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:	Q1584	**OrderDate:**	3/14/2025 2:20:00 PM
Client:	Chemtech Consulting Group	**Project:**	Weekly Storage Blanks
Contact:	QA Officer	**Location:**	F11,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1584-01	**Storage-Blank-SOIL-REF-6**	**Water**			**03/14/25**			**03/14/25**
			VOC- Chemtech Full	8260-Low			03/20/25	
Q1584-02	**Storage-Blank-WATER-REF-5**	**Water**			**03/14/25**			**03/14/25**
			VOC- Chemtech Full	8260-Low			03/20/25	
Q1584-03	**Storage-Blank-WATER-REF-4**	**Water**			**03/14/25**			**03/14/25**
			VOC- Chemtech Full	8260-Low			03/20/25	
Q1584-04	**Storage-Blank-SAMPLE-MANAGEMENT**	**Water**			**03/14/25**			**03/14/25**
			VOC- Chemtech Full	8260-Low			03/20/25	

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Hit Summary Sheet
SW-846

SDG No.: Q1584

Client: Chemtech Consulting Group

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID:								
				0				

Total Voc :

Total Concentration:

QC SUMMARY

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Surrogate Summary

SDG No.: Q1584

Client: Chemtech Consulting Group

Analytical Method: SW8260-Low

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits Low	Limits High
Q1584-01	Storage-Blank-SOIL-REF-6	1,2-Dichloroethane-d4	50	55.6	111	74	125
		Dibromofluoromethane	50	52.5	105	75	124
		Toluene-d8	50	51.7	103	86	113
		4-Bromofluorobenzene	50	55.0	110	77	121
Q1584-02	Storage-Blank-WATER-REF-5	1,2-Dichloroethane-d4	50	56.4	113	74	125
		Dibromofluoromethane	50	52.5	105	75	124
		Toluene-d8	50	51.7	103	86	113
		4-Bromofluorobenzene	50	55.6	111	77	121
Q1584-03	Storage-Blank-WATER-REF-4	1,2-Dichloroethane-d4	50	57.3	115	74	125
		Dibromofluoromethane	50	53.0	106	75	124
		Toluene-d8	50	52.2	104	86	113
		4-Bromofluorobenzene	50	53.4	107	77	121
Q1584-04	Storage-Blank-SAMPLE-MANAGEME	1,2-Dichloroethane-d4	50	56.0	112	74	125
		Dibromofluoromethane	50	52.2	104	75	124
		Toluene-d8	50	51.4	103	86	113
		4-Bromofluorobenzene	50	53.0	106	77	121
VX0320WBL01	VX0320WBL01	1,2-Dichloroethane-d4	50	57.3	115	74	125
		Dibromofluoromethane	50	53.1	106	75	124
		Toluene-d8	50	51.2	102	86	113
		4-Bromofluorobenzene	50	52.0	104	77	121
VX0320WBS01	VX0320WBS01	1,2-Dichloroethane-d4	50	56.5	113	74	125
		Dibromofluoromethane	50	54.8	110	75	124
		Toluene-d8	50	53.3	107	86	113
		4-Bromofluorobenzene	50	55.7	111	77	121
VX0320WBSD0	VX0320WBSD01	1,2-Dichloroethane-d4	50	55.1	110	74	125
		Dibromofluoromethane	50	54.8	110	75	124
		Toluene-d8	50	51.7	103	86	113
		4-Bromofluorobenzene	50	52.5	105	77	121

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1584

Client: Chemtech Consulting Group

Analytical Method: SW8260-Low **Datafile :** VX045350.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VX0320WBS01	Dichlorodifluoromethane	20	18.3	ug/L	92			69	116	
	Chloromethane	20	17.0	ug/L	85			65	116	
	Vinyl chloride	20	16.5	ug/L	83			65	117	
	Ethyl Acetate	20	20.8	ug/L	104			75	115	
	Bromomethane	20	19.1	ug/L	96			58	125	
	Chloroethane	20	20.4	ug/L	102			56	128	
	Trichlorofluoromethane	20	19.1	ug/L	96			73	115	
	1,1,2-Trichlorotrifluoroethane	20	21.6	ug/L	108			80	112	
	Tert butyl alcohol	100	82.4	ug/L	82			73	124	
	1,1-Dichloroethene	20	18.8	ug/L	94			74	110	
	Acrolein	100	52.6	ug/L	53			51	143	
	Acrylonitrile	100	110	ug/L	110			73	113	
	Acetone	100	100	ug/L	100			60	125	
	Carbon disulfide	20	15.2	ug/L	76			64	112	
	Methyl tert-butyl Ether	20	20.4	ug/L	102			78	114	
	Methyl Acetate	20	26.3	ug/L	132		*	67	125	
	Methylene Chloride	20	19.6	ug/L	98			72	114	
	trans-1,2-Dichloroethene	20	19.0	ug/L	95			75	108	
	Vinyl Acetate	100	99.8	ug/L	100			76	115	
	1,1-Dichloroethane	20	20.0	ug/L	100			78	112	
	Cyclohexane	20	18.7	ug/L	94			75	110	
	2-Butanone	100	110	ug/L	110			65	122	
	Carbon Tetrachloride	20	21.1	ug/L	106			77	113	
	2,2-Dichloropropane	20	28.8	ug/L	144		*	75	116	
	cis-1,2-Dichloroethene	20	19.8	ug/L	99			77	110	
	Bromochloromethane	20	18.6	ug/L	93			70	124	
	Chloroform	20	21.2	ug/L	106			79	113	
	1,1,1-Trichloroethane	20	21.1	ug/L	106			80	108	
	Methylcyclohexane	20	19.7	ug/L	99			72	115	
	1,1-Dichloropropene	20	19.4	ug/L	97			79	110	
	Benzene	20	20.2	ug/L	101			82	109	
	1,2-Dichloroethane	20	22.2	ug/L	111			80	115	
	Trichloroethene	20	19.5	ug/L	98			77	113	
	1,2-Dichloropropane	20	20.6	ug/L	103			83	111	
	Dibromomethane	20	21.4	ug/L	107			82	110	
	Bromodichloromethane	20	21.2	ug/L	106			83	110	
	4-Methyl-2-Pentanone	100	110	ug/L	110			74	118	
	Toluene	20	20.9	ug/L	104			82	110	
	t-1,3-Dichloropropene	20	20.9	ug/L	104			79	110	
	cis-1,3-Dichloropropene	20	21.2	ug/L	106			82	110	
	1,1,2-Trichloroethane	20	21.6	ug/L	108			83	112	
	1,3-Dichloropropane	20	21.1	ug/L	106			83	111	
	2-Chloroethyl vinyl ether	100	97.1	ug/L	97			75	124	
	2-Hexanone	100	110	ug/L	110			73	117	
	Dibromochloromethane	20	21.4	ug/L	107			82	110	
	1,2-Dibromoethane	20	21.4	ug/L	107			81	110	
	Tetrachloroethene	20	20.4	ug/L	102			67	123	
	Chlorobenzene	20	20.4	ug/L	102			82	109	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1584

Client: Chemtech Consulting Group

Analytical Method: SW8260-Low **Datafile :** VX045350.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VX0320WBS01	1,1,1,2-Tetrachloroethane	20	20.7	ug/L	104			84	111	
	Hexachloroethane	20	21.4	ug/L	107			80	113	
	Ethyl Benzene	20	20.4	ug/L	102			83	109	
	m/p-Xylenes	40	42.2	ug/L	106			82	110	
	o-Xylene	20	20.7	ug/L	104			83	109	
	Styrene	20	20.9	ug/L	104			80	111	
	Bromoform	20	20.6	ug/L	103			79	109	
	Isopropylbenzene	20	21.7	ug/L	109			83	112	
	1,1,2,2-Tetrachloroethane	20	21.4	ug/L	107			76	118	
	1,2,3-Trichloropropane	20	21.2	ug/L	106			75	112	
	Bromobenzene	20	20.8	ug/L	104			77	116	
	N-propylbenzene	20	22.0	ug/L	110			83	112	
	2-Chlorotoluene	20	21.4	ug/L	107			83	110	
	1,3,5-Trimethylbenzene	20	22.2	ug/L	111			85	112	
	4-Chlorotoluene	20	21.7	ug/L	109			82	110	
	tert-Butylbenzene	20	21.5	ug/L	108			83	112	
	1,2,4-Trimethylbenzene	20	21.6	ug/L	108			85	111	
	Sec-butylbenzene	20	22.5	ug/L	113			81	114	
	p-Isopropyltoluene	20	22.1	ug/L	111			78	116	
	1,3-Dichlorobenzene	20	20.9	ug/L	104			82	108	
	1,4-Dichlorobenzene	20	20.4	ug/L	102			82	107	
	n-Butylbenzene	20	21.8	ug/L	109			75	115	
	1,2-Dichlorobenzene	20	21.1	ug/L	106			82	109	
	1,2-Dibromo-3-Chloropropane	20	21.8	ug/L	109			68	112	
	1,2,4-Trichlorobenzene	20	20.0	ug/L	100			75	113	
	Hexachlorobutadiene	20	21.7	ug/L	109			81	121	
	Naphthalene	20	20.0	ug/L	100			78	119	
	1,2,3-Trichlorobenzene	20	19.8	ug/L	99			76	114	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1584

Client: Chemtech Consulting Group

Analytical Method: SW8260-Low **Datafile :** VX045355.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Qual	Limits Low	Limits High	RPD
VX0320WBSD01	Dichlorodifluoromethane	20	16.0	ug/L	80	14			69	116	20
	Chloromethane	20	14.3	ug/L	72	17			65	116	20
	Vinyl chloride	20	14.2	ug/L	71	16			65	117	20
	Ethyl Acetate	20	17.8	ug/L	89	16			75	115	20
	Bromomethane	20	17.0	ug/L	85	12			58	125	20
	Chloroethane	20	17.5	ug/L	88	15			56	128	20
	Trichlorofluoromethane	20	16.8	ug/L	84	13			73	115	20
	1,1,2-Trichlorotrifluoroethane	20	19.1	ug/L	96	12			80	112	20
	Tert butyl alcohol	100	67.6	ug/L	68	19	*		73	124	20
	1,1-Dichloroethene	20	16.6	ug/L	83	12			74	110	20
	Acrolein	100	45.0	ug/L	45	16	*		51	143	20
	Acrylonitrile	100	88.7	ug/L	89	21		*	73	113	20
	Acetone	100	86.4	ug/L	86	15			60	125	20
	Carbon disulfide	20	13.0	ug/L	65	16			64	112	20
	Methyl tert-butyl Ether	20	17.8	ug/L	89	14			78	114	20
	Methyl Acetate	20	22.5	ug/L	113	16			67	125	20
	Methylene Chloride	20	16.8	ug/L	84	15			72	114	20
	trans-1,2-Dichloroethene	20	17.0	ug/L	85	11			75	108	20
	Vinyl Acetate	100	87.1	ug/L	87	14			76	115	20
	1,1-Dichloroethane	20	17.9	ug/L	90	11			78	112	20
	Cyclohexane	20	16.7	ug/L	84	11			75	110	20
	2-Butanone	100	90.7	ug/L	91	19			65	122	20
	Carbon Tetrachloride	20	18.9	ug/L	95	11			77	113	20
	2,2-Dichloropropane	20	25.5	ug/L	128	12	*		75	116	20
	cis-1,2-Dichloroethene	20	17.7	ug/L	89	11			77	110	20
	Bromochloromethane	20	18.3	ug/L	92	1			70	124	20
	Chloroform	20	18.8	ug/L	94	12			79	113	20
	1,1,1-Trichloroethane	20	18.4	ug/L	92	14			80	108	20
	Methylcyclohexane	20	17.9	ug/L	90	10			72	115	20
	1,1-Dichloropropene	20	17.3	ug/L	86	12			79	110	20
	Benzene	20	18.1	ug/L	91	10			82	109	20
	1,2-Dichloroethane	20	19.8	ug/L	99	11			80	115	20
	Trichloroethene	20	17.9	ug/L	90	9			77	113	20
	1,2-Dichloropropane	20	18.3	ug/L	92	11			83	111	20
	Dibromomethane	20	19.0	ug/L	95	12			82	110	20
	Bromodichloromethane	20	19.2	ug/L	96	10			83	110	20
	4-Methyl-2-Pentanone	100	93.8	ug/L	94	16			74	118	20
	Toluene	20	18.8	ug/L	94	10			82	110	20
	t-1,3-Dichloropropene	20	17.9	ug/L	90	14			79	110	20
	cis-1,3-Dichloropropene	20	18.8	ug/L	94	12			82	110	20
	1,1,2-Trichloroethane	20	18.4	ug/L	92	16			83	112	20
	1,3-Dichloropropane	20	18.9	ug/L	95	11			83	111	20
	2-Chloroethyl vinyl ether	100	110	ug/L	110	13			75	124	20
	2-Hexanone	100	94.7	ug/L	95	15			73	117	20
	Dibromochloromethane	20	18.6	ug/L	93	14			82	110	20
	1,2-Dibromoethane	20	18.5	ug/L	93	14			81	110	20
	Tetrachloroethene	20	18.7	ug/L	94	8			67	123	20
	Chlorobenzene	20	18.8	ug/L	94	8			82	109	20

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1584

Client: Chemtech Consulting Group

Analytical Method: SW8260-Low **Datafile :** VX045355.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VX0320WBSD01	1,1,1,2-Tetrachloroethane	20	18.9	ug/L	95	9		84	111	20
	Hexachloroethane	20	18.4	ug/L	92	15		80	113	20
	Ethyl Benzene	20	19.1	ug/L	96	6		83	109	20
	m/p-Xylenes	40	38.5	ug/L	96	10		82	110	20
	o-Xylene	20	19.3	ug/L	97	7		83	109	20
	Styrene	20	19.0	ug/L	95	9		80	111	20
	Bromoform	20	18.2	ug/L	91	12		79	109	20
	Isopropylbenzene	20	20.2	ug/L	101	8		83	112	20
	1,1,2,2-Tetrachloroethane	20	19.2	ug/L	96	11		76	118	20
	1,2,3-Trichloropropane	20	19.4	ug/L	97	9		75	112	20
	Bromobenzene	20	19.2	ug/L	96	8		77	116	20
	N-propylbenzene	20	20.2	ug/L	101	9		83	112	20
	2-Chlorotoluene	20	19.4	ug/L	97	10		83	110	20
	1,3,5-Trimethylbenzene	20	20.2	ug/L	101	9		85	112	20
	4-Chlorotoluene	20	19.9	ug/L	100	9		82	110	20
	tert-Butylbenzene	20	19.7	ug/L	99	9		83	112	20
	1,2,4-Trimethylbenzene	20	20.1	ug/L	101	7		85	111	20
	Sec-butylbenzene	20	20.4	ug/L	102	10		81	114	20
	p-Isopropyltoluene	20	20.3	ug/L	102	8		78	116	20
	1,3-Dichlorobenzene	20	19.2	ug/L	96	8		82	108	20
	1,4-Dichlorobenzene	20	18.8	ug/L	94	8		82	107	20
	n-Butylbenzene	20	19.8	ug/L	99	10		75	115	20
	1,2-Dichlorobenzene	20	19.2	ug/L	96	10		82	109	20
	1,2-Dibromo-3-Chloropropane	20	20.0	ug/L	100	9		68	112	20
	1,2,4-Trichlorobenzene	20	17.9	ug/L	90	11		75	113	20
	Hexachlorobutadiene	20	18.6	ug/L	93	16		81	121	20
	Naphthalene	20	17.9	ug/L	90	11		78	119	20
	1,2,3-Trichlorobenzene	20	17.8	ug/L	89	11		76	114	20

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VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VX0320WBL01

Lab Name: CHEMTECH Contract: CHEM02

Lab Code: CHEM Case No.: Q1584 SAS No.: Q1584 SDG NO.: Q1584

Lab File ID: VX045349.D Lab Sample ID: VX0320WBL01

Date Analyzed: 03/20/2025 Time Analyzed: 10:29

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
VX0320WBS01	VX0320WBS01	VX045350.D	03/20/2025
VX0320WBSD01	VX0320WBSD01	VX045355.D	03/20/2025
Storage-Blank-WATER-REF-5	Q1584-02	VX045357.D	03/20/2025
Storage-Blank-WATER-REF-4	Q1584-03	VX045358.D	03/20/2025
Storage-Blank-SAMPLE-MANAGEMENT	Q1584-04	VX045359.D	03/20/2025
Storage-Blank-SOIL-REF-6	Q1584-01	VX045362.D	03/20/2025

COMMENTS:

Raw Data: **VX045067.D**

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

Lab Name: CHEMTECH Contract: CHEM02

Lab Code: CHEM Case No.: Q1584 SAS No.: Q1584 SDG NO.: Q1584

Lab File ID: VX045067.D BFB Injection Date: 02/28/2025

Instrument ID: MSVOA_X BFB Injection Time: 01:03

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	20.7
75	30.0 - 60.0% of mass 95	53.6
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.7 (1) 1
174	50.0 - 100.0% of mass 95	73.8
175	5.0 - 9.0% of mass 174	5.8 (7.9) 1
176	95.0 - 101.0% of mass 174	70.6 (95.6) 1
177	5.0 - 9.0% of mass 176	4.3 (6.2) 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
VSTDICC001	VSTDICC001	VX045068.D	02/28/2025	01:27
VSTDICC005	VSTDICC005	VX045069.D	02/28/2025	02:13
VSTDICC020	VSTDICC020	VX045070.D	02/28/2025	02:37
VSTDICCC050	VSTDICCC050	VX045071.D	02/28/2025	03:00
VSTDICC100	VSTDICC100	VX045072.D	02/28/2025	03:23
VSTDICC150	VSTDICC150	VX045073.D	02/28/2025	03:47

Alliance TECHNICAL GROUP

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: CHEM02

Lab Code: CHEM Case No.: Q1584 SAS No.: Q1584 SDG NO.: Q1584

Lab File ID: VX045346.D BFB Injection Date: 03/20/2025

Instrument ID: MSVOA_X BFB Injection Time: 09:09

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	23
75	30.0 - 60.0% of mass 95	57.1
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	0.9 (1.2) 1
174	50.0 - 100.0% of mass 95	72.1
175	5.0 - 9.0% of mass 174	5.6 (7.7) 1
176	95.0 - 101.0% of mass 174	68.9 (95.5) 1
177	5.0 - 9.0% of mass 176	4.5 (6.5) 2

1-Value is % mass 174 2-Value is % mass 176

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VX045347.D	03/20/2025	09:38
VX0320WBL01	VX0320WBL01	VX045349.D	03/20/2025	10:29
VX0320WBS01	VX0320WBS01	VX045350.D	03/20/2025	10:53
VX0320WBSD01	VX0320WBSD01	VX045355.D	03/20/2025	12:53
Storage-Blank-WATER-REF-5	Q1584-02	VX045357.D	03/20/2025	13:40
Storage-Blank-WATER-REF-4	Q1584-03	VX045358.D	03/20/2025	14:03
Storage-Blank-SAMPLE-MANAGEMENT	Q1584-04	VX045359.D	03/20/2025	14:26
Storage-Blank-SOIL-REF-6	Q1584-01	VX045362.D	03/20/2025	15:36

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

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: CHEM02

Lab Code: CHEM Case No.: Q1584 SAS No.: Q1584 SDG NO.: Q1584

Lab File ID: VX045347.D Date Analyzed: 03/20/2025

Instrument ID: MSVOA_X Time Analyzed: 09:38

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	94097	5.54	160941	6.75	139446	10.05
UPPER LIMIT	188194	6.044	321882	7.251	278892	10.549
LOWER LIMIT	47048.5	5.044	80470.5	6.251	69723	9.549
EPA SAMPLE NO.						
Storage-Blank-SOIL-REF-6	69102	5.55	135289	6.76	126510	10.05
Storage-Blank-WATER-REF-5	66150	5.54	131162	6.76	123316	10.05
Storage-Blank-WATER-REF-4	67006	5.54	129802	6.76	117724	10.05
Storage-Blank-SAMPLE-MANAGEMEN	70067	5.55	138915	6.76	128357	10.05
VX0320WBL01	67796	5.54	133500	6.76	121748	10.05
VX0320WBS01	94337	5.55	168482	6.76	149499	10.06
VX0320WBSD01	103163	5.54	181737	6.76	154271	10.05

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: CHEM02

Lab Code: CHEM Case No.: Q1584 SAS No.: Q1584 SDG NO.: Q1584

Lab File ID: VX045347.D Date Analyzed: 03/20/2025

Instrument ID: MSVOA_X Time Analyzed: 09:38

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

	IS4 AREA #	RT #				
12 HOUR STD	64140	12.018				
UPPER LIMIT	128280	12.518				
LOWER LIMIT	32070	11.518				
EPA SAMPLE NO.						
Storage-Blank-SOIL-REF-6	51157	12.02				
Storage-Blank-WATER-REF-5	50814	12.02				
Storage-Blank-WATER-REF-4	46278	12.02				
Storage-Blank-SAMPLE-MANAGEME	51018	12.02				
VX0320WBL01	47437	12.02				
VX0320WBS01	65210	12.02				
VX0320WBSD01	66247	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: **VX045362.D**

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Fax : 908 789 8922

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	03/14/25
Project:	Weekly Storage Blanks	Date Received:	03/14/25
Client Sample ID:	Storage-Blank-SOIL-REF-6	SDG No.:	Q1584
Lab Sample ID:	Q1584-01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC- Chemtech Full
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045362.D	1		03/20/25 15:36	VX032025

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
141-78-6	Ethyl Acetate	0.31	U	0.31	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
75-65-0	Tert butyl alcohol	5.50	UQ	5.50	25.0	ug/L
75-35-4	1,1-Dichloroethene	0.23	U	0.23	1.00	ug/L
107-02-8	Acrolein	7.10	UQ	7.10	25.0	ug/L
107-13-1	Acrylonitrile	0.83	U	0.83	5.00	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	UQ	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
108-05-4	Vinyl Acetate	0.66	U	0.66	5.00	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
594-20-7	2,2-Dichloropropane	0.21	UQ	0.21	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
563-58-6	1,1-Dichloropropene	0.15	U	0.15	1.00	ug/L

Raw Data: **VX045362.D**

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Fax : 908 789 8922

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	03/14/25
Project:	Weekly Storage Blanks	Date Received:	03/14/25
Client Sample ID:	Storage-Blank-SOIL-REF-6	SDG No.:	Q1584
Lab Sample ID:	Q1584-01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC- Chemtech Full
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045362.D	1		03/20/25 15:36	VX032025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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
74-95-3	Dibromomethane	0.25	U	0.25	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
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
142-28-9	1,3-Dichloropropane	0.19	U	0.19	1.00	ug/L
110-75-8	2-Chloroethyl Vinyl ether	0.30	U	0.30	5.00	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
630-20-6	1,1,1,2-Tetrachloroethane	0.19	U	0.19	1.00	ug/L
67-72-1	Hexachloroethane	0.32	U	0.32	0	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
96-18-4	1,2,3-Trichloropropane	0.35	U	0.35	1.00	ug/L
108-86-1	Bromobenzene	0.24	U	0.24	1.00	ug/L
103-65-1	n-propylbenzene	0.13	U	0.13	1.00	ug/L
95-49-8	2-Chlorotoluene	0.14	U	0.14	1.00	ug/L

Raw Data: **VX045362.D**

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284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	03/14/25
Project:	Weekly Storage Blanks	Date Received:	03/14/25
Client Sample ID:	Storage-Blank-SOIL-REF-6	SDG No.:	Q1584
Lab Sample ID:	Q1584-01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC- Chemtech Full
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045362.D	1		03/20/25 15:36	VX032025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
108-67-8	1,3,5-Trimethylbenzene	0.15	U	0.15	1.00	ug/L
106-43-4	4-Chlorotoluene	0.13	U	0.13	1.00	ug/L
98-06-6	tert-Butylbenzene	0.14	U	0.14	1.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.14	U	0.14	1.00	ug/L
135-98-8	sec-Butylbenzene	0.13	U	0.13	1.00	ug/L
99-87-6	p-Isopropyltoluene	0.13	U	0.13	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
104-51-8	n-Butylbenzene	0.15	U	0.15	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
87-68-3	Hexachlorobutadiene	0.30	U	0.30	1.00	ug/L
91-20-3	Naphthalene	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	55.6		74 - 125	111%	SPK: 50
1868-53-7	Dibromofluoromethane	52.5		75 - 124	105%	SPK: 50
2037-26-5	Toluene-d8	51.7		86 - 113	103%	SPK: 50
460-00-4	4-Bromofluorobenzene	55.0		77 - 121	110%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	69100	5.55			
540-36-3	1,4-Difluorobenzene	135000	6.757			
3114-55-4	Chlorobenzene-d5	127000	10.049			
3855-82-1	1,4-Dichlorobenzene-d4	51200	12.018			

Raw Data: **VX045362.D**

Alliance TECHNICAL GROUP

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Fax : 908 789 8922

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	03/14/25
Project:	Weekly Storage Blanks	Date Received:	03/14/25
Client Sample ID:	Storage-Blank-SOIL-REF-6	SDG No.:	Q1584
Lab Sample ID:	Q1584-01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC- Chemtech Full
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045362.D	1		03/20/25 15:36	VX032025

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\VX032025\
Data File : VX045362.D
Acq On : 20 Mar 2025 15:36
Operator : JC/MD
Sample : Q1584-01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 17 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
Storage-Blank-SOIL-REF-6

Quant Time: Mar 21 01:49:38 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

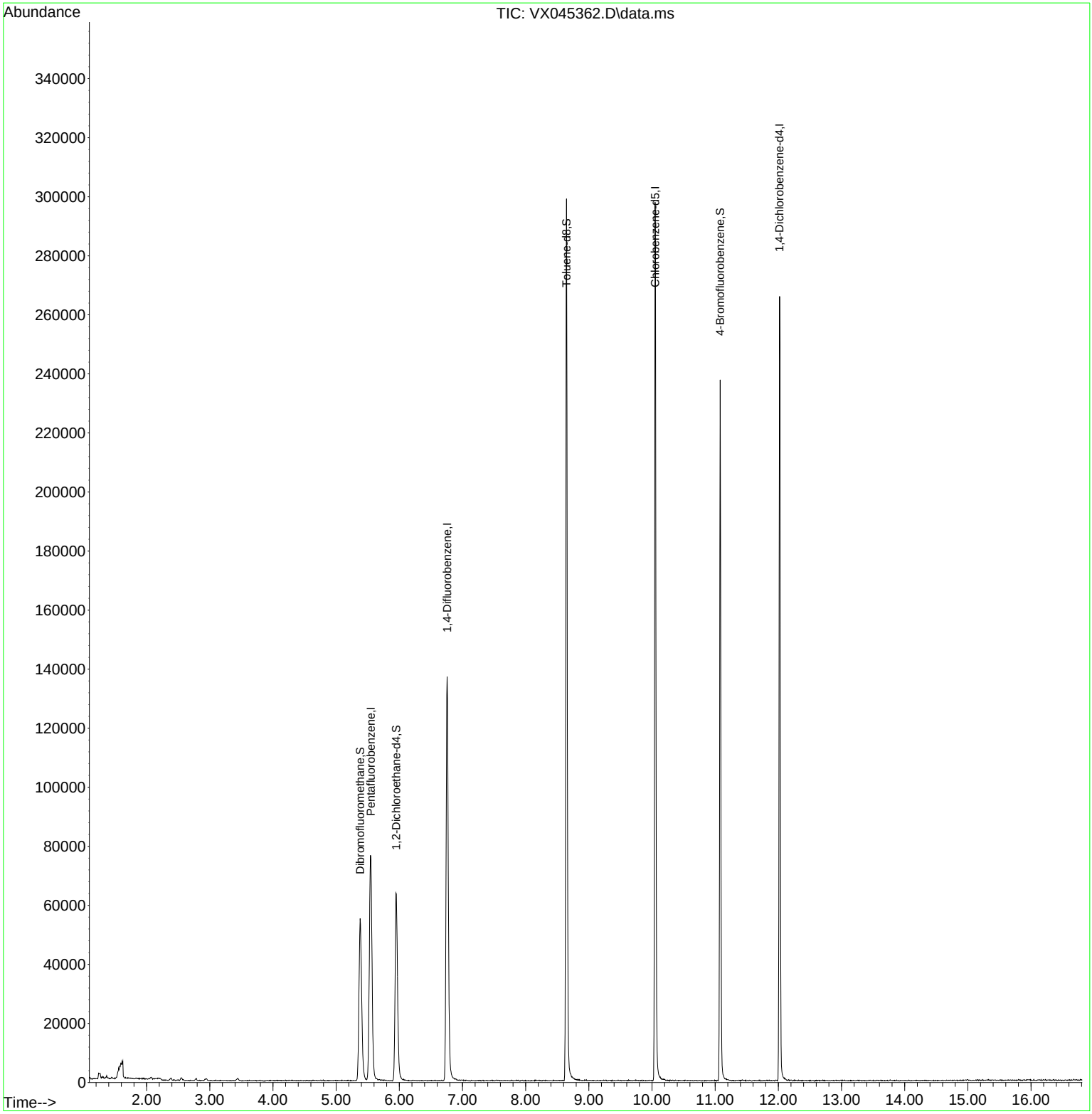
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.550	168	69102	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.757	114	135289	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.049	117	126510	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	51157	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.952	65	61132	55.617	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 111.240%			
35) Dibromofluoromethane	5.379	113	47482	52.487	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 104.980%			
50) Toluene-d8	8.647	98	169612	51.717	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 103.440%			
62) 4-Bromofluorobenzene	11.079	95	59764	54.992	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 109.980%			
Target Compounds						Qvalue

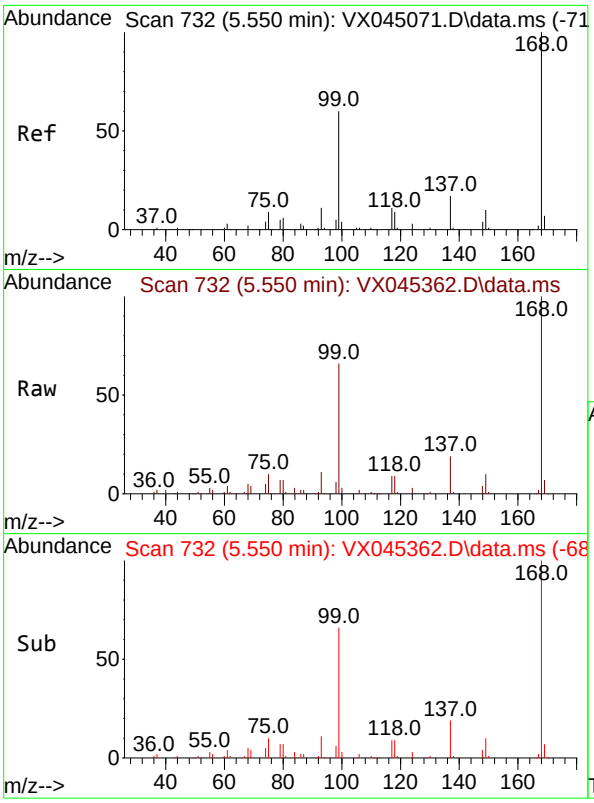
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032025\
Data File : VX045362.D
Acq On : 20 Mar 2025 15:36
Operator : JC/MD
Sample : Q1584-01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 17 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
Storage-Blank-SOIL-REF-6

Quant Time: Mar 21 01:49:38 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration



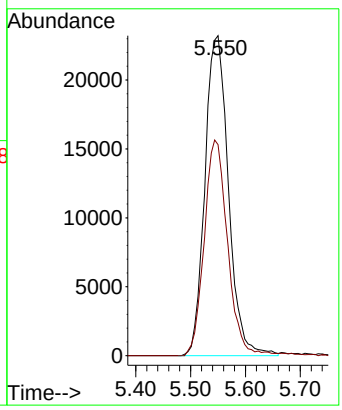


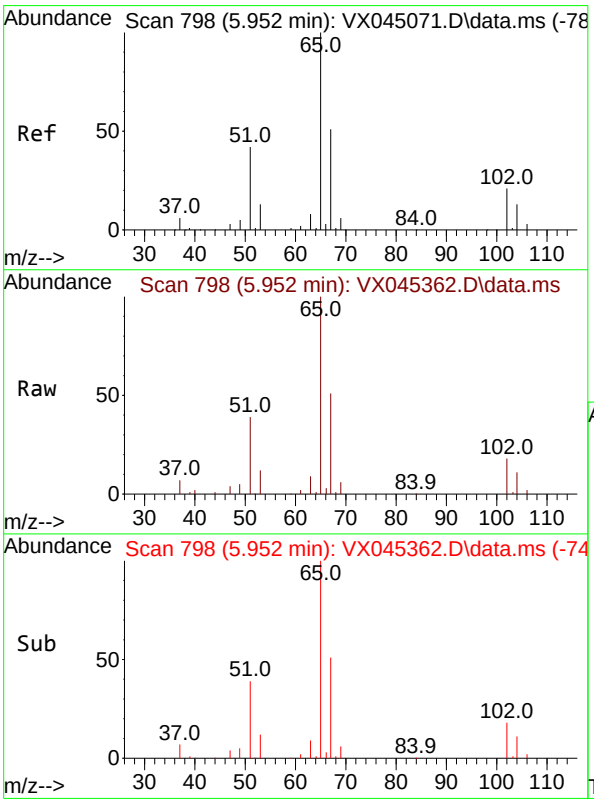
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.550 min Scan# 7
Delta R.T. -0.000 min
Lab File: VX045362.D
Acq: 20 Mar 2025 15:36

Instrument :
MSVOA_X
ClientSampleId :
Storage-Blank-SOIL-REF-6

Tgt Ion:168 Resp: 69102

Ion	Ratio	Lower	Upper
168	100		
99	66.0	48.2	72.4

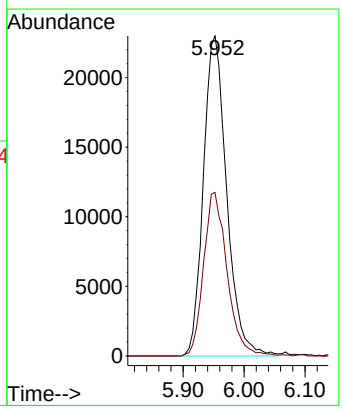


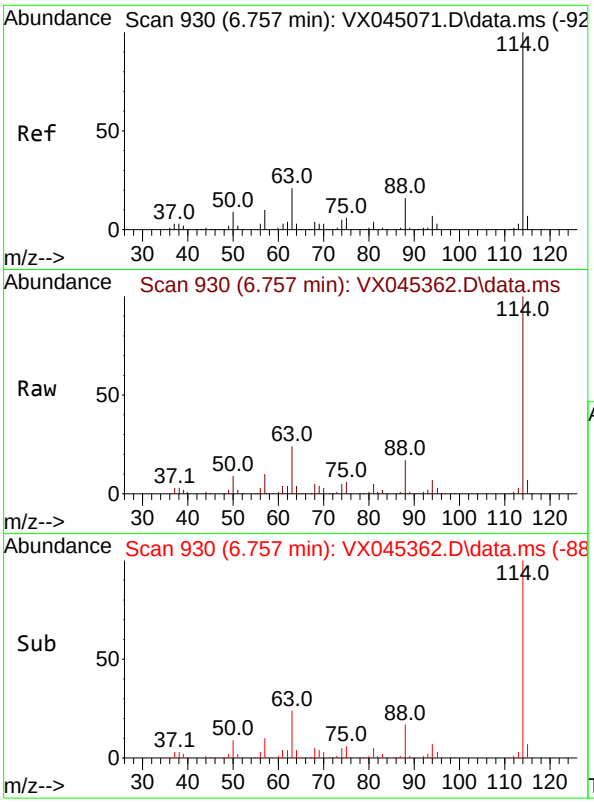


#33
1,2-Dichloroethane-d4
Concen: 55.617 ug/l
RT: 5.952 min Scan# 798
Delta R.T. 0.000 min
Lab File: VX045362.D
Acq: 20 Mar 2025 15:36

Tgt Ion: 65 Resp: 61132

Ion	Ratio	Lower	Upper
65	100		
67	51.6	0.0	106.2



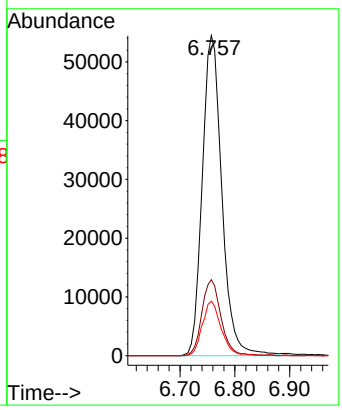


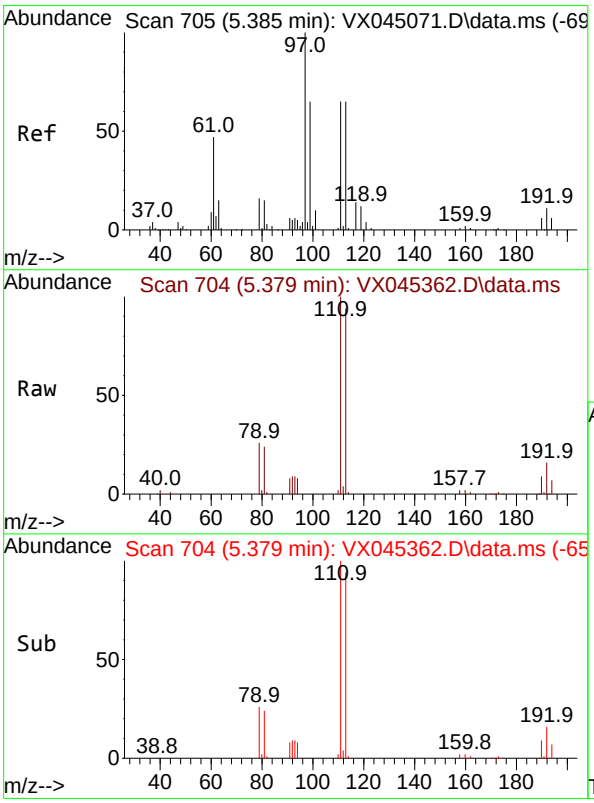
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.757 min Scan# 9
Delta R.T. 0.000 min
Lab File: VX045362.D
Acq: 20 Mar 2025 15:36

Instrument :
MSVOA_X
ClientSampleId :
Storage-Blank-SOIL-REF-6

Tgt Ion:114 Resp: 135289

Ion	Ratio	Lower	Upper
114	100		
63	23.7	0.0	41.8
88	17.0	0.0	32.8

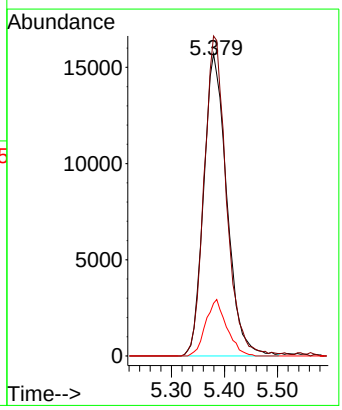


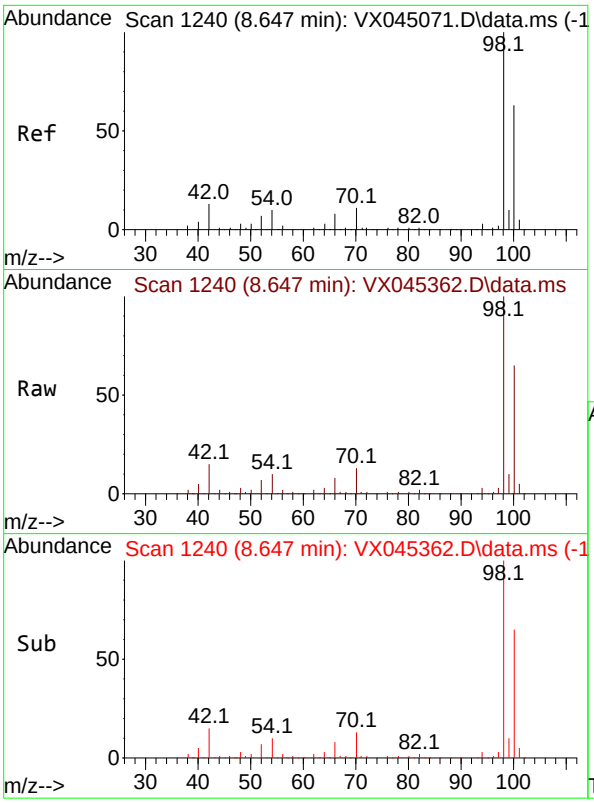


#35
Dibromofluoromethane
Concen: 52.487 ug/l
RT: 5.379 min Scan# 704
Delta R.T. -0.006 min
Lab File: VX045362.D
Acq: 20 Mar 2025 15:36

Tgt Ion:113 Resp: 47482

Ion	Ratio	Lower	Upper
113	100		
111	102.3	81.8	122.6
192	17.1	14.3	21.5



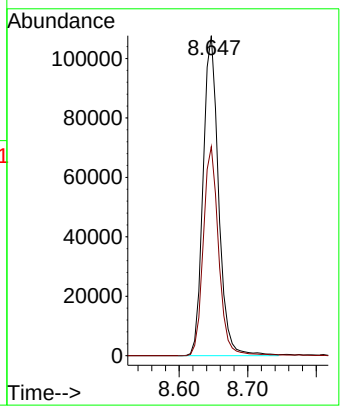


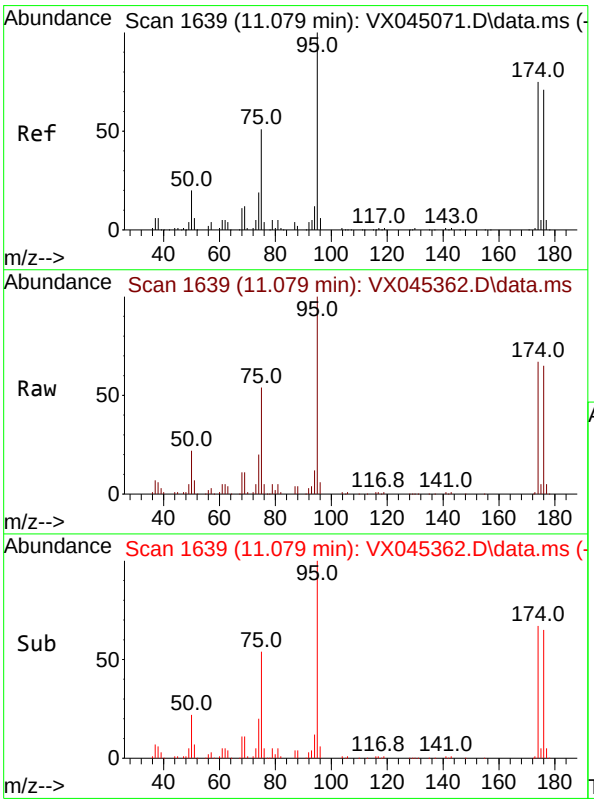
#50
Toluene-d8
Concen: 51.717 ug/l
RT: 8.647 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045362.D
Acq: 20 Mar 2025 15:36

Instrument :
MSVOA_X
ClientSampleId :
Storage-Blank-SOIL-REF-6

Tgt Ion: 98 Resp: 169612

Ion	Ratio	Lower	Upper
98	100		
100	65.0	52.0	78.0

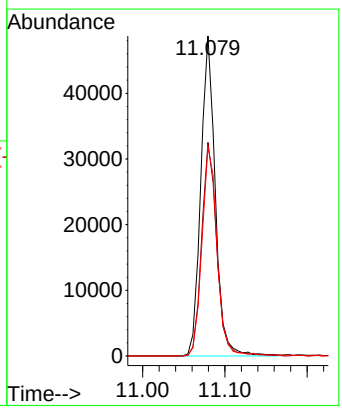


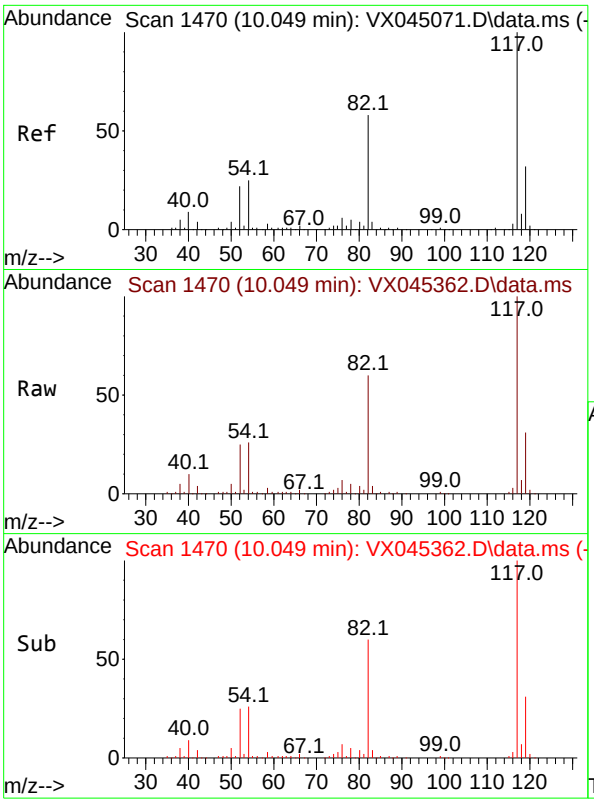


#62
4-Bromofluorobenzene
Concen: 54.992 ug/l
RT: 11.079 min Scan# 1639
Delta R.T. 0.000 min
Lab File: VX045362.D
Acq: 20 Mar 2025 15:36

Tgt Ion: 95 Resp: 59764

Ion	Ratio	Lower	Upper
95	100		
174	69.3	0.0	148.2
176	68.2	0.0	141.4



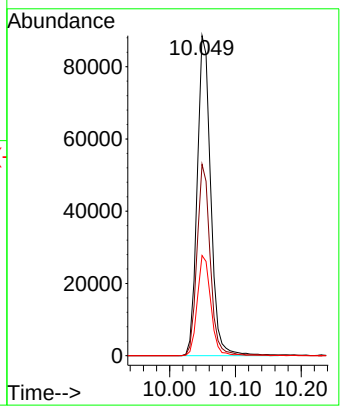


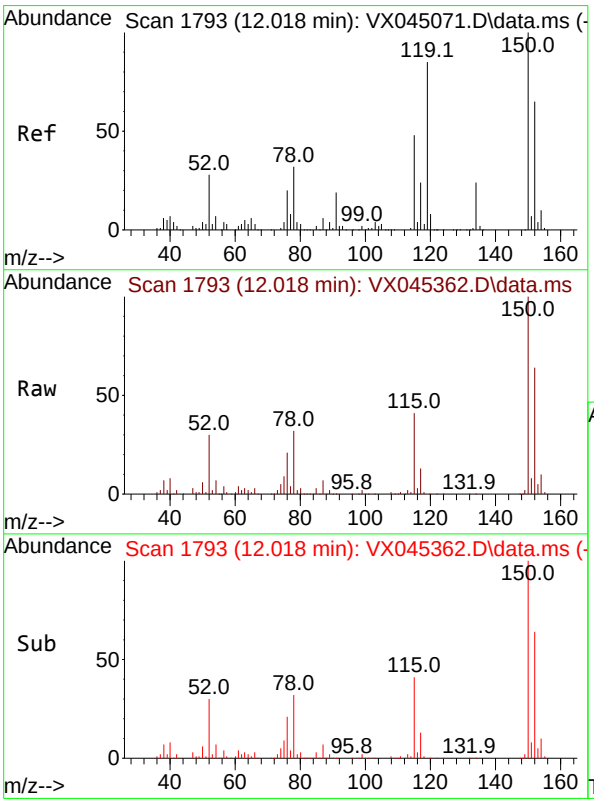
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.049 min Scan# 14
Delta R.T. 0.000 min
Lab File: VX045362.D
Acq: 20 Mar 2025 15:36

Instrument :
MSVOA_X
ClientSampleId :
Storage-Blank-SOIL-REF-6

Tgt Ion:117 Resp: 126510

Ion	Ratio	Lower	Upper
117	100		
82	59.8	46.3	69.5
119	31.3	25.7	38.5

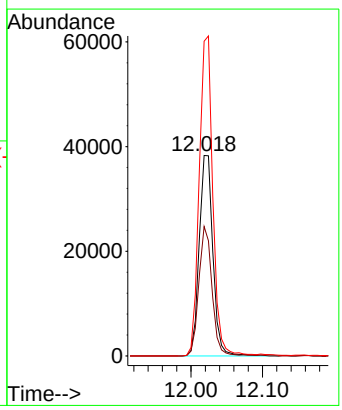




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.018 min Scan# 1793
Delta R.T. 0.000 min
Lab File: VX045362.D
Acq: 20 Mar 2025 15:36

Tgt Ion:152 Resp: 51157

Ion	Ratio	Lower	Upper
152	100		
115	62.2	44.2	132.6
150	157.7	0.0	349.0



Raw Data: **VX045357.D**

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

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	03/14/25
Project:	Weekly Storage Blanks	Date Received:	03/14/25
Client Sample ID:	Storage-Blank-WATER-REF-5	SDG No.:	Q1584
Lab Sample ID:	Q1584-02	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC- Chemtech Full
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045357.D	1		03/20/25 13:40	VX032025

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
141-78-6	Ethyl Acetate	0.31	U	0.31	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
75-65-0	Tert butyl alcohol	5.50	UQ	5.50	25.0	ug/L
75-35-4	1,1-Dichloroethene	0.23	U	0.23	1.00	ug/L
107-02-8	Acrolein	7.10	UQ	7.10	25.0	ug/L
107-13-1	Acrylonitrile	0.83	U	0.83	5.00	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	UQ	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
108-05-4	Vinyl Acetate	0.66	U	0.66	5.00	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
594-20-7	2,2-Dichloropropane	0.21	UQ	0.21	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
563-58-6	1,1-Dichloropropene	0.15	U	0.15	1.00	ug/L

Raw Data: **VX045357.D**

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

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	03/14/25
Project:	Weekly Storage Blanks	Date Received:	03/14/25
Client Sample ID:	Storage-Blank-WATER-REF-5	SDG No.:	Q1584
Lab Sample ID:	Q1584-02	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC- Chemtech Full
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045357.D	1		03/20/25 13:40	VX032025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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
74-95-3	Dibromomethane	0.25	U	0.25	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
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
142-28-9	1,3-Dichloropropane	0.19	U	0.19	1.00	ug/L
110-75-8	2-Chloroethyl Vinyl ether	0.30	U	0.30	5.00	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
630-20-6	1,1,1,2-Tetrachloroethane	0.19	U	0.19	1.00	ug/L
67-72-1	Hexachloroethane	0.32	U	0.32	0	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
96-18-4	1,2,3-Trichloropropane	0.35	U	0.35	1.00	ug/L
108-86-1	Bromobenzene	0.24	U	0.24	1.00	ug/L
103-65-1	n-propylbenzene	0.13	U	0.13	1.00	ug/L
95-49-8	2-Chlorotoluene	0.14	U	0.14	1.00	ug/L

Raw Data: **VX045357.D**

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

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	03/14/25
Project:	Weekly Storage Blanks	Date Received:	03/14/25
Client Sample ID:	Storage-Blank-WATER-REF-5	SDG No.:	Q1584
Lab Sample ID:	Q1584-02	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC- Chemtech Full
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045357.D	1		03/20/25 13:40	VX032025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
108-67-8	1,3,5-Trimethylbenzene	0.15	U	0.15	1.00	ug/L
106-43-4	4-Chlorotoluene	0.13	U	0.13	1.00	ug/L
98-06-6	tert-Butylbenzene	0.14	U	0.14	1.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.14	U	0.14	1.00	ug/L
135-98-8	sec-Butylbenzene	0.13	U	0.13	1.00	ug/L
99-87-6	p-Isopropyltoluene	0.13	U	0.13	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
104-51-8	n-Butylbenzene	0.15	U	0.15	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
87-68-3	Hexachlorobutadiene	0.30	U	0.30	1.00	ug/L
91-20-3	Naphthalene	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	56.4		74 - 125	113%	SPK: 50
1868-53-7	Dibromofluoromethane	52.5		75 - 124	105%	SPK: 50
2037-26-5	Toluene-d8	51.7		86 - 113	103%	SPK: 50
460-00-4	4-Bromofluorobenzene	55.6		77 - 121	111%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	66200	5.544			
540-36-3	1,4-Difluorobenzene	131000	6.757			
3114-55-4	Chlorobenzene-d5	123000	10.049			
3855-82-1	1,4-Dichlorobenzene-d4	50800	12.018			

Raw Data: **VX045357.D**

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

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	03/14/25
Project:	Weekly Storage Blanks	Date Received:	03/14/25
Client Sample ID:	Storage-Blank-WATER-REF-5	SDG No.:	Q1584
Lab Sample ID:	Q1584-02	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC- Chemtech Full
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045357.D	1		03/20/25 13:40	VX032025

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\VX032025\
Data File : VX045357.D
Acq On : 20 Mar 2025 13:40
Operator : JC/MD
Sample : Q1584-02
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
Storage-Blank-WATER-REF-5

Quant Time: Mar 21 01:47:38 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.544	168	66150	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.757	114	131162	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.049	117	123316	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	50814	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.952	65	59360	56.414	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 112.820%			
35) Dibromofluoromethane	5.379	113	46006	52.456	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 104.920%			
50) Toluene-d8	8.647	98	164368	51.695	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 103.380%			
62) 4-Bromofluorobenzene	11.079	95	58542	55.563	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 111.120%			

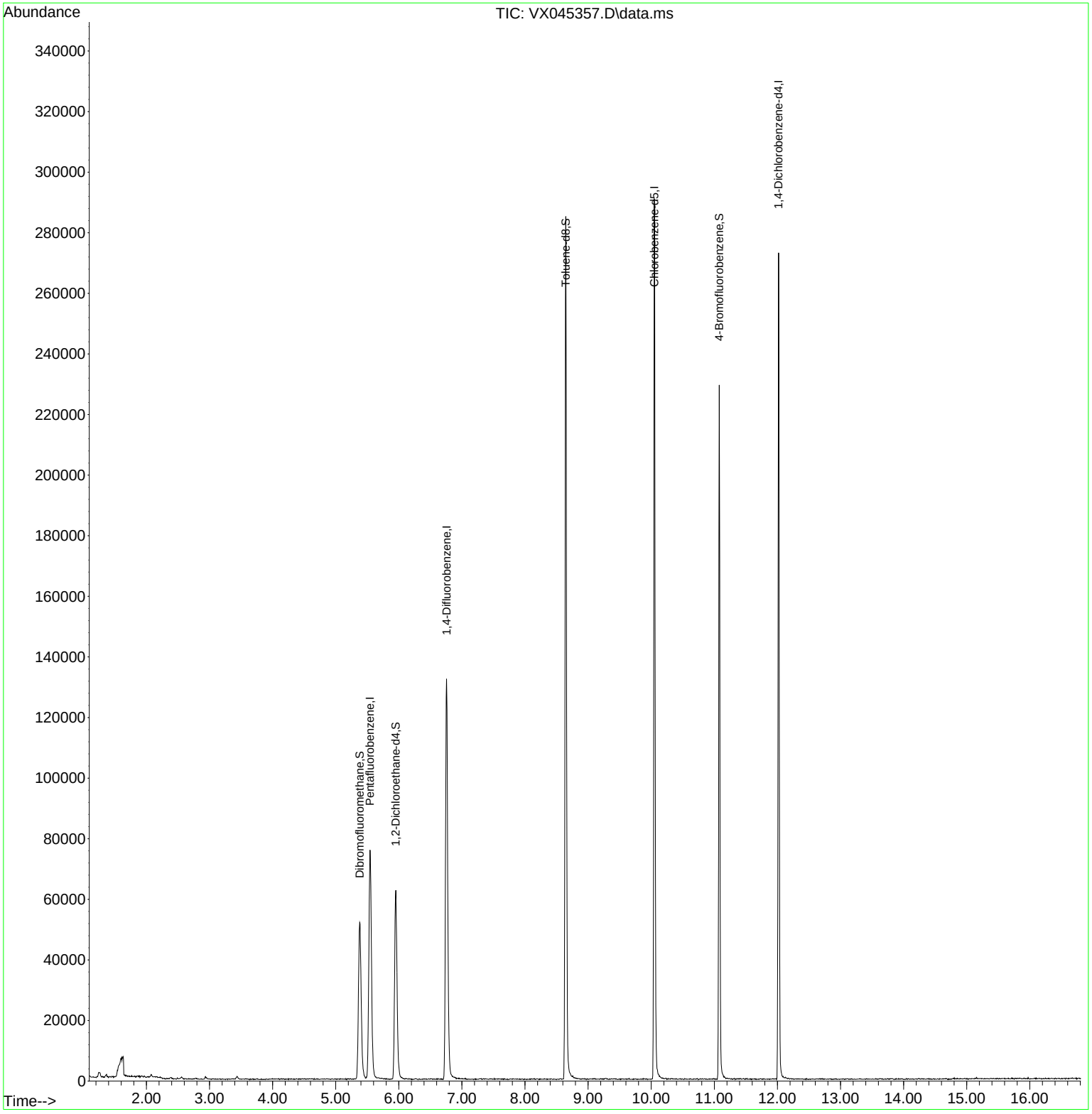
Target Compounds Qvalue

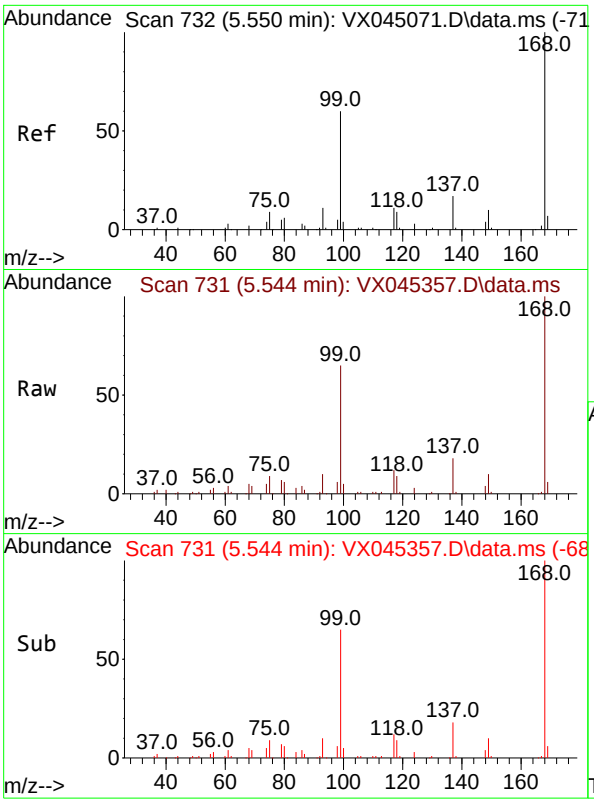
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032025\
Data File : VX045357.D
Acq On : 20 Mar 2025 13:40
Operator : JC/MD
Sample : Q1584-02
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
Storage-Blank-WATER-REF-5

Quant Time: Mar 21 01:47:38 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration



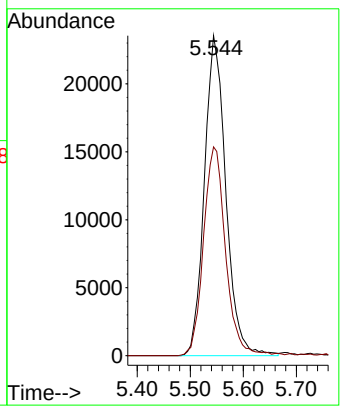


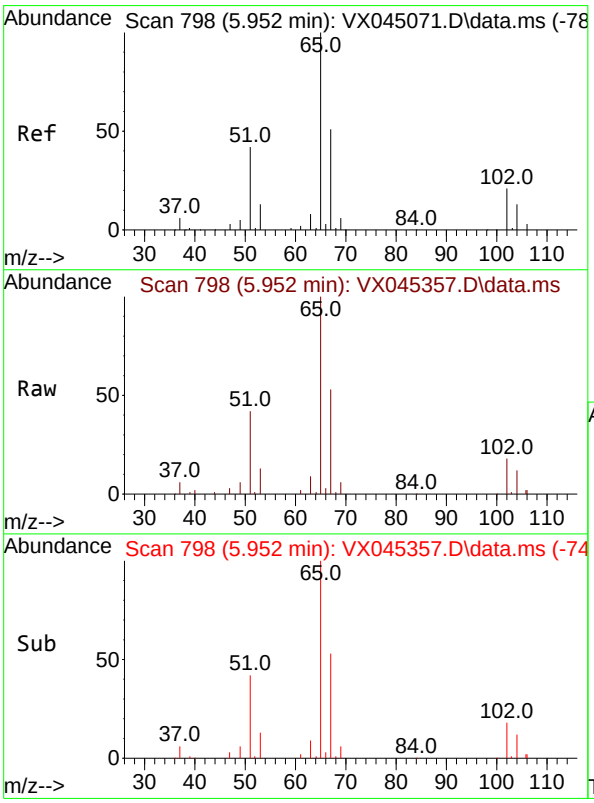
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.544 min Scan# 7
Delta R.T. -0.006 min
Lab File: VX045357.D
Acq: 20 Mar 2025 13:40

Instrument :
MSVOA_X
ClientSampleId :
Storage-Blank-WATER-REF-5

Tgt Ion:168 Resp: 66150

Ion	Ratio	Lower	Upper
168	100		
99	65.3	48.2	72.4

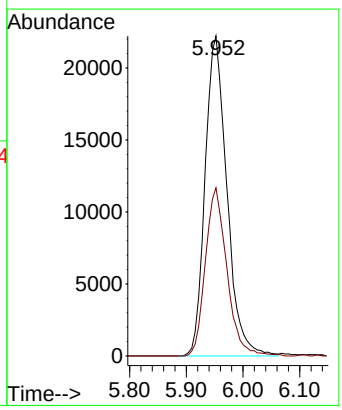


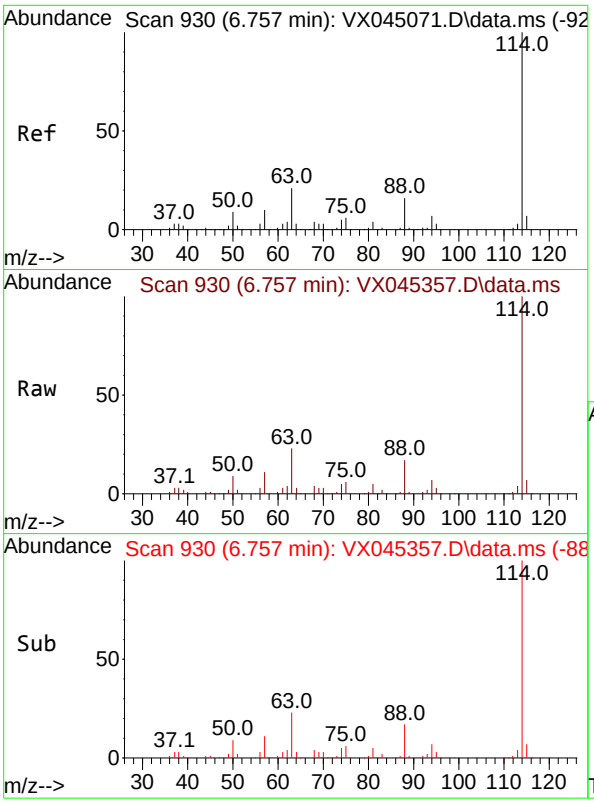


#33
1,2-Dichloroethane-d4
Concen: 56.414 ug/l
RT: 5.952 min Scan# 798
Delta R.T. 0.000 min
Lab File: VX045357.D
Acq: 20 Mar 2025 13:40

Tgt Ion: 65 Resp: 59360

Ion	Ratio	Lower	Upper
65	100		
67	51.9	0.0	106.2



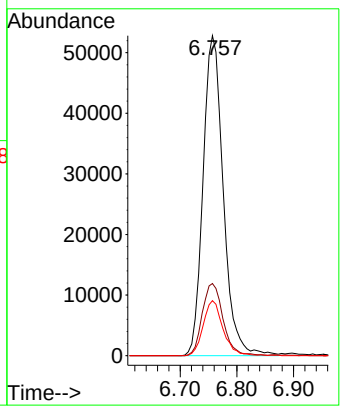


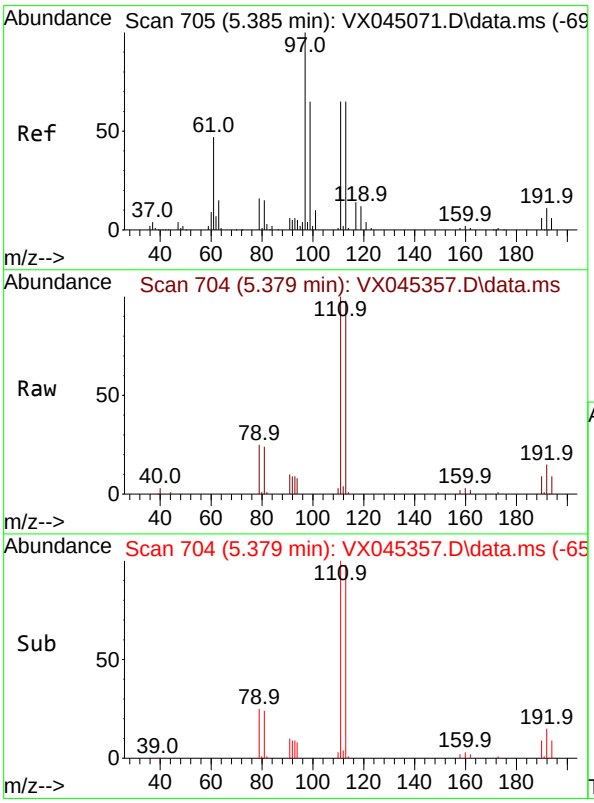
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.757 min Scan# 9
Delta R.T. 0.000 min
Lab File: VX045357.D
Acq: 20 Mar 2025 13:40

Instrument :
MSVOA_X
ClientSampleId :
Storage-Blank-WATER-REF-5

Tgt Ion:114 Resp: 131162

Ion	Ratio	Lower	Upper
114	100		
63	22.6	0.0	41.8
88	17.2	0.0	32.8

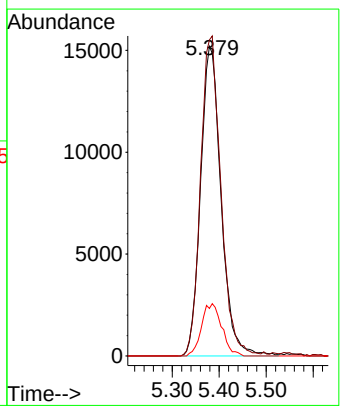


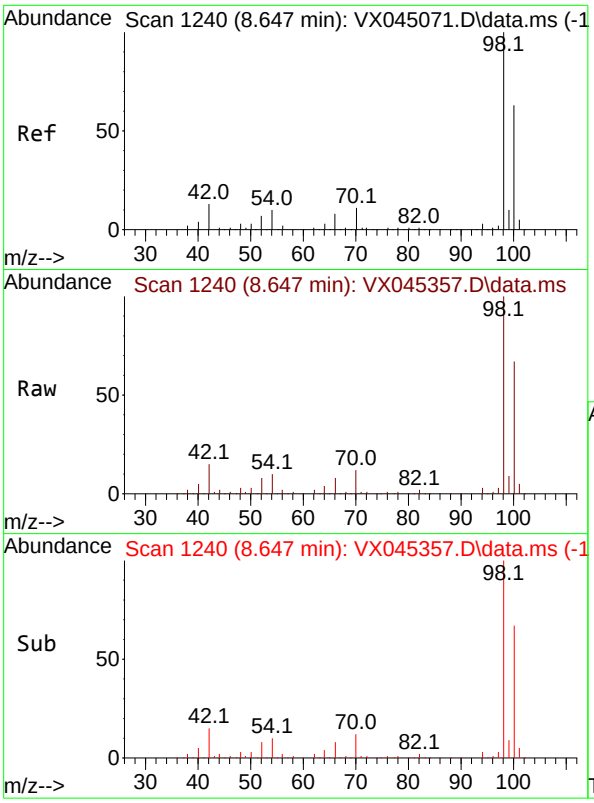


#35
Dibromofluoromethane
Concen: 52.456 ug/l
RT: 5.379 min Scan# 704
Delta R.T. -0.006 min
Lab File: VX045357.D
Acq: 20 Mar 2025 13:40

Tgt Ion:113 Resp: 46006

Ion	Ratio	Lower	Upper
113	100		
111	102.2	81.8	122.6
192	16.7	14.3	21.5



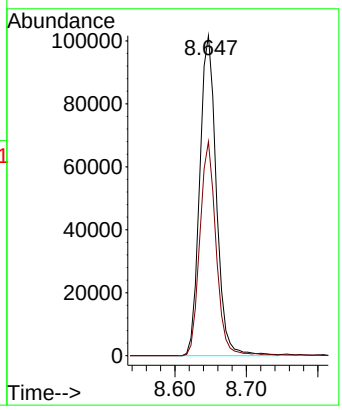


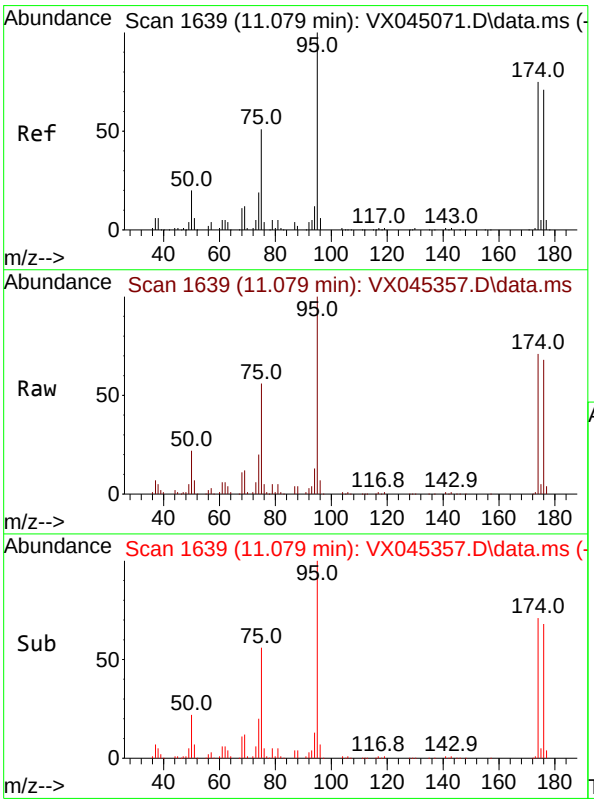
#50
Toluene-d8
Concen: 51.695 ug/l
RT: 8.647 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX045357.D
Acq: 20 Mar 2025 13:40

Instrument :
MSVOA_X
ClientSampleId :
Storage-Blank-WATER-REF-5

Tgt Ion: 98 Resp: 164368

Ion	Ratio	Lower	Upper
98	100		
100	65.3	52.0	78.0

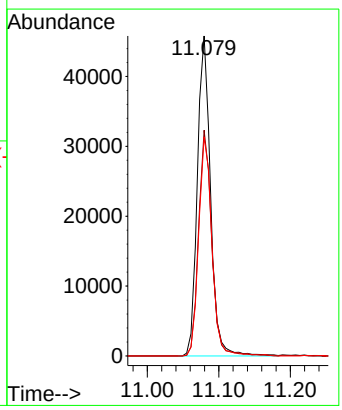


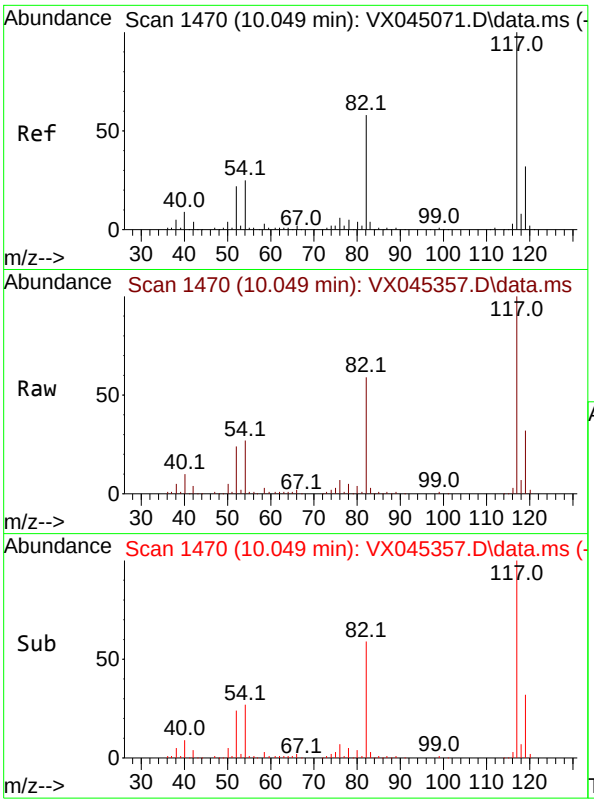


#62
4-Bromofluorobenzene
Concen: 55.563 ug/l
RT: 11.079 min Scan# 1639
Delta R.T. 0.000 min
Lab File: VX045357.D
Acq: 20 Mar 2025 13:40

Tgt Ion: 95 Resp: 58542

Ion	Ratio	Lower	Upper
95	100		
174	70.5	0.0	148.2
176	69.3	0.0	141.4



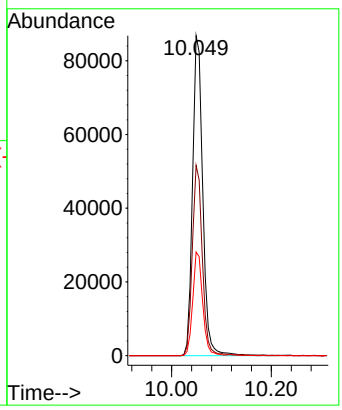


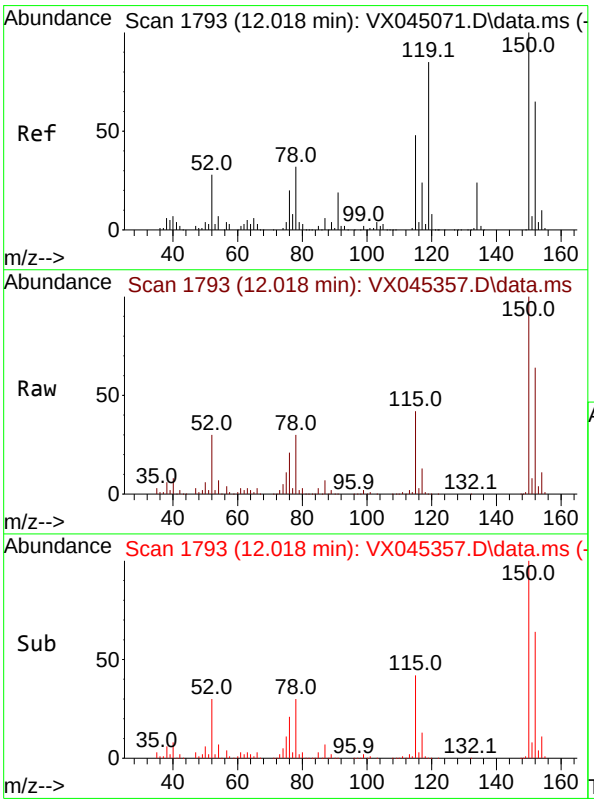
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.049 min Scan# 14
Delta R.T. 0.000 min
Lab File: VX045357.D
Acq: 20 Mar 2025 13:40

Instrument :
MSVOA_X
ClientSampleId :
Storage-Blank-WATER-REF-5

Tgt Ion:117 Resp: 123316

Ion	Ratio	Lower	Upper
117	100		
82	59.5	46.3	69.5
119	32.4	25.7	38.5

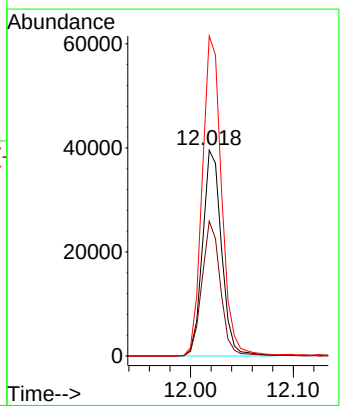




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.018 min Scan# 1793
Delta R.T. 0.000 min
Lab File: VX045357.D
Acq: 20 Mar 2025 13:40

Tgt Ion:152 Resp: 50814

Ion	Ratio	Lower	Upper
152	100		
115	64.2	44.2	132.6
150	158.5	0.0	349.0



Raw Data: **VX045358.D**

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

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	03/14/25
Project:	Weekly Storage Blanks	Date Received:	03/14/25
Client Sample ID:	Storage-Blank-WATER-REF-4	SDG No.:	Q1584
Lab Sample ID:	Q1584-03	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC- Chemtech Full
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045358.D	1		03/20/25 14:03	VX032025

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
141-78-6	Ethyl Acetate	0.31	U	0.31	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
75-65-0	Tert butyl alcohol	5.50	UQ	5.50	25.0	ug/L
75-35-4	1,1-Dichloroethene	0.23	U	0.23	1.00	ug/L
107-02-8	Acrolein	7.10	UQ	7.10	25.0	ug/L
107-13-1	Acrylonitrile	0.83	U	0.83	5.00	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	UQ	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
108-05-4	Vinyl Acetate	0.66	U	0.66	5.00	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
594-20-7	2,2-Dichloropropane	0.21	UQ	0.21	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
563-58-6	1,1-Dichloropropene	0.15	U	0.15	1.00	ug/L

Raw Data: **VX045358.D**

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

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	03/14/25
Project:	Weekly Storage Blanks	Date Received:	03/14/25
Client Sample ID:	Storage-Blank-WATER-REF-4	SDG No.:	Q1584
Lab Sample ID:	Q1584-03	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC- Chemtech Full
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045358.D	1		03/20/25 14:03	VX032025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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
74-95-3	Dibromomethane	0.25	U	0.25	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
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
142-28-9	1,3-Dichloropropane	0.19	U	0.19	1.00	ug/L
110-75-8	2-Chloroethyl Vinyl ether	0.30	U	0.30	5.00	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
630-20-6	1,1,1,2-Tetrachloroethane	0.19	U	0.19	1.00	ug/L
67-72-1	Hexachloroethane	0.32	U	0.32	0	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
96-18-4	1,2,3-Trichloropropane	0.35	U	0.35	1.00	ug/L
108-86-1	Bromobenzene	0.24	U	0.24	1.00	ug/L
103-65-1	n-propylbenzene	0.13	U	0.13	1.00	ug/L
95-49-8	2-Chlorotoluene	0.14	U	0.14	1.00	ug/L

Raw Data: **VX045358.D**

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

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	03/14/25
Project:	Weekly Storage Blanks	Date Received:	03/14/25
Client Sample ID:	Storage-Blank-WATER-REF-4	SDG No.:	Q1584
Lab Sample ID:	Q1584-03	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC- Chemtech Full
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045358.D	1		03/20/25 14:03	VX032025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
108-67-8	1,3,5-Trimethylbenzene	0.15	U	0.15	1.00	ug/L
106-43-4	4-Chlorotoluene	0.13	U	0.13	1.00	ug/L
98-06-6	tert-Butylbenzene	0.14	U	0.14	1.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.14	U	0.14	1.00	ug/L
135-98-8	sec-Butylbenzene	0.13	U	0.13	1.00	ug/L
99-87-6	p-Isopropyltoluene	0.13	U	0.13	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
104-51-8	n-Butylbenzene	0.15	U	0.15	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
87-68-3	Hexachlorobutadiene	0.30	U	0.30	1.00	ug/L
91-20-3	Naphthalene	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	57.3		74 - 125	115%	SPK: 50
1868-53-7	Dibromofluoromethane	53.0		75 - 124	106%	SPK: 50
2037-26-5	Toluene-d8	52.2		86 - 113	104%	SPK: 50
460-00-4	4-Bromofluorobenzene	53.4		77 - 121	107%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	67000	5.544			
540-36-3	1,4-Difluorobenzene	130000	6.757			
3114-55-4	Chlorobenzene-d5	118000	10.049			
3855-82-1	1,4-Dichlorobenzene-d4	46300	12.018			

Raw Data: **VX045358.D**

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

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	03/14/25
Project:	Weekly Storage Blanks	Date Received:	03/14/25
Client Sample ID:	Storage-Blank-WATER-REF-4	SDG No.:	Q1584
Lab Sample ID:	Q1584-03	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC- Chemtech Full
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045358.D	1		03/20/25 14:03	VX032025

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

Sample Results: **VX045358.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032025\
Data File : VX045358.D
Acq On : 20 Mar 2025 14:03
Operator : JC/MD
Sample : Q1584-03
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 13 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
Storage-Blank-WATER-REF-4

Quant Time: Mar 21 01:48:02 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

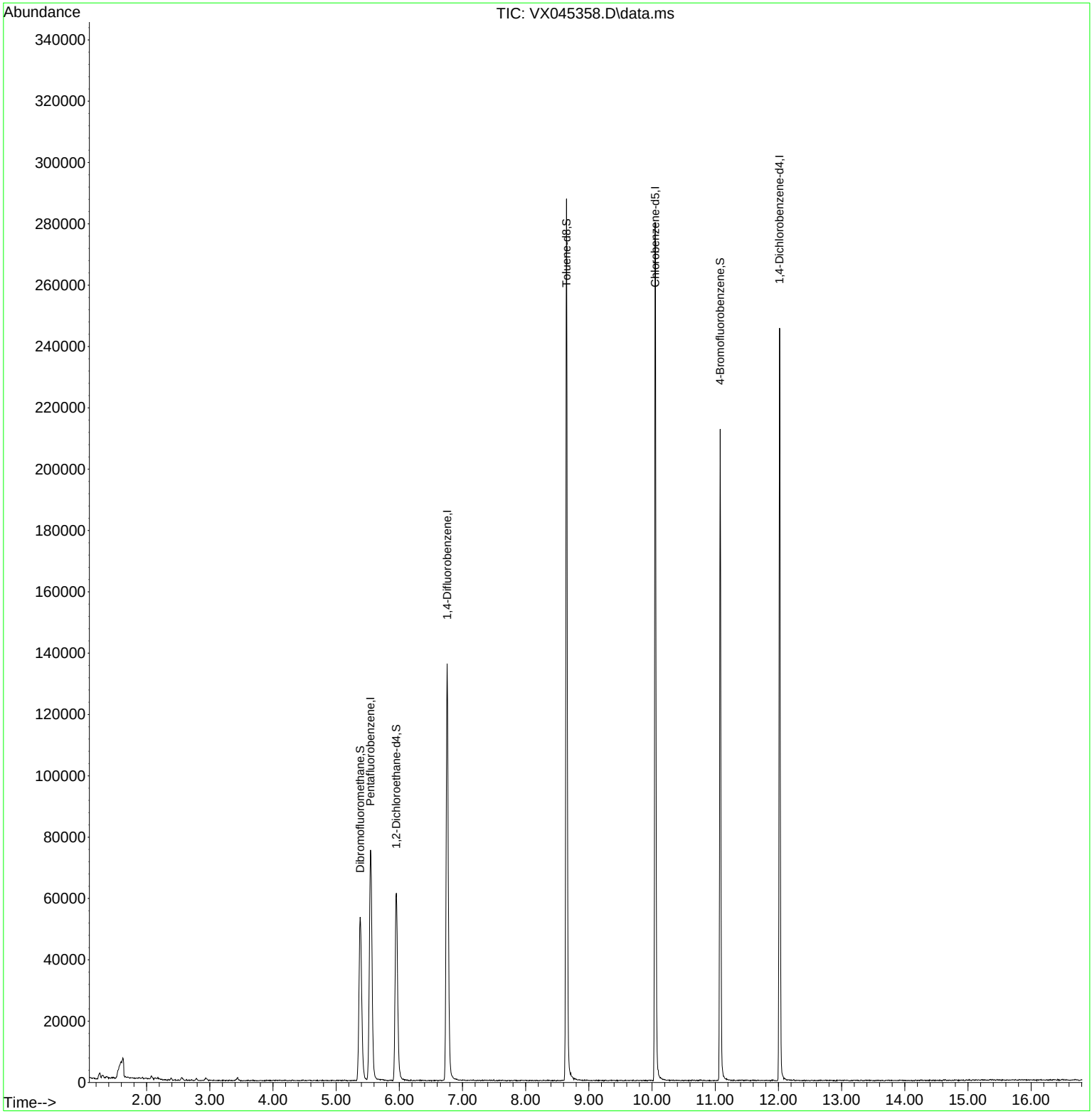
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.544	168	67006	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.757	114	129802	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.049	117	117724	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	46278	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.952	65	61092	57.319	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 114.640%			
35) Dibromofluoromethane	5.379	113	46017	53.018	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 106.040%			
50) Toluene-d8	8.647	98	164112	52.155	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 104.300%			
62) 4-Bromofluorobenzene	11.079	95	55671	53.391	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 106.780%			
Target Compounds						Qvalue

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

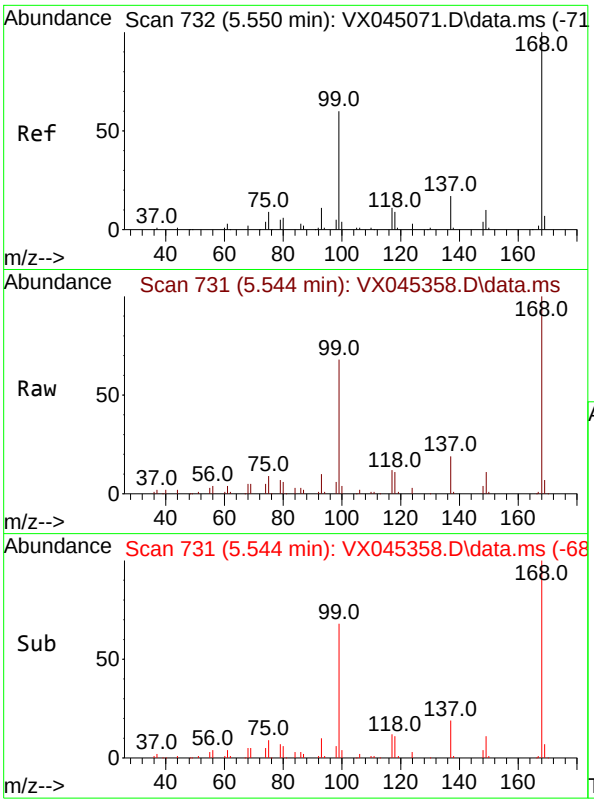
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032025\
Data File : VX045358.D
Acq On : 20 Mar 2025 14:03
Operator : JC/MD
Sample : Q1584-03
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 13 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
Storage-Blank-WATER-REF-4

Quant Time: Mar 21 01:48:02 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration



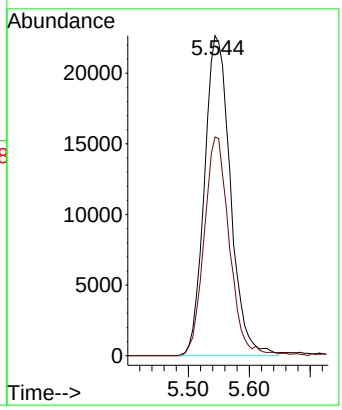
Instrument :
MSVOA_X
ClientSampleId :
Storage-Blank-WATER-REF-4

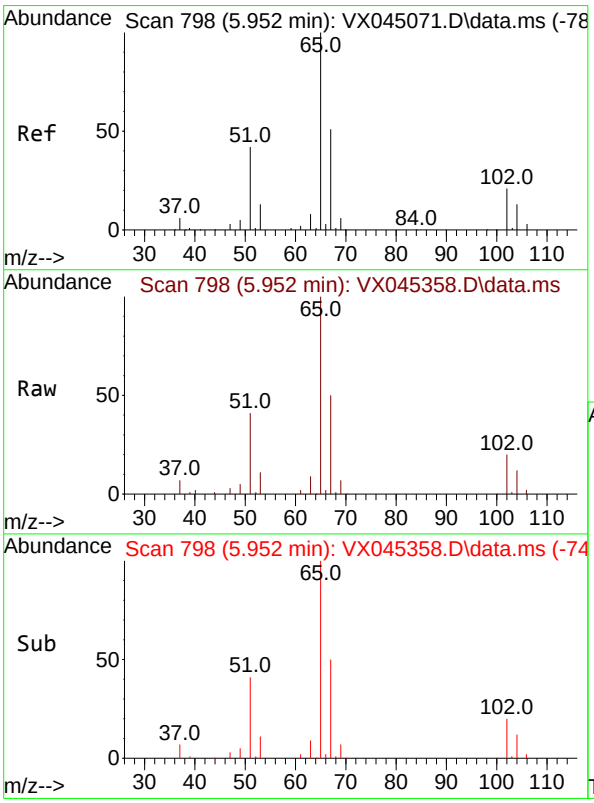


#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.544 min Scan# 7
Delta R.T. -0.006 min
Lab File: VX045358.D
Acq: 20 Mar 2025 14:03

Tgt Ion:168 Resp: 67006

Ion	Ratio	Lower	Upper
168	100		
99	68.4	48.2	72.4

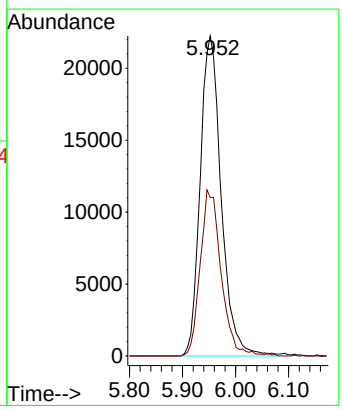


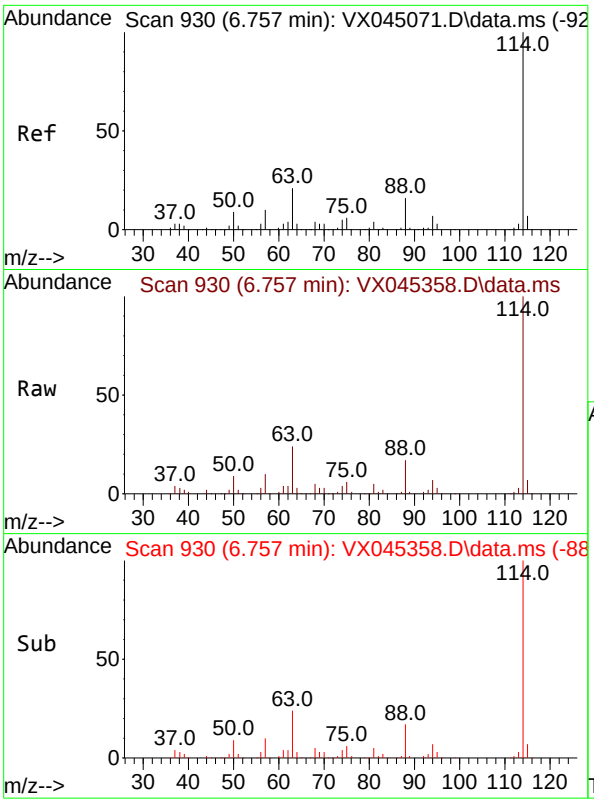


#33
1,2-Dichloroethane-d4
Concen: 57.319 ug/l
RT: 5.952 min Scan# 798
Delta R.T. -0.000 min
Lab File: VX045358.D
Acq: 20 Mar 2025 14:03

Tgt Ion: 65 Resp: 61092

Ion	Ratio	Lower	Upper
65	100		
67	51.4	0.0	106.2



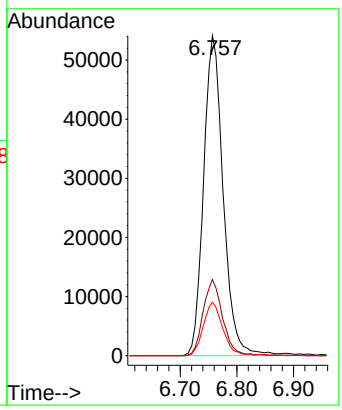


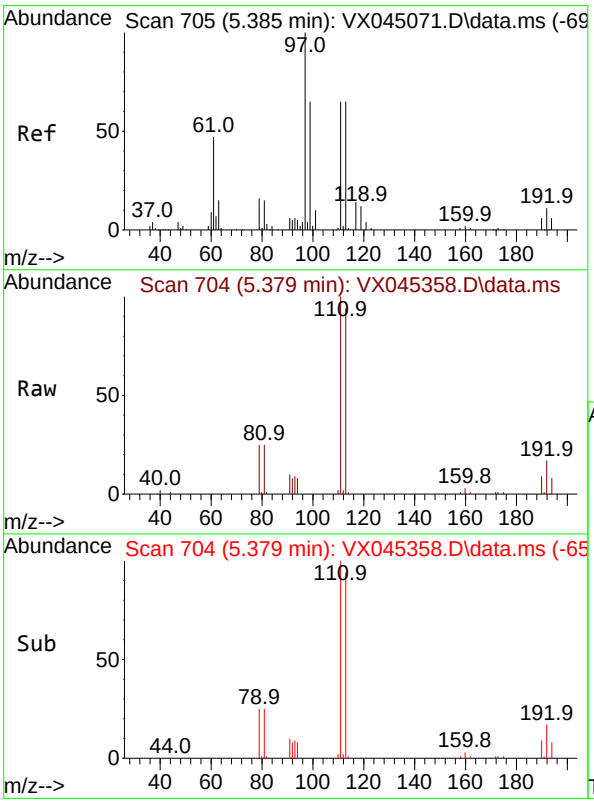
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.757 min Scan# 9
Delta R.T. -0.000 min
Lab File: VX045358.D
Acq: 20 Mar 2025 14:03

Instrument :
MSVOA_X
ClientSampleId :
Storage-Blank-WATER-REF-4

Tgt Ion:114 Resp: 129802

Ion	Ratio	Lower	Upper
114	100		
63	23.8	0.0	41.8
88	16.8	0.0	32.8

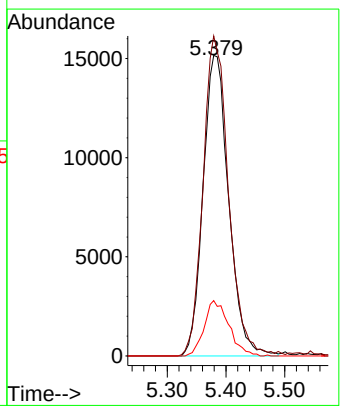


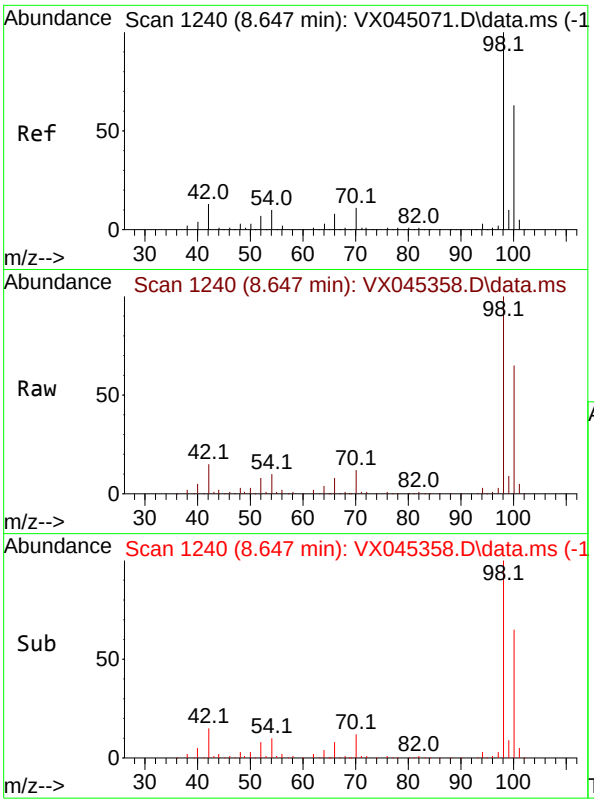


#35
Dibromofluoromethane
Concen: 53.018 ug/l
RT: 5.379 min Scan# 704
Delta R.T. -0.006 min
Lab File: VX045358.D
Acq: 20 Mar 2025 14:03

Tgt Ion:113 Resp: 46017

Ion	Ratio	Lower	Upper
113	100		
111	105.7	81.8	122.6
192	17.7	14.3	21.5



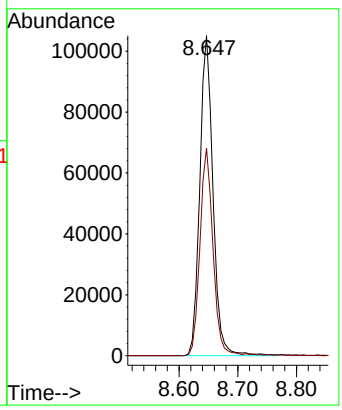


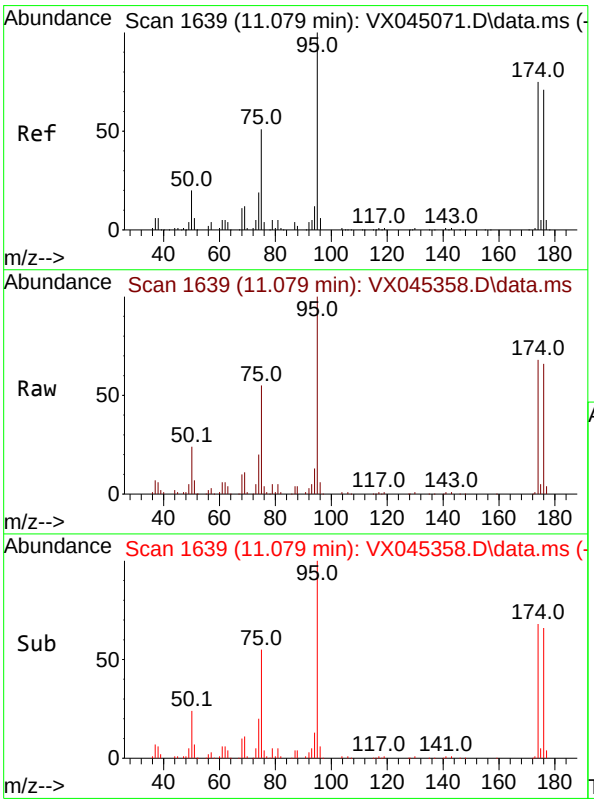
#50
Toluene-d8
Concen: 52.155 ug/l
RT: 8.647 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045358.D
Acq: 20 Mar 2025 14:03

Instrument :
MSVOA_X
ClientSampleId :
Storage-Blank-WATER-REF-4

Tgt Ion: 98 Resp: 164112

Ion	Ratio	Lower	Upper
98	100		
100	63.8	52.0	78.0

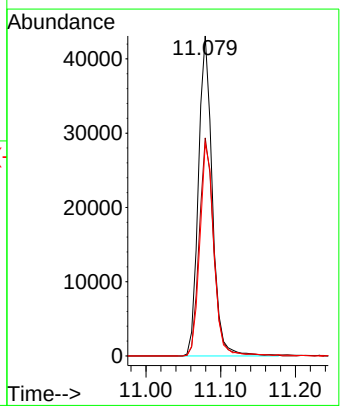


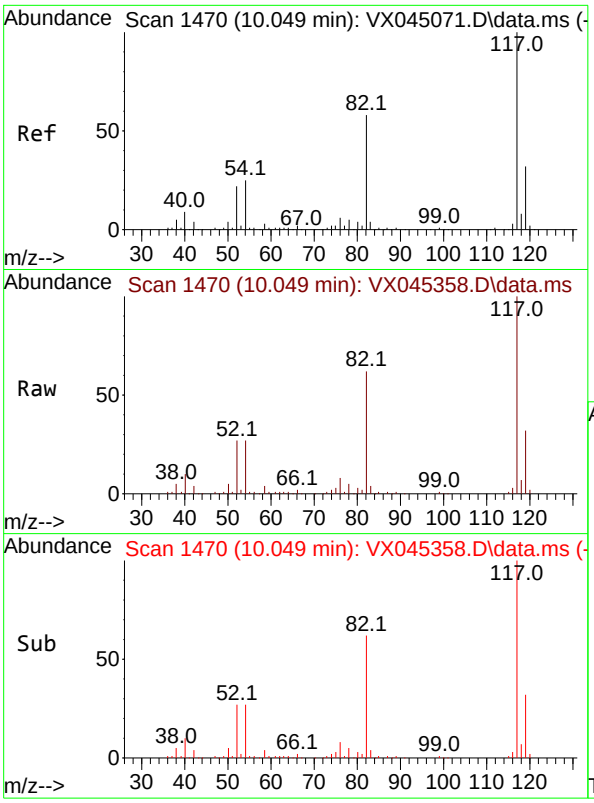


#62
4-Bromofluorobenzene
Concen: 53.391 ug/l
RT: 11.079 min Scan# 1639
Delta R.T. -0.000 min
Lab File: VX045358.D
Acq: 20 Mar 2025 14:03

Tgt Ion: 95 Resp: 55671

Ion	Ratio	Lower	Upper
95	100		
174	70.0	0.0	148.2
176	67.3	0.0	141.4



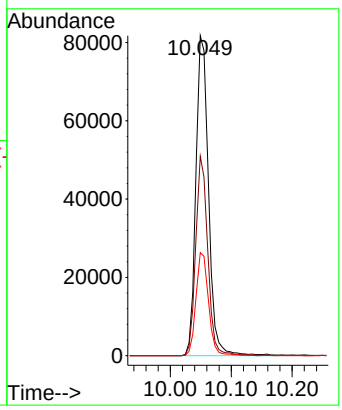


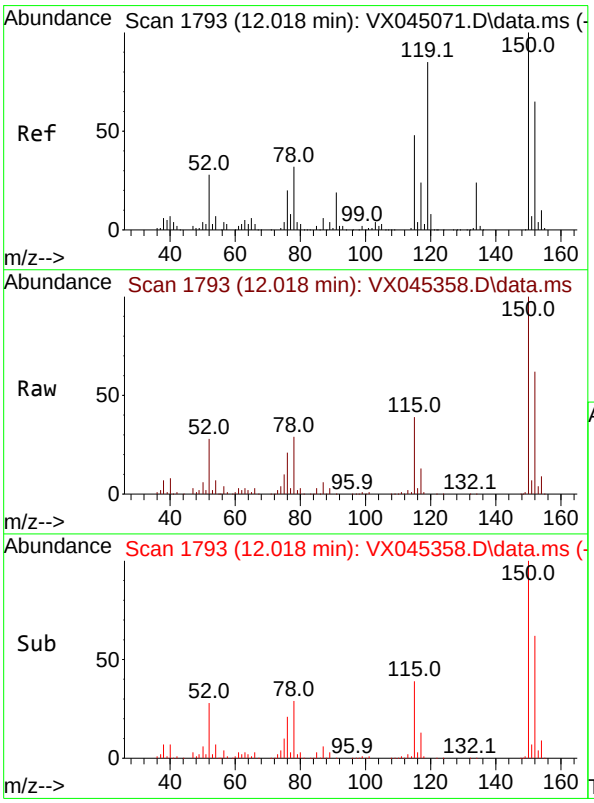
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.049 min Scan# 14
Delta R.T. -0.000 min
Lab File: VX045358.D
Acq: 20 Mar 2025 14:03

Instrument :
MSVOA_X
ClientSampleId :
Storage-Blank-WATER-REF-4

Tgt Ion:117 Resp: 117724

Ion	Ratio	Lower	Upper
117	100		
82	62.4	46.3	69.5
119	32.2	25.7	38.5

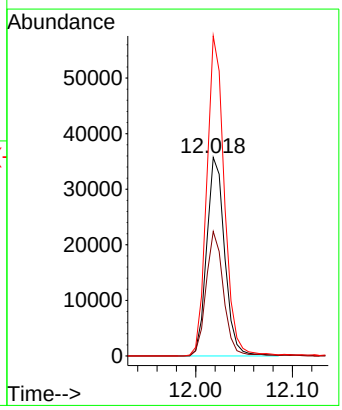




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.018 min Scan# 1793
Delta R.T. -0.000 min
Lab File: VX045358.D
Acq: 20 Mar 2025 14:03

Tgt Ion:152 Resp: 46278

Ion	Ratio	Lower	Upper
152	100		
115	61.0	44.2	132.6
150	158.7	0.0	349.0



Raw Data: **VX045359.D**

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

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	03/14/25
Project:	Weekly Storage Blanks	Date Received:	03/14/25
Client Sample ID:	Storage-Blank-SAMPLE-MANAGEMENT	SDG No.:	Q1584
Lab Sample ID:	Q1584-04	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC- Chemtech Full
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045359.D	1		03/20/25 14:26	VX032025

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
141-78-6	Ethyl Acetate	0.31	U	0.31	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
75-65-0	Tert butyl alcohol	5.50	UQ	5.50	25.0	ug/L
75-35-4	1,1-Dichloroethene	0.23	U	0.23	1.00	ug/L
107-02-8	Acrolein	7.10	UQ	7.10	25.0	ug/L
107-13-1	Acrylonitrile	0.83	U	0.83	5.00	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	UQ	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
108-05-4	Vinyl Acetate	0.66	U	0.66	5.00	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
594-20-7	2,2-Dichloropropane	0.21	UQ	0.21	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
563-58-6	1,1-Dichloropropene	0.15	U	0.15	1.00	ug/L

Raw Data: **VX045359.D**

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

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	03/14/25
Project:	Weekly Storage Blanks	Date Received:	03/14/25
Client Sample ID:	Storage-Blank-SAMPLE-MANAGEMENT	SDG No.:	Q1584
Lab Sample ID:	Q1584-04	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC- Chemtech Full
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045359.D	1		03/20/25 14:26	VX032025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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
74-95-3	Dibromomethane	0.25	U	0.25	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
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
142-28-9	1,3-Dichloropropane	0.19	U	0.19	1.00	ug/L
110-75-8	2-Chloroethyl Vinyl ether	0.30	U	0.30	5.00	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
630-20-6	1,1,1,2-Tetrachloroethane	0.19	U	0.19	1.00	ug/L
67-72-1	Hexachloroethane	0.32	U	0.32	0	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
96-18-4	1,2,3-Trichloropropane	0.35	U	0.35	1.00	ug/L
108-86-1	Bromobenzene	0.24	U	0.24	1.00	ug/L
103-65-1	n-propylbenzene	0.13	U	0.13	1.00	ug/L
95-49-8	2-Chlorotoluene	0.14	U	0.14	1.00	ug/L

Raw Data: **VX045359.D**

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

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	03/14/25
Project:	Weekly Storage Blanks	Date Received:	03/14/25
Client Sample ID:	Storage-Blank-SAMPLE-MANAGEMENT	SDG No.:	Q1584
Lab Sample ID:	Q1584-04	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC- Chemtech Full
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045359.D	1		03/20/25 14:26	VX032025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
108-67-8	1,3,5-Trimethylbenzene	0.15	U	0.15	1.00	ug/L
106-43-4	4-Chlorotoluene	0.13	U	0.13	1.00	ug/L
98-06-6	tert-Butylbenzene	0.14	U	0.14	1.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.14	U	0.14	1.00	ug/L
135-98-8	sec-Butylbenzene	0.13	U	0.13	1.00	ug/L
99-87-6	p-Isopropyltoluene	0.13	U	0.13	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
104-51-8	n-Butylbenzene	0.15	U	0.15	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
87-68-3	Hexachlorobutadiene	0.30	U	0.30	1.00	ug/L
91-20-3	Naphthalene	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	56.0		74 - 125	112%	SPK: 50
1868-53-7	Dibromofluoromethane	52.2		75 - 124	104%	SPK: 50
2037-26-5	Toluene-d8	51.4		86 - 113	103%	SPK: 50
460-00-4	4-Bromofluorobenzene	53.0		77 - 121	106%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	70100	5.55			
540-36-3	1,4-Difluorobenzene	139000	6.757			
3114-55-4	Chlorobenzene-d5	128000	10.049			
3855-82-1	1,4-Dichlorobenzene-d4	51000	12.024			

Raw Data: **VX045359.D**

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

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	03/14/25
Project:	Weekly Storage Blanks	Date Received:	03/14/25
Client Sample ID:	Storage-Blank-SAMPLE-MANAGEMENT	SDG No.:	Q1584
Lab Sample ID:	Q1584-04	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC- Chemtech Full
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045359.D	1		03/20/25 14:26	VX032025

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\VX032025\
Data File : VX045359.D
Acq On : 20 Mar 2025 14:26
Operator : JC/MD
Sample : Q1584-04
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 14 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
Storage-Blank-SAMPLE-MANAGEMENT

Quant Time: Mar 21 01:48:26 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

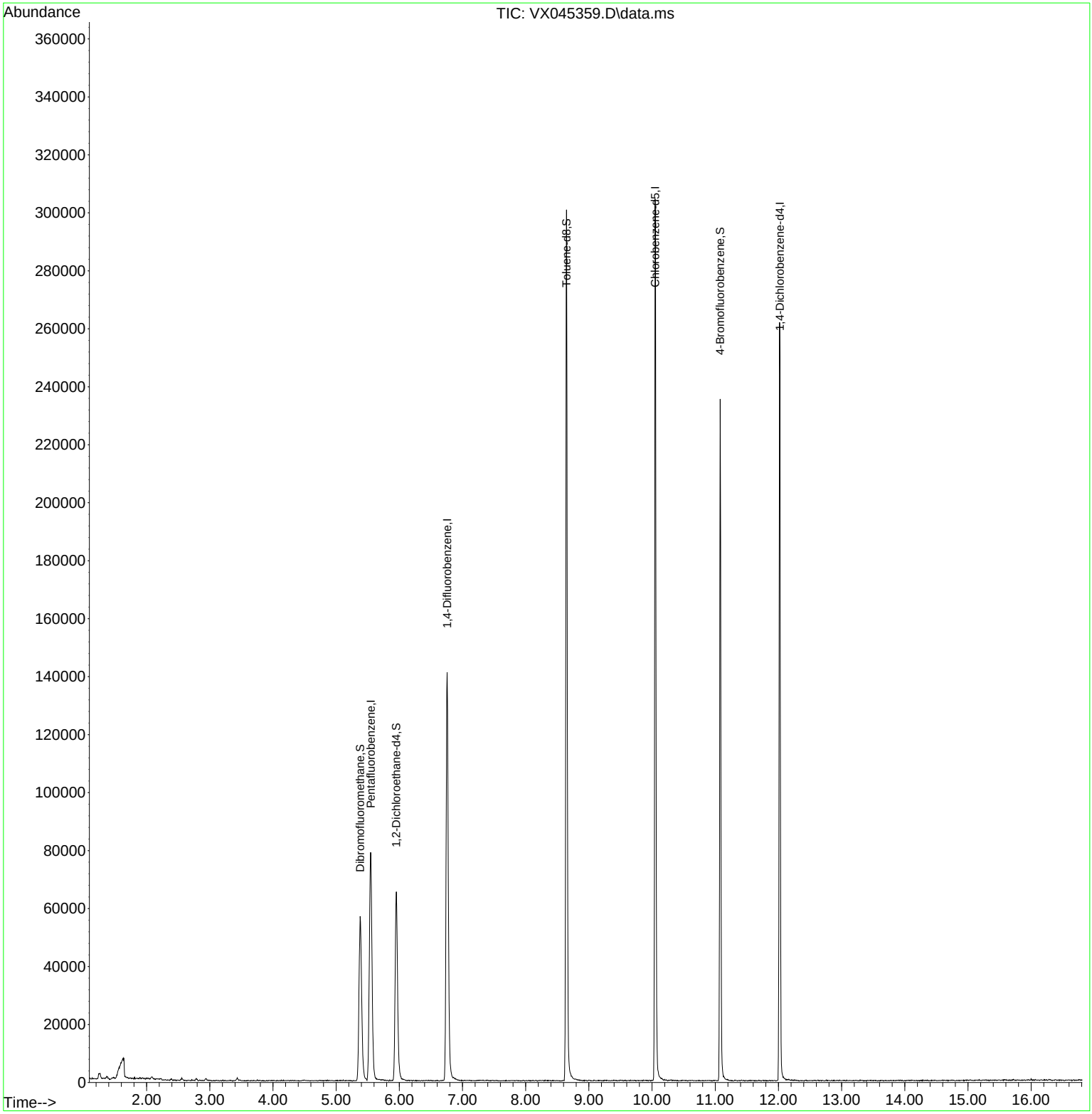
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.550	168	70067	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.757	114	138915	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.049	117	128357	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.024	152	51018	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.952	65	62464	56.046	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 112.100%			
35) Dibromofluoromethane	5.379	113	48461	52.171	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 104.340%			
50) Toluene-d8	8.647	98	173128	51.411	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 102.820%			
62) 4-Bromofluorobenzene	11.079	95	59162	53.017	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 106.040%			
Target Compounds						Qvalue

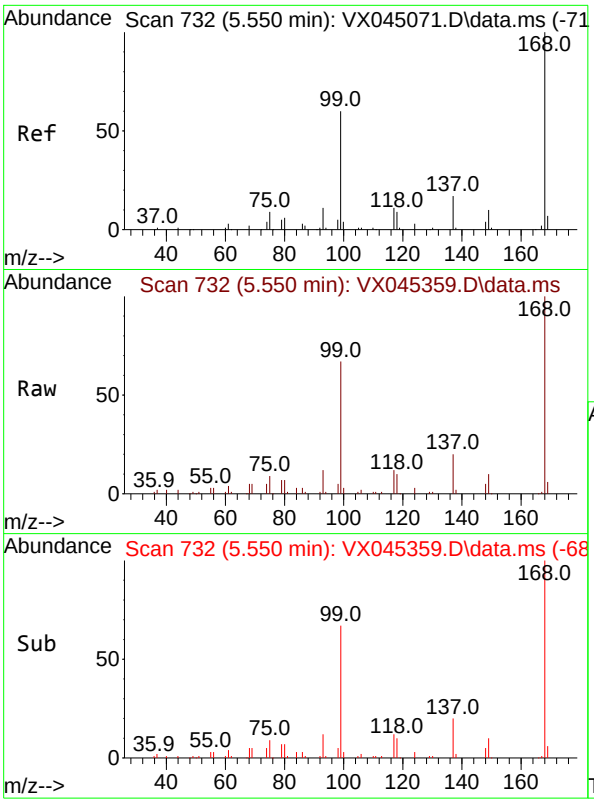
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032025\
Data File : VX045359.D
Acq On : 20 Mar 2025 14:26
Operator : JC/MD
Sample : Q1584-04
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 14 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
Storage-Blank-SAMPLE-MANAGEMENT

Quant Time: Mar 21 01:48:26 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration



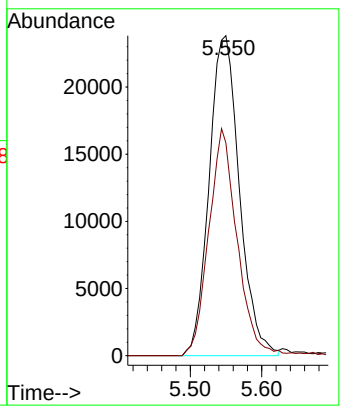


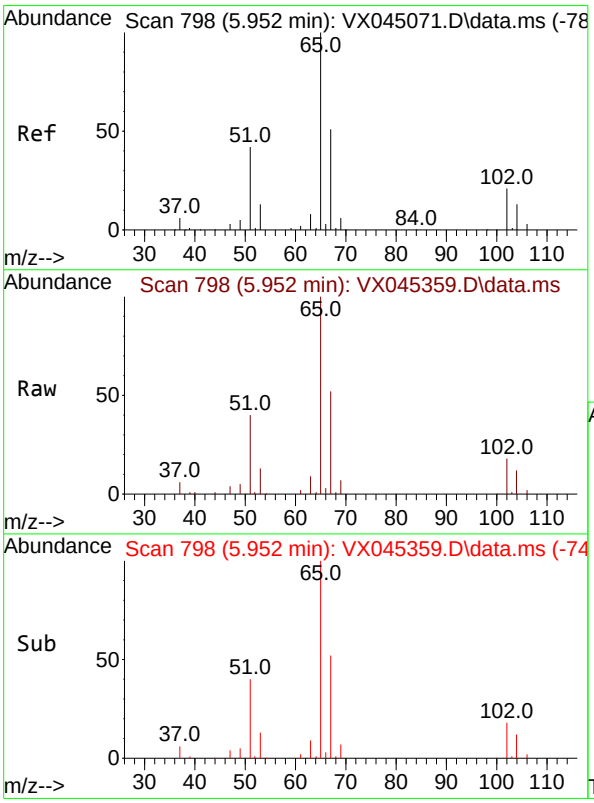
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.550 min Scan# 7
Delta R.T. -0.000 min
Lab File: VX045359.D
Acq: 20 Mar 2025 14:26

Instrument :
MSVOA_X
ClientSampleId :
Storage-Blank-SAMPLE-MANAGEMENT

Tgt Ion:168 Resp: 70067

Ion	Ratio	Lower	Upper
168	100		
99	66.5	48.2	72.4

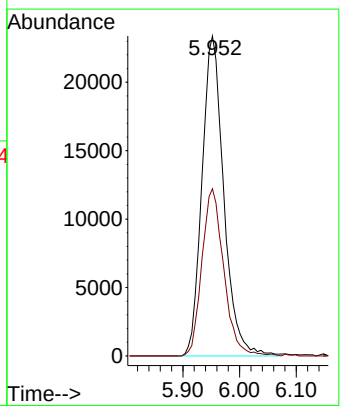


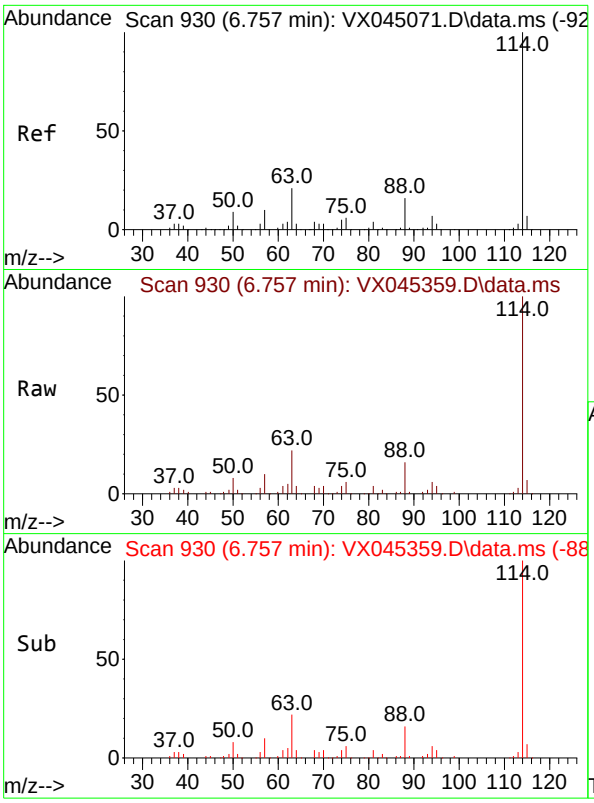


#33
1,2-Dichloroethane-d4
Concen: 56.046 ug/l
RT: 5.952 min Scan# 798
Delta R.T. -0.000 min
Lab File: VX045359.D
Acq: 20 Mar 2025 14:26

Tgt Ion: 65 Resp: 62464

Ion	Ratio	Lower	Upper
65	100		
67	52.5	0.0	106.2



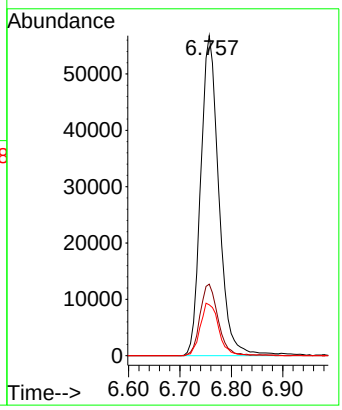


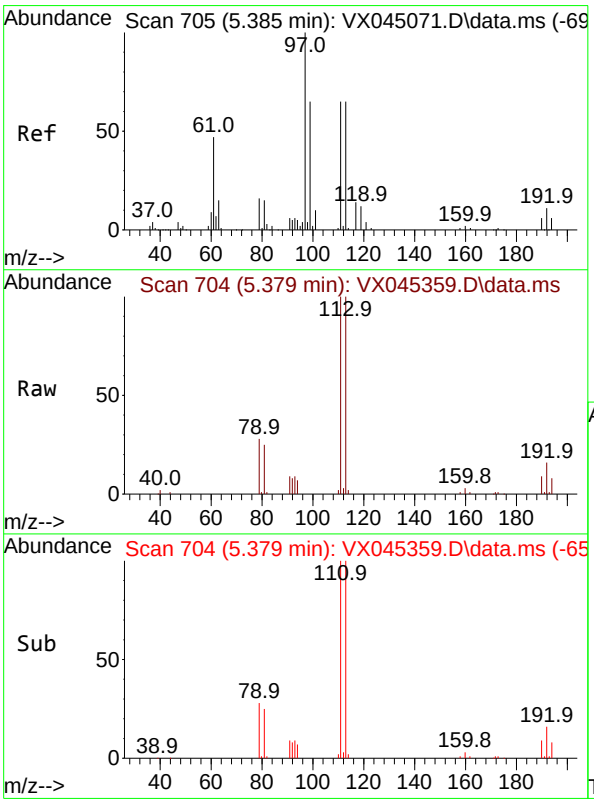
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.757 min Scan# 9
Delta R.T. -0.000 min
Lab File: VX045359.D
Acq: 20 Mar 2025 14:26

Instrument :
MSVOA_X
ClientSampleId :
Storage-Blank-SAMPLE-MANAGEMENT

Tgt Ion:114 Resp: 138915

Ion	Ratio	Lower	Upper
114	100		
63	22.3	0.0	41.8
88	15.9	0.0	32.8

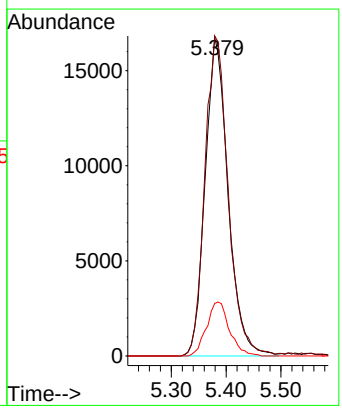


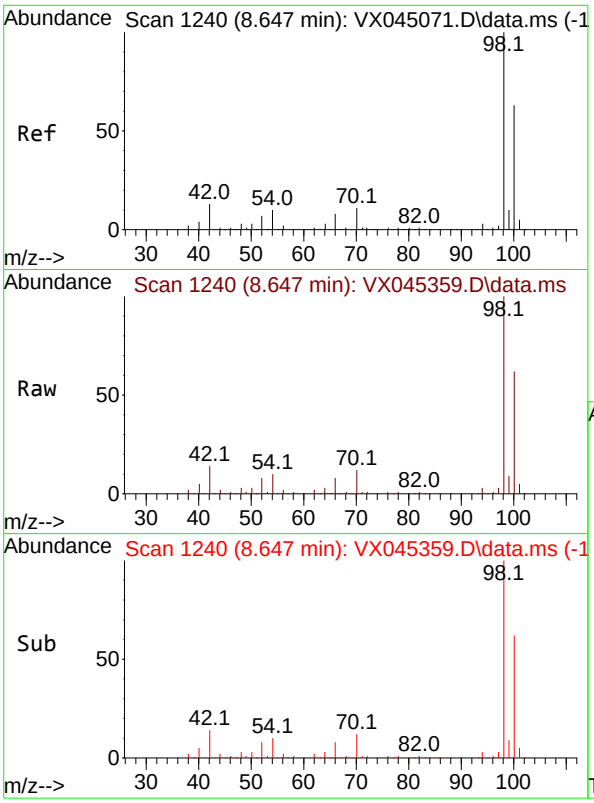


#35
Dibromofluoromethane
Concen: 52.171 ug/l
RT: 5.379 min Scan# 704
Delta R.T. -0.006 min
Lab File: VX045359.D
Acq: 20 Mar 2025 14:26

Tgt Ion:113 Resp: 48461

Ion	Ratio	Lower	Upper
113	100		
111	102.4	81.8	122.6
192	17.0	14.3	21.5



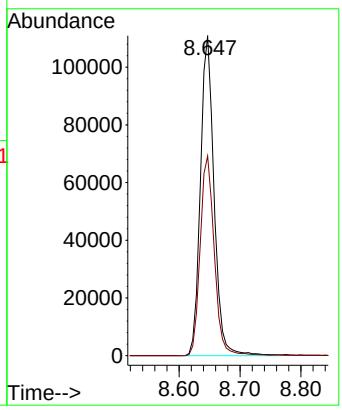


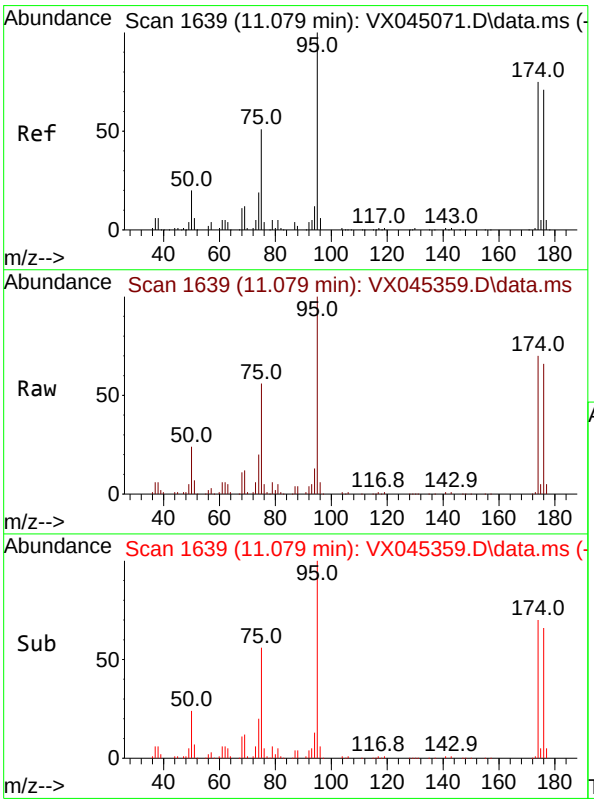
#50
Toluene-d8
Concen: 51.411 ug/l
RT: 8.647 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045359.D
Acq: 20 Mar 2025 14:26

Instrument :
MSVOA_X
ClientSampleId :
Storage-Blank-SAMPLE-MANAGEMENT

Tgt Ion: 98 Resp: 173128

Ion	Ratio	Lower	Upper
98	100		
100	64.4	52.0	78.0

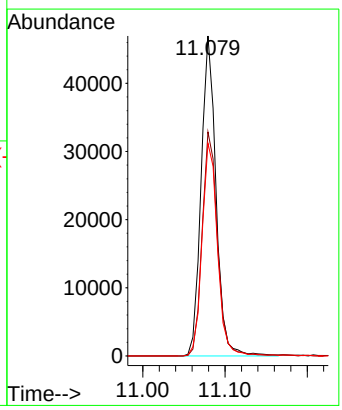


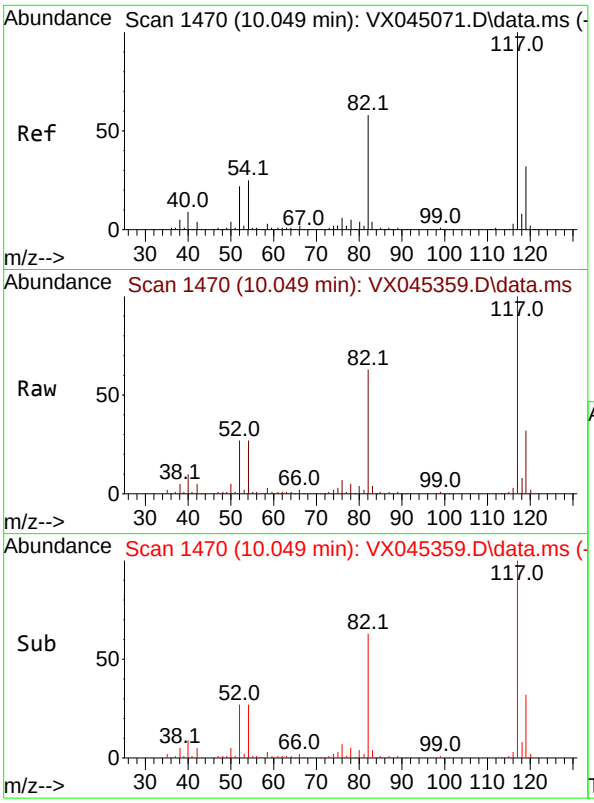


#62
4-Bromofluorobenzene
Concen: 53.017 ug/l
RT: 11.079 min Scan# 1639
Delta R.T. -0.000 min
Lab File: VX045359.D
Acq: 20 Mar 2025 14:26

Tgt Ion: 95 Resp: 59162

Ion	Ratio	Lower	Upper
95	100		
174	72.2	0.0	148.2
176	68.8	0.0	141.4



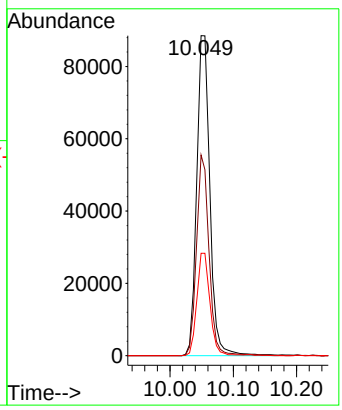


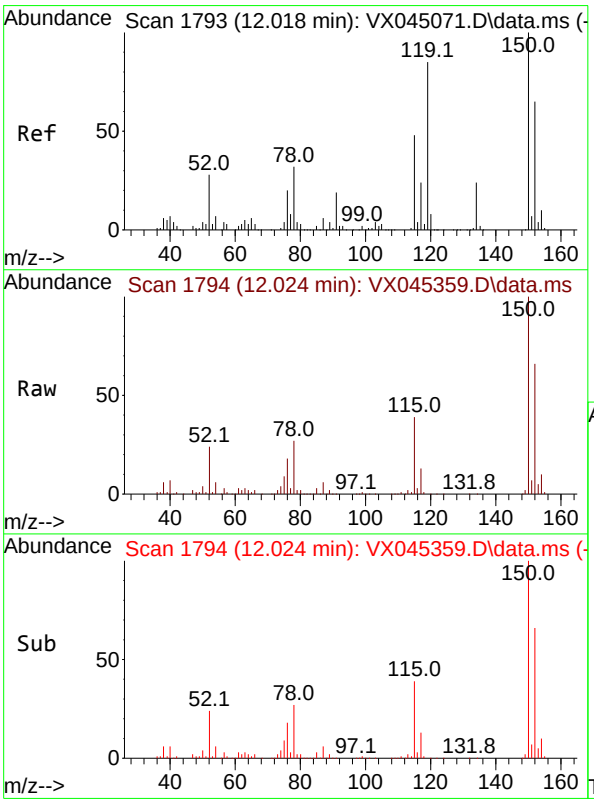
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.049 min Scan# 14
Delta R.T. -0.000 min
Lab File: VX045359.D
Acq: 20 Mar 2025 14:26

Instrument :
MSVOA_X
ClientSampleId :
Storage-Blank-SAMPLE-MANAGEMENT

Tgt Ion:117 Resp: 128357

Ion	Ratio	Lower	Upper
117	100		
82	62.7	46.3	69.5
119	32.0	25.7	38.5

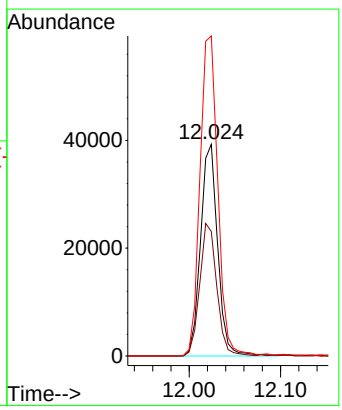




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.024 min Scan# 1794
Delta R.T. 0.006 min
Lab File: VX045359.D
Acq: 20 Mar 2025 14:26

Tgt Ion:152 Resp: 51018

Ion	Ratio	Lower	Upper
152	100		
115	62.4	44.2	132.6
150	157.7	0.0	349.0



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: CHEM02

Lab Code: CHEM Case No.: Q1584 SAS No.: Q1584 SDG No.: Q1584

Instrument ID: MSVOA_X Calibration Date(s): 02/28/2025 02/28/2025

Heated Purge: (Y/N) N Calibration Time(s): 01:27 03:47

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

LAB FILE ID: RRF001 = VX045068.D RRF005 = VX045069.D RRF020 = VX045070.D
RRF050 = VX045071.D RRF100 = VX045072.D RRF150 = VX045073.D

COMPOUND	RRF001	RRF005	RRF020	RRF050	RRF100	RRF150	$\overline{RRF}$	% RSD
Dichlorodifluoromethane	0.624	0.646	0.646	0.627	0.626	0.607	0.629	2.4
Chloromethane	0.755	0.821	0.828	0.753	0.721	0.744	0.770	5.7
Vinyl Chloride	0.773	0.755	0.774	0.761	0.765	0.758	0.764	1
Ethyl Acetate	0.589	0.538	0.607	0.606	0.609	0.596	0.591	4.5
Bromomethane		0.337	0.298	0.292	0.284	0.291	0.300	7
Chloroethane	0.373	0.421	0.366	0.373	0.297	0.286	0.352	14.5
Trichlorofluoromethane	0.978	1.061	1.050	1.050	0.982	0.948	1.012	4.7
1,1,2-Trichlorotrifluoroethane	0.526	0.613	0.595	0.594	0.596	0.563	0.581	5.4
Tert butyl alcohol		0.189	0.161	0.134	0.133	0.136	0.151	16.2
1,1-Dichloroethene	0.609	0.620	0.612	0.623	0.620	0.603	0.614	1.3
Acrolein		0.162	0.173	0.174	0.178	0.184	0.174	4.5
Acrylonitrile	0.396	0.398	0.432	0.410	0.387	0.399	0.404	3.9
Acetone	0.414	0.363	0.384	0.351	0.345	0.356	0.369	7
Carbon Disulfide	1.584	1.582	1.587	1.660	1.708	1.698	1.636	3.6
Methyl tert-butyl Ether	1.955	1.913	2.127	2.083	2.132	2.158	2.061	5
Methyl Acetate	0.954	0.835	0.903	0.867	0.869	0.899	0.888	4.6
Methylene Chloride	0.806	0.730	0.752	0.698	0.694	0.706	0.731	5.8
trans-1,2-Dichloroethene	0.540	0.619	0.603	0.631	0.634	0.616	0.607	5.7
Vinyl Acetate	1.486	1.655	1.961	1.973	2.012	2.049	1.856	12.4
1,1-Dichloroethane	1.200	1.223	1.280	1.242	1.270	1.264	1.247	2.5
Cyclohexane		1.021	1.087	1.108	1.142	1.052	1.082	4.3
2-Butanone	0.476	0.545	0.610	0.579	0.553	0.570	0.555	8.1
Carbon Tetrachloride	0.463	0.463	0.447	0.468	0.489	0.463	0.465	3
2,2-Dichloropropane	0.519	0.562	0.588	0.597	0.617	0.626	0.585	6.7
cis-1,2-Dichloroethene	0.687	0.746	0.765	0.762	0.767	0.769	0.749	4.2
Bromochloromethane	0.557	0.633	0.613	0.603	0.563	0.596	0.594	5
Chloroform	1.206	1.247	1.278	1.246	1.230	1.225	1.239	2
1,1,1-Trichloroethane	0.908	0.992	1.009	1.024	1.044	1.025	1.000	4.8
Methylcyclohexane	0.464	0.530	0.560	0.585	0.607	0.550	0.549	9.1
1,1-Dichloropropene	0.446	0.462	0.444	0.469	0.476	0.455	0.459	2.8

* 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

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: CHEM02

Lab Code: CHEM Case No.: Q1584 SAS No.: Q1584 SDG No.: Q1584

Instrument ID: MSVOA_X Calibration Date(s): 02/28/2025 02/28/2025

Heated Purge: (Y/N) N Calibration Time(s): 01:27 03:47

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

LAB FILE ID: RRF001 = VX045068.D RRF005 = VX045069.D RRF020 = VX045070.D
RRF050 = VX045071.D RRF100 = VX045072.D RRF150 = VX045073.D

COMPOUND	RRF001	RRF005	RRF020	RRF050	RRF100	RRF150	$\overline{RRF}$	% RSD
Benzene	1.321	1.459	1.491	1.496	1.497	1.424	1.448	4.7
1,2-Dichloroethane	0.487	0.525	0.545	0.528	0.524	0.520	0.521	3.6
Trichloroethene	0.319	0.351	0.339	0.341	0.354	0.336	0.340	3.7
1,2-Dichloropropane	0.354	0.378	0.382	0.371	0.376	0.373	0.372	2.7
Dibromomethane	0.236	0.265	0.272	0.269	0.269	0.268	0.263	5.1
Bromodichloromethane	0.478	0.503	0.536	0.524	0.528	0.528	0.516	4.2
4-Methyl-2-Pentanone	0.535	0.570	0.647	0.610	0.579	0.579	0.587	6.5
Toluene	0.716	0.872	0.892	0.898	0.874	0.845	0.849	8
t-1,3-Dichloropropene	0.304	0.389	0.436	0.469	0.490	0.502	0.431	17.3
cis-1,3-Dichloropropene	0.404	0.463	0.509	0.535	0.555	0.553	0.503	11.8
1,1,2-Trichloroethane	0.346	0.348	0.371	0.356	0.341	0.336	0.350	3.6
1,3-Dichloropropane	0.560	0.623	0.643	0.620	0.597	0.588	0.605	4.9
2-Chloroethyl Vinyl ether	0.218	0.239	0.271	0.284	0.273	0.270	0.259	9.7
2-Hexanone	0.349	0.412	0.476	0.448	0.431	0.436	0.425	10.1
Dibromochloromethane	0.305	0.349	0.390	0.384	0.385	0.380	0.366	9
1,2-Dibromoethane	0.311	0.352	0.371	0.356	0.355	0.350	0.349	5.7
Tetrachloroethene	0.315	0.326	0.319	0.324	0.329	0.309	0.320	2.3
Chlorobenzene	0.968	1.054	1.090	1.092	1.100	1.045	1.058	4.7
1,1,1,2-Tetrachloroethane	0.337	0.331	0.357	0.356	0.372	0.362	0.352	4.4
Hexachloroethane	0.470	0.498	0.568	0.605	0.633	0.633	0.568	12.3
Ethyl Benzene	1.566	1.794	1.889	1.952	1.972	1.888	1.843	8.1
m/p-Xylenes	0.555	0.672	0.711	0.724	0.715	0.673	0.675	9.3
o-Xylene	0.609	0.689	0.702	0.706	0.707	0.670	0.681	5.5
Styrene	0.879	1.060	1.170	1.181	1.183	1.134	1.101	10.7
Bromoform	0.209	0.234	0.276	0.276	0.300	0.300	0.266	13.9
Isopropylbenzene	3.397	4.034	3.999	4.135	4.006	3.845	3.903	6.8
1,1,2,2-Tetrachloroethane	1.395	1.479	1.513	1.419	1.391	1.396	1.432	3.6
1,2,3-Trichloropropane	1.181	1.201	1.193	1.147	1.131	1.130	1.164	2.7
Bromobenzene	0.899	0.947	0.939	0.939	0.910	0.891	0.921	2.6
n-propylbenzene	3.451	4.375	4.577	4.805	4.696	4.548	4.409	11.1

* 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

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284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: CHEM02

Lab Code: CHEM Case No.: Q1584 SAS No.: Q1584 SDG No.: Q1584

Instrument ID: MSVOA_X Calibration Date(s): 02/28/2025 02/28/2025

Heated Purge: (Y/N) N Calibration Time(s): 01:27 03:47

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

LAB FILE ID: RRF001 = VX045068.D RRF005 = VX045069.D RRF020 = VX045070.D
RRF050 = VX045071.D RRF100 = VX045072.D RRF150 = VX045073.D

COMPOUND	RRF001	RRF005	RRF020	RRF050	RRF100	RRF150	$\overline{RRF}$	% RSD
2-Chlorotoluene	2.788	2.888	2.828	2.869	2.770	2.702	2.808	2.4
1,3,5-Trimethylbenzene	2.611	3.211	3.373	3.384	3.224	3.131	3.156	9
4-Chlorotoluene	2.800	3.015	3.078	3.234	3.140	3.092	3.060	4.8
tert-Butylbenzene	3.029	3.256	3.342	3.375	3.292	3.160	3.242	4
1,2,4-Trimethylbenzene	2.646	3.202	3.380	3.378	3.258	3.188	3.175	8.6
sec-Butylbenzene	3.000	3.847	4.137	4.215	4.125	3.978	3.884	11.6
p-Isopropyltoluene	2.511	2.986	3.266	3.424	3.369	3.275	3.139	10.9
1,3-Dichlorobenzene	1.502	1.652	1.710	1.668	1.675	1.649	1.643	4.4
1,4-Dichlorobenzene	1.605	1.702	1.665	1.687	1.669	1.643	1.662	2.1
n-Butylbenzene	1.905	2.359	2.788	3.013	3.099	3.057	2.703	17.7
1,2-Dichlorobenzene	1.479	1.695	1.735	1.668	1.687	1.622	1.648	5.5
1,2-Dibromo-3-Chloropropane	0.237	0.243	0.285	0.289	0.300	0.320	0.279	11.6
1,2,4-Trichlorobenzene	0.668	0.821	0.978	1.009	1.074	1.080	0.938	17.3
Hexachlorobutadiene	0.356	0.369	0.390	0.392	0.406	0.395	0.385	4.8
Naphthalene	2.573	3.115	3.866	3.902	4.091	4.082	3.605	17.2
1,2,3-Trichlorobenzene	0.747	0.897	1.032	1.059	1.107	1.096	0.990	14.2
1,2-Dichloroethane-d4		0.836	0.784	0.757	0.783	0.817	0.795	3.9
Dibromofluoromethane		0.329	0.335	0.329	0.340	0.338	0.334	1.5
Toluene-d8		1.237	1.191	1.210	1.219	1.203	1.212	1.4
4-Bromofluorobenzene		0.383	0.393	0.402	0.410	0.421	0.402	3.7

* 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 : 82X022825W.M
Title : SW846 8260
Last Update : Fri Feb 28 06:45:16 2025
Response Via : Initial Calibration

Calibration Files
1 =VX045068.D 5 =VX045069.D 20 =VX045070.D 50 =VX045071.D 100 =VX045072.D 150 =VX045073.D

		Compound	1	5	20	50	100	150	Avg	%RSD
1)	I	Pentafluorobenzene	----------ISTD----------							
2)	T	Dichlorodifluo...	0.624	0.646	0.646	0.627	0.626	0.607	0.629	2.38
3)	P	Chloromethane	0.755	0.821	0.828	0.753	0.721	0.744	0.770	5.68
4)	C	Vinyl Chloride	0.773	0.755	0.774	0.761	0.765	0.758	0.764	1.03#
5)	T	Bromomethane		0.337	0.298	0.292	0.284	0.291	0.300	7.01
6)	T	Chloroethane	0.373	0.421	0.366	0.373	0.297	0.286	0.352	14.54
7)	T	Trichlorofluor...	0.978	1.061	1.050	1.050	0.982	0.948	1.011	4.73
8)	T	Diethyl Ether	0.406	0.402	0.409	0.387	0.387	0.383	0.396	2.83
9)	T	1,1,2-Trichlor...	0.526	0.613	0.595	0.594	0.596	0.563	0.581	5.41
10)	T	Methyl Iodide		0.607	0.758	0.769	0.758	0.739	0.726	9.28
11)	T	Tert butyl alc...		0.189	0.161	0.134	0.133	0.136	0.151	16.19
12)	CM	1,1-Dichloroet...	0.609	0.620	0.612	0.623	0.620	0.603	0.614	1.27#
13)	T	Acrolein		0.162	0.173	0.174	0.178	0.184	0.174	4.53
14)	T	Allyl chloride	1.140	1.047	1.104	1.107	1.091	1.072	1.094	2.92
15)	T	Acrylonitrile	0.396	0.398	0.432	0.410	0.387	0.399	0.404	3.90
16)	T	Acetone	0.414	0.363	0.384	0.351	0.345	0.356	0.369	7.04
17)	T	Carbon Disulfide	1.584	1.582	1.587	1.660	1.708	1.698	1.636	3.62
18)	T	Methyl Acetate	0.954	0.835	0.903	0.867	0.869	0.899	0.888	4.59
19)	T	Methyl tert-bu...	1.955	1.913	2.127	2.083	2.132	2.158	2.061	4.97
20)	T	Methylene Chlo...	0.806	0.730	0.752	0.698	0.694	0.706	0.731	5.84
21)	T	trans-1,2-Dich...	0.540	0.619	0.603	0.631	0.634	0.616	0.607	5.73
22)	T	Diisopropyl ether	1.959	2.156	2.321	2.291	2.310	2.307	2.224	6.46
23)	T	Vinyl Acetate	1.486	1.655	1.961	1.973	2.012	2.049	1.856	12.38
24)	P	1,1-Dichloroet...	1.200	1.223	1.280	1.242	1.270	1.264	1.247	2.45
25)	T	2-Butanone	0.476	0.545	0.610	0.579	0.553	0.570	0.555	8.09
26)	T	2,2-Dichloropr...	0.519	0.562	0.588	0.597	0.617	0.626	0.585	6.74
27)	T	cis-1,2-Dichlo...	0.687	0.746	0.765	0.762	0.767	0.769	0.749	4.21
28)	T	Bromochloromet...	0.557	0.633	0.613	0.603	0.563	0.596	0.594	4.97
29)	T	Tetrahydrofuran	0.362	0.376	0.398	0.373	0.361	0.368	0.373	3.61
30)	C	Chloroform	1.206	1.247	1.278	1.246	1.230	1.225	1.239	1.97#
31)	T	Cyclohexane		1.021	1.087	1.108	1.142	1.052	1.082	4.35
32)	T	1,1,1-Trichlor...	0.908	0.992	1.009	1.024	1.044	1.025	1.000	4.83
33)	S	1,2-Dichloroet...		0.836	0.784	0.757	0.783	0.817	0.795	3.91
34)	I	1,4-Difluorobenzene	----------ISTD----------							
35)	S	Dibromofluorom...		0.329	0.335	0.329	0.340	0.338	0.334	1.53
36)	T	1,1-Dichloropr...	0.446	0.462	0.444	0.469	0.476	0.455	0.459	2.77
37)	T	Ethyl Acetate	0.589	0.538	0.607	0.606	0.609	0.596	0.591	4.53
38)	T	Carbon Tetrach...	0.463	0.463	0.447	0.468	0.489	0.463	0.465	2.96
39)	T	Methylcyclohexane	0.464	0.530	0.560	0.585	0.607	0.550	0.549	9.07
40)	TM	Benzene	1.321	1.459	1.491	1.496	1.497	1.424	1.448	4.72
41)	T	Methacrylonitrile	0.284	0.293	0.337	0.340	0.332	0.330	0.319	7.59
42)	TM	1,2-Dichloroet...	0.487	0.525	0.545	0.528	0.524	0.520	0.521	3.63
43)	T	Isopropyl Acetate	0.675	0.800	0.940	0.929	0.935	0.964	0.874	12.98
44)	TM	Trichloroethene	0.319	0.351	0.339	0.341	0.354	0.336	0.340	3.72
45)	C	1,2-Dichloropr...	0.354	0.378	0.382	0.371	0.376	0.373	0.372	2.68#
46)	T	Dibromomethane	0.236	0.265	0.272	0.269	0.269	0.268	0.263	5.10
47)	T	Bromodichlorom...	0.478	0.503	0.536	0.524	0.528	0.528	0.516	4.23
48)	T	Methyl methacr...	0.352	0.422	0.460	0.463	0.458	0.475	0.438	10.46
49)	T	1,4-Dioxane	0.008	0.009	0.010	0.009	0.009	0.009	0.009	6.46
50)	S	Toluene-d8		1.237	1.191	1.210	1.219	1.203	1.212	1.43
51)	T	4-Methyl-2-Pen...	0.535	0.570	0.647	0.610	0.579	0.579	0.587	6.52
52)	CM	Toluene	0.716	0.872	0.892	0.898	0.874	0.845	0.849	8.03#
53)	T	t-1,3-Dichloro...	0.304	0.389	0.436	0.469	0.490	0.502	0.431	17.30
54)	T	cis-1,3-Dichlo...	0.404	0.463	0.509	0.535	0.555	0.553	0.503	11.80
55)	T	1,1,2-Trichlor...	0.346	0.348	0.371	0.356	0.341	0.336	0.350	3.63
56)	T	Ethyl methacry...	0.396	0.500	0.562	0.570	0.577	0.586	0.532	13.74

Method Path : Z:\voasrv\HPCHEM1\MSVOA_X\Method\
Method File : 82X022825W.M

57)	T	1,3-Dichloropr...	0.560	0.623	0.643	0.620	0.597	0.588	0.605	4.90
58)	T	2-Chloroethyl ...	0.218	0.239	0.271	0.284	0.273	0.270	0.259	9.71
59)	T	2-Hexanone	0.349	0.412	0.476	0.448	0.431	0.436	0.425	10.08
60)	T	Dibromochlorom...	0.305	0.349	0.390	0.384	0.385	0.380	0.366	9.01
61)	T	1,2-Dibromoethane	0.311	0.352	0.371	0.356	0.355	0.350	0.349	5.73
62)	S	4-Bromofluorob...		0.383	0.393	0.402	0.410	0.421	0.402	3.67
63)	I	Chlorobenzene-d5	----------ISTD----------							
64)	T	Tetrachloroethene	0.315	0.326	0.319	0.324	0.329	0.309	0.320	2.33
65)	PM	Chlorobenzene	0.968	1.054	1.090	1.092	1.100	1.045	1.058	4.68
66)	T	1,1,1,2-Tetrac...	0.337	0.331	0.357	0.356	0.372	0.362	0.352	4.39
67)	C	Ethyl Benzene	1.566	1.794	1.889	1.952	1.972	1.888	1.843	8.11#
68)	T	m/p-Xylenes	0.555	0.672	0.711	0.724	0.715	0.673	0.675	9.27
69)	T	o-Xylene	0.609	0.689	0.702	0.706	0.707	0.670	0.681	5.52
70)	T	Styrene	0.879	1.060	1.170	1.181	1.183	1.134	1.101	10.75
71)	P	Bromoform	0.209	0.234	0.276	0.276	0.300	0.300	0.266	13.94
72)	I	1,4-Dichlorobenzen...	----------ISTD----------							
73)	T	Isopropylbenzene	3.397	4.034	3.999	4.135	4.006	3.845	3.903	6.79
74)	T	N-amyl acetate	1.349	1.578	1.890	1.977	2.078	2.116	1.831	16.62
75)	P	1,1,2,2-Tetrac...	1.395	1.479	1.513	1.419	1.391	1.396	1.432	3.60
76)	T	1,2,3-Trichlor...	1.181	1.201	1.193	1.147	1.131	1.130	1.164	2.73
77)	T	Bromobenzene	0.899	0.947	0.939	0.939	0.910	0.891	0.921	2.57
78)	T	n-propylbenzene	3.451	4.375	4.577	4.805	4.696	4.548	4.409	11.14
79)	T	2-Chlorotoluene	2.788	2.888	2.828	2.869	2.770	2.702	2.808	2.45
80)	T	1,3,5-Trimethy...	2.611	3.211	3.373	3.384	3.224	3.131	3.156	9.01
81)	T	trans-1,4-Dich...		0.268	0.313	0.339	0.376	0.405	0.340	15.78
82)	T	4-Chlorotoluene	2.800	3.015	3.078	3.234	3.140	3.092	3.060	4.80
83)	T	tert-Butylbenzene	3.029	3.256	3.342	3.375	3.292	3.160	3.242	3.96
84)	T	1,2,4-Trimethy...	2.646	3.202	3.380	3.378	3.258	3.188	3.175	8.57
85)	T	sec-Butylbenzene	3.000	3.847	4.137	4.215	4.125	3.978	3.884	11.65
86)	T	p-Isopropyltol...	2.511	2.986	3.266	3.424	3.369	3.275	3.139	10.91
87)	T	1,3-Dichlorobe...	1.502	1.652	1.710	1.668	1.675	1.649	1.643	4.40
88)	T	1,4-Dichlorobe...	1.605	1.702	1.665	1.687	1.669	1.643	1.662	2.06
89)	T	n-Butylbenzene	1.905	2.359	2.788	3.013	3.099	3.057	2.703	17.67
90)	T	Hexachloroethane	0.470	0.498	0.568	0.605	0.633	0.633	0.568	12.30
91)	T	1,2-Dichlorobe...	1.479	1.695	1.735	1.668	1.687	1.622	1.648	5.50
92)	T	1,2-Dibromo-3-...	0.237	0.243	0.285	0.289	0.300	0.320	0.279	11.64
93)	T	1,2,4-Trichlor...	0.668	0.821	0.978	1.009	1.074	1.080	0.938	17.32
94)	T	Hexachlorobuta...	0.356	0.369	0.390	0.392	0.406	0.395	0.385	4.77
95)	T	Naphthalene	2.573	3.115	3.866	3.902	4.091	4.082	3.605	17.21
96)	T	1,2,3-Trichlor...	0.747	0.897	1.032	1.059	1.107	1.096	0.990	14.23

(#) = Out of Range

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045068.D
Acq On : 28 Feb 2025 01:27
Operator : JC/MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 16 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

Quant Time: Feb 28 06:28:57 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:18:23 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.550	168	102761	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.757	114	188642	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.049	117	159886	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	64845	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	1.166	85	1282	1.007	ug/l	90
3) Chloromethane	1.301	50	1552	0.975	ug/l	91
4) Vinyl Chloride	1.368	62	1588	1.008	ug/l #	85
6) Chloroethane	1.673	64	766m	0.992	ug/l	
7) Trichlorofluoromethane	1.880	101	2011	0.957	ug/l	97
8) Diethyl Ether	2.130	74	835	1.045	ug/l	80
9) 1,1,2-Trichlorotrifluo...	2.319	101	1081	0.884	ug/l	87
12) 1,1-Dichloroethene	2.313	96	1251	0.991	ug/l	92
14) Allyl chloride	2.660	41	2343	1.055	ug/l	93
15) Acrylonitrile	3.075	53	4067	4.931	ug/l	99
16) Acetone	2.380	43	4259	5.635	ug/l	100
17) Carbon Disulfide	2.502	76	3256	0.956	ug/l #	92
18) Methyl Acetate	2.703	43	1960	1.066	ug/l	93
19) Methyl tert-butyl Ether	3.111	73	4017	0.943	ug/l	91
20) Methylene Chloride	2.782	84	1656	1.095	ug/l	98
21) trans-1,2-Dichloroethene	3.093	96	1109	0.869	ug/l	91
22) Diisopropyl ether	3.764	45	4026	0.871	ug/l #	80
23) Vinyl Acetate	3.727	43	15271	3.971	ug/l	97
24) 1,1-Dichloroethane	3.605	63	2467	0.958	ug/l #	83
25) 2-Butanone	4.587	43	4894	4.252	ug/l	96
26) 2,2-Dichloropropane	4.471	77	1066	0.872	ug/l #	56
27) cis-1,2-Dichloroethene	4.501	96	1412	0.902	ug/l #	19
28) Bromochloromethane	4.885	49	1144	0.958	ug/l #	54
29) Tetrahydrofuran	5.032	42	3719	4.809	ug/l #	34
30) Chloroform	5.093	83	2478	0.978	ug/l	92
32) 1,1,1-Trichloroethane	5.373	97	1867	0.893	ug/l #	52
36) 1,1-Dichloropropene	5.690	75	1681	0.967	ug/l #	84
37) Ethyl Acetate	4.739	43	2223m	0.988	ug/l	
38) Carbon Tetrachloride	5.672	117	1747m	0.987	ug/l	
39) Methylcyclohexane	7.385	83	1750	0.831	ug/l	88
40) Benzene	6.031	78	4984	0.907	ug/l	99
41) Methacrylonitrile	4.958	41	1072m	0.879	ug/l	
42) 1,2-Dichloroethane	6.099	62	1837	0.924	ug/l	78
43) Isopropyl Acetate	6.355	43	2545	0.767	ug/l #	95
44) Trichloroethene	7.129	130	1202	0.933	ug/l	65
45) 1,2-Dichloropropane	7.434	63	1334	0.971	ug/l #	82

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045068.D
Acq On : 28 Feb 2025 01:27
Operator : JC/MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 28 06:28:57 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:18:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) Dibromomethane	7.586	93	891	0.897	ug/l		92
47) Bromodichloromethane	7.818	83	1802	0.927	ug/l	#	85
48) Methyl methacrylate	7.714	41	1328m	0.825	ug/l		
49) 1,4-Dioxane	7.684	88	639	18.144	ug/l	#	81
51) 4-Methyl-2-Pentanone	8.574	43	10091	4.567	ug/l		95
52) Toluene	8.720	92	2700	0.841	ug/l		97
53) t-1,3-Dichloropropene	8.994	75	1147	0.700	ug/l	#	85
54) cis-1,3-Dichloropropene	8.373	75	1525	0.804	ug/l	#	90
55) 1,1,2-Trichloroethane	9.153	97	1306	1.004	ug/l	#	90
56) Ethyl methacrylate	9.135	69	1494	0.748	ug/l	#	93
57) 1,3-Dichloropropane	9.311	76	2112	0.920	ug/l		97
58) 2-Chloroethyl Vinyl ether	8.251	63	4115	4.320	ug/l		95
59) 2-Hexanone	9.439	43	6582	4.153	ug/l		96
60) Dibromochloromethane	9.519	129	1152	0.835	ug/l		98
61) 1,2-Dibromoethane	9.610	107	1174	0.890	ug/l		97
64) Tetrachloroethene	9.275	164	1006	0.986	ug/l	#	88
65) Chlorobenzene	10.080	112	3094	0.908	ug/l		90
66) 1,1,1,2-Tetrachloroethane	10.159	131	1078	0.978	ug/l	#	65
67) Ethyl Benzene	10.195	91	5008	0.846	ug/l	#	85
68) m/p-Xylenes	10.305	106	3552	1.630	ug/l		97
69) o-Xylene	10.640	106	1949	0.891	ug/l		95
70) Styrene	10.665	104	2810	0.802	ug/l		97
71) Bromoform	10.799	173	667	0.768	ug/l	#	92
73) Isopropylbenzene	10.964	105	4405	0.858	ug/l		96
74) N-amyl acetate	10.854	43	1750	0.732	ug/l	#	87
75) 1,1,2,2-Tetrachloroethane	11.213	83	1809	0.954	ug/l		88
76) 1,2,3-Trichloropropane	11.244	75	1531m	1.015	ug/l		
77) Bromobenzene	11.201	156	1166	0.972	ug/l		91
78) n-propylbenzene	11.305	91	4475	0.773	ug/l		97
79) 2-Chlorotoluene	11.366	91	3616	0.986	ug/l		98
80) 1,3,5-Trimethylbenzene	11.451	105	3386	0.815	ug/l		94
82) 4-Chlorotoluene	11.457	91	3631	0.904	ug/l		99
83) tert-Butylbenzene	11.713	119	3928	0.929	ug/l		96
84) 1,2,4-Trimethylbenzene	11.756	105	3432	0.827	ug/l		95
85) sec-Butylbenzene	11.890	105	3891	0.752	ug/l		100
86) p-Isopropyltoluene	12.012	119	3257	0.797	ug/l		94
87) 1,3-Dichlorobenzene	11.976	146	1948	0.913	ug/l		96
88) 1,4-Dichlorobenzene	12.043	146	2082m	0.962	ug/l		
89) n-Butylbenzene	12.335	91	2470	0.691	ug/l		93
90) Hexachloroethane	12.536	117	609	0.805	ug/l		94
91) 1,2-Dichlorobenzene	12.335	146	1918	0.890	ug/l		98
92) 1,2-Dibromo-3-Chloropr...	12.945	75	308	0.859	ug/l		82
93) 1,2,4-Trichlorobenzene	13.591	180	866	0.706	ug/l		93
94) Hexachlorobutadiene	13.725	225	462	0.917	ug/l		94
95) Naphthalene	13.780	128	3337	0.707	ug/l	#	94
96) 1,2,3-Trichlorobenzene	13.963	180	969	0.759	ug/l		93

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

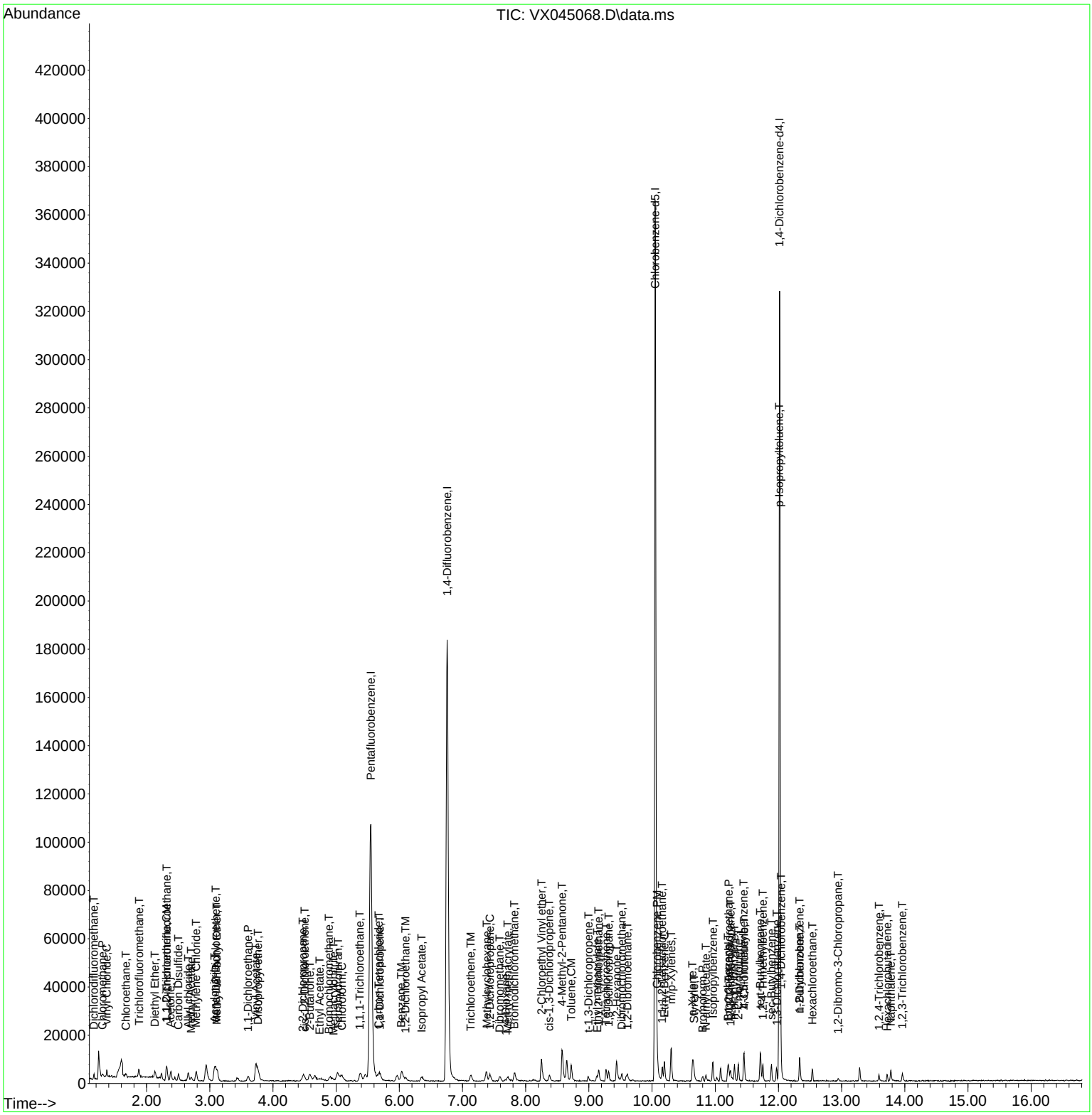
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045068.D
Acq On : 28 Feb 2025 01:27
Operator : JC/MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 28 06:28:57 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:18:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045069.D
Acq On : 28 Feb 2025 02:13
Operator : JC/MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 28 05:32:40 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 05:28:02 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.544	168	107391	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.757	114	194243	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	172367	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	73591	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.964	65	8978	5.659	ug/l	0.01
Spiked Amount 50.000	Range 74 - 125		Recovery = 11.320%#			
35) Dibromofluoromethane	5.391	113	6398	5.039	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 10.080%#			
50) Toluene-d8	8.647	98	24037	5.057	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 10.120%#			
62) 4-Bromofluorobenzene	11.079	95	7436	4.685	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 9.360%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.166	85	6941	4.689	ug/l	96
3) Chloromethane	1.307	50	8819	4.896	ug/l	99
4) Vinyl Chloride	1.374	62	8106	4.608	ug/l	94
5) Bromomethane	1.593	94	3620	6.582	ug/l	96
6) Chloroethane	1.660	64	4517	6.746	ug/l	91
7) Trichlorofluoromethane	1.867	101	11392	5.056	ug/l	95
8) Diethyl Ether	2.136	74	4314	5.268	ug/l	99
9) 1,1,2-Trichlorotrifluo...	2.319	101	6586	4.894	ug/l	98
10) Methyl Iodide	2.441	142	6520	3.780	ug/l	95
11) Tert butyl alcohol	2.983	59	10164m	34.976	ug/l	
12) 1,1-Dichloroethene	2.313	96	6658	4.819	ug/l	94
13) Acrolein	2.233	56	8725	27.725	ug/l	97
14) Allyl chloride	2.654	41	11244	4.527	ug/l	96
15) Acrylonitrile	3.068	53	21381	27.072	ug/l	99
16) Acetone	2.386	43	19512	29.891	ug/l	97
17) Carbon Disulfide	2.502	76	16984	4.518	ug/l	99
18) Methyl Acetate	2.703	43	8964	4.559	ug/l	97
19) Methyl tert-butyl Ether	3.117	73	20546	4.651	ug/l	95
20) Methylene Chloride	2.782	84	7835	5.068	ug/l	97
21) trans-1,2-Dichloroethene	3.087	96	6651	4.895	ug/l	94
22) Diisopropyl ether	3.763	45	23151	4.875	ug/l #	82
23) Vinyl Acetate	3.721	43	88852	22.788	ug/l	98
24) 1,1-Dichloroethane	3.605	63	13132	4.949	ug/l	99
25) 2-Butanone	4.574	43	29277	27.819	ug/l	99
26) 2,2-Dichloropropane	4.471	77	6034	3.059	ug/l	97
27) cis-1,2-Dichloroethene	4.483	96	8012	4.892	ug/l	97
28) Bromochloromethane	4.904	49	6797	5.311	ug/l #	96
29) Tetrahydrofuran	5.013	42	20186	28.950	ug/l	99
30) Chloroform	5.093	83	13390	5.159	ug/l	96
31) Cyclohexane	5.464	56	10968	4.504	ug/l	95
32) 1,1,1-Trichloroethane	5.385	97	10654	4.876	ug/l	100
36) 1,1-Dichloropropene	5.690	75	8977	4.917	ug/l #	83
37) Ethyl Acetate	4.727	43	10459	5.035	ug/l	98
38) Carbon Tetrachloride	5.666	117	8997	5.013	ug/l	95
39) Methylcyclohexane	7.379	83	10291	4.414	ug/l	97
40) Benzene	6.037	78	28339	4.966	ug/l	97

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045069.D
Acq On : 28 Feb 2025 02:13
Operator : JC/MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 28 05:32:40 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 05:28:02 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
41) Methacrylonitrile	4.922	41	5700	5.136 ug/l	95
42) 1,2-Dichloroethane	6.092	62	10189	5.510 ug/l	98
43) Isopropyl Acetate	6.348	43	15543	4.700 ug/l	99
44) Trichloroethene	7.129	130	6827	5.234 ug/l	99
45) 1,2-Dichloropropane	7.427	63	7342	5.177 ug/l	95
46) Dibromomethane	7.586	93	5146	5.195 ug/l	97
47) Bromodichloromethane	7.824	83	9773	5.100 ug/l	99
48) Methyl methacrylate	7.696	41	8201	5.224 ug/l	95
49) 1,4-Dioxane	7.665	88	3531	105.826 ug/l	95
51) 4-Methyl-2-Pentanone	8.574	43	55320	27.303 ug/l	99
52) Toluene	8.720	92	16933	4.997 ug/l	99
53) t-1,3-Dichloropropene	8.982	75	7548	3.985 ug/l	94
54) cis-1,3-Dichloropropene	8.366	75	8988	4.244 ug/l	92
55) 1,1,2-Trichloroethane	9.153	97	6759	5.151 ug/l	97
56) Ethyl methacrylate	9.116	69	9712	4.628 ug/l	98
57) 1,3-Dichloropropane	9.305	76	12106	5.289 ug/l	100
58) 2-Chloroethyl Vinyl ether	8.238	63	23212	22.527 ug/l	99
59) 2-Hexanone	9.433	43	39994	27.363 ug/l	99
60) Dibromochloromethane	9.519	129	6785	4.846 ug/l	98
61) 1,2-Dibromoethane	9.610	107	6832	5.161 ug/l	95
64) Tetrachloroethene	9.269	164	5615	5.128 ug/l	93
65) Chlorobenzene	10.079	112	18161	4.908 ug/l	97
66) 1,1,1,2-Tetrachloroethane	10.159	131	5702	4.781 ug/l	96
67) Ethyl Benzene	10.195	91	30918	4.725 ug/l	98
68) m/p-Xylenes	10.299	106	23152	9.608 ug/l	97
69) o-Xylene	10.640	106	11881	4.914 ug/l	95
70) Styrene	10.659	104	18278	4.704 ug/l	99
71) Bromoform	10.799	173	4027	4.541 ug/l #	98
73) Isopropylbenzene	10.963	105	29685	4.991 ug/l	98
74) N-amyl acetate	10.848	43	11609	4.300 ug/l	97
75) 1,1,2,2-Tetrachloroethane	11.213	83	10881	5.310 ug/l	100
76) 1,2,3-Trichloropropane	11.238	75	8839m	5.384 ug/l	
77) Bromobenzene	11.195	156	6970	5.163 ug/l	96
78) n-propylbenzene	11.305	91	32196	4.694 ug/l	99
79) 2-Chlorotoluene	11.366	91	21253	5.048 ug/l	98
80) 1,3,5-Trimethylbenzene	11.451	105	23627	4.897 ug/l	99
81) trans-1,4-Dichloro-2-b...	11.018	75	1971	3.256 ug/l #	83
82) 4-Chlorotoluene	11.457	91	22190	4.761 ug/l	98
83) tert-Butylbenzene	11.713	119	23960	4.910 ug/l	97
84) 1,2,4-Trimethylbenzene	11.750	105	23561	4.960 ug/l	99
85) sec-Butylbenzene	11.890	105	28314	4.687 ug/l	99
86) p-Isopropyltoluene	12.006	119	21977	4.532 ug/l	97
87) 1,3-Dichlorobenzene	11.969	146	12157	4.926 ug/l	98
88) 1,4-Dichlorobenzene	12.042	146	12526	5.014 ug/l	96
89) n-Butylbenzene	12.335	91	17358	4.072 ug/l	99
90) Hexachloroethane	12.536	117	3665	4.052 ug/l	96
91) 1,2-Dichlorobenzene	12.335	146	12477	5.138 ug/l	95
92) 1,2-Dibromo-3-Chloropr...	12.945	75	1787	4.712 ug/l	90
93) 1,2,4-Trichlorobenzene	13.591	180	6040	4.114 ug/l	97
94) Hexachlorobutadiene	13.725	225	2716	4.640 ug/l	97
95) Naphthalene	13.780	128	22927	4.287 ug/l	99
96) 1,2,3-Trichlorobenzene	13.963	180	6600	4.437 ug/l	98

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045069.D
Acq On : 28 Feb 2025 02:13
Operator : JC/MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 18 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

Quant Time: Feb 28 05:32:40 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 05:28:02 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

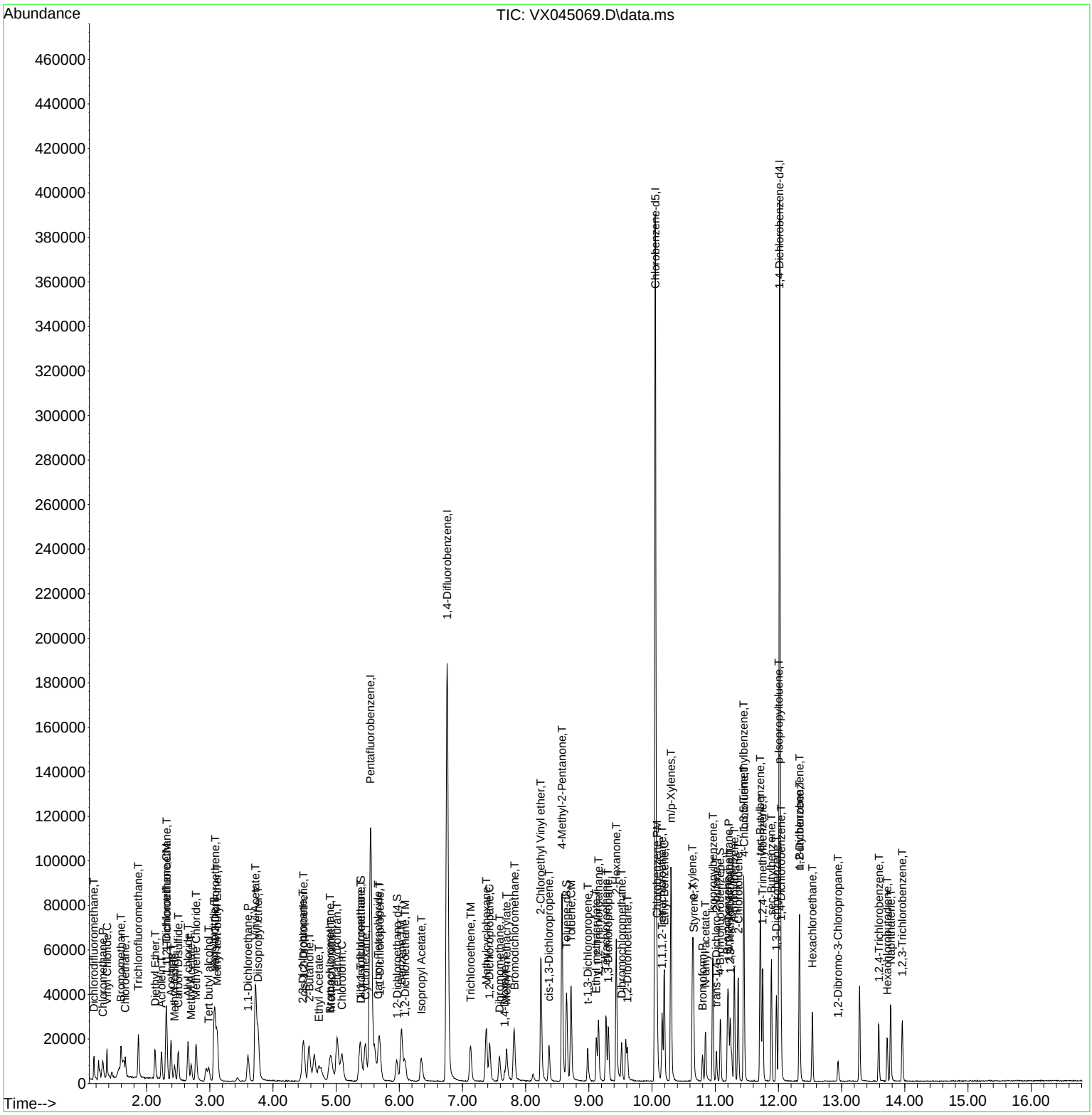
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045069.D
Acq On : 28 Feb 2025 02:13
Operator : JC/MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 28 05:32:40 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 05:28:02 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045070.D
Acq On : 28 Feb 2025 02:37
Operator : JC/MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 19 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

Quant Time: Feb 28 05:33:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 05:28:02 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.543	168	97338	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.757	114	177403	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	157714	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	70072	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.958	65	30514	21.221	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 42.440%#			
35) Dibromofluoromethane	5.385	113	23739	20.473	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 40.940%#			
50) Toluene-d8	8.646	98	84516	19.469	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 38.940%#			
62) 4-Bromofluorobenzene	11.079	95	27856	19.215	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 38.420%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.166	85	25155	18.750	ug/l	95
3) Chloromethane	1.306	50	32219	19.736	ug/l	99
4) Vinyl Chloride	1.373	62	30134	18.899	ug/l	97
5) Bromomethane	1.593	94	11584	23.239	ug/l	99
6) Chloroethane	1.660	64	14237	23.457	ug/l	99
7) Trichlorofluoromethane	1.867	101	40880	20.015	ug/l	99
8) Diethyl Ether	2.135	74	15911	21.437	ug/l	98
9) 1,1,2-Trichlorotrifluo...	2.312	101	23154	18.984	ug/l	98
10) Methyl Iodide	2.440	142	29500	18.867	ug/l	100
11) Tert butyl alcohol	2.983	59	31246	118.627	ug/l	98
12) 1,1-Dichloroethene	2.306	96	23810	19.014	ug/l	97
13) Acrolein	2.239	56	33586	117.747	ug/l	99
14) Allyl chloride	2.654	41	42993	19.096	ug/l	100
15) Acrylonitrile	3.068	53	84182	117.598	ug/l	100
16) Acetone	2.385	43	74701	126.257	ug/l	99
17) Carbon Disulfide	2.501	76	61802	18.139	ug/l	99
18) Methyl Acetate	2.709	43	35157	19.729	ug/l	99
19) Methyl tert-butyl Ether	3.117	73	82833	20.689	ug/l	96
20) Methylene Chloride	2.782	84	29281	20.895	ug/l	94
21) trans-1,2-Dichloroethene	3.080	96	23471	19.057	ug/l	97
22) Diisopropyl ether	3.763	45	90378	20.995	ug/l	93
23) Vinyl Acetate	3.721	43	381808	108.038	ug/l	99
24) 1,1-Dichloroethane	3.605	63	49826	20.716	ug/l	99
25) 2-Butanone	4.562	43	118713	124.449	ug/l	97
26) 2,2-Dichloropropane	4.470	77	22886	12.799	ug/l	99
27) cis-1,2-Dichloroethene	4.483	96	29788	20.065	ug/l	99
28) Bromochloromethane	4.891	49	23869	20.579	ug/l	99
29) Tetrahydrofuran	5.007	42	77433	122.519	ug/l	99
30) Chloroform	5.086	83	49751	21.147	ug/l	97
31) Cyclohexane	5.464	56	42340	19.181	ug/l	98
32) 1,1,1-Trichloroethane	5.373	97	39276	19.831	ug/l	99
36) 1,1-Dichloropropene	5.684	75	31519	18.903	ug/l	99
37) Ethyl Acetate	4.714	43	43097	22.714	ug/l	99
38) Carbon Tetrachloride	5.671	117	31694	19.334	ug/l	97
39) Methylcyclohexane	7.372	83	39769	18.676	ug/l	97
40) Benzene	6.031	78	105787	20.298	ug/l	98

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045070.D
Acq On : 28 Feb 2025 02:37
Operator : JC/MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 28 05:33:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 05:28:02 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	4.928	41	23924	23.605	ug/l		97
42) 1,2-Dichloroethane	6.086	62	38653	22.886	ug/l		99
43) Isopropyl Acetate	6.348	43	66727	22.094	ug/l		99
44) Trichloroethene	7.122	130	24052	20.191	ug/l		98
45) 1,2-Dichloropropane	7.427	63	27128	20.945	ug/l		99
46) Dibromomethane	7.580	93	19323	21.357	ug/l		97
47) Bromodichloromethane	7.817	83	38038	21.732	ug/l		97
48) Methyl methacrylate	7.695	41	32627	22.757	ug/l		98
49) 1,4-Dioxane	7.665	88	14602	479.170	ug/l		97
51) 4-Methyl-2-Pentanone	8.573	43	229615	124.081	ug/l		98
52) Toluene	8.714	92	63326	20.463	ug/l		100
53) t-1,3-Dichloropropene	8.976	75	30917	17.871	ug/l		97
54) cis-1,3-Dichloropropene	8.366	75	36118	18.675	ug/l		97
55) 1,1,2-Trichloroethane	9.152	97	26358	21.992	ug/l		99
56) Ethyl methacrylate	9.116	69	39850	20.791	ug/l		97
57) 1,3-Dichloropropane	9.305	76	45644	21.836	ug/l		100
58) 2-Chloroethyl Vinyl ether	8.238	63	96311	102.342	ug/l		99
59) 2-Hexanone	9.433	43	168768	126.428	ug/l		100
60) Dibromochloromethane	9.518	129	27705	21.668	ug/l		99
61) 1,2-Dibromoethane	9.610	107	26311	21.764	ug/l		98
64) Tetrachloroethene	9.268	164	20140	20.102	ug/l		97
65) Chlorobenzene	10.079	112	68777	20.316	ug/l		98
66) 1,1,1,2-Tetrachloroethane	10.158	131	22508	20.627	ug/l		97
67) Ethyl Benzene	10.189	91	119165	19.905	ug/l		100
68) m/p-Xylenes	10.299	106	89735	40.699	ug/l		98
69) o-Xylene	10.640	106	44281	20.018	ug/l		98
70) Styrene	10.652	104	73832	20.767	ug/l		98
71) Bromoform	10.799	173	17403	21.449	ug/l	#	99
73) Isopropylbenzene	10.963	105	112099	19.794	ug/l		99
74) N-amyl acetate	10.841	43	52972	20.606	ug/l		99
75) 1,1,2,2-Tetrachloroethane	11.213	83	42413	21.738	ug/l		100
76) 1,2,3-Trichloropropane	11.237	75	33440m	21.394	ug/l		
77) Bromobenzene	11.195	156	26310	20.466	ug/l		99
78) n-propylbenzene	11.305	91	128284	19.641	ug/l		100
79) 2-Chlorotoluene	11.359	91	79275	19.775	ug/l		100
80) 1,3,5-Trimethylbenzene	11.451	105	94545	20.581	ug/l		98
81) trans-1,4-Dichloro-2-b...	11.018	75	8759	15.196	ug/l		96
82) 4-Chlorotoluene	11.451	91	86281	19.443	ug/l		98
83) tert-Butylbenzene	11.713	119	93670	20.159	ug/l		99
84) 1,2,4-Trimethylbenzene	11.750	105	94734	20.943	ug/l		100
85) sec-Butylbenzene	11.890	105	115953	20.160	ug/l		100
86) p-Isopropyltoluene	12.006	119	91554	19.827	ug/l		99
87) 1,3-Dichlorobenzene	11.969	146	47934	20.400	ug/l		97
88) 1,4-Dichlorobenzene	12.042	146	46657	19.615	ug/l		99
89) n-Butylbenzene	12.329	91	78135	19.249	ug/l		100
90) Hexachloroethane	12.536	117	15919	18.483	ug/l		98
91) 1,2-Dichlorobenzene	12.335	146	48632	21.031	ug/l		98
92) 1,2-Dibromo-3-Chloropr...	12.944	75	7987	22.119	ug/l		99
93) 1,2,4-Trichlorobenzene	13.585	180	27424	19.617	ug/l		99
94) Hexachlorobutadiene	13.725	225	10934	19.616	ug/l		99
95) Naphthalene	13.774	128	108350	21.279	ug/l		100
96) 1,2,3-Trichlorobenzene	13.963	180	28937	20.432	ug/l		98

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045070.D
Acq On : 28 Feb 2025 02:37
Operator : JC/MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 19 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

Quant Time: Feb 28 05:33:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 05:28:02 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

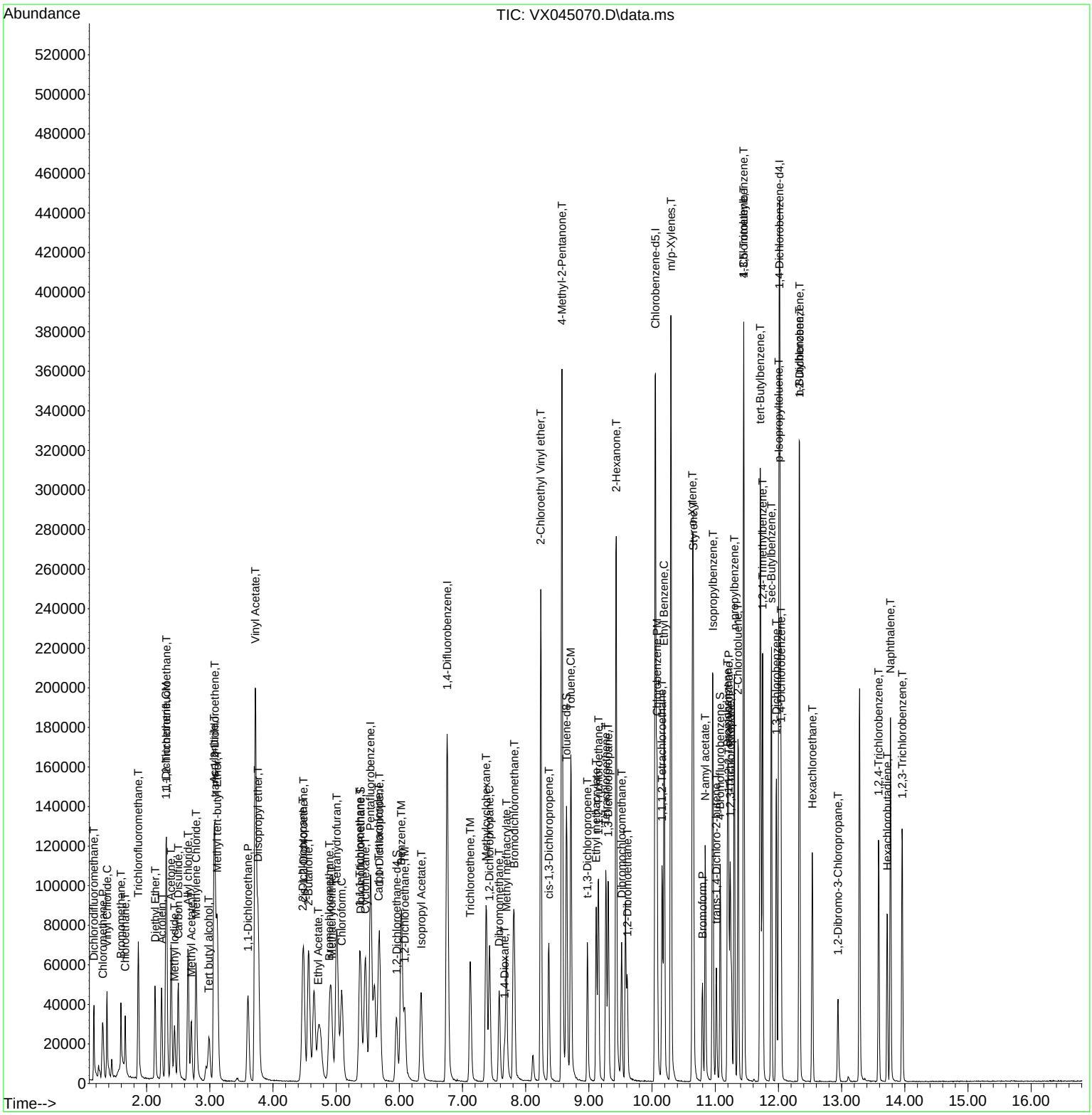
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045070.D
Acq On : 28 Feb 2025 02:37
Operator : JC/MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 28 05:33:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 05:28:02 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045071.D
Acq On : 28 Feb 2025 03:00
Operator : JC/MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 20 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

Quant Time: Feb 28 05:34:27 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 05:28:02 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.550	168	103235	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.757	114	186358	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.049	117	162079	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	71264	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.952	65	78159	51.250	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 102.500%			
35) Dibromofluoromethane	5.385	113	61323	50.346	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 100.700%			
50) Toluene-d8	8.647	98	225493	49.449	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 98.900%			
62) 4-Bromofluorobenzene	11.079	95	74945	49.212	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 98.420%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.166	85	64743	45.502	ug/l	100
3) Chloromethane	1.307	50	77729	44.894	ug/l	100
4) Vinyl Chloride	1.374	62	78524	46.434	ug/l	100
5) Bromomethane	1.593	94	30169	57.066	ug/l	100
6) Chloroethane	1.660	64	38461	59.750	ug/l	100
7) Trichlorofluoromethane	1.868	101	108411	50.047	ug/l	100
8) Diethyl Ether	2.136	74	40001	50.814	ug/l	100
9) 1,1,2-Trichlorotrifluo...	2.313	101	61312	47.399	ug/l	100
10) Methyl Iodide	2.441	142	79357	47.854	ug/l	100
11) Tert butyl alcohol	2.983	59	69139	247.496	ug/l	100
12) 1,1-Dichloroethene	2.307	96	64327	48.434	ug/l	100
13) Acrolein	2.233	56	89603	296.189	ug/l	100
14) Allyl chloride	2.654	41	114313	47.875	ug/l	100
15) Acrylonitrile	3.062	53	211455	278.519	ug/l	100
16) Acetone	2.386	43	181429	289.130	ug/l	100
17) Carbon Disulfide	2.502	76	171353	47.419	ug/l	100
18) Methyl Acetate	2.703	43	89508	47.359	ug/l	100
19) Methyl tert-butyl Ether	3.117	73	215043	50.642	ug/l	100
20) Methylene Chloride	2.782	84	72081	48.500	ug/l	100
21) trans-1,2-Dichloroethene	3.087	96	65093	49.832	ug/l	100
22) Diisopropyl ether	3.764	45	236563	51.816	ug/l	100
23) Vinyl Acetate	3.721	43	1018631	271.773	ug/l	100
24) 1,1-Dichloroethane	3.605	63	128235	50.270	ug/l	100
25) 2-Butanone	4.562	43	298785	295.330	ug/l	100
26) 2,2-Dichloropropane	4.471	77	61631	32.498	ug/l	100
27) cis-1,2-Dichloroethene	4.483	96	78657	49.955	ug/l	100
28) Bromochloromethane	4.898	49	62299	50.643	ug/l	100
29) Tetrahydrofuran	5.007	42	192607	287.345	ug/l	100
30) Chloroform	5.087	83	128581	51.532	ug/l	100
31) Cyclohexane	5.464	56	114333	48.836	ug/l	100
32) 1,1,1-Trichloroethane	5.379	97	105671	50.306	ug/l	100
36) 1,1-Dichloropropene	5.690	75	87338	49.861	ug/l	100
37) Ethyl Acetate	4.715	43	112892	56.641	ug/l	100
38) Carbon Tetrachloride	5.672	117	87123	50.593	ug/l	100
39) Methylcyclohexane	7.373	83	108974	48.715	ug/l	100
40) Benzene	6.031	78	278802	50.925	ug/l	100

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045071.D
Acq On : 28 Feb 2025 03:00
Operator : JC/MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 28 05:34:27 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 05:28:02 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	4.922	41	63454	59.598	ug/l		100
42) 1,2-Dichloroethane	6.080	62	98340	55.428	ug/l		100
43) Isopropyl Acetate	6.342	43	173045	54.544	ug/l		100
44) Trichloroethene	7.123	130	63513	50.756	ug/l		100
45) 1,2-Dichloropropane	7.428	63	69128	50.808	ug/l		100
46) Dibromomethane	7.580	93	50143	52.757	ug/l		100
47) Bromodichloromethane	7.818	83	97729	53.153	ug/l		100
48) Methyl methacrylate	7.690	41	86231	57.256	ug/l		100
49) 1,4-Dioxane	7.659	88	35053	1095.003	ug/l		100
51) 4-Methyl-2-Pentanone	8.574	43	568737	292.570	ug/l		100
52) Toluene	8.714	92	167431	51.505	ug/l		100
53) t-1,3-Dichloropropene	8.976	75	87373	48.078	ug/l		100
54) cis-1,3-Dichloropropene	8.366	75	99713	49.079	ug/l		100
55) 1,1,2-Trichloroethane	9.147	97	66379	52.724	ug/l		100
56) Ethyl methacrylate	9.116	69	106157	52.724	ug/l		100
57) 1,3-Dichloropropane	9.305	76	115488	52.594	ug/l		100
58) 2-Chloroethyl Vinyl ether	8.238	63	264555	267.612	ug/l		100
59) 2-Hexanone	9.427	43	416984	297.362	ug/l		100
60) Dibromochloromethane	9.519	129	71569	53.284	ug/l		100
61) 1,2-Dibromoethane	9.604	107	66312	52.217	ug/l		100
64) Tetrachloroethene	9.269	164	52531	51.021	ug/l		100
65) Chlorobenzene	10.079	112	176922	50.853	ug/l		100
66) 1,1,1,2-Tetrachloroethane	10.159	131	57642	51.402	ug/l		100
67) Ethyl Benzene	10.189	91	316427	51.431	ug/l		100
68) m/p-Xylenes	10.299	106	234554	103.515	ug/l		100
69) o-Xylene	10.640	106	114440	50.341	ug/l		100
70) Styrene	10.653	104	191406	52.387	ug/l		100
71) Bromoform	10.799	173	44730	53.645	ug/l	#	100
73) Isopropylbenzene	10.963	105	294694	51.167	ug/l		100
74) N-amyl acetate	10.842	43	140869	53.881	ug/l		100
75) 1,1,2,2-Tetrachloroethane	11.213	83	101089	50.945	ug/l		100
76) 1,2,3-Trichloropropane	11.238	75	81743m	51.421	ug/l		
77) Bromobenzene	11.195	156	66904	51.173	ug/l		100
78) n-propylbenzene	11.305	91	342399	51.546	ug/l		100
79) 2-Chlorotoluene	11.360	91	204484	50.154	ug/l		100
80) 1,3,5-Trimethylbenzene	11.451	105	241129	51.613	ug/l		100
81) trans-1,4-Dichloro-2-b...	11.018	75	24135	41.172	ug/l		100
82) 4-Chlorotoluene	11.451	91	230493	51.072	ug/l		100
83) tert-Butylbenzene	11.713	119	240510	50.895	ug/l		100
84) 1,2,4-Trimethylbenzene	11.750	105	240719	52.326	ug/l		100
85) sec-Butylbenzene	11.890	105	300393	51.353	ug/l		100
86) p-Isopropyltoluene	12.006	119	244031	51.964	ug/l		100
87) 1,3-Dichlorobenzene	11.969	146	118879	49.747	ug/l		100
88) 1,4-Dichlorobenzene	12.036	146	120217	49.694	ug/l		100
89) n-Butylbenzene	12.329	91	214685	52.006	ug/l		100
90) Hexachloroethane	12.536	117	43086	49.188	ug/l		100
91) 1,2-Dichlorobenzene	12.335	146	118896	50.557	ug/l		100
92) 1,2-Dibromo-3-Chloropr...	12.939	75	20610	56.123	ug/l		100
93) 1,2,4-Trichlorobenzene	13.585	180	71897	50.571	ug/l		100
94) Hexachlorobutadiene	13.725	225	27916	49.245	ug/l		100
95) Naphthalene	13.774	128	278086	53.700	ug/l		100
96) 1,2,3-Trichlorobenzene	13.957	180	75482	52.406	ug/l		100

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045071.D
Acq On : 28 Feb 2025 03:00
Operator : JC/MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 20 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

Quant Time: Feb 28 05:34:27 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 05:28:02 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

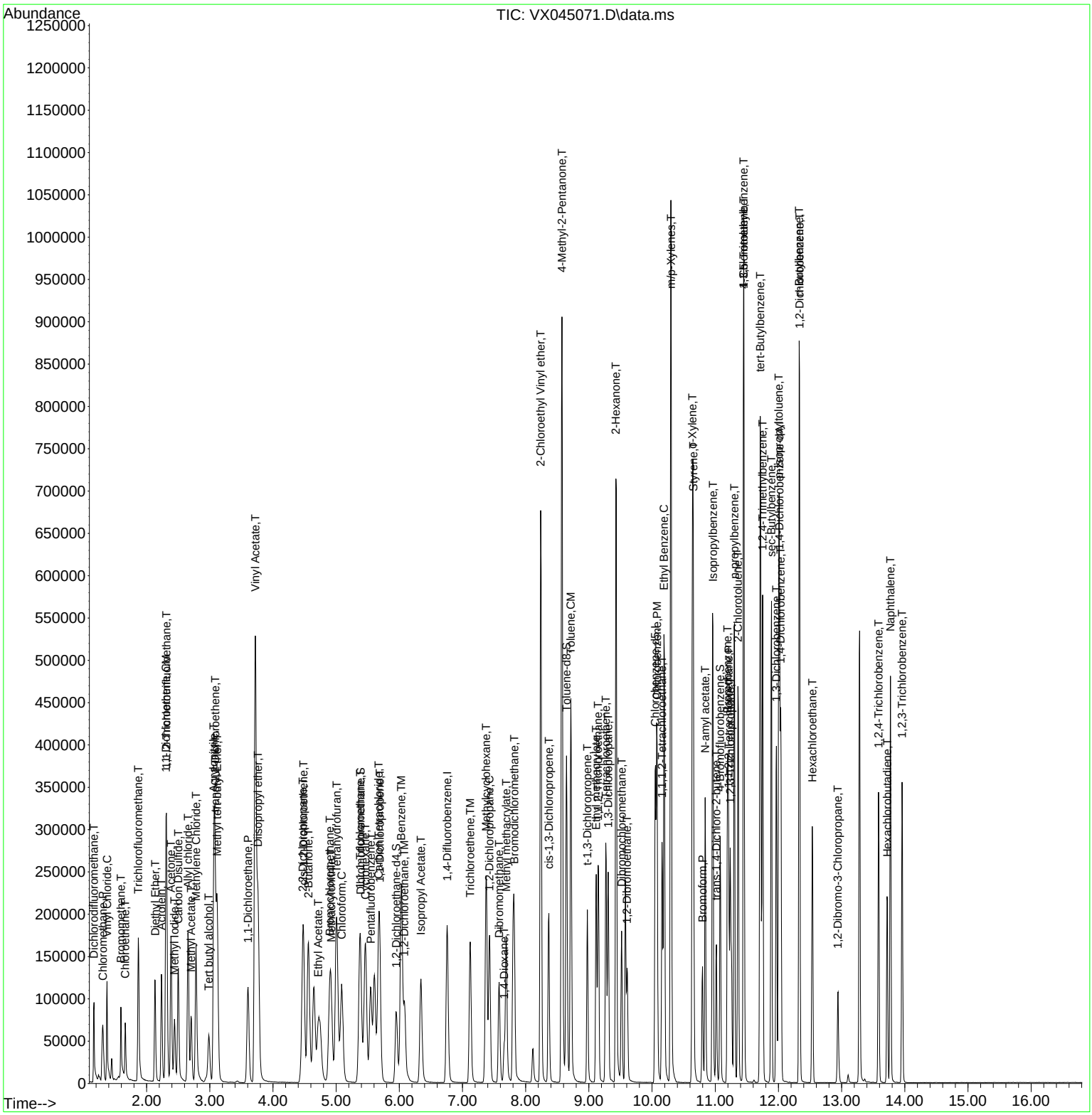
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045071.D
Acq On : 28 Feb 2025 03:00
Operator : JC/MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 28 05:34:27 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 05:28:02 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045072.D
Acq On : 28 Feb 2025 03:23
Operator : JC/MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 21 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

Quant Time: Feb 28 05:35:19 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 05:28:02 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.550	168	101178	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.757	114	181031	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	151175	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	69086	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.952	65	158452	106.011	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 212.020%#			
35) Dibromofluoromethane	5.385	113	123185	104.110	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 208.220%#			
50) Toluene-d8	8.647	98	441188	99.595	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 199.200%#			
62) 4-Bromofluorobenzene	11.079	95	148476	100.365	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 200.720%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.166	85	126718	90.869	ug/l	95
3) Chloromethane	1.306	50	145825	85.936	ug/l	98
4) Vinyl Chloride	1.373	62	154734	93.360	ug/l	96
5) Bromomethane	1.593	94	57503	110.980	ug/l	97
6) Chloroethane	1.660	64	60155	95.351	ug/l	97
7) Trichlorofluoromethane	1.861	101	198701	93.594	ug/l	99
8) Diethyl Ether	2.135	74	78263	101.441	ug/l	100
9) 1,1,2-Trichlorotrifluo...	2.312	101	120518	95.064	ug/l	98
10) Methyl Iodide	2.440	142	153466	94.425	ug/l	99
11) Tert butyl alcohol	3.001	59	135016	493.141	ug/l	98
12) 1,1-Dichloroethene	2.306	96	125436	96.366	ug/l	98
13) Acrolein	2.239	56	180411	608.485	ug/l	99
14) Allyl chloride	2.654	41	220783	94.344	ug/l	98
15) Acrylonitrile	3.068	53	391946	526.749	ug/l	100
16) Acetone	2.392	43	348698	566.991	ug/l	99
17) Carbon Disulfide	2.495	76	345572	97.574	ug/l	98
18) Methyl Acetate	2.709	43	175784	94.899	ug/l	98
19) Methyl tert-butyl Ether	3.117	73	431413	103.661	ug/l	100
20) Methylene Chloride	2.782	84	140388	96.381	ug/l	98
21) trans-1,2-Dichloroethene	3.080	96	128232	100.164	ug/l	98
22) Diisopropyl ether	3.763	45	467534	104.489	ug/l	98
23) Vinyl Acetate	3.721	43	2035880	554.219	ug/l	99
24) 1,1-Dichloroethane	3.605	63	257023	102.805	ug/l	100
25) 2-Butanone	4.562	43	559182	563.952	ug/l	99
26) 2,2-Dichloropropane	4.470	77	124805	67.148	ug/l	100
27) cis-1,2-Dichloroethene	4.483	96	155193	100.568	ug/l	99
28) Bromochloromethane	4.897	49	113848	94.428	ug/l	98
29) Tetrahydrofuran	5.007	42	365565	556.465	ug/l	100
30) Chloroform	5.092	83	248978	101.814	ug/l	97
31) Cyclohexane	5.464	56	231082	100.711	ug/l	97
32) 1,1,1-Trichloroethane	5.379	97	211302	102.638	ug/l	99
36) 1,1-Dichloropropene	5.690	75	172295	101.258	ug/l	99
37) Ethyl Acetate	4.720	43	220327	113.796	ug/l	99
38) Carbon Tetrachloride	5.671	117	177219	105.940	ug/l	97
39) Methylcyclohexane	7.372	83	219856	101.175	ug/l	99
40) Benzene	6.031	78	541974	101.908	ug/l	100

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045072.D
Acq On : 28 Feb 2025 03:23
Operator : JC/MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 28 05:35:19 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 05:28:02 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	4.922	41	120186	116.205	ug/l		98
42) 1,2-Dichloroethane	6.086	62	189857	110.158	ug/l		99
43) Isopropyl Acetate	6.342	43	338414	109.806	ug/l		99
44) Trichloroethene	7.122	130	128124	105.402	ug/l		96
45) 1,2-Dichloropropane	7.427	63	135997	102.898	ug/l		100
46) Dibromomethane	7.580	93	97248	105.329	ug/l		99
47) Bromodichloromethane	7.817	83	191016	106.947	ug/l		97
48) Methyl methacrylate	7.695	41	165825	113.344	ug/l		99
49) 1,4-Dioxane	7.665	88	66308	2132.314	ug/l		99
51) 4-Methyl-2-Pentanone	8.573	43	1048140	555.050	ug/l		99
52) Toluene	8.714	92	316349	100.178	ug/l		100
53) t-1,3-Dichloropropene	8.976	75	177352	100.462	ug/l		97
54) cis-1,3-Dichloropropene	8.366	75	200943	101.815	ug/l		98
55) 1,1,2-Trichloroethane	9.146	97	123426	100.920	ug/l		99
56) Ethyl methacrylate	9.116	69	208782	106.744	ug/l		100
57) 1,3-Dichloropropane	9.305	76	216267	101.387	ug/l		100
58) 2-Chloroethyl Vinyl ether	8.238	63	494551	514.987	ug/l		99
59) 2-Hexanone	9.433	43	779492	572.233	ug/l		99
60) Dibromochloromethane	9.518	129	139245	106.719	ug/l		99
61) 1,2-Dibromoethane	9.610	107	128617	104.259	ug/l		99
64) Tetrachloroethene	9.268	164	99386	103.491	ug/l		98
65) Chlorobenzene	10.079	112	332473	102.456	ug/l		100
66) 1,1,1,2-Tetrachloroethane	10.158	131	112451	107.511	ug/l		96
67) Ethyl Benzene	10.189	91	596257	103.905	ug/l		100
68) m/p-Xylenes	10.299	106	432214	204.507	ug/l		99
69) o-Xylene	10.640	106	213835	100.849	ug/l		99
70) Styrene	10.652	104	357649	104.948	ug/l		99
71) Bromoform	10.799	173	90800	116.751	ug/l	#	99
73) Isopropylbenzene	10.963	105	553533	99.138	ug/l		99
74) N-amyl acetate	10.841	43	287104	113.277	ug/l		100
75) 1,1,2,2-Tetrachloroethane	11.213	83	192217	99.923	ug/l		98
76) 1,2,3-Trichloropropane	11.238	75	156259m	101.395	ug/l		
77) Bromobenzene	11.195	156	125700	99.175	ug/l		97
78) n-propylbenzene	11.305	91	648835	100.758	ug/l		99
79) 2-Chlorotoluene	11.359	91	382703	96.825	ug/l		100
80) 1,3,5-Trimethylbenzene	11.451	105	445466	98.356	ug/l		99
81) trans-1,4-Dichloro-2-b...	11.018	75	51975	91.460	ug/l		99
82) 4-Chlorotoluene	11.451	91	433881	99.168	ug/l		100
83) tert-Butylbenzene	11.713	119	454859	99.288	ug/l		99
84) 1,2,4-Trimethylbenzene	11.750	105	450108	100.926	ug/l		99
85) sec-Butylbenzene	11.890	105	570006	100.517	ug/l		100
86) p-Isopropyltoluene	12.006	119	465512	102.252	ug/l		100
87) 1,3-Dichlorobenzene	11.969	146	231440	99.903	ug/l		100
88) 1,4-Dichlorobenzene	12.042	146	230663	98.355	ug/l		99
89) n-Butylbenzene	12.329	91	428209	107.000	ug/l		99
90) Hexachloroethane	12.536	117	87448	102.980	ug/l		99
91) 1,2-Dichlorobenzene	12.335	146	233125	102.254	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	12.938	75	41402	116.296	ug/l		99
93) 1,2,4-Trichlorobenzene	13.585	180	148368	107.648	ug/l		99
94) Hexachlorobutadiene	13.725	225	56065	102.019	ug/l		99
95) Naphthalene	13.774	128	565250	112.593	ug/l		100
96) 1,2,3-Trichlorobenzene	13.963	180	152970	109.554	ug/l		100

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045072.D
Acq On : 28 Feb 2025 03:23
Operator : JC/MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 21 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

Quant Time: Feb 28 05:35:19 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 05:28:02 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

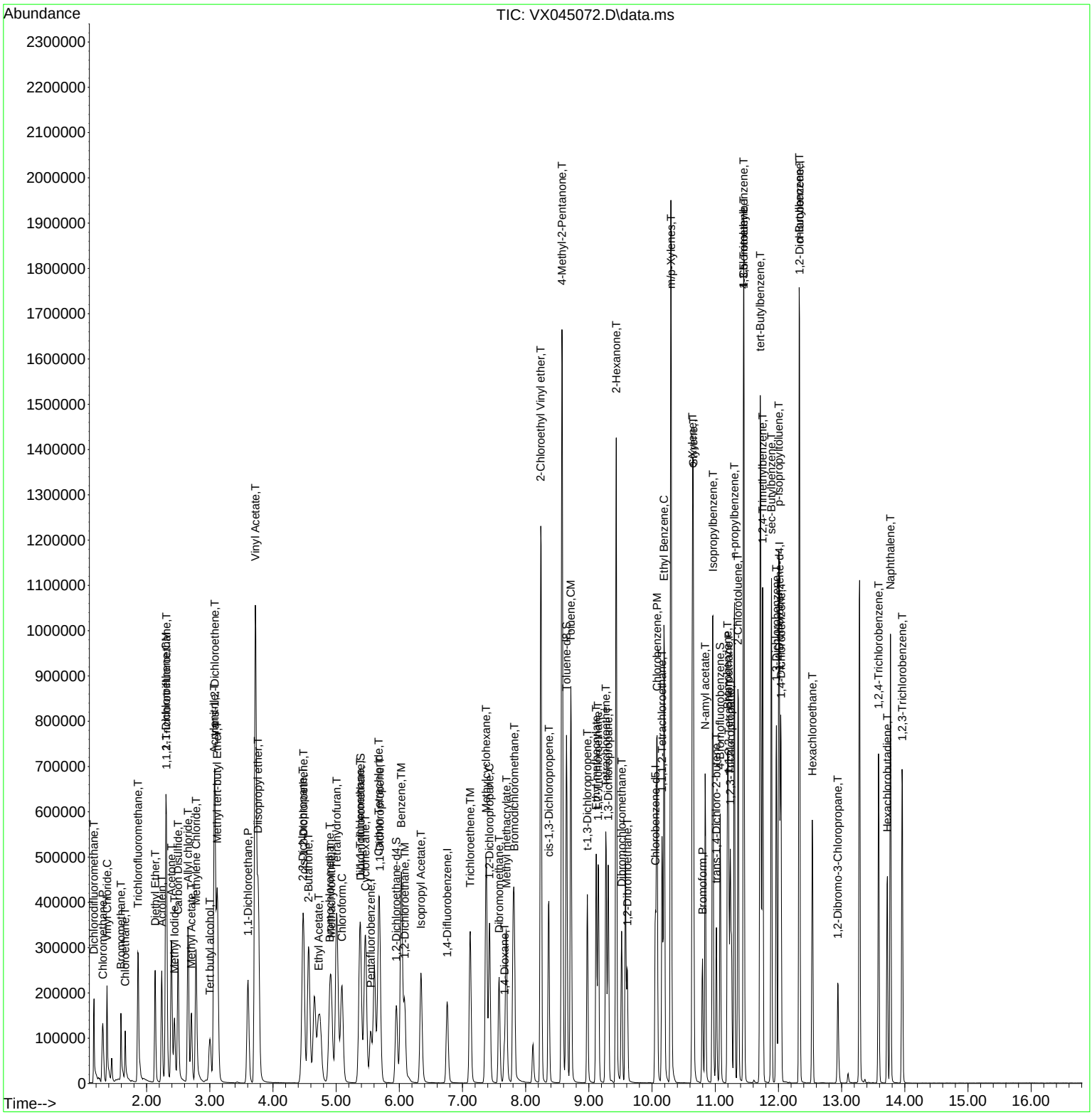
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045072.D
Acq On : 28 Feb 2025 03:23
Operator : JC/MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 28 05:35:19 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 05:28:02 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045073.D
Acq On : 28 Feb 2025 03:47
Operator : JC/MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 22 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

Quant Time: Feb 28 05:36:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 05:28:02 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.544	168	95754	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.757	114	176991	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	150547	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.024	152	67685	50.000	ug/l	# 0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.952	65	234624	165.865	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 331.740%#			
35) Dibromofluoromethane	5.379	113	179722	155.359	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 310.720%#			
50) Toluene-d8	8.647	98	638979	147.538	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 295.080%#			
62) 4-Bromofluorobenzene	11.079	95	223346	154.420	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 308.840%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.166	85	174297	132.067	ug/l	96
3) Chloromethane	1.307	50	213704	133.072	ug/l	97
4) Vinyl Chloride	1.374	62	217672	138.774	ug/l	97
5) Bromomethane	1.593	94	83547	170.379	ug/l	98
6) Chloroethane	1.660	64	82101	137.509	ug/l	95
7) Trichlorofluoromethane	1.861	101	272235	135.494	ug/l	98
8) Diethyl Ether	2.136	74	110005	150.660	ug/l	98
9) 1,1,2-Trichlorotrifluo...	2.313	101	161825	134.877	ug/l	99
10) Methyl Iodide	2.441	142	212355	138.059	ug/l	99
11) Tert butyl alcohol	3.014	59	195415	754.176	ug/l	97
12) 1,1-Dichloroethene	2.300	96	173271	140.655	ug/l	96
13) Acrolein	2.239	56	263999	940.846	ug/l	98
14) Allyl chloride	2.654	41	308018	139.077	ug/l	98
15) Acrylonitrile	3.069	53	573208	813.990	ug/l	99
16) Acetone	2.392	43	511828	879.387	ug/l	100
17) Carbon Disulfide	2.495	76	487720	145.511	ug/l	98
18) Methyl Acetate	2.709	43	258303	147.347	ug/l	100
19) Methyl tert-butyl Ether	3.117	73	619778	157.358	ug/l	99
20) Methylene Chloride	2.782	84	202913	147.198	ug/l	99
21) trans-1,2-Dichloroethene	3.081	96	176924	146.027	ug/l	98
22) Diisopropyl ether	3.764	45	662828	156.526	ug/l	98
23) Vinyl Acetate	3.721	43	2943150	846.586	ug/l	99
24) 1,1-Dichloroethane	3.605	63	363081	153.453	ug/l	99
25) 2-Butanone	4.568	43	818497	872.239	ug/l	99
26) 2,2-Dichloropropane	4.465	77	179826	102.231	ug/l	99
27) cis-1,2-Dichloroethene	4.483	96	220826	151.205	ug/l	98
28) Bromochloromethane	4.891	49	171273	150.105	ug/l	100
29) Tetrahydrofuran	5.007	42	528574	850.174	ug/l	99
30) Chloroform	5.093	83	351934	152.067	ug/l	97
31) Cyclohexane	5.458	56	302215	139.174	ug/l	96
32) 1,1,1-Trichloroethane	5.379	97	294434	151.120	ug/l	100
36) 1,1-Dichloropropene	5.684	75	241405	145.112	ug/l	100
37) Ethyl Acetate	4.721	43	316250	167.067	ug/l	99
38) Carbon Tetrachloride	5.672	117	245917	150.363	ug/l	99
39) Methylcyclohexane	7.373	83	292216	137.544	ug/l	97
40) Benzene	6.031	78	755854	145.368	ug/l	100

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045073.D
Acq On : 28 Feb 2025 03:47
Operator : JC/MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 28 05:36:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 05:28:02 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
41) Methacrylonitrile	4.928	41	175023	173.088 ug/l		99
42) 1,2-Dichloroethane	6.080	62	276129	163.872 ug/l		99
43) Isopropyl Acetate	6.342	43	511643	169.804 ug/l		99
44) Trichloroethene	7.123	130	178483	150.181 ug/l		97
45) 1,2-Dichloropropane	7.428	63	198135	153.334 ug/l		100
46) Dibromomethane	7.580	93	142119	157.443 ug/l		99
47) Bromodichloromethane	7.818	83	280255	160.492 ug/l		99
48) Methyl methacrylate	7.696	41	252275	176.370 ug/l		99
49) 1,4-Dioxane	7.665	88	96268	3166.423 ug/l		99
51) 4-Methyl-2-Pentanone	8.580	43	1536157	832.051 ug/l		99
52) Toluene	8.714	92	448664	145.321 ug/l		99
53) t-1,3-Dichloropropene	8.976	75	266444	154.373 ug/l		96
54) cis-1,3-Dichloropropene	8.366	75	293521	152.117 ug/l		96
55) 1,1,2-Trichloroethane	9.147	97	178217	149.046 ug/l		98
56) Ethyl methacrylate	9.116	69	310992	162.631 ug/l		98
57) 1,3-Dichloropropane	9.305	76	312196	149.699 ug/l		100
58) 2-Chloroethyl Vinyl ether	8.238	63	717328	764.019 ug/l		99
59) 2-Hexanone	9.433	43	1156653	868.492 ug/l		100
60) Dibromochloromethane	9.519	129	201906	158.276 ug/l		99
61) 1,2-Dibromoethane	9.610	107	185828	154.074 ug/l		100
64) Tetrachloroethene	9.269	164	139536	145.906 ug/l		94
65) Chlorobenzene	10.079	112	472117	146.096 ug/l		99
66) 1,1,1,2-Tetrachloroethane	10.159	131	163370	156.845 ug/l		97
67) Ethyl Benzene	10.189	91	852575	149.191 ug/l		99
68) m/p-Xylenes	10.299	106	607523	288.655 ug/l		97
69) o-Xylene	10.640	106	302495	143.259 ug/l		99
70) Styrene	10.653	104	512379	150.979 ug/l		99
71) Bromoform	10.799	173	135388	174.808 ug/l	#	99
73) Isopropylbenzene	10.963	105	780706	142.719 ug/l		99
74) N-amyl acetate	10.842	43	429686	173.042 ug/l		100
75) 1,1,2,2-Tetrachloroethane	11.213	83	283558	150.458 ug/l		99
76) 1,2,3-Trichloropropane	11.238	75	229435m	151.960 ug/l		
77) Bromobenzene	11.195	156	180997	145.760 ug/l		96
78) n-propylbenzene	11.305	91	923593	146.395 ug/l		99
79) 2-Chlorotoluene	11.366	91	548695	141.695 ug/l		99
80) 1,3,5-Trimethylbenzene	11.451	105	635832	143.293 ug/l		98
81) trans-1,4-Dichloro-2-b...	11.018	75	82267	147.761 ug/l		98
82) 4-Chlorotoluene	11.451	91	627816	146.464 ug/l		99
83) tert-Butylbenzene	11.713	119	641713	142.974 ug/l		99
84) 1,2,4-Trimethylbenzene	11.750	105	647248	148.135 ug/l		100
85) sec-Butylbenzene	11.890	105	807713	145.383 ug/l		100
86) p-Isopropyltoluene	12.006	119	664916	149.075 ug/l		100
87) 1,3-Dichlorobenzene	11.969	146	334751	147.488 ug/l		100
88) 1,4-Dichlorobenzene	12.043	146	333594	145.189 ug/l		99
89) n-Butylbenzene	12.329	91	620757	158.324 ug/l		99
90) Hexachloroethane	12.536	117	128582	154.554 ug/l		100
91) 1,2-Dichlorobenzene	12.335	146	329318	147.436 ug/l		99
92) 1,2-Dibromo-3-Chloropr...	12.939	75	64958	186.240 ug/l		98
93) 1,2,4-Trichlorobenzene	13.585	180	219313	162.416 ug/l		99
94) Hexachlorobutadiene	13.725	225	80241	149.034 ug/l		99
95) Naphthalene	13.774	128	828949	168.538 ug/l		100
96) 1,2,3-Trichlorobenzene	13.957	180	222608	162.727 ug/l		99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045073.D
Acq On : 28 Feb 2025 03:47
Operator : JC/MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 22 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

Quant Time: Feb 28 05:36:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 05:28:02 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

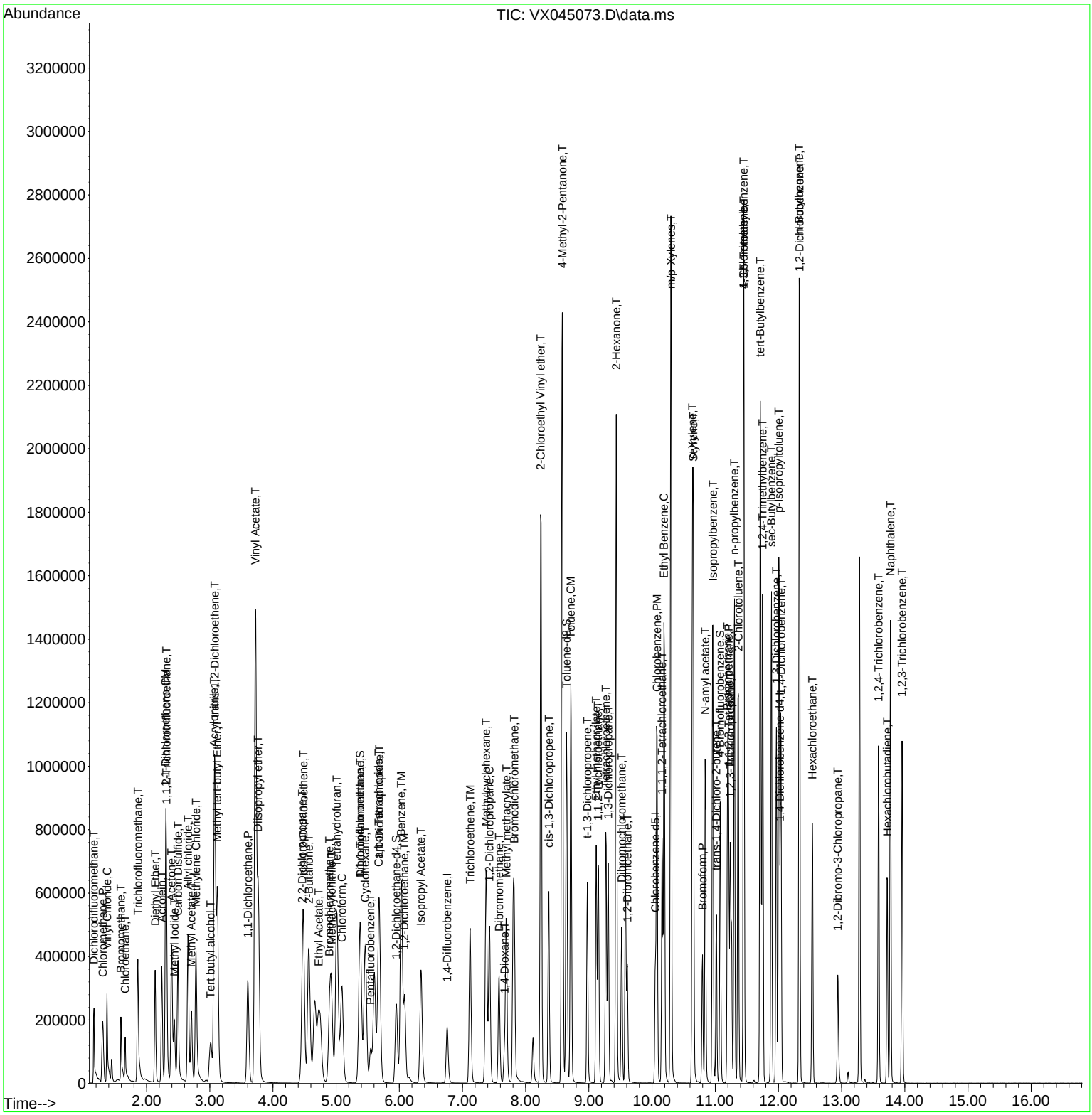
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045073.D
Acq On : 28 Feb 2025 03:47
Operator : JC/MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 28 05:36:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 05:28:02 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045075.D
Acq On : 28 Feb 2025 04:33
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 24 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX022825

Manual Integrations APPROVED

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

Quant Time: Feb 28 06:55:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.550	168	101603	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.757	114	184964	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	157797	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	69357	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.952	65	81288	50.297	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 100.600%			
35) Dibromofluoromethane	5.385	113	62880	50.841	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 101.680%			
50) Toluene-d8	8.647	98	225823	50.364	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 100.720%			
62) 4-Bromofluorobenzene	11.079	95	73162	49.240	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 98.480%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.166	85	61303	47.933	ug/l	95
3) Chloromethane	1.306	50	76216	48.696	ug/l	94
4) Vinyl Chloride	1.373	62	76901	49.529	ug/l	97
5) Bromomethane	1.593	94	28193	46.190	ug/l	97
6) Chloroethane	1.660	64	30042	41.948	ug/l	99
7) Trichlorofluoromethane	1.867	101	101886	49.569	ug/l	98
8) Diethyl Ether	2.136	74	39113	48.651	ug/l	96
9) 1,1,2-Trichlorotrifluo...	2.312	101	59477	50.367	ug/l	100
10) Methyl Iodide	2.440	142	74585	50.541	ug/l	98
11) Tert butyl alcohol	2.989	59	73034	238.577	ug/l	98
12) 1,1-Dichloroethene	2.306	96	61885	49.568	ug/l	98
13) Acrolein	2.239	56	95989	271.255	ug/l	99
14) Allyl chloride	2.654	41	114875	51.691	ug/l	98
15) Acrylonitrile	3.068	53	209607	255.479	ug/l	99
16) Acetone	2.392	43	182119	242.877	ug/l	100
17) Carbon Disulfide	2.501	76	166105	49.952	ug/l	97
18) Methyl Acetate	2.709	43	90756	50.312	ug/l	99
19) Methyl tert-butyl Ether	3.117	73	222475	53.114	ug/l	99
20) Methylene Chloride	2.782	84	73731	49.639	ug/l	98
21) trans-1,2-Dichloroethene	3.081	96	63117	51.172	ug/l	98
22) Diisopropyl ether	3.763	45	243860	53.955	ug/l	97
23) Vinyl Acetate	3.721	43	1064817	282.313	ug/l	100
24) 1,1-Dichloroethane	3.605	63	129666	51.190	ug/l	100
25) 2-Butanone	4.562	43	298021	264.040	ug/l	98
26) 2,2-Dichloropropane	4.471	77	58694	49.401	ug/l	99
27) cis-1,2-Dichloroethene	4.483	96	78576	51.606	ug/l	100
28) Bromochloromethane	4.891	49	60849	50.399	ug/l	100
29) Tetrahydrofuran	5.007	42	195768	258.277	ug/l	99
30) Chloroform	5.086	83	126437	50.236	ug/l	98
31) Cyclohexane	5.464	56	110288	50.158	ug/l	98
32) 1,1,1-Trichloroethane	5.373	97	103546	50.939	ug/l	99
36) 1,1-Dichloropropene	5.684	75	82722	48.770	ug/l	99
37) Ethyl Acetate	4.714	43	112768	51.596	ug/l	99
38) Carbon Tetrachloride	5.672	117	85110	49.425	ug/l	99
39) Methylcyclohexane	7.372	83	103996	51.169	ug/l	98
40) Benzene	6.031	78	274206	51.195	ug/l	99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045075.D
Acq On : 28 Feb 2025 04:33
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 28 06:55:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
ICVVX022825

Manual Integrations APPROVED

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	4.922	41	63051	53.352	ug/l		99
42) 1,2-Dichloroethane	6.080	62	97821	50.718	ug/l		100
43) Isopropyl Acetate	6.342	43	175982	54.452	ug/l		100
44) Trichloroethene	7.122	130	61530	48.924	ug/l		99
45) 1,2-Dichloropropane	7.427	63	70350	51.086	ug/l		97
46) Dibromomethane	7.580	93	50284	51.661	ug/l		99
47) Bromodichloromethane	7.817	83	97236	50.930	ug/l		99
48) Methyl methacrylate	7.689	41	87582	54.016	ug/l		100
49) 1,4-Dioxane	7.665	88	35878	1049.007	ug/l		98
51) 4-Methyl-2-Pentanone	8.573	43	564197	259.995	ug/l		99
52) Toluene	8.714	92	160331	51.020	ug/l		99
53) t-1,3-Dichloropropene	8.976	75	86584	54.247	ug/l		99
54) cis-1,3-Dichloropropene	8.366	75	98146	52.732	ug/l		95
55) 1,1,2-Trichloroethane	9.146	97	64985	50.232	ug/l		99
56) Ethyl methacrylate	9.116	69	106405	54.109	ug/l		100
57) 1,3-Dichloropropane	9.305	76	114880	51.312	ug/l		99
58) 2-Chloroethyl Vinyl ether	8.238	63	264335	275.557	ug/l		99
59) 2-Hexanone	9.427	43	416731	265.049	ug/l		99
60) Dibromochloromethane	9.518	129	69492	51.374	ug/l		98
61) 1,2-Dibromoethane	9.610	107	66501	51.492	ug/l		99
64) Tetrachloroethene	9.268	164	50659	50.126	ug/l		96
65) Chlorobenzene	10.079	112	168885	50.580	ug/l		99
66) 1,1,1,2-Tetrachloroethane	10.159	131	56822	51.102	ug/l		98
67) Ethyl Benzene	10.189	91	300324	51.621	ug/l		100
68) m/p-Xylenes	10.299	106	220335	103.454	ug/l		99
69) o-Xylene	10.640	106	108836	50.668	ug/l		100
70) Styrene	10.652	104	181349	52.177	ug/l		100
71) Bromoform	10.799	173	44135	52.636	ug/l	#	100
73) Isopropylbenzene	10.957	105	279278	51.589	ug/l		99
74) N-amyl acetate	10.841	43	144412	56.851	ug/l		99
75) 1,1,2,2-Tetrachloroethane	11.213	83	100800	50.741	ug/l		99
76) 1,2,3-Trichloropropane	11.238	75	80618m	49.940	ug/l		
77) Bromobenzene	11.195	156	64324	50.360	ug/l		100
78) n-propylbenzene	11.305	91	319235	52.203	ug/l		99
79) 2-Chlorotoluene	11.360	91	192150	49.338	ug/l		100
80) 1,3,5-Trimethylbenzene	11.451	105	225622	51.544	ug/l		100
81) trans-1,4-Dichloro-2-b...	11.018	75	23943	50.757	ug/l		99
82) 4-Chlorotoluene	11.451	91	216511	51.009	ug/l		100
83) tert-Butylbenzene	11.713	119	227357	50.552	ug/l		100
84) 1,2,4-Trimethylbenzene	11.750	105	228729	51.932	ug/l		100
85) sec-Butylbenzene	11.890	105	283931	52.703	ug/l		100
86) p-Isopropyltoluene	12.006	119	229894	52.803	ug/l		100
87) 1,3-Dichlorobenzene	11.969	146	114778	50.372	ug/l		100
88) 1,4-Dichlorobenzene	12.036	146	115486	50.097	ug/l		99
89) n-Butylbenzene	12.329	91	204972	54.662	ug/l		99
90) Hexachloroethane	12.536	117	40844	51.866	ug/l		99
91) 1,2-Dichlorobenzene	12.335	146	116343	50.899	ug/l		100
92) 1,2-Dibromo-3-Chloropr...	12.938	75	20589	53.199	ug/l		99
93) 1,2,4-Trichlorobenzene	13.585	180	71368	54.834	ug/l		98
94) Hexachlorobutadiene	13.725	225	26697	50.032	ug/l		99
95) Naphthalene	13.774	128	275844	55.163	ug/l		100
96) 1,2,3-Trichlorobenzene	13.957	180	74211	54.049	ug/l		99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045075.D
Acq On : 28 Feb 2025 04:33
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 24 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX022825

Manual Integrations APPROVED

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025

Quant Time: Feb 28 06:55:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 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

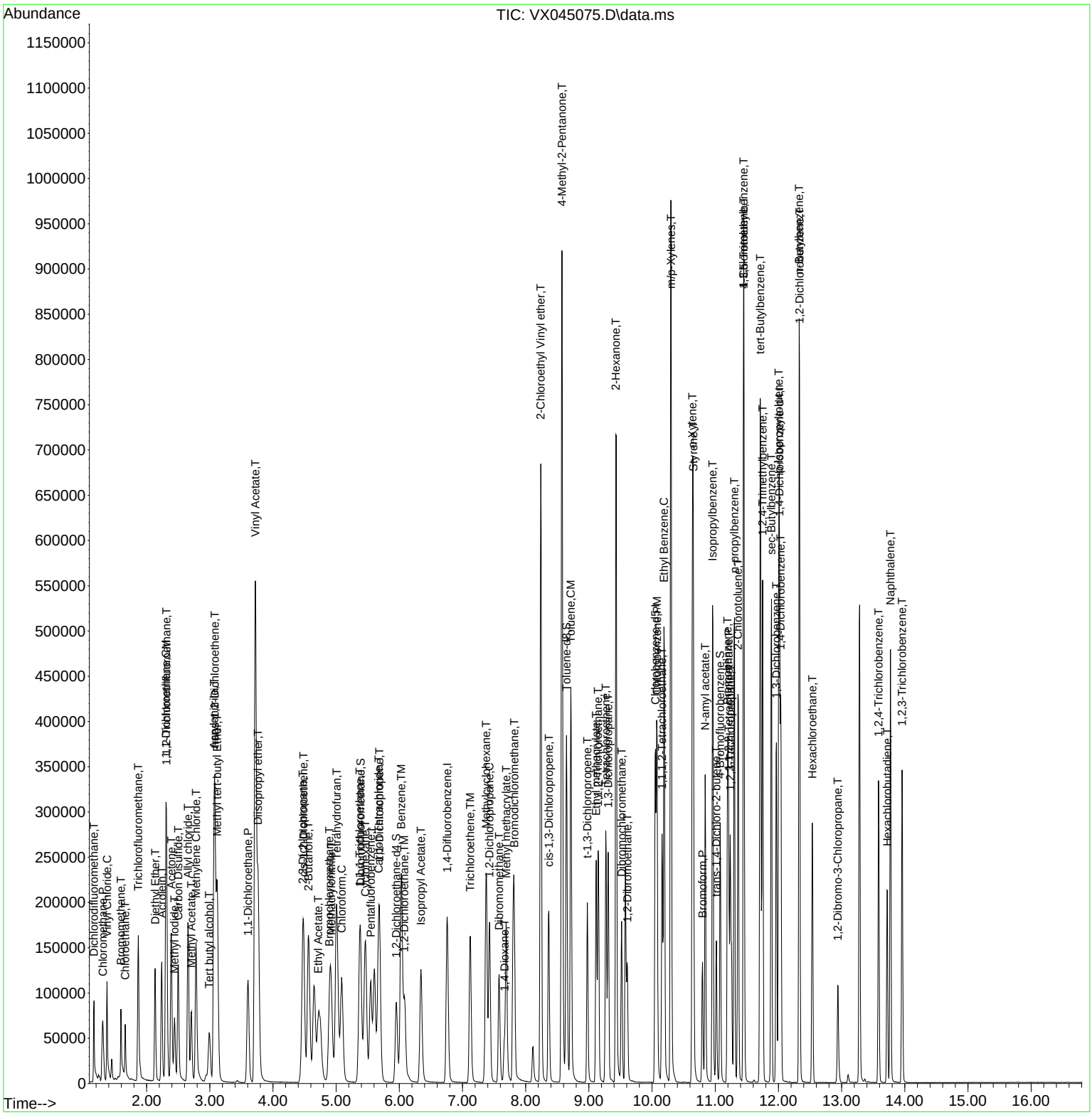
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045075.D
Acq On : 28 Feb 2025 04:33
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 28 06:55:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
ICVVX022825

Manual Integrations APPROVED

Reviewed By :John Carlone 02/28/2025
Supervised By :Mahesh Dadoda 02/28/2025



Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045075.D
Acq On : 28 Feb 2025 04:33
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 24 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX022825

Quant Time: Feb 28 06:55:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 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	98	0.00
2	T	Dichlorodifluoromethane	0.629	0.603	4.1	95	0.00
3	P	Chloromethane	0.770	0.750	2.6	98	0.00
4	C	Vinyl Chloride	0.764	0.757	0.9#	98	0.00
5	T	Bromomethane	0.300	0.277	7.7	93	0.00
6	T	Chloroethane	0.352	0.296	15.9	78	0.00
7	T	Trichlorofluoromethane	1.011	1.003	0.8	94	0.00
8	T	Diethyl Ether	0.396	0.385	2.8	98	0.00
9	T	1,1,2-Trichlorotrifluoroeth	0.581	0.585	-0.7	97	0.00
10	T	Methyl Iodide	0.726	0.734	-1.1	94	0.00
11	T	Tert butyl alcohol	0.151	0.144	4.6	106	0.00
12	CM	1,1-Dichloroethene	0.614	0.609	0.8#	96	0.00
13	T	Acrolein	0.174	0.189	-8.6	107	0.00
14	T	Allyl chloride	1.094	1.131	-3.4	100	0.00
15	T	Acrylonitrile	0.404	0.413	-2.2	99	0.00
16	T	Acetone	0.369	0.358	3.0	100	0.00
17	T	Carbon Disulfide	1.636	1.635	0.1	97	0.00
18	T	Methyl Acetate	0.888	0.893	-0.6	101	0.00
19	T	Methyl tert-butyl Ether	2.061	2.190	-6.3	103	0.00
20	T	Methylene Chloride	0.731	0.726	0.7	102	0.00
21	T	trans-1,2-Dichloroethene	0.607	0.621	-2.3	97	0.00
22	T	Diisopropyl ether	2.224	2.400	-7.9	103	0.00
23	T	Vinyl Acetate	1.856	2.096	-12.9	105	0.00
24	P	1,1-Dichloroethane	1.247	1.276	-2.3	101	0.00
25	T	2-Butanone	0.555	0.587	-5.8	100	0.00
26	T	2,2-Dichloropropane	0.585	0.578	1.2	95	0.00
27	T	cis-1,2-Dichloroethene	0.749	0.773	-3.2	100	0.00
28	T	Bromochloromethane	0.594	0.599	-0.8	98	0.00
29	T	Tetrahydrofuran	0.373	0.385	-3.2	102	0.00
30	C	Chloroform	1.239	1.244	-0.4#	98	0.00
31	T	Cyclohexane	1.082	1.085	-0.3	96	0.00
32	T	1,1,1-Trichloroethane	1.000	1.019	-1.9	98	0.00
33	S	1,2-Dichloroethane-d4	0.795	0.800	-0.6	104	0.00
34	I	1,4-Difluorobenzene	1.000	1.000	0.0	99	0.00
35	S	Dibromofluoromethane	0.334	0.340	-1.8	103	0.00
36	T	1,1-Dichloropropene	0.459	0.447	2.6	95	0.00
37	T	Ethyl Acetate	0.591	0.610	-3.2	100	0.00
38	T	Carbon Tetrachloride	0.465	0.460	1.1	98	0.00
39	T	Methylcyclohexane	0.549	0.562	-2.4	95	0.00
40	TM	Benzene	1.448	1.482	-2.3	98	0.00
41	T	Methacrylonitrile	0.319	0.341	-6.9	99	0.00
42	TM	1,2-Dichloroethane	0.521	0.529	-1.5	99	0.00
43	T	Isopropyl Acetate	0.874	0.951	-8.8	102	0.00
44	TM	Trichloroethene	0.340	0.333	2.1	97	0.00
45	C	1,2-Dichloropropane	0.372	0.380	-2.2#	102	0.00
46	T	Dibromomethane	0.263	0.272	-3.4	100	0.00
47	T	Bromodichloromethane	0.516	0.526	-1.9	99	0.00
48	T	Methyl methacrylate	0.438	0.474	-8.2	102	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045075.D
Acq On : 28 Feb 2025 04:33
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 24 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX022825

Quant Time: Feb 28 06:55:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 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	0.009	0.010	-11.1	102	0.00
50	S	Toluene-d8	1.212	1.221	-0.7	100	0.00
51	T	4-Methyl-2-Pentanone	0.587	0.610	-3.9	99	0.00
52	CM	Toluene	0.849	0.867	-2.1#	96	0.00
53	T	t-1,3-Dichloropropene	0.431	0.468	-8.6	99	0.00
54	T	cis-1,3-Dichloropropene	0.503	0.531	-5.6	98	0.00
55	T	1,1,2-Trichloroethane	0.350	0.351	-0.3	98	0.00
56	T	Ethyl methacrylate	0.532	0.575	-8.1	100	0.00
57	T	1,3-Dichloropropane	0.605	0.621	-2.6	99	0.00
58	T	2-Chloroethyl Vinyl ether	0.259	0.286	-10.4	100	0.00
59	T	2-Hexanone	0.425	0.451	-6.1	100	0.00
60	T	Dibromochloromethane	0.366	0.376	-2.7	97	0.00
61	T	1,2-Dibromoethane	0.349	0.360	-3.2	100	0.00
62	S	4-Bromofluorobenzene	0.402	0.396	1.5	98	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	97	0.00
64	T	Tetrachloroethene	0.320	0.321	-0.3	96	0.00
65	PM	Chlorobenzene	1.058	1.070	-1.1	95	0.00
66	T	1,1,1,2-Tetrachloroethane	0.352	0.360	-2.3	99	0.00
67	C	Ethyl Benzene	1.843	1.903	-3.3#	95	0.00
68	T	m/p-Xylenes	0.675	0.698	-3.4	94	0.00
69	T	o-Xylene	0.681	0.690	-1.3	95	0.00
70	T	Styrene	1.101	1.149	-4.4	95	0.00
71	P	Bromoform	0.266	0.280	-5.3	99	0.00
72	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	97	0.00
73	T	Isopropylbenzene	3.903	4.027	-3.2	95	0.00
74	T	N-amyl acetate	1.831	2.082	-13.7	103	0.00
75	P	1,1,2,2-Tetrachloroethane	1.432	1.453	-1.5	100	0.00
76	T	1,2,3-Trichloropropane	1.164	1.162	0.2	99	0.00
77	T	Bromobenzene	0.921	0.927	-0.7	96	0.00
78	T	n-propylbenzene	4.409	4.603	-4.4	93	0.00
79	T	2-Chlorotoluene	2.808	2.770	1.4	94	0.00
80	T	1,3,5-Trimethylbenzene	3.156	3.253	-3.1	94	0.00
81	T	trans-1,4-Dichloro-2-butene	0.340	0.345	-1.5	99	0.00
82	T	4-Chlorotoluene	3.060	3.122	-2.0	94	0.00
83	T	tert-Butylbenzene	3.242	3.278	-1.1	95	0.00
84	T	1,2,4-Trimethylbenzene	3.175	3.298	-3.9	95	0.00
85	T	sec-Butylbenzene	3.884	4.094	-5.4	95	0.00
86	T	p-Isopropyltoluene	3.139	3.315	-5.6	94	0.00
87	T	1,3-Dichlorobenzene	1.643	1.655	-0.7	97	0.00
88	T	1,4-Dichlorobenzene	1.662	1.665	-0.2	96	0.00
89	T	n-Butylbenzene	2.703	2.955	-9.3	95	0.00
90	T	Hexachloroethane	0.568	0.589	-3.7	95	0.00
91	T	1,2-Dichlorobenzene	1.648	1.677	-1.8	98	0.00
92	T	1,2-Dibromo-3-Chloropropane	0.279	0.297	-6.5	100	0.00
93	T	1,2,4-Trichlorobenzene	0.938	1.029	-9.7	99	0.00
94	T	Hexachlorobutadiene	0.385	0.385	0.0	96	0.00
95	T	Naphthalene	3.605	3.977	-10.3	99	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045075.D
Acq On : 28 Feb 2025 04:33
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 24 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX022825

Quant Time: Feb 28 06:55:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 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	0.990	1.070	-8.1	98	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\VX022825\
Data File : VX045075.D
Acq On : 28 Feb 2025 04:33
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 24 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX022825

Quant Time: Feb 28 06:55:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 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	98	0.00
2	T	Dichlorodifluoromethane	50.000	47.933	4.1	95	0.00
3	P	Chloromethane	50.000	48.696	2.6	98	0.00
4	C	Vinyl Chloride	50.000	49.529	0.9#	98	0.00
5	T	Bromomethane	50.000	46.190	7.6	93	0.00
6	T	Chloroethane	50.000	41.948	16.1	78	0.00
7	T	Trichlorofluoromethane	50.000	49.569	0.9	94	0.00
8	T	Diethyl Ether	50.000	48.651	2.7	98	0.00
9	T	1,1,2-Trichlorotrifluoroeth	50.000	50.367	-0.7	97	0.00
10	T	Methyl Iodide	50.000	50.541	-1.1	94	0.00
11	T	Tert butyl alcohol	250.000	238.577	4.6	106	0.00
12	CM	1,1-Dichloroethene	50.000	49.568	0.9#	96	0.00
13	T	Acrolein	250.000	271.255	-8.5	107	0.00
14	T	Allyl chloride	50.000	51.691	-3.4	100	0.00
15	T	Acrylonitrile	250.000	255.479	-2.2	99	0.00
16	T	Acetone	250.000	242.877	2.8	100	0.00
17	T	Carbon Disulfide	50.000	49.952	0.1	97	0.00
18	T	Methyl Acetate	50.000	50.312	-0.6	101	0.00
19	T	Methyl tert-butyl Ether	50.000	53.114	-6.2	103	0.00
20	T	Methylene Chloride	50.000	49.639	0.7	102	0.00
21	T	trans-1,2-Dichloroethene	50.000	51.172	-2.3	97	0.00
22	T	Diisopropyl ether	50.000	53.955	-7.9	103	0.00
23	T	Vinyl Acetate	250.000	282.313	-12.9	105	0.00
24	P	1,1-Dichloroethane	50.000	51.190	-2.4	101	0.00
25	T	2-Butanone	250.000	264.040	-5.6	100	0.00
26	T	2,2-Dichloropropane	50.000	49.401	1.2	95	0.00
27	T	cis-1,2-Dichloroethene	50.000	51.606	-3.2	100	0.00
28	T	Bromochloromethane	50.000	50.399	-0.8	98	0.00
29	T	Tetrahydrofuran	250.000	258.277	-3.3	102	0.00
30	C	Chloroform	50.000	50.236	-0.5#	98	0.00
31	T	Cyclohexane	50.000	50.158	-0.3	96	0.00
32	T	1,1,1-Trichloroethane	50.000	50.939	-1.9	98	0.00
33	S	1,2-Dichloroethane-d4	50.000	50.297	-0.6	104	0.00
34	I	1,4-Difluorobenzene	50.000	50.000	0.0	99	0.00
35	S	Dibromofluoromethane	50.000	50.841	-1.7	103	0.00
36	T	1,1-Dichloropropene	50.000	48.770	2.5	95	0.00
37	T	Ethyl Acetate	50.000	51.596	-3.2	100	0.00
38	T	Carbon Tetrachloride	50.000	49.425	1.2	98	0.00
39	T	Methylcyclohexane	50.000	51.169	-2.3	95	0.00
40	TM	Benzene	50.000	51.195	-2.4	98	0.00
41	T	Methacrylonitrile	50.000	53.352	-6.7	99	0.00
42	TM	1,2-Dichloroethane	50.000	50.718	-1.4	99	0.00
43	T	Isopropyl Acetate	50.000	54.452	-8.9	102	0.00
44	TM	Trichloroethene	50.000	48.924	2.2	97	0.00
45	C	1,2-Dichloropropane	50.000	51.086	-2.2#	102	0.00
46	T	Dibromomethane	50.000	51.661	-3.3	100	0.00
47	T	Bromodichloromethane	50.000	50.930	-1.9	99	0.00
48	T	Methyl methacrylate	50.000	54.016	-8.0	102	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045075.D
Acq On : 28 Feb 2025 04:33
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 24 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX022825

Quant Time: Feb 28 06:55:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 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	1049.007	-4.9	102	0.00
50	S	Toluene-d8	50.000	50.364	-0.7	100	0.00
51	T	4-Methyl-2-Pentanone	250.000	259.995	-4.0	99	0.00
52	CM	Toluene	50.000	51.020	-2.0#	96	0.00
53	T	t-1,3-Dichloropropene	50.000	54.247	-8.5	99	0.00
54	T	cis-1,3-Dichloropropene	50.000	52.732	-5.5	98	0.00
55	T	1,1,2-Trichloroethane	50.000	50.232	-0.5	98	0.00
56	T	Ethyl methacrylate	50.000	54.109	-8.2	100	0.00
57	T	1,3-Dichloropropane	50.000	51.312	-2.6	99	0.00
58	T	2-Chloroethyl Vinyl ether	250.000	275.557	-10.2	100	0.00
59	T	2-Hexanone	250.000	265.049	-6.0	100	0.00
60	T	Dibromochloromethane	50.000	51.374	-2.7	97	0.00
61	T	1,2-Dibromoethane	50.000	51.492	-3.0	100	0.00
62	S	4-Bromofluorobenzene	50.000	49.240	1.5	98	0.00
63	I	Chlorobenzene-d5	50.000	50.000	0.0	97	0.00
64	T	Tetrachloroethene	50.000	50.126	-0.3	96	0.00
65	PM	Chlorobenzene	50.000	50.580	-1.2	95	0.00
66	T	1,1,1,2-Tetrachloroethane	50.000	51.102	-2.2	99	0.00
67	C	Ethyl Benzene	50.000	51.621	-3.2#	95	0.00
68	T	m/p-Xylenes	100.000	103.454	-3.5	94	0.00
69	T	o-Xylene	50.000	50.668	-1.3	95	0.00
70	T	Styrene	50.000	52.177	-4.4	95	0.00
71	P	Bromoform	50.000	52.636	-5.3	99	0.00
72	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	97	0.00
73	T	Isopropylbenzene	50.000	51.589	-3.2	95	0.00
74	T	N-amyl acetate	50.000	56.851	-13.7	103	0.00
75	P	1,1,2,2-Tetrachloroethane	50.000	50.741	-1.5	100	0.00
76	T	1,2,3-Trichloropropane	50.000	49.940	0.1	99	0.00
77	T	Bromobenzene	50.000	50.360	-0.7	96	0.00
78	T	n-propylbenzene	50.000	52.203	-4.4	93	0.00
79	T	2-Chlorotoluene	50.000	49.338	1.3	94	0.00
80	T	1,3,5-Trimethylbenzene	50.000	51.544	-3.1	94	0.00
81	T	trans-1,4-Dichloro-2-butene	50.000	50.757	-1.5	99	0.00
82	T	4-Chlorotoluene	50.000	51.009	-2.0	94	0.00
83	T	tert-Butylbenzene	50.000	50.552	-1.1	95	0.00
84	T	1,2,4-Trimethylbenzene	50.000	51.932	-3.9	95	0.00
85	T	sec-Butylbenzene	50.000	52.703	-5.4	95	0.00
86	T	p-Isopropyltoluene	50.000	52.803	-5.6	94	0.00
87	T	1,3-Dichlorobenzene	50.000	50.372	-0.7	97	0.00
88	T	1,4-Dichlorobenzene	50.000	50.097	-0.2	96	0.00
89	T	n-Butylbenzene	50.000	54.662	-9.3	95	0.00
90	T	Hexachloroethane	50.000	51.866	-3.7	95	0.00
91	T	1,2-Dichlorobenzene	50.000	50.899	-1.8	98	0.00
92	T	1,2-Dibromo-3-Chloropropane	50.000	53.199	-6.4	100	0.00
93	T	1,2,4-Trichlorobenzene	50.000	54.834	-9.7	99	0.00
94	T	Hexachlorobutadiene	50.000	50.032	-0.1	96	0.00
95	T	Naphthalene	50.000	55.163	-10.3	99	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045075.D
Acq On : 28 Feb 2025 04:33
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 24 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX022825

Quant Time: Feb 28 06:55:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 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	54.049	-8.1	98	0.00

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

Raw Data: **VX045347.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: CHEM02

Lab Code: CHEM Case No.: Q1584 SAS No.: Q1584 SDG No.: Q1584

Instrument ID: MSVOA_X Calibration Date/Time: 03/20/2025 09:38

Lab File ID: VX045347.D Init. Calib. Date(s): 02/28/2025 02/28/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 01:27 03:47

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Dichlorodifluoromethane	0.629	0.635		0.95	20
Chloromethane	0.770	0.683	0.1	-11.3	20
Vinyl Chloride	0.764	0.657		-14.01	20
Ethyl Acetate	0.591	0.635		7.45	20
Bromomethane	0.300	0.275		-8.33	20
Chloroethane	0.352	0.316		-10.23	20
Trichlorofluoromethane	1.012	0.978		-3.36	20
1,1,2-Trichlorotrifluoroethane	0.581	0.655		12.74	20
Tert butyl alcohol	0.151	0.140		-7.28	20
1,1-Dichloroethene	0.614	0.608		-0.98	20
Acrolein	0.174	0.160		-8.05	20
Acrylonitrile	0.404	0.426		5.45	20
Acetone	0.369	0.417		13.01	20
Carbon Disulfide	1.636	1.362		-16.75	20
Methyl tert-butyl Ether	2.061	2.143		3.98	20
Methyl Acetate	0.888	1.180		32.88	20
Methylene Chloride	0.731	0.724		-0.96	20
trans-1,2-Dichloroethene	0.607	0.602		-0.82	20
Vinyl Acetate	1.856	1.938		4.42	20
1,1-Dichloroethane	1.247	1.270	0.1	1.84	20
Cyclohexane	1.082	1.055		-2.49	20
2-Butanone	0.555	0.609		9.73	20
Carbon Tetrachloride	0.465	0.526		13.12	20
2,2-Dichloropropane	0.585	0.919		57.09	20
cis-1,2-Dichloroethene	0.749	0.755		0.8	20
Bromochloromethane	0.594	0.603		1.51	20
Chloroform	1.239	1.284		3.63	20
1,1,1-Trichloroethane	1.000	1.065		6.5	20
Methylcyclohexane	0.549	0.607		10.56	20
1,1-Dichloropropene	0.459	0.480		4.57	20
Benzene	1.448	1.505		3.94	20
1,2-Dichloroethane	0.521	0.601		15.35	20
Trichloroethene	0.340	0.353		3.82	20
1,2-Dichloropropane	0.372	0.401		7.8	20
Dibromomethane	0.263	0.293		11.41	20
Bromodichloromethane	0.516	0.586		13.57	20
4-Methyl-2-Pentanone	0.587	0.672		14.48	20
Toluene	0.849	0.910		7.18	20

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

Raw Data: **VX045347.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: CHEM02

Lab Code: CHEM Case No.: Q1584 SAS No.: Q1584 SDG No.: Q1584

Instrument ID: MSVOA_X Calibration Date/Time: 03/20/2025 09:38

Lab File ID: VX045347.D Init. Calib. Date(s): 02/28/2025 02/28/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 01:27 03:47

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
t-1,3-Dichloropropene	0.431	0.527		22.27	20
cis-1,3-Dichloropropene	0.503	0.598		18.89	20
1,1,2-Trichloroethane	0.350	0.376		7.43	20
1,3-Dichloropropane	0.605	0.660		9.09	20
2-Chloroethyl Vinyl ether	0.259	0.321		23.94	20
2-Hexanone	0.425	0.491		15.53	20
Dibromochloromethane	0.366	0.421		15.03	20
1,2-Dibromoethane	0.349	0.377		8.02	20
Tetrachloroethene	0.320	0.349		9.06	20
Chlorobenzene	1.058	1.146	0.3	8.32	20
1,1,1,2-Tetrachloroethane	0.352	0.388		10.23	20
Hexachloroethane	0.568	0.652		14.79	20
Ethyl Benzene	1.843	2.054		11.45	20
m/p-Xylenes	0.675	0.757		12.15	20
o-Xylene	0.681	0.736		8.08	20
Styrene	1.101	1.244		12.99	20
Bromoform	0.266	0.311	0.1	16.92	20
Isopropylbenzene	3.903	4.256		9.04	20
1,1,2,2-Tetrachloroethane	1.432	1.465	0.3	2.3	20
1,2,3-Trichloropropane	1.164	1.229		5.58	20
Bromobenzene	0.921	0.944		2.5	20
n-propylbenzene	4.409	5.000		13.4	20
2-Chlorotoluene	2.808	3.000		6.84	20
1,3,5-Trimethylbenzene	3.156	3.473		10.04	20
4-Chlorotoluene	3.060	3.358		9.74	20
tert-Butylbenzene	3.242	3.499		7.93	20
1,2,4-Trimethylbenzene	3.175	3.505		10.39	20
sec-Butylbenzene	3.884	4.452		14.62	20
p-Isopropyltoluene	3.139	3.622		15.39	20
1,3-Dichlorobenzene	1.643	1.747		6.33	20
1,4-Dichlorobenzene	1.662	1.724		3.73	20
n-Butylbenzene	2.703	3.300		22.09	20
1,2-Dichlorobenzene	1.648	1.756		6.55	20
1,2-Dibromo-3-Chloropropane	0.279	0.321		15.05	20
1,2,4-Trichlorobenzene	0.938	1.072		14.29	20
Hexachlorobutadiene	0.385	0.460		19.48	20
Naphthalene	3.605	3.992		10.73	20
1,2,3-Trichlorobenzene	0.990	1.108		11.92	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: CHEM02

Lab Code: CHEM Case No.: Q1584 SAS No.: Q1584 SDG No.: Q1584

Instrument ID: MSVOA_X Calibration Date/Time: 03/20/2025 09:38

Lab File ID: VX045347.D Init. Calib. Date(s): 02/28/2025 02/28/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 01:27 03:47

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
1,2-Dichloroethane-d4	0.795	0.877		10.31	20
Dibromofluoromethane	0.334	0.382		14.37	20
Toluene-d8	1.212	1.314		8.42	20
4-Bromofluorobenzene	0.402	0.464		15.42	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\VX032025\
Data File : VX045347.D
Acq On : 20 Mar 2025 09:38
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 21 01:40:50 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 03/21/2025
Supervised By :Mahesh Dadoda 03/21/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.544	168	94097	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.751	114	160941	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.049	117	139446	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	64140	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.946	65	82508	55.125	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 110.240%			
35) Dibromofluoromethane	5.379	113	61401	57.055	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 114.120%			
50) Toluene-d8	8.647	98	211503	54.211	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 108.420%			
62) 4-Bromofluorobenzene	11.079	95	74611	57.711	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 115.420%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.166	85	59746	50.442	ug/l	97
3) Chloromethane	1.307	50	64302	44.361	ug/l	96
4) Vinyl Chloride	1.374	62	61838	43.004	ug/l	95
5) Bromomethane	1.593	94	25902	45.822	ug/l	97
6) Chloroethane	1.660	64	29735	44.831	ug/l	100
7) Trichlorofluoromethane	1.868	101	92068	48.366	ug/l	99
8) Diethyl Ether	2.130	74	32644	43.843	ug/l	97
9) 1,1,2-Trichlorotrifluo...	2.313	101	61677	56.396	ug/l	99
10) Methyl Iodide	2.441	142	71548	52.350	ug/l	96
11) Tert butyl alcohol	2.983	59	66006	232.818	ug/l	99
12) 1,1-Dichloroethene	2.307	96	57166	49.441	ug/l	99
13) Acrolein	2.239	56	75371	229.981	ug/l	98
14) Allyl chloride	2.654	41	110322	53.602	ug/l	97
15) Acrylonitrile	3.062	53	200634	264.049	ug/l	99
16) Acetone	2.386	43	196313	282.690	ug/l	99
17) Carbon Disulfide	2.496	76	128203	41.629	ug/l	97
18) Methyl Acetate	2.703	43	110994	66.439	ug/l	98
19) Methyl tert-butyl Ether	3.111	73	201610	51.972	ug/l	99
20) Methylene Chloride	2.782	84	68099	49.504	ug/l	98
21) trans-1,2-Dichloroethene	3.081	96	56672	49.612	ug/l	97
22) Diisopropyl ether	3.757	45	218443	52.186	ug/l	93
23) Vinyl Acetate	3.715	43	911566	260.960	ug/l	98
24) 1,1-Dichloroethane	3.599	63	119458	50.922	ug/l	99
25) 2-Butanone	4.556	43	286555	274.133	ug/l	96
26) 2,2-Dichloropropane	4.465	77	86451	78.567	ug/l	94
27) cis-1,2-Dichloroethene	4.477	96	71053	50.388	ug/l	92
28) Bromochloromethane	4.891	49	56750	50.753	ug/l	99
29) Tetrahydrofuran	5.001	42	176238	251.058	ug/l	99
30) Chloroform	5.087	83	120782	51.818	ug/l	100
31) Cyclohexane	5.452	56	99254	48.741	ug/l	93
32) 1,1,1-Trichloroethane	5.373	97	100201	53.226	ug/l	98
36) 1,1-Dichloropropene	5.678	75	77237	52.334	ug/l	99
37) Ethyl Acetate	4.715	43	102186	53.733	ug/l	99
38) Carbon Tetrachloride	5.666	117	84612	56.470	ug/l	98
39) Methylcyclohexane	7.373	83	97687	55.240	ug/l	96
40) Benzene	6.025	78	242215	51.973	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032025\
Data File : VX045347.D
Acq On : 20 Mar 2025 09:38
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 21 01:40:50 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 03/21/2025
Supervised By :Mahesh Dadoda 03/21/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	4.910	41	59716	58.072	ug/l		99
42) 1,2-Dichloroethane	6.080	62	96672	57.604	ug/l		97
43) Isopropyl Acetate	6.336	43	160232	56.979	ug/l		99
44) Trichloroethene	7.117	130	56744	51.854	ug/l		100
45) 1,2-Dichloropropane	7.421	63	64615	53.925	ug/l		98
46) Dibromomethane	7.574	93	47119	55.635	ug/l		97
47) Bromodichloromethane	7.818	83	94372	56.808	ug/l		99
48) Methyl methacrylate	7.690	41	80819	57.285	ug/l		96
49) 1,4-Dioxane	7.665	88	29379	987.206	ug/l		97
51) 4-Methyl-2-Pentanone	8.574	43	540720	286.370	ug/l		99
52) Toluene	8.714	92	146417	53.547	ug/l		100
53) t-1,3-Dichloropropene	8.976	75	84772	61.040	ug/l		95
54) cis-1,3-Dichloropropene	8.360	75	96208	59.407	ug/l		92
55) 1,1,2-Trichloroethane	9.147	97	60462	53.712	ug/l		97
56) Ethyl methacrylate	9.116	69	96357	56.313	ug/l		95
57) 1,3-Dichloropropane	9.305	76	106148	54.489	ug/l		100
58) 2-Chloroethyl Vinyl ether	8.238	63	258027	309.131	ug/l		98
59) 2-Hexanone	9.427	43	395325	288.965	ug/l		99
60) Dibromochloromethane	9.519	129	67728	57.543	ug/l		98
61) 1,2-Dibromoethane	9.604	107	60702	54.017	ug/l		100
64) Tetrachloroethene	9.269	164	48599	54.416	ug/l		98
65) Chlorobenzene	10.073	112	159759	54.144	ug/l		100
66) 1,1,1,2-Tetrachloroethane	10.159	131	54037	54.992	ug/l		99
67) Ethyl Benzene	10.189	91	286365	55.699	ug/l		100
68) m/p-Xylenes	10.299	106	211033	112.126	ug/l		97
69) o-Xylene	10.640	106	102643	54.073	ug/l		97
70) Styrene	10.653	104	173421	56.462	ug/l		98
71) Bromoform	10.799	173	43429	58.610	ug/l	#	99
73) Isopropylbenzene	10.957	105	272973	54.526	ug/l		99
74) N-amyl acetate	10.842	43	131333	55.907	ug/l		98
75) 1,1,2,2-Tetrachloroethane	11.207	83	93995	51.164	ug/l		98
76) 1,2,3-Trichloropropane	11.238	75	78826m	52.802	ug/l		
77) Bromobenzene	11.195	156	60575	51.283	ug/l		95
78) n-propylbenzene	11.305	91	320714	56.710	ug/l		99
79) 2-Chlorotoluene	11.360	91	192413	53.424	ug/l		98
80) 1,3,5-Trimethylbenzene	11.451	105	222755	55.029	ug/l		98
81) trans-1,4-Dichloro-2-b...	11.018	75	25918	59.413	ug/l		92
82) 4-Chlorotoluene	11.451	91	215413	54.878	ug/l		99
83) tert-Butylbenzene	11.713	119	224427	53.959	ug/l		99
84) 1,2,4-Trimethylbenzene	11.750	105	224842	55.202	ug/l		98
85) sec-Butylbenzene	11.890	105	285577	57.320	ug/l		99
86) p-Isopropyltoluene	12.006	119	232345	57.707	ug/l		98
87) 1,3-Dichlorobenzene	11.969	146	112042	53.171	ug/l		100
88) 1,4-Dichlorobenzene	12.036	146	110569	51.865	ug/l		98
89) n-Butylbenzene	12.329	91	211674	61.041	ug/l		100
90) Hexachloroethane	12.536	117	41788	57.380	ug/l		99
91) 1,2-Dichlorobenzene	12.335	146	112628	53.282	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	12.939	75	20610	57.585	ug/l		94
93) 1,2,4-Trichlorobenzene	13.585	180	68746	57.116	ug/l		99
94) Hexachlorobutadiene	13.725	225	29525	59.832	ug/l		98
95) Naphthalene	13.774	128	256043	55.368	ug/l		99
96) 1,2,3-Trichlorobenzene	13.957	180	71037	55.945	ug/l		99

Sample Results: **VX045347.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032025\
Data File : VX045347.D
Acq On : 20 Mar 2025 09:38
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 21 01:40:50 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 03/21/2025
Supervised By :Mahesh Dadoda 03/21/2025

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

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

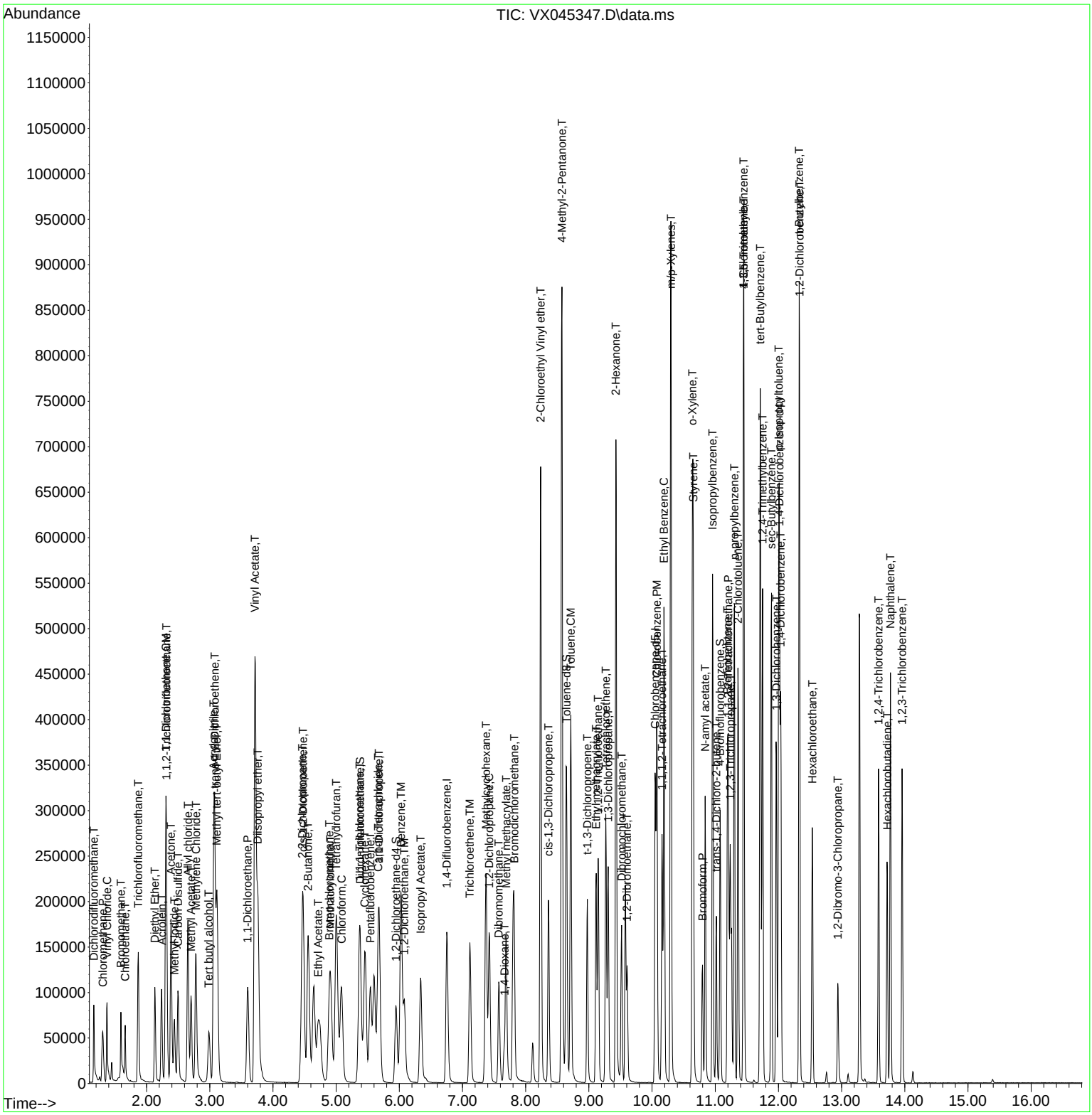
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032025\
Data File : VX045347.D
Acq On : 20 Mar 2025 09:38
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 21 01:40:50 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 03/21/2025
Supervised By :Mahesh Dadoda 03/21/2025



Evaluate Continuing Calibration Report

Sample Results: **VX045347.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032025\
Data File : VX045347.D
Acq On : 20 Mar 2025 09:38
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Mar 21 01:40:50 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 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	91	0.00
2	T	Dichlorodifluoromethane	0.629	0.635	-1.0	92	0.00
3	P	Chloromethane	0.770	0.683	11.3	83	0.00
4	C	Vinyl Chloride	0.764	0.657	14.0#	79	0.00
5	T	Bromomethane	0.300	0.275	8.3	86	0.00
6	T	Chloroethane	0.352	0.316	10.2	77	0.00
7	T	Trichlorofluoromethane	1.011	0.978	3.3	85	0.00
8	T	Diethyl Ether	0.396	0.347	12.4	82	0.00
9	T	1,1,2-Trichlorotrifluoroeth	0.581	0.655	-12.7	101	0.00
10	T	Methyl Iodide	0.726	0.760	-4.7	90	0.00
11	T	Tert butyl alcohol	0.151	0.140	7.3	95	0.00
12	CM	1,1-Dichloroethene	0.614	0.608	1.0#	89	0.00
13	T	Acrolein	0.174	0.160	8.0	84	0.00
14	T	Allyl chloride	1.094	1.172	-7.1	97	0.00
15	T	Acrylonitrile	0.404	0.426	-5.4	95	0.00
16	T	Acetone	0.369	0.417	-13.0	108	0.00
17	T	Carbon Disulfide	1.636	1.362	16.7	75	0.00
18	T	Methyl Acetate	0.888	1.180	-32.9#	124	0.00
19	T	Methyl tert-butyl Ether	2.061	2.143	-4.0	94	0.00
20	T	Methylene Chloride	0.731	0.724	1.0	94	0.00
21	T	trans-1,2-Dichloroethene	0.607	0.602	0.8	87	0.00
22	T	Diisopropyl ether	2.224	2.321	-4.4	92	0.00
23	T	Vinyl Acetate	1.856	1.938	-4.4	89	0.00
24	P	1,1-Dichloroethane	1.247	1.270	-1.8	93	0.00
25	T	2-Butanone	0.555	0.609	-9.7	96	0.00
26	T	2,2-Dichloropropane	0.585	0.919	-57.1#	140	0.00
27	T	cis-1,2-Dichloroethene	0.749	0.755	-0.8	90	0.00
28	T	Bromochloromethane	0.594	0.603	-1.5	91	0.00
29	T	Tetrahydrofuran	0.373	0.375	-0.5	92	0.00
30	C	Chloroform	1.239	1.284	-3.6#	94	0.00
31	T	Cyclohexane	1.082	1.055	2.5	87	-0.01
32	T	1,1,1-Trichloroethane	1.000	1.065	-6.5	95	0.00
33	S	1,2-Dichloroethane-d4	0.795	0.877	-10.3	106	0.00
34	I	1,4-Difluorobenzene	1.000	1.000	0.0	86	0.00
35	S	Dibromofluoromethane	0.334	0.382	-14.4	100	0.00
36	T	1,1-Dichloropropene	0.459	0.480	-4.6	88	-0.01
37	T	Ethyl Acetate	0.591	0.635	-7.4	91	0.00
38	T	Carbon Tetrachloride	0.465	0.526	-13.1	97	0.00
39	T	Methylcyclohexane	0.549	0.607	-10.6	90	0.00
40	TM	Benzene	1.448	1.505	-3.9	87	0.00
41	T	Methacrylonitrile	0.319	0.371	-16.3	94	-0.01
42	TM	1,2-Dichloroethane	0.521	0.601	-15.4	98	0.00
43	T	Isopropyl Acetate	0.874	0.996	-14.0	93	0.00
44	TM	Trichloroethene	0.340	0.353	-3.8	89	0.00
45	C	1,2-Dichloropropane	0.372	0.401	-7.8#	93	0.00
46	T	Dibromomethane	0.263	0.293	-11.4	94	0.00
47	T	Bromodichloromethane	0.516	0.586	-13.6	97	0.00
48	T	Methyl methacrylate	0.438	0.502	-14.6	94	0.00

Sample Results: **VX045347.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032025\
Data File : VX045347.D
Acq On : 20 Mar 2025 09:38
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Mar 21 01:40:50 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 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	0.009	0.009	0.0	84	0.00
50	S	Toluene-d8	1.212	1.314	-8.4	94	0.00
51	T	4-Methyl-2-Pentanone	0.587	0.672	-14.5	95	0.00
52	CM	Toluene	0.849	0.910	-7.2#	87	0.00
53	T	t-1,3-Dichloropropene	0.431	0.527	-22.3	97	0.00
54	T	cis-1,3-Dichloropropene	0.503	0.598	-18.9	96	0.00
55	T	1,1,2-Trichloroethane	0.350	0.376	-7.4	91	0.00
56	T	Ethyl methacrylate	0.532	0.599	-12.6	91	0.00
57	T	1,3-Dichloropropane	0.605	0.660	-9.1	92	0.00
58	T	2-Chloroethyl Vinyl ether	0.259	0.321	-23.9	98	0.00
59	T	2-Hexanone	0.425	0.491	-15.5	95	0.00
60	T	Dibromochloromethane	0.366	0.421	-15.0	95	0.00
61	T	1,2-Dibromoethane	0.349	0.377	-8.0	92	0.00
62	S	4-Bromofluorobenzene	0.402	0.464	-15.4	100	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	86	0.00
64	T	Tetrachloroethene	0.320	0.349	-9.1	93	0.00
65	PM	Chlorobenzene	1.058	1.146	-8.3	90	0.00
66	T	1,1,1,2-Tetrachloroethane	0.352	0.388	-10.2	94	0.00
67	C	Ethyl Benzene	1.843	2.054	-11.4#	90	0.00
68	T	m/p-Xylenes	0.675	0.757	-12.1	90	0.00
69	T	o-Xylene	0.681	0.736	-8.1	90	0.00
70	T	Styrene	1.101	1.244	-13.0	91	0.00
71	P	Bromoform	0.266	0.311	-16.9	97	0.00
72	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	90	0.00
73	T	Isopropylbenzene	3.903	4.256	-9.0	93	0.00
74	T	N-amyl acetate	1.831	2.048	-11.9	93	0.00
75	P	1,1,2,2-Tetrachloroethane	1.432	1.465	-2.3	93	0.00
76	T	1,2,3-Trichloropropane	1.164	1.229	-5.6	96	0.00
77	T	Bromobenzene	0.921	0.944	-2.5	91	0.00
78	T	n-propylbenzene	4.409	5.000	-13.4	94	0.00
79	T	2-Chlorotoluene	2.808	3.000	-6.8	94	0.00
80	T	1,3,5-Trimethylbenzene	3.156	3.473	-10.0	92	0.00
81	T	trans-1,4-Dichloro-2-butene	0.340	0.404	-18.8	107	0.00
82	T	4-Chlorotoluene	3.060	3.358	-9.7	93	0.00
83	T	tert-Butylbenzene	3.242	3.499	-7.9	93	0.00
84	T	1,2,4-Trimethylbenzene	3.175	3.505	-10.4	93	0.00
85	T	sec-Butylbenzene	3.884	4.452	-14.6	95	0.00
86	T	p-Isopropyltoluene	3.139	3.622	-15.4	95	0.00
87	T	1,3-Dichlorobenzene	1.643	1.747	-6.3	94	0.00
88	T	1,4-Dichlorobenzene	1.662	1.724	-3.7	92	0.00
89	T	n-Butylbenzene	2.703	3.300	-22.1	99	0.00
90	T	Hexachloroethane	0.568	0.652	-14.8	97	0.00
91	T	1,2-Dichlorobenzene	1.648	1.756	-6.6	95	0.00
92	T	1,2-Dibromo-3-Chloropropane	0.279	0.321	-15.1	100	0.00
93	T	1,2,4-Trichlorobenzene	0.938	1.072	-14.3	96	0.00
94	T	Hexachlorobutadiene	0.385	0.460	-19.5	106	0.00
95	T	Naphthalene	3.605	3.992	-10.7	92	0.00

Sample Results: **VX045347.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032025\
Data File : VX045347.D
Acq On : 20 Mar 2025 09:38
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Mar 21 01:40:50 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 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	0.990	1.108	-11.9	94	0.00

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

Sample Results: **VX045347.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032025\
Data File : VX045347.D
Acq On : 20 Mar 2025 09:38
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Mar 21 01:40:50 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 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	91	0.00
2	T	Dichlorodifluoromethane	50.000	50.442	-0.9	92	0.00
3	P	Chloromethane	50.000	44.361	11.3	83	0.00
4	C	Vinyl Chloride	50.000	43.004	14.0#	79	0.00
5	T	Bromomethane	50.000	45.822	8.4	86	0.00
6	T	Chloroethane	50.000	44.831	10.3	77	0.00
7	T	Trichlorofluoromethane	50.000	48.366	3.3	85	0.00
8	T	Diethyl Ether	50.000	43.843	12.3	82	0.00
9	T	1,1,2-Trichlorotrifluoroeth	50.000	56.396	-12.8	101	0.00
10	T	Methyl Iodide	50.000	52.350	-4.7	90	0.00
11	T	Tert butyl alcohol	250.000	232.818	6.9	95	0.00
12	CM	1,1-Dichloroethene	50.000	49.441	1.1#	89	0.00
13	T	Acrolein	250.000	229.981	8.0	84	0.00
14	T	Allyl chloride	50.000	53.602	-7.2	97	0.00
15	T	Acrylonitrile	250.000	264.049	-5.6	95	0.00
16	T	Acetone	250.000	282.690	-13.1	108	0.00
17	T	Carbon Disulfide	50.000	41.629	16.7	75	0.00
18	T	Methyl Acetate	50.000	66.439	-32.9#	124	0.00
19	T	Methyl tert-butyl Ether	50.000	51.972	-3.9	94	0.00
20	T	Methylene Chloride	50.000	49.504	1.0	94	0.00
21	T	trans-1,2-Dichloroethene	50.000	49.612	0.8	87	0.00
22	T	Diisopropyl ether	50.000	52.186	-4.4	92	0.00
23	T	Vinyl Acetate	250.000	260.960	-4.4	89	0.00
24	P	1,1-Dichloroethane	50.000	50.922	-1.8	93	0.00
25	T	2-Butanone	250.000	274.133	-9.7	96	0.00
26	T	2,2-Dichloropropane	50.000	78.567	-57.1#	140	0.00
27	T	cis-1,2-Dichloroethene	50.000	50.388	-0.8	90	0.00
28	T	Bromochloromethane	50.000	50.753	-1.5	91	0.00
29	T	Tetrahydrofuran	250.000	251.058	-0.4	92	0.00
30	C	Chloroform	50.000	51.818	-3.6#	94	0.00
31	T	Cyclohexane	50.000	48.741	2.5	87	-0.01
32	T	1,1,1-Trichloroethane	50.000	53.226	-6.5	95	0.00
33	S	1,2-Dichloroethane-d4	50.000	55.125	-10.3	106	0.00
34	I	1,4-Difluorobenzene	50.000	50.000	0.0	86	0.00
35	S	Dibromofluoromethane	50.000	57.055	-14.1	100	0.00
36	T	1,1-Dichloropropene	50.000	52.334	-4.7	88	-0.01
37	T	Ethyl Acetate	50.000	53.733	-7.5	91	0.00
38	T	Carbon Tetrachloride	50.000	56.470	-12.9	97	0.00
39	T	Methylcyclohexane	50.000	55.240	-10.5	90	0.00
40	TM	Benzene	50.000	51.973	-3.9	87	0.00
41	T	Methacrylonitrile	50.000	58.072	-16.1	94	-0.01
42	TM	1,2-Dichloroethane	50.000	57.604	-15.2	98	0.00
43	T	Isopropyl Acetate	50.000	56.979	-14.0	93	0.00
44	TM	Trichloroethene	50.000	51.854	-3.7	89	0.00
45	C	1,2-Dichloropropane	50.000	53.925	-7.8#	93	0.00
46	T	Dibromomethane	50.000	55.635	-11.3	94	0.00
47	T	Bromodichloromethane	50.000	56.808	-13.6	97	0.00
48	T	Methyl methacrylate	50.000	57.285	-14.6	94	0.00

Sample Results: **VX045347.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032025\
Data File : VX045347.D
Acq On : 20 Mar 2025 09:38
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Mar 21 01:40:50 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 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	987.206	1.3	84	0.00
50	S	Toluene-d8	50.000	54.211	-8.4	94	0.00
51	T	4-Methyl-2-Pentanone	250.000	286.370	-14.5	95	0.00
52	CM	Toluene	50.000	53.547	-7.1#	87	0.00
53	T	t-1,3-Dichloropropene	50.000	61.040	-22.1	97	0.00
54	T	cis-1,3-Dichloropropene	50.000	59.407	-18.8	96	0.00
55	T	1,1,2-Trichloroethane	50.000	53.712	-7.4	91	0.00
56	T	Ethyl methacrylate	50.000	56.313	-12.6	91	0.00
57	T	1,3-Dichloropropane	50.000	54.489	-9.0	92	0.00
58	T	2-Chloroethyl Vinyl ether	250.000	309.131	-23.7	98	0.00
59	T	2-Hexanone	250.000	288.965	-15.6	95	0.00
60	T	Dibromochloromethane	50.000	57.543	-15.1	95	0.00
61	T	1,2-Dibromoethane	50.000	54.017	-8.0	92	0.00
62	S	4-Bromofluorobenzene	50.000	57.711	-15.4	100	0.00
63	I	Chlorobenzene-d5	50.000	50.000	0.0	86	0.00
64	T	Tetrachloroethene	50.000	54.416	-8.8	93	0.00
65	PM	Chlorobenzene	50.000	54.144	-8.3	90	0.00
66	T	1,1,1,2-Tetrachloroethane	50.000	54.992	-10.0	94	0.00
67	C	Ethyl Benzene	50.000	55.699	-11.4#	90	0.00
68	T	m/p-Xylenes	100.000	112.126	-12.1	90	0.00
69	T	o-Xylene	50.000	54.073	-8.1	90	0.00
70	T	Styrene	50.000	56.462	-12.9	91	0.00
71	P	Bromoform	50.000	58.610	-17.2	97	0.00
72	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	90	0.00
73	T	Isopropylbenzene	50.000	54.526	-9.1	93	0.00
74	T	N-amyl acetate	50.000	55.907	-11.8	93	0.00
75	P	1,1,2,2-Tetrachloroethane	50.000	51.164	-2.3	93	0.00
76	T	1,2,3-Trichloropropane	50.000	52.802	-5.6	96	0.00
77	T	Bromobenzene	50.000	51.283	-2.6	91	0.00
78	T	n-propylbenzene	50.000	56.710	-13.4	94	0.00
79	T	2-Chlorotoluene	50.000	53.424	-6.8	94	0.00
80	T	1,3,5-Trimethylbenzene	50.000	55.029	-10.1	92	0.00
81	T	trans-1,4-Dichloro-2-butene	50.000	59.413	-18.8	107	0.00
82	T	4-Chlorotoluene	50.000	54.878	-9.8	93	0.00
83	T	tert-Butylbenzene	50.000	53.959	-7.9	93	0.00
84	T	1,2,4-Trimethylbenzene	50.000	55.202	-10.4	93	0.00
85	T	sec-Butylbenzene	50.000	57.320	-14.6	95	0.00
86	T	p-Isopropyltoluene	50.000	57.707	-15.4	95	0.00
87	T	1,3-Dichlorobenzene	50.000	53.171	-6.3	94	0.00
88	T	1,4-Dichlorobenzene	50.000	51.865	-3.7	92	0.00
89	T	n-Butylbenzene	50.000	61.041	-22.1	99	0.00
90	T	Hexachloroethane	50.000	57.380	-14.8	97	0.00
91	T	1,2-Dichlorobenzene	50.000	53.282	-6.6	95	0.00
92	T	1,2-Dibromo-3-Chloropropane	50.000	57.585	-15.2	100	0.00
93	T	1,2,4-Trichlorobenzene	50.000	57.116	-14.2	96	0.00
94	T	Hexachlorobutadiene	50.000	59.832	-19.7	106	0.00
95	T	Naphthalene	50.000	55.368	-10.7	92	0.00

Sample Results: **VX045347.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032025\
Data File : VX045347.D
Acq On : 20 Mar 2025 09:38
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Mar 21 01:40:50 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 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	55.945	-11.9	94	0.00

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

QC SAMPLE DATA

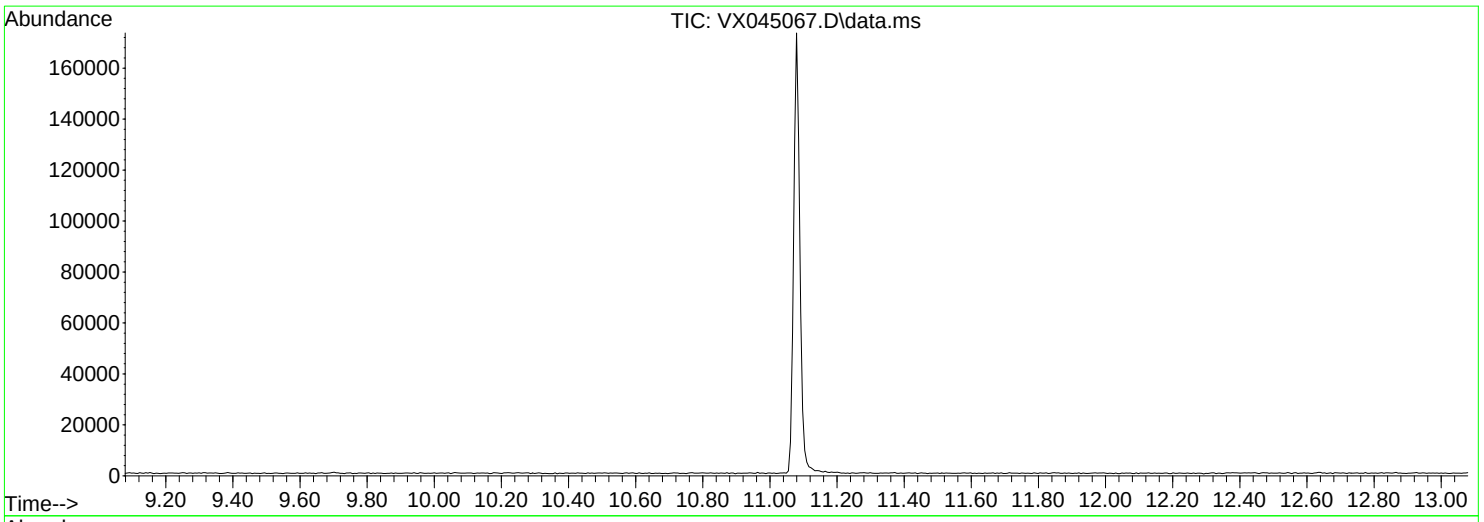
Sample Results: **VX045067.D**

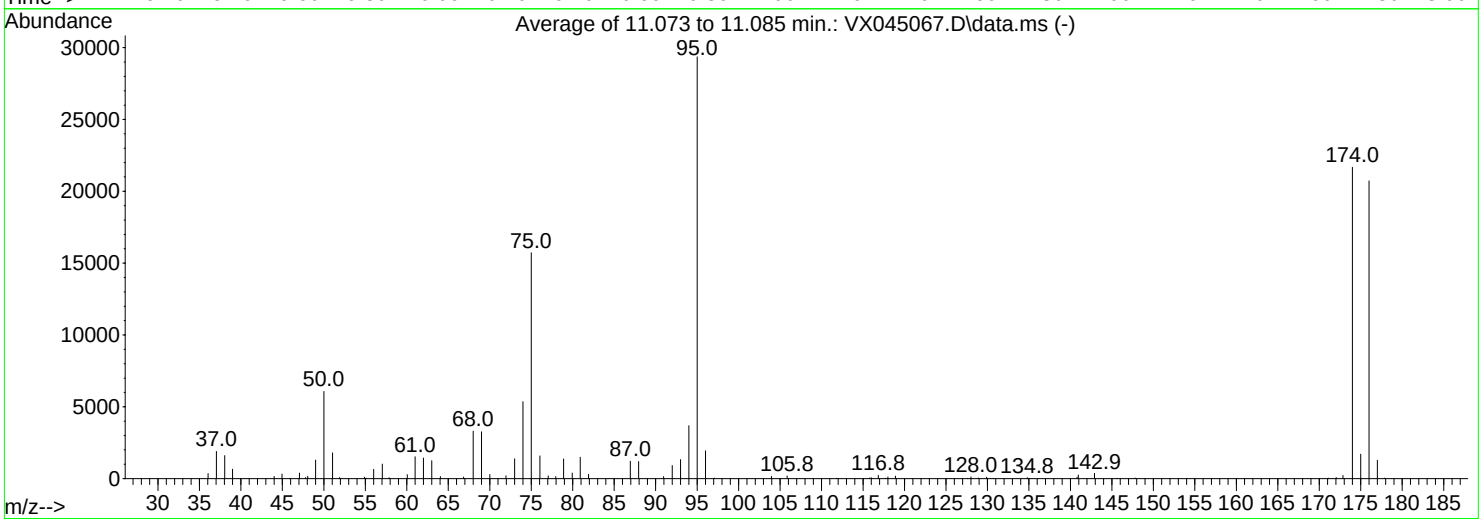
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX022825\
Data File : VX045067.D
Acq On : 28 Feb 2025 01:03
Operator : JC/MD
Sample : BFB
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 15 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Title : SW846 8260
Last Update : Fri Feb 28 06:45:16 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	20.7	6072	PASS
75	95	30	60	53.6	15726	PASS
95	95	100	100	100.0	29360	PASS
96	95	5	9	6.6	1942	PASS
173	174	0.00	2	1.0	219	PASS
174	95	50	100	73.8	21677	PASS
175	174	5	9	7.9	1702	PASS
176	174	95	101	95.6	20723	PASS
177	176	5	9	6.2	1277	PASS

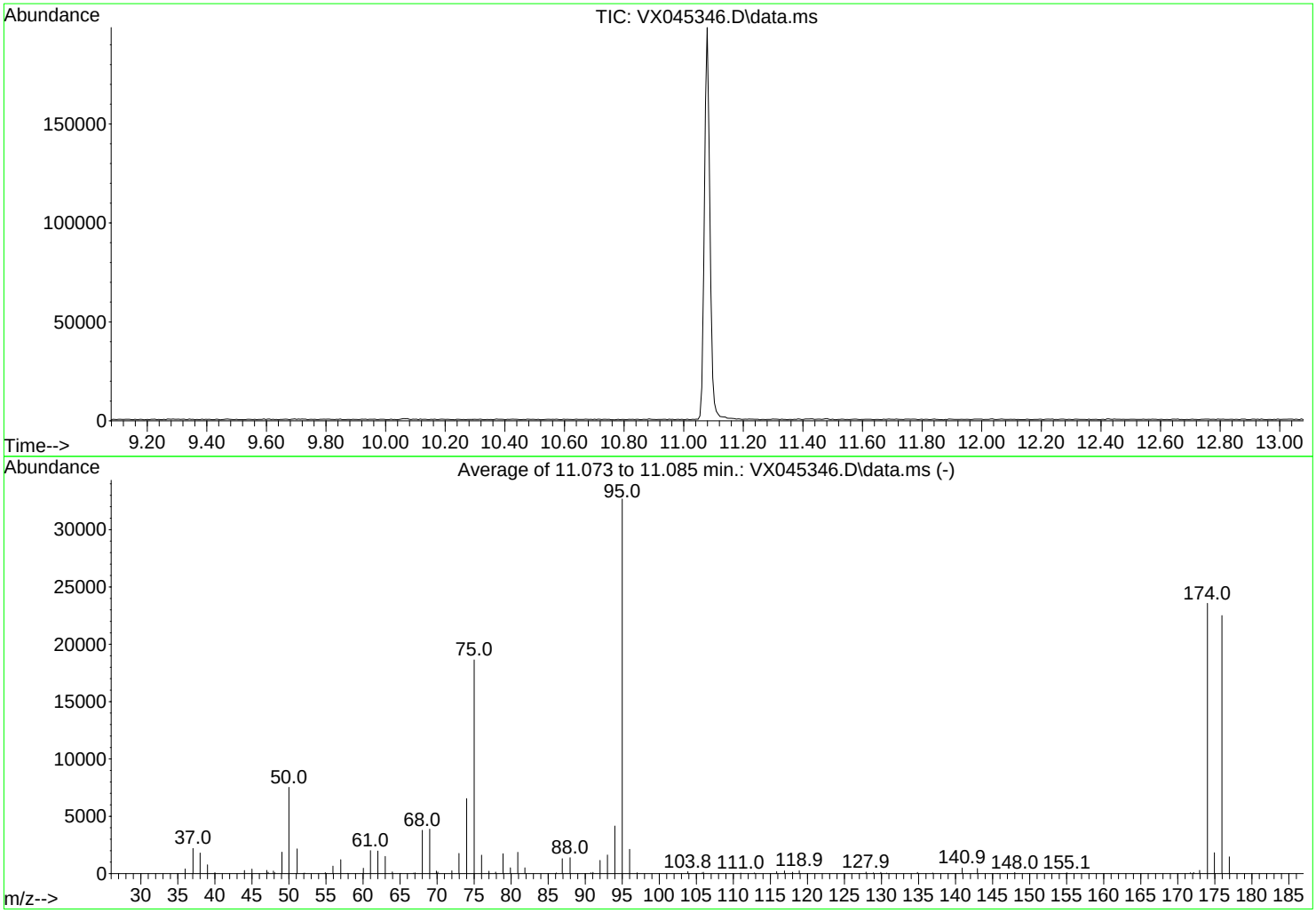
Sample Results: **VX045346.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032025\
Data File : VX045346.D
Acq On : 20 Mar 2025 09:09
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\82X022825W.M
Title : SW846 8260
Last Update : Fri Feb 28 06:45:16 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	23.0	7519	PASS
75	95	30	60	57.1	18644	PASS
95	95	100	100	100.0	32675	PASS
96	95	5	9	6.5	2124	PASS
173	174	0.00	2	1.2	288	PASS
174	95	50	100	72.1	23573	PASS
175	174	5	9	7.7	1819	PASS
176	174	95	101	95.5	22507	PASS
177	176	5	9	6.5	1462	PASS

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

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	
Project:	Weekly Storage Blanks	Date Received:	
Client Sample ID:	VX0320WBL01	SDG No.:	Q1584
Lab Sample ID:	VX0320WBL01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC- Chemtech Full
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045349.D	1		03/20/25 10:29	VX032025

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
141-78-6	Ethyl Acetate	0.31	U	0.31	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
75-65-0	Tert butyl alcohol	5.50	U	5.50	25.0	ug/L
75-35-4	1,1-Dichloroethene	0.23	U	0.23	1.00	ug/L
107-02-8	Acrolein	7.10	U	7.10	25.0	ug/L
107-13-1	Acrylonitrile	0.83	U	0.83	5.00	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
108-05-4	Vinyl Acetate	0.66	U	0.66	5.00	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
594-20-7	2,2-Dichloropropane	0.21	U	0.21	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
563-58-6	1,1-Dichloropropene	0.15	U	0.15	1.00	ug/L

Raw Data: **VX045349.D**

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

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	
Project:	Weekly Storage Blanks	Date Received:	
Client Sample ID:	VX0320WBL01	SDG No.:	Q1584
Lab Sample ID:	VX0320WBL01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC- Chemtech Full
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045349.D	1		03/20/25 10:29	VX032025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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
74-95-3	Dibromomethane	0.25	U	0.25	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
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
142-28-9	1,3-Dichloropropane	0.19	U	0.19	1.00	ug/L
110-75-8	2-Chloroethyl Vinyl ether	0.30	U	0.30	5.00	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
630-20-6	1,1,1,2-Tetrachloroethane	0.19	U	0.19	1.00	ug/L
67-72-1	Hexachloroethane	0.32	U	0.32	0	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
96-18-4	1,2,3-Trichloropropane	0.35	U	0.35	1.00	ug/L
108-86-1	Bromobenzene	0.24	U	0.24	1.00	ug/L
103-65-1	n-propylbenzene	0.13	U	0.13	1.00	ug/L
95-49-8	2-Chlorotoluene	0.14	U	0.14	1.00	ug/L

Raw Data: **VX045349.D**

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

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	
Project:	Weekly Storage Blanks	Date Received:	
Client Sample ID:	VX0320WBL01	SDG No.:	Q1584
Lab Sample ID:	VX0320WBL01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC- Chemtech Full
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045349.D	1		03/20/25 10:29	VX032025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
108-67-8	1,3,5-Trimethylbenzene	0.15	U	0.15	1.00	ug/L
106-43-4	4-Chlorotoluene	0.13	U	0.13	1.00	ug/L
98-06-6	tert-Butylbenzene	0.14	U	0.14	1.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.14	U	0.14	1.00	ug/L
135-98-8	sec-Butylbenzene	0.13	U	0.13	1.00	ug/L
99-87-6	p-Isopropyltoluene	0.13	U	0.13	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
104-51-8	n-Butylbenzene	0.15	U	0.15	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
87-68-3	Hexachlorobutadiene	0.30	U	0.30	1.00	ug/L
91-20-3	Naphthalene	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	57.3		74 - 125	115%	SPK: 50
1868-53-7	Dibromofluoromethane	53.1		75 - 124	106%	SPK: 50
2037-26-5	Toluene-d8	51.2		86 - 113	102%	SPK: 50
460-00-4	4-Bromofluorobenzene	52.0		77 - 121	104%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	67800	5.544			
540-36-3	1,4-Difluorobenzene	134000	6.757			
3114-55-4	Chlorobenzene-d5	122000	10.049			
3855-82-1	1,4-Dichlorobenzene-d4	47400	12.018			

Raw Data: **VX045349.D**

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

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	
Project:	Weekly Storage Blanks	Date Received:	
Client Sample ID:	VX0320WBL01	SDG No.:	Q1584
Lab Sample ID:	VX0320WBL01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC- Chemtech Full
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045349.D	1		03/20/25 10:29	VX032025

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\VX032025\
Data File : VX045349.D
Acq On : 20 Mar 2025 10:29
Operator : JC/MD
Sample : VX0320WBL01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VX0320WBL01

Quant Time: Mar 21 01:42:19 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

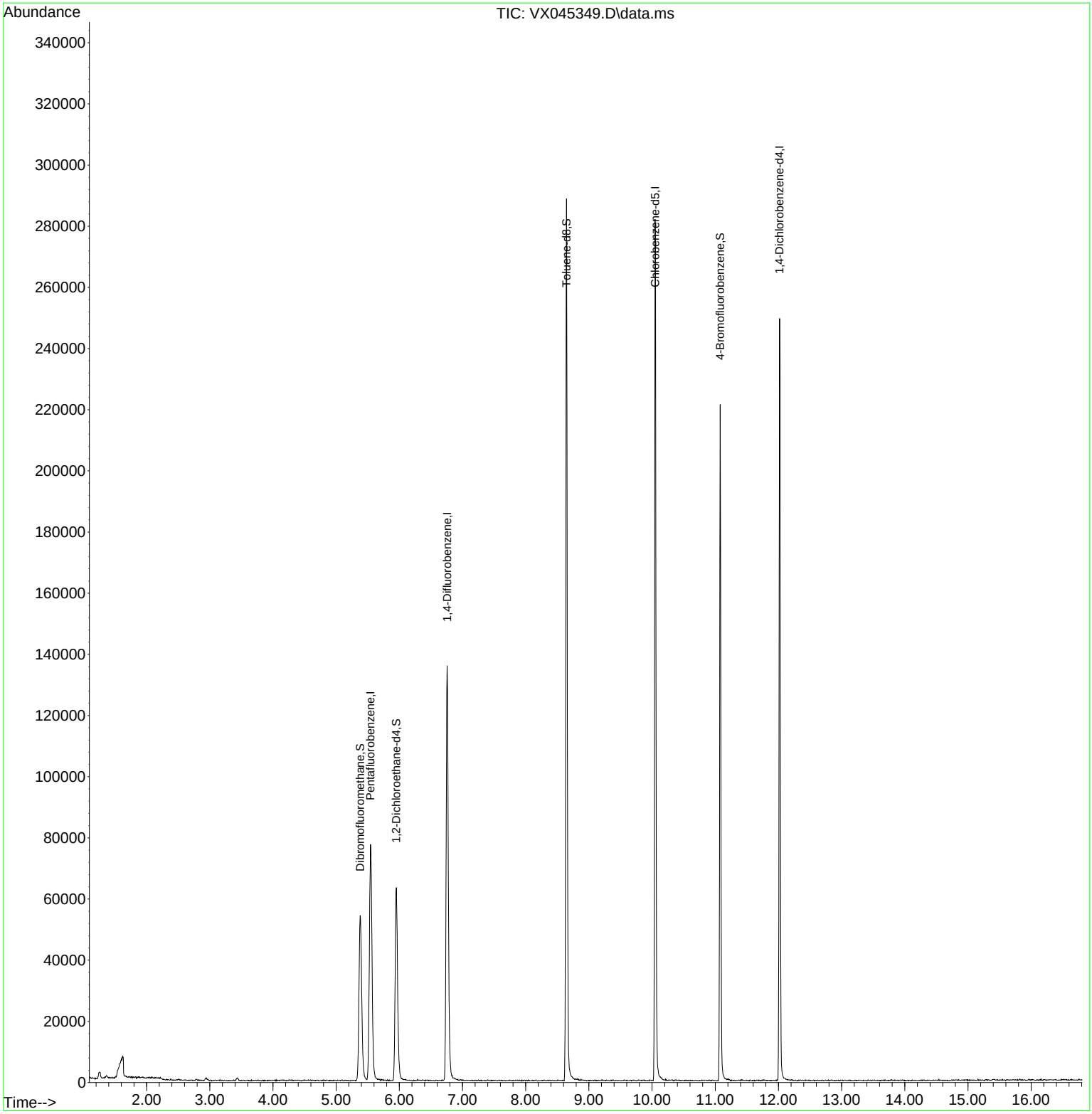
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.544	168	67796	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.757	114	133500	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.049	117	121748	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	47437	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.952	65	61741	57.253	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 114.500%			
35) Dibromofluoromethane	5.379	113	47374	53.069	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 106.140%			
50) Toluene-d8	8.647	98	165758	51.219	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 102.440%			
62) 4-Bromofluorobenzene	11.079	95	55720	51.958	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 103.920%			
Target Compounds						Qvalue

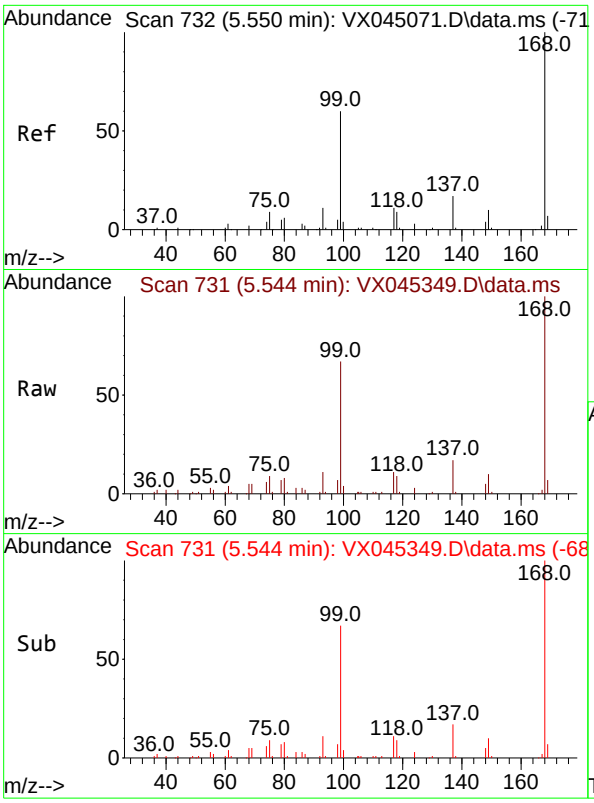
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032025\
Data File : VX045349.D
Acq On : 20 Mar 2025 10:29
Operator : JC/MD
Sample : VX0320WBL01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VX0320WBL01

Quant Time: Mar 21 01:42:19 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration



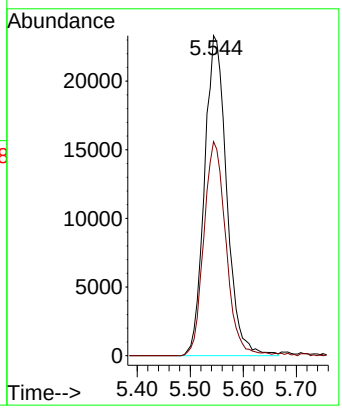


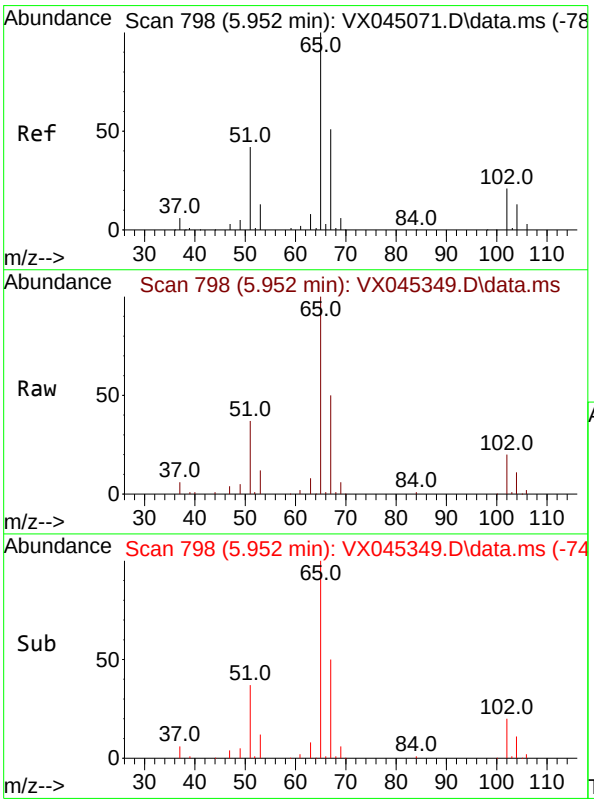
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.544 min Scan# 7
Delta R.T. -0.006 min
Lab File: VX045349.D
Acq: 20 Mar 2025 10:29

Instrument :
MSVOA_X
ClientSampleId :
VX0320WBL01

Tgt Ion:168 Resp: 67796

Ion	Ratio	Lower	Upper
168	100		
99	66.9	48.2	72.4

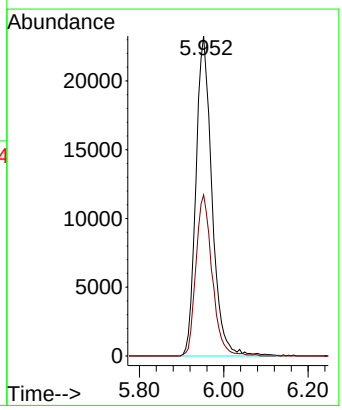


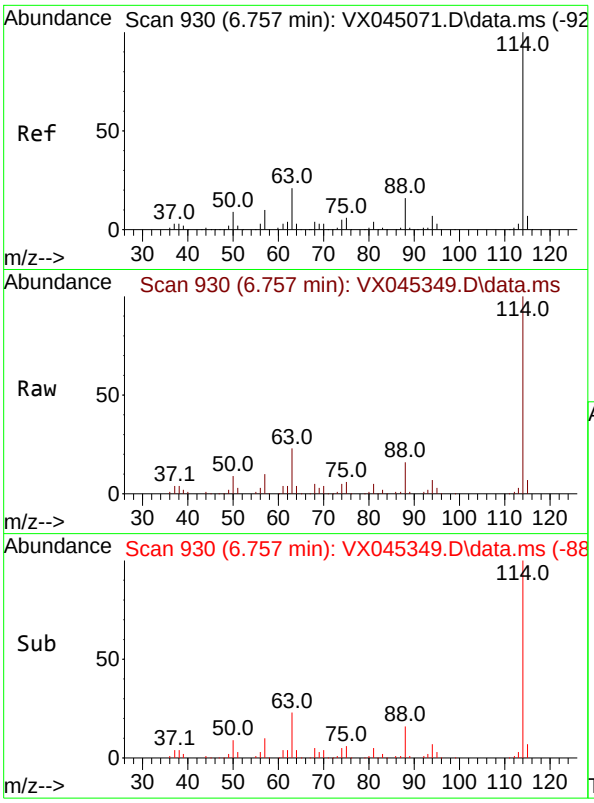


#33
1,2-Dichloroethane-d4
Concen: 57.253 ug/l
RT: 5.952 min Scan# 798
Delta R.T. -0.000 min
Lab File: VX045349.D
Acq: 20 Mar 2025 10:29

Tgt Ion: 65 Resp: 61741

Ion	Ratio	Lower	Upper
65	100		
67	50.8	0.0	106.2



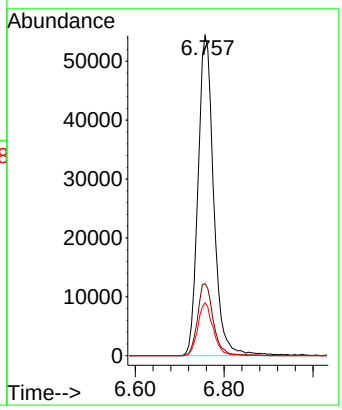


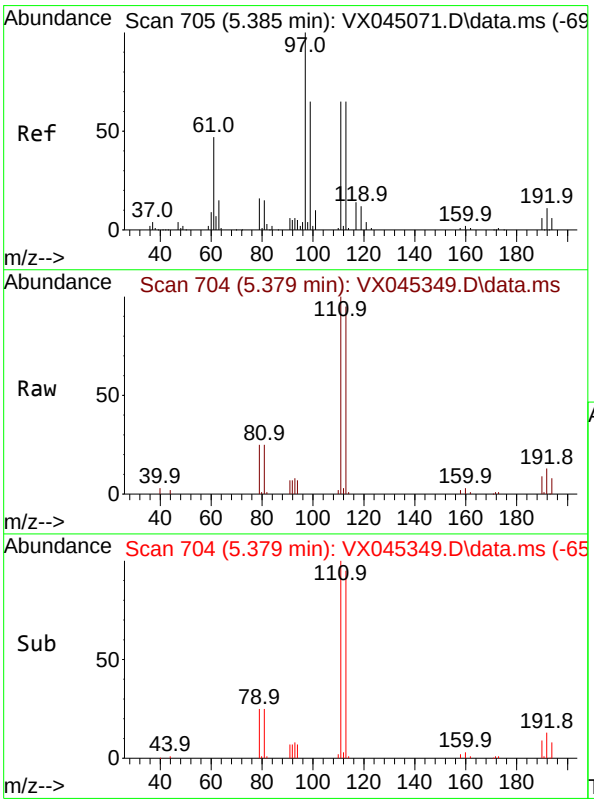
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.757 min Scan# 9
Delta R.T. -0.000 min
Lab File: VX045349.D
Acq: 20 Mar 2025 10:29

Instrument :
MSVOA_X
ClientSampleId :
VX0320WBL01

Tgt Ion:114 Resp: 133500

Ion	Ratio	Lower	Upper
114	100		
63	22.5	0.0	41.8
88	16.5	0.0	32.8

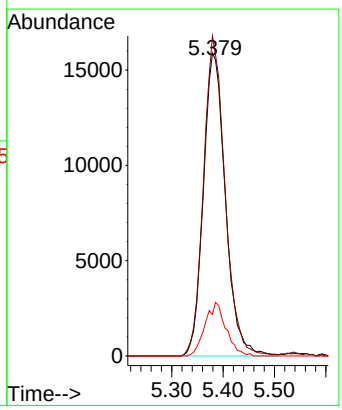


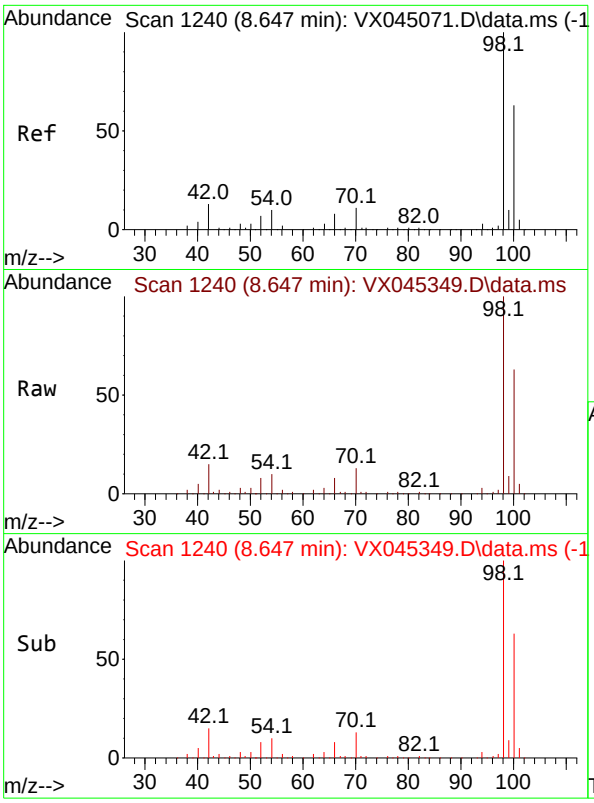


#35
Dibromofluoromethane
Concen: 53.069 ug/l
RT: 5.379 min Scan# 704
Delta R.T. -0.006 min
Lab File: VX045349.D
Acq: 20 Mar 2025 10:29

Tgt Ion:113 Resp: 47374

Ion	Ratio	Lower	Upper
113	100		
111	103.0	81.8	122.6
192	16.8	14.3	21.5



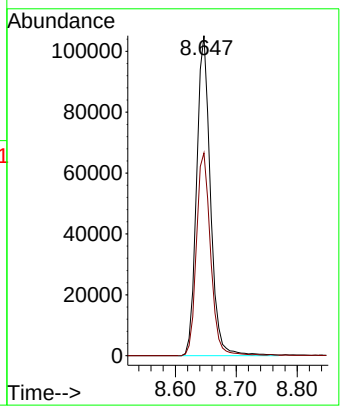


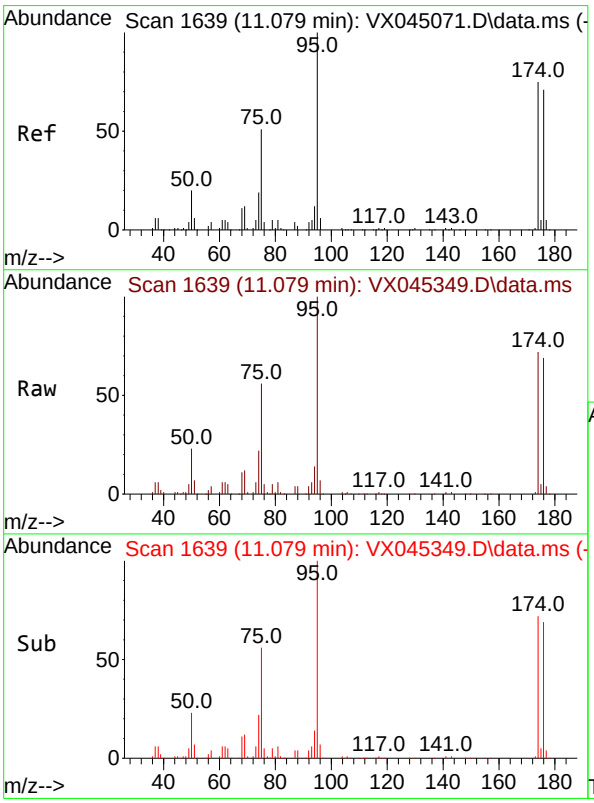
#50
Toluene-d8
Concen: 51.219 ug/l
RT: 8.647 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX045349.D
Acq: 20 Mar 2025 10:29

Instrument :
MSVOA_X
ClientSampleId :
VX0320WBL01

Tgt Ion: 98 Resp: 165758

Ion	Ratio	Lower	Upper
98	100		
100	64.7	52.0	78.0

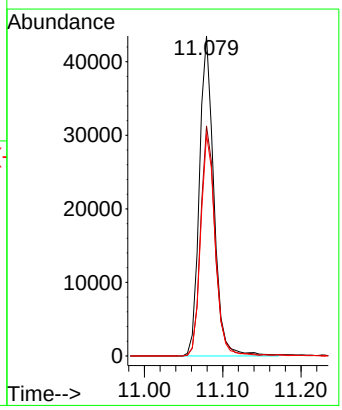


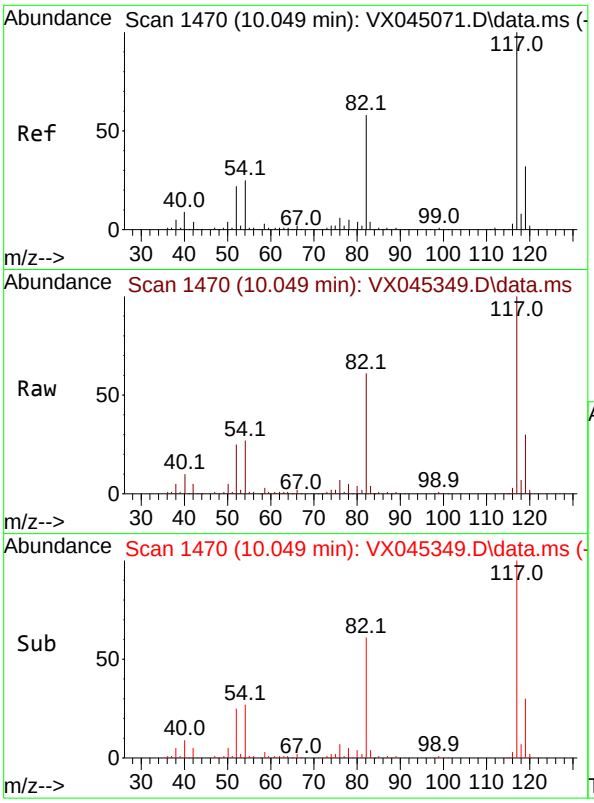


#62
4-Bromofluorobenzene
Concen: 51.958 ug/l
RT: 11.079 min Scan# 1639
Delta R.T. -0.000 min
Lab File: VX045349.D
Acq: 20 Mar 2025 10:29

Tgt Ion: 95 Resp: 55720

Ion	Ratio	Lower	Upper
95	100		
174	71.9	0.0	148.2
176	69.4	0.0	141.4



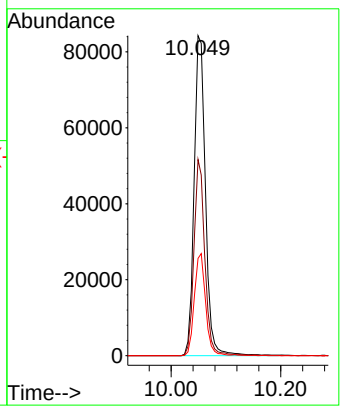


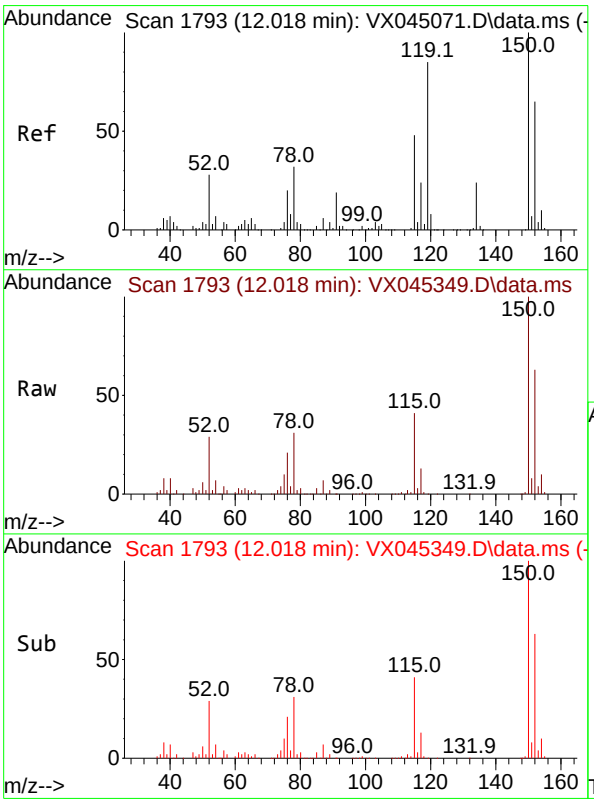
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.049 min Scan# 14
Delta R.T. -0.000 min
Lab File: VX045349.D
Acq: 20 Mar 2025 10:29

Instrument :
MSVOA_X
ClientSampleId :
VX0320WBL01

Tgt Ion:117 Resp: 121748

Ion	Ratio	Lower	Upper
117	100		
82	61.3	46.3	69.5
119	30.4	25.7	38.5

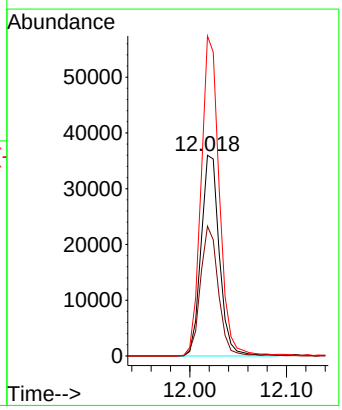




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.018 min Scan# 1793
Delta R.T. -0.000 min
Lab File: VX045349.D
Acq: 20 Mar 2025 10:29

Tgt Ion:152 Resp: 47437

Ion	Ratio	Lower	Upper
152	100		
115	63.6	44.2	132.6
150	159.4	0.0	349.0



Raw Data: **VX045350.D**

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

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	
Project:	Weekly Storage Blanks	Date Received:	
Client Sample ID:	VX0320WBS01	SDG No.:	Q1584
Lab Sample ID:	VX0320WBS01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC- Chemtech Full
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045350.D	1		03/20/25 10:53	VX032025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	18.3		0.22	1.00	ug/L
74-87-3	Chloromethane	17.0		0.32	1.00	ug/L
75-01-4	Vinyl Chloride	16.5		0.26	1.00	ug/L
141-78-6	Ethyl Acetate	20.8		0.31	1.00	ug/L
74-83-9	Bromomethane	19.1		1.40	5.00	ug/L
75-00-3	Chloroethane	20.4		0.47	1.00	ug/L
75-69-4	Trichlorofluoromethane	19.1		0.33	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	21.6		0.25	1.00	ug/L
75-65-0	Tert butyl alcohol	82.4		5.50	25.0	ug/L
75-35-4	1,1-Dichloroethene	18.8		0.23	1.00	ug/L
107-02-8	Acrolein	52.6		7.10	25.0	ug/L
107-13-1	Acrylonitrile	110		0.83	5.00	ug/L
67-64-1	Acetone	100		1.50	5.00	ug/L
75-15-0	Carbon Disulfide	15.2		0.21	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	20.4		0.16	1.00	ug/L
79-20-9	Methyl Acetate	26.3		0.27	1.00	ug/L
75-09-2	Methylene Chloride	19.6		0.28	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	19.0		0.23	1.00	ug/L
108-05-4	Vinyl Acetate	99.8		0.66	5.00	ug/L
75-34-3	1,1-Dichloroethane	20.0		0.23	1.00	ug/L
110-82-7	Cyclohexane	18.7		1.50	5.00	ug/L
78-93-3	2-Butanone	110		0.98	5.00	ug/L
56-23-5	Carbon Tetrachloride	21.1		0.25	1.00	ug/L
594-20-7	2,2-Dichloropropane	28.8		0.21	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	19.8		0.19	1.00	ug/L
74-97-5	Bromochloromethane	18.6		0.22	1.00	ug/L
67-66-3	Chloroform	21.2		0.25	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	21.1		0.20	1.00	ug/L
108-87-2	Methylcyclohexane	19.7		0.16	1.00	ug/L
563-58-6	1,1-Dichloropropene	19.4		0.15	1.00	ug/L

Raw Data: **VX045350.D**

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

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	
Project:	Weekly Storage Blanks	Date Received:	
Client Sample ID:	VX0320WBS01	SDG No.:	Q1584
Lab Sample ID:	VX0320WBS01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC- Chemtech Full
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045350.D	1		03/20/25 10:53	VX032025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
71-43-2	Benzene	20.2		0.15	1.00	ug/L
107-06-2	1,2-Dichloroethane	22.2		0.22	1.00	ug/L
79-01-6	Trichloroethene	19.5		0.090	1.00	ug/L
78-87-5	1,2-Dichloropropane	20.6		0.20	1.00	ug/L
74-95-3	Dibromomethane	21.4		0.25	1.00	ug/L
75-27-4	Bromodichloromethane	21.2		0.22	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	110		0.68	5.00	ug/L
108-88-3	Toluene	20.9		0.14	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	20.9		0.17	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	21.2		0.16	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	21.6		0.21	1.00	ug/L
142-28-9	1,3-Dichloropropane	21.1		0.19	1.00	ug/L
110-75-8	2-Chloroethyl Vinyl ether	97.1		0.30	5.00	ug/L
591-78-6	2-Hexanone	110		0.89	5.00	ug/L
124-48-1	Dibromochloromethane	21.4		0.18	1.00	ug/L
106-93-4	1,2-Dibromoethane	21.4		0.15	1.00	ug/L
127-18-4	Tetrachloroethene	20.4		0.23	1.00	ug/L
108-90-7	Chlorobenzene	20.4		0.12	1.00	ug/L
630-20-6	1,1,1,2-Tetrachloroethane	20.7		0.19	1.00	ug/L
67-72-1	Hexachloroethane	21.4		0.32	0	ug/L
100-41-4	Ethyl Benzene	20.4		0.13	1.00	ug/L
179601-23-1	m/p-Xylenes	42.2		0.24	2.00	ug/L
95-47-6	o-Xylene	20.7		0.12	1.00	ug/L
100-42-5	Styrene	20.9		0.15	1.00	ug/L
75-25-2	Bromoform	20.6		0.19	1.00	ug/L
98-82-8	Isopropylbenzene	21.7		0.12	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	21.4		0.26	1.00	ug/L
96-18-4	1,2,3-Trichloropropane	21.2		0.35	1.00	ug/L
108-86-1	Bromobenzene	20.8		0.24	1.00	ug/L
103-65-1	n-propylbenzene	22.0		0.13	1.00	ug/L
95-49-8	2-Chlorotoluene	21.4		0.14	1.00	ug/L

Raw Data: **VX045350.D**

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

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	
Project:	Weekly Storage Blanks	Date Received:	
Client Sample ID:	VX0320WBS01	SDG No.:	Q1584
Lab Sample ID:	VX0320WBS01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC- Chemtech Full
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045350.D	1		03/20/25 10:53	VX032025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
108-67-8	1,3,5-Trimethylbenzene	22.2		0.15	1.00	ug/L
106-43-4	4-Chlorotoluene	21.7		0.13	1.00	ug/L
98-06-6	tert-Butylbenzene	21.5		0.14	1.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	21.6		0.14	1.00	ug/L
135-98-8	sec-Butylbenzene	22.5		0.13	1.00	ug/L
99-87-6	p-Isopropyltoluene	22.1		0.13	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	20.9		0.16	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	20.4		0.19	1.00	ug/L
104-51-8	n-Butylbenzene	21.8		0.15	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	21.1		0.16	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	21.8		0.53	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	20.0		0.20	1.00	ug/L
87-68-3	Hexachlorobutadiene	21.7		0.30	1.00	ug/L
91-20-3	Naphthalene	20.0		0.20	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	19.8		0.20	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	56.5		74 - 125	113%	SPK: 50
1868-53-7	Dibromofluoromethane	54.8		75 - 124	110%	SPK: 50
2037-26-5	Toluene-d8	53.3		86 - 113	107%	SPK: 50
460-00-4	4-Bromofluorobenzene	55.7		77 - 121	111%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	94300	5.55			
540-36-3	1,4-Difluorobenzene	168000	6.757			
3114-55-4	Chlorobenzene-d5	149000	10.055			
3855-82-1	1,4-Dichlorobenzene-d4	65200	12.018			

Raw Data: **VX045350.D**

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

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	
Project:	Weekly Storage Blanks	Date Received:	
Client Sample ID:	VX0320WBS01	SDG No.:	Q1584
Lab Sample ID:	VX0320WBS01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC- Chemtech Full
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045350.D	1		03/20/25 10:53	VX032025

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

Sample Results: **VX045350.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032025\
Data File : VX045350.D
Acq On : 20 Mar 2025 10:53
Operator : JC/MD
Sample : VX0320WBS01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 21 01:42:42 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX0320WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 03/21/2025
Supervised By :Mahesh Dadoda 03/21/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.550	168	94337	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.757	114	168482	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	149499	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	65210	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.952	65	84826	56.529	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 113.060%			
35) Dibromofluoromethane	5.379	113	61688	54.756	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 109.520%			
50) Toluene-d8	8.647	98	217551	53.265	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 106.540%			
62) 4-Bromofluorobenzene	11.079	95	75333	55.661	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 111.320%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.166	85	21766	18.330	ug/l	96
3) Chloromethane	1.307	50	24700	16.997	ug/l	99
4) Vinyl Chloride	1.374	62	23778	16.494	ug/l	99
5) Bromomethane	1.593	94	10806	19.068	ug/l	97
6) Chloroethane	1.666	64	13543	20.367	ug/l	96
7) Trichlorofluoromethane	1.874	101	36454	19.102	ug/l	98
8) Diethyl Ether	2.130	74	12684	16.992	ug/l	92
9) 1,1,2-Trichlorotrifluo...	2.319	101	23673	21.591	ug/l	98
10) Methyl Iodide	2.441	142	26414	19.277	ug/l	96
11) Tert butyl alcohol	2.983	59	23416	82.384	ug/l	97
12) 1,1-Dichloroethene	2.306	96	21823	18.826	ug/l	94
13) Acrolein	2.233	56	17293	52.632	ug/l	97
14) Allyl chloride	2.654	41	41884	20.298	ug/l	96
15) Acrylonitrile	3.062	53	80049	105.082	ug/l	99
16) Acetone	2.386	43	71160	102.209	ug/l	98
17) Carbon Disulfide	2.502	76	46834	15.169	ug/l	98
18) Methyl Acetate	2.703	43	44122	26.343	ug/l	100
19) Methyl tert-butyl Ether	3.117	73	79261	20.380	ug/l	96
20) Methylene Chloride	2.782	84	26965	19.552	ug/l	94
21) trans-1,2-Dichloroethene	3.087	96	21732	18.976	ug/l	95
22) Diisopropyl ether	3.763	45	84886	20.228	ug/l	91
23) Vinyl Acetate	3.721	43	349536	99.810	ug/l	97
24) 1,1-Dichloroethane	3.605	63	46978	19.975	ug/l	99
25) 2-Butanone	4.562	43	113246	108.061	ug/l	97
26) 2,2-Dichloropropane	4.471	77	31743	28.775	ug/l	98
27) cis-1,2-Dichloroethene	4.483	96	28042	19.836	ug/l	92
28) Bromochloromethane	4.891	49	20825	18.577	ug/l	100
29) Tetrahydrofuran	5.013	42	70666	100.410	ug/l	99
30) Chloroform	5.086	83	49636	21.241	ug/l	94
31) Cyclohexane	5.458	56	38216	18.719	ug/l	97
32) 1,1,1-Trichloroethane	5.379	97	39741	21.056	ug/l	98
36) 1,1-Dichloropropene	5.684	75	29925	19.369	ug/l	98
37) Ethyl Acetate	4.721	43	41357	20.774	ug/l	100
38) Carbon Tetrachloride	5.672	117	33150	21.134	ug/l	92
39) Methylcyclohexane	7.379	83	36558	19.747	ug/l	98
40) Benzene	6.031	78	98693	20.229	ug/l	95

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032025\
Data File : VX045350.D
Acq On : 20 Mar 2025 10:53
Operator : JC/MD
Sample : VX0320WBS01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 21 01:42:42 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX0320WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 03/21/2025
Supervised By :Mahesh Dadoda 03/21/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	4.922	41	23443	21.777	ug/l		98
42) 1,2-Dichloroethane	6.080	62	38946	22.168	ug/l		98
43) Isopropyl Acetate	6.342	43	62089	21.091	ug/l		98
44) Trichloroethene	7.129	130	22383	19.539	ug/l		98
45) 1,2-Dichloropropane	7.427	63	25785	20.556	ug/l		96
46) Dibromomethane	7.580	93	19014	21.446	ug/l		96
47) Bromodichloromethane	7.818	83	36869	21.200	ug/l		99
48) Methyl methacrylate	7.690	41	31795	21.528	ug/l		96
49) 1,4-Dioxane	7.665	88	11649	373.915	ug/l		93
51) 4-Methyl-2-Pentanone	8.574	43	222348	112.487	ug/l		99
52) Toluene	8.714	92	59792	20.888	ug/l		100
53) t-1,3-Dichloropropene	8.976	75	30322	20.856	ug/l		100
54) cis-1,3-Dichloropropene	8.366	75	36016	21.244	ug/l		92
55) 1,1,2-Trichloroethane	9.147	97	25471	21.615	ug/l		99
56) Ethyl methacrylate	9.116	69	38614	21.557	ug/l		96
57) 1,3-Dichloropropane	9.305	76	42984	21.077	ug/l		100
58) 2-Chloroethyl Vinyl ether	8.238	63	84877	97.136	ug/l		99
59) 2-Hexanone	9.427	43	161205	112.560	ug/l		98
60) Dibromochloromethane	9.519	129	26339	21.377	ug/l		98
61) 1,2-Dibromoethane	9.610	107	25179	21.403	ug/l		97
64) Tetrachloroethene	9.269	164	19550	20.418	ug/l		99
65) Chlorobenzene	10.079	112	64649	20.437	ug/l		99
66) 1,1,1,2-Tetrachloroethane	10.159	131	21858	20.749	ug/l		97
67) Ethyl Benzene	10.189	91	112693	20.445	ug/l		99
68) m/p-Xylenes	10.299	106	85116	42.183	ug/l		99
69) o-Xylene	10.640	106	42125	20.699	ug/l		98
70) Styrene	10.652	104	68782	20.888	ug/l		97
71) Bromoform	10.799	173	16337	20.565	ug/l	#	99
73) Isopropylbenzene	10.963	105	110486	21.707	ug/l		99
74) N-amyl acetate	10.841	43	50145	20.996	ug/l		98
75) 1,1,2,2-Tetrachloroethane	11.213	83	39901	21.363	ug/l		99
76) 1,2,3-Trichloropropane	11.238	75	32167m	21.194	ug/l		
77) Bromobenzene	11.195	156	24928	20.758	ug/l		96
78) n-propylbenzene	11.299	91	126518	22.004	ug/l		98
79) 2-Chlorotoluene	11.360	91	78311	21.386	ug/l		98
80) 1,3,5-Trimethylbenzene	11.451	105	91263	22.175	ug/l		97
81) trans-1,4-Dichloro-2-b...	11.018	75	9225	20.800	ug/l	#	84
82) 4-Chlorotoluene	11.451	91	86685	21.721	ug/l		100
83) tert-Butylbenzene	11.713	119	91062	21.535	ug/l		98
84) 1,2,4-Trimethylbenzene	11.750	105	89517	21.617	ug/l		100
85) sec-Butylbenzene	11.890	105	113963	22.499	ug/l		99
86) p-Isopropyltoluene	12.006	119	90559	22.123	ug/l		98
87) 1,3-Dichlorobenzene	11.969	146	44674	20.853	ug/l		99
88) 1,4-Dichlorobenzene	12.036	146	44289	20.434	ug/l		98
89) n-Butylbenzene	12.329	91	76819	21.789	ug/l		99
90) Hexachloroethane	12.536	117	15824	21.372	ug/l		95
91) 1,2-Dichlorobenzene	12.335	146	45440	21.144	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	12.939	75	7923	21.774	ug/l		93
93) 1,2,4-Trichlorobenzene	13.585	180	24507	20.027	ug/l		99
94) Hexachlorobutadiene	13.725	225	10883	21.692	ug/l		98
95) Naphthalene	13.774	128	94184	20.032	ug/l		99
96) 1,2,3-Trichlorobenzene	13.957	180	25568	19.806	ug/l		97

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032025\
Data File : VX045350.D
Acq On : 20 Mar 2025 10:53
Operator : JC/MD
Sample : VX0320WBS01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VX0320WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 03/21/2025
Supervised By :Mahesh Dadoda 03/21/2025

Quant Time: Mar 21 01:42:42 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

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

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

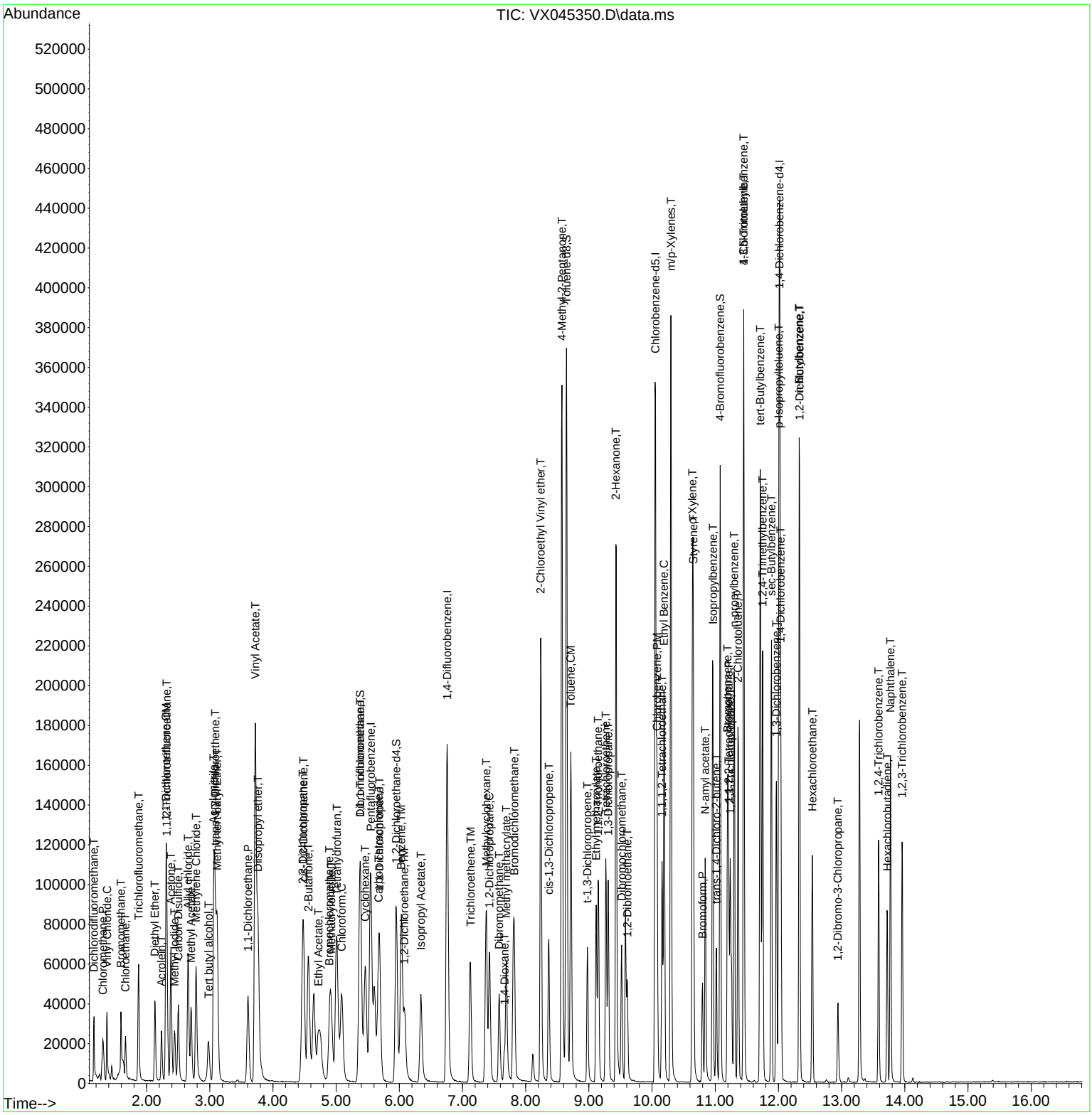
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032025\
Data File : VX045350.D
Acq On : 20 Mar 2025 10:53
Operator : JC/MD
Sample : VX0320WBS01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 21 01:42:42 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX0320WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 03/21/2025
Supervised By :Mahesh Dadoda 03/21/2025



Raw Data: **VX045355.D**

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

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	
Project:	Weekly Storage Blanks	Date Received:	
Client Sample ID:	VX0320WBSD01	SDG No.:	Q1584
Lab Sample ID:	VX0320WBSD01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC- Chemtech Full
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045355.D	1		03/20/25 12:53	VX032025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	16.0		0.22	1.00	ug/L
74-87-3	Chloromethane	14.3		0.32	1.00	ug/L
75-01-4	Vinyl Chloride	14.2		0.26	1.00	ug/L
141-78-6	Ethyl Acetate	17.8		0.31	1.00	ug/L
74-83-9	Bromomethane	17.0		1.40	5.00	ug/L
75-00-3	Chloroethane	17.5		0.47	1.00	ug/L
75-69-4	Trichlorofluoromethane	16.8		0.33	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	19.1		0.25	1.00	ug/L
75-65-0	Tert butyl alcohol	67.6		5.50	25.0	ug/L
75-35-4	1,1-Dichloroethene	16.6		0.23	1.00	ug/L
107-02-8	Acrolein	45.0		7.10	25.0	ug/L
107-13-1	Acrylonitrile	88.7		0.83	5.00	ug/L
67-64-1	Acetone	86.4		1.50	5.00	ug/L
75-15-0	Carbon Disulfide	13.0		0.21	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	17.8		0.16	1.00	ug/L
79-20-9	Methyl Acetate	22.5		0.27	1.00	ug/L
75-09-2	Methylene Chloride	16.8		0.28	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	17.0		0.23	1.00	ug/L
108-05-4	Vinyl Acetate	87.1		0.66	5.00	ug/L
75-34-3	1,1-Dichloroethane	17.9		0.23	1.00	ug/L
110-82-7	Cyclohexane	16.7		1.50	5.00	ug/L
78-93-3	2-Butanone	90.7		0.98	5.00	ug/L
56-23-5	Carbon Tetrachloride	18.9		0.25	1.00	ug/L
594-20-7	2,2-Dichloropropane	25.5		0.21	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	17.7		0.19	1.00	ug/L
74-97-5	Bromochloromethane	18.3		0.22	1.00	ug/L
67-66-3	Chloroform	18.8		0.25	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	18.4		0.20	1.00	ug/L
108-87-2	Methylcyclohexane	17.9		0.16	1.00	ug/L
563-58-6	1,1-Dichloropropene	17.3		0.15	1.00	ug/L

Raw Data: **VX045355.D**

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

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	
Project:	Weekly Storage Blanks	Date Received:	
Client Sample ID:	VX0320WBSD01	SDG No.:	Q1584
Lab Sample ID:	VX0320WBSD01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC- Chemtech Full
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045355.D	1		03/20/25 12:53	VX032025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
71-43-2	Benzene	18.1		0.15	1.00	ug/L
107-06-2	1,2-Dichloroethane	19.8		0.22	1.00	ug/L
79-01-6	Trichloroethene	17.9		0.090	1.00	ug/L
78-87-5	1,2-Dichloropropane	18.3		0.20	1.00	ug/L
74-95-3	Dibromomethane	19.0		0.25	1.00	ug/L
75-27-4	Bromodichloromethane	19.2		0.22	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	93.8		0.68	5.00	ug/L
108-88-3	Toluene	18.8		0.14	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	17.9		0.17	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	18.8		0.16	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	18.4		0.21	1.00	ug/L
142-28-9	1,3-Dichloropropane	18.9		0.19	1.00	ug/L
110-75-8	2-Chloroethyl Vinyl ether	110		0.30	5.00	ug/L
591-78-6	2-Hexanone	94.7		0.89	5.00	ug/L
124-48-1	Dibromochloromethane	18.6		0.18	1.00	ug/L
106-93-4	1,2-Dibromoethane	18.5		0.15	1.00	ug/L
127-18-4	Tetrachloroethene	18.7		0.23	1.00	ug/L
108-90-7	Chlorobenzene	18.8		0.12	1.00	ug/L
630-20-6	1,1,1,2-Tetrachloroethane	18.9		0.19	1.00	ug/L
67-72-1	Hexachloroethane	18.4		0.32	0	ug/L
100-41-4	Ethyl Benzene	19.1		0.13	1.00	ug/L
179601-23-1	m/p-Xylenes	38.5		0.24	2.00	ug/L
95-47-6	o-Xylene	19.3		0.12	1.00	ug/L
100-42-5	Styrene	19.0		0.15	1.00	ug/L
75-25-2	Bromoform	18.2		0.19	1.00	ug/L
98-82-8	Isopropylbenzene	20.2		0.12	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	19.2		0.26	1.00	ug/L
96-18-4	1,2,3-Trichloropropane	19.4		0.35	1.00	ug/L
108-86-1	Bromobenzene	19.2		0.24	1.00	ug/L
103-65-1	n-propylbenzene	20.2		0.13	1.00	ug/L
95-49-8	2-Chlorotoluene	19.4		0.14	1.00	ug/L

Raw Data: **VX045355.D**

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

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	
Project:	Weekly Storage Blanks	Date Received:	
Client Sample ID:	VX0320WBSD01	SDG No.:	Q1584
Lab Sample ID:	VX0320WBSD01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC- Chemtech Full
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045355.D	1		03/20/25 12:53	VX032025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
108-67-8	1,3,5-Trimethylbenzene	20.2		0.15	1.00	ug/L
106-43-4	4-Chlorotoluene	19.9		0.13	1.00	ug/L
98-06-6	tert-Butylbenzene	19.7		0.14	1.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	20.1		0.14	1.00	ug/L
135-98-8	sec-Butylbenzene	20.4		0.13	1.00	ug/L
99-87-6	p-Isopropyltoluene	20.3		0.13	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	19.2		0.16	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	18.8		0.19	1.00	ug/L
104-51-8	n-Butylbenzene	19.8		0.15	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	19.2		0.16	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	20.0		0.53	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	17.9		0.20	1.00	ug/L
87-68-3	Hexachlorobutadiene	18.6		0.30	1.00	ug/L
91-20-3	Naphthalene	17.9		0.20	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	17.8		0.20	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	55.1		74 - 125	110%	SPK: 50
1868-53-7	Dibromofluoromethane	54.8		75 - 124	110%	SPK: 50
2037-26-5	Toluene-d8	51.7		86 - 113	103%	SPK: 50
460-00-4	4-Bromofluorobenzene	52.5		77 - 121	105%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	103000	5.544			
540-36-3	1,4-Difluorobenzene	182000	6.757			
3114-55-4	Chlorobenzene-d5	154000	10.049			
3855-82-1	1,4-Dichlorobenzene-d4	66200	12.018			

Raw Data: **VX045355.D**

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

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	
Project:	Weekly Storage Blanks	Date Received:	
Client Sample ID:	VX0320WBSD01	SDG No.:	Q1584
Lab Sample ID:	VX0320WBSD01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC- Chemtech Full
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX045355.D	1		03/20/25 12:53	VX032025

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\VX032025\
Data File : VX045355.D
Acq On : 20 Mar 2025 12:53
Operator : JC/MD
Sample : VX0320WBSD01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 21 01:46:07 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX0320WBSD01

Manual Integrations APPROVED

Reviewed By :John Carlone 03/21/2025
Supervised By :Mahesh Dadoda 03/21/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.544	168	103163	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.757	114	181737	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.049	117	154271	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	66247	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.952	65	90427	55.106	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 110.220%			
35) Dibromofluoromethane	5.379	113	66573	54.782	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 109.560%			
50) Toluene-d8	8.647	98	227931	51.736	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 103.480%			
62) 4-Bromofluorobenzene	11.079	95	76667	52.516	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 105.040%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.166	85	20816	16.030	ug/l	93
3) Chloromethane	1.307	50	22694	14.280	ug/l	100
4) Vinyl Chloride	1.374	62	22442	14.235	ug/l	95
5) Bromomethane	1.593	94	10536	17.001	ug/l	95
6) Chloroethane	1.666	64	12737	17.516	ug/l	91
7) Trichlorofluoromethane	1.873	101	35069	16.804	ug/l	95
8) Diethyl Ether	2.130	74	12438	15.237	ug/l	94
9) 1,1,2-Trichlorotrifluo...	2.319	101	22957	19.147	ug/l	99
10) Methyl Iodide	2.447	142	25972	17.333	ug/l	96
11) Tert butyl alcohol	2.977	59	21006	67.582	ug/l	99
12) 1,1-Dichloroethene	2.312	96	21080	16.629	ug/l	95
13) Acrolein	2.233	56	16173	45.012	ug/l	98
14) Allyl chloride	2.660	41	40725	18.048	ug/l	95
15) Acrylonitrile	3.062	53	73899	88.710	ug/l	99
16) Acetone	2.386	43	65813	86.442	ug/l	99
17) Carbon Disulfide	2.501	76	43727	12.951	ug/l	97
18) Methyl Acetate	2.703	43	41294	22.546	ug/l	99
19) Methyl tert-butyl Ether	3.111	73	75611	17.778	ug/l	100
20) Methylene Chloride	2.782	84	25392	16.837	ug/l	95
21) trans-1,2-Dichloroethene	3.087	96	21273	16.986	ug/l	98
22) Diisopropyl ether	3.763	45	82592	17.997	ug/l	94
23) Vinyl Acetate	3.721	43	333482	87.078	ug/l	99
24) 1,1-Dichloroethane	3.605	63	46000	17.886	ug/l	100
25) 2-Butanone	4.562	43	103957	90.711	ug/l	93
26) 2,2-Dichloropropane	4.471	77	30710	25.457	ug/l	95
27) cis-1,2-Dichloroethene	4.483	96	27428	17.742	ug/l	93
28) Bromochloromethane	4.891	49	22492	18.348	ug/l	98
29) Tetrahydrofuran	5.007	42	64971	84.420	ug/l	98
30) Chloroform	5.086	83	48043	18.800	ug/l	98
31) Cyclohexane	5.458	56	37277	16.697	ug/l	97
32) 1,1,1-Trichloroethane	5.379	97	37970	18.397	ug/l	97
36) 1,1-Dichloropropene	5.690	75	28834	17.302	ug/l	98
37) Ethyl Acetate	4.721	43	38316	17.842	ug/l	97
38) Carbon Tetrachloride	5.672	117	31919	18.865	ug/l	94
39) Methylcyclohexane	7.379	83	35667	17.861	ug/l	97
40) Benzene	6.031	78	95403	18.128	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032025\
Data File : VX045355.D
Acq On : 20 Mar 2025 12:53
Operator : JC/MD
Sample : VX0320WBSD01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 21 01:46:07 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX0320WBSD01

Manual Integrations APPROVED

Reviewed By :John Carlone 03/21/2025
Supervised By :Mahesh Dadoda 03/21/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	4.916	41	21420	18.447	ug/l		95
42) 1,2-Dichloroethane	6.080	62	37596	19.839	ug/l		96
43) Isopropyl Acetate	6.342	43	58297	18.358	ug/l		99
44) Trichloroethene	7.123	130	22079	17.867	ug/l		97
45) 1,2-Dichloropropane	7.427	63	24774	18.309	ug/l		96
46) Dibromomethane	7.580	93	18218	19.049	ug/l		98
47) Bromodichloromethane	7.818	83	35984	19.182	ug/l		100
48) Methyl methacrylate	7.696	41	29431	18.474	ug/l		93
49) 1,4-Dioxane	7.665	88	10437	310.577	ug/l		94
51) 4-Methyl-2-Pentanone	8.573	43	199937	93.772	ug/l		99
52) Toluene	8.714	92	58027	18.793	ug/l		99
53) t-1,3-Dichloropropene	8.976	75	28125	17.934	ug/l		98
54) cis-1,3-Dichloropropene	8.366	75	34347	18.782	ug/l		92
55) 1,1,2-Trichloroethane	9.153	97	23399	18.408	ug/l		97
56) Ethyl methacrylate	9.116	69	35410	18.326	ug/l		94
57) 1,3-Dichloropropane	9.305	76	41664	18.940	ug/l		99
58) 2-Chloroethyl Vinyl ether	8.238	63	99493	105.558	ug/l		99
59) 2-Hexanone	9.427	43	146337	94.726	ug/l		98
60) Dibromochloromethane	9.518	129	24709	18.591	ug/l		100
61) 1,2-Dibromoethane	9.610	107	23441	18.473	ug/l		95
64) Tetrachloroethene	9.268	164	18524	18.748	ug/l		98
65) Chlorobenzene	10.073	112	61249	18.763	ug/l		99
66) 1,1,1,2-Tetrachloroethane	10.159	131	20539	18.893	ug/l		97
67) Ethyl Benzene	10.189	91	108805	19.129	ug/l		100
68) m/p-Xylenes	10.299	106	80137	38.487	ug/l		97
69) o-Xylene	10.640	106	40477	19.274	ug/l		97
70) Styrene	10.652	104	64556	18.998	ug/l		98
71) Bromoform	10.799	173	14948	18.235	ug/l	#	98
73) Isopropylbenzene	10.957	105	104692	20.247	ug/l		99
74) N-amyl acetate	10.841	43	45871	18.906	ug/l		99
75) 1,1,2,2-Tetrachloroethane	11.207	83	36461	19.215	ug/l		99
76) 1,2,3-Trichloropropane	11.238	75	29874m	19.375	ug/l		
77) Bromobenzene	11.195	156	23427	19.202	ug/l		98
78) n-propylbenzene	11.299	91	117971	20.197	ug/l		98
79) 2-Chlorotoluene	11.360	91	72251	19.423	ug/l		98
80) 1,3,5-Trimethylbenzene	11.451	105	84359	20.177	ug/l		98
81) trans-1,4-Dichloro-2-b...	11.018	75	8196	18.191	ug/l	#	83
82) 4-Chlorotoluene	11.451	91	80479	19.851	ug/l		99
83) tert-Butylbenzene	11.713	119	84632	19.701	ug/l		97
84) 1,2,4-Trimethylbenzene	11.750	105	84742	20.144	ug/l		98
85) sec-Butylbenzene	11.890	105	105104	20.425	ug/l		99
86) p-Isopropyltoluene	12.006	119	84328	20.278	ug/l		99
87) 1,3-Dichlorobenzene	11.969	146	41784	19.199	ug/l		98
88) 1,4-Dichlorobenzene	12.036	146	41434	18.817	ug/l		98
89) n-Butylbenzene	12.329	91	70969	19.814	ug/l		100
90) Hexachloroethane	12.536	117	13841	18.401	ug/l		98
91) 1,2-Dichlorobenzene	12.335	146	41960	19.219	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	12.939	75	7380	19.964	ug/l		89
93) 1,2,4-Trichlorobenzene	13.585	180	22232	17.883	ug/l		99
94) Hexachlorobutadiene	13.725	225	9477	18.594	ug/l		98
95) Naphthalene	13.774	128	85625	17.927	ug/l		100
96) 1,2,3-Trichlorobenzene	13.957	180	23401	17.843	ug/l		99

Sample Results: **VX045355.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032025\
Data File : VX045355.D
Acq On : 20 Mar 2025 12:53
Operator : JC/MD
Sample : VX0320WBSD01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VX0320WBSD01

Manual Integrations APPROVED

Reviewed By :John Carlone 03/21/2025
Supervised By :Mahesh Dadoda 03/21/2025

Quant Time: Mar 21 01:46:07 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

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

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

Sample Results: **VX045355.D**

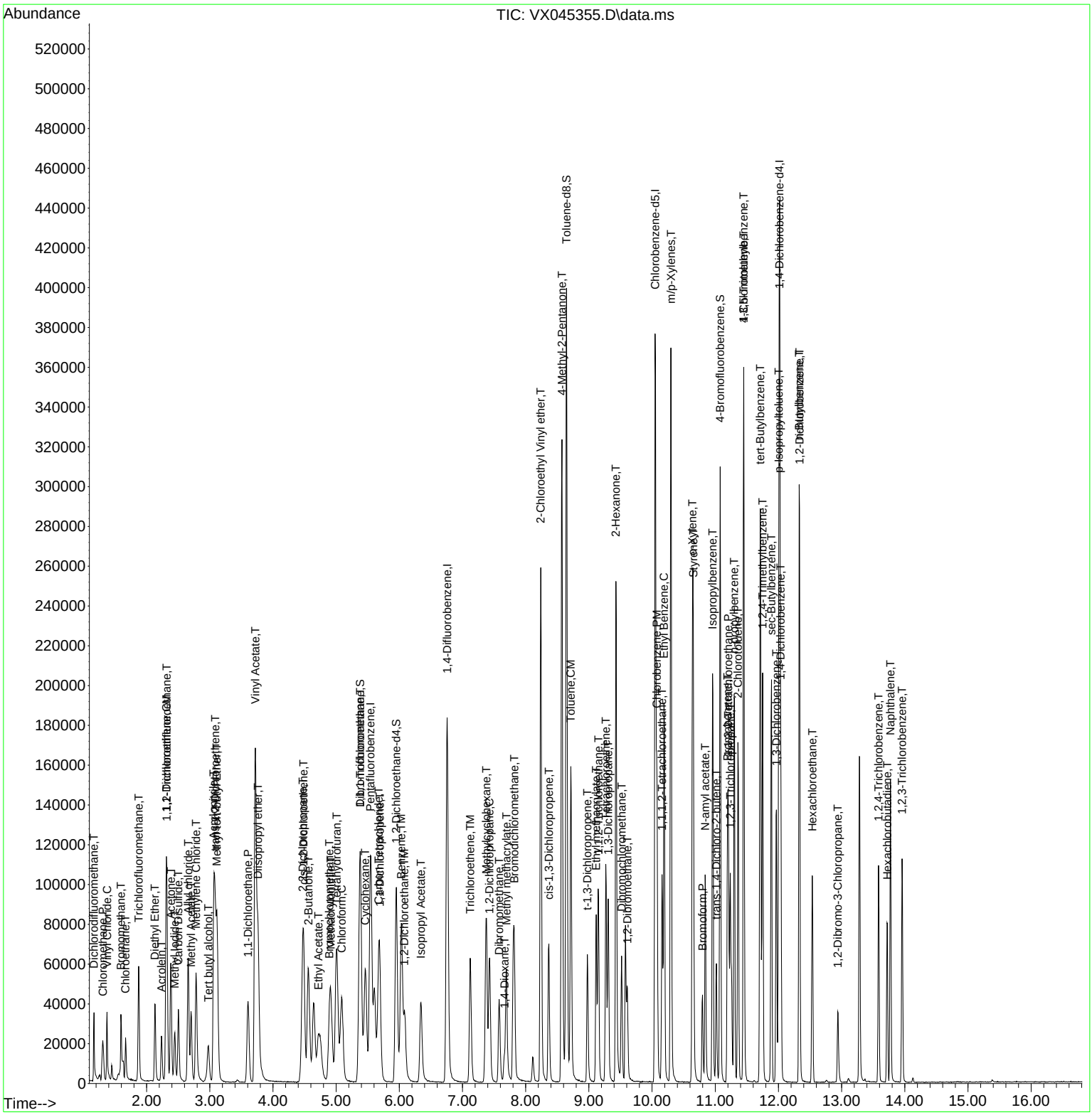
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032025\
Data File : VX045355.D
Acq On : 20 Mar 2025 12:53
Operator : JC/MD
Sample : VX0320WBSD01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 21 01:46:07 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X022825W.M
Quant Title : SW846 8260
QLast Update : Fri Feb 28 06:45:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX0320WBSD01

Manual Integrations APPROVED

Reviewed By :John Carlone 03/21/2025
Supervised By :Mahesh Dadoda 03/21/2025



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

Manual Integration Report

Sequence:	VX022825	Instrument	MSVOA_x

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC001	VX045068.D	1,2,3-Trichloropropane	JOHN	2/28/2025 10:05:09 AM	MMDadoda	2/28/2025 11:09:31 AM	Peak Integrated by Software
VSTDICC001	VX045068.D	1,4-Dichlorobenzene	JOHN	2/28/2025 10:05:09 AM	MMDadoda	2/28/2025 11:09:31 AM	Peak Integrated by Software
VSTDICC001	VX045068.D	Carbon Tetrachloride	JOHN	2/28/2025 10:05:09 AM	MMDadoda	2/28/2025 11:09:31 AM	Peak Integrated by Software
VSTDICC001	VX045068.D	Chloroethane	JOHN	2/28/2025 10:05:09 AM	MMDadoda	2/28/2025 11:09:31 AM	Peak Integrated by Software
VSTDICC001	VX045068.D	Ethyl Acetate	JOHN	2/28/2025 10:05:09 AM	MMDadoda	2/28/2025 11:09:31 AM	Peak Integrated by Software
VSTDICC001	VX045068.D	Methacrylonitrile	JOHN	2/28/2025 10:05:09 AM	MMDadoda	2/28/2025 11:09:31 AM	Peak Integrated by Software
VSTDICC001	VX045068.D	Methyl methacrylate	JOHN	2/28/2025 10:05:09 AM	MMDadoda	2/28/2025 11:09:31 AM	Peak Integrated by Software
VSTDICC005	VX045069.D	1,2,3-Trichloropropane	JOHN	2/28/2025 10:05:14 AM	MMDadoda	2/28/2025 11:09:31 AM	Peak Integrated by Software
VSTDICC005	VX045069.D	Tert butyl alcohol	JOHN	2/28/2025 10:05:14 AM	MMDadoda	2/28/2025 11:09:31 AM	Peak Integrated by Software
VSTDICC020	VX045070.D	1,2,3-Trichloropropane	JOHN	2/28/2025 10:05:21 AM	MMDadoda	2/28/2025 11:09:33 AM	Peak Integrated by Software
VSTDICCC050	VX045071.D	1,2,3-Trichloropropane	JOHN	2/28/2025 10:05:25 AM	MMDadoda	2/28/2025 11:09:35 AM	Peak Integrated by Software
VSTDICC100	VX045072.D	1,2,3-Trichloropropane	JOHN	2/28/2025 10:05:30 AM	MMDadoda	2/28/2025 11:09:37 AM	Peak Integrated by Software
VSTDICC150	VX045073.D	1,2,3-Trichloropropane	JOHN	2/28/2025 10:05:33 AM	MMDadoda	2/28/2025 11:09:42 AM	Peak Integrated by Software

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Manual Integration Report

Sequence:	VX022825	Instrument	MSVOA_x

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICV050	VX045075.D	1,2,3-Trichloropropane	JOHN	2/28/2025 10:05:38 AM	MMDadoda	2/28/2025 11:09:44 AM	Peak Integrated by Software
VSTDCCC050	VX045077.D	1,2,3-Trichloropropane	JOHN	3/3/2025 8:20:45 AM	MMDadoda	3/3/2025 1:49:43 PM	Peak Integrated by Software
VSTDCCC050	VX045077.D	Tert butyl alcohol	JOHN	3/3/2025 8:20:45 AM	MMDadoda	3/3/2025 1:49:43 PM	Peak Integrated by Software
VSTDCCC050	VX045098.D	1,2,3-Trichloropropane	JOHN	3/3/2025 8:20:59 AM	MMDadoda	3/3/2025 1:49:50 PM	Peak Integrated by Software

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Manual Integration Report

Sequence:	VX032025	Instrument	MSVOA_x

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC050	VX045347.D	1,2,3-Trichloropropane	JOHN	3/21/2025 9:51:08 AM	MMDadoda	3/21/2025 10:05:51 AM	Peak Integrated by Software
VX0320WBS01	VX045350.D	1,2,3-Trichloropropane	JOHN	3/21/2025 9:51:14 AM	MMDadoda	3/21/2025 10:05:52 AM	Peak Integrated by Software
VX0320WBSD01	VX045355.D	1,2,3-Trichloropropane	JOHN	3/21/2025 9:51:22 AM	MMDadoda	3/21/2025 10:05:54 AM	Peak Integrated by Software
VSTDCCC050	VX045373.D	1,2,3-Trichloropropane	JOHN	3/21/2025 9:51:39 AM	MMDadoda	3/21/2025 10:05:56 AM	Peak Integrated by Software

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Fax : 908 789 8922

Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QCBatch ID # VX022825

Review By	Mahesh Dadoda	Review On	2/28/2025 11:09:50 AM		
Supervise By	Semsettin Yesilyurt	Supervise On	2/28/2025 11:11:09 AM		
SubDirectory	VX022825	HP Acquire Method		HP Processing Method	82X022825W.M

STD. NAME	STD REF.#
Tune/Reschk	VP133187,VP133189
Initial Calibration Stds	VP133194,VP133195,VP133196,VP133197,VP133198,VP133199
CCC	VP133188,VP133190
Internal Standard/PEM	
ICV/I.BLK	VP133200
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VX045067.D	28 Feb 2025 01:03	JC/MD	Ok
2	VSTDICC001	VX045068.D	28 Feb 2025 01:27	JC/MD	Ok,M
3	VSTDICC005	VX045069.D	28 Feb 2025 02:13	JC/MD	Ok,M
4	VSTDICC020	VX045070.D	28 Feb 2025 02:37	JC/MD	Ok,M
5	VSTDICCC050	VX045071.D	28 Feb 2025 03:00	JC/MD	Ok,M
6	VSTDICC100	VX045072.D	28 Feb 2025 03:23	JC/MD	Ok,M
7	VSTDICC150	VX045073.D	28 Feb 2025 03:47	JC/MD	Ok,M
8	IBLK	VX045074.D	28 Feb 2025 04:10	JC/MD	Ok
9	VSTDICV050	VX045075.D	28 Feb 2025 04:33	JC/MD	Ok,M
10	BFB	VX045076.D	28 Feb 2025 10:03	JC/MD	Ok
11	VSTDCCC050	VX045077.D	28 Feb 2025 10:32	JC/MD	Ok,M
12	VX0228MBL01	VX045078.D	28 Feb 2025 11:00	JC/MD	Ok
13	VX0228WBL01	VX045079.D	28 Feb 2025 11:23	JC/MD	Ok
14	VX0228WBS01	VX045080.D	28 Feb 2025 11:46	JC/MD	Ok,M
15	VX0228WBSD01	VX045081.D	28 Feb 2025 12:13	JC/MD	Ok,M
16	Q1401-03	VX045082.D	28 Feb 2025 12:37	JC/MD	Ok
17	Q1401-06	VX045083.D	28 Feb 2025 13:00	JC/MD	Ok
18	Q1423-01	VX045084.D	28 Feb 2025 13:23	JC/MD	Ok
19	Q1423-03	VX045085.D	28 Feb 2025 13:47	JC/MD	Ok
20	Q1403-01	VX045086.D	28 Feb 2025 14:10	JC/MD	Ok
21	Q1403-02	VX045087.D	28 Feb 2025 14:33	JC/MD	Ok

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Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QCBatch ID # VX022825

Review By	Mahesh Dadoda	Review On	2/28/2025 11:09:50 AM		
Supervise By	Semsettin Yesilyurt	Supervise On	2/28/2025 11:11:09 AM		
SubDirectory	VX022825	HP Acquire Method		HP Processing Method	82X022825W.M

STD. NAME	STD REF.#
Tune/Reschk	VP133187,VP133189
Initial Calibration Stds	VP133194,VP133195,VP133196,VP133197,VP133198,VP133199
CCC	VP133188,VP133190
Internal Standard/PEM	
ICV/I.BLK	VP133200
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

22	Q1435-01	VX045088.D	28 Feb 2025 14:57	JC/MD	Ok
23	Q1403-04	VX045089.D	28 Feb 2025 15:20	JC/MD	Ok
24	Q1462-02	VX045090.D	28 Feb 2025 15:44	JC/MD	Ok
25	Q1469-01	VX045091.D	28 Feb 2025 16:07	JC/MD	Ok
26	Q1469-02	VX045092.D	28 Feb 2025 16:31	JC/MD	Ok
27	Q1469-03	VX045093.D	28 Feb 2025 16:54	JC/MD	Ok
28	Q1469-04	VX045094.D	28 Feb 2025 17:17	JC/MD	Ok
29	Q1403-03	VX045095.D	28 Feb 2025 17:41	JC/MD	Ok
30	Q1462-01	VX045096.D	28 Feb 2025 18:04	JC/MD	Ok,M
31	IBLK	VX045097.D	28 Feb 2025 18:27	JC/MD	Ok
32	VSTDCCC050	VX045098.D	28 Feb 2025 18:50	JC/MD	Ok,M

M : Manual Integration

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Fax : 908 789 8922

Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QCBatch ID # VX032025

Review By	John Carlone	Review On	3/21/2025 10:02:10 AM		
Supervise By	Mahesh Dadoda	Supervise On	3/21/2025 10:05:58 AM		
SubDirectory	VX032025	HP Acquire Method		HP Processing Method	82X022825W.M

STD. NAME	STD REF.#
Tune/Reschk	VP133422
Initial Calibration Stds	
CCC	VP133423,VP133424
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VX045346.D	20 Mar 2025 09:09	JC/MD	Ok
2	VSTDCCC050	VX045347.D	20 Mar 2025 09:38	JC/MD	Ok,M
3	VX0320MBL01	VX045348.D	20 Mar 2025 10:06	JC/MD	Ok
4	VX0320WBL01	VX045349.D	20 Mar 2025 10:29	JC/MD	Ok
5	VX0320WBS01	VX045350.D	20 Mar 2025 10:53	JC/MD	Ok,M
6	VX0320WBS02	VX045351.D	20 Mar 2025 11:20	JC/MD	Not Ok
7	Q1559-09DL	VX045352.D	20 Mar 2025 11:44	JC/MD	Ok
8	Q1559-22DL	VX045353.D	20 Mar 2025 12:07	JC/MD	Ok
9	Q1559-21DL	VX045354.D	20 Mar 2025 12:30	JC/MD	Ok
10	VX0320WBSD01	VX045355.D	20 Mar 2025 12:53	JC/MD	Ok,M
11	Q1559-08	VX045356.D	20 Mar 2025 13:17	JC/MD	Ok
12	Q1584-02	VX045357.D	20 Mar 2025 13:40	JC/MD	Ok
13	Q1584-03	VX045358.D	20 Mar 2025 14:03	JC/MD	Ok
14	Q1584-04	VX045359.D	20 Mar 2025 14:26	JC/MD	Ok
15	Q1582-16	VX045360.D	20 Mar 2025 14:50	JC/MD	Ok
16	Q1582-05	VX045361.D	20 Mar 2025 15:13	JC/MD	ReRun
17	Q1584-01	VX045362.D	20 Mar 2025 15:36	JC/MD	Ok
18	Q1582-02	VX045363.D	20 Mar 2025 15:59	JC/MD	Dilution
19	Q1582-03	VX045364.D	20 Mar 2025 16:22	JC/MD	Dilution
20	Q1582-04	VX045365.D	20 Mar 2025 16:46	JC/MD	ReRun
21	Q1582-06	VX045366.D	20 Mar 2025 17:09	JC/MD	Dilution

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Fax : 908 789 8922

Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QCBatch ID # VX032025

Review By	John Carlone	Review On	3/21/2025 10:02:10 AM		
Supervise By	Mahesh Dadoda	Supervise On	3/21/2025 10:05:58 AM		
SubDirectory	VX032025	HP Acquire Method		HP Processing Method	82X022825W.M

STD. NAME	STD REF.#
Tune/Reschk	VP133422
Initial Calibration Stds	
CCC	VP133423,VP133424
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

22	Q1582-07	VX045367.D	20 Mar 2025 17:32	JC/MD	Dilution
23	Q1582-08	VX045368.D	20 Mar 2025 17:55	JC/MD	Dilution
24	Q1582-09	VX045369.D	20 Mar 2025 18:19	JC/MD	ReRun
25	Q1582-10	VX045370.D	20 Mar 2025 18:42	JC/MD	Dilution
26	Q1582-11	VX045371.D	20 Mar 2025 19:05	JC/MD	ReRun
27	Q1582-12	VX045372.D	20 Mar 2025 19:28	JC/MD	Ok
28	VSTDCCC050	VX045373.D	20 Mar 2025 19:51	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 # VX022825

Review By	Mahesh Dadoda	Review On	2/28/2025 11:09:50 AM		
Supervise By	Semsettin Yesilyurt	Supervise On	2/28/2025 11:11:09 AM		
SubDirectory	VX022825	HP Acquire Method		HP Processing Method	82X022825W.M

STD. NAME	STD REF.#
Tune/Reschk	VP133187,VP133189
Initial Calibration Stds	VP133194,VP133195,VP133196,VP133197,VP133198,VP133199
CCC	VP133188,VP133190
Internal Standard/PEM	
ICV/I.BLK	VP133200
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VX045067.D	28 Feb 2025 01:03		JC/MD	Ok
2	VSTDICC001	VSTDICC001	VX045068.D	28 Feb 2025 01:27		JC/MD	Ok,M
3	VSTDICC005	VSTDICC005	VX045069.D	28 Feb 2025 02:13		JC/MD	Ok,M
4	VSTDICC020	VSTDICC020	VX045070.D	28 Feb 2025 02:37		JC/MD	Ok,M
5	VSTDICCC050	VSTDICCC050	VX045071.D	28 Feb 2025 03:00		JC/MD	Ok,M
6	VSTDICC100	VSTDICC100	VX045072.D	28 Feb 2025 03:23		JC/MD	Ok,M
7	VSTDICC150	VSTDICC150	VX045073.D	28 Feb 2025 03:47		JC/MD	Ok,M
8	IBLK	IBLK	VX045074.D	28 Feb 2025 04:10		JC/MD	Ok
9	VSTDICV050	ICVVX022825	VX045075.D	28 Feb 2025 04:33		JC/MD	Ok,M
10	BFB	BFB	VX045076.D	28 Feb 2025 10:03		JC/MD	Ok
11	VSTDCCC050	VSTDCCC050	VX045077.D	28 Feb 2025 10:32	V12668	JC/MD	Ok,M
12	VX0228MBL01	VX0228MBL01	VX045078.D	28 Feb 2025 11:00		JC/MD	Ok
13	VX0228WBL01	VX0228WBL01	VX045079.D	28 Feb 2025 11:23		JC/MD	Ok
14	VX0228WBS01	VX0228WBS01	VX045080.D	28 Feb 2025 11:46		JC/MD	Ok,M
15	VX0228WBSD01	VX0228WBSD01	VX045081.D	28 Feb 2025 12:13		JC/MD	Ok,M
16	Q1401-03	BP-VPB-192-GW-840-8	VX045082.D	28 Feb 2025 12:37	vial B pH<2	JC/MD	Ok
17	Q1401-06	BP-VPB-192-GW-900-9	VX045083.D	28 Feb 2025 13:00	vial B pH<2	JC/MD	Ok
18	Q1423-01	BP-VPB-192-TB-20250	VX045084.D	28 Feb 2025 13:23	vial B pH<2 TB	JC/MD	Ok

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Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QCBatch ID # VX022825

Review By	Mahesh Dadoda	Review On	2/28/2025 11:09:50 AM		
Supervise By	Semsettin Yesilyurt	Supervise On	2/28/2025 11:11:09 AM		
SubDirectory	VX022825	HP Acquire Method		HP Processing Method	82X022825W.M

STD. NAME	STD REF.#
Tune/Reschk	VP133187,VP133189
Initial Calibration Stds	VP133194,VP133195,VP133196,VP133197,VP133198,VP133199
CCC	VP133188,VP133190
Internal Standard/PEM	
ICV/I.BLK	VP133200
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

19	Q1423-03	BP-VPB-192-EB-20250	VX045085.D	28 Feb 2025 13:47	vial B pH<2 EB	JC/MD	Ok
20	Q1403-01	Storage-Blank-SOIL-RE	VX045086.D	28 Feb 2025 14:10	vial B pH<2	JC/MD	Ok
21	Q1403-02	Storage-Blank-WATER-	VX045087.D	28 Feb 2025 14:33	vial B pH<2	JC/MD	Ok
22	Q1435-01	286107	VX045088.D	28 Feb 2025 14:57	vial A pH<2	JC/MD	Ok
23	Q1403-04	Storage-Blank-SAMPLE	VX045089.D	28 Feb 2025 15:20	vial B pH<2	JC/MD	Ok
24	Q1462-02	FB	VX045090.D	28 Feb 2025 15:44	vial A pH<2 FB	JC/MD	Ok
25	Q1469-01	Storage-Blank-SOIL-RE	VX045091.D	28 Feb 2025 16:07	vial A pH<2	JC/MD	Ok
26	Q1469-02	Storage-Blank-WATER-	VX045092.D	28 Feb 2025 16:31	vial A pH<2	JC/MD	Ok
27	Q1469-03	Storage-Blank-WATER-	VX045093.D	28 Feb 2025 16:54	vial A pH<2	JC/MD	Ok
28	Q1469-04	Storage-Blank-SAMPLE	VX045094.D	28 Feb 2025 17:17	vial A pH<2	JC/MD	Ok
29	Q1403-03	Storage-Blank-WATER-	VX045095.D	28 Feb 2025 17:41	vial B pH<2	JC/MD	Ok
30	Q1462-01	MW2	VX045096.D	28 Feb 2025 18:04	vial A pH<2	JC/MD	Ok,M
31	IBLK	IBLK	VX045097.D	28 Feb 2025 18:27		JC/MD	Ok
32	VSTDCCC050	VSTDCCC050EC	VX045098.D	28 Feb 2025 18:50		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 # VX032025

Review By	John Carlone	Review On	3/21/2025 10:02:10 AM		
Supervise By	Mahesh Dadoda	Supervise On	3/21/2025 10:05:58 AM		
SubDirectory	VX032025	HP Acquire Method		HP Processing Method	82X022825W.M

STD. NAME	STD REF.#
Tune/Reschk	VP133422
Initial Calibration Stds	
CCC	VP133423,VP133424
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	VX045346.D	20 Mar 2025 09:09		JC/MD	Ok
2	VSTDCCC050	VSTDCCC050	VX045347.D	20 Mar 2025 09:38	pH#Lot#V12668	JC/MD	Ok,M
3	VX0320MBL01	VX0320MBL01	VX045348.D	20 Mar 2025 10:06		JC/MD	Ok
4	VX0320WBL01	VX0320WBL01	VX045349.D	20 Mar 2025 10:29		JC/MD	Ok
5	VX0320WBS01	VX0320WBS01	VX045350.D	20 Mar 2025 10:53		JC/MD	Ok,M
6	VX0320WBS02	VX0320WBS02	VX045351.D	20 Mar 2025 11:20	Surrogate Fail for DOD	JC/MD	Not Ok
7	Q1559-09DL	DUP03-20250310DL	VX045352.D	20 Mar 2025 11:44	vial B pH<2	JC/MD	Ok
8	Q1559-22DL	RE120D2-20250312DL	VX045353.D	20 Mar 2025 12:07	vial B pH<2	JC/MD	Ok
9	Q1559-21DL	RE120D3-20250312DL	VX045354.D	20 Mar 2025 12:30	vial B pH<2	JC/MD	Ok
10	VX0320WBSD01	VX0320WBSD01	VX045355.D	20 Mar 2025 12:53	BSD failed low for comp. #11,13	JC/MD	Ok,M
11	Q1559-08	DUP02-20250310	VX045356.D	20 Mar 2025 13:17	vial B pH<2	JC/MD	Ok
12	Q1584-02	Storage-Blank-WATER-	VX045357.D	20 Mar 2025 13:40	vial A pH<2	JC/MD	Ok
13	Q1584-03	Storage-Blank-WATER-	VX045358.D	20 Mar 2025 14:03	vial A pH<2	JC/MD	Ok
14	Q1584-04	Storage-Blank-SAMPLE	VX045359.D	20 Mar 2025 14:26	vial A pH<2	JC/MD	Ok
15	Q1582-16	FB	VX045360.D	20 Mar 2025 14:50	vial A pH<2 FB	JC/MD	Ok
16	Q1582-05	FB02-20250313	VX045361.D	20 Mar 2025 15:13	vial A pH<2 FB;Hit of comp.#16	JC/MD	ReRun
17	Q1584-01	Storage-Blank-SOIL-RE	VX045362.D	20 Mar 2025 15:36	vial A pH<2	JC/MD	Ok
18	Q1582-02	TT180D1-20250313	VX045363.D	20 Mar 2025 15:59	vial A pH<2 Need 5X	JC/MD	Dilution

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 # VX032025

Review By	John Carlone	Review On	3/21/2025 10:02:10 AM		
Supervise By	Mahesh Dadoda	Supervise On	3/21/2025 10:05:58 AM		
SubDirectory	VX032025	HP Acquire Method		HP Processing Method	82X022825W.M

STD. NAME	STD REF.#
Tune/Reschk	VP133422
Initial Calibration Stds	
CCC	VP133423,VP133424
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

19	Q1582-03	TT180D2-20250313	VX045364.D	20 Mar 2025 16:22	vial A pH<2 Need 10X	JC/MD	Dilution
20	Q1582-04	TT180D-20250313	VX045365.D	20 Mar 2025 16:46	vial A pH<2 E flage in previous sample	JC/MD	ReRun
21	Q1582-06	RE131D1-20250313	VX045366.D	20 Mar 2025 17:09	vial A pH<2 Need 5X	JC/MD	Dilution
22	Q1582-07	RE131D2-20250313	VX045367.D	20 Mar 2025 17:32	vial A pH<2 Need 5X	JC/MD	Dilution
23	Q1582-08	RE131D3-20250313	VX045368.D	20 Mar 2025 17:55	vial A pH<2 Need 20X	JC/MD	Dilution
24	Q1582-09	TT119S1-20250313	VX045369.D	20 Mar 2025 18:19	vial A pH<2 E flage in previous sample	JC/MD	ReRun
25	Q1582-10	RE114D1-20250313	VX045370.D	20 Mar 2025 18:42	vial A pH<2 Need 10X	JC/MD	Dilution
26	Q1582-11	BPOW1-7-20250314	VX045371.D	20 Mar 2025 19:05	vial A pH<2 E flage in previous sample	JC/MD	ReRun
27	Q1582-12	BPOW1-8-20250314	VX045372.D	20 Mar 2025 19:28	vial A pH<2	JC/MD	Ok
28	VSTDCCC050	VSTDCCC050EC	VX045373.D	20 Mar 2025 19:51		JC/MD	Ok,M

M : Manual Integration

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 3/17/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:20
In Date: 03/14/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN-1

OVENTEMP OUT Celsius(°C): 105
Time OUT: 08:35
Out Date: 03/15/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLIDS-OVEN

QC: LB135036

Lab ID	Client SampleID	Dish #	Dish Wt(g) (A)	Sample Wt(g)	Dish + Sample Wt(g) (B)	Dish+Dry Sample Wt(g) (C)	% Solid	Comments
Q1569-01	TAP-IDW-SOIL-031325-01	1	1.14	11.74	12.88	10.13	76.6	
Q1569-04	TAP-IDW-SOIL-031325-02	2	1.16	10.92	12.08	9.16	73.3	
Q1572-01	C0AC9	3	1.12	10.23	11.35	8.25	69.7	
Q1572-02	C0O14	4	1.15	10.41	11.56	9.32	78.5	
Q1572-03	C0O15	5	1.18	10.05	11.23	9.22	80.0	
Q1572-04	C0O16	6	1.15	9.00	10.15	7.3	68.3	
Q1572-05	C0O17	7	1.14	10.49	11.63	8.97	74.6	
Q1572-06	C0O18	8	1.15	9.91	11.06	8.68	76.0	
Q1572-07	C0O19	9	1.16	10.15	11.31	8.17	69.1	
Q1572-08	C0O20	10	1.13	10.26	11.39	8.8	74.8	
Q1572-09	C0O21	11	1.15	10.40	11.55	8.11	66.9	
Q1572-10	C0O22	12	1.15	10.39	11.54	8.00	65.9	
Q1572-11	C0O23	13	1.14	10.46	11.6	9.91	83.8	
Q1572-12	C0O24	14	1.13	10.28	11.41	8.82	74.8	
Q1572-13	C0O25	15	1.12	10.22	11.34	8.92	76.3	
Q1572-14	C0O26	16	1.19	10.23	11.42	8.82	74.6	
Q1572-15	C0O27	17	1.12	10.48	11.6	8.85	73.8	
Q1572-16	C0O28	18	1.15	10.11	11.26	9.52	82.8	
Q1573-01	C0AC4	19	1.19	10.51	11.7	8.81	72.5	
Q1573-02	C0AC5	20	1.16	11.03	12.19	8.16	63.5	
Q1573-03	C0AC6	21	1.14	10.38	11.52	7.66	62.8	
Q1573-04	C0AC8	22	1.16	10.28	11.44	7.25	59.2	
Q1573-05	C0O29	23	1.18	10.60	11.78	7.09	55.8	
Q1573-06	C0O30	24	1.13	10.13	11.26	8.17	69.5	
Q1573-07	C0O31	25	1.19	10.24	11.43	8.1	67.5	
Q1573-08	C0O32	26	1.15	10.08	11.23	6.7	55.1	
Q1573-09	C0O33	27	1.13	10.27	11.4	7.76	64.6	
Q1573-10	C0O34	28	1.14	10.42	11.56	9.7	82.1	

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 3/17/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:20
In Date: 03/14/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN-1

OVENTEMP OUT Celsius(°C): 105
Time OUT: 08:35
Out Date: 03/15/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLIDS-OVEN

QC: LB135036

Lab ID	Client SampleID	Dish #	Dish Wt(g) (A)	Sample Wt(g)	Dish + Sample Wt(g) (B)	Dish+Dry Sample Wt(g) (C)	% Solid	Comments
Q1573-11	C0O35	29	1.19	11.25	12.44	9.97	78.0	
Q1574-01	WC1	30	1.11	10.31	11.42	11.21	98.0	
Q1578-01	JEC817T-1-1	31	1.00	1.00	2.00	2.00	100.0	pilc
Q1578-02	JEC817T-1-2	32	1.00	1.00	2.00	2.00	100.0	pilc
Q1579-01	BC271189-1-1	33	1.00	1.00	2.00	2.00	100.0	pilc
Q1579-02	BC271189-1-2	34	1.00	1.00	2.00	2.00	100.0	pilc
Q1579-03	BC271038-1-1	35	1.00	1.00	2.00	2.00	100.0	pilc
Q1579-04	BC271038-1-2	36	1.00	1.00	2.00	2.00	100.0	pilc
Q1581-01	TR-06-031425	37	1.14	10.08	11.22	10.54	93.3	
Q1581-02	TR-06-031425-E2	38	1.18	10.18	11.36	10.64	92.9	
Q1584-05	SVOC-GPC-BLANK	39	1.00	1.00	2.00	2.00	100.0	
Q1584-06	PEST-GPC-BLANK	40	1.00	1.00	2.00	2.00	100.0	
Q1584-07	PEST-GPC-BLANK-SPIKE	41	1.00	1.00	2.00	2.00	100.0	
Q1584-08	PCB-GPC-BLANK	42	1.00	1.00	2.00	2.00	100.0	
Q1584-09	PCB-GPC-BLANK-SPIKE	43	1.00	1.00	2.00	2.00	100.0	
Q1584-10	SVOC-GPC2-BLANK	44	1.00	1.00	2.00	2.00	100.0	
Q1584-11	PEST-GPC2-BLANK	45	1.00	1.00	2.00	2.00	100.0	
Q1584-12	PEST-GPC2-BLANK-SPIKE	46	1.00	1.00	2.00	2.00	100.0	
Q1584-13	PCB-GPC2-BLANK	47	1.00	1.00	2.00	2.00	100.0	
Q1584-14	PCB-GPC2-BLANK-SPIKE	48	1.00	1.00	2.00	2.00	100.0	
Q1585-01	OK-02-03142025	49	1.14	10.43	11.57	11.27	97.1	
Q1585-02	OK-02-03142025-E2	50	1.13	10.27	11.4	10.89	95.0	

$$\% \text{ Solid} = \frac{(C-A) * 100}{(B-A)}$$

WORKLIST(Hardcopy Internal Chain)

VB 135036

WorkList Name : %1-031425 **WorkList ID :** 188269 **Department :** Wet-Chemistry **Date :** 03-14-2025 08:28:30

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1569-01	TAP-IDW-SOIL-031325-01	Solid	Percent Solids	Cool 4 deg C	WEST04	I33	03/13/2025	Chemtech -SO
Q1569-04	TAP-IDW-SOIL-031325-02	Solid	Percent Solids	Cool 4 deg C	WEST04	I33	03/13/2025	Chemtech -SO
Q1572-01	C0AC9	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/12/2025	Chemtech -SO
Q1572-02	C0O14	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/12/2025	Chemtech -SO
Q1572-03	C0O15	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/12/2025	Chemtech -SO
Q1572-04	C0O16	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/12/2025	Chemtech -SO
Q1572-05	C0O17	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/12/2025	Chemtech -SO
Q1572-06	C0O18	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/12/2025	Chemtech -SO
Q1572-07	C0O19	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/12/2025	Chemtech -SO
Q1572-08	C0O20	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/12/2025	Chemtech -SO
Q1572-09	C0O21	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/12/2025	Chemtech -SO
Q1572-10	C0O22	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/12/2025	Chemtech -SO
Q1572-11	C0O23	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/12/2025	Chemtech -SO
Q1572-12	C0O24	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/12/2025	Chemtech -SO
Q1572-13	C0O25	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/12/2025	Chemtech -SO
Q1572-14	C0O26	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/12/2025	Chemtech -SO
Q1572-15	C0O27	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/12/2025	Chemtech -SO
Q1572-16	C0O28	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/12/2025	Chemtech -SO
Q1573-01	C0AC4	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/12/2025	Chemtech -SO
Q1573-02	C0AC5	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/11/2025	Chemtech -SO
Q1573-03	C0AC6	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/11/2025	Chemtech -SO

Date/Time 03/13/25 16:10

Raw Sample Received by: JP WDC

Raw Sample Relinquished by: IT (SM)

Date/Time ~~03/13/25~~ 03/14/25 17:30

Raw Sample Received by: IT (SM)

Raw Sample Relinquished by: JP WDC

WORKLIST(Hardcopy Internal Chain)

VB135036

WorkList Name : %1-031425 **WorkList ID :** 188269 **Department :** Wet-Chemistry **Date :** 03-14-2025 08:28:30

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1573-04	C0AC8	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/11/2025	Chemtech -SO
Q1573-05	C0O29	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/11/2025	Chemtech -SO
Q1573-06	C0O30	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/11/2025	Chemtech -SO
Q1573-07	C0O31	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/11/2025	Chemtech -SO
Q1573-08	C0O32	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/11/2025	Chemtech -SO
Q1573-09	C0O33	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/11/2025	Chemtech -SO
Q1573-10	C0O34	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/11/2025	Chemtech -SO
Q1573-11	C0O35	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/11/2025	Chemtech -SO
Q1574-01	WC1	Solid	Percent Solids	Cool 4 deg C	GENV01	I41	03/12/2025	Chemtech -SO
Q1578-01	JEC817T-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	I41	03/14/2025	Chemtech -SO
Q1578-02	JEC817T-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	I41	03/14/2025	Chemtech -SO
Q1579-01	BC271189-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	I41	03/14/2025	Chemtech -SO
Q1579-02	BC271189-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	I41	03/14/2025	Chemtech -SO
Q1579-03	BC271038-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	I41	03/14/2025	Chemtech -SO
Q1579-04	BC271038-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	I41	03/14/2025	Chemtech -SO
Q1581-01	TR-06-031425	Solid	Percent Solids	Cool 4 deg C	PSEG05	I41	03/14/2025	Chemtech -SO
Q1581-02	TR-06-031425-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	I41	03/14/2025	Chemtech -SO
Q1584-05	SVOC-GPC-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	F11	03/14/2025	Chemtech -SO
Q1584-06	PEST-GPC-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	F11	03/14/2025	Chemtech -SO
Q1584-07	PEST-GPC-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	CHEM02	F11	03/14/2025	Chemtech -SO
Q1584-08	PCB-GPC-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	F11	03/14/2025	Chemtech -SO

Date/Time 03/14/25 16:10

Raw Sample Received by: SB WOC

Raw Sample Relinquished by: JTCSM

Date/Time 03/14/25 1730

Raw Sample Received by: JTCSM

Raw Sample Relinquished by: SB WOC

WORKLIST(Hardcopy Internal Chain)

UB 135036

WorkList Name : %1-031425 **WorkList ID :** 188269 **Department :** Wet-Chemistry **Date :** 03-14-2025 08:28:30

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1584-09	PCB-GPC-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	CHEM02	F11	03/14/2025	Chemtech -SO
Q1584-10	SVOC-GPC2-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	F11	03/14/2025	Chemtech -SO
Q1584-11	PEST-GPC2-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	F11	03/14/2025	Chemtech -SO
Q1584-12	PEST-GPC2-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	CHEM02	F11	03/14/2025	Chemtech -SO
Q1584-13	PCB-GPC2-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	F11	03/14/2025	Chemtech -SO
Q1584-14	PCB-GPC2-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	CHEM02	F11	03/14/2025	Chemtech -SO
Q1585-01	OK-02-03142025	Solid	Percent Solids	Cool 4 deg C	PSEG05	I41	03/14/2025	Chemtech -SO
Q1585-02	OK-02-03142025-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	I41	03/14/2025	Chemtech -SO

Date/Time 03/14/25 16:10
Raw Sample Received by: [signature]
Raw Sample Relinquished by: IT (SM)

Date/Time 03/14/25 17:30
Raw Sample Received by: IT (SM)
Raw Sample Relinquished by: [signature]

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

Prep Standard - Chemical Standard Summary

Order ID : Q1584

Test : VOC- Chemtech Full

Prepbatch ID :

Sequence ID/Qc Batch ID: VX032025,

Standard ID :
VP131746,VP131767,VP132035,VP132096,VP133174,VP133178,VP133342,VP133422,VP133423,VP133424,

Chemical ID :
V13391,V13457,V13460,V13465,V13466,V13706,V14154,V14175,V14176,V14289,V14433,V14439,V14521,V14522,V14613,V14614,V14630,V14631,V14632,V14633,V14722,V14723,V14724,V14744,V14754,V14809,V14814,V14842,V14883,V14896,V14897,V14898,V14899,W3112,

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

VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
247	8260 Internal Standard, 250PPM	VP131746	11/22/2024	05/18/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 11/23/2024

FROM 0.50000ml of V14289 + 49.50000ml of V14154 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
218	BFB, 25PPM	VP131767	11/22/2024	05/18/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 11/27/2024

FROM 0.50000ml of V13391 + 49.50000ml of V14154 = Final Quantity: 50.000 ml

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

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	VP132035	12/10/2024	06/10/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 12/12/2024

FROM 1.00000ml of V14630 + 1.00000ml of V14631 + 1.00000ml of V14632 + 1.00000ml of V14633 + 46.00000ml of V14614 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
719	8260 Working STD (BCM)-First source, 400PPM	VP132096	12/12/2024	06/10/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 12/19/2024

FROM 1.00000ml of V13465 + 1.00000ml of V13466 + 1.50000ml of V13457 + 1.50000ml of V13460 + 20.00000ml of V14614 = Final Quantity: 25.000 ml

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

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	VP133178	02/27/2025	03/31/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 03/04/2025

FROM 0.40000ml of V14842 + 1.00000ml of V14175 + 1.00000ml of V14176 + 1.00000ml of V14433 + 1.00000ml of V14439 + 1.00000ml of V14521 + 1.00000ml of V14522 + 1.00000ml of V14724 + 1.00000ml of V14744 + 1.00000ml of V14754 + 1.00000ml of V14809 + 1.00000ml of V14814 + 1.50000ml of V14722 + 1.50000ml of V14723 + 10.60000ml of V14613 = Final Quantity: 25.000 ml

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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	VP133342	03/18/2025	04/17/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 03/20/2025

FROM 1.00000ml of V14896 + 1.00000ml of V14897 + 1.00000ml of V14898 + 1.00000ml of V14899 + 21.00000ml of V14883 = Final Quantity: 25.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
589	BFB TUNE CHECK	VP133422	03/20/2025	03/21/2025	John Carlone	None	None	Mahesh Dadoda 03/21/2025

FROM 39.98400ml of W3112 + 0.01600ml of VP131767 = 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	VP133423	03/20/2025	03/21/2025	John Carlone	None	None	Mahesh Dadoda 03/21/2025

FROM 39.94450ml of W3112 + 0.00500ml of VP132096 + 0.00500ml of VP133174 + 0.00800ml of VP131746 + 0.01250ml of VP132035 + 0.01250ml of VP133178 + 0.01250ml of VP133342 = 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	VP133424	03/20/2025	03/21/2025	John Carlone	None	None	Mahesh Dadoda 03/21/2025

FROM 39.94450ml of W3112 + 0.00500ml of VP132096 + 0.00500ml of VP133174 + 0.00800ml of VP131746 + 0.01250ml of VP132035 + 0.01250ml of VP133178 + 0.01250ml of VP133342 = 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	30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul	A0193071	06/12/2025	12/12/2024 / SAM	01/27/2023 / SAM	V13457

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul	A0193071	06/12/2025	12/12/2024 / SAM	01/27/2023 / SAM	V13460

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul	A0193071	06/12/2025	12/12/2024 / SAM	01/27/2023 / SAM	V13465

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul	A0193071	06/12/2025	12/12/2024 / SAM	01/27/2023 / SAM	V13466

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

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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)	22L0562016	05/18/2025	11/18/2024 / pedro	02/06/2024 / SAM	V14154

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95317 / Universal VOA Mega Mix (Min order = 5)	021624	07/10/2025	01/10/2025 / SAM	02/20/2024 / SAM	V14175

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95317 / Universal VOA Mega Mix (Min order = 5)	021624	07/10/2025	01/10/2025 / SAM	02/20/2024 / SAM	V14176

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555581 / Custom Standard, 8260 Internal Std [CS 5179-1]	A0210184	11/22/2025	11/22/2024 / SAM	04/15/2024 / SAM	V14289

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30489 / VOA Mix, 8260B Acetates Mix, P&TM, 1mL	A0209618	07/10/2025	01/10/2025 / SAM	08/15/2024 / SAM	V14433

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30489 / VOA Mix, 8260B Acetates Mix, P&TM, 1mL	A0209618	07/10/2025	01/10/2025 / SAM	08/15/2024 / SAM	V14439

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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.	95319 / Revised Additions Mix (Min = 5)	091724	07/10/2025	01/10/2025 / SAM	09/18/2024 / SAM	V14521

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95319 / Revised Additions Mix (Min = 5)	091724	07/10/2025	01/10/2025 / SAM	09/18/2024 / SAM	V14522

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	22L0562016	08/27/2025	02/27/2025 / SAM	11/26/2024 / SAM	V14613

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	22L0562016	06/10/2025	12/10/2024 / SAM	11/26/2024 / SAM	V14614

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	06/10/2025	12/10/2024 / SAM	12/06/2024 / SAM	V14630

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	06/10/2025	12/10/2024 / SAM	12/06/2024 / SAM	V14631

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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	06/10/2025	12/10/2024 / SAM	12/06/2024 / SAM	V14632

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	06/10/2025	12/10/2024 / SAM	12/06/2024 / SAM	V14633

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml	A02110618	07/10/2025	01/10/2025 / SAM	12/17/2024 / SAM	V14722

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml	A02110618	07/10/2025	01/10/2025 / SAM	12/17/2024 / SAM	V14723

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml	A02110618	07/10/2025	01/10/2025 / SAM	12/17/2024 / SAM	V14724

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30042 / VOA Mix,500 series method 502.2 Calibration Std #1 gases, 2000uq/ml, PTM, 1ml	A0216826	08/27/2025	02/27/2025 / SAM	12/17/2024 / SAM	V14744

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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	05/31/2031	01/10/2025 / SAM	12/17/2024 / SAM	V14754

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555408 / Custom Standard, Vinyl Acetate Standard w/ Grav [CS 5066-6] TWO SEPARATE LOTS	A0220471	07/10/2025	01/10/2025 / SAM	01/08/2025 / SAM	V14809

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	07/10/2025	01/10/2025 / SAM	01/08/2025 / SAM	V14814

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30470 / VOA Stock Solution, tert-butanol std, 1mL, P&TM	A0217535	08/27/2025	02/27/2025 / SAM	01/21/2025 / SAM	V14842

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	22L0562016	10/25/2025	02/19/2025 / Jaswal	04/22/2024 / Jaswal	V14883

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	031725	04/17/2025	03/18/2025 / SAM	03/18/2025 / SAM	V14896

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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.	91980 / Acrolin Std (Min = 5)	031725	04/17/2025	03/18/2025 / SAM	03/18/2025 / SAM	V14897

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	031725	04/17/2025	03/18/2025 / SAM	03/18/2025 / SAM	V14898

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	031725	04/17/2025	03/18/2025 / SAM	03/18/2025 / SAM	V14899

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

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

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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

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

Formulated By: Prashant Chauhan 021624 DATE

Reviewed By: Pedro L. Rentas 021624 DATE

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

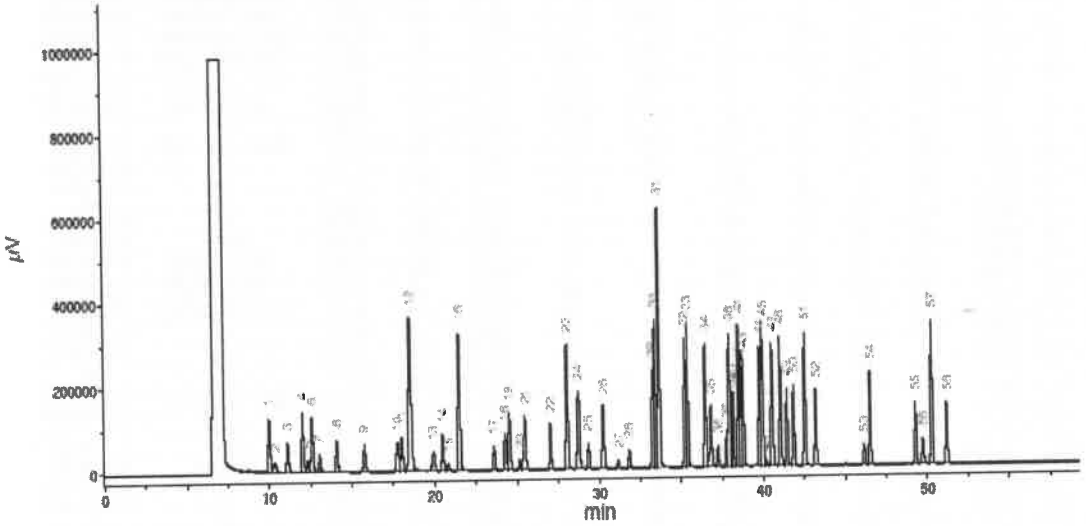
Compound	(RM#) Part Number	Lot Number	Dil. Factor	Initial Vol. (mL)	Initial Conc.(ug/mL)	Nominal Conc (µg/mL)	Purity (%)	Purity Uncertainty	Uncertainty Pipette (mL)	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached 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	(0486)	MKBP6041V	NA	NA	NA	2000	96.5	0.2	NA	0.20731	0.20748	2001.7	8.4	110-57-6	N/A	N/A
6. Diethyl ether	(0153)	IK18CAS000(	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	(0361)	06126PX	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 848mg/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	40017.8	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 (46mg/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	1999.6	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	1999.6	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 6040mg/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 sample, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty References: 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-1,2,2-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	18.46
13	Isobutanol/1,1,1-Trichloroethane	19.91
14	1,1-Dichloropropene	20.46
15	Carbon tetrachloride	20.79
16	Benzene/1,2-Dichloroethane	21.49
17	Trichloroethene	23.58
18	1,2-Dichloropropane	24.28
19	Methyl methacrylate	24.52
20	Bromodichloromethane	25.13
21	Dibromomethane/2-Nitropropane	25.46
22	cis-1,3-Dichloropropene	27.02
23	Toluene	28.05
24	Ethyl methacrylate/trans-1,3-Dichloropropene	28.73
25	1,1,2-Trichloroethane	29.34
26	Tetrachloroethene/1,3-Dichloropropane	30.24
27	Dibromochloromethane	31.16
28	1,2-Dibromoethene	31.84
29	Chlorobenzene	33.26
30	Ethylbenzene/1,1,1,2-Tetrachloroethane	33.40
31	m-Xylene/p-Xylene	33.88
32	o-Xylene	35.22
33	Styrene	35.38
34	Isopropylbenzene/Bromoform	36.18
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	37.93
39	trans-1,4-Dichloro-2-Butene	38.05
40	Bromobenzene	38.14
41	1,3,5-Trimethylbenzene	38.80
42	2-Chlorotoluene	38.82
43	4-Chlorotoluene	38.77
44	tert-Butylbenzene	39.76
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	41.42
50	1,4-Dichlorobenzene	41.83
51	n-Butylbenzene	42.53
52	1,2-Dichlorobenzene	43.18
53	1,2-Dibromo-3-chloropropane	46.12
54	Nitrobenzene	46.46
55	1,2,4-Trichlorobenzene	49.26
56	Hexachlorobutadiene	49.72
57	Naphthalene	50.26
58	1,2,3-Trichlorobenzene	51.16

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, 2023

Section II - Hazards Identification

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

H225	**Highly Flammable Liquid and Vapor**	**H301, 311, 331**	**Toxic if swallowed, skin contact, inhaled**
H370	**Cause damage to organs**	**H351**	**Suspected of causing cancer**
P271	**Use in ventilated area**	**P280**	**Use gloves, eye protection/face 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.

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

Formulated By: Prashant Chauhan 021624 DATE

Reviewed By: Pedro L. Rentas 021624 DATE

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

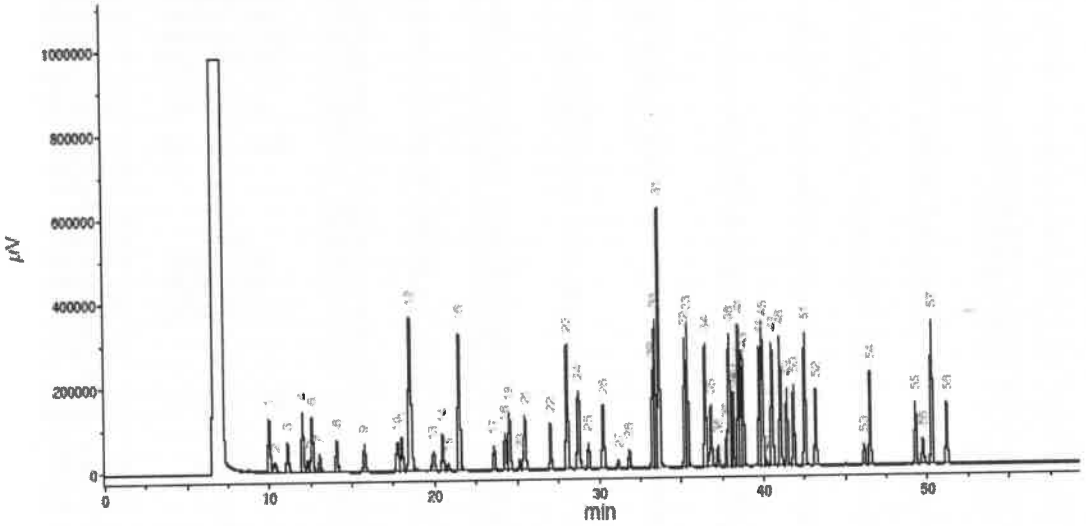
Compound	(RM#) Part Number	Lot Number	Dil. Factor	Initial Vol. (mL)	Initial Conc.(ug/mL)	Nominal Conc (µg/mL)	Purity (%)	Purity Uncertainty	Uncertainty Pipette (mL)	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached 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	(0486)	MKBP6041V	NA	NA	NA	2000	96.5	0.2	NA	0.20731	0.20748	2001.7	8.4	110-57-6	N/A	N/A
6. Diethyl ether	(0153)	IK18CAS000(	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	(0361)	06126PX	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 848mg/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	40017.8	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 (46mg/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	1999.6	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	1999.6	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 6040mg/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 sample, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty References: 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-1,2,2-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	18.46
13	Isobutanol/1,1,1-Trichloroethane	19.91
14	1,1-Dichloropropene	20.46
15	Carbon tetrachloride	20.79
16	Benzene/1,2-Dichloroethane	21.49
17	Trichloroethene	23.58
18	1,2-Dichloropropane	24.28
19	Methyl methacrylate	24.52
20	Bromodichloromethane	25.13
21	Dibromomethane/2-Nitropropane	25.46
22	cis-1,3-Dichloropropene	27.02
23	Toluene	28.05
24	Ethyl methacrylate/trans-1,3-Dichloropropene	28.73
25	1,1,2-Trichloroethane	29.34
26	Tetrachloroethene/1,3-Dichloropropane	30.24
27	Dibromochloromethane	31.16
28	1,2-Dibromoethene	31.84
29	Chlorobenzene	33.26
30	Ethylbenzene/1,1,1,2-Tetrachloroethane	33.40
31	m-Xylene/p-Xylene	33.88
32	o-Xylene	35.22
33	Styrene	35.38
34	Isopropylbenzene/Bromoform	36.18
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	37.93
39	trans-1,4-Dichloro-2-Butene	38.05
40	Bromobenzene	38.14
41	1,3,5-Trimethylbenzene	38.80
42	2-Chlorotoluene	38.82
43	4-Chlorotoluene	38.77
44	tert-Butylbenzene	39.76
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	41.42
50	1,4-Dichlorobenzene	41.83
51	n-Butylbenzene	42.53
52	1,2-Dichlorobenzene	43.18
53	1,2-Dibromo-3-chloropropane	46.12
54	Nitrobenzene	46.46
55	1,2,4-Trichlorobenzene	49.26
56	Hexachlorobutadiene	49.72
57	Naphthalene	50.26
58	1,2,3-Trichlorobenzene	51.16

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, 2023

Section II - Hazards Identification

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

H225	**Highly Flammable Liquid and Vapor**	**H301, 311, 331**	**Toxic if swallowed, skin contact, inhaled**
H370	**Cause damage to organs**	**H351**	**Suspected of causing cancer**
P271	**Use in ventilated area**	**P280**	**Use gloves, eye protection/face 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

Exp 03/18/24

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

CERTIFIED WEIGHT REPORT

5 vial

Part Number:	91980
Lot Number:	031725
Description:	Acrolein
Expiration Date:	041725
Recommended Storage:	Refrigerate (4 °C)
Nominal Concentration (µg/mL):	5000
NIST Test ID#:	6UTB

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

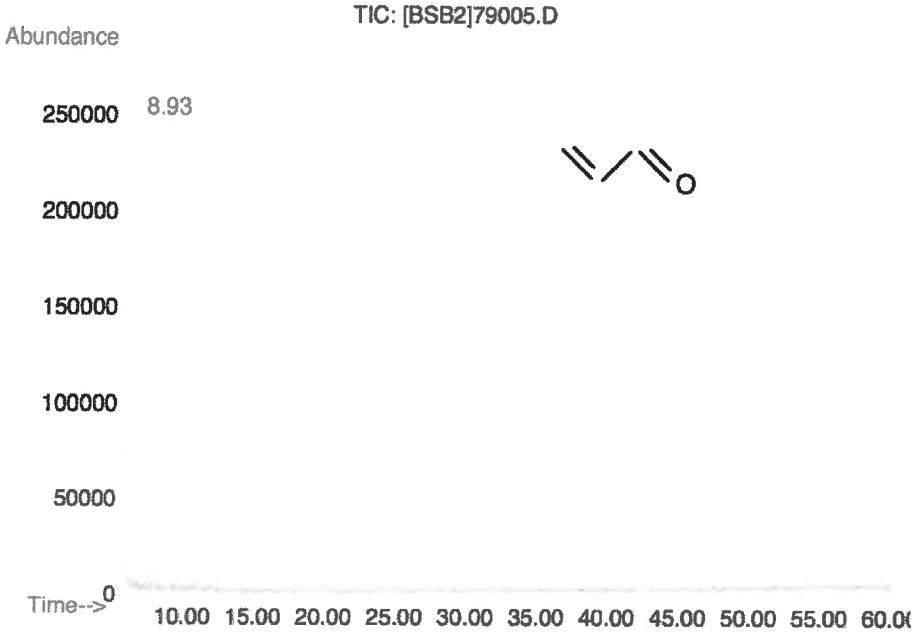
V14895 to V14899

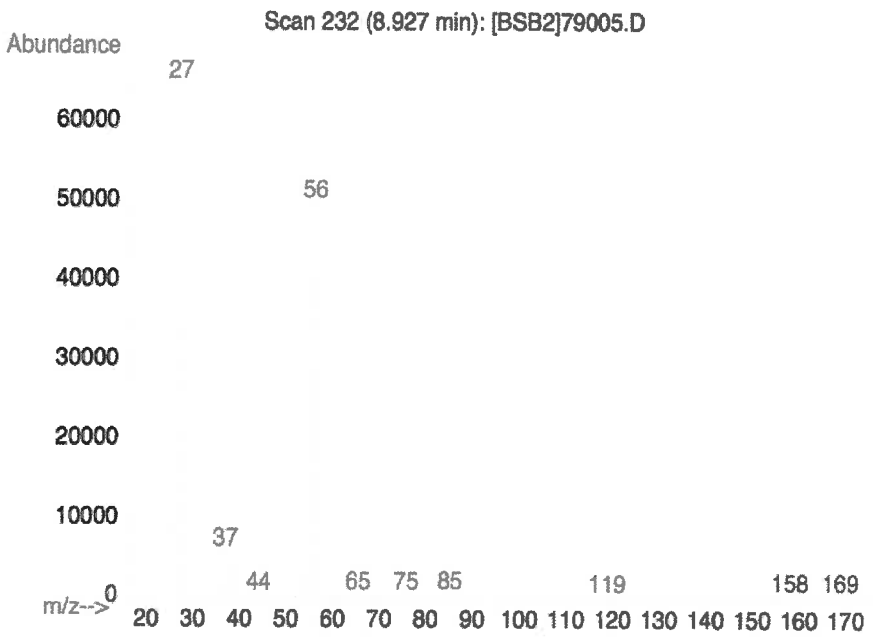
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

Formulated By:	Lawrence Barry	031725 DATE
Reviewed By:	Pedro L. Rentas	031725 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 with weights traceable to NIST (see above).**
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- **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 WATER**

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	**1-800-535-5053**
Address	44 Rossotto Dr.	Emergency Telephone International	**1-352-323-3500**
	Hamden CT, 06514	Date Prepared/Revised	January 1, 2025

Section II - Hazards Identification

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

P271	**Use in ventilated area**	**H315**	**Causes skin and eye irritation.**
P302,332	**If on skin, wash with soap and water**	**P280**	**Use gloves, eye protection/face sheild**
		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)
Water	CAS#: 7732-18-5	> 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

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.
Hazardous Decomposition products	Carbon oxides

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
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

Water CAS#: 7732-18-5 TWA: 500 ppm

Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

Section IX - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point	100°C	Specific Gravity (H2O = 1)	1
Vapor Pressure (mm Hg)		Melting Point	

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	NA		0°C
Vapor Density (AIR = 1)	NA	Evaporation rate (Butyl Acetate = 1)	NA

Solubility in Water Completely miscible

Appearance and Odor CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions NA
Conditions to avoid NA
Materials to avoid NA
Hazardous decomposition products - No data available

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - Rat NA
LC50 Inhalation - Rat NA
LD50 Dermal - Guinea pig NA
Causes skin irritation.
Eye irritation

Section XII. ECOLOGICAL INFORMATION

LC50 NA
EC50 NA

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
Not dangerous goods
Proper shipping name: Water

IATA
Not dangerous goods
Proper shipping name: Water

Section XV. REGULATORY INFORMATION

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

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential 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 Material Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

Absolute Standards, Inc.
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Certified Reference Material CRM

Exp 03/18/24

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

CERTIFIED WEIGHT REPORT

5 vial

Part Number:	91980
Lot Number:	031725
Description:	Acrolein
Expiration Date:	041725
Recommended Storage:	Refrigerate (4 °C)
Nominal Concentration (µg/mL):	5000
NIST Test ID#:	6UTB

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

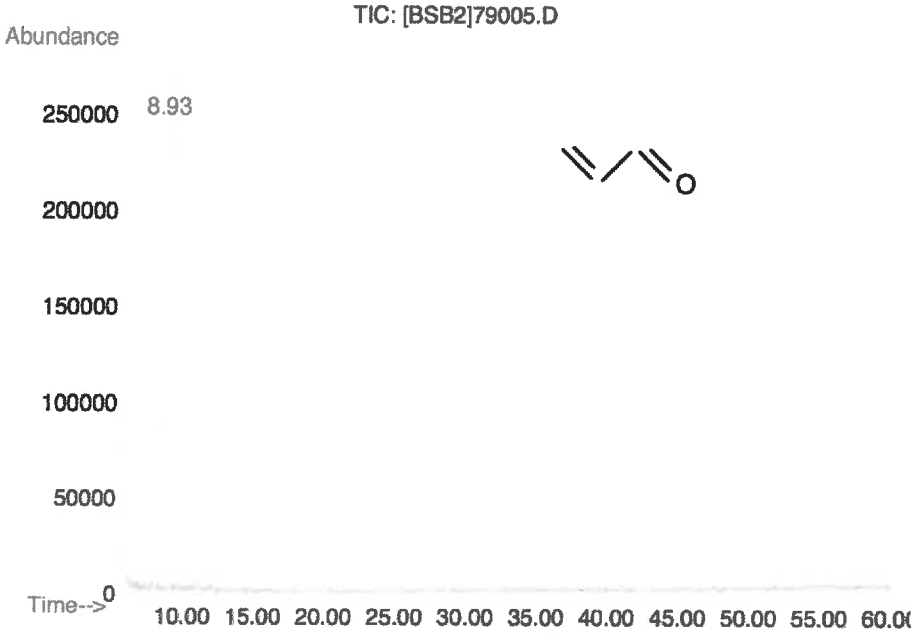
V14895 to V14899

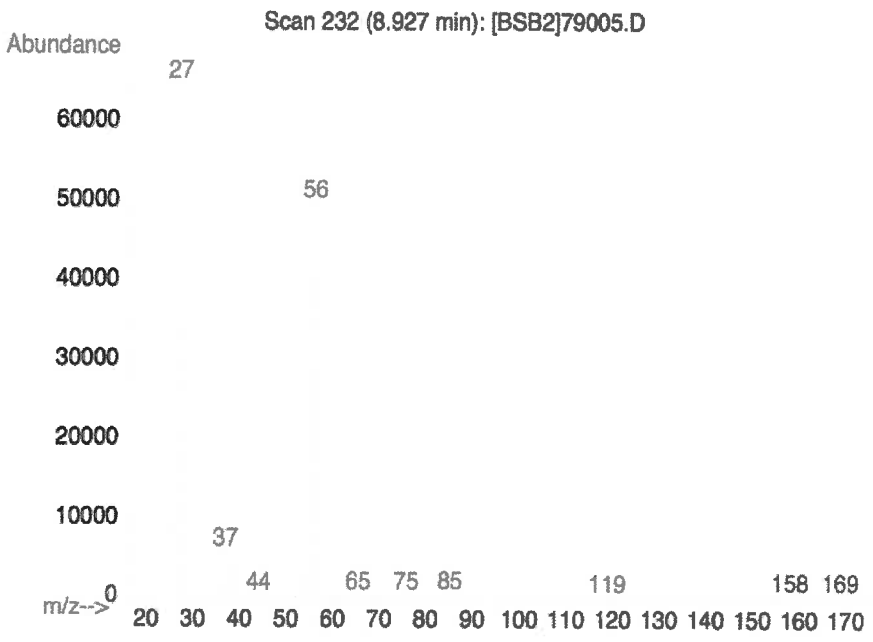
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

Formulated By:	Lawrence Barry	031725 DATE
Reviewed By:	Pedro L. Rentas	031725 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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Safety Data Sheet (SDS) GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY **ANALYTICAL STANDARD DISSOLVED IN WATER**

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	**1-800-535-5053**
Address	44 Rossotto Dr.	Emergency Telephone International	**1-352-323-3500**
	Hamden CT, 06514	Date Prepared/Revised	January 1, 2025

Section II - Hazards Identification

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

P271	**Use in ventilated area**	**H315**	**Causes skin and eye irritation.**
P302,332	**If on skin, wash with soap and water**	**P280**	**Use gloves, eye protection/face sheild**
		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)
Water	CAS#: 7732-18-5	> 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

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.
Hazardous Decomposition products	Carbon oxides

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
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

Water CAS#: 7732-18-5 TWA: 500 ppm

Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

Section IX - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point	100°C	Specific Gravity (H2O = 1)	1
Vapor Pressure (mm Hg)		Melting Point	

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	NA		0°C
Vapor Density (AIR = 1)	NA	Evaporation rate (Butyl Acetate = 1)	NA

Solubility in Water Completely miscible

Appearance and Odor CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions NA
Conditions to avoid NA
Materials to avoid NA
Hazardous decomposition products - No data available

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - Rat NA
LC50 Inhalation - Rat NA
LD50 Dermal - Guinea pig NA
Causes skin irritation.
Eye irritation

Section XII. ECOLOGICAL INFORMATION

LC50 NA
EC50 NA

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
Not dangerous goods
Proper shipping name: Water

IATA
Not dangerous goods
Proper shipping name: Water

Section XV. REGULATORY INFORMATION

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

Section XVI. Misc. INFORMATION

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Certified Reference Material CRM

Exp 03/18/24

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https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

5 vial

Part Number:	91980
Lot Number:	031725
Description:	Acrolein
Expiration Date:	041725
Recommended Storage:	Refrigerate (4 °C)
Nominal Concentration (µg/mL):	5000
NIST Test ID#:	6UTB

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

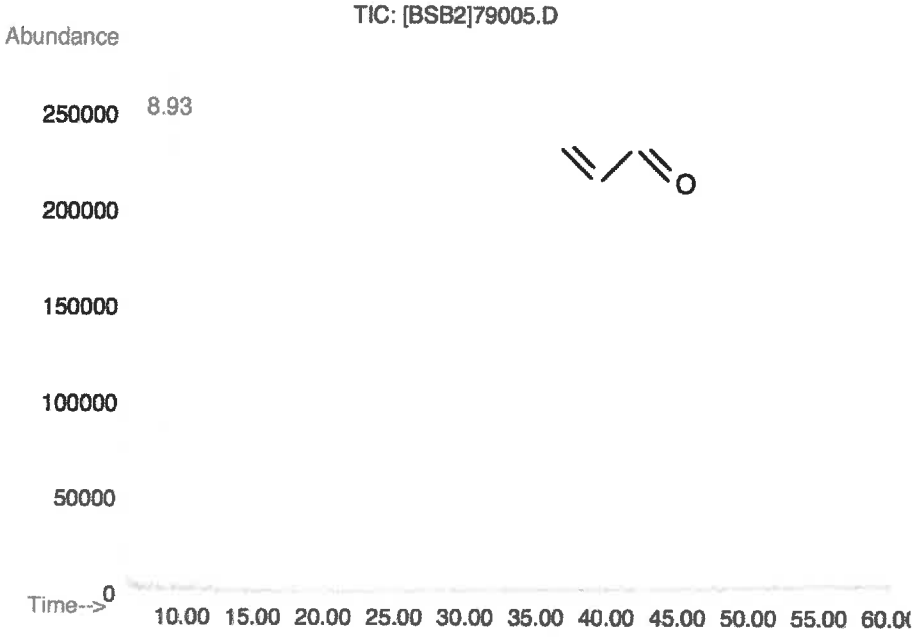
V14895 to V14899

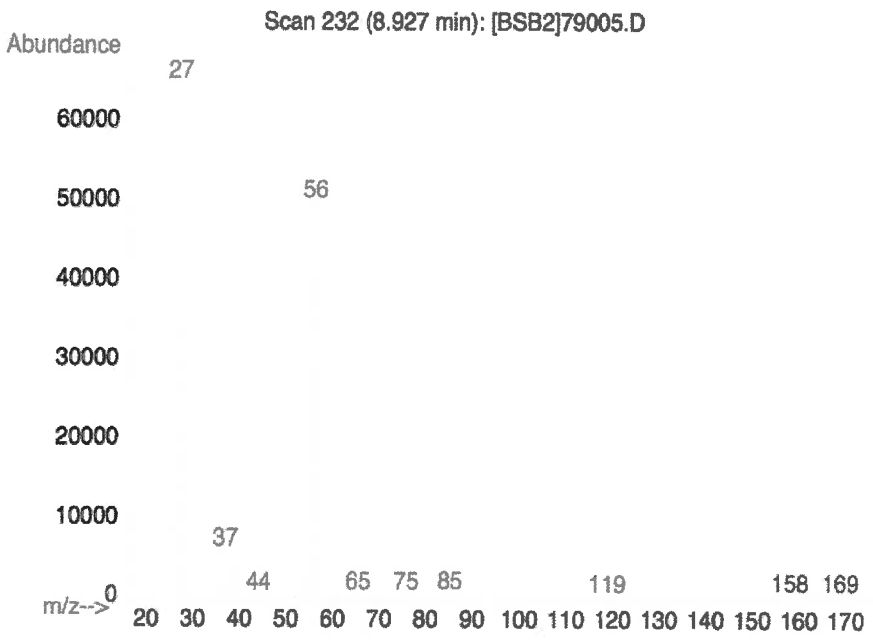
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

Formulated By:	Lawrence Barry	031725 DATE
Reviewed By:	Pedro L. Rentas	031725 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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P302,332	**If on skin, wash with soap and water**	**P280**	**Use gloves, eye protection/face sheild**
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Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))		% (optional)
Water	CAS#: 7732-18-5	> 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.
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Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
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Hazardous Decomposition products	Carbon oxides

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Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

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Water CAS#: 7732-18-5 TWA: 500 ppm

Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
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Section IX - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point	100°C	Specific Gravity (H2O = 1)	1
Vapor Pressure (mm Hg)		Melting Point	

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	NA		0°C
Vapor Density (AIR = 1)	NA	Evaporation rate (Butyl Acetate = 1)	NA

Solubility in Water Completely miscible

Appearance and Odor CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions NA
Conditions to avoid NA
Materials to avoid NA
Hazardous decomposition products - No data available

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - Rat NA
LC50 Inhalation - Rat NA
LD50 Dermal - Guinea pig NA
Causes skin irritation.
Eye irritation

Section XII. ECOLOGICAL INFORMATION

LC50 NA
EC50 NA

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
Not dangerous goods
Proper shipping name: Water

IATA
Not dangerous goods
Proper shipping name: Water

Section XV. REGULATORY INFORMATION

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5 vial

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Lot Number:	031725
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Recommended Storage:	Refrigerate (4 °C)
Nominal Concentration (µg/mL):	5000
NIST Test ID#:	6UTB

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

V14895 to V14899

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

Formulated By:	Lawrence Barry	031725 DATE
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Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
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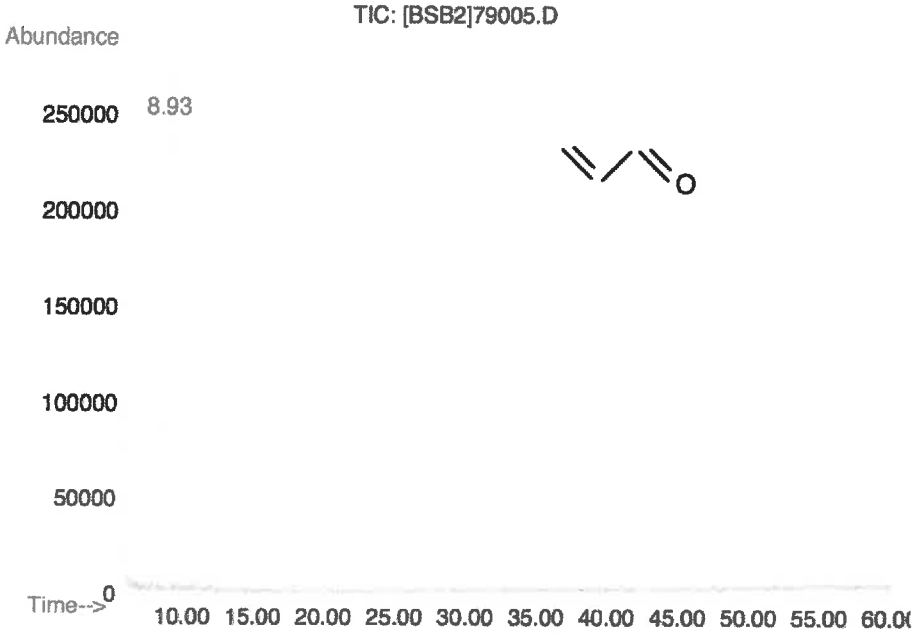
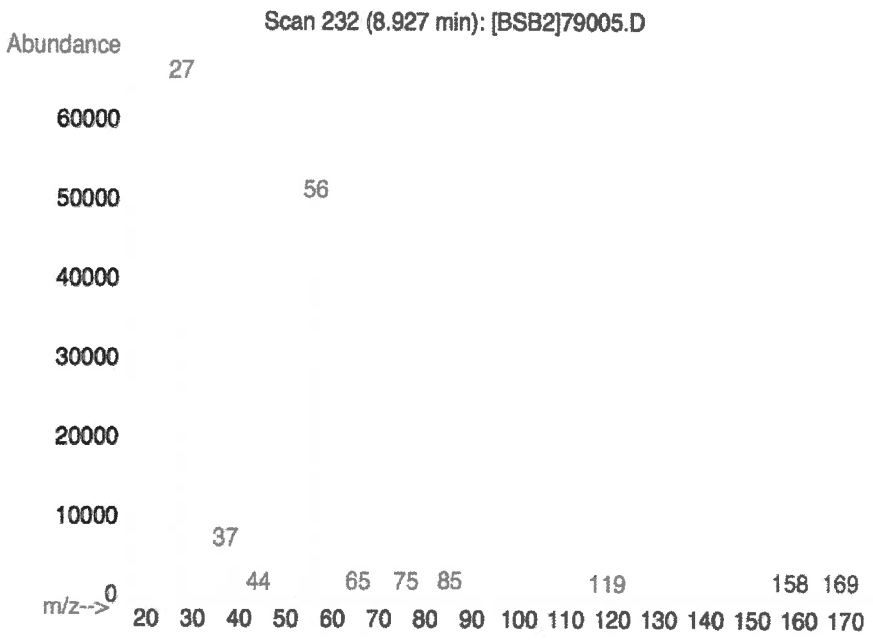
Method: GC6MSD-1. **Detector:** Mass Selective Detector (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C (Time 2 = 8.75 min.) Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. **Analyst:** Pedro Rentas. **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 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 WATER**

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	**1-800-535-5053**
Address	44 Rossotto Dr.	Emergency Telephone International	**1-352-323-3500**
	Hamden CT, 06514	Date Prepared/Revised	January 1, 2025

Section II - Hazards Identification

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

P271	**Use in ventilated area**	**H315**	**Causes skin and eye irritation.**
P302,332	**If on skin, wash with soap and water**	**P280**	**Use gloves, eye protection/face sheild**
		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)
Water	CAS#: 7732-18-5	> 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

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.
Hazardous Decomposition products	Carbon oxides

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
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

Water CAS#: 7732-18-5 TWA: 500 ppm

Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

Section IX - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point	100°C	Specific Gravity (H2O = 1)	1
Vapor Pressure (mm Hg)		Melting Point	

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Hamden, CT 06518-0585

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	NA		0°C
Vapor Density (AIR = 1)	NA	Evaporation rate (Butyl Acetate = 1)	NA

Solubility in Water Completely miscible

Appearance and Odor CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions NA
Conditions to avoid NA
Materials to avoid NA
Hazardous decomposition products - No data available

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - Rat NA
LC50 Inhalation - Rat NA
LD50 Dermal - Guinea pig NA
Causes skin irritation.
Eye irritation

Section XII. ECOLOGICAL INFORMATION

LC50 NA
EC50 NA

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
Not dangerous goods
Proper shipping name: Water

IATA
Not dangerous goods
Proper shipping name: Water

Section XV. REGULATORY INFORMATION

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

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential 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 Material Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

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

Certified Reference Material CRM

Rec 09/16/24 2 Vials

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

CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 091424
Description: Acrolein

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

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

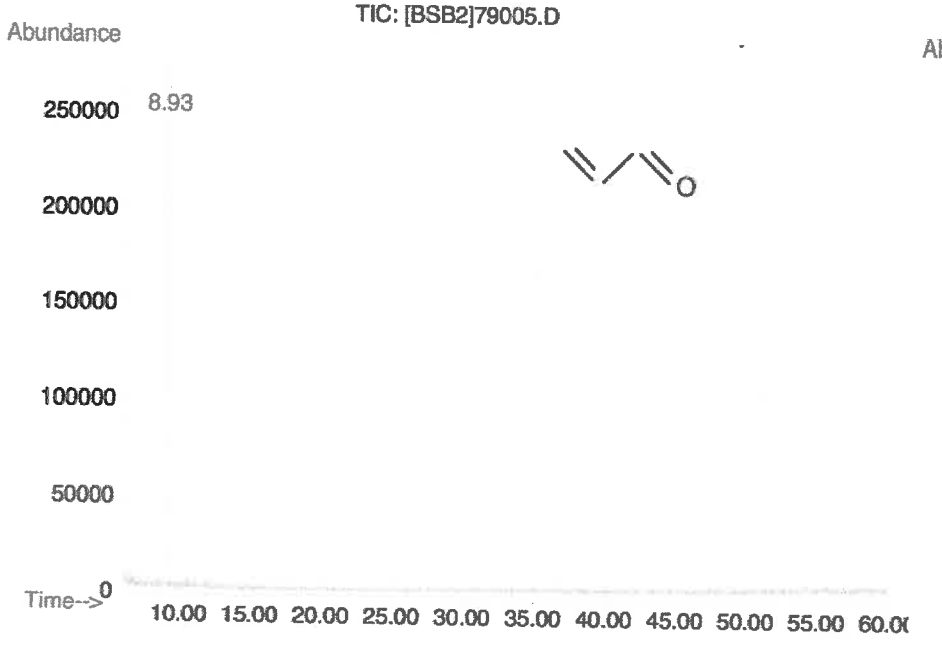
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

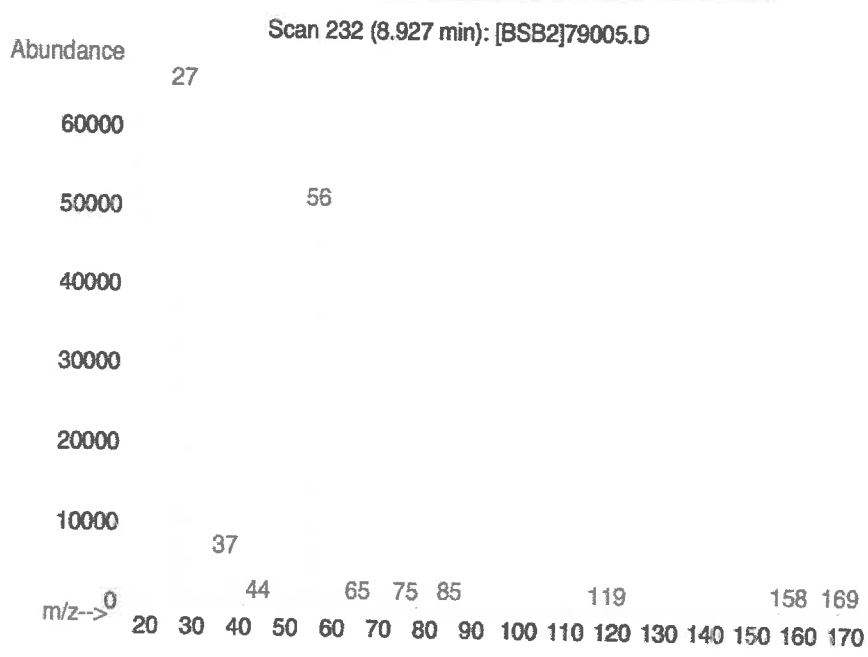
Formulated By: Justin Dippold 091424 DATE

Reviewed By: Pedro L. Rentas 091424 DATE

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

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





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www.absolutestandards.com

Certified Reference Material CRM

Rec 09/16/24 2 Vials

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

CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 091424
Description: Acrolein

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

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

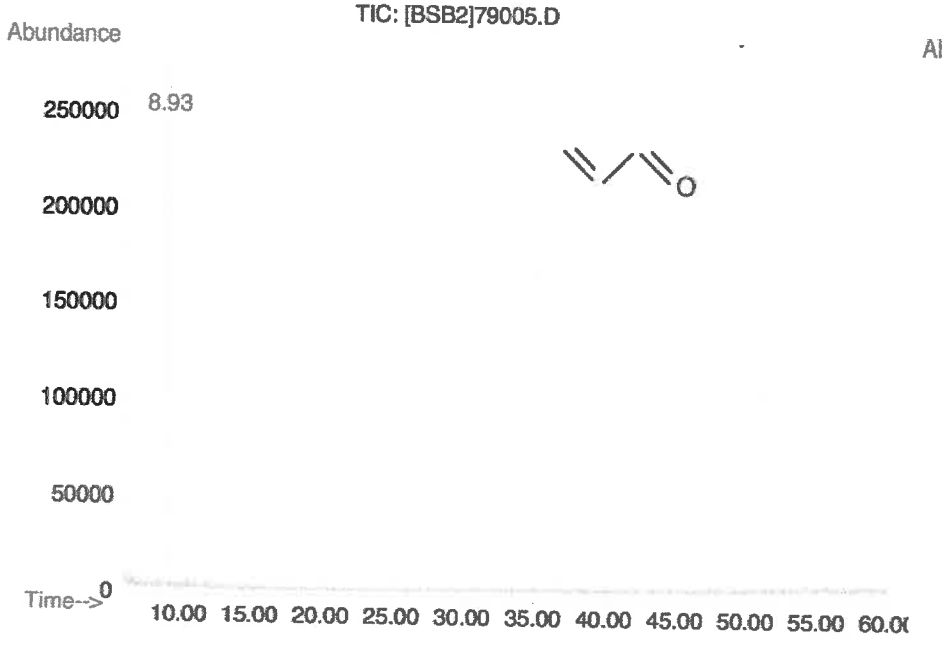
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

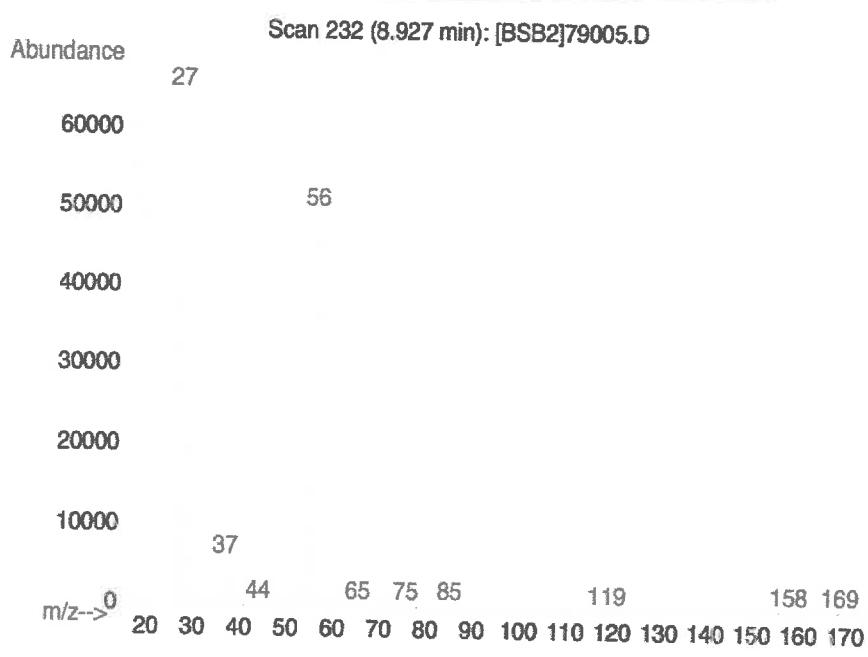
Formulated By: Justin Dippold 091424 DATE

Reviewed By: Pedro L. Rentas 091424 DATE

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

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





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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

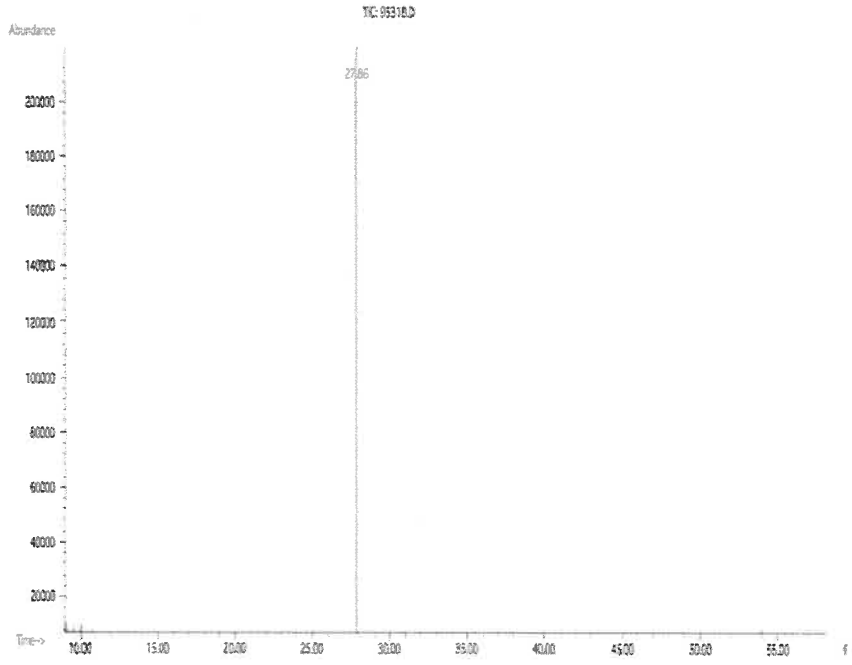
V14630 to V14649

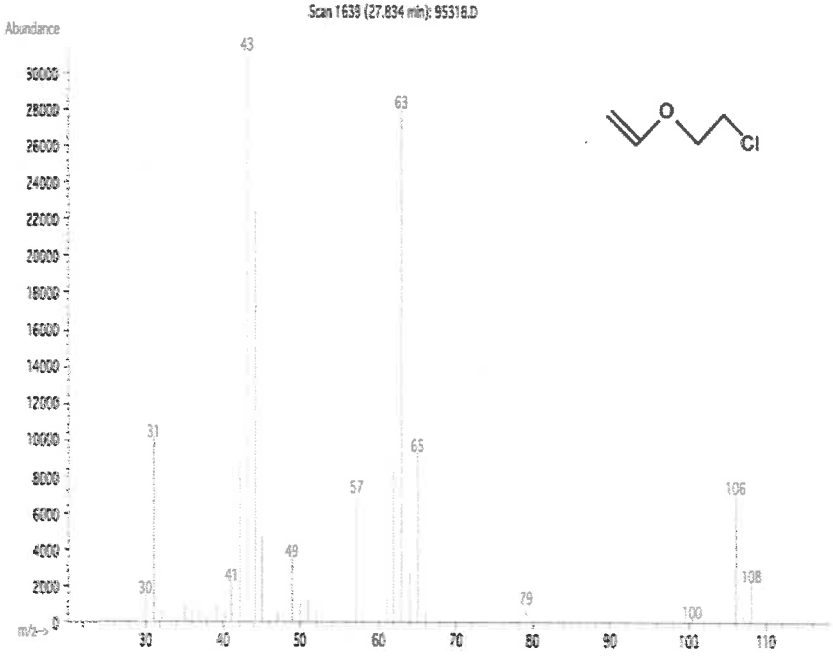
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 50.0 0.001 Flask Uncertainty

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

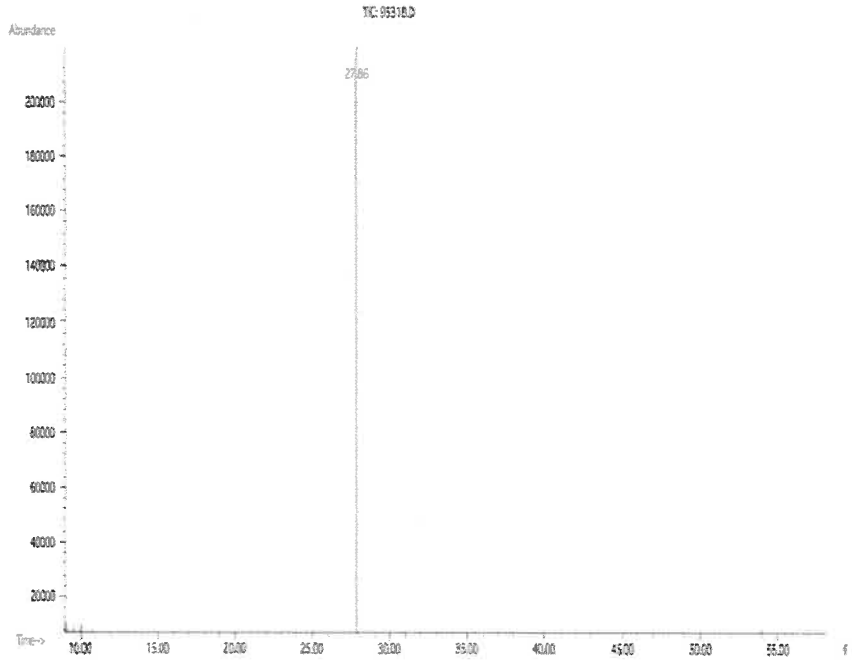
V14630 to V14649

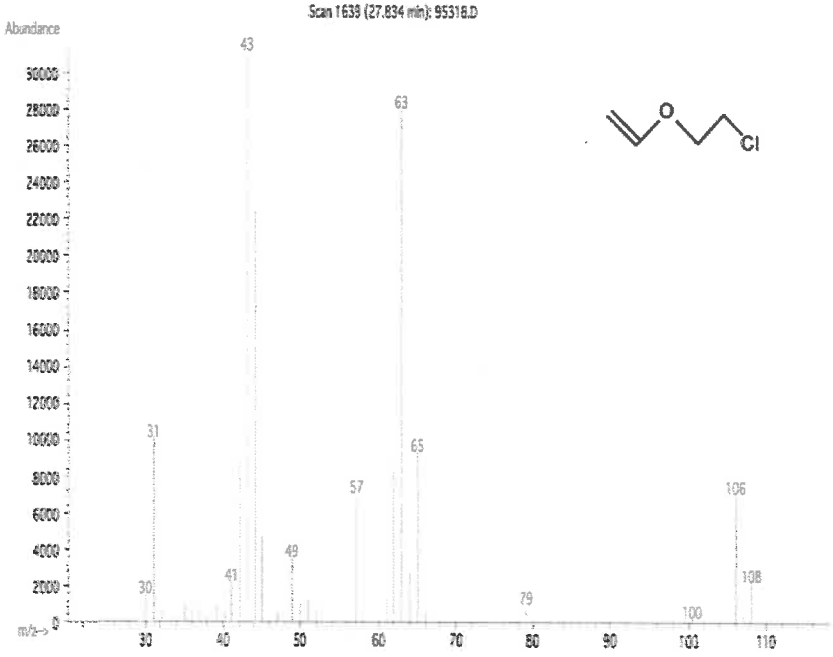
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 50.0 0.001 Flask Uncertainty

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.
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Safety Data Sheet (SDS) GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	**1-800-535-5053**
Address	44 Rossotto Dr. 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
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Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

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

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

Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
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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Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

Rec 12/6/24
20 vial

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

CERTIFIED WEIGHT REPORT

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

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

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

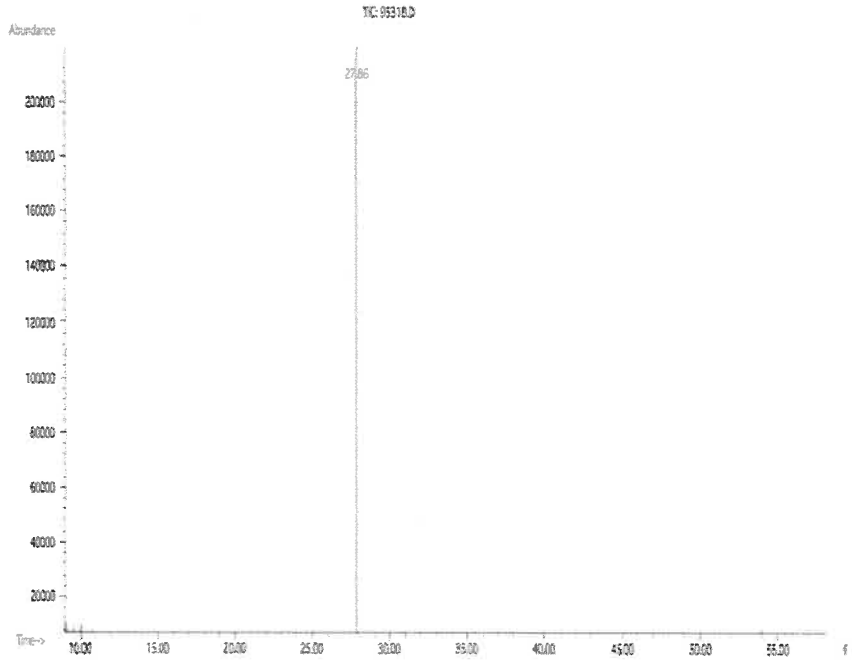
V14630 to V14649

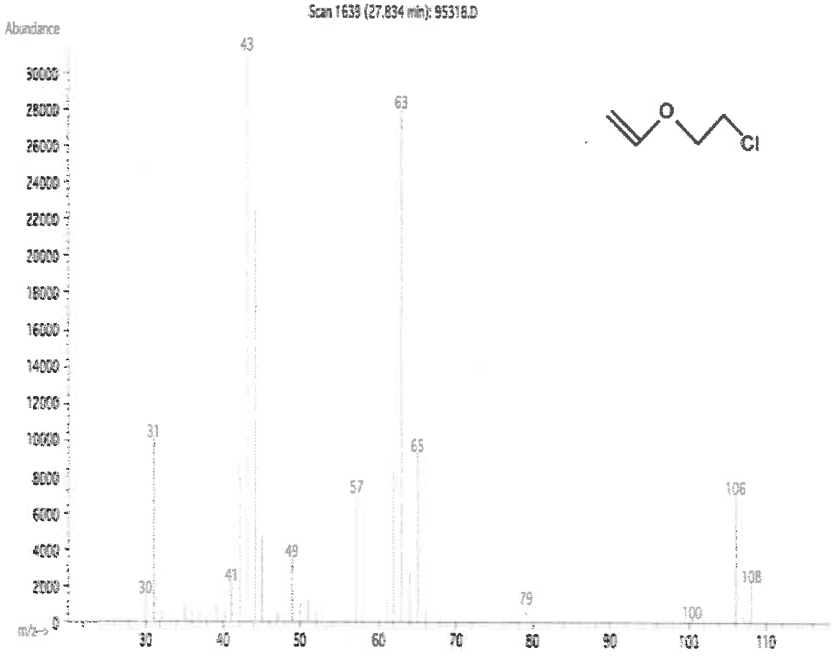
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 50.0 0.001 Flask Uncertainty

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

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

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





- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
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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**
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Signal Word: DANGER

Section III - Composition

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

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.
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Solubility in Water COMPLETE

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

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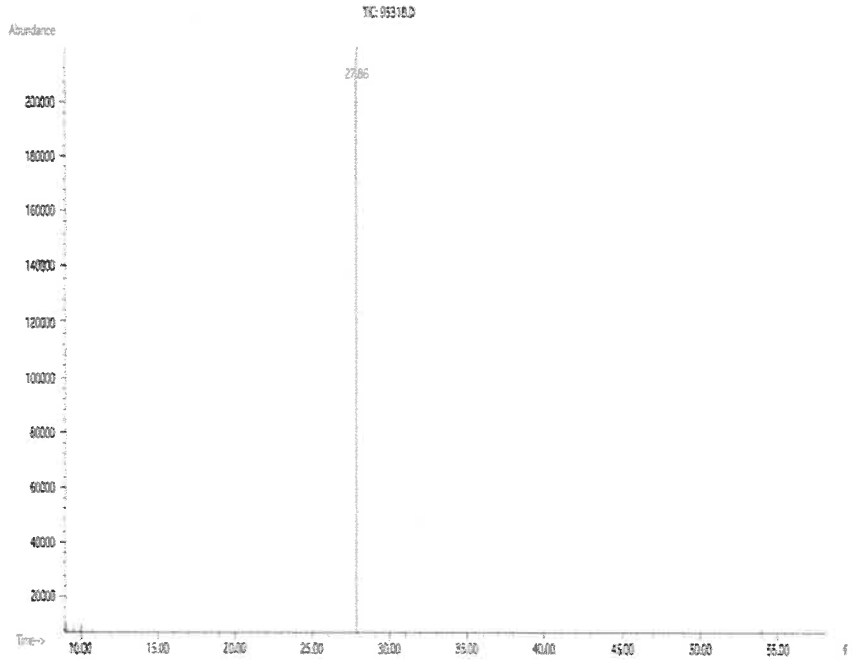

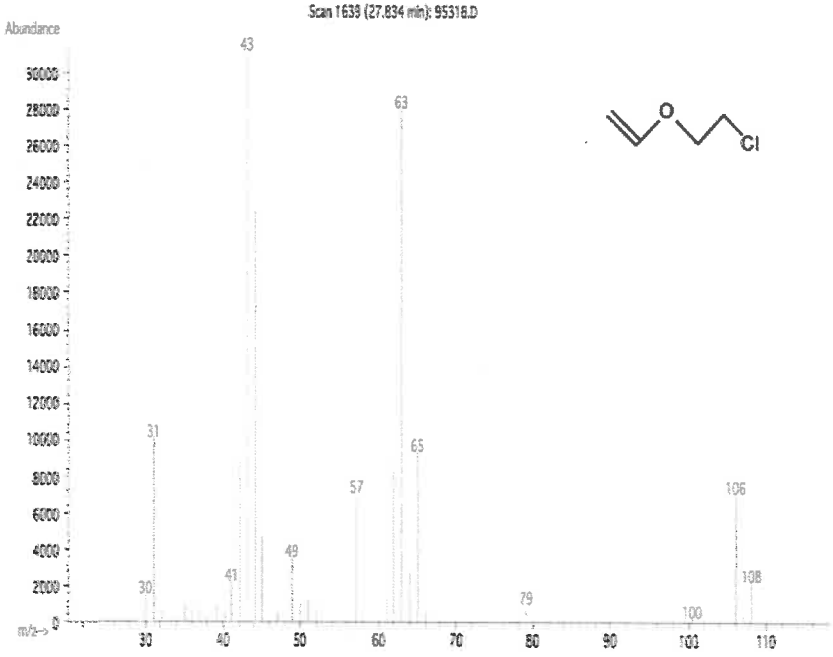

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RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : 4-Bromofluorobenzene Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

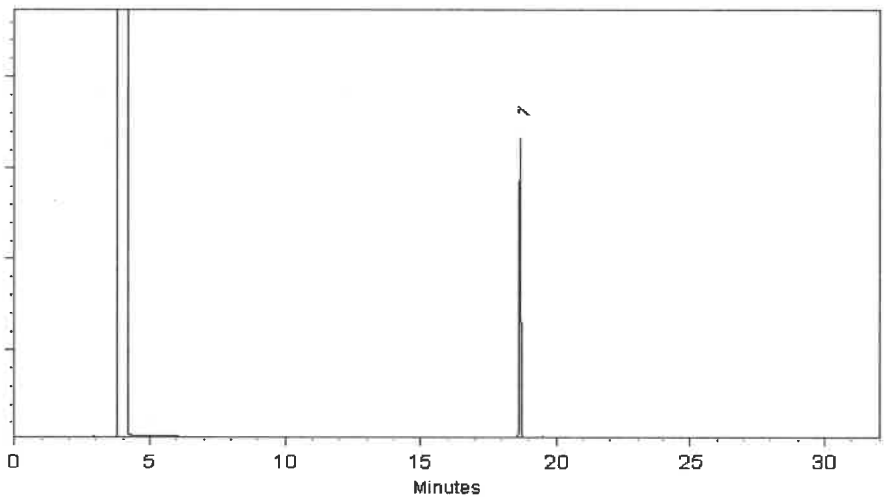
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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

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

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

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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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.:** A0193071

Description : Bromochloromethane Standard

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

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

Expiration Date : December 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Bromochloromethane	74-97-5	00008541	99%	2,018.0 µg/mL	+/- 113.3890

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

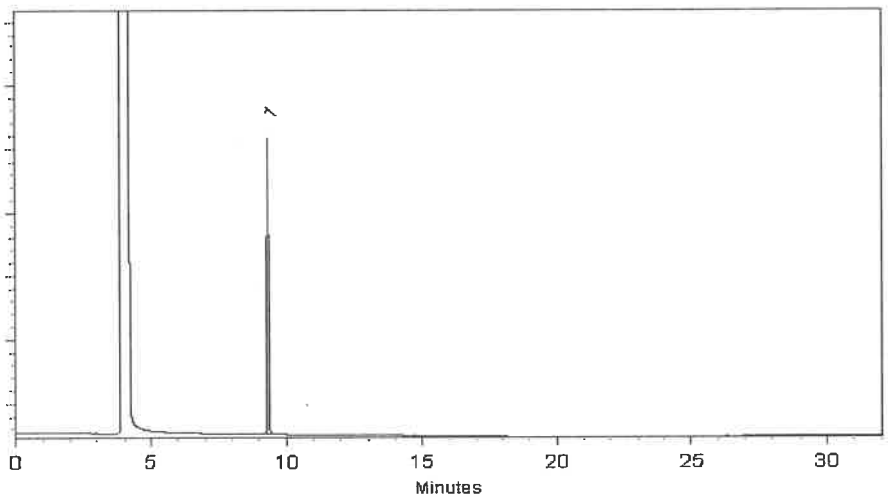
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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

Tom Suckar - Mix Technician

Date Mixed: 29-Dec-2022 **Balance Serial #** B707717271

Christie Mills - Operations Tech II - ARM QC

Date Passed: 03-Jan-2023

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

General Certified Reference Material Notes

Expiration Notes:

- 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:

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

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

Manufacturing Notes:

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

Handling Notes:

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

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

Catalog No. : 30225 **Lot No.:** A0193071

Description : Bromochloromethane Standard

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

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

Expiration Date : December 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Bromochloromethane	74-97-5	00008541	99%	2,018.0 µg/mL	+/- 113.3890

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

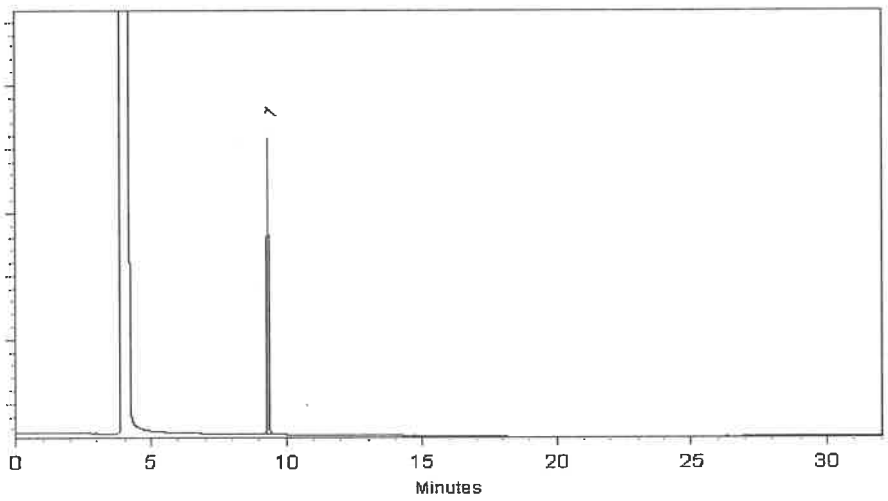
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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

Tom Suckar - Mix Technician

Date Mixed: 29-Dec-2022 **Balance Serial #** B707717271

Christie Mills - Operations Tech II - ARM QC

Date Passed: 03-Jan-2023

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

General Certified Reference Material Notes

Expiration Notes:

- 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:

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Manufacturing Notes:

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

Handling Notes:

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Catalog No. : 30225 **Lot No.:** A0193071

Description : Bromochloromethane Standard

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

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

Expiration Date : December 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Bromochloromethane	74-97-5	00008541	99%	2,018.0 µg/mL	+/- 113.3890

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

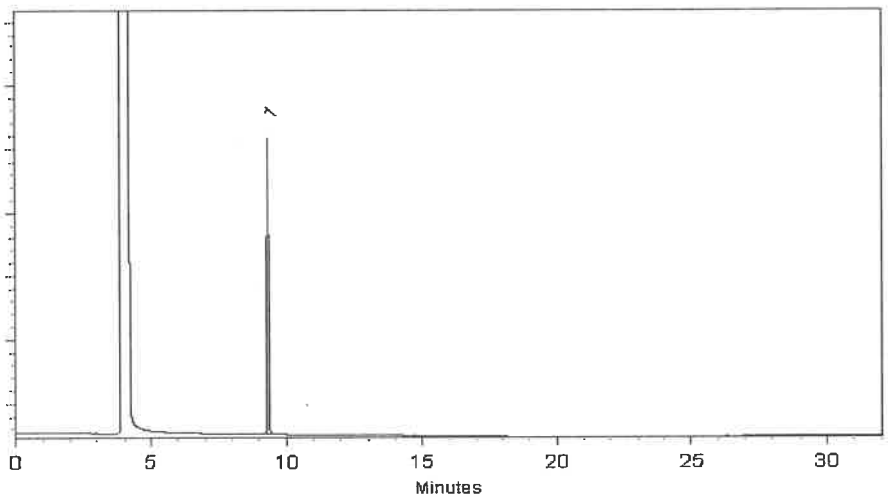
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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Tom Suckar - Mix Technician

Date Mixed: 29-Dec-2022 **Balance Serial #** B707717271

Christie Mills - Operations Tech II - ARM QC

Date Passed: 03-Jan-2023

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

General Certified Reference Material Notes

Expiration Notes:

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

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Catalog No. : 30225 **Lot No.:** A0193071

Description : Bromochloromethane Standard

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

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

Expiration Date : December 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Bromochloromethane	74-97-5	00008541	99%	2,018.0 µg/mL	+/- 113.3890

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

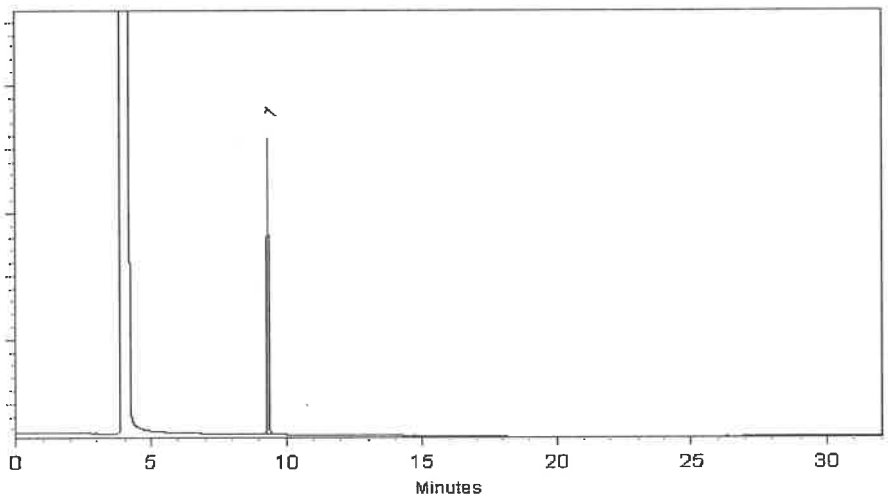
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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

Tom Suckar - Mix Technician

Date Mixed: 29-Dec-2022 **Balance Serial #** B707717271

Christie Mills - Operations Tech II - ARM QC

Date Passed: 03-Jan-2023

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

General Certified Reference Material Notes

Expiration Notes:

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Purity Notes:

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Certified Uncertainty Value Notes:

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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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:

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30489 **Lot No.:** 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.)

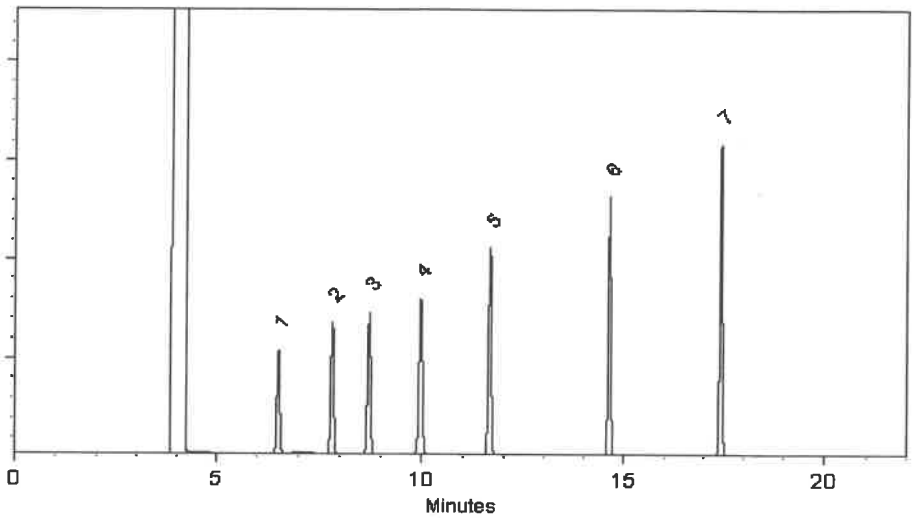
Inj. Temp:
200°C

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.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30489 **Lot No.:** 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.)

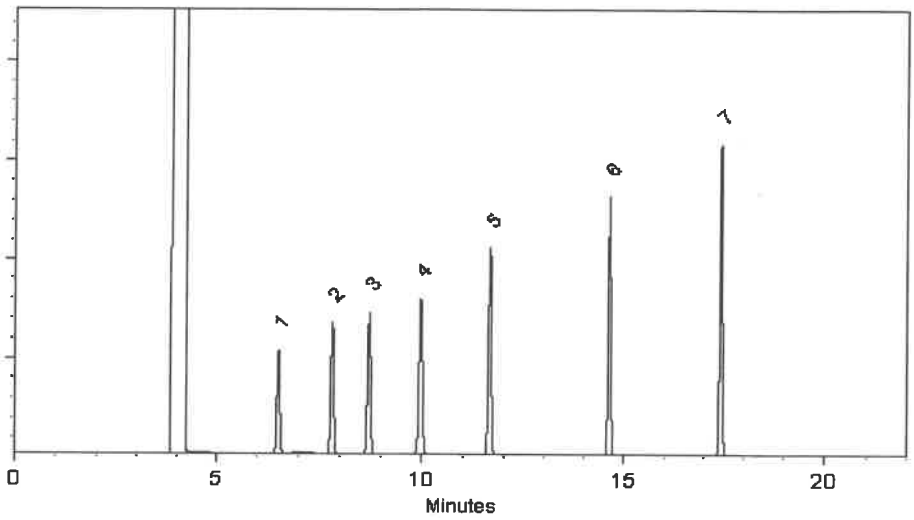
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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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.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

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

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

Description : Custom 8260 Internal Standard Mix

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

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

John Friedline - Operations Technician I

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

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
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- Purity of isomeric compounds is reported as the sum of the isomers.
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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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- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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.)

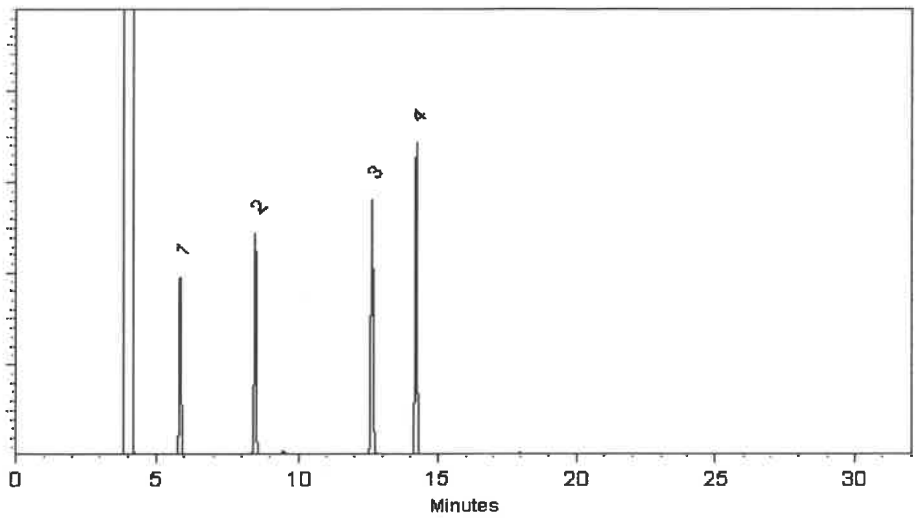
Inj. Temp:
200°C

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 values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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

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

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

Manufacturing Notes:

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

Handling Notes:

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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.)

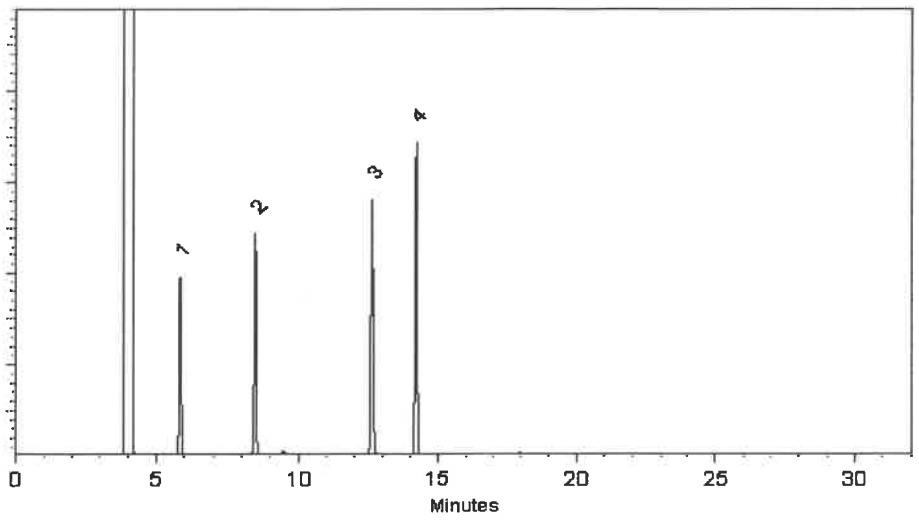
Inj. Temp:
200°C

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.
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Purity Notes:

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

Certified Uncertainty Value Notes:

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Manufacturing Notes:

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Handling Notes:

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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:
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Split Vent:
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Inj. Vol
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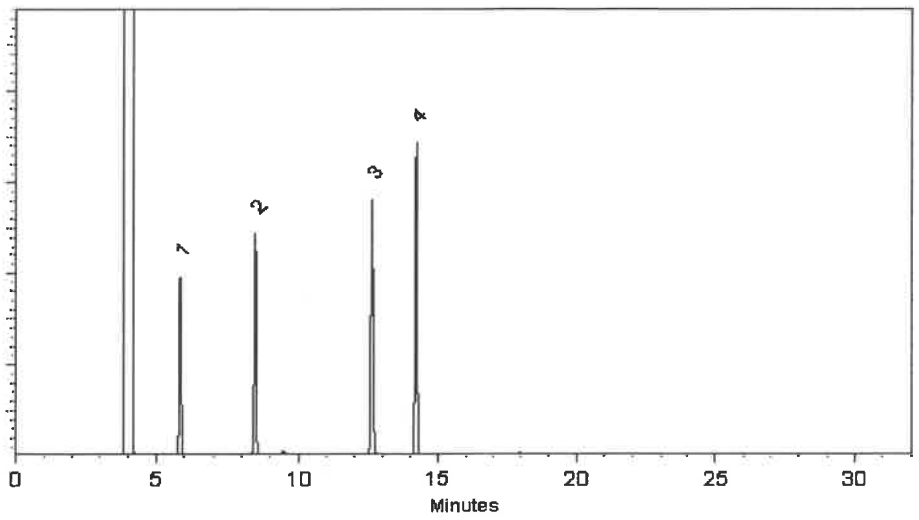

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Dakota Parson - Operations Technician I

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

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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:

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

  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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Rec 12/17/24

CERTIFIED REFERENCE MATERIAL

30 Vial

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chromatographic plus

V14727 to
V14756

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

Description : 502.2 Calibration Mix #1

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

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

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

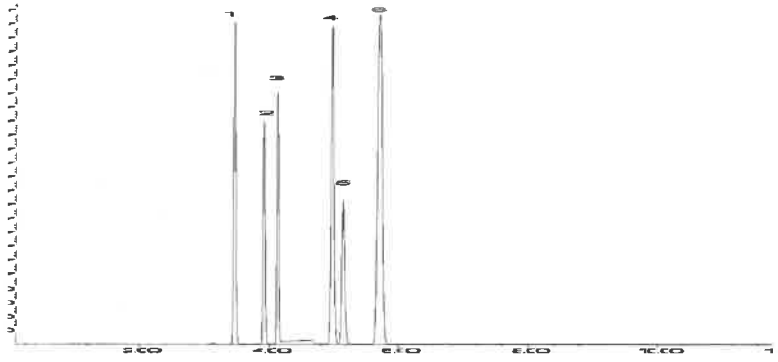
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD

Split Vent:
Split ratio 10:1

Inj. Vol
1µl



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

Tom Suckar - Mix Technician

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

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 04-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

Manufacturing Notes:

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

Handling Notes:

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CERTIFIED REFERENCE MATERIAL

30 Vial

Certificate of Analysis

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V14727 to
V14756

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

Description : 502.2 Calibration Mix #1

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

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

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

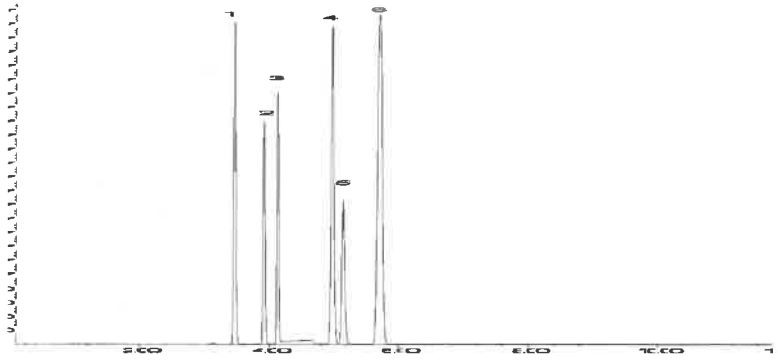
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD

Split Vent:
Split ratio 10:1

Inj. Vol
1µl



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

Tom Suckar - Mix Technician

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

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 04-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- 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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Manufacturing Notes:

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Handling Notes:

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Certificate of Analysis

chromatographic plus

J14842 to 14846

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Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30470 **Lot No.:** A0217535

Description : tert-Butanol Standard

tert-Butanol Std 50,000µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : October 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	tert-Butanol (TBA)	75-65-0	SHBQ8002-1	99%	50,007.5 µg/mL	+/- 717.6137

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

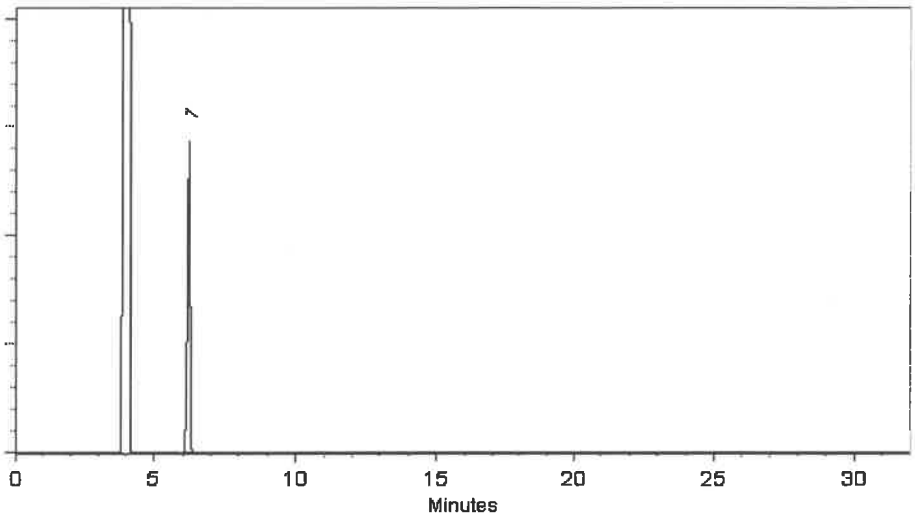
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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

Certified Uncertainty Value Notes:

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

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

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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Zoviny Rec 01/08/21

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

V14803 - V14822

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 555408-SL **Lot No.:** A0220471

Description : Custom Vinyl Acetate Standard

Custom Vinyl Acetate Standard 8,000µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : June 30, 2026 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Vinyl acetate	108-05-4	RD240423RSR	99%	8,066.0 µg/mL	+/- 278.7979

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

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

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

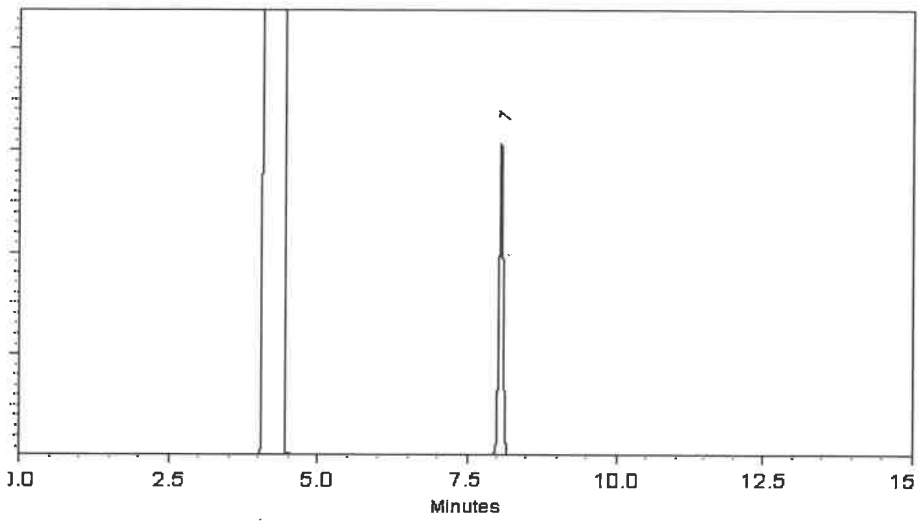
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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Ethan Winiarski - Operations Tech I

Date Mixed: 24-Dec-2024 **Balance Serial #** 1127510105

Dillan Murphy - Operations Technician I

Date Passed: 02-Jan-2025

REVIEWED

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
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Certified Uncertainty Value Notes:

- 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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Zoviny Rec 01/08/21

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

V14803 - V14822

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Catalog No. : 555408-SL **Lot No.:** A0220471

Description : Custom Vinyl Acetate Standard

Custom Vinyl Acetate Standard 8,000µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : June 30, 2026 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Vinyl acetate	108-05-4	RD240423RSR	99%	8,066.0 µg/mL	+/- 278.7979

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

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

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

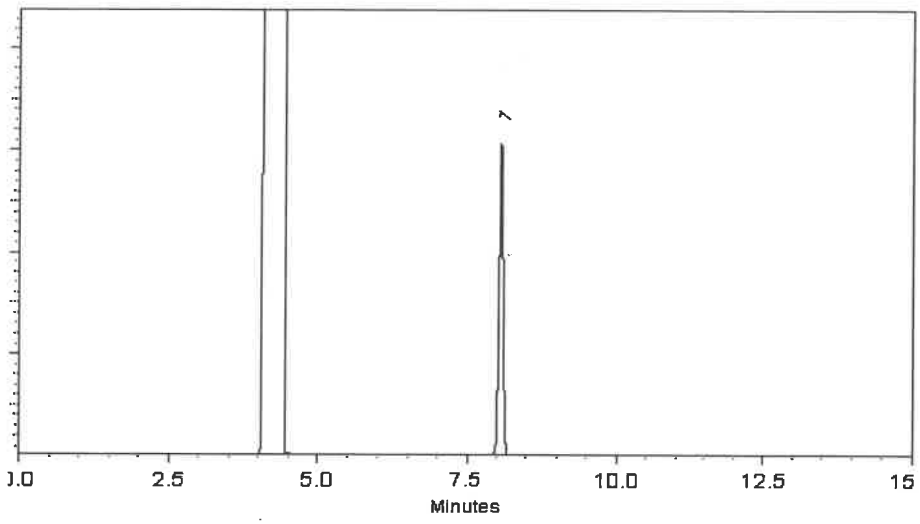
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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Ethan Winiarski - Operations Tech I

Date Mixed: 24-Dec-2024 **Balance Serial #** 1127510105

Dillan Murphy - Operations Technician I

Date Passed: 02-Jan-2025

REVIEWED

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

General Certified Reference Material Notes

Expiration Notes:

- 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.

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Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

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 T Ethier

Jamie Ethier
Vice President Global Quality

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V14883
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Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone 610.386.1700

SHIPPING DOCUMENTS

Alliance TECHNICAL GROUP

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax: (908) 78-8922
www.chemtech.net

CHAIN OF CUSTODY RECORD

Alliance Project Number: Q1584

COC Number:

CLIENT INFORMATION

COMPANY: Alliance Technical Group
ADDRESS: 284 Sheffield Street
CITY Mountainside STATE: NJ ZIP:07092
ATTENTION: QA Officer
PHOI 908-789-8900 FAX:908-788-9222

PROJECT INFORMATION

PROJECT NAME: Weekly Storage Blanks
PROJECT #: LOCATION:
PROJECT MANAGER:
E-MAIL:
PHONE: FAX:

BILLING INFORMATION

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

DATA TURNAROUND INFORMATION

FAX:_____10_____ DAYS*
HARD COPY:_____10_____DAYS*
EDD_____DAYS*
* TO BE APPROVED BY ALLIANCE
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

- ☐ RESULTS ONLY (L1)
- ☐ RESULTS + QC (L2)
- ☐ NJ REDUCED (L3)
- ☐ NJ FULL (L4)
- ☐ US EPA CLP (L4)
- ☐ NYS ASP "A" (L2)
- ☐ NYS ASP "B" (L4)
- ☐ Other_____
- ☐ EDD Format_____

ANALYSIS

	1	2	3	4	5	6	7	8	9
	VOC-Drinking H2O	SVOC-Full+25-8270	PESTICIDE-TCL	PCB					

PRESERVATIVES

COMMENTS

<-- Specify Preservatives
A-HCl B-HNO3
C-H2SO4 D-NaOH
E-ICE F-Other

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# of Bottles	A/E	1	2	3	4	5	6	7	8	9
1.	Storage-Blank-SOIL-REF-6	AQ		X			2	X									
2.	Storage-Blank-WATER-REF-5	AQ		X			2	X									
3.	Storage-Blank-WATER-REF-4	AQ		X			2	X									
4.	Storage-Blank-SAMPLE-MANAGEMENT	AQ		X			2	X									
5.	SVOC-GPC-BLANK	SO		X			1		X								
6.	PEST-GPC-BLANK	SO		X			1			X							
7.	PEST-GPC-BLANK-SPIKE	SO		X			1			X							
8.	PCB-GPC-BLANK	SO		X			1				X						
9.	PCB-GPC-BLANK-SPIKE	SO		X			1				X						
10.	SVOC-GPC2-BLANK	SO		X			1		X								

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

RELINQUISHED BY SAMPLER	DATE/TIME	RECEIVED BY
1.		1.
RELINQUISHED BY	DATE/TIME	RECEIVED BY
2.		2.
RELINQUISHED BY	DATE/TIME	RECEIVED FOR LAB BY
3.		3.

Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant ☐ Cooler Temp_____
☐ Ice in Cooler?:_____
MeOH extraction requires an additional 4oz. Jar for percent solid
Comments:

Page 1 of 2

SHIPPED VIA: CLIENT: ☐ Hand Delivered ☐ Overnight
ALLIANCE: ☐ Picked Up ☐ Overnight

Shipment Complete
☐ YES ☐ NO

WHITE - ALLIANCE COPY FOR RETURN TO CLIENT YELLOW - ALLIANCE COPY PINK - SAMPLER COPY

3/14

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1.	PEST-GPC2-BLANK	SO		X			1			X						
2.	PEST-GPC2-BLANK-SPIKE	SO		X			1			X						
3.	PCB-GPC2-BLANK	SO		X			1				X					
4.	PCB-GPC2-BLANK-SPIKE	SO		X			1				X					
5.																
6.																
7.																
8.																
9.																
10.																

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3/14

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