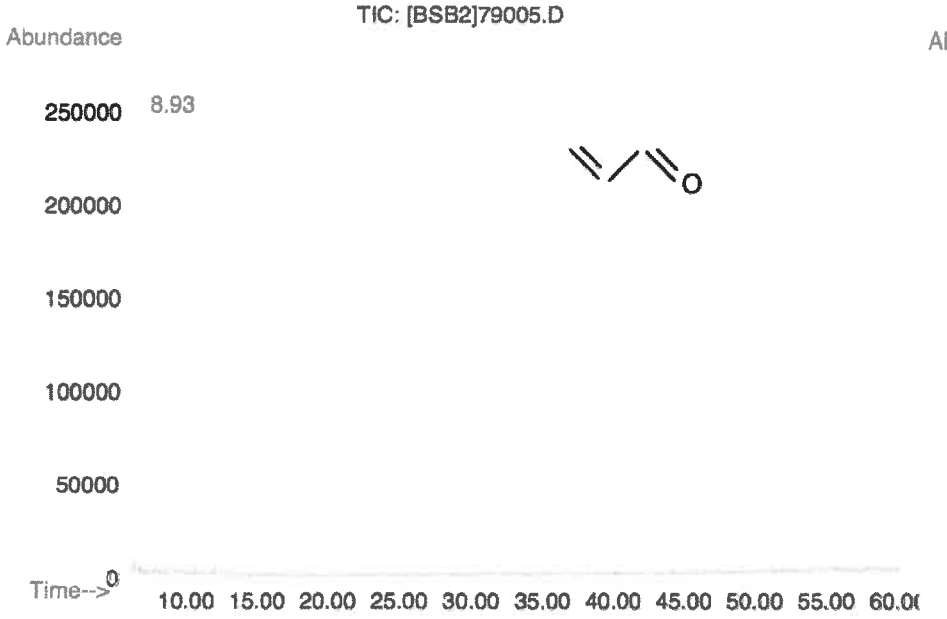
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

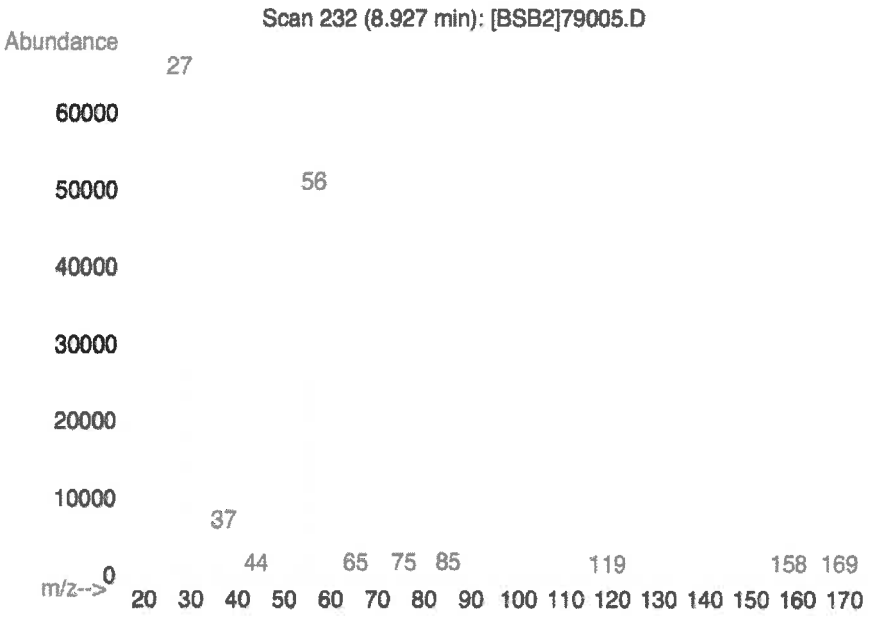
Lawrence Barry 051925
Formulated By: Lawrence Barry DATE

Pedro Rentas 051925
Reviewed By: Pedro L. Rentas DATE

	Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1.	Acrolein	5	103755V10F	5000	97	0.5	0.05166	0.05170	5004.1	52.5	107-02-8	0.1 ppm	orl-rat 46mg/kg

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





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Certified Reference Material CRM

Rec 05/21/25

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

CERTIFIED WEIGHT REPORT

5.014

Part Number:	91980
Lot Number:	051925
Description:	Acrolein
Expiration Date:	061925
Recommended Storage:	Refrigerate (4 °C)
Nominal Concentration (µg/mL):	5000
NIST Test ID#:	6UTB

Solvent(s): Water **Lot#** 041725Q

J14944-V14948

5E-05 Balance Uncertainty

Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

Lawrence Barry 051925
Formulated By: Lawrence Barry DATE

Pedro Rentas 051925
Reviewed By: Pedro L. Rentas DATE

	Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
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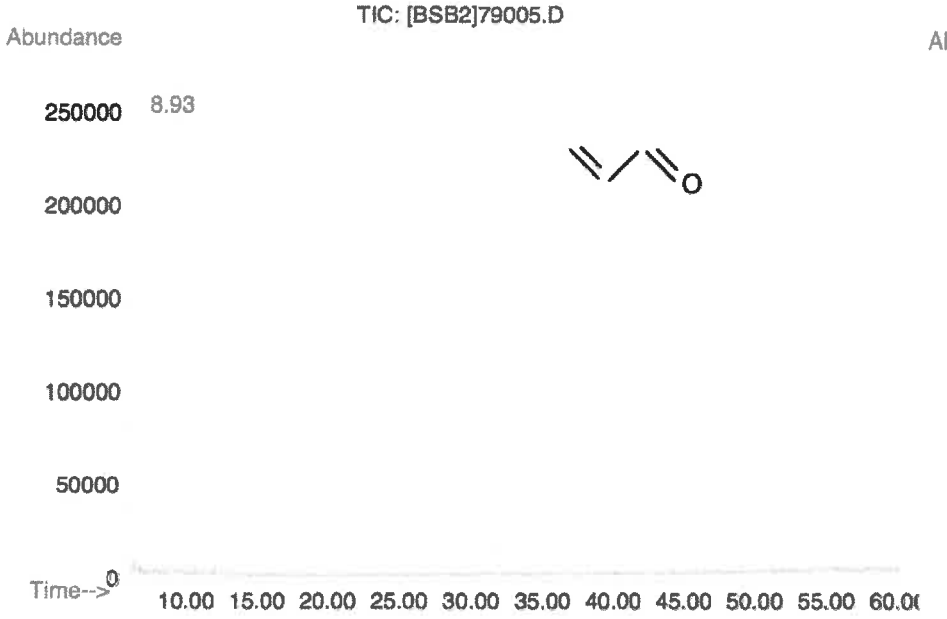

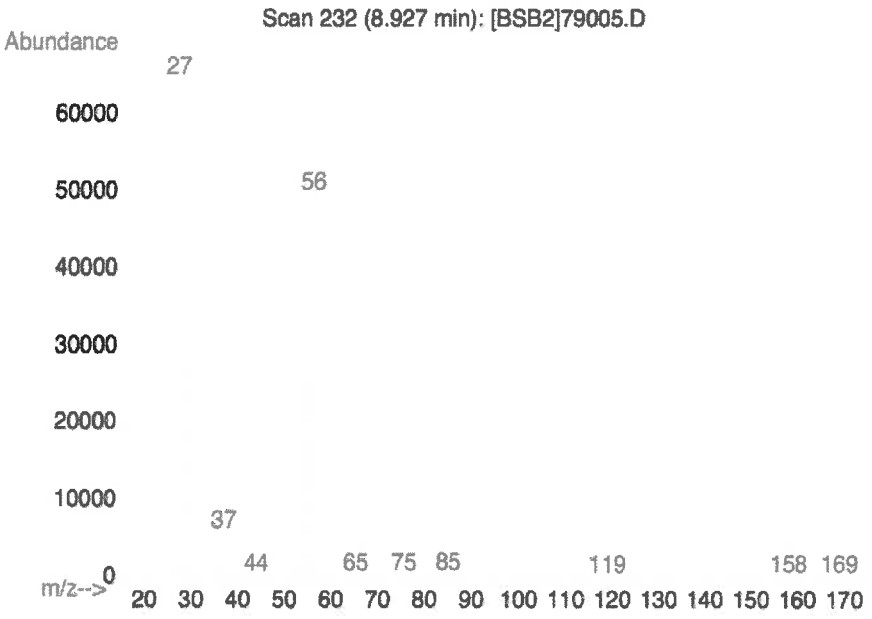

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CERTIFIED WEIGHT REPORT

5.014

Part Number:	91980
Lot Number:	051925
Description:	Acrolein
Expiration Date:	061925
Recommended Storage:	Refrigerate (4 °C)
Nominal Concentration (µg/mL):	5000
NIST Test ID#:	6UTB

Solvent(s): Water **Lot#** 041725Q

J14944-V14948

5E-05 Balance Uncertainty

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Formulated By: Lawrence Barry DATE

Pedro Rentas 051925
Reviewed By: Pedro L. Rentas DATE

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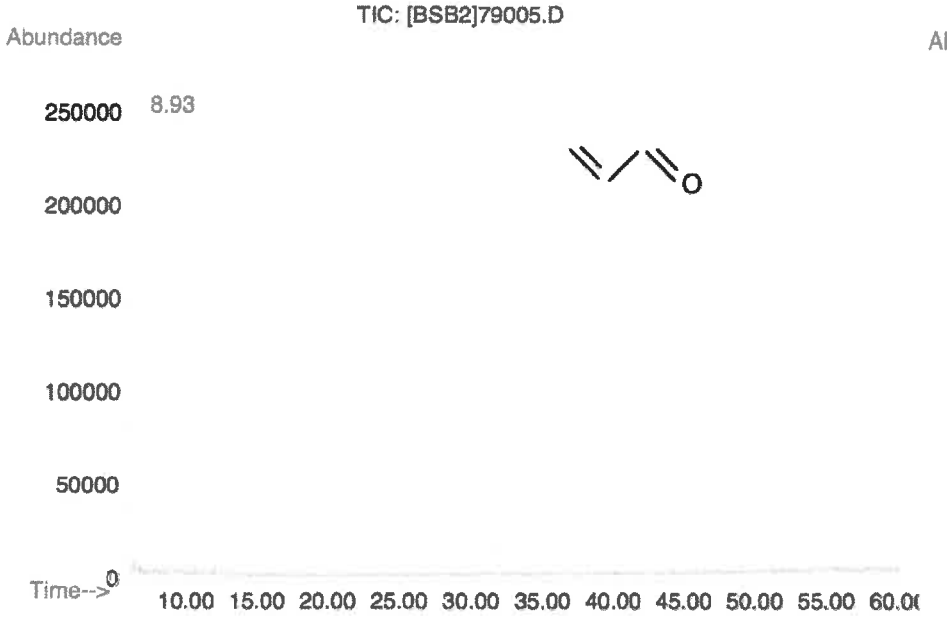

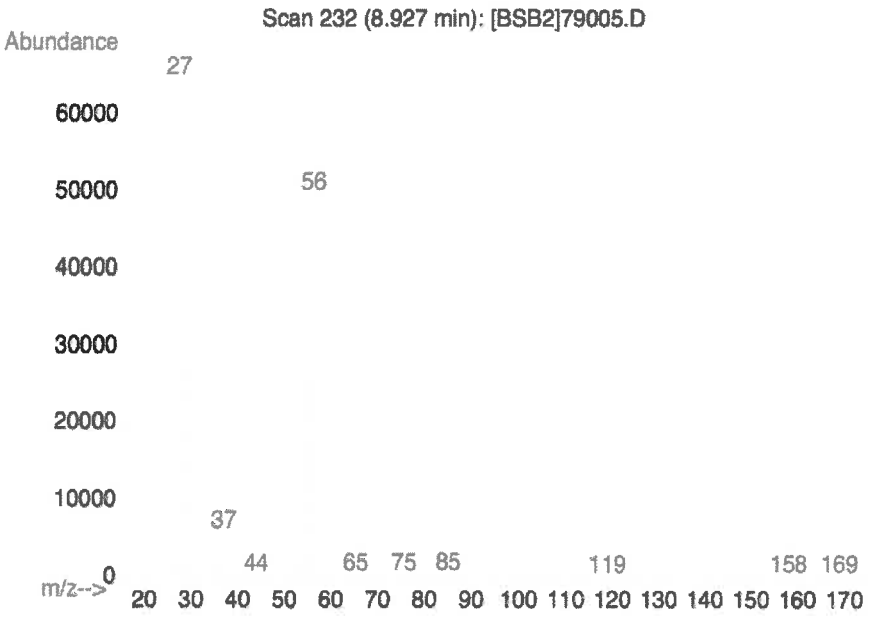

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  Rev 1.0, 2/25/2025

SHIPPING DOCUMENTS

Alliance TECHNICAL GROUP

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 • Fax (908) 789-8922
www.chemtech.net

ALLIANCE PROJECT NO.
QUOTE NO. Q2372
COC Number 2046408

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: G ENVIRONMENTAL
ADDRESS: 8 CARRIAGE NJ
CITY: SUCCASUNNA STATE: NJ ZIP: 07876
ATTENTION:
PHONE: FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: AVE B
PROJECT NO.: LOCATION:
PROJECT MANAGER: GV
e-mail:
PHONE: FAX:

CLIENT BILLING INFORMATION

BILL TO: G ENVIRONMENTAL PO#:
ADDRESS: 8 CARRIAGE
CITY: SUCCASUNNA STATE: NJ ZIP:
ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

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

DATA DELIVERABLE INFORMATION

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

ANALYSIS

1: TCL VOA's
2: TAL Metals
3: BNA's (NJ Reduced)
4: Low Level B
5:
6:
7:
8:
9:

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	PRESERVATIVES 1 (HCl)	2 (HNO3 1:1)	3	4	5	6	7	8	9	COMMENTS
1.	~~BCA~~ GAV1W	GW		X	6/19/25	1310	5	X	X	X	X						
2.	GAV2W	GW		X	6/19/25	1345	3	X	X								
3.																	
4.																	
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

← Specify Preservatives
A-HCl D-NaOH
B-HN03 E-ICE
C-H2SO4 F-OTHER

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

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1. MM	6/19/25 M45	1. CR
2.		2.
3.		3.

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 2.1-C °C
Comments: FR-Gun #1

Page _____ of

CLIENT: ☐ Hand Delivered ☐ Other

Shipment Complete ☐ YES ☐ NO

WHITE - ALLIANCE COPY FOR RETURN TO CLIENT YELLOW - ALLIANCE COPY PINK - SAMPLER COPY

284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (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

QA Control Code: A2070148

Alliance TECHNICAL GROUP

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q2372 GENV01
Client Name : G Environmental
Client Contact : Gary Landis
Invoice Name : G Environmental
Invoice Contact : Gary Landis

Order Date : 6/19/2025 2:53:00 PM
Project Name : Ave B
Receive DateTime : 6/19/2025 2:45:00 PM
Purchase Order :

Project Mgr :
Report Type : NJ Reduced
EDD Type : NJ HAZSITE
Hard Copy Date :
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q2372-01	GAV1W	Water	06/19/2025	13:10					
					VOCMS Group1		8260-Low		10 Bus. Days
Q2372-02	GAV2W	Water	06/19/2025	13:45					
					VOCMS Group1		8260-Low		10 Bus. Days

Relinguished By : [signature]
Date / Time : 6/19/25 15:28

Received By : [signature]
Date / Time 06/19/25 15:28 RJH 4

Storage Area : VOA Refridgerator Room