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:	Q3715	**OrderDate:**	11/24/2025 2:29:36 PM
Client:	G Environmental	**Project:**	Union
Contact:	Gary Landis	**Location:**	--Select--,VOA Lab

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q3715-01	**MW2**	**Water**			**11/24/25**			**11/24/25**
			VOCMS Group1	8260-Low			11/25/25	
Q3715-02	**MW6**	**Water**			**11/24/25**			**11/24/25**
			VOCMS Group1	8260-Low			12/01/25	
Q3715-03	**MW7**	**Water**			**11/24/25**			**11/24/25**
			VOCMS Group1	8260-Low			11/25/25	

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Hit Summary Sheet
SW-846

SDG No.: Q3715

Client: G Environmental

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Client ID:	**MW2**								
Q3715-01	MW2	Water	Cyclohexane		6.70		1.50	5.00	ug/L
Q3715-01	MW2	Water	Methylcyclohexane		3.50		0.16	1.00	ug/L
Q3715-01	MW2	Water	Benzene		1.90		0.15	1.00	ug/L
Q3715-01	MW2	Water	Trichloroethene		0.50	J	0.090	1.00	ug/L
Q3715-01	MW2	Water	Toluene		0.49	J	0.14	1.00	ug/L
Q3715-01	MW2	Water	Tetrachloroethene		0.44	J	0.23	1.00	ug/L
Q3715-01	MW2	Water	Ethyl Benzene		1.30		0.13	1.00	ug/L
Q3715-01	MW2	Water	m/p-Xylenes		0.84	J	0.24	2.00	ug/L
Q3715-01	MW2	Water	Isopropylbenzene		5.20		0.12	1.00	ug/L
			Total Voc :		20.9				
Q3715-01	MW2	Water	Butane, 2-methyl-	*	27.8	J	0	0	ug/L
Q3715-01	MW2	Water	Butane, 2,3-dimethyl-	*	8.60	J	0	0	ug/L
Q3715-01	MW2	Water	Pentane, 3-methyl-	*	16.4	J	0	0	ug/L
Q3715-01	MW2	Water	Cyclopentane, methyl-	*	16.7	J	0	0	ug/L
Q3715-01	MW2	Water	Benzene, 1,2,3,4-tetramethyl-	*	9.50	J	0	0	ug/L
Q3715-01	MW2	Water	Benzene, 1-ethenyl-2-methyl-	*	21.9	J	0	0	ug/L
Q3715-01	MW2	Water	Benzene, 4-ethyl-1,2-dimethyl-	*	7.60	J	0	0	ug/L
Q3715-01	MW2	Water	Benzene, 2-ethenyl-1,4-dimeth	*	6.50	J	0	0	ug/L
Q3715-01	MW2	Water	Benzene, 1-ethenyl-3-ethyl-	*	11.1	J	0	0	ug/L
Q3715-01	MW2	Water	n-propylbenzene	*	11.1	J	0.13	1.00	ug/L
Q3715-01	MW2	Water	1,3,5-Trimethylbenzene	*	0.26	J	0.15	1.00	ug/L
Q3715-01	MW2	Water	tert-Butylbenzene	*	0.24	J	0.14	1.00	ug/L
Q3715-01	MW2	Water	sec-Butylbenzene	*	1.40	J	0.13	1.00	ug/L
Q3715-01	MW2	Water	n-Butylbenzene	*	0.99	J	0.15	1.00	ug/L
Q3715-01	MW2	Water	Naphthalene	*	2.10	J	0.20	1.00	ug/L
			Total Tics :		142				
			Total Concentration:		163				
Client ID:	**MW6**								
Q3715-02	MW6	Water	Cyclohexane		180		5.80	20.0	ug/L
Q3715-02	MW6	Water	2-Butanone		39.5		3.90	20.0	ug/L
Q3715-02	MW6	Water	Methylcyclohexane		170		0.64	4.00	ug/L
Q3715-02	MW6	Water	Benzene		14.5		0.60	4.00	ug/L
Q3715-02	MW6	Water	Toluene		7.00		0.56	4.00	ug/L
Q3715-02	MW6	Water	Ethyl Benzene		200		0.52	4.00	ug/L
Q3715-02	MW6	Water	m/p-Xylenes		110		0.96	8.00	ug/L
Q3715-02	MW6	Water	o-Xylene		6.90		0.48	4.00	ug/L

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Hit Summary Sheet
SW-846

SDG No.: Q3715

Client: G Environmental

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Q3715-02	MW6	Water	Isopropylbenzene		170		0.48	4.00	ug/L
			Total Voc :		898				
Q3715-02	MW6	Water	Butane, 2-methyl-	*	300	J	0	0	ug/L
Q3715-02	MW6	Water	Pentane, 3-methyl-	*	150	J	0	0	ug/L
Q3715-02	MW6	Water	Cyclopentane, methyl-	*	240	J	0	0	ug/L
Q3715-02	MW6	Water	Pentane, 2-methyl-	*	250	J	0	0	ug/L
Q3715-02	MW6	Water	Pentane	*	120	J	0	0	ug/L
Q3715-02	MW6	Water	Benzene, 1,3-diethyl-	*	340	J	0	0	ug/L
Q3715-02	MW6	Water	Benzene, 1,2,3,5-tetramethyl-	*	390	J	0	0	ug/L
Q3715-02	MW6	Water	Benzene, 1-ethyl-2-methyl-	*	140	J	0	0	ug/L
Q3715-02	MW6	Water	1H-Indene, 2,3-dihydro-5-meth	*	240	J	0	0	ug/L
Q3715-02	MW6	Water	Benzene, 4-ethyl-1,2-dimethyl-	*	700	J	0	0	ug/L
Q3715-02	MW6	Water	Benzene, 2-ethenyl-1,4-dimeth	*	550	J	0	0	ug/L
Q3715-02	MW6	Water	n-propylbenzene	*	610	J	0.52	4.00	ug/L
Q3715-02	MW6	Water	1,3,5-Trimethylbenzene	*	51.6	J	0.60	4.00	ug/L
Q3715-02	MW6	Water	tert-Butylbenzene	*	8.40	J	0.56	4.00	ug/L
Q3715-02	MW6	Water	1,2,4-Trimethylbenzene	*	16.0	J	0.56	4.00	ug/L
Q3715-02	MW6	Water	sec-Butylbenzene	*	58.7	J	0.52	4.00	ug/L
Q3715-02	MW6	Water	p-Isopropyltoluene	*	18.3	J	0.52	4.00	ug/L
Q3715-02	MW6	Water	n-Butylbenzene	*	85.8	J	0.60	4.00	ug/L
Q3715-02	MW6	Water	Naphthalene	*	80.3	J	0.80	4.00	ug/L
			Total Tics :		4350				
			Total Concentration:		5250				
Client ID:	**MW7**								
Q3715-03	MW7	Water	Chloromethane		0.52	J	0.32	1.00	ug/L
Q3715-03	MW7	Water	Tetrachloroethene		2.50		0.23	1.00	ug/L
			Total Voc :		3.02				
			Total Concentration:		3.02				

QC SUMMARY

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

SDG No.: Q3715

Client: G Environmental

Analytical Method: SW8260-Low

Lab Sample ID	Client ID	Parameter	Spike	Result	Recovery (%)	Qual	Limits (%) Low	Limits (%) High
Q3715-01	MW2	1,2-Dichloroethane-d4	50	52.6	105		70 (74)	130 (125)
		Dibromofluoromethane	50	47.4	95		70 (75)	130 (124)
		Toluene-d8	50	53.5	107		70 (86)	130 (113)
		4-Bromofluorobenzene	50	63.1	126		70 (77)	130 (121)
Q3715-02	MW6	1,2-Dichloroethane-d4	50	52.1	104		70 (74)	130 (125)
		Dibromofluoromethane	50	49.3	99		70 (75)	130 (124)
		Toluene-d8	50	49.9	100		70 (86)	130 (113)
		4-Bromofluorobenzene	50	55.0	110		70 (77)	130 (121)
Q3715-03	MW7	1,2-Dichloroethane-d4	50	51.4	103		70 (74)	130 (125)
		Dibromofluoromethane	50	47.1	94		70 (75)	130 (124)
		Toluene-d8	50	55.2	110		70 (86)	130 (113)
		4-Bromofluorobenzene	50	60.0	120		70 (77)	130 (121)
VN1201WBL01	VN1201WBL01	1,2-Dichloroethane-d4	50	57.8	116		70 (74)	130 (125)
		Dibromofluoromethane	50	52.2	104		70 (75)	130 (124)
		Toluene-d8	50	50.0	100		70 (86)	130 (113)
		4-Bromofluorobenzene	50	52.4	105		70 (77)	130 (121)
VN1201WBS01	VN1201WBS01	1,2-Dichloroethane-d4	50	56.0	112		70 (74)	130 (125)
		Dibromofluoromethane	50	55.1	110		70 (75)	130 (124)
		Toluene-d8	50	54.9	110		70 (86)	130 (113)
		4-Bromofluorobenzene	50	53.3	107		70 (77)	130 (121)
VN1201WBSD0	VN1201WBSD01	1,2-Dichloroethane-d4	50	52.2	104		70 (74)	130 (125)
		Dibromofluoromethane	50	52.3	105		70 (75)	130 (124)
		Toluene-d8	50	53.2	106		70 (86)	130 (113)
		4-Bromofluorobenzene	50	51.1	102		70 (77)	130 (121)
VX1125WBL01	VX1125WBL01	1,2-Dichloroethane-d4	50	56.6	113		70 (74)	130 (125)
		Dibromofluoromethane	50	46.3	93		70 (75)	130 (124)
		Toluene-d8	50	48.8	98		70 (86)	130 (113)
		4-Bromofluorobenzene	50	57.4	115		70 (77)	130 (121)
VX1125WBS01	VX1125WBS01	1,2-Dichloroethane-d4	50	51.2	102		70 (74)	130 (125)
		Dibromofluoromethane	50	45.9	92		70 (75)	130 (124)
		Toluene-d8	50	50.1	100		70 (86)	130 (113)
		4-Bromofluorobenzene	50	49.1	98		70 (77)	130 (121)

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q3715 **Analytical Method:** SW8260-Low

Client: G Environmental **Datafile :** VN088373.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VN1201WBS01	Dichlorodifluoromethane	20	18.2	ug/L	91			40 (69)	160 (116)	
	Chloromethane	20	19.4	ug/L	97			40 (65)	160 (116)	
	Vinyl chloride	20	18.9	ug/L	95			70 (65)	130 (117)	
	Bromomethane	20	19.7	ug/L	99			40 (58)	160 (125)	
	Chloroethane	20	19.5	ug/L	98			40 (56)	160 (128)	
	Trichlorofluoromethane	20	18.6	ug/L	93			40 (73)	160 (115)	
	1,1,2-Trichlorotrifluoroethane	20	18.6	ug/L	93			70 (80)	130 (112)	
	Tert butyl alcohol	100	87.5	ug/L	88			70 (48)	130 (142)	
	1,1-Dichloroethene	20	19.0	ug/L	95			70 (74)	130 (110)	
	Acetone	100	87.9	ug/L	88			40 (60)	160 (125)	
	Carbon disulfide	20	19.4	ug/L	97			40 (64)	160 (112)	
	Methyl tert-butyl Ether	20	19.9	ug/L	100			70 (78)	130 (114)	
	Methyl Acetate	20	19.1	ug/L	96			70 (57)	130 (150)	
	Methylene Chloride	20	20.0	ug/L	100			70 (72)	130 (114)	
	trans-1,2-Dichloroethene	20	19.6	ug/L	98			70 (75)	130 (108)	
	1,1-Dichloroethane	20	19.8	ug/L	99			70 (78)	130 (112)	
	Cyclohexane	20	17.9	ug/L	90			70 (75)	130 (110)	
	2-Butanone	100	96.0	ug/L	96			40 (65)	160 (122)	
	Carbon Tetrachloride	20	18.3	ug/L	92			70 (77)	130 (113)	
	cis-1,2-Dichloroethene	20	20.1	ug/L	101			70 (77)	130 (110)	
	Bromochloromethane	20	19.3	ug/L	97			70 (70)	130 (124)	
	Chloroform	20	20.3	ug/L	102			70 (79)	130 (113)	
	1,1,1-Trichloroethane	20	18.8	ug/L	94			70 (80)	130 (108)	
	Methylcyclohexane	20	17.1	ug/L	86			70 (72)	130 (115)	
	Benzene	20	19.4	ug/L	97			70 (82)	130 (109)	
	1,2-Dichloroethane	20	19.6	ug/L	98			70 (80)	130 (115)	
	Trichloroethene	20	18.8	ug/L	94			70 (77)	130 (113)	
	1,2-Dichloropropane	20	19.8	ug/L	99			70 (83)	130 (111)	
	Bromodichloromethane	20	19.5	ug/L	98			70 (83)	130 (110)	
	4-Methyl-2-Pentanone	100	98.3	ug/L	98			40 (74)	160 (118)	
	Toluene	20	19.5	ug/L	98			70 (82)	130 (110)	
	t-1,3-Dichloropropene	20	19.9	ug/L	100			70 (79)	130 (110)	
	cis-1,3-Dichloropropene	20	20.1	ug/L	101			70 (82)	130 (110)	
	1,1,2-Trichloroethane	20	20.2	ug/L	101			70 (83)	130 (112)	
	2-Hexanone	100	93.5	ug/L	94			40 (73)	160 (117)	
	Dibromochloromethane	20	20.1	ug/L	101			70 (82)	130 (110)	
	1,2-Dibromoethane	20	20.6	ug/L	103			70 (81)	130 (110)	
	Tetrachloroethene	20	17.9	ug/L	90			70 (67)	130 (123)	
	Chlorobenzene	20	19.5	ug/L	98			70 (82)	130 (109)	
	Ethyl Benzene	20	18.6	ug/L	93			70 (83)	130 (109)	
	m/p-Xylenes	40	37.0	ug/L	93			70 (82)	130 (110)	
	o-Xylene	20	18.3	ug/L	92			70 (83)	130 (109)	
	Styrene	20	19.6	ug/L	98			70 (80)	130 (111)	
	Bromoform	20	20.0	ug/L	100			70 (79)	130 (109)	
	Isopropylbenzene	20	18.6	ug/L	93			70 (83)	130 (112)	
	1,1,2,2-Tetrachloroethane	20	20.1	ug/L	101			70 (76)	130 (118)	
	1,3-Dichlorobenzene	20	19.0	ug/L	95			70 (82)	130 (108)	
	1,4-Dichlorobenzene	20	18.5	ug/L	93			70 (82)	130 (107)	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q3715 **Analytical Method:** SW8260-Low

Client: G Environmental **Datafile :** VN088373.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VN1201WBS01	1,2-Dichlorobenzene	20	19.4	ug/L	97			70 (82)	130 (109)	
	1,2-Dibromo-3-Chloropropane	20	18.2	ug/L	91			40 (68)	160 (112)	
	1,2,4-Trichlorobenzene	20	18.5	ug/L	93			70 (75)	130 (113)	
	1,2,3-Trichlorobenzene	20	18.3	ug/L	92			70 (76)	130 (114)	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q3715 **Analytical Method:** SW8260-Low

Client: G Environmental **Datafile :** VN088374.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	Limits RPD
VN1201WBSD01	Dichlorodifluoromethane	20	18.9	ug/L	95	4		40 (69)	160 (116)	20 (19)
	Chloromethane	20	19.4	ug/L	97	0		40 (65)	160 (116)	20 (21)
	Vinyl chloride	20	18.7	ug/L	94	1		70 (65)	130 (117)	20 (19)
	Bromomethane	20	20.2	ug/L	101	2		40 (58)	160 (125)	20 (30)
	Chloroethane	20	19.3	ug/L	97	1		40 (56)	160 (128)	20 (20)
	Trichlorofluoromethane	20	18.7	ug/L	94	1		40 (73)	160 (115)	20 (16)
	1,1,2-Trichlorotrifluoroethane	20	18.5	ug/L	93	0		70 (80)	130 (112)	20 (20)
	Tert butyl alcohol	100	88.0	ug/L	88	0		70 (48)	130 (142)	20 (30)
	1,1-Dichloroethene	20	18.8	ug/L	94	1		70 (74)	130 (110)	20 (20)
	Acetone	100	87.0	ug/L	87	1		40 (60)	160 (125)	20 (27)
	Carbon disulfide	20	18.8	ug/L	94	3		40 (64)	160 (112)	20 (17)
	Methyl tert-butyl Ether	20	19.4	ug/L	97	3		70 (78)	130 (114)	20 (20)
	Methyl Acetate	20	19.0	ug/L	95	1		70 (57)	130 (150)	20 (20)
	Methylene Chloride	20	20.2	ug/L	101	1		70 (72)	130 (114)	20 (20)
	trans-1,2-Dichloroethene	20	19.6	ug/L	98	0		70 (75)	130 (108)	20 (16)
	1,1-Dichloroethane	20	19.1	ug/L	96	3		70 (78)	130 (112)	20 (20)
	Cyclohexane	20	18.5	ug/L	93	3		70 (75)	130 (110)	20 (20)
	2-Butanone	100	96.2	ug/L	96	0		40 (65)	160 (122)	20 (26)
	Carbon Tetrachloride	20	18.8	ug/L	94	2		70 (77)	130 (113)	20 (15)
	cis-1,2-Dichloroethene	20	19.4	ug/L	97	4		70 (77)	130 (110)	20 (20)
	Bromochloromethane	20	18.5	ug/L	93	4		70 (70)	130 (124)	20 (20)
	Chloroform	20	19.6	ug/L	98	4		70 (79)	130 (113)	20 (20)
	1,1,1-Trichloroethane	20	19.0	ug/L	95	1		70 (80)	130 (108)	20 (20)
	Methylcyclohexane	20	18.5	ug/L	93	8		70 (72)	130 (115)	20 (20)
	Benzene	20	19.1	ug/L	96	1		70 (82)	130 (109)	20 (15)
	1,2-Dichloroethane	20	19.4	ug/L	97	1		70 (80)	130 (115)	20 (20)
	Trichloroethene	20	19.1	ug/L	96	2		70 (77)	130 (113)	20 (15)
	1,2-Dichloropropane	20	19.2	ug/L	96	3		70 (83)	130 (111)	20 (21)
	Bromodichloromethane	20	19.3	ug/L	97	1		70 (83)	130 (110)	20 (21)
	4-Methyl-2-Pentanone	100	98.5	ug/L	99	1		40 (74)	160 (118)	20 (25)
	Toluene	20	19.8	ug/L	99	1		70 (82)	130 (110)	20 (16)
	t-1,3-Dichloropropene	20	19.1	ug/L	96	4		70 (79)	130 (110)	20 (20)
	cis-1,3-Dichloropropene	20	19.5	ug/L	98	3		70 (82)	130 (110)	20 (16)
	1,1,2-Trichloroethane	20	20.0	ug/L	100	1		70 (83)	130 (112)	20 (20)
	2-Hexanone	100	94.4	ug/L	94	0		40 (73)	160 (117)	20 (25)
	Dibromochloromethane	20	20.3	ug/L	102	1		70 (82)	130 (110)	20 (20)
	1,2-Dibromoethane	20	19.9	ug/L	100	3		70 (81)	130 (110)	20 (20)
	Tetrachloroethene	20	19.0	ug/L	95	5		70 (67)	130 (123)	20 (15)
	Chlorobenzene	20	19.8	ug/L	99	1		70 (82)	130 (109)	20 (15)
	Ethyl Benzene	20	18.9	ug/L	95	2		70 (83)	130 (109)	20 (16)
	m/p-Xylenes	40	37.8	ug/L	95	2		70 (82)	130 (110)	20 (20)
	o-Xylene	20	19.2	ug/L	96	4		70 (83)	130 (109)	20 (20)
	Styrene	20	19.4	ug/L	97	1		70 (80)	130 (111)	20 (17)
	Bromoform	20	20.1	ug/L	101	1		70 (79)	130 (109)	20 (20)
	Isopropylbenzene	20	19.3	ug/L	97	4		70 (83)	130 (112)	20 (22)
	1,1,2,2-Tetrachloroethane	20	19.5	ug/L	98	3		70 (76)	130 (118)	20 (20)
	1,3-Dichlorobenzene	20	19.5	ug/L	98	3		70 (82)	130 (108)	20 (20)
	1,4-Dichlorobenzene	20	19.0	ug/L	95	2		70 (82)	130 (107)	20 (20)

( ) = LABORATORY INHOUSE LIMIT

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q3715 **Analytical Method:** SW8260-Low

Client: G Environmental **Datafile :** VN088374.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	Limits RPD
VN1201WBSD01	1,2-Dichlorobenzene	20	19.0	ug/L	95	2		70 (82)	130 (109)	20 (20)
	1,2-Dibromo-3-Chloropropane	20	18.5	ug/L	93	2		40 (68)	160 (112)	20 (26)
	1,2,4-Trichlorobenzene	20	18.0	ug/L	90	3		70 (75)	130 (113)	20 (21)
	1,2,3-Trichlorobenzene	20	19.1	ug/L	96	4		70 (76)	130 (114)	20 (22)

( ) = LABORATORY INHOUSE LIMIT

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q3715 **Analytical Method:** SW8260-Low

Client: G Environmental **Datafile :** VX048675.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VX1125WBS01	Dichlorodifluoromethane	20	17.9	ug/L	90			40 (69)	160 (116)	
	Chloromethane	20	14.8	ug/L	74			40 (65)	160 (116)	
	Vinyl chloride	20	19.5	ug/L	98			70 (65)	130 (117)	
	Bromomethane	20	21.9	ug/L	110			40 (58)	160 (125)	
	Chloroethane	20	18.9	ug/L	95			40 (56)	160 (128)	
	Trichlorofluoromethane	20	20.0	ug/L	100			40 (73)	160 (115)	
	1,1,2-Trichlorotrifluoroethane	20	20.4	ug/L	102			70 (80)	130 (112)	
	Tert butyl alcohol	100	91.1	ug/L	91			70 (48)	130 (142)	
	1,1-Dichloroethene	20	18.6	ug/L	93			70 (74)	130 (110)	
	Acetone	100	92.6	ug/L	93			40 (60)	160 (125)	
	Carbon disulfide	20	16.1	ug/L	81			40 (64)	160 (112)	
	Methyl tert-butyl Ether	20	18.0	ug/L	90			70 (78)	130 (114)	
	Methyl Acetate	20	22.5	ug/L	113			70 (57)	130 (150)	
	Methylene Chloride	20	19.7	ug/L	99			70 (72)	130 (114)	
	trans-1,2-Dichloroethene	20	16.9	ug/L	85			70 (75)	130 (108)	
	1,1-Dichloroethane	20	17.2	ug/L	86			70 (78)	130 (112)	
	Cyclohexane	20	18.8	ug/L	94			70 (75)	130 (110)	
	2-Butanone	100	82.8	ug/L	83			40 (65)	160 (122)	
	Carbon Tetrachloride	20	20.3	ug/L	102			70 (77)	130 (113)	
	cis-1,2-Dichloroethene	20	17.8	ug/L	89			70 (77)	130 (110)	
	Bromochloromethane	20	21.1	ug/L	106			70 (70)	130 (124)	
	Chloroform	20	21.7	ug/L	109			70 (79)	130 (113)	
	1,1,1-Trichloroethane	20	21.0	ug/L	105			70 (80)	130 (108)	
	Methylcyclohexane	20	18.3	ug/L	92			70 (72)	130 (115)	
	Benzene	20	19.1	ug/L	96			70 (82)	130 (109)	
	1,2-Dichloroethane	20	20.6	ug/L	103			70 (80)	130 (115)	
	Trichloroethene	20	20.3	ug/L	102			70 (77)	130 (113)	
	1,2-Dichloropropane	20	21.6	ug/L	108			70 (83)	130 (111)	
	Bromodichloromethane	20	23.3	ug/L	117			70 (83)	130 (110)	
	4-Methyl-2-Pentanone	100	120	ug/L	120			40 (74)	160 (118)	
	Toluene	20	22.2	ug/L	111			70 (82)	130 (110)	
	t-1,3-Dichloropropene	20	22.7	ug/L	114			70 (79)	130 (110)	
	cis-1,3-Dichloropropene	20	22.7	ug/L	114			70 (82)	130 (110)	
	1,1,2-Trichloroethane	20	23.9	ug/L	119			70 (83)	130 (112)	
	2-Hexanone	100	120	ug/L	120			40 (73)	160 (117)	
	Dibromochloromethane	20	23.9	ug/L	119			70 (82)	130 (110)	
	1,2-Dibromoethane	20	22.7	ug/L	114			70 (81)	130 (110)	
	Tetrachloroethene	20	18.9	ug/L	95			70 (67)	130 (123)	
	Chlorobenzene	20	19.0	ug/L	95			70 (82)	130 (109)	
	Ethyl Benzene	20	19.3	ug/L	97			70 (83)	130 (109)	
	m/p-Xylenes	40	38.8	ug/L	97			70 (82)	130 (110)	
	o-Xylene	20	19.2	ug/L	96			70 (83)	130 (109)	
	Styrene	20	20.3	ug/L	102			70 (80)	130 (111)	
	Bromoform	20	19.9	ug/L	100			70 (79)	130 (109)	
	Isopropylbenzene	20	19.9	ug/L	100			70 (83)	130 (112)	
	1,1,2,2-Tetrachloroethane	20	20.3	ug/L	102			70 (76)	130 (118)	
	1,3-Dichlorobenzene	20	19.7	ug/L	99			70 (82)	130 (108)	
	1,4-Dichlorobenzene	20	19.5	ug/L	98			70 (82)	130 (107)	

( ) = LABORATORY INHOUSE LIMIT

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q3715 **Analytical Method:** SW8260-Low

Client: G Environmental **Datafile :** VX048675.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VX1125WBS01	1,2-Dichlorobenzene	20	19.8	ug/L	99			70 (82)	130 (109)	
	1,2-Dibromo-3-Chloropropane	20	20.3	ug/L	102			40 (68)	160 (112)	
	1,2,4-Trichlorobenzene	20	19.0	ug/L	95			70 (75)	130 (113)	
	1,2,3-Trichlorobenzene	20	19.1	ug/L	96			70 (76)	130 (114)	

( ) = LABORATORY INHOUSE LIMIT

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VOLATILE METHOD BLANK SUMMARY

Client ID: VN1201WBL01

Lab Name: Alliance Contract: GENV01

Lab Code: ACE SDG NO.: Q3715

Lab File ID: VN088372.D Lab Sample ID: VN1201WBL01

Date Analyzed: 12/01/2025 Time Analyzed: 10:53

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

Instrument ID: MSVOA_N

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VN1201WBS01	VN1201WBS01	VN088373.D	12/01/2025
VN1201WBSD01	VN1201WBSD01	VN088374.D	12/01/2025
MW6	Q3715-02	VN088375.D	12/01/2025

COMMENTS:

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VOLATILE METHOD BLANK SUMMARY

Client ID: VX1125WBL01

Lab Name: Alliance | Contract: GENV01

Lab Code: ACE | SDG NO.: Q3715

Lab File ID: VX048674.D | Lab Sample ID: VX1125WBL01

Date Analyzed: 11/25/2025 | Time Analyzed: 10:38

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
VX1125WBS01	VX1125WBS01	VX048675.D	11/25/2025
MW2	Q3715-01	VX048678.D	11/25/2025
MW7	Q3715-03	VX048679.D	11/25/2025

COMMENTS:

Raw Data: **VN088343.D**

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alliance | Contract: GENV01

Lab Code: ACE | SDG NO.: Q3715

Lab File ID: VN088343.D | BFB Injection Date: 11/24/2025

Instrument ID: MSVOA_N | BFB Injection Time: 08:17

GC Column: RXI-624 ID: 0.25 (mm) | Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	23.6
75	30.0 - 60.0% of mass 95	56.6
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	1 (1.4) 1
174	50.0 - 100.0% of mass 95	70.8
175	5.0 - 9.0% of mass 174	6 (8.4) 1
176	95.0 - 101.0% of mass 174	68.3 (96.4) 1
177	5.0 - 9.0% of mass 176	4.3 (6.4) 2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDICC001	VSTDICC001	VN088344.D	11/24/2025	12:38
VSTDICC005	VSTDICC005	VN088345.D	11/24/2025	13:11
VSTDICC020	VSTDICC020	VN088346.D	11/24/2025	13:32
VSTDICCC050	VSTDICCC050	VN088347.D	11/24/2025	13:53
VSTDICC100	VSTDICC100	VN088348.D	11/24/2025	14:14
VSTDICC150	VSTDICC150	VN088349.D	11/24/2025	14:35

Raw Data: **VN088369.D**

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alliance
Contract: GENV01
Lab Code: ACE
SDG NO.: Q3715
Lab File ID: VN088369.D
BFB Injection Date: 12/01/2025
Instrument ID: MSVOA_N
BFB Injection Time: 08:49
GC Column: RXI-624 ID: 0.25 (mm)
Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.9
75	30.0 - 60.0% of mass 95	59.1
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.9 (1.2) 1
174	50.0 - 100.0% of mass 95	71
175	5.0 - 9.0% of mass 174	5.7 (8) 1
176	95.0 - 101.0% of mass 174	68.9 (97.1) 1
177	5.0 - 9.0% of mass 176	5.2 (7.5) 2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VN088370.D	12/01/2025	09:58
VN1201WBL01	VN1201WBL01	VN088372.D	12/01/2025	10:53
VN1201WBS01	VN1201WBS01	VN088373.D	12/01/2025	11:27
VN1201WBSD01	VN1201WBSD01	VN088374.D	12/01/2025	12:10
MW6	Q3715-02	VN088375.D	12/01/2025	12:30

Raw Data: **VX048515.D**

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alliance
Contract: GENV01
Lab Code: ACE
SDG NO.: Q3715
Lab File ID: VX048515.D
BFB Injection Date: 11/07/2025
Instrument ID: MSVOA_X
BFB Injection Time: 13:06
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	21.2
75	30.0 - 60.0% of mass 95	56
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	1 (1.2) 1
174	50.0 - 100.0% of mass 95	77.2
175	5.0 - 9.0% of mass 174	5.7 (7.3) 1
176	95.0 - 101.0% of mass 174	75.5 (97.9) 1
177	5.0 - 9.0% of mass 176	4.7 (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:

CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDICC001	VSTDICC001	VX048516.D	11/07/2025	13:35
VSTDICC005	VSTDICC005	VX048517.D	11/07/2025	13:56
VSTDICC020	VSTDICC020	VX048518.D	11/07/2025	14:16
VSTDICC100	VSTDICC100	VX048520.D	11/07/2025	14:58
VSTDICC150	VSTDICC150	VX048521.D	11/07/2025	15:18
VSTDICCC050	VSTDICCC050	VX048524.D	11/07/2025	16:29

Raw Data: **VX048671.D**

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alliance
Contract: GENV01
Lab Code: ACE
SDG NO.: Q3715
Lab File ID: VX048671.D
BFB Injection Date: 11/25/2025
Instrument ID: MSVOA_X
BFB Injection Time: 08:48
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	15.9
75	30.0 - 60.0% of mass 95	48.3
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	5.9
173	Less than 2.0% of mass 174	0.3 (0.4) 1
174	50.0 - 100.0% of mass 95	79.2
175	5.0 - 9.0% of mass 174	6.1 (7.7) 1
176	95.0 - 101.0% of mass 174	76.6 (96.8) 1
177	5.0 - 9.0% of mass 176	5.3 (6.9) 2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VX048672.D	11/25/2025	09:48
VX1125WBL01	VX1125WBL01	VX048674.D	11/25/2025	10:38
VX1125WBS01	VX1125WBS01	VX048675.D	11/25/2025	11:05
MW2	Q3715-01	VX048678.D	11/25/2025	12:39
MW7	Q3715-03	VX048679.D	11/25/2025	13:00

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance Contract: GENV01

Lab Code: ACE SDG NO.: Q3715

Lab File ID: VN088370.D Date Analyzed: 12/01/2025

Instrument ID: MSVOA_N Time Analyzed: 09:58

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	262500	8.20	457607	9.08	408098	11.84
UPPER LIMIT	525000	8.7	915214	9.582	816196	12.341
LOWER LIMIT	131250	7.7	228804	8.582	204049	11.341
EPA SAMPLE NO.						
MW6	190391	8.21	425302	9.08	411286	11.84
VN1201WBL01	188076	8.20	435319	9.08	418422	11.84
VN1201WBS01	256678	8.21	487472	9.08	435019	11.84
VN1201WBSD01	257123	8.21	472668	9.08	413438	11.84

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

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

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

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance Contract: GENV01

Lab Code: ACE SDG NO.: Q3715

Lab File ID: VN088370.D Date Analyzed: 12/01/2025

Instrument ID: MSVOA_N Time Analyzed: 09:58

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	197460	13.765				
UPPER LIMIT	394920	14.265				
LOWER LIMIT	98730	13.265				
EPA SAMPLE NO.						
MW6	194905	13.77				
VN1201WBL01	198799	13.77				
VN1201WBS01	207303	13.77				
VN1201WBSD01	196888	13.77				

IS4 = 1,4-Dichlorobenzene-d4

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

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

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance Contract: GENV01

Lab Code: ACE SDG NO.: Q3715

Lab File ID: VX048672.D Date Analyzed: 11/25/2025

Instrument ID: MSVOA_X Time Analyzed: 09:48

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	150094	5.53	259657	6.74	217303	10.04
UPPER LIMIT	300188	6.025	519314	7.239	434606	10.537
LOWER LIMIT	75047	5.025	129829	6.239	108652	9.537
EPA SAMPLE NO.						
MW2	172027	5.54	315243	6.75	370755	10.04
MW7	166997	5.54	305521	6.75	379381	10.04
VX1125WBL01	175748	5.54	347104	6.75	371931	10.04
VX1125WBS01	152887	5.53	255033	6.75	234446	10.04

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

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

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

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance Contract: GENV01

Lab Code: ACE SDG NO.: Q3715

Lab File ID: VX048672.D Date Analyzed: 11/25/2025

Instrument ID: MSVOA_X Time Analyzed: 09:48

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

	IS4 AREA #	RT #				
12 HOUR STD	114893	12				
UPPER LIMIT	229786	12.5				
LOWER LIMIT	57446.5	11.5				
EPA SAMPLE NO.						
MW2	198932	12.01				
MW7	188892	12.01				
VX1125WBL01	201273	12.01				
VX1125WBS01	118863	12.01				

IS4 = 1,4-Dichlorobenzene-d4

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

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

SAMPLE DATA

Raw Data: **VX048678.D**

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Report of Analysis

Client:	G Environmental	Date Collected:	11/24/25
Project:	Union	Date Received:	11/24/25
Client Sample ID:	MW2	SDG No.:	Q3715
Lab Sample ID:	Q3715-01	Matrix:	Water
Analytical Method:	8260D	Level: LOW	% Solid: 0
Sample Wt/Vol:	5 mL	Final Vol: 5000 uL	Test: VOCMS Group1

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
TARGETS									
75-71-8	Dichlorodifluoromethane	0.22	U	1	0.22	1.00	ug/L	11/25/25 12:39	VX112525
74-87-3	Chloromethane	0.32	U	1	0.32	1.00	ug/L	11/25/25 12:39	VX112525
75-01-4	Vinyl Chloride	0.26	U	1	0.26	1.00	ug/L	11/25/25 12:39	VX112525
74-83-9	Bromomethane	1.40	U	1	1.40	5.00	ug/L	11/25/25 12:39	VX112525
75-00-3	Chloroethane	0.47	U	1	0.47	1.00	ug/L	11/25/25 12:39	VX112525
75-69-4	Trichlorofluoromethane	0.33	U	1	0.33	1.00	ug/L	11/25/25 12:39	VX112525
76-13-1	1,1,2-Trichlorotrifluoroethane	0.25	U	1	0.25	1.00	ug/L	11/25/25 12:39	VX112525
75-65-0	Tert butyl alcohol	5.50	U	1	5.50	25.0	ug/L	11/25/25 12:39	VX112525
75-35-4	1,1-Dichloroethene	0.23	U	1	0.23	1.00	ug/L	11/25/25 12:39	VX112525
67-64-1	Acetone	1.50	U	1	1.50	5.00	ug/L	11/25/25 12:39	VX112525
75-15-0	Carbon Disulfide	0.21	U	1	0.21	1.00	ug/L	11/25/25 12:39	VX112525
1634-04-4	Methyl tert-butyl Ether	0.16	U	1	0.16	1.00	ug/L	11/25/25 12:39	VX112525
79-20-9	Methyl Acetate	0.27	U	1	0.27	1.00	ug/L	11/25/25 12:39	VX112525
75-09-2	Methylene Chloride	0.28	U	1	0.28	1.00	ug/L	11/25/25 12:39	VX112525
156-60-5	trans-1,2-Dichloroethene	0.23	U	1	0.23	1.00	ug/L	11/25/25 12:39	VX112525
75-34-3	1,1-Dichloroethane	0.23	U	1	0.23	1.00	ug/L	11/25/25 12:39	VX112525
110-82-7	Cyclohexane	6.70		1	1.50	5.00	ug/L	11/25/25 12:39	VX112525
78-93-3	2-Butanone	0.98	U	1	0.98	5.00	ug/L	11/25/25 12:39	VX112525
56-23-5	Carbon Tetrachloride	0.25	U	1	0.25	1.00	ug/L	11/25/25 12:39	VX112525
156-59-2	cis-1,2-Dichloroethene	0.19	U	1	0.19	1.00	ug/L	11/25/25 12:39	VX112525
74-97-5	Bromochloromethane	0.22	U	1	0.22	1.00	ug/L	11/25/25 12:39	VX112525
67-66-3	Chloroform	0.25	U	1	0.25	1.00	ug/L	11/25/25 12:39	VX112525
71-55-6	1,1,1-Trichloroethane	0.20	U	1	0.20	1.00	ug/L	11/25/25 12:39	VX112525
108-87-2	Methylcyclohexane	3.50		1	0.16	1.00	ug/L	11/25/25 12:39	VX112525
71-43-2	Benzene	1.90		1	0.15	1.00	ug/L	11/25/25 12:39	VX112525
107-06-2	1,2-Dichloroethane	0.22	U	1	0.22	1.00	ug/L	11/25/25 12:39	VX112525
79-01-6	Trichloroethene	0.50	J	1	0.090	1.00	ug/L	11/25/25 12:39	VX112525
78-87-5	1,2-Dichloropropane	0.20	U	1	0.20	1.00	ug/L	11/25/25 12:39	VX112525
75-27-4	Bromodichloromethane	0.22	U	1	0.22	1.00	ug/L	11/25/25 12:39	VX112525
108-10-1	4-Methyl-2-Pentanone	0.68	U	1	0.68	5.00	ug/L	11/25/25 12:39	VX112525
108-88-3	Toluene	0.49	J	1	0.14	1.00	ug/L	11/25/25 12:39	VX112525
10061-02-6	t-1,3-Dichloropropene	0.17	U	1	0.17	1.00	ug/L	11/25/25 12:39	VX112525
10061-01-5	cis-1,3-Dichloropropene	0.16	U	1	0.16	1.00	ug/L	11/25/25 12:39	VX112525
79-00-5	1,1,2-Trichloroethane	0.21	U	1	0.21	1.00	ug/L	11/25/25 12:39	VX112525
591-78-6	2-Hexanone	0.89	U	1	0.89	5.00	ug/L	11/25/25 12:39	VX112525
124-48-1	Dibromochloromethane	0.18	U	1	0.18	1.00	ug/L	11/25/25 12:39	VX112525
106-93-4	1,2-Dibromoethane	0.15	U	1	0.15	1.00	ug/L	11/25/25 12:39	VX112525
127-18-4	Tetrachloroethene	0.44	J	1	0.23	1.00	ug/L	11/25/25 12:39	VX112525
108-90-7	Chlorobenzene	0.12	U	1	0.12	1.00	ug/L	11/25/25 12:39	VX112525
100-41-4	Ethyl Benzene	1.30		1	0.13	1.00	ug/L	11/25/25 12:39	VX112525
179601-23-1	m/p-Xylenes	0.84	J	1	0.24	2.00	ug/L	11/25/25 12:39	VX112525
95-47-6	o-Xylene	0.12	U	1	0.12	1.00	ug/L	11/25/25 12:39	VX112525
100-42-5	Styrene	0.15	U	1	0.15	1.00	ug/L	11/25/25 12:39	VX112525

Raw Data: **VX048678.D**

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

Report of Analysis

Client:	G Environmental	Date Collected:	11/24/25
Project:	Union	Date Received:	11/24/25
Client Sample ID:	MW2	SDG No.:	Q3715
Lab Sample ID:	Q3715-01	Matrix:	Water
Analytical Method:	8260D	Level: LOW	% Solid: 0
Sample Wt/Vol:	5 mL	Final Vol: 5000 uL	Test: VOCMS Group1

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
75-25-2	Bromoform	0.19	U	1	0.19	1.00	ug/L	11/25/25 12:39	VX112525
98-82-8	Isopropylbenzene	5.20		1	0.12	1.00	ug/L	11/25/25 12:39	VX112525
79-34-5	1,1,2,2-Tetrachloroethane	0.26	U	1	0.26	1.00	ug/L	11/25/25 12:39	VX112525
541-73-1	1,3-Dichlorobenzene	0.16	U	1	0.16	1.00	ug/L	11/25/25 12:39	VX112525
106-46-7	1,4-Dichlorobenzene	0.19	U	1	0.19	1.00	ug/L	11/25/25 12:39	VX112525
95-50-1	1,2-Dichlorobenzene	0.16	U	1	0.16	1.00	ug/L	11/25/25 12:39	VX112525
96-12-8	1,2-Dibromo-3-Chloropropane	0.53	U	1	0.53	1.00	ug/L	11/25/25 12:39	VX112525
120-82-1	1,2,4-Trichlorobenzene	0.20	U	1	0.20	1.00	ug/L	11/25/25 12:39	VX112525
87-61-6	1,2,3-Trichlorobenzene	0.20	U	1	0.20	1.00	ug/L	11/25/25 12:39	VX112525
SURROGATES									
17060-07-0	1,2-Dichloroethane-d4	52.6			70 (74) - 130 (125)	105%	SPK: 50		
1868-53-7	Dibromofluoromethane	47.3			70 (75) - 130 (124)	95%	SPK: 50		
2037-26-5	Toluene-d8	53.5			70 (86) - 130 (113)	107%	SPK: 50		
460-00-4	4-Bromofluorobenzene	63.1			70 (77) - 130 (121)	126%	SPK: 50		
INTERNAL STANDARDS		**Area Count**							
363-72-4	Pentafluorobenzene	172000							
540-36-3	1,4-Difluorobenzene	315000							
3114-55-4	Chlorobenzene-d5	371000							
3855-82-1	1,4-Dichlorobenzene-d4	199000							
TENTATIVE IDENTIFIED COMPOUNDS									
000078-78-4	Butane, 2-methyl-	27.8	J			1.76	ug/L		
000079-29-8	Butane, 2,3-dimethyl-	8.60	J			2.78	ug/L		
000096-14-0	Pentane, 3-methyl-	16.4	J			3.10	ug/L		
000096-37-7	Cyclopentane, methyl-	16.7	J			4.30	ug/L		
103-65-1	n-propylbenzene	11.1	J			11.3	ug/L		
108-67-8	1,3,5-Trimethylbenzene	0.26	J			11.4	ug/L		
98-06-6	tert-Butylbenzene	0.24	J			11.7	ug/L		
135-98-8	sec-Butylbenzene	1.40	J			11.9	ug/L		
000611-15-4	Benzene, 1-ethenyl-2-methyl-	21.9	J			12.2	ug/L		
104-51-8	n-Butylbenzene	0.99	J			12.3	ug/L		
000934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	7.60	J			12.6	ug/L		
007525-62-4	Benzene, 1-ethenyl-3-ethyl-	11.1	J			12.7	ug/L		
000488-23-3	Benzene, 1,2,3,4-tetramethyl-	9.50	J			12.9	ug/L		
002039-89-6	Benzene, 2-ethenyl-1,4-dimethyl-	6.50	J			13.3	ug/L		
91-20-3	Naphthalene	2.10	J			13.8	ug/L		

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112525\
Data File : VX048678.D
Acq On : 25 Nov 2025 12:39
Operator : JC/MD
Sample : Q3715-01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
MW2

Quant Time: Nov 26 00:59:41 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 05:08:11 2025
Response via : Initial Calibration

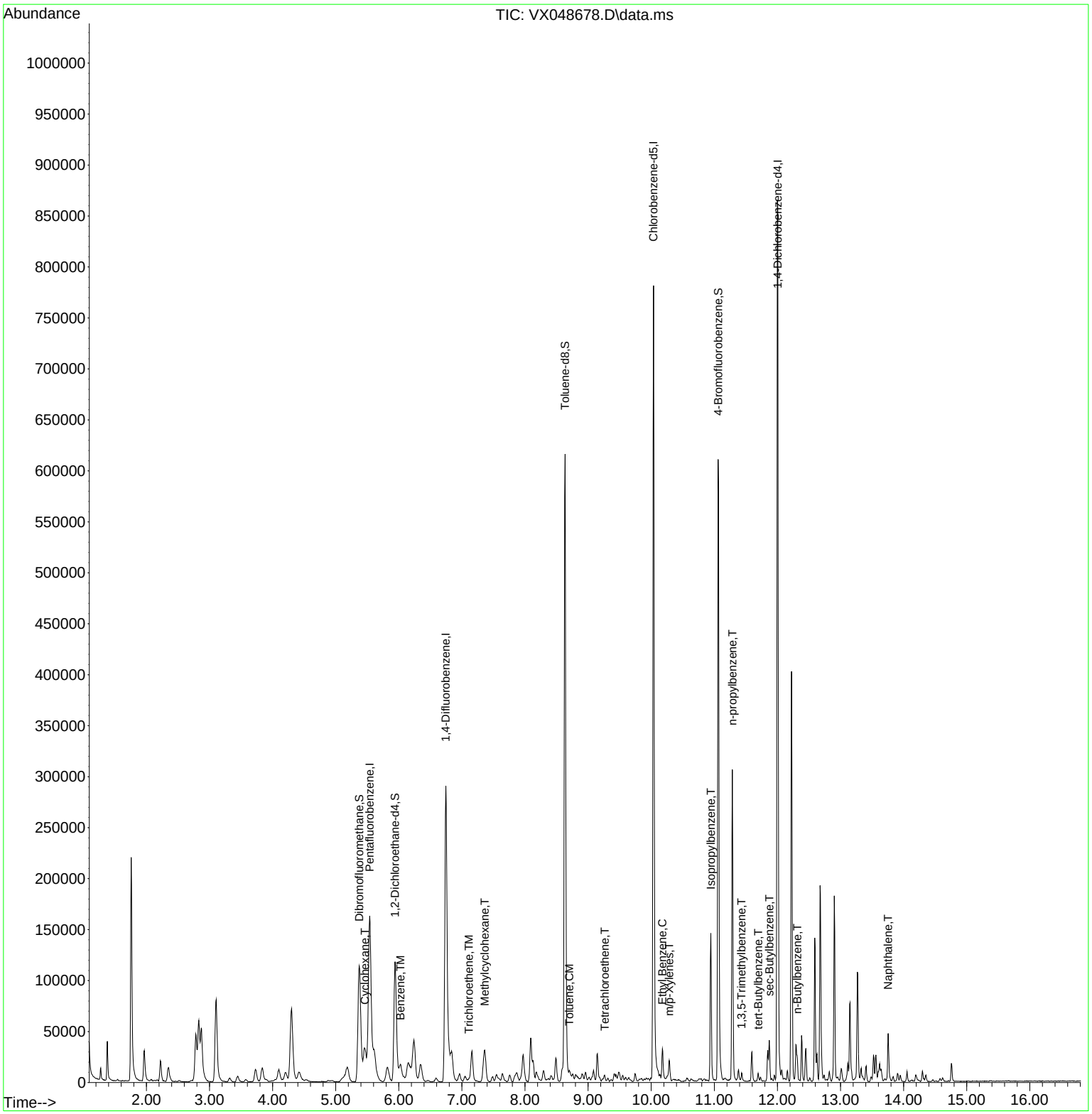
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.538	168	172027	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.745	114	315243	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.037	117	370755	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.006	152	198932	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.940	65	126147	52.626	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 105.260%			
35) Dibromofluoromethane	5.373	113	112968	47.347	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 94.700%			
50) Toluene-d8	8.635	98	398167	53.507	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery = 107.020%			
62) 4-Bromofluorobenzene	11.061	95	174996	63.103	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery = 126.200%#			
Target Compounds						Qvalue
31) Cyclohexane	5.465	56	21434	6.659	ug/l #	93
39) Methylcyclohexane	7.361	83	12603	3.513	ug/l	93
40) Benzene	6.025	78	18541	1.872	ug/l	98
44) Trichloroethene	7.111	130	1188	0.502	ug/l	83
52) Toluene	8.702	92	2566	0.492	ug/l	99
64) Tetrachloroethene	9.263	164	1180	0.438	ug/l #	79
67) Ethyl Benzene	10.177	91	19781	1.339	ug/l	95
68) m/p-Xylenes	10.287	106	4699	0.844	ug/l	90
73) Isopropylbenzene	10.945	105	75615	5.237	ug/l	98
78) n-propylbenzene	11.287	91	188783	11.119	ug/l	98
80) 1,3,5-Trimethylbenzene	11.433	105	3073	0.261	ug/l	97
83) tert-Butylbenzene	11.695	119	2942	0.242	ug/l	83
85) sec-Butylbenzene	11.872	105	20574	1.367	ug/l	96
89) n-Butylbenzene	12.317	91	11693	0.985	ug/l #	75
95) Naphthalene	13.756	128	29896	2.086	ug/l #	97

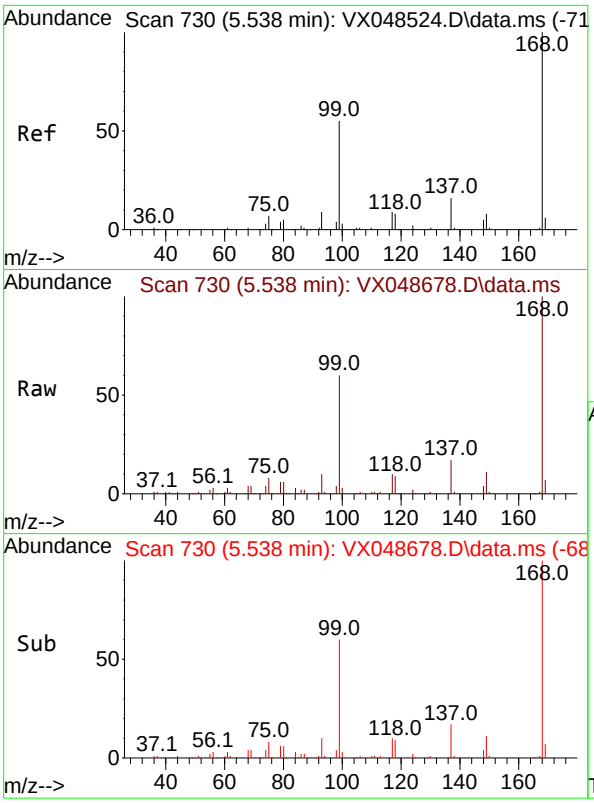
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112525\
Data File : VX048678.D
Acq On : 25 Nov 2025 12:39
Operator : JC/MD
Sample : Q3715-01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
MW2

Quant Time: Nov 26 00:59:41 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 05:08:11 2025
Response via : Initial Calibration



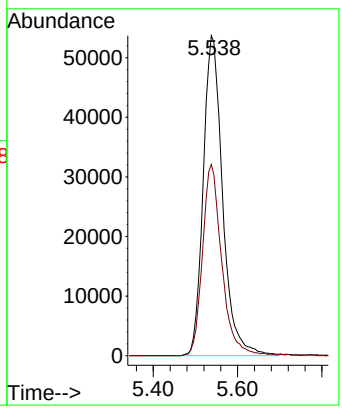


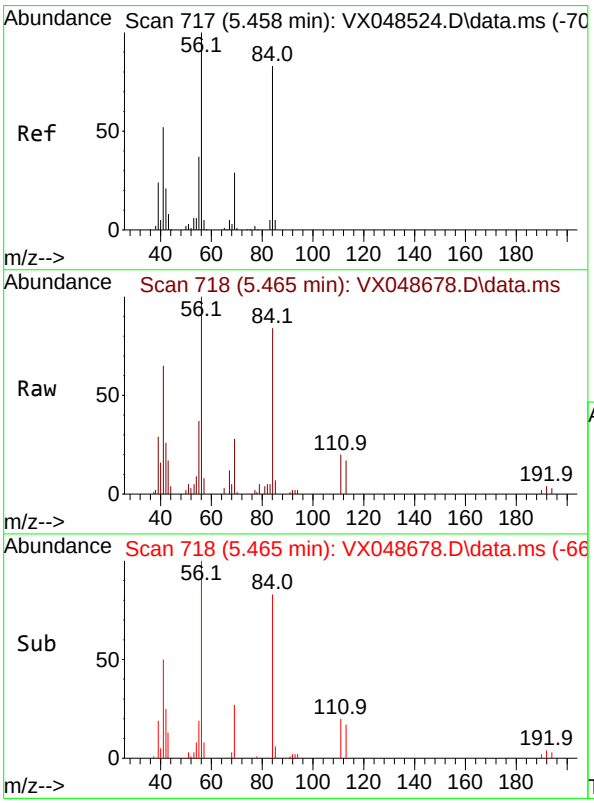
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.538 min Scan# 7
Delta R.T. -0.000 min
Lab File: VX048678.D
Acq: 25 Nov 2025 12:39

Instrument :
MSVOA_X
ClientSampleId :
MW2

Tgt Ion:168 Resp: 172027

Ion	Ratio	Lower	Upper
168	100		
99	59.8	45.2	67.8

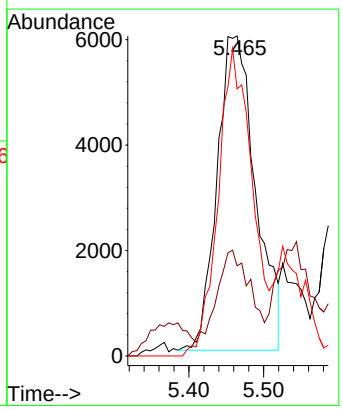


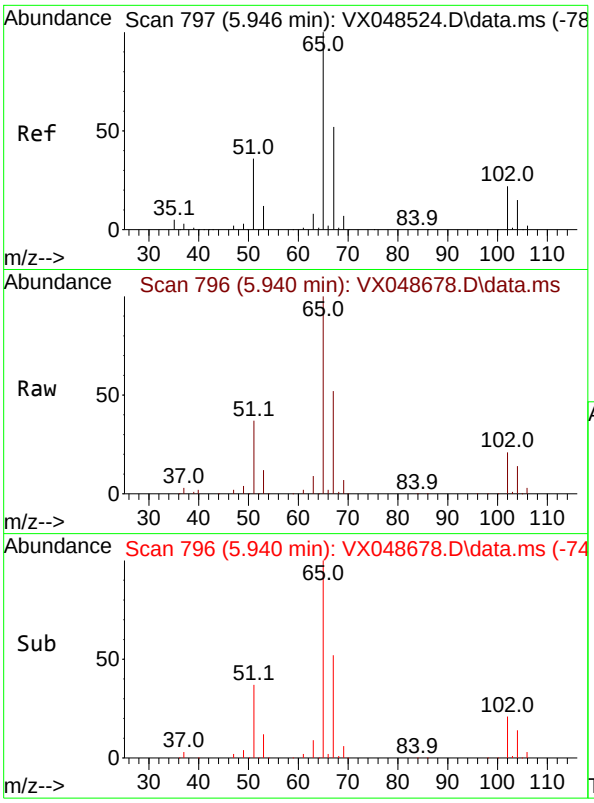


#31
Cyclohexane
Concen: 6.659 ug/l
RT: 5.465 min Scan# 718
Delta R.T. 0.006 min
Lab File: VX048678.D
Acq: 25 Nov 2025 12:39

Tgt Ion: 56 Resp: 21434

Ion	Ratio	Lower	Upper
56	100		
69	18.1	23.4	35.2#
84	85.0	66.3	99.5



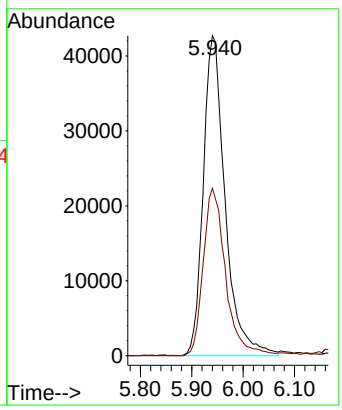


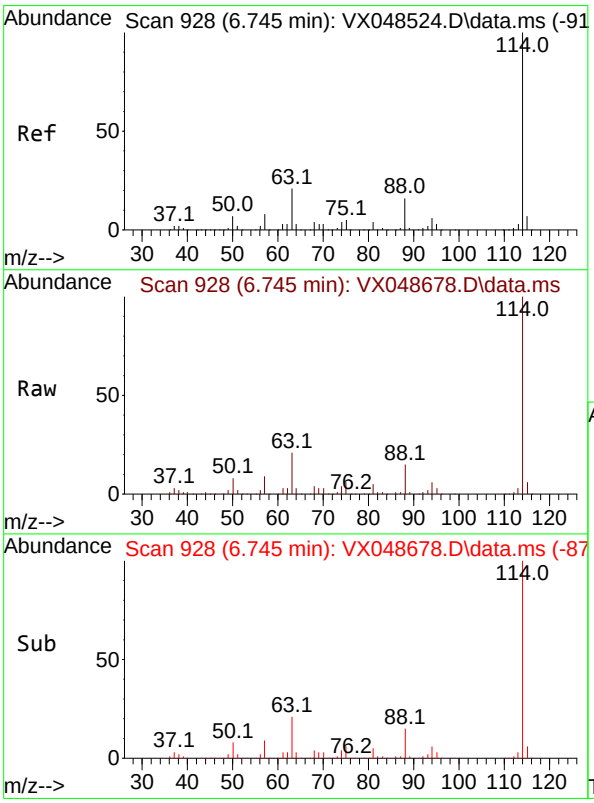
#33
1,2-Dichloroethane-d4
Concen: 52.626 ug/l
RT: 5.940 min Scan# 7
Delta R.T. -0.006 min
Lab File: VX048678.D
Acq: 25 Nov 2025 12:39

Instrument :
MSVOA_X
ClientSampleId :
MW2

Tgt Ion: 65 Resp: 126147

Ion	Ratio	Lower	Upper
65	100		
67	53.4	0.0	106.2

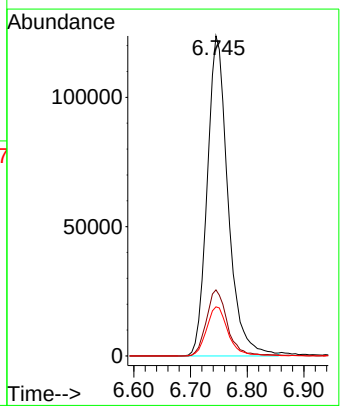


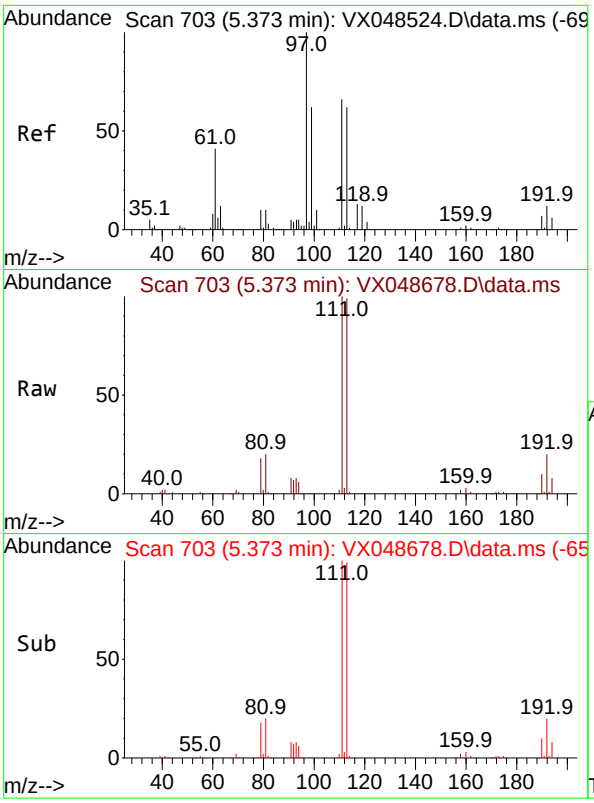


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.745 min Scan# 928
Delta R.T. -0.000 min
Lab File: VX048678.D
Acq: 25 Nov 2025 12:39

Tgt Ion:114 Resp: 315243

Ion	Ratio	Lower	Upper
114	100		
63	20.6	0.0	41.2
88	15.4	0.0	32.2



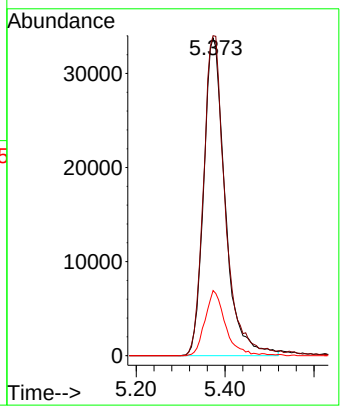


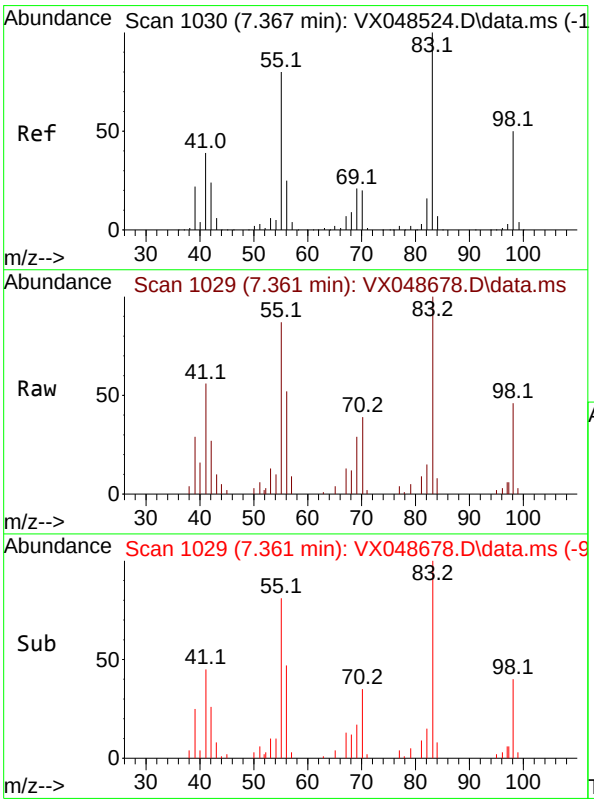
#35
Dibromofluoromethane
Concen: 47.347 ug/l
RT: 5.373 min Scan# 7
Delta R.T. -0.000 min
Lab File: VX048678.D
Acq: 25 Nov 2025 12:39

Instrument :
MSVOA_X
ClientSampleId :
MW2

Tgt Ion:113 Resp: 112968

Ion	Ratio	Lower	Upper
113	100		
111	102.3	81.9	122.9
192	19.5	15.8	23.6

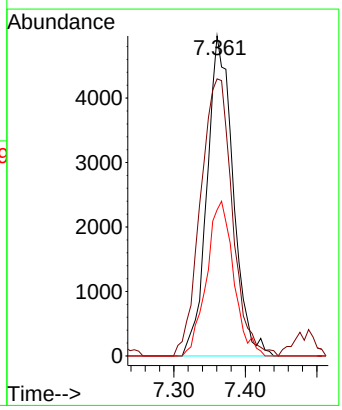


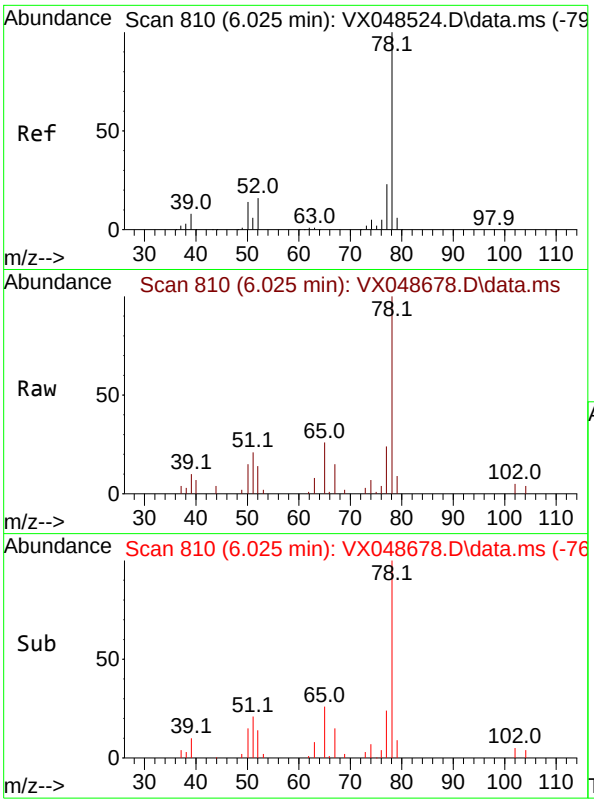


#39
Methylcyclohexane
Concen: 3.513 ug/l
RT: 7.361 min Scan# 1029
Delta R.T. -0.006 min
Lab File: VX048678.D
Acq: 25 Nov 2025 12:39

Tgt Ion: 83 Resp: 12603

Ion	Ratio	Lower	Upper
83	100		
55	86.6	63.8	95.6
98	45.6	40.3	60.5



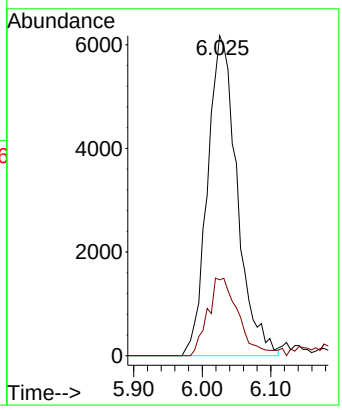


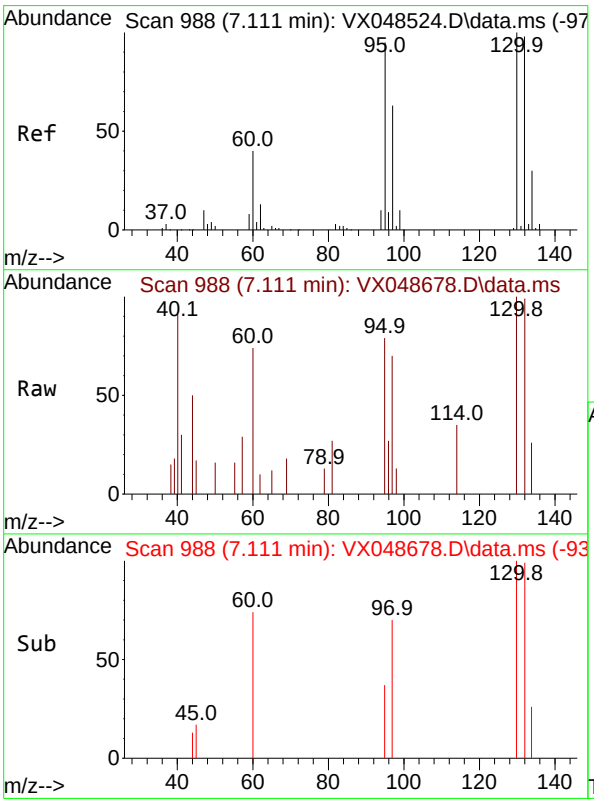
#40
Benzene
Concen: 1.872 ug/l
RT: 6.025 min Scan# 8
Delta R.T. -0.000 min
Lab File: VX048678.D
Acq: 25 Nov 2025 12:39

Instrument :
MSVOA_X
ClientSampleId :
MW2

Tgt Ion: 78 Resp: 18541

Ion	Ratio	Lower	Upper
78	100		
77	23.7	18.3	27.5

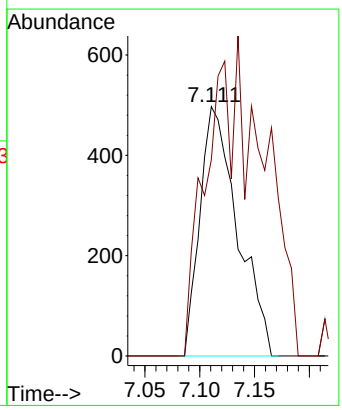


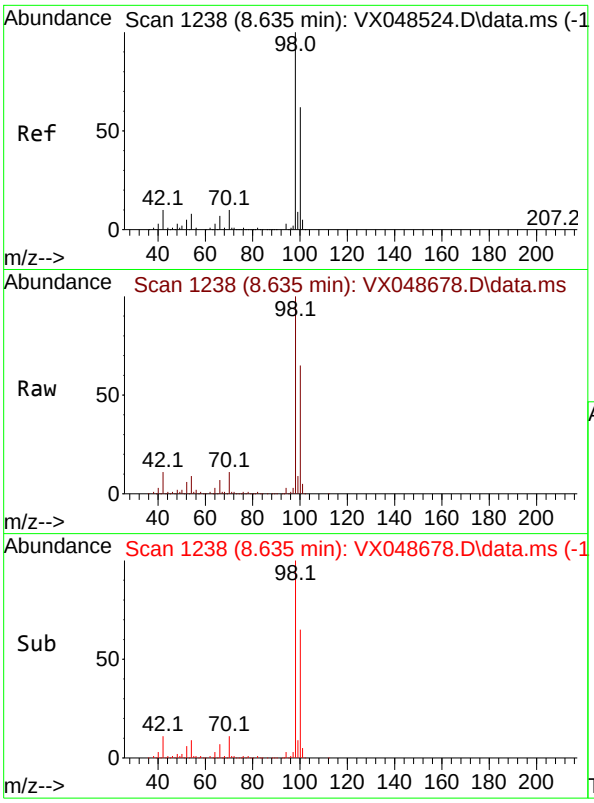


#44
Trichloroethene
Concen: 0.502 ug/l
RT: 7.111 min Scan# 988
Delta R.T. -0.000 min
Lab File: VX048678.D
Acq: 25 Nov 2025 12:39

Tgt Ion:130 Resp: 1188

Ion	Ratio	Lower	Upper
130	100		
95	78.7	0.0	190.2



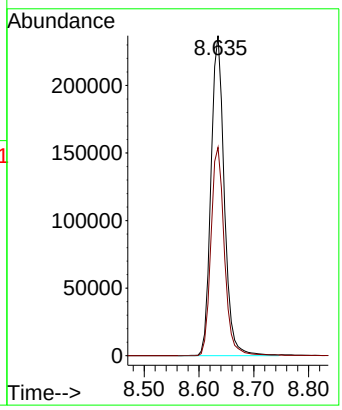


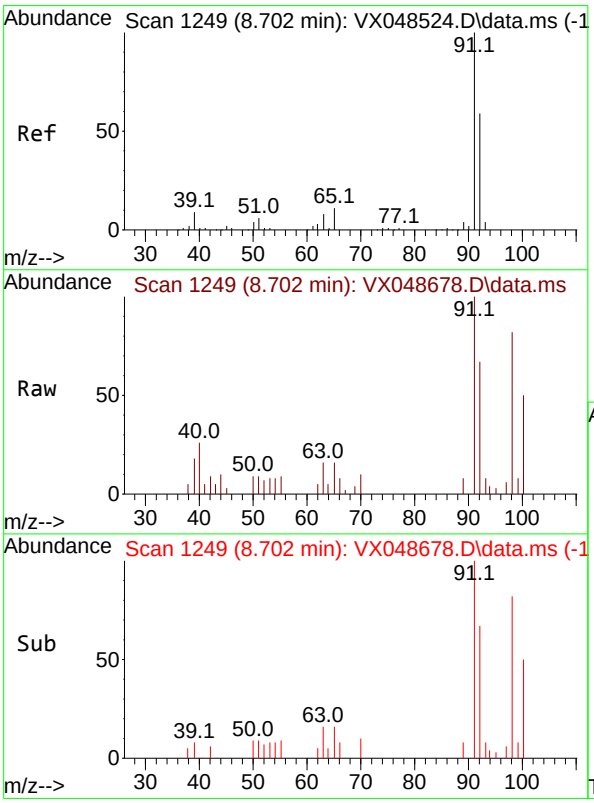
#50
Toluene-d8
Concen: 53.507 ug/l
RT: 8.635 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX048678.D
Acq: 25 Nov 2025 12:39

Instrument :
MSVOA_X
ClientSampleId :
MW2

Tgt Ion: 98 Resp: 398167

Ion	Ratio	Lower	Upper
98	100		
100	65.9	53.6	80.4

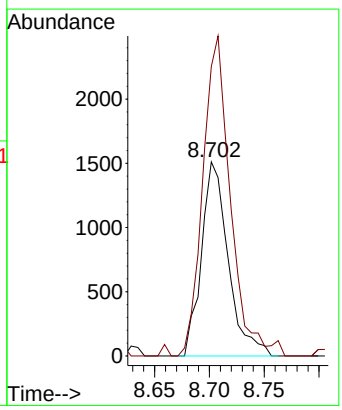


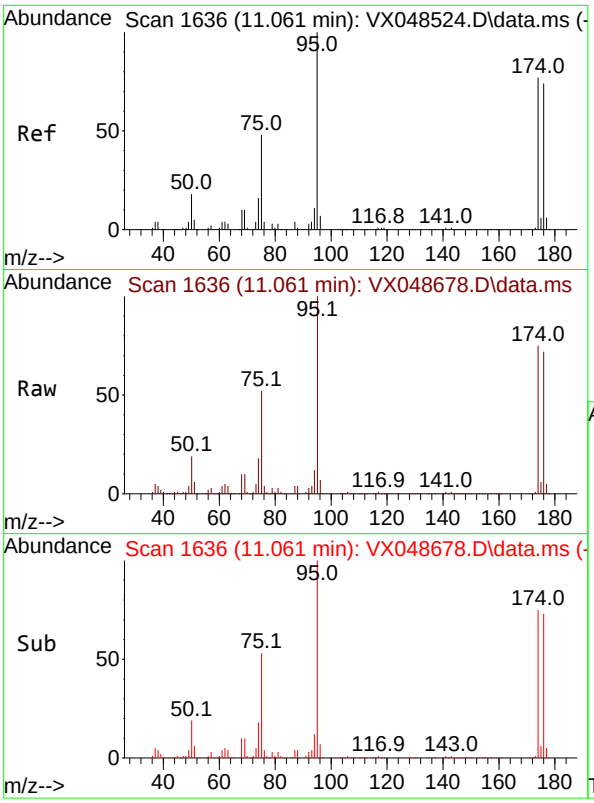


#52
Toluene
Concen: 0.492 ug/l
RT: 8.702 min Scan# 1249
Delta R.T. -0.000 min
Lab File: VX048678.D
Acq: 25 Nov 2025 12:39

Tgt Ion: 92 Resp: 2566

Ion	Ratio	Lower	Upper
92	100		
91	170.1	137.0	205.6



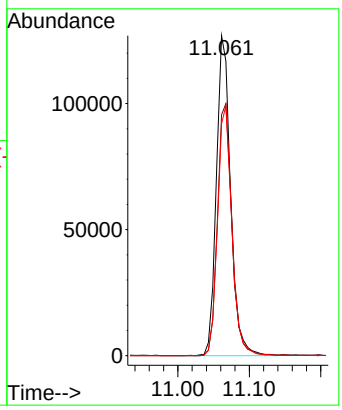


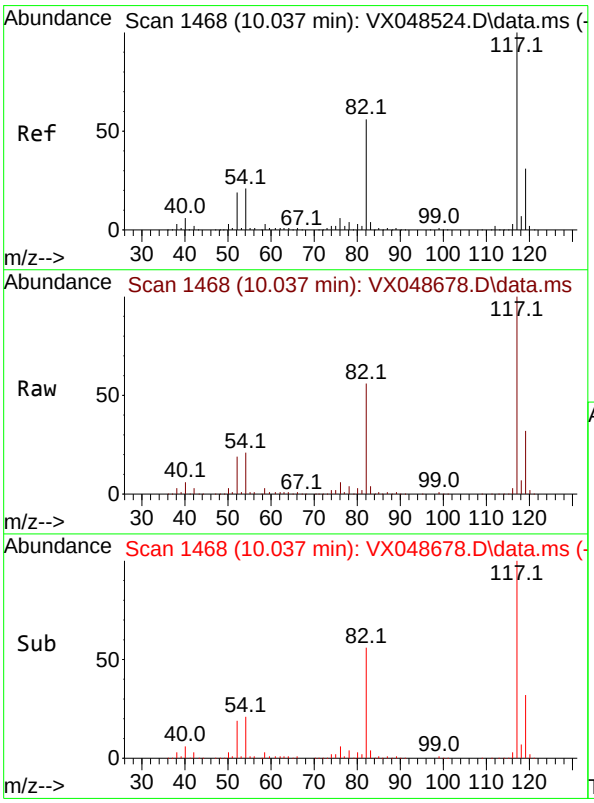
#62
4-Bromofluorobenzene
Concen: 63.103 ug/l
RT: 11.061 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX048678.D
Acq: 25 Nov 2025 12:39

Instrument :
MSVOA_X
ClientSampleId :
MW2

Tgt Ion: 95 Resp: 174996

Ion	Ratio	Lower	Upper
95	100		
174	80.6	0.0	161.8
176	78.4	0.0	153.6

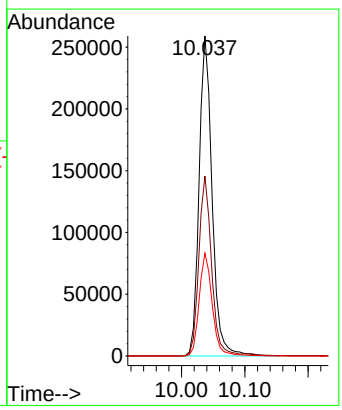


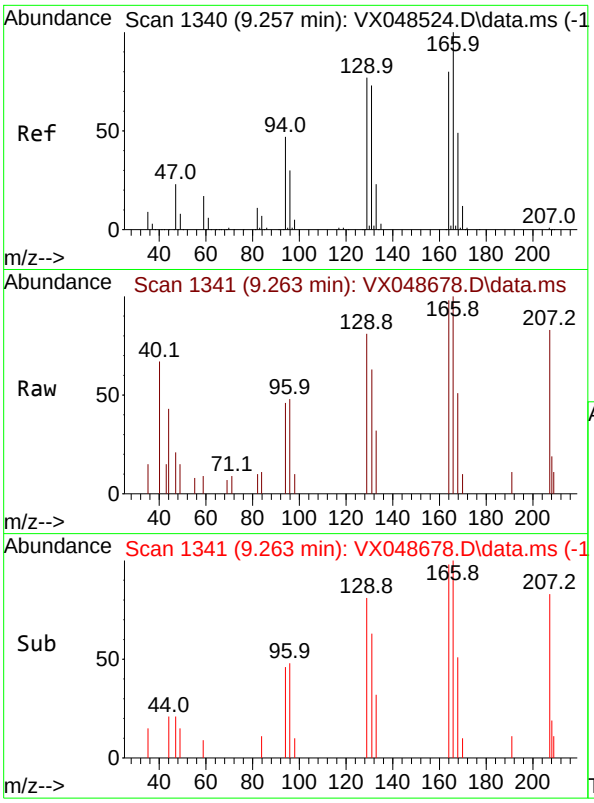


#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.037 min Scan# 1468
Delta R.T. -0.000 min
Lab File: VX048678.D
Acq: 25 Nov 2025 12:39

Tgt Ion:117 Resp: 370755

Ion	Ratio	Lower	Upper
117	100		
82	56.2	44.4	66.6
119	32.1	25.1	37.7



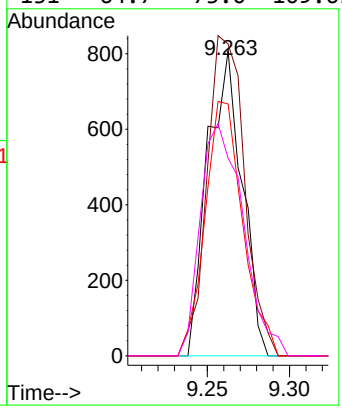


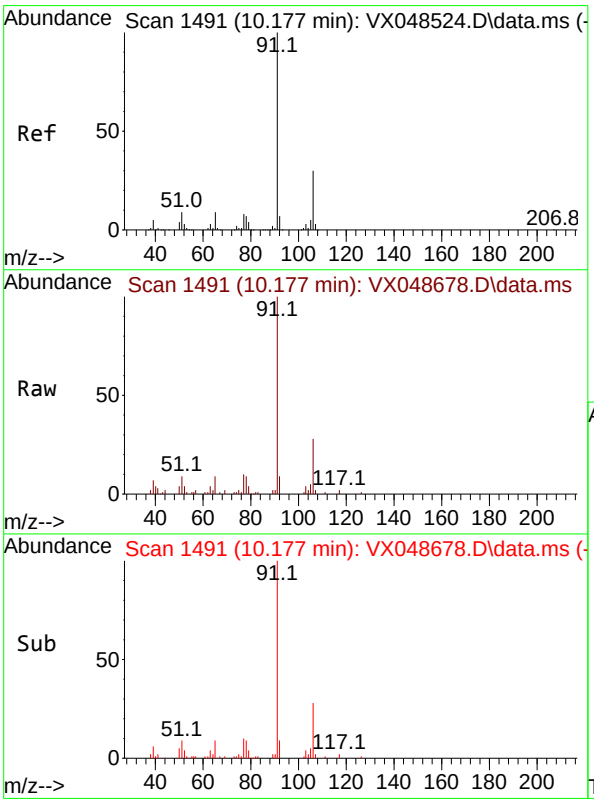
#64
Tetrachloroethene
Concen: 0.438 ug/l
RT: 9.263 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX048678.D
Acq: 25 Nov 2025 12:39

Instrument :
MSVOA_X
ClientSampleId :
MW2

Tgt Ion:164 Resp: 1180

Ion	Ratio	Lower	Upper
164	100		
166	102.2	100.6	150.8
129	82.5	77.6	116.4
131	64.7	73.0	109.6#

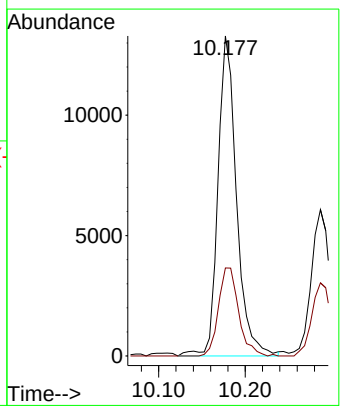


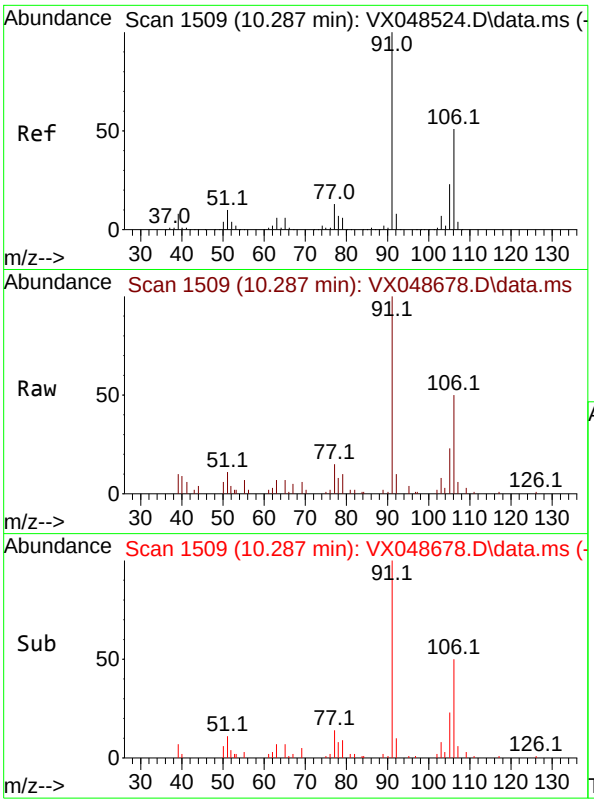


#67
Ethyl Benzene
Concen: 1.339 ug/l
RT: 10.177 min Scan# 1491
Delta R.T. -0.000 min
Lab File: VX048678.D
Acq: 25 Nov 2025 12:39

Tgt Ion: 91 Resp: 19781

Ion	Ratio	Lower	Upper
91	100		
106	27.5	24.1	36.1



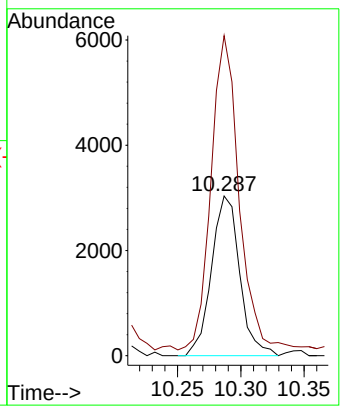


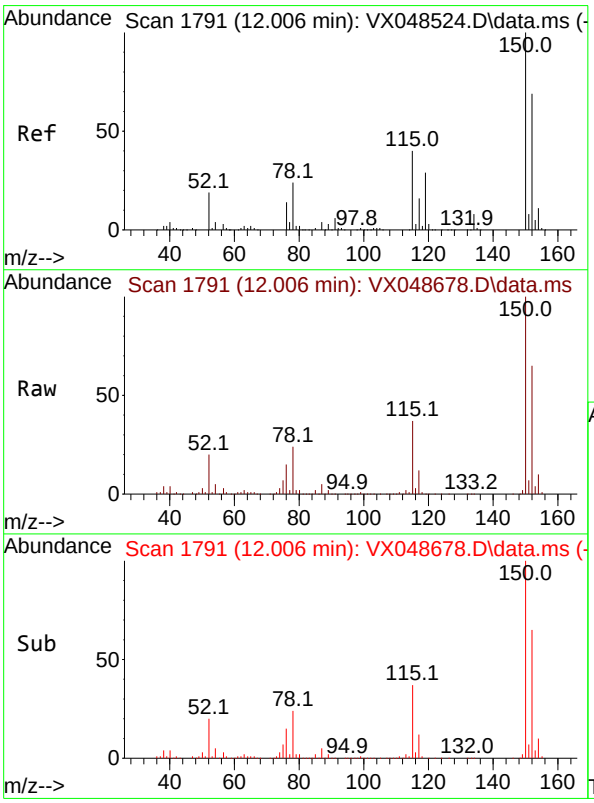
#68
m/p-Xylenes
Concen: 0.844 ug/l
RT: 10.287 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX048678.D
Acq: 25 Nov 2025 12:39

Instrument :
MSVOA_X
ClientSampleId :
MW2

Tgt Ion:106 Resp: 4699

Ion	Ratio	Lower	Upper
106	100		
91	214.5	159.6	239.4

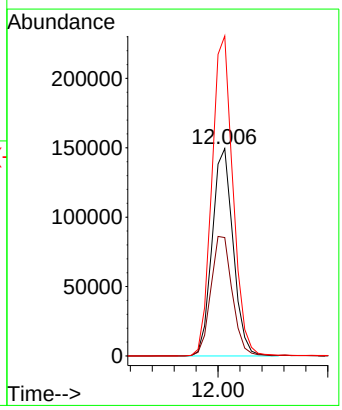


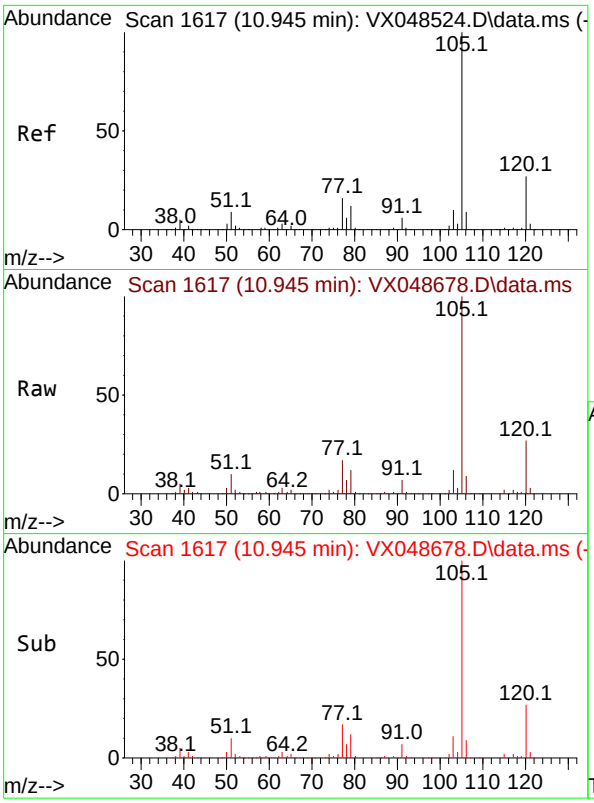


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.006 min Scan# 1791
Delta R.T. -0.000 min
Lab File: VX048678.D
Acq: 25 Nov 2025 12:39

Tgt Ion:152 Resp: 198932

Ion	Ratio	Lower	Upper
152	100		
115	58.6	39.2	117.6
150	155.1	0.0	347.0



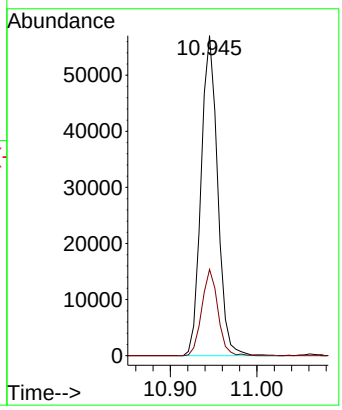


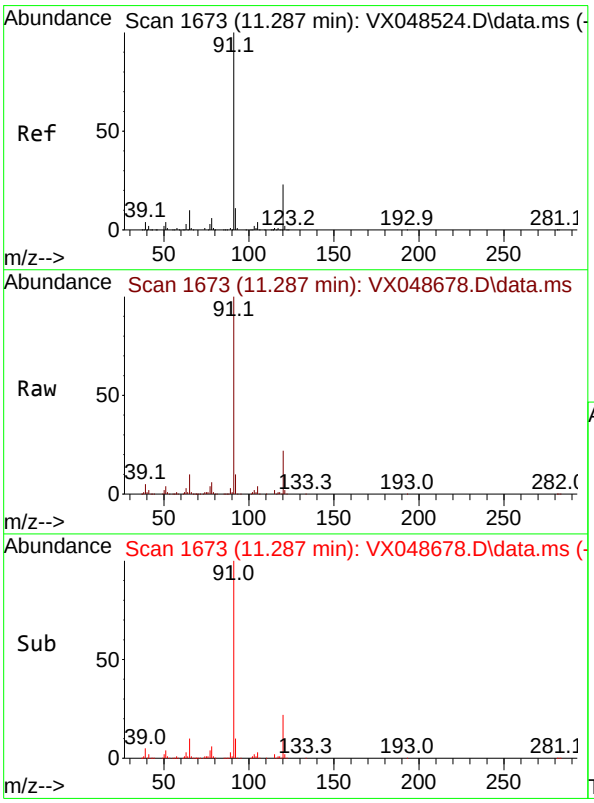
#73
Isopropylbenzene
Concen: 5.237 ug/l
RT: 10.945 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX048678.D
Acq: 25 Nov 2025 12:39

Instrument :
MSVOA_X
ClientSampleId :
MW2

Tgt Ion:105 Resp: 75615

Ion	Ratio	Lower	Upper
105	100		
120	26.1	13.6	40.7

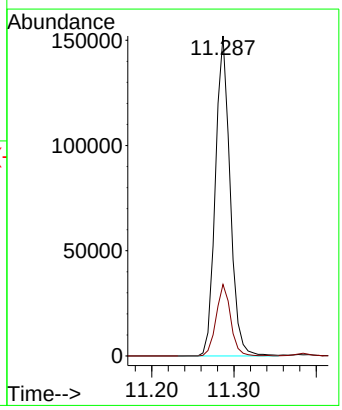


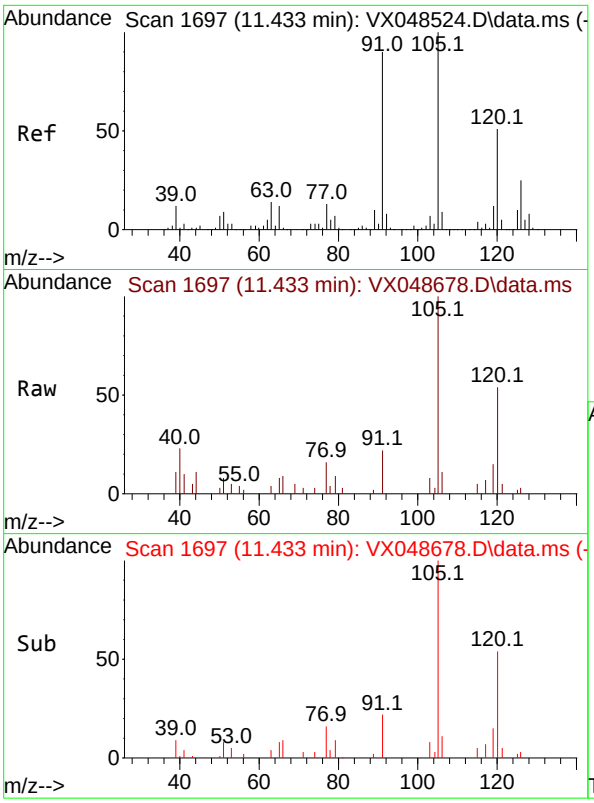


#78
n-propylbenzene
Concen: 11.119 ug/l
RT: 11.287 min Scan# 1673
Delta R.T. -0.000 min
Lab File: VX048678.D
Acq: 25 Nov 2025 12:39

Tgt Ion: 91 Resp: 188783

Ion	Ratio	Lower	Upper
91	100		
120	22.0	11.6	34.8



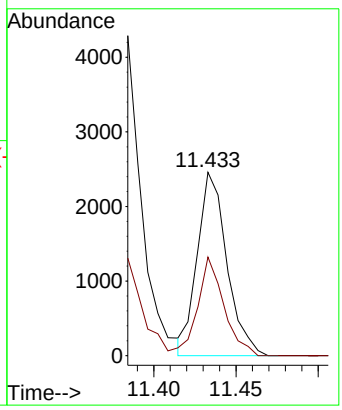


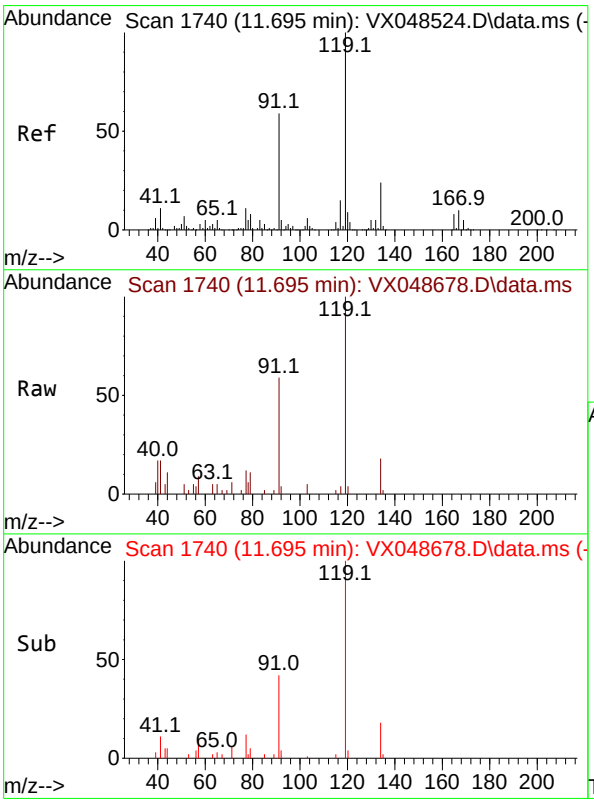
#80
1,3,5-Trimethylbenzene
Concen: 0.261 ug/l
RT: 11.433 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX048678.D
Acq: 25 Nov 2025 12:39

Instrument :
MSVOA_X
ClientSampleId :
MW2

Tgt Ion:105 Resp: 3073

Ion	Ratio	Lower	Upper
105	100		
120	48.3	25.1	75.2

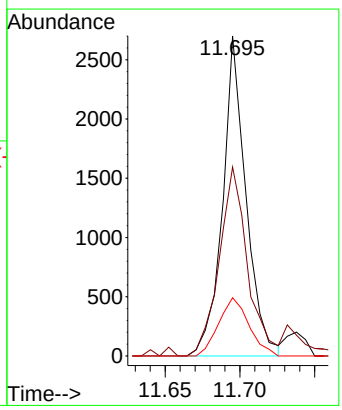


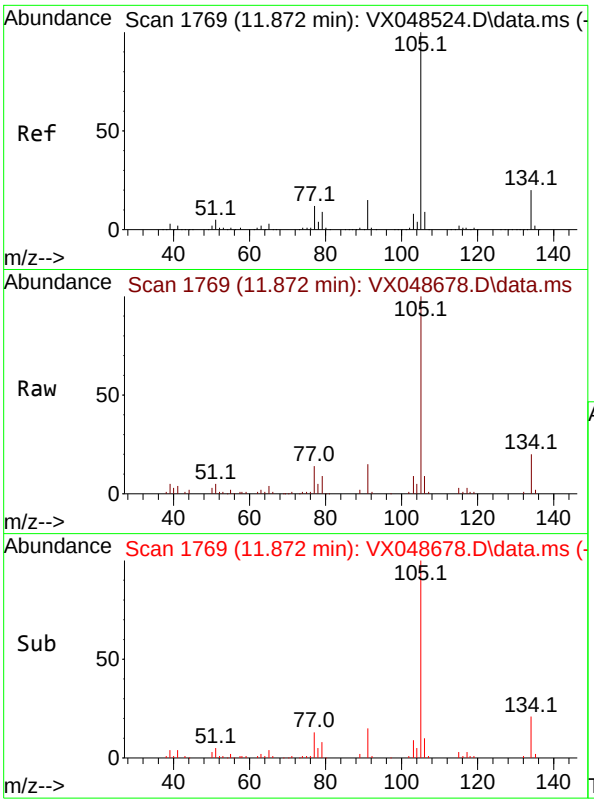


#83
tert-Butylbenzene
Concen: 0.242 ug/l
RT: 11.695 min Scan# 1740
Delta R.T. -0.000 min
Lab File: VX048678.D
Acq: 25 Nov 2025 12:39

Tgt Ion:119 Resp: 2942

Ion	Ratio	Lower	Upper
119	100		
91	71.0	27.1	81.3
134	23.5	11.4	34.1



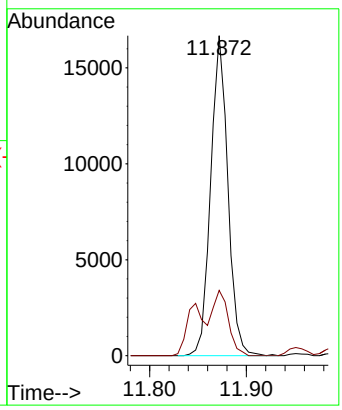


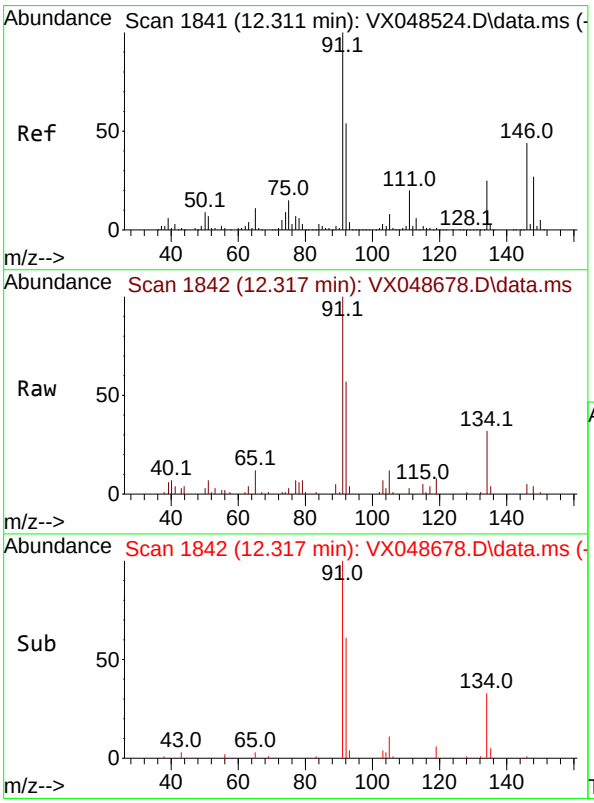
#85
sec-Butylbenzene
Concen: 1.367 ug/l
RT: 11.872 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX048678.D
Acq: 25 Nov 2025 12:39

Instrument :
MSVOA_X
ClientSampleId :
MW2

Tgt Ion:105 Resp: 20574

Ion	Ratio	Lower	Upper
105	100		
134	18.6	10.2	30.4

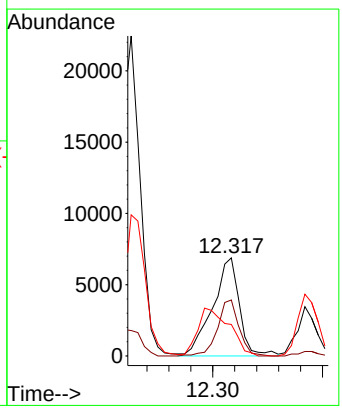


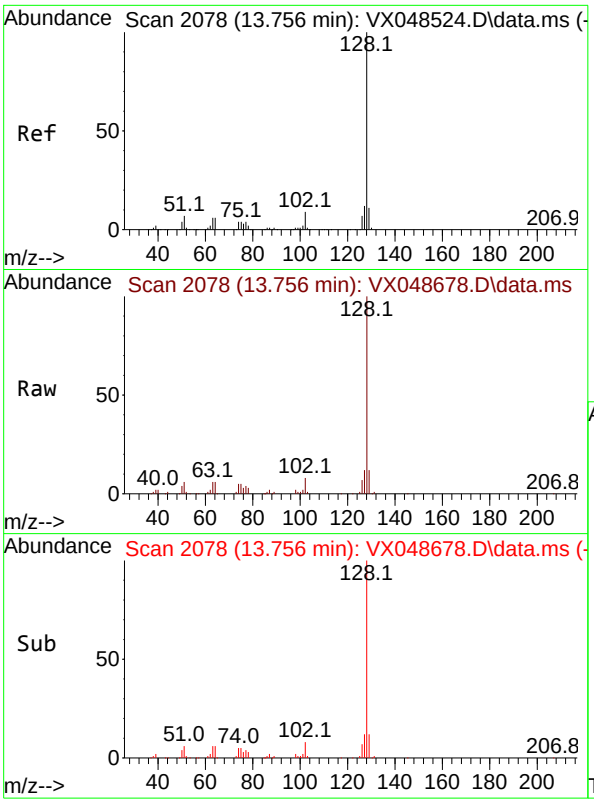


#89
n-Butylbenzene
Concen: 0.985 ug/l
RT: 12.317 min Scan# 1842
Delta R.T. 0.006 min
Lab File: VX048678.D
Acq: 25 Nov 2025 12:39

Tgt Ion: 91 Resp: 11693

Ion	Ratio	Lower	Upper
91	100		
92	45.7	27.2	81.5
134	0.0	13.0	39.0#



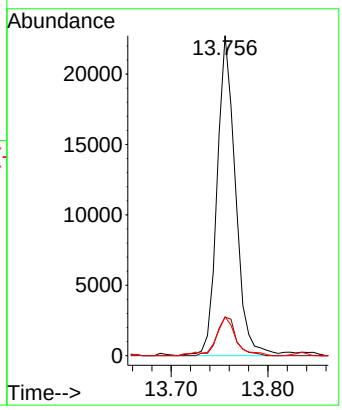


#95
Naphthalene
Concen: 2.086 ug/l
RT: 13.756 min Scan# 2
Delta R.T. -0.000 min
Lab File: VX048678.D
Acq: 25 Nov 2025 12:39

Instrument :
MSVOA_X
ClientSampleId :
MW2

Tgt Ion:128 Resp: 29896

Ion	Ratio	Lower	Upper
128	100		
127	12.6	10.1	15.1
129	13.2	8.7	13.1#



LSC Area Percent Report

Sample Results: **VX048678.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112525\
Data File : VX048678.D
Acq On : 25 Nov 2025 12:39
Operator : JC/MD
Sample : Q3715-01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
MW2

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Title : SW846 8260

Signal : TIC: VX048678.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.276	27	31	39	rVB	11743	14729	1.23%	0.126%
2	1.380	43	48	60	rBV	38379	47158	3.94%	0.405%
3	1.758	102	110	125	rBV	219269	349046	29.15%	2.997%
4	1.965	139	144	158	rBV2	29561	54586	4.56%	0.469%
5	2.221	181	186	193	rBV	20001	34987	2.92%	0.300%
6	2.349	200	207	217	rBV2	13594	33788	2.82%	0.290%
7	2.782	270	278	282	rBV	45868	107458	8.97%	0.923%
8	2.831	282	286	289	rVV	59187	122187	10.20%	1.049%
9	2.867	289	292	311	rVB2	52030	127738	10.67%	1.097%
10	3.105	321	331	348	rBV	80750	205427	17.15%	1.764%
11	3.447	379	387	393	rBV4	5586	13575	1.13%	0.117%
12	3.727	425	433	443	rBV3	12049	31672	2.64%	0.272%
13	3.837	443	451	461	rBV3	12796	35268	2.95%	0.303%
14	4.099	486	494	501	rBV4	10154	24644	2.06%	0.212%
15	4.203	505	511	518	rVV3	7097	19285	1.61%	0.166%
16	4.300	518	527	539	rVV2	69579	209621	17.50%	1.800%
17	4.416	540	546	555	rVB5	7218	21952	1.83%	0.189%
18	5.184	650	672	686	rBV6	14548	69718	5.82%	0.599%
19	5.373	693	703	712	rBV	113391	364981	30.48%	3.134%
20	5.452	712	716	722	rVV4	30645	93577	7.81%	0.804%
21	5.538	722	730	764	rVB	162436	627501	52.40%	5.389%
22	5.818	764	776	787	rBV6	14078	48252	4.03%	0.414%
23	5.940	787	796	806	rBV	116780	332504	27.77%	2.855%
24	6.153	822	831	837	rBV5	14673	54321	4.54%	0.466%
25	6.239	838	845	855	rVV3	38499	120658	10.08%	1.036%
26	6.342	856	862	874	rVB4	16644	51198	4.28%	0.440%
27	6.745	919	928	939	rBV	289871	772544	64.51%	6.634%
28	6.964	956	964	972	rVB3	7287	17511	1.46%	0.150%
29	7.159	986	996	1006	rVB2	29321	72845	6.08%	0.626%
30	7.361	1017	1029	1041	rBV5	31147	94960	7.93%	0.815%
31	7.549	1054	1060	1070	rBV5	6029	16322	1.36%	0.140%
32	7.641	1070	1075	1087	rVB3	7997	19238	1.61%	0.165%
33	7.757	1087	1094	1100	rBV3	6531	13628	1.14%	0.117%
34	7.867	1100	1112	1119	rBV9	8916	30785	2.57%	0.264%
35	7.970	1119	1129	1142	rVB3	26288	69434	5.80%	0.596%
36	8.092	1142	1149	1153	rBV	42903	91585	7.65%	0.786%

Sample Results: **VX048678.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112525\
Data File : VX048678.D
Acq On : 25 Nov 2025 12:39
Operator : JC/MD
Sample : Q3715-01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
MW2

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Title : SW846 8260

37	8.177	1160	1163	1171	rVB6	7282	15241	1.27%	0.131%
38	8.293	1176	1182	1190	rBV5	9594	20066	1.68%	0.172%
39	8.488	1208	1214	1224	rVB3	22875	44688	3.73%	0.384%
40	8.635	1224	1238	1247	rBV	615207	1080193	90.20%	9.276%
41	8.958	1287	1291	1296	rVB3	7367	12024	1.00%	0.103%
42	9.086	1305	1312	1317	rBV4	9595	18166	1.52%	0.156%
43	9.147	1317	1322	1332	rVB	26870	49802	4.16%	0.428%
44	9.415	1361	1366	1369	rBV	6938	12201	1.02%	0.105%
45	9.482	1374	1377	1384	rVB6	7726	16104	1.34%	0.138%
46	9.744	1413	1420	1426	rBV4	7572	13033	1.09%	0.112%
47	10.037	1462	1468	1483	rBV	778036	1126097	94.04%	9.670%
48	10.177	1487	1491	1499	rVV	30557	48470	4.05%	0.416%
49	10.287	1500	1509	1515	rVB	19919	38725	3.23%	0.333%
50	10.945	1611	1617	1625	rBV	144892	193164	16.13%	1.659%
51	11.061	1631	1636	1649	rBV	608617	857679	71.62%	7.365%
52	11.287	1668	1673	1683	rVB	304597	382509	31.94%	3.285%
53	11.384	1683	1689	1694	rVV	10772	17291	1.44%	0.148%
54	11.598	1719	1724	1731	rVB	28969	40828	3.41%	0.351%
55	11.848	1758	1765	1767	rBV	30396	42114	3.52%	0.362%
56	11.872	1767	1769	1773	rVB	38855	41907	3.50%	0.360%
57	12.000	1785	1790	1799	rBV	862830	1197513	100.00%	10.284%
58	12.158	1813	1816	1821	rVB	10234	13168	1.10%	0.113%
59	12.225	1821	1827	1834	rBV2	402032	524551	43.80%	4.505%
60	12.293	1834	1838	1849	rVV2	35679	73453	6.13%	0.631%
61	12.384	1849	1853	1859	rVV	44705	56505	4.72%	0.485%
62	12.451	1859	1864	1870	rVB2	32016	46899	3.92%	0.403%
63	12.591	1880	1887	1891	rBV	140820	182488	15.24%	1.567%
64	12.628	1891	1893	1897	rVV2	25546	27236	2.27%	0.234%
65	12.677	1897	1901	1909	rVV	190046	265851	22.20%	2.283%
66	12.823	1920	1925	1931	rVB2	9321	14021	1.17%	0.120%
67	12.902	1931	1938	1944	rBV	181907	226796	18.94%	1.948%
68	13.012	1951	1956	1964	rVB3	12593	22704	1.90%	0.195%
69	13.116	1964	1973	1975	rBV3	17768	27626	2.31%	0.237%
70	13.152	1975	1979	1987	rVB	76164	106767	8.92%	0.917%
71	13.268	1987	1998	2004	rBV2	106072	156639	13.08%	1.345%
72	13.408	2016	2021	2025	rVB2	14920	21259	1.78%	0.183%
73	13.524	2036	2040	2043	rBV	23643	31446	2.63%	0.270%
74	13.561	2043	2046	2050	rVB3	21677	27126	2.27%	0.233%
75	13.622	2050	2056	2058	rBV2	12940	21147	1.77%	0.182%
76	13.756	2072	2078	2087	rVB	46305	62799	5.24%	0.539%

Sample Results: **VX048678.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112525\
Data File : VX048678.D
Acq On : 25 Nov 2025 12:39
Operator : JC/MD
Sample : Q3715-01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
MW2

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Title : SW846 8260

77	13.902	2094	2102	2106	rBV4	7624	12158	1.02%	0.104%
78	14.298	2162	2167	2173	rBV3	10027	16215	1.35%	0.139%
79	14.762	2238	2243	2251	rBV	17531	25639	2.14%	0.220%

Sum of corrected areas: 11644991

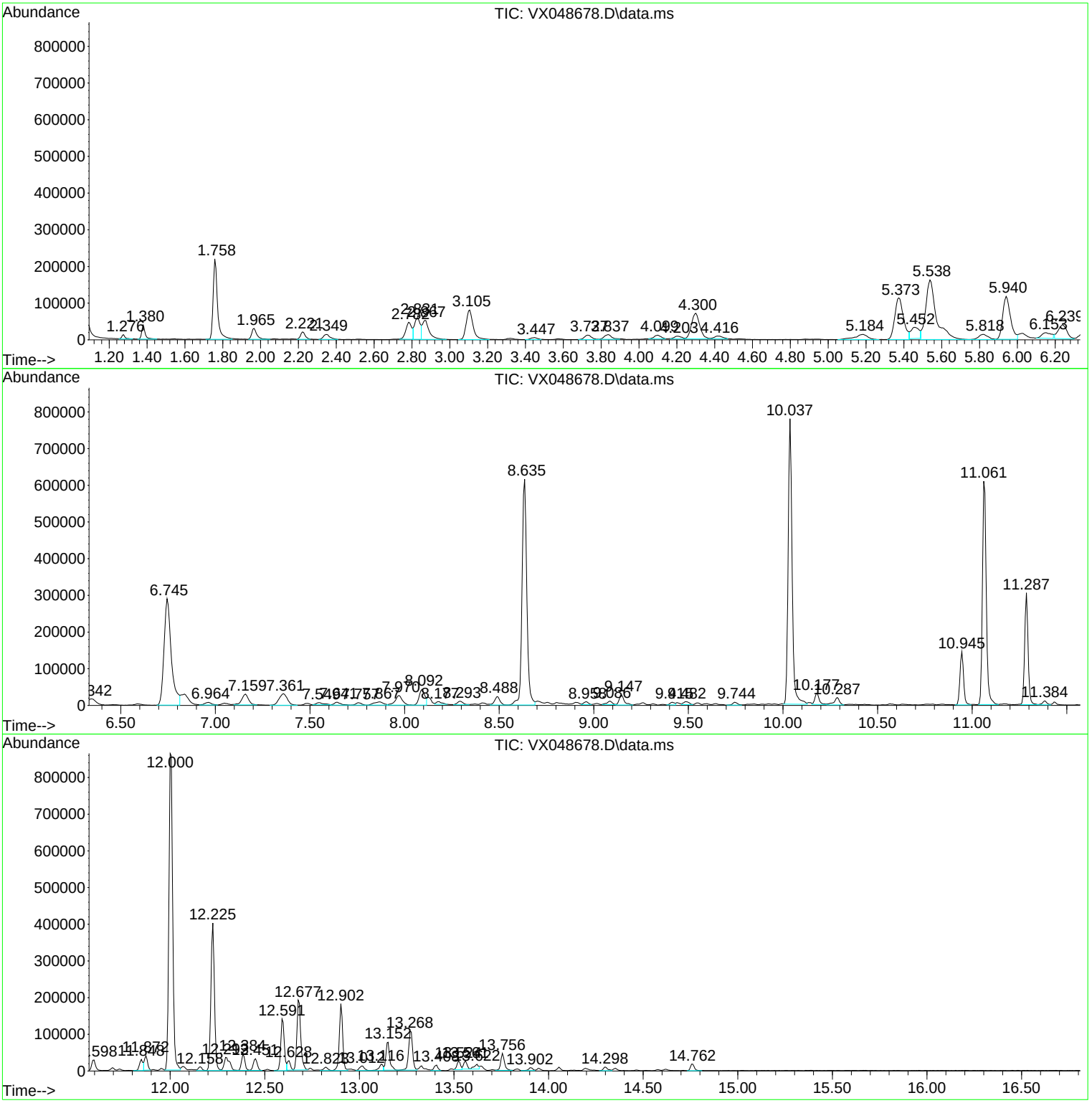
Sample Results: **VX048678.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112525\
Data File : VX048678.D
Acq On : 25 Nov 2025 12:39
Operator : JC/MD
Sample : Q3715-01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
MW2

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112525\
Data File : VX048678.D
Acq On : 25 Nov 2025 12:39
Operator : JC/MD
Sample : Q3715-01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
MW2

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260

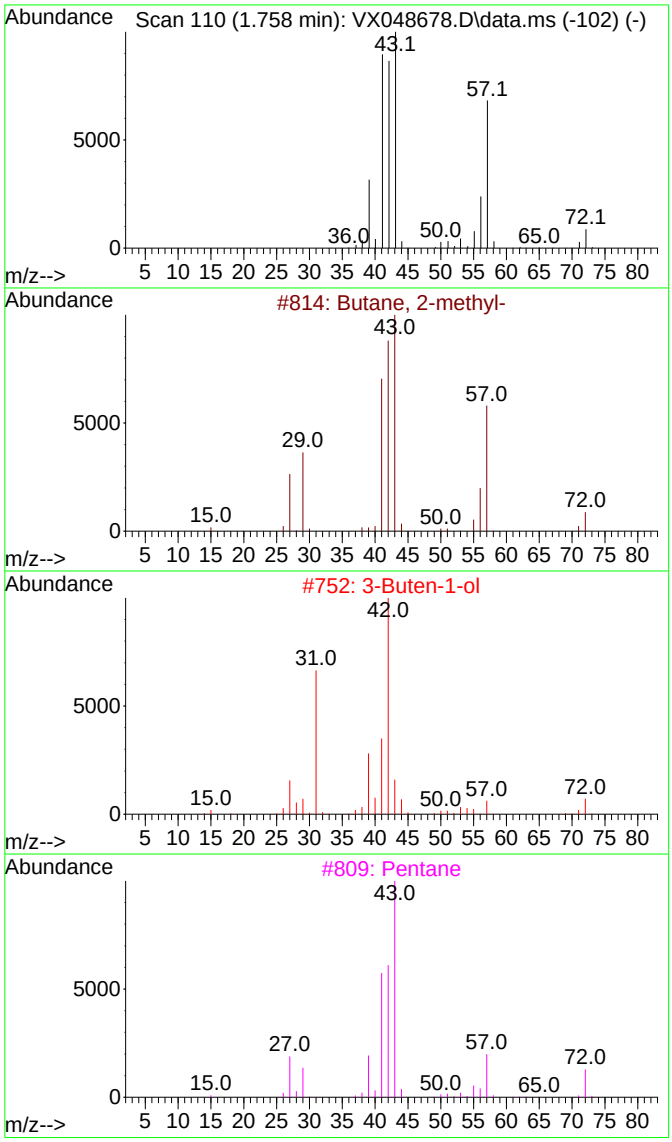
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

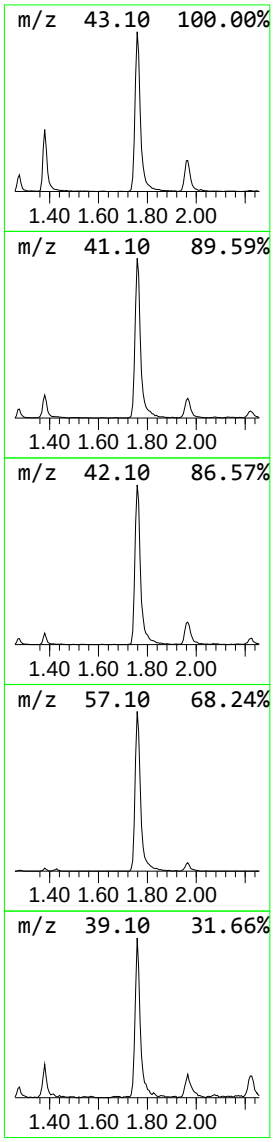
****

Peak Number 1 Butane, 2-methyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.758	27.81 ug/l	349046	Pentafluorobenzene	5.538

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 2-methyl-	72	C5H12	000078-78-4	90
2	3-Buten-1-ol	72	C4H8O	000627-27-0	38
3	Pentane	72	C5H12	000109-66-0	36
4	1-Butene	56	C4H8	000106-98-9	14
5	3-Buten-2-ol	72	C4H8O	000598-32-3	9





Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112525\
Data File : VX048678.D
Acq On : 25 Nov 2025 12:39
Operator : JC/MD
Sample : Q3715-01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
MW2

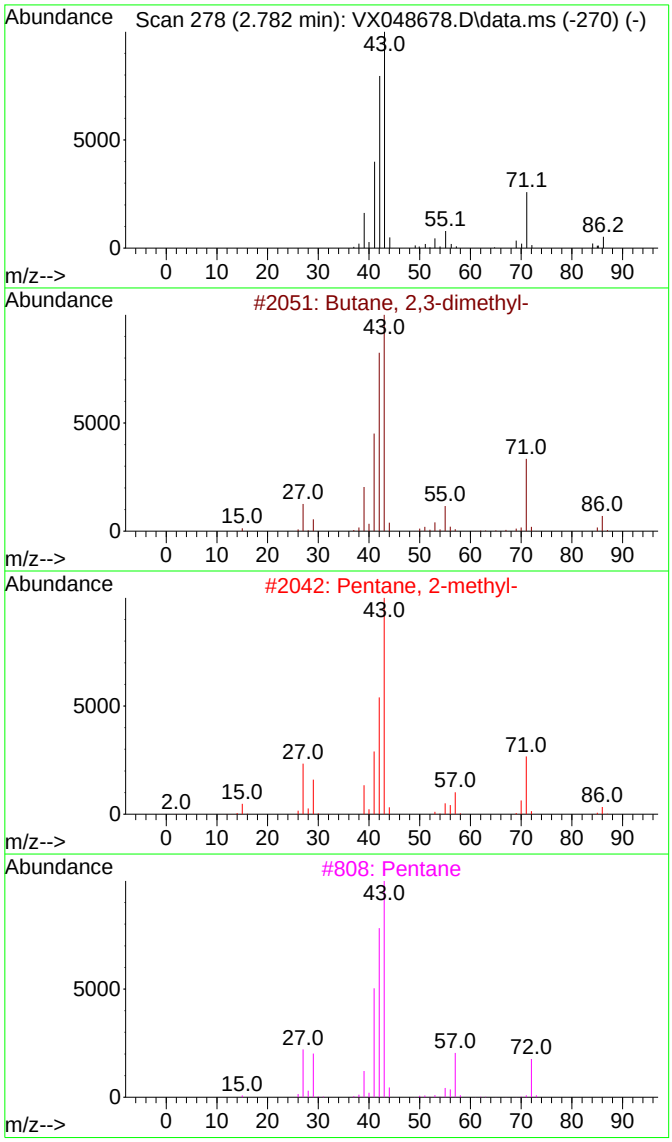
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260

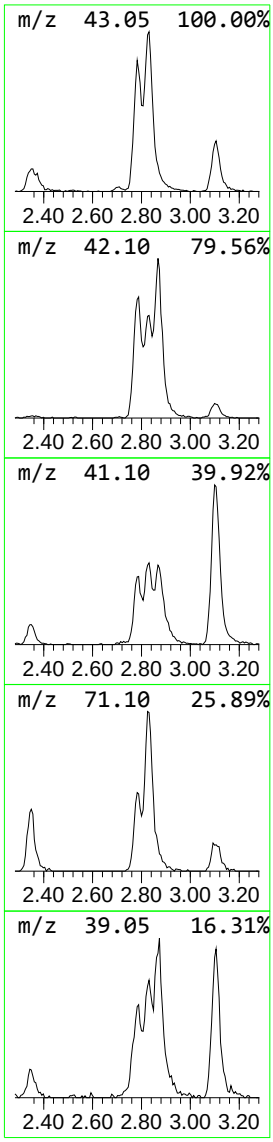
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 2 Butane, 2,3-dimethyl- Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.782	8.56 ug/l	107458	Pentafluorobenzene	5.538

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	90
2	Pentane, 2-methyl-	86	C6H14	000107-83-5	47
3	Pentane	72	C5H12	000109-66-0	36
4	Tetrahydrofuran	72	C4H8O	000109-99-9	36
5	Propanoyl chloride, 2-methyl-	106	C4H7ClO	000079-30-1	10





Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112525\
Data File : VX048678.D
Acq On : 25 Nov 2025 12:39
Operator : JC/MD
Sample : Q3715-01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
MW2

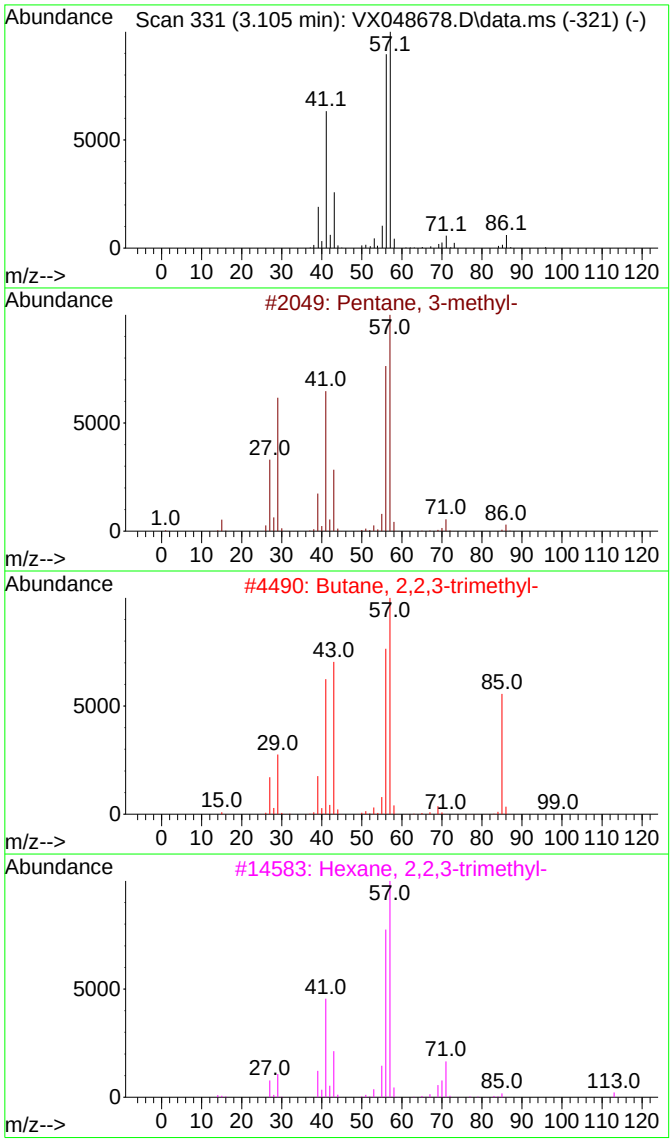
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260

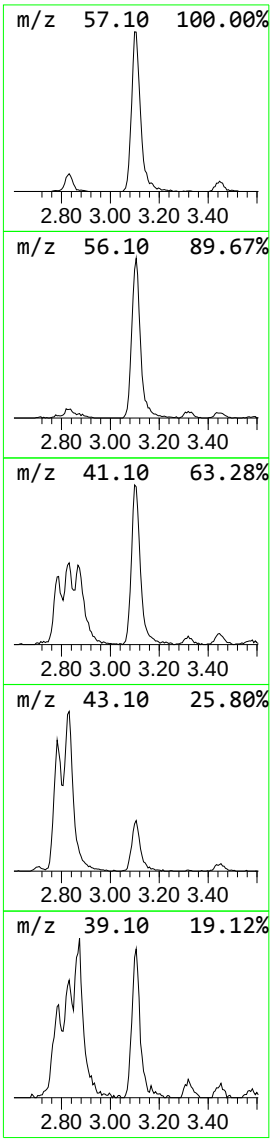
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 5 Pentane, 3-methyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.105	16.37 ug/l	205427	Pentafluorobenzene	5.538

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 3-methyl-	86	C6H14	000096-14-0	91
2	Butane, 2,2,3-trimethyl-	100	C7H16	000464-06-2	78
3	Hexane, 2,2,3-trimethyl-	128	C9H20	016747-25-4	72
4	Pentane, 3-ethyl-2,2-dimethyl-	128	C9H20	016747-32-3	56
5	Oxirane, (1-methylethyl)-	86	C5H10O	001438-14-8	42





Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112525\
Data File : VX048678.D
Acq On : 25 Nov 2025 12:39
Operator : JC/MD
Sample : Q3715-01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
MW2

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260

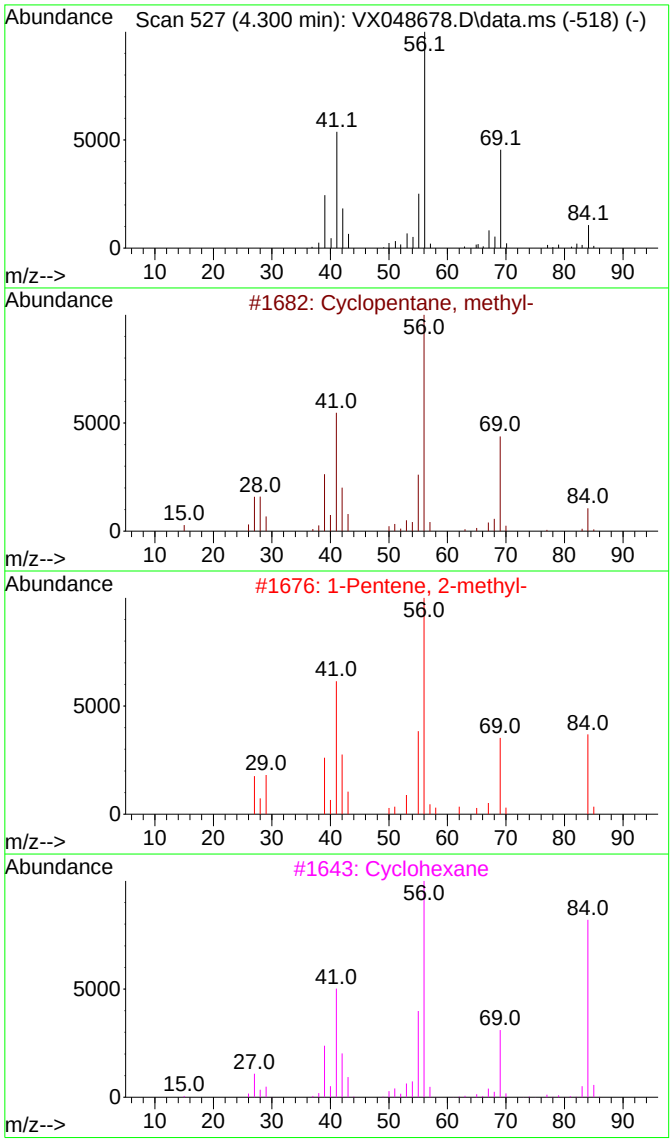
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

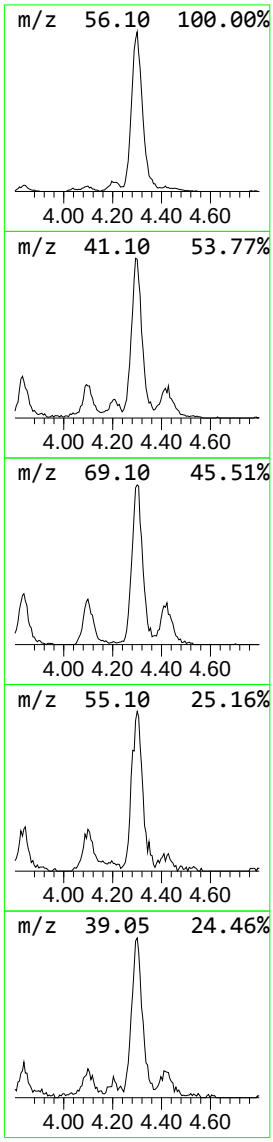
****

Peak Number 6 Cyclopentane, methyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.300	16.70 ug/l	209621	Pentafluorobenzene	5.538

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopentane, methyl-	84	C6H12	000096-37-7	91
2	1-Pentene, 2-methyl-	84	C6H12	000763-29-1	72
3	Cyclohexane	84	C6H12	000110-82-7	72
4	Cyclobutane, ethyl-	84	C6H12	004806-61-5	72
5	1H-Tetrazole, 5-methyl-	84	C2H4N4	004076-36-2	53





Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112525\
Data File : VX048678.D
Acq On : 25 Nov 2025 12:39
Operator : JC/MD
Sample : Q3715-01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
MW2

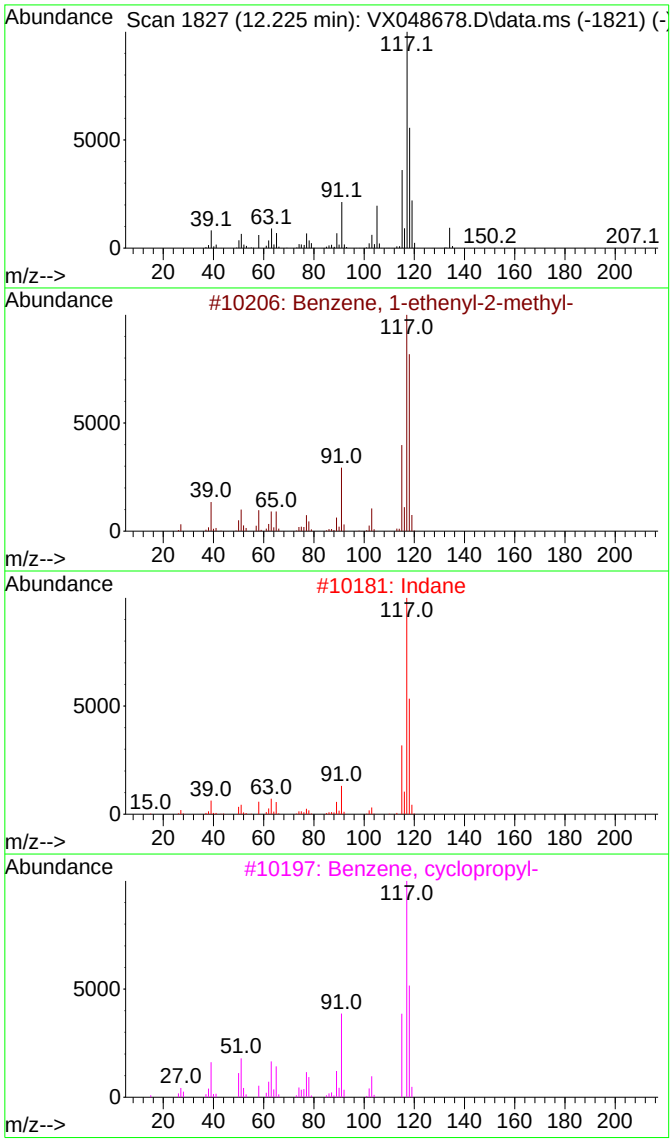
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260

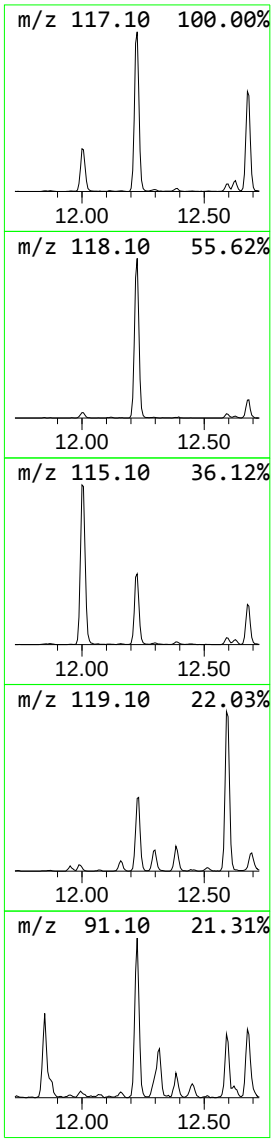
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 10 Benzene, 1-ethenyl-2-methyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.226	21.90 ug/l	524551	1,4-Dichlorobenzene-d4	12.006

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethenyl-2-methyl-	118	C9H10	000611-15-4	86
2	Indane	118	C9H10	000496-11-7	70
3	Benzene, cyclopropyl-	118	C9H10	000873-49-4	64
4	Benzene, 2-propenyl-	118	C9H10	000300-57-2	64
5	Benzene, 1-propenyl-	118	C9H10	000637-50-3	58





Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112525\
Data File : VX048678.D
Acq On : 25 Nov 2025 12:39
Operator : JC/MD
Sample : Q3715-01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
MW2

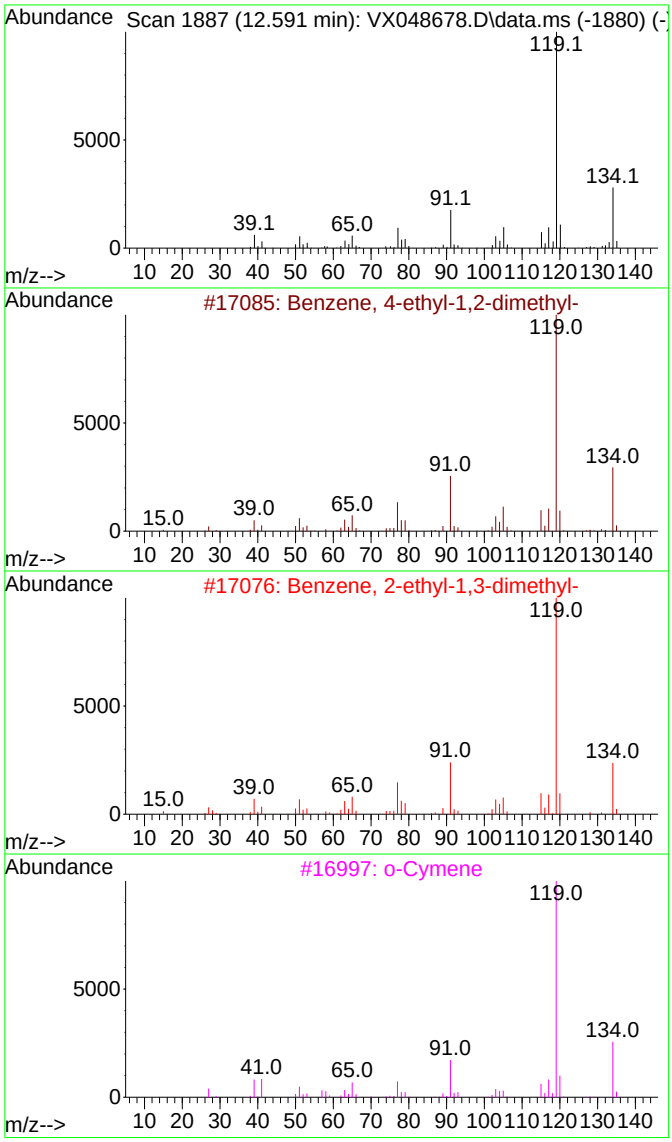
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260

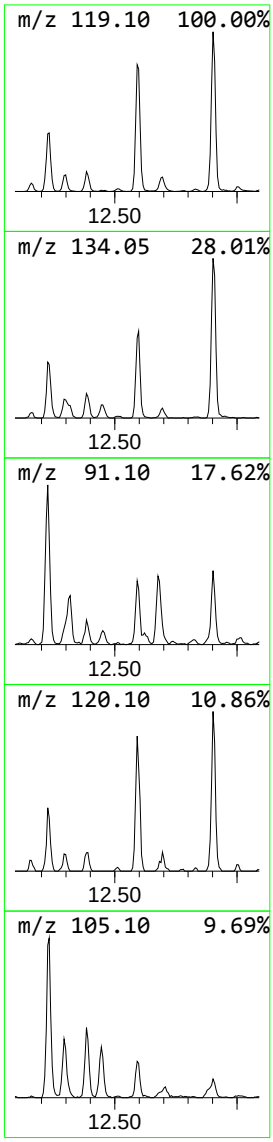
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 11 Benzene, 4-ethyl-1,2-dimethyl- Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.591	7.62 ug/l	182488	1,4-Dichlorobenzene-d4	12.006

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	96
2	Benzene, 2-ethyl-1,3-dimethyl-	134	C10H14	002870-04-4	95
3	o-Cymene	134	C10H14	000527-84-4	95
4	p-Cymene	134	C10H14	000099-87-6	95
5	Benzene, 1-ethyl-2,3-dimethyl-	134	C10H14	000933-98-2	95





Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112525\
Data File : VX048678.D
Acq On : 25 Nov 2025 12:39
Operator : JC/MD
Sample : Q3715-01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
MW2

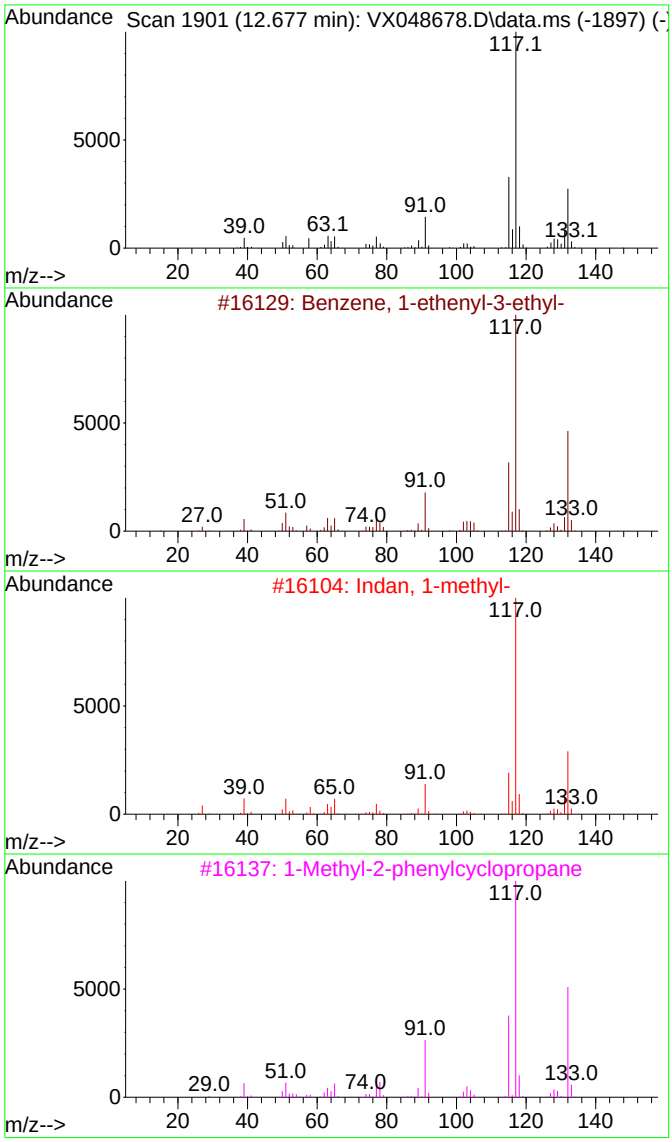
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260

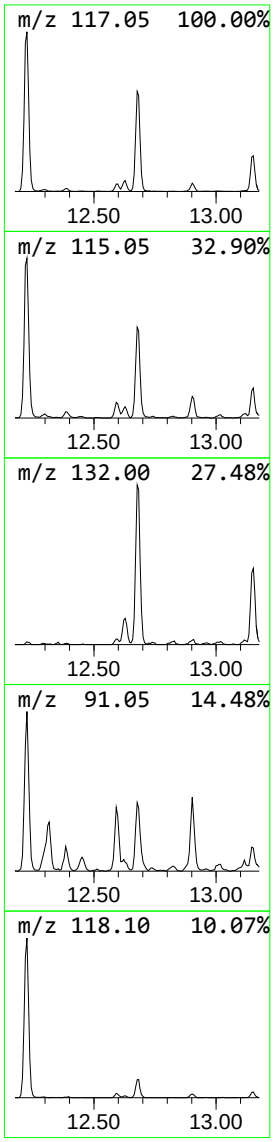
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 12 Benzene, 1-ethenyl-3-ethyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.677	11.10 ug/l	265851	1,4-Dichlorobenzene-d4	12.006

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethenyl-3-ethyl-	132	C10H12	007525-62-4	91
2	Indan, 1-methyl-	132	C10H12	000767-58-8	90
3	1-Methyl-2-phenylcyclopropane	132	C10H12	003145-76-4	90
4	1H-Indene, 2,3-dihydro-2-methyl-	132	C10H12	000824-63-5	83
5	3-Phenylbut-1-ene	132	C10H12	000934-10-1	80





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Data File : VX048678.D
Acq On : 25 Nov 2025 12:39
Operator : JC/MD
Sample : Q3715-01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
MW2

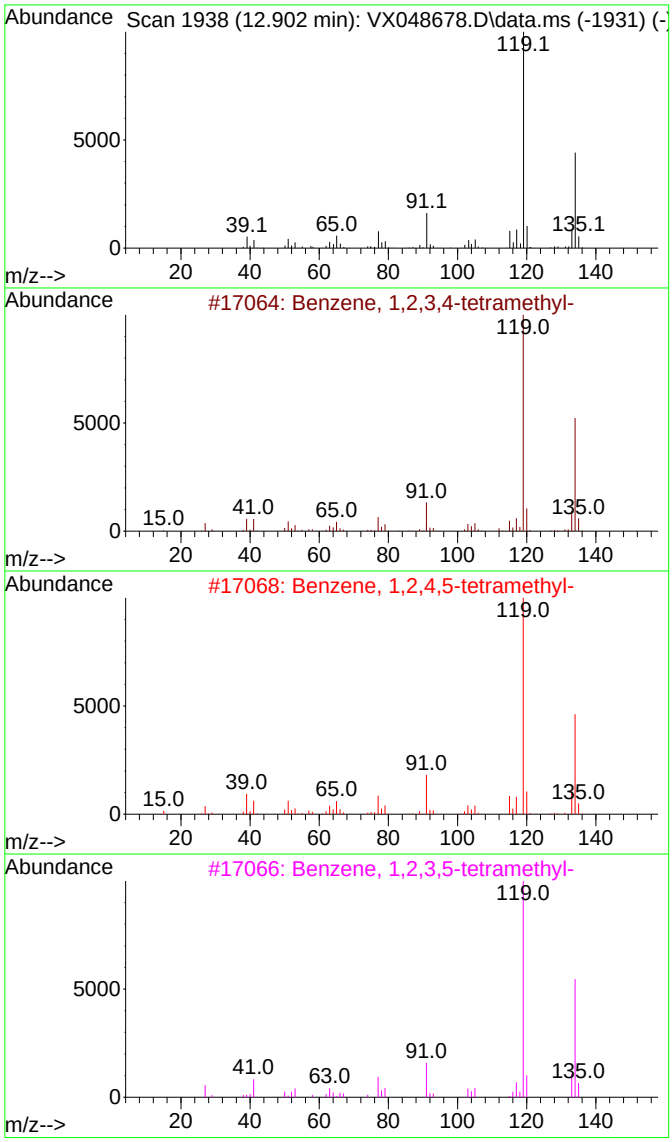
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260

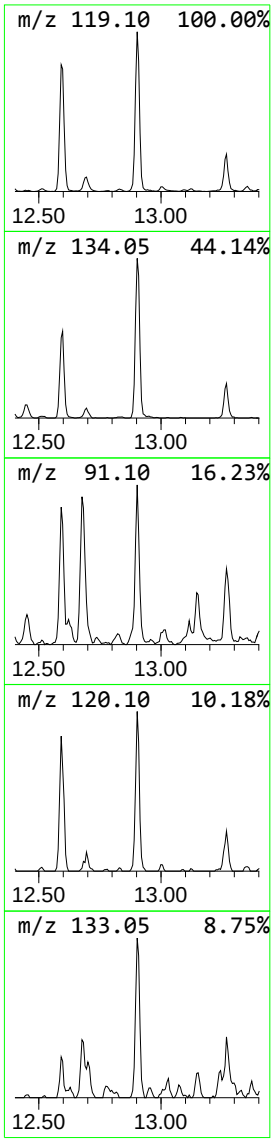
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 13 Benzene, 1,2,3,4-tetramethyl- Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.902	9.47 ug/l	226796	1,4-Dichlorobenzene-d4	12.006

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	97
2	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	97
3	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	96
4	Benzene, 1-ethyl-2,4-dimethyl-	134	C10H14	000874-41-9	94
5	o-Cymene	134	C10H14	000527-84-4	94





Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112525\
Data File : VX048678.D
Acq On : 25 Nov 2025 12:39
Operator : JC/MD
Sample : Q3715-01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
MW2

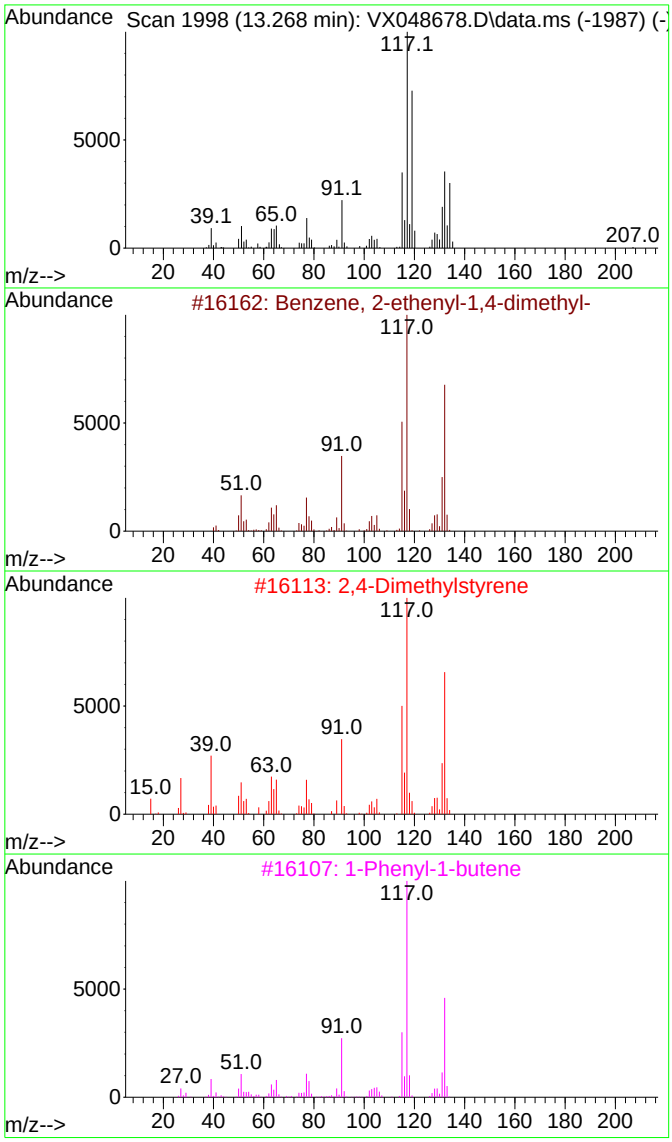
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260

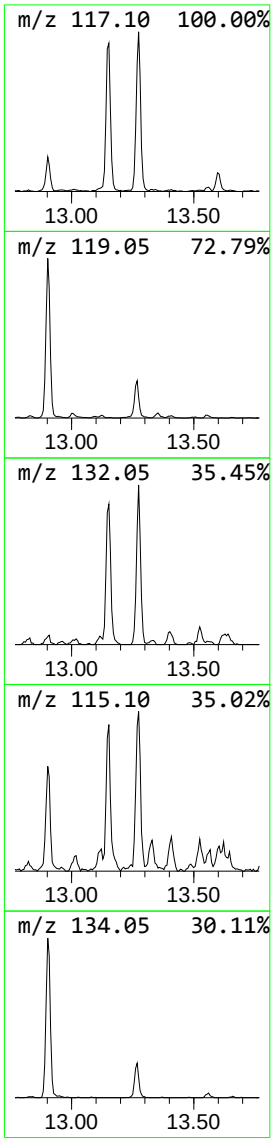
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 14 Benzene, 2-ethenyl-1,4-dime... Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.268	6.54 ug/l	156639	1,4-Dichlorobenzene-d4	12.006

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 2-ethenyl-1,4-dimethyl-	132	C10H12	002039-89-6	90
2	2,4-Dimethylstyrene	132	C10H12	002234-20-0	90
3	1-Phenyl-1-butene	132	C10H12	000824-90-8	70
4	Benzene, 2-ethenyl-1,3-dimethyl-	132	C10H12	002039-90-9	64
5	Benzene, 1-methyl-2-(2-propenyl)-	132	C10H12	001587-04-8	64





Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112525\
Data File : VX048678.D
Acq On : 25 Nov 2025 12:39
Operator : JC/MD
Sample : Q3715-01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
MW2

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260

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

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Butane, 2-methyl-	1.758	27.8	ug/l	349046	1	5.538	627501	50.0
Butane, 2,3-dim...	2.782	8.6	ug/l	107458	1	5.538	627501	50.0
Pentane, 3-methyl-	3.105	16.4	ug/l	205427	1	5.538	627501	50.0
Cyclopentane, m...	4.300	16.7	ug/l	209621	1	5.538	627501	50.0
Benzene, 1-ethe...	12.226	21.9	ug/l	524551	4	12.006	1197510	50.0
Benzene, 4-ethy...	12.591	7.6	ug/l	182488	4	12.006	1197510	50.0
Benzene, 1-ethe...	12.677	11.1	ug/l	265851	4	12.006	1197510	50.0
Benzene, 1,2,3,...	12.902	9.5	ug/l	226796	4	12.006	1197510	50.0
Benzene, 2-ethe...	13.268	6.5	ug/l	156639	4	12.006	1197510	50.0

Raw Data: **VN088375.D**

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

Report of Analysis

Client:	G Environmental			Date Collected:	11/24/25
Project:	Union			Date Received:	11/24/25
Client Sample ID:	MW6			SDG No.:	Q3715
Lab Sample ID:	Q3715-02			Matrix:	Water
Analytical Method:	8260D	Level:	LOW	% Solid:	0
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL	Test:	VOCMS Group1

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
TARGETS									
75-71-8	Dichlorodifluoromethane	0.88	U	4	0.88	4.00	ug/L	12/01/25 12:30	VN120125
74-87-3	Chloromethane	1.30	U	4	1.30	4.00	ug/L	12/01/25 12:30	VN120125
75-01-4	Vinyl Chloride	1.00	U	4	1.00	4.00	ug/L	12/01/25 12:30	VN120125
74-83-9	Bromomethane	5.80	U	4	5.80	20.0	ug/L	12/01/25 12:30	VN120125
75-00-3	Chloroethane	1.90	U	4	1.90	4.00	ug/L	12/01/25 12:30	VN120125
75-69-4	Trichlorofluoromethane	1.30	U	4	1.30	4.00	ug/L	12/01/25 12:30	VN120125
76-13-1	1,1,2-Trichlorotrifluoroethane	1.00	U	4	1.00	4.00	ug/L	12/01/25 12:30	VN120125
75-65-0	Tert butyl alcohol	22.0	U	4	22.0	100	ug/L	12/01/25 12:30	VN120125
75-35-4	1,1-Dichloroethene	0.92	U	4	0.92	4.00	ug/L	12/01/25 12:30	VN120125
67-64-1	Acetone	6.00	U	4	6.00	20.0	ug/L	12/01/25 12:30	VN120125
75-15-0	Carbon Disulfide	0.84	U	4	0.84	4.00	ug/L	12/01/25 12:30	VN120125
1634-04-4	Methyl tert-butyl Ether	0.64	U	4	0.64	4.00	ug/L	12/01/25 12:30	VN120125
79-20-9	Methyl Acetate	1.10	U	4	1.10	4.00	ug/L	12/01/25 12:30	VN120125
75-09-2	Methylene Chloride	1.10	U	4	1.10	4.00	ug/L	12/01/25 12:30	VN120125
156-60-5	trans-1,2-Dichloroethene	0.92	U	4	0.92	4.00	ug/L	12/01/25 12:30	VN120125
75-34-3	1,1-Dichloroethane	0.92	U	4	0.92	4.00	ug/L	12/01/25 12:30	VN120125
110-82-7	Cyclohexane	180		4	5.80	20.0	ug/L	12/01/25 12:30	VN120125
78-93-3	2-Butanone	39.5		4	3.90	20.0	ug/L	12/01/25 12:30	VN120125
56-23-5	Carbon Tetrachloride	1.00	U	4	1.00	4.00	ug/L	12/01/25 12:30	VN120125
156-59-2	cis-1,2-Dichloroethene	0.76	U	4	0.76	4.00	ug/L	12/01/25 12:30	VN120125
74-97-5	Bromochloromethane	0.88	U	4	0.88	4.00	ug/L	12/01/25 12:30	VN120125
67-66-3	Chloroform	1.00	U	4	1.00	4.00	ug/L	12/01/25 12:30	VN120125
71-55-6	1,1,1-Trichloroethane	0.80	U	4	0.80	4.00	ug/L	12/01/25 12:30	VN120125
108-87-2	Methylcyclohexane	170		4	0.64	4.00	ug/L	12/01/25 12:30	VN120125
71-43-2	Benzene	14.5		4	0.60	4.00	ug/L	12/01/25 12:30	VN120125
107-06-2	1,2-Dichloroethane	0.88	U	4	0.88	4.00	ug/L	12/01/25 12:30	VN120125
79-01-6	Trichloroethene	0.37	U	4	0.37	4.00	ug/L	12/01/25 12:30	VN120125
78-87-5	1,2-Dichloropropane	0.80	U	4	0.80	4.00	ug/L	12/01/25 12:30	VN120125
75-27-4	Bromodichloromethane	0.88	U	4	0.88	4.00	ug/L	12/01/25 12:30	VN120125
108-10-1	4-Methyl-2-Pentanone	2.70	U	4	2.70	20.0	ug/L	12/01/25 12:30	VN120125
108-88-3	Toluene	7.00		4	0.56	4.00	ug/L	12/01/25 12:30	VN120125
10061-02-6	t-1,3-Dichloropropene	0.68	U	4	0.68	4.00	ug/L	12/01/25 12:30	VN120125
10061-01-5	cis-1,3-Dichloropropene	0.64	U	4	0.64	4.00	ug/L	12/01/25 12:30	VN120125
79-00-5	1,1,2-Trichloroethane	0.84	U	4	0.84	4.00	ug/L	12/01/25 12:30	VN120125
591-78-6	2-Hexanone	3.60	U	4	3.60	20.0	ug/L	12/01/25 12:30	VN120125
124-48-1	Dibromochloromethane	0.72	U	4	0.72	4.00	ug/L	12/01/25 12:30	VN120125
106-93-4	1,2-Dibromoethane	0.60	U	4	0.60	4.00	ug/L	12/01/25 12:30	VN120125
127-18-4	Tetrachloroethene	0.92	U	4	0.92	4.00	ug/L	12/01/25 12:30	VN120125
108-90-7	Chlorobenzene	0.48	U	4	0.48	4.00	ug/L	12/01/25 12:30	VN120125
100-41-4	Ethyl Benzene	200		4	0.52	4.00	ug/L	12/01/25 12:30	VN120125
179601-23-1	m/p-Xylenes	110		4	0.96	8.00	ug/L	12/01/25 12:30	VN120125
95-47-6	o-Xylene	6.90		4	0.48	4.00	ug/L	12/01/25 12:30	VN120125
100-42-5	Styrene	0.60	U	4	0.60	4.00	ug/L	12/01/25 12:30	VN120125

Raw Data: **VN088375.D**

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

Report of Analysis

Client:	G Environmental	Date Collected:	11/24/25
Project:	Union	Date Received:	11/24/25
Client Sample ID:	MW6	SDG No.:	Q3715
Lab Sample ID:	Q3715-02	Matrix:	Water
Analytical Method:	8260D	Level: LOW	% Solid: 0
Sample Wt/Vol:	5 mL	Final Vol: 5000 uL	Test: VOCMS Group1

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
75-25-2	Bromoform	0.76	U	4	0.76	4.00	ug/L	12/01/25 12:30	VN120125
98-82-8	Isopropylbenzene	170		4	0.48	4.00	ug/L	12/01/25 12:30	VN120125
79-34-5	1,1,2,2-Tetrachloroethane	1.00	U	4	1.00	4.00	ug/L	12/01/25 12:30	VN120125
541-73-1	1,3-Dichlorobenzene	0.64	U	4	0.64	4.00	ug/L	12/01/25 12:30	VN120125
106-46-7	1,4-Dichlorobenzene	0.76	U	4	0.76	4.00	ug/L	12/01/25 12:30	VN120125
95-50-1	1,2-Dichlorobenzene	0.64	U	4	0.64	4.00	ug/L	12/01/25 12:30	VN120125
96-12-8	1,2-Dibromo-3-Chloropropane	2.10	U	4	2.10	4.00	ug/L	12/01/25 12:30	VN120125
120-82-1	1,2,4-Trichlorobenzene	0.80	U	4	0.80	4.00	ug/L	12/01/25 12:30	VN120125
87-61-6	1,2,3-Trichlorobenzene	0.80	U	4	0.80	4.00	ug/L	12/01/25 12:30	VN120125
SURROGATES									
17060-07-0	1,2-Dichloroethane-d4	52.1			70 (74) - 130 (125)	104%	SPK: 50		
1868-53-7	Dibromofluoromethane	49.3			70 (75) - 130 (124)	99%	SPK: 50		
2037-26-5	Toluene-d8	49.9			70 (86) - 130 (113)	100%	SPK: 50		
460-00-4	4-Bromofluorobenzene	55.0			70 (77) - 130 (121)	110%	SPK: 50		
INTERNAL STANDARDS		**Area Count**							
363-72-4	Pentafluorobenzene	190000							
540-36-3	1,4-Difluorobenzene	425000							
3114-55-4	Chlorobenzene-d5	411000							
3855-82-1	1,4-Dichlorobenzene-d4	195000							
TENTATIVE IDENTIFIED COMPOUNDS									
000078-78-4	Butane, 2-methyl-	300	J			3.27	ug/L		
000109-66-0	Pentane	120	J			3.66	ug/L		
000107-83-5	Pentane, 2-methyl-	250	J			5.33	ug/L		
000096-14-0	Pentane, 3-methyl-	150	J			5.80	ug/L		
000096-37-7	Cyclopentane, methyl-	240	J			7.31	ug/L		
103-65-1	n-propylbenzene	610	J			13.0	ug/L		
108-67-8	1,3,5-Trimethylbenzene	51.6	J			13.1	ug/L		
000611-14-3	Benzene, 1-ethyl-2-methyl-	140	J			13.3	ug/L		
98-06-6	tert-Butylbenzene	8.40	J			13.4	ug/L		
95-63-6	1,2,4-Trimethylbenzene	16.0	J			13.5	ug/L		
135-98-8	sec-Butylbenzene	58.7	J			13.6	ug/L		
99-87-6	p-Isopropyltoluene	18.3	J			13.7	ug/L		
000141-93-5	Benzene, 1,3-diethyl-	340	J			13.9	ug/L		
104-51-8	n-Butylbenzene	85.8	J			14.0	ug/L		
000934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	700	J			14.3	ug/L		
000527-53-7	Benzene, 1,2,3,5-tetramethyl-	390	J			14.6	ug/L		
000874-35-1	1H-Indene, 2,3-dihydro-5-methyl-	240	J			14.9	ug/L		
002039-89-6	Benzene, 2-ethenyl-1,4-dimethyl-	550	J			15.0	ug/L		
91-20-3	Naphthalene	80.3	J			15.6	ug/L		

Raw Data: **VN088375.D**

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

Report of Analysis

Client:	G Environmental			Date Collected:	11/24/25
Project:	Union			Date Received:	11/24/25
Client Sample ID:	MW6			SDG No.:	Q3715
Lab Sample ID:	Q3715-02			Matrix:	Water
Analytical Method:	8260D	Level:	LOW	% Solid:	0
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL	Test:	VOCMS Group1

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120125\
Data File : VN088375.D
Acq On : 01 Dec 2025 12:30
Operator : JC\MD
Sample : Q3715-02 4X
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 02 00:11:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:34:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
MW6

Manual Integrations APPROVED

Reviewed By :John Carlone 12/02/2025
Supervised By :Mahesh Dadoda 12/02/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.206	168	190391	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.083	114	425302	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.841	117	411286	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.765	152	194905	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.559	65	186996	52.138	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 104.280%			
35) Dibromofluoromethane	8.147	113	145277	49.291	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 98.580%			
50) Toluene-d8	10.541	98	547230	49.901	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 99.800%			
62) 4-Bromofluorobenzene	12.829	95	207102	55.040	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 110.080%			
Target Compounds						Qvalue
25) 2-Butanone	7.471	43	20607	9.882	ug/l	99
31) Cyclohexane	8.230	56	207628	44.017	ug/l #	93
39) Methylcyclohexane	9.577	83	202004	41.518	ug/l	94
40) Benzene	8.588	78	48442	3.629	ug/l	95
52) Toluene	10.606	92	13442	1.744	ug/l	99
67) Ethyl Benzene	11.941	91	789435	48.892	ug/l	100
68) m/p-Xylenes	12.041	106	170697	28.513	ug/l	99
69) o-Xylene	12.376	106	9872m	1.730	ug/l	
73) Isopropylbenzene	12.671	105	601978	41.772	ug/l	100
78) n-propylbenzene	13.012	91	2709447m	153.684	ug/l	
80) 1,3,5-Trimethylbenzene	13.147	105	154136	12.908	ug/l	98
83) tert-Butylbenzene	13.418	119	21234	2.092	ug/l	94
84) 1,2,4-Trimethylbenzene	13.459	105	47419	3.995	ug/l	96
85) sec-Butylbenzene	13.588	105	213874	14.666	ug/l #	64
86) p-Isopropyltoluene	13.706	119	54659	4.571	ug/l	95
89) n-Butylbenzene	14.029	91	249163m	21.459	ug/l	
95) Naphthalene	15.612	128	249692	20.078	ug/l	99

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

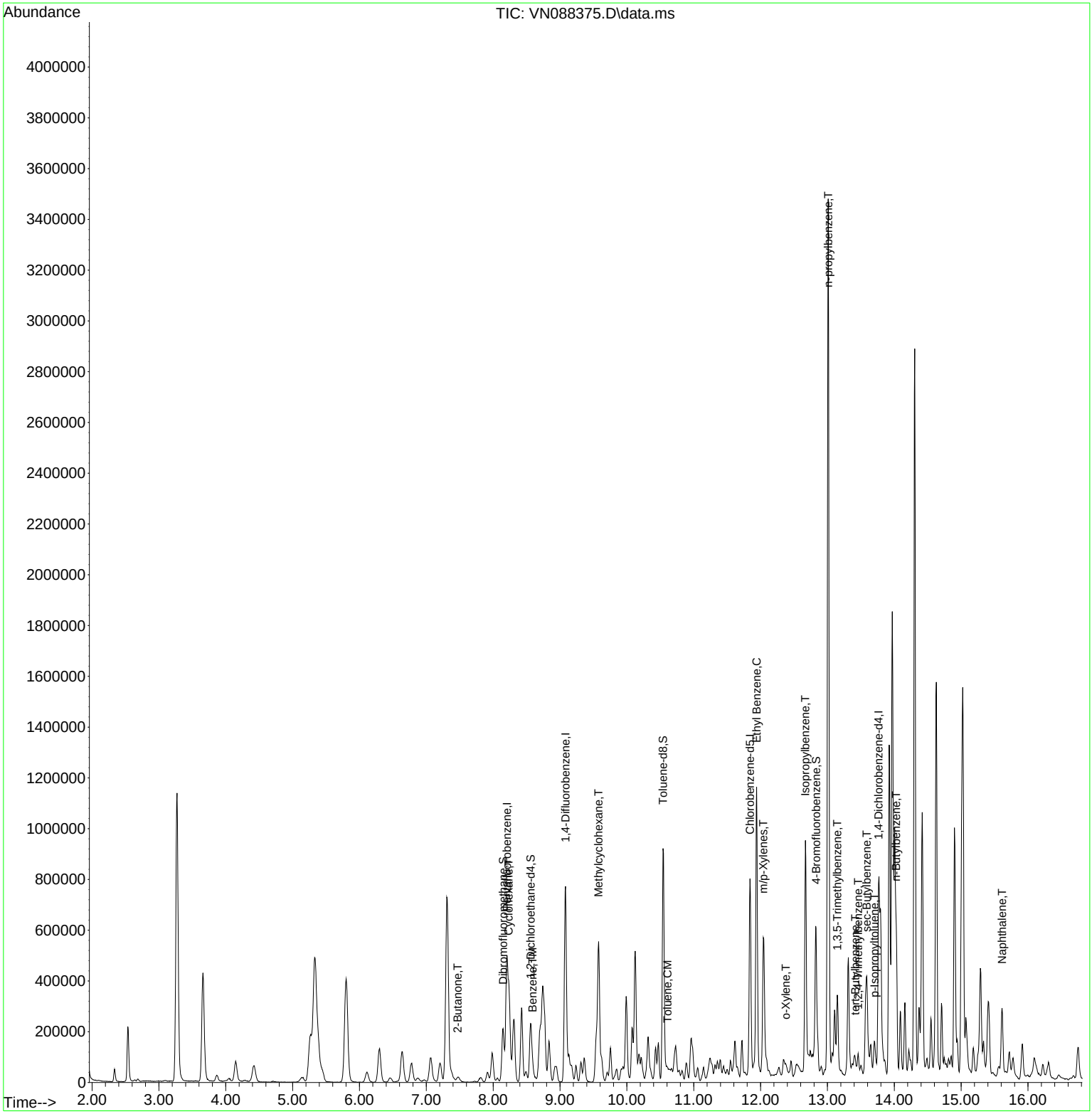
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120125\
Data File : VN088375.D
Acq On : 01 Dec 2025 12:30
Operator : JC\MD
Sample : Q3715-02 4X
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

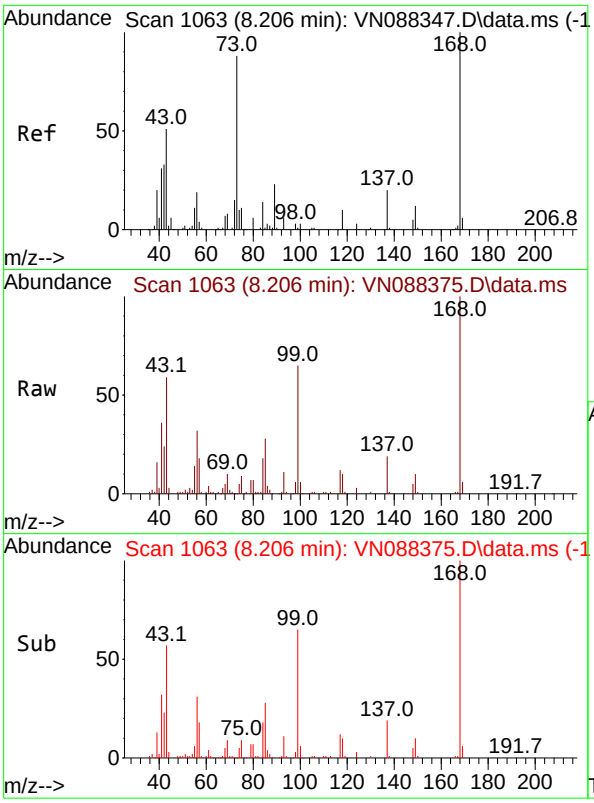
Quant Time: Dec 02 00:11:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:34:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
MW6

Manual Integrations APPROVED

Reviewed By :John Carlone 12/02/2025
Supervised By :Mahesh Dadoda 12/02/2025





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.206 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN088375.D
Acq: 01 Dec 2025 12:30

Tgt Ion:168 Resp: 19039

Ion	Ratio	Lower	Upper
168	100		
99	64.9	57.1	85.7

Instrument :
MSVOA_N
ClientSampleId :
MW6

Manual Integrations
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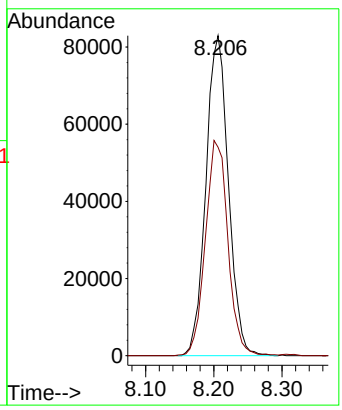
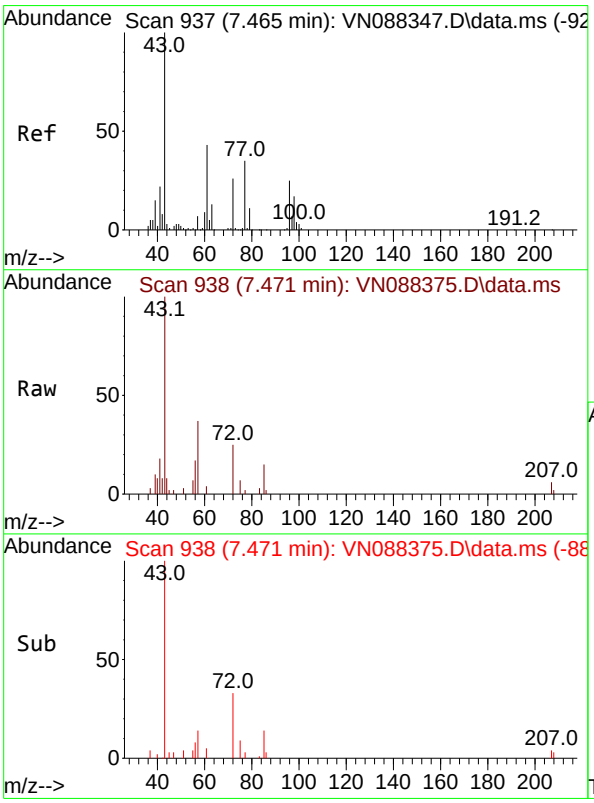
Reviewed By :John Carlone 12/02/2025
Supervised By :Mahesh Dadoda 12/02/2025

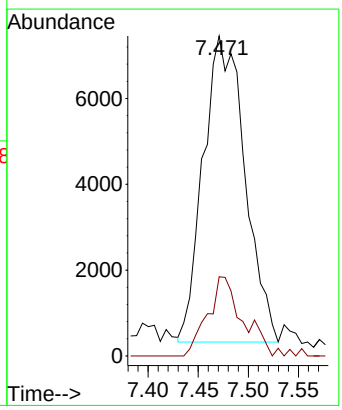


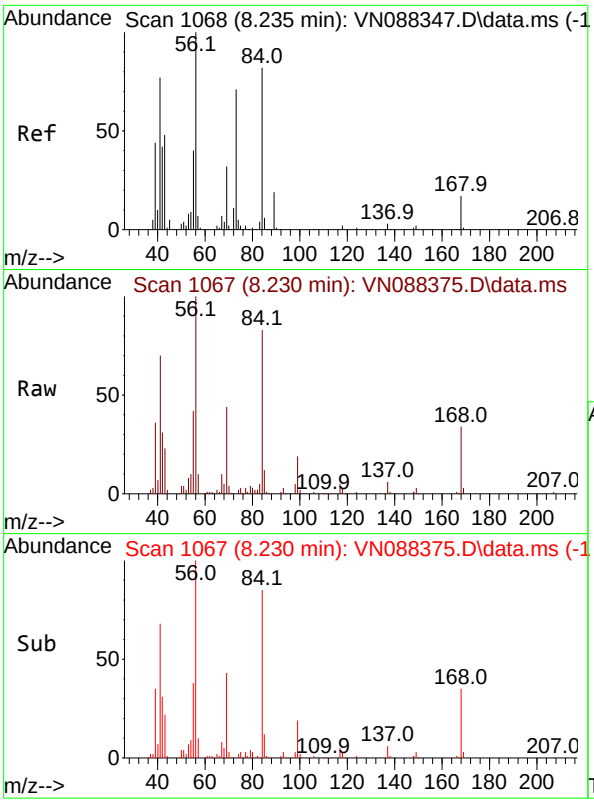


#25
2-Butanone
Concen: 9.882 ug/l
RT: 7.471 min Scan# 938
Delta R.T. 0.006 min
Lab File: VN088375.D
Acq: 01 Dec 2025 12:30

Tgt Ion: 43 Resp: 20607

Ion	Ratio	Lower	Upper
43	100		
72	25.9	20.5	30.7





#31
Cyclohexane
Concen: 44.017 ug/l
RT: 8.230 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN088375.D
Acq: 01 Dec 2025 12:30

Tgt Ion: 56 Resp: 20762

Ion	Ratio	Lower	Upper
56	100		
69	41.1	25.3	37.9
84	84.1	65.4	98.2

Instrument :
MSVOA_N
ClientSampleId :
MW6

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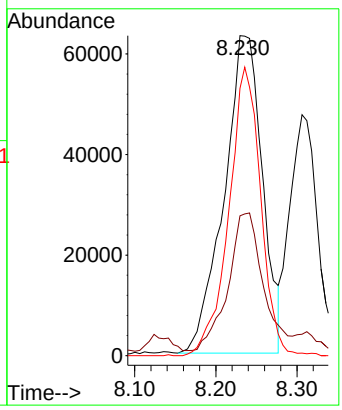
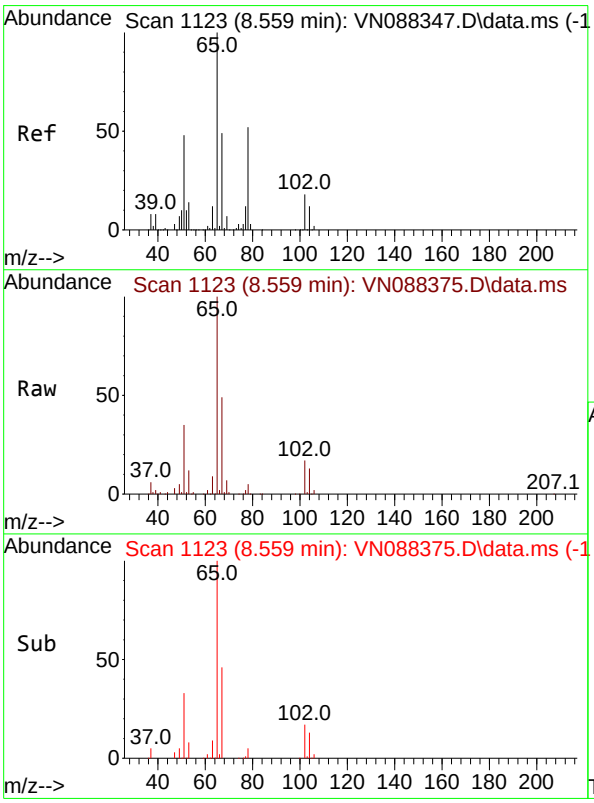
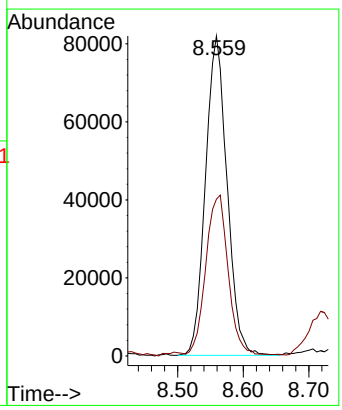


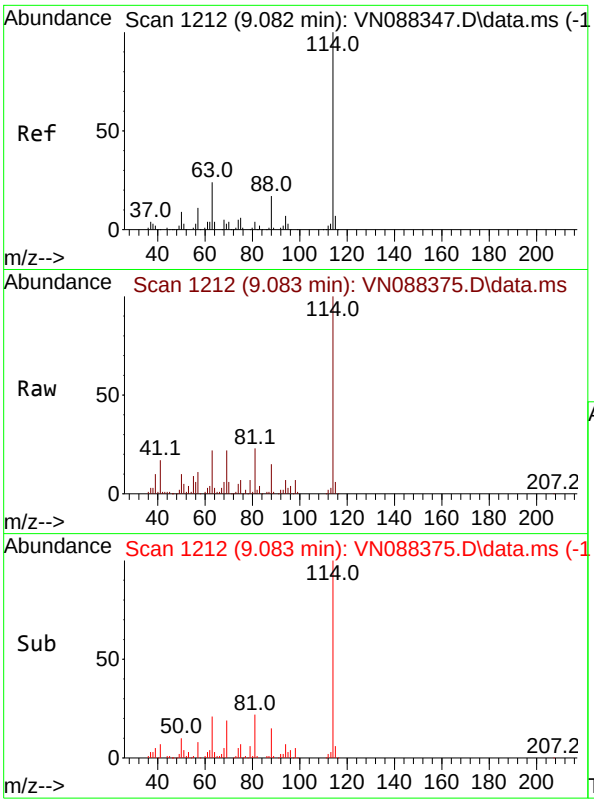


#33
1,2-Dichloroethane-d4
Concen: 52.138 ug/l
RT: 8.559 min Scan# 1123
Delta R.T. 0.000 min
Lab File: VN088375.D
Acq: 01 Dec 2025 12:30

Tgt Ion: 65 Resp: 186996

Ion	Ratio	Lower	Upper
65	100		
67	51.8	0.0	100.8





#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.083 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN088375.D
Acq: 01 Dec 2025 12:30

Tgt Ion:114 Resp: 42530

Ion	Ratio	Lower	Upper
114	100		
63	21.5	0.0	49.0
88	15.5	0.0	34.0

Instrument :
MSVOA_N
ClientSampleId :
MW6

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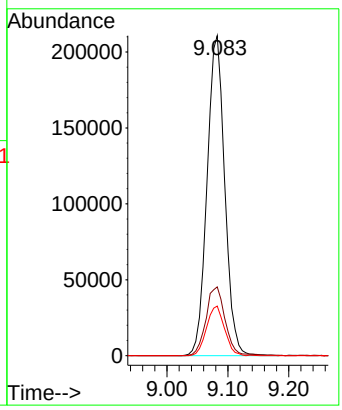
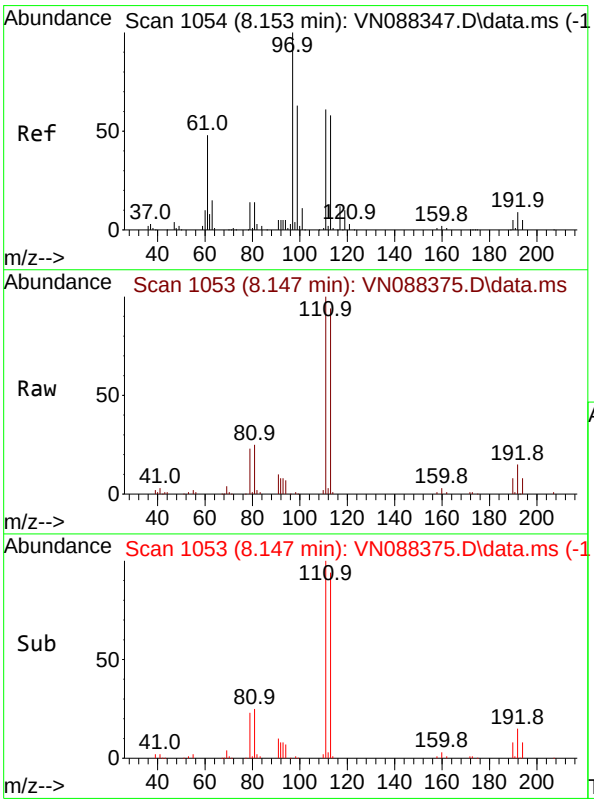
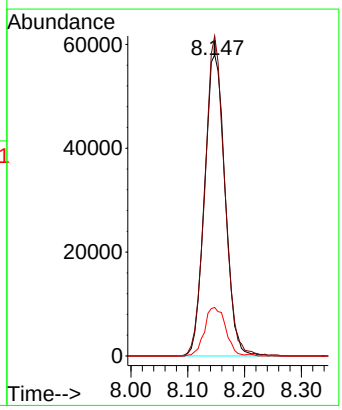


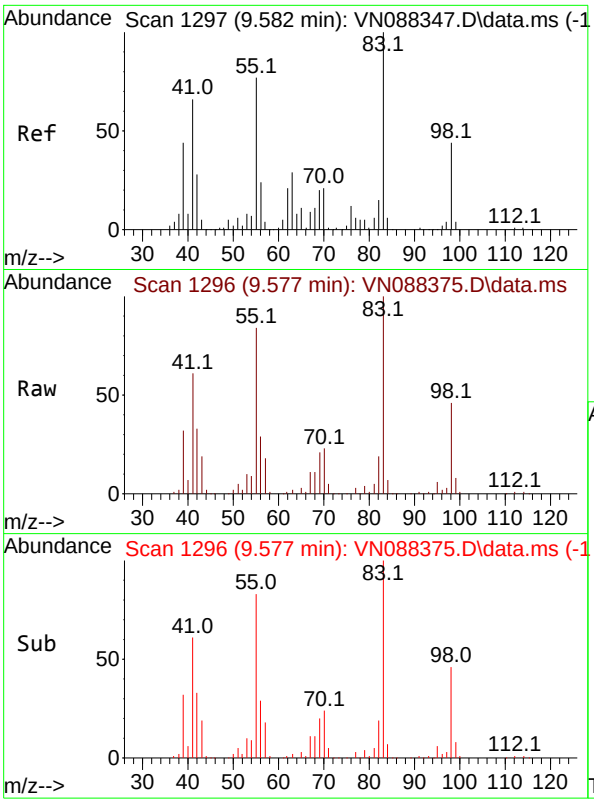


#35
Dibromofluoromethane
Concen: 49.291 ug/l
RT: 8.147 min Scan# 1053
Delta R.T. -0.006 min
Lab File: VN088375.D
Acq: 01 Dec 2025 12:30

Tgt Ion:113 Resp: 145277

Ion	Ratio	Lower	Upper
113	100		
111	102.1	82.5	123.7
192	16.6	12.8	19.2

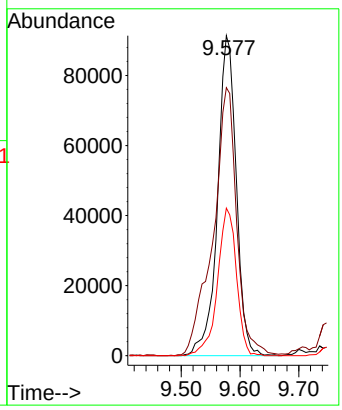




#39
Methylcyclohexane
Concen: 41.518 ug/l
RT: 9.577 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN088375.D
Acq: 01 Dec 2025 12:30

Tgt Ion: 83 Resp: 20200

Ion	Ratio	Lower	Upper
83	100		
55	83.4	61.6	92.4
98	46.1	35.3	52.9



Instrument :
MSVOA_N
ClientSampleId :
MW6

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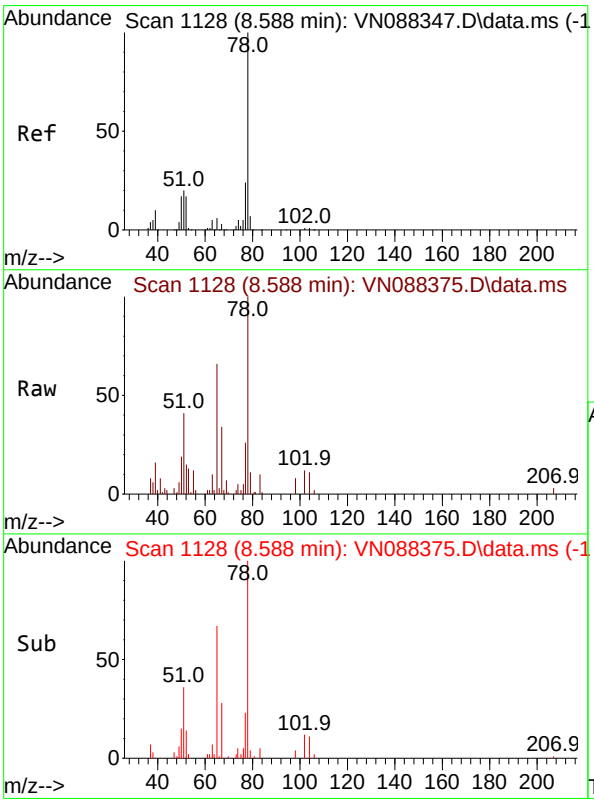
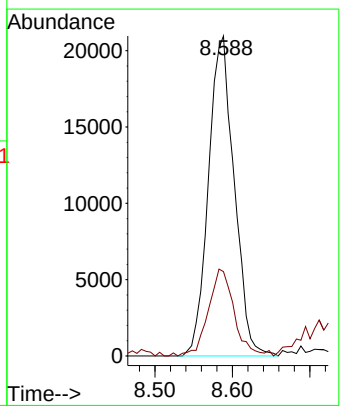
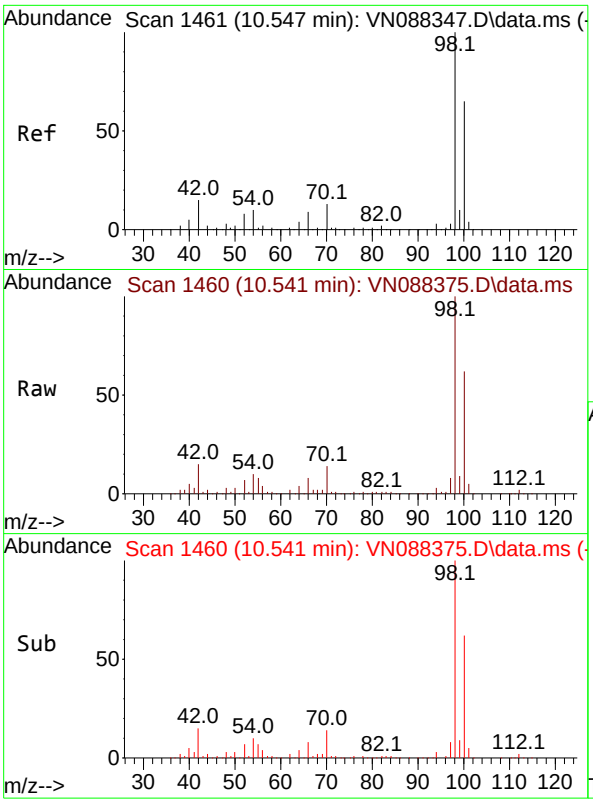


#40
Benzene
Concen: 3.629 ug/l
RT: 8.588 min Scan# 1128
Delta R.T. 0.000 min
Lab File: VN088375.D
Acq: 01 Dec 2025 12:30

Tgt Ion: 78 Resp: 48442

Ion	Ratio	Lower	Upper
78	100		
77	26.3	19.0	28.4





#50
Toluene-d8
Concen: 49.901 ug/l
RT: 10.541 min Scan# 14
Delta R.T. -0.006 min
Lab File: VN088375.D
Acq: 01 Dec 2025 12:30

Tgt Ion: 98 Resp: 54723

Ion	Ratio	Lower	Upper
98	100		
100	63.5	52.2	78.2

Instrument :
MSVOA_N
ClientSampleId :
MW6

Manual Integrations
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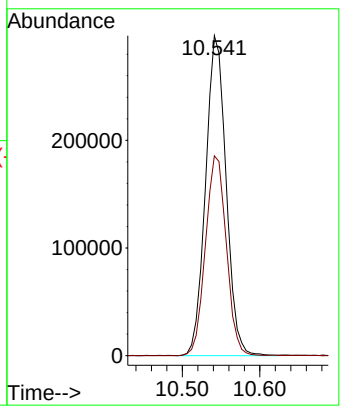
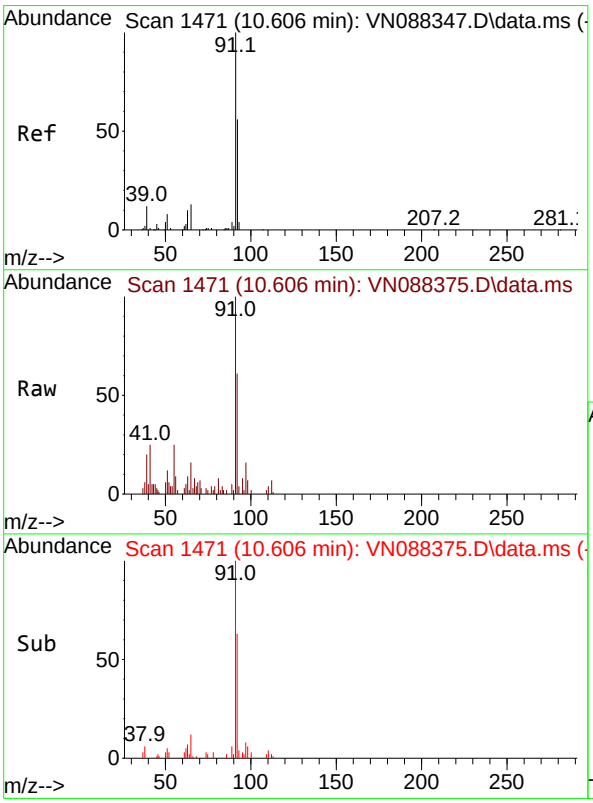
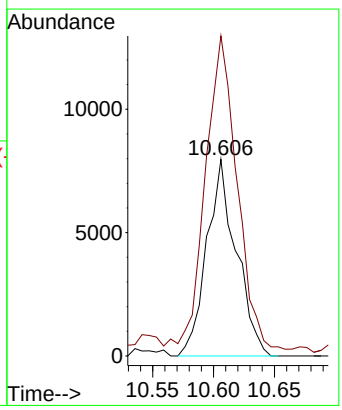


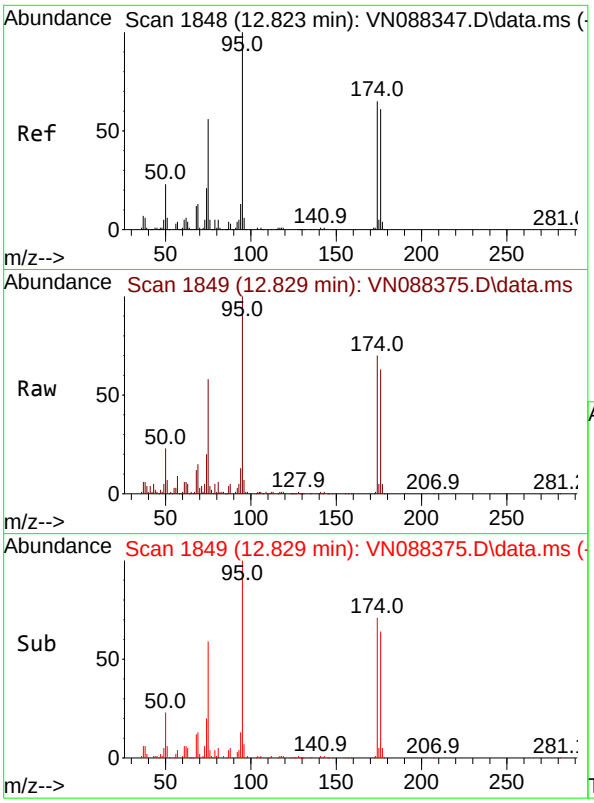


#52
Toluene
Concen: 1.744 ug/l
RT: 10.606 min Scan# 1471
Delta R.T. 0.000 min
Lab File: VN088375.D
Acq: 01 Dec 2025 12:30

Tgt Ion: 92 Resp: 13442

Ion	Ratio	Lower	Upper
92	100		
91	174.3	140.2	210.2





#62
4-Bromofluorobenzene
Concen: 55.040 ug/l
RT: 12.829 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN088375.D
Acq: 01 Dec 2025 12:30

Tgt Ion: 95 Resp: 20710

Ion	Ratio	Lower	Upper
95	100		
174	69.5	0.0	139.0
176	67.3	0.0	132.4

Instrument :
MSVOA_N
ClientSampleId :
MW6

Manual Integrations
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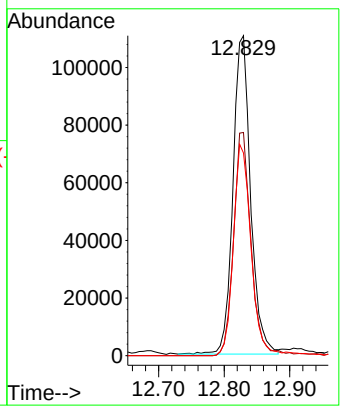
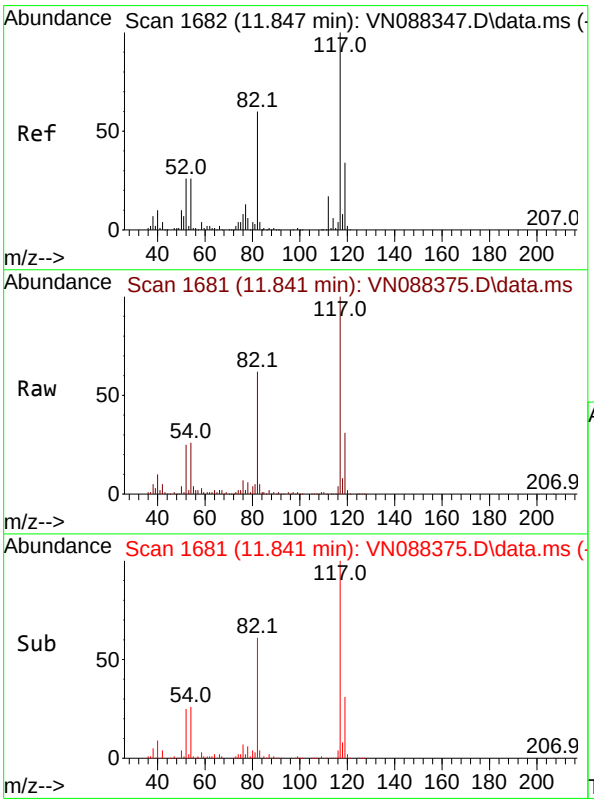
Supervised By :Mahesh Dadoda 12/02/2025

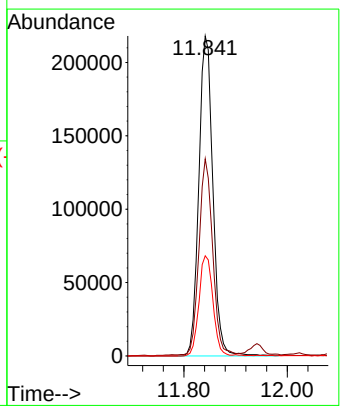


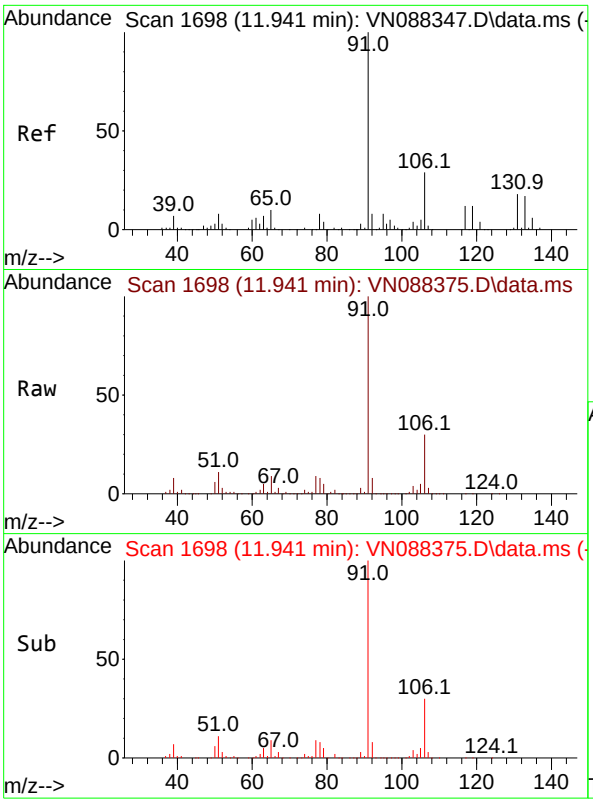


#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.841 min Scan# 1681
Delta R.T. -0.006 min
Lab File: VN088375.D
Acq: 01 Dec 2025 12:30

Tgt Ion:117 Resp: 411286

Ion	Ratio	Lower	Upper
117	100		
82	61.2	47.8	71.8
119	31.3	26.9	40.3





#67
Ethyl Benzene
Concen: 48.892 ug/l
RT: 11.941 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN088375.D
Acq: 01 Dec 2025 12:30

Tgt Ion: 91 Resp: 78943

Ion	Ratio	Lower	Upper
91	100		
106	29.6	23.6	35.4

Instrument :
MSVOA_N
ClientSampleId :
MW6

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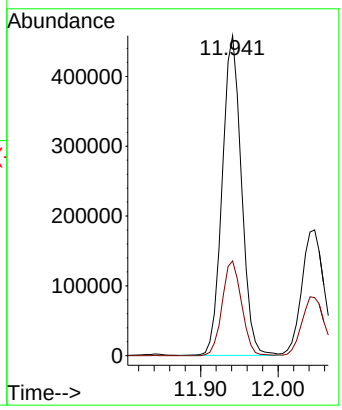
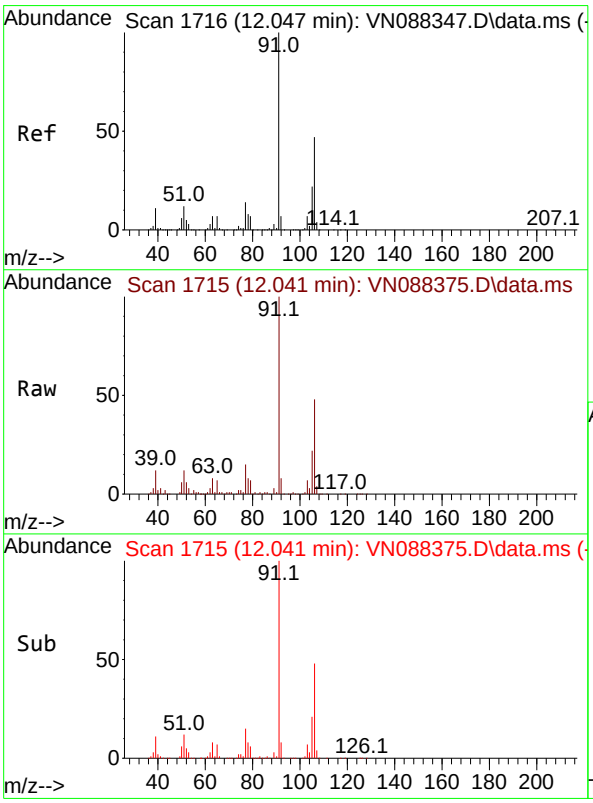
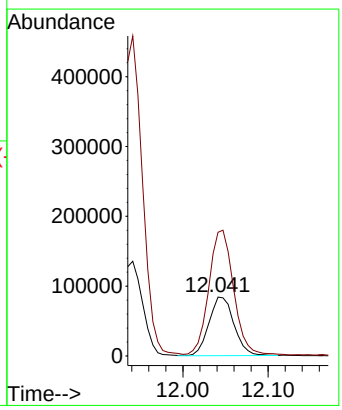


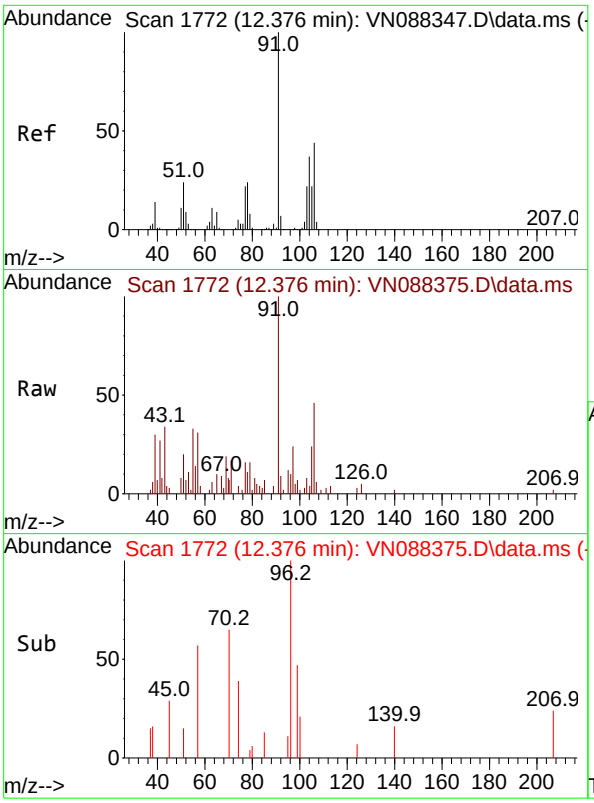


#68
m/p-Xylenes
Concen: 28.513 ug/l
RT: 12.041 min Scan# 1715
Delta R.T. -0.006 min
Lab File: VN088375.D
Acq: 01 Dec 2025 12:30

Tgt Ion:106 Resp: 170697

Ion	Ratio	Lower	Upper
106	100		
91	211.0	167.8	251.6





#69
o-Xylene
Concen: 1.730 ug/l m
RT: 12.376 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN088375.D
Acq: 01 Dec 2025 12:30

Tgt Ion:106 Resp: 987

Ion	Ratio	Lower	Upper
106	100		
91	0.0	112.9	338.7#

Instrument :
MSVOA_N
ClientSampleId :
MW6

Manual Integrations
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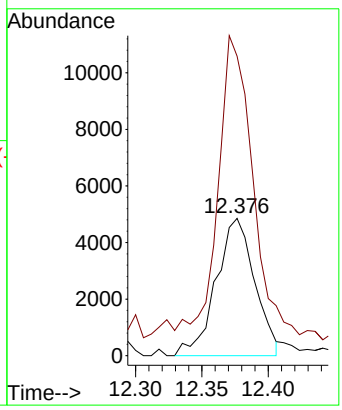
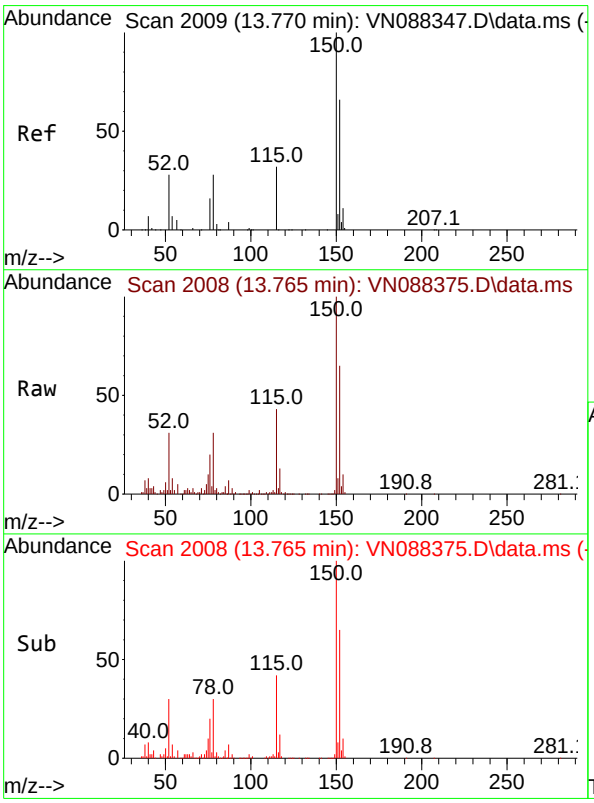
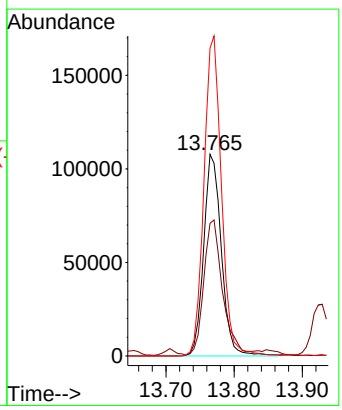


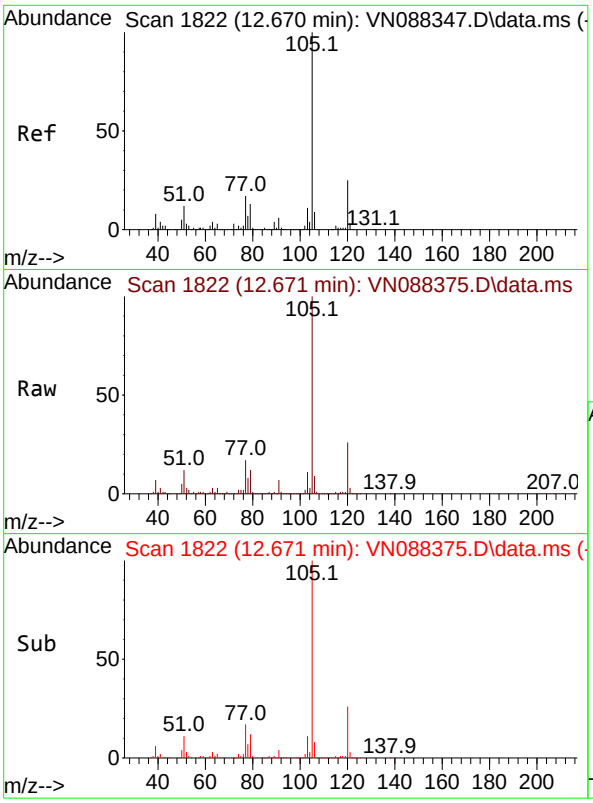


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.765 min Scan# 2008
Delta R.T. -0.006 min
Lab File: VN088375.D
Acq: 01 Dec 2025 12:30

Tgt Ion:152 Resp: 194905

Ion	Ratio	Lower	Upper
152	100		
115	70.4	33.0	98.9
150	157.4	0.0	349.0





#73
Isopropylbenzene
Concen: 41.772 ug/l
RT: 12.671 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN088375.D
Acq: 01 Dec 2025 12:30

Tgt Ion:105 Resp: 60197

Ion	Ratio	Lower	Upper
105	100		
120	25.5	12.8	38.3

Instrument :
MSVOA_N
ClientSampleId :
MW6

Manual Integrations
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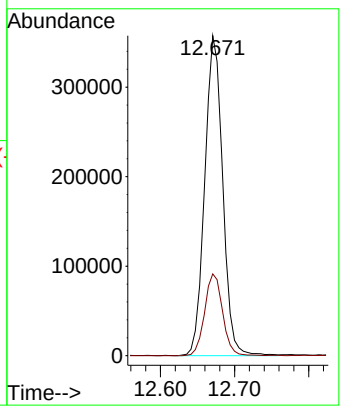
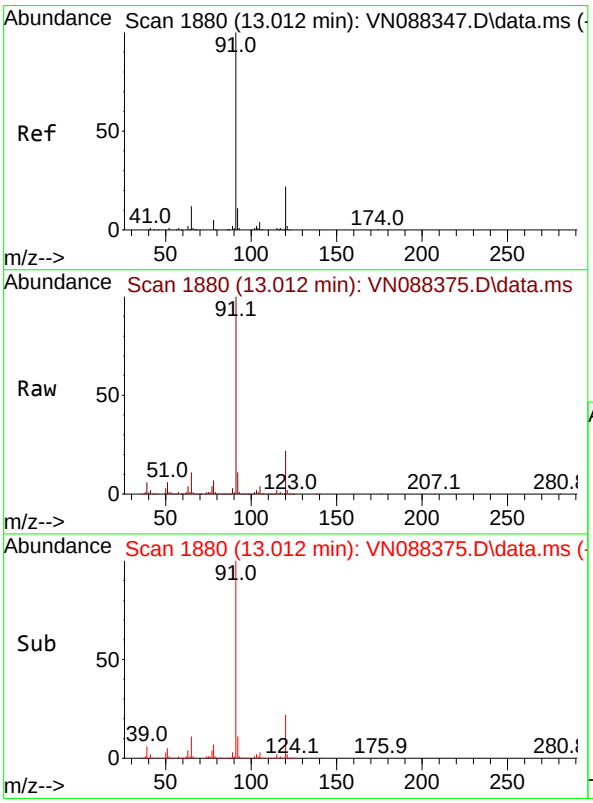
Supervised By :Mahesh Dadoda 12/02/2025

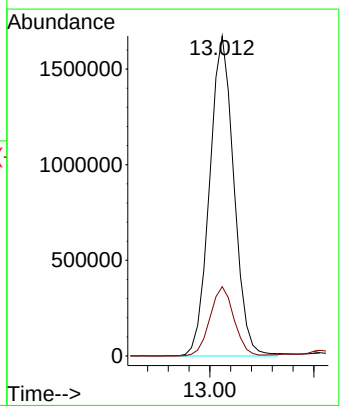


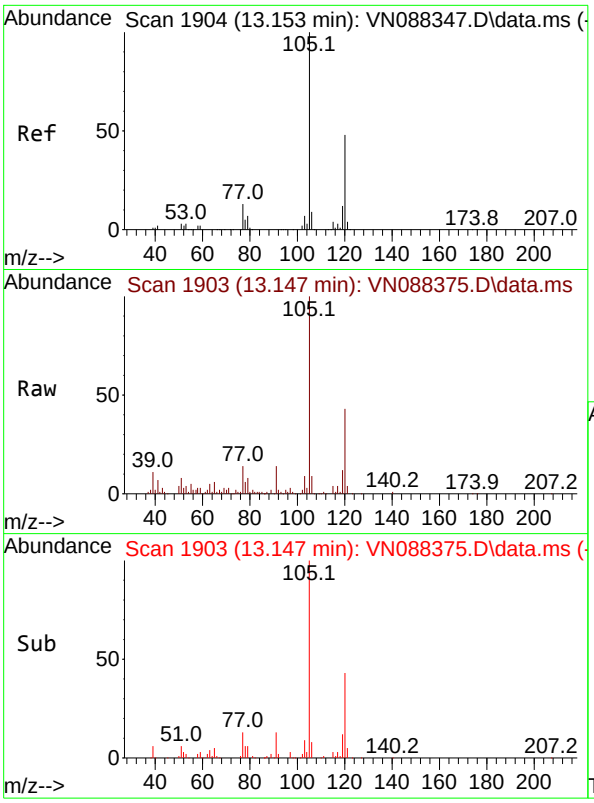


#78
n-propylbenzene
Concen: 153.684 ug/l m
RT: 13.012 min Scan# 1880
Delta R.T. 0.000 min
Lab File: VN088375.D
Acq: 01 Dec 2025 12:30

Tgt Ion: 91 Resp: 2709447

Ion	Ratio	Lower	Upper
91	100		
120	0.0	10.9	32.6#





#80
1,3,5-Trimethylbenzene
Concen: 12.908 ug/l
RT: 13.147 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN088375.D
Acq: 01 Dec 2025 12:30

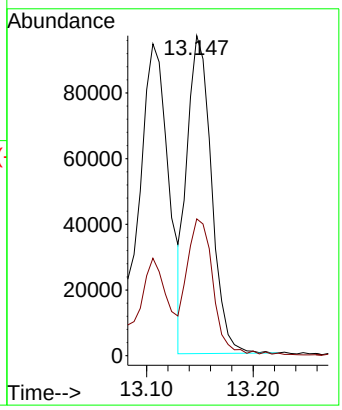
Tgt Ion:105 Resp: 15413

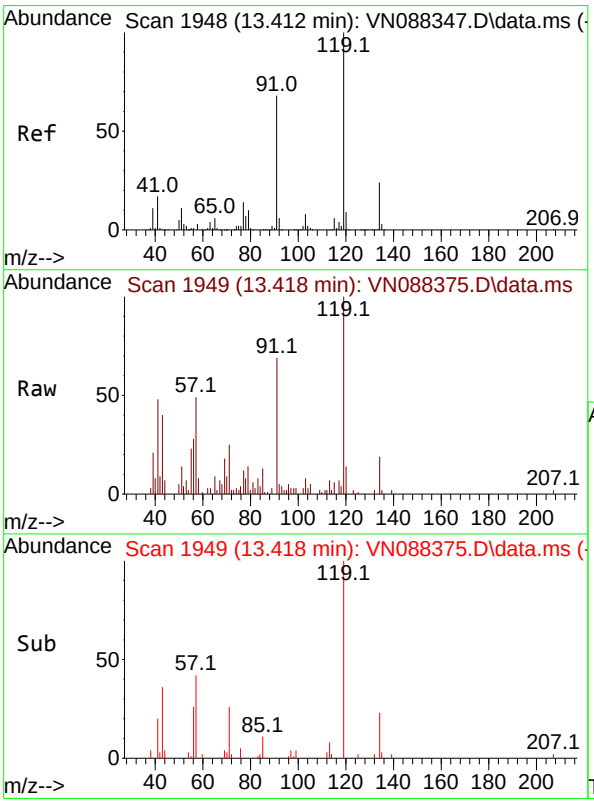
Ion	Ratio	Lower	Upper
105	100		
120	46.2	23.8	71.5

Instrument :
MSVOA_N
ClientSampleId :
MW6

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/02/2025
Supervised By :Mahesh Dadoda 12/02/2025

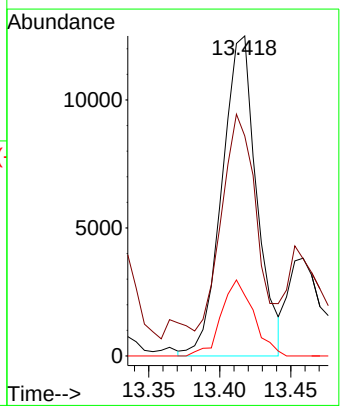


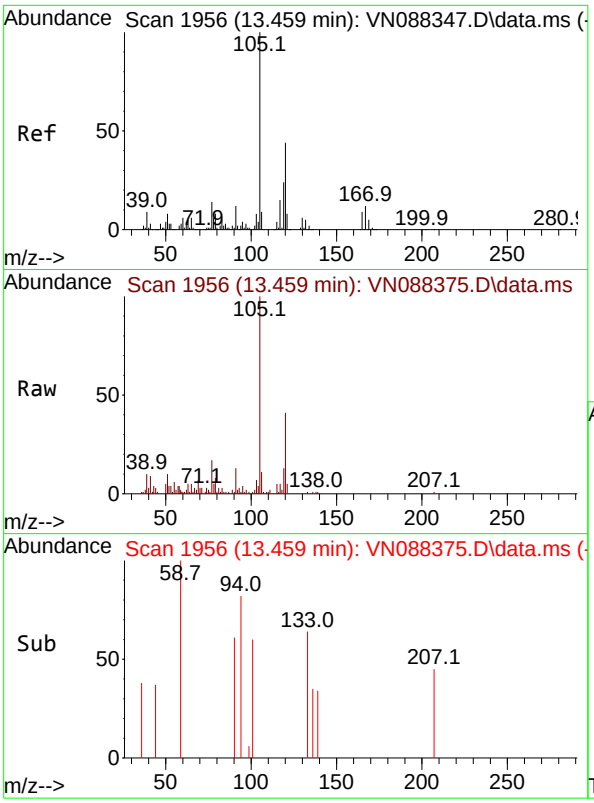


#83
tert-Butylbenzene
Concen: 2.092 ug/l
RT: 13.418 min Scan# 1949
Delta R.T. 0.006 min
Lab File: VN088375.D
Acq: 01 Dec 2025 12:30

Tgt Ion:119 Resp: 21234

Ion	Ratio	Lower	Upper
119	100		
91	65.9	35.1	105.3
134	22.0	12.8	38.4





#84
1,2,4-Trimethylbenzene
Concen: 3.995 ug/l
RT: 13.459 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN088375.D
Acq: 01 Dec 2025 12:30

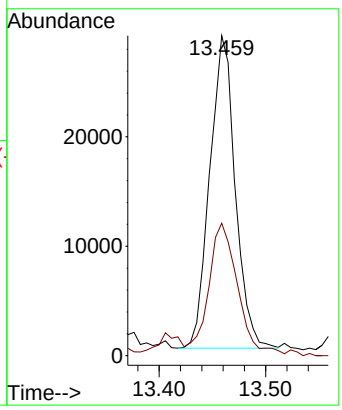
Tgt Ion:105 Resp: 4741

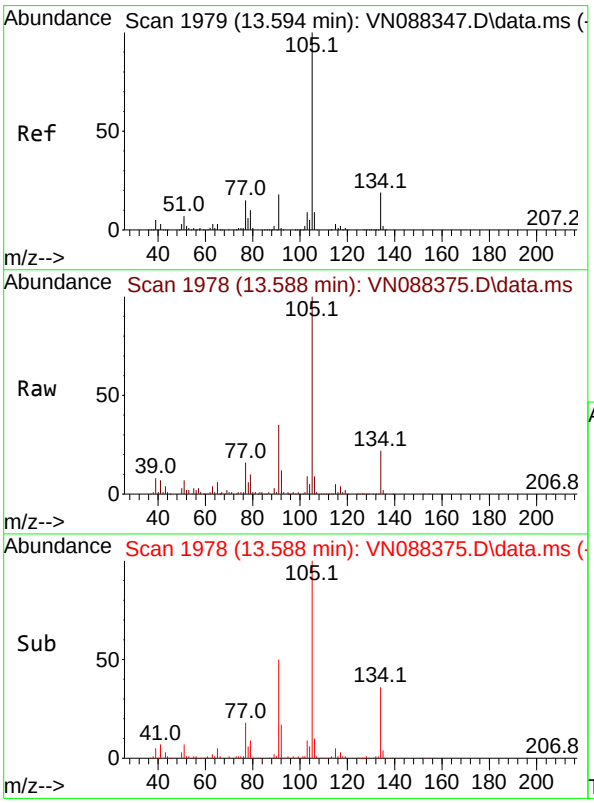
Ion	Ratio	Lower	Upper
105	100		
120	46.6	22.1	66.1

Instrument :
MSVOA_N
ClientSampleId :
MW6

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/02/2025
Supervised By :Mahesh Dadoda 12/02/2025

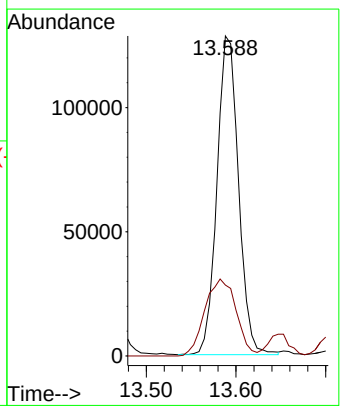


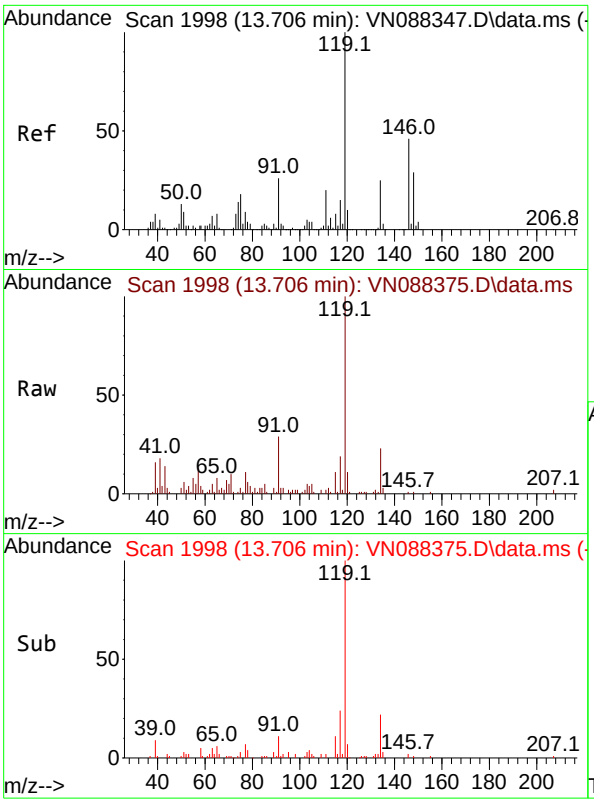


#85
sec-Butylbenzene
Concen: 14.666 ug/l
RT: 13.588 min Scan# 1978
Delta R.T. -0.006 min
Lab File: VN088375.D
Acq: 01 Dec 2025 12:30

Tgt Ion:105 Resp: 213874

Ion	Ratio	Lower	Upper
105	100		
134	35.1	9.5	28.5#

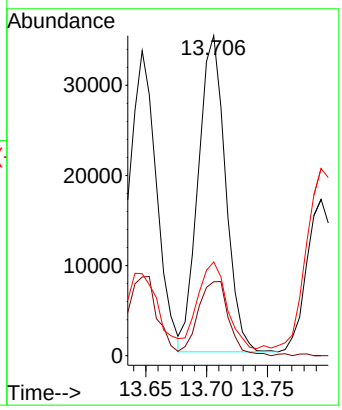




#86
p-Isopropyltoluene
Concen: 4.571 ug/l
RT: 13.706 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN088375.D
Acq: 01 Dec 2025 12:30

Tgt Ion:119 Resp: 5465

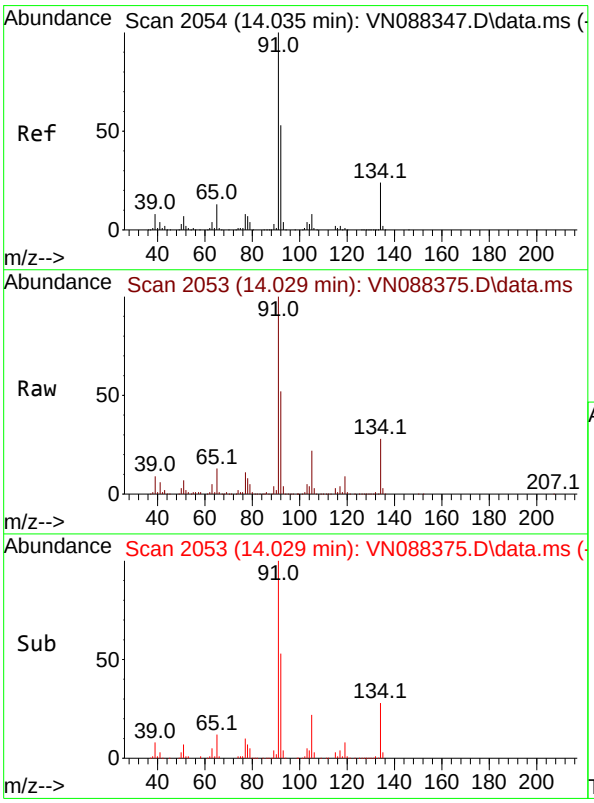
Ion	Ratio	Lower	Upper
119	100		
134	26.4	12.2	36.6
91	29.0	13.0	39.0



Instrument :
MSVOA_N
ClientSampleId :
MW6

Manual Integrations
APPROVED

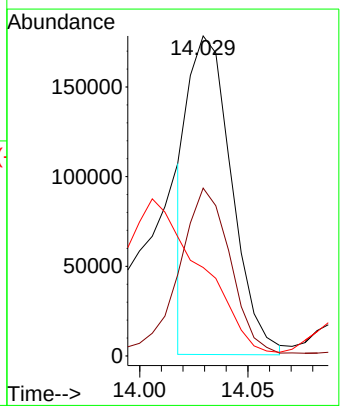
Reviewed By :John Carlone 12/02/2025
Supervised By :Mahesh Dadoda 12/02/2025

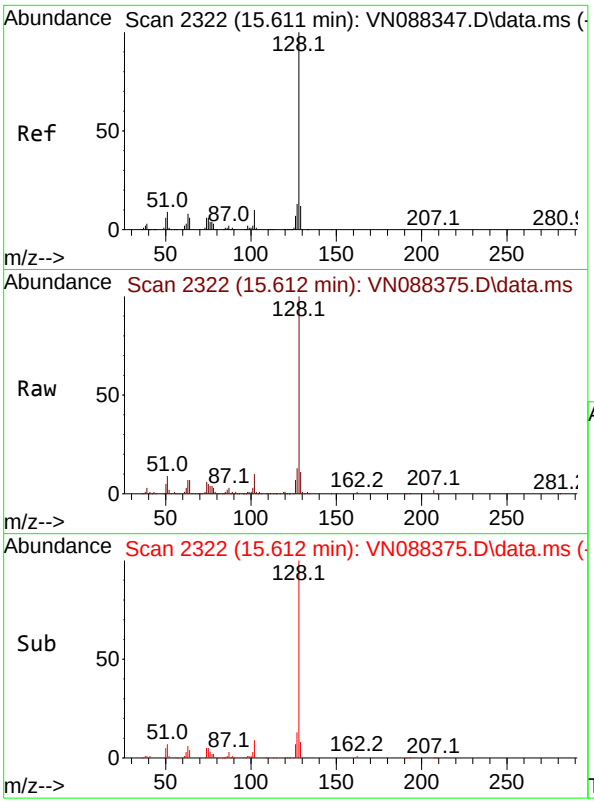


#89
n-Butylbenzene
Concen: 21.459 ug/l m
RT: 14.029 min Scan# 2053
Delta R.T. -0.006 min
Lab File: VN088375.D
Acq: 01 Dec 2025 12:30

Tgt Ion: 91 Resp: 249163

Ion	Ratio	Lower	Upper
91	100		
92	60.6	26.1	78.3
134	0.0	11.7	35.1#

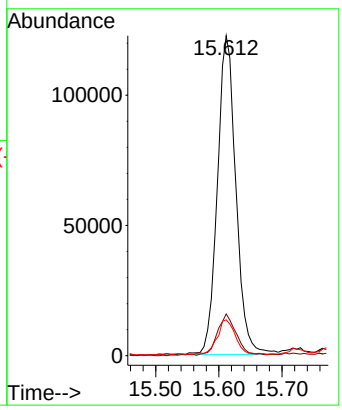




#95
Naphthalene
Concen: 20.078 ug/l
RT: 15.612 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN088375.D
Acq: 01 Dec 2025 12:30

Tgt Ion:128 Resp: 24969

Ion	Ratio	Lower	Upper
128	100		
127	13.5	10.4	15.6
129	10.7	9.0	13.6



Instrument :
MSVOA_N
ClientSampleId :
MW6

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/02/2025
Supervised By :Mahesh Dadoda 12/02/2025

Sample Results: **VN088375.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120125\
Data File : VN088375.D
Acq On : 01 Dec 2025 12:30
Operator : JC\MD
Sample : Q3715-02 4X
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
MW6

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Title : SW846 8260

Signal : TIC: VN088375.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.336	59	65	73	rBV	49016	81631	1.48%	0.106%
2	2.536	88	99	110	rBV	216373	397950	7.20%	0.515%
3	3.271	213	224	244	rBV	1135005	2789567	50.47%	3.609%
4	3.659	278	290	301	rBV	427616	1134413	20.52%	1.468%
5	4.148	364	373	387	rVB2	78361	223665	4.05%	0.289%
6	4.424	407	420	432	rVB3	62523	218919	3.96%	0.283%
7	5.271	550	564	565	rBV2	183301	482816	8.73%	0.625%
8	5.330	567	574	603	rVB4	488617	2350831	42.53%	3.042%
9	5.800	641	654	673	rBV	406003	1413570	25.57%	1.829%
10	6.112	694	707	719	rBV4	40374	134068	2.43%	0.173%
11	6.300	724	739	754	rBV3	132805	412276	7.46%	0.533%
12	6.642	785	797	809	rVB2	118765	370380	6.70%	0.479%
13	6.783	809	821	830	rBV3	73818	224155	4.06%	0.290%
14	7.065	859	869	884	rVV3	92009	284695	5.15%	0.368%
15	7.206	884	893	900	rVV2	72174	211374	3.82%	0.273%
16	7.306	900	910	932	rVV	726315	2224361	40.24%	2.878%
17	7.912	1005	1013	1018	rBV3	37515	92836	1.68%	0.120%
18	7.983	1018	1025	1034	rVB2	108658	265040	4.79%	0.343%
19	8.147	1044	1053	1057	rBV	205789	511132	9.25%	0.661%
20	8.206	1057	1063	1075	rVV3	488654	1857225	33.60%	2.403%
21	8.312	1075	1081	1091	rVB2	244861	622216	11.26%	0.805%
22	8.424	1091	1100	1107	rBV	290860	659081	11.92%	0.853%
23	8.559	1116	1123	1138	rVB4	217586	595118	10.77%	0.770%
24	8.741	1138	1154	1165	rBV3	366039	1697426	30.71%	2.196%
25	8.836	1165	1170	1178	rVB2	154684	350070	6.33%	0.453%
26	8.924	1178	1185	1186	rBV	55072	86519	1.57%	0.112%
27	9.083	1202	1212	1219	rBV3	769091	1805879	32.67%	2.337%
28	9.235	1233	1238	1245	rVB	60313	110346	2.00%	0.143%
29	9.312	1245	1251	1255	rVV2	75556	154077	2.79%	0.199%
30	9.359	1255	1259	1270	rVB	94001	211500	3.83%	0.274%
31	9.577	1277	1296	1312	rBV4	553615	1760735	31.85%	2.278%
32	9.753	1321	1326	1332	rVB2	122812	230763	4.17%	0.299%
33	9.847	1332	1342	1347	rVB5	42746	102141	1.85%	0.132%
34	9.988	1360	1366	1375	rVB	320230	660944	11.96%	0.855%
35	10.077	1375	1381	1384	rBV	197766	358370	6.48%	0.464%
36	10.124	1384	1389	1395	rVV2	479683	1001025	18.11%	1.295%

Sample Results: **VN088375.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120125\
Data File : VN088375.D
Acq On : 01 Dec 2025 12:30
Operator : JC\MD
Sample : Q3715-02 4X
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
MW6

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Title : SW846 8260

37	10.182	1395	1399	1402	rVV3	70739	132347	2.39%	0.171%
38	10.212	1402	1404	1413	rVB3	82220	153051	2.77%	0.198%
39	10.318	1413	1422	1434	rVB3	165368	431630	7.81%	0.558%
40	10.430	1434	1441	1444	rBV	122921	229449	4.15%	0.297%
41	10.471	1444	1448	1453	rVB2	141056	239068	4.33%	0.309%
42	10.541	1453	1460	1468	rBV	905373	1757655	31.80%	2.274%
43	10.730	1484	1492	1498	rVB5	102083	237800	4.30%	0.308%
44	10.888	1514	1519	1525	rBV4	63477	130424	2.36%	0.169%
45	10.965	1525	1532	1542	rVV5	156616	451842	8.17%	0.585%
46	11.059	1542	1548	1554	rVB6	51473	108979	1.97%	0.141%
47	11.147	1554	1563	1569	rBV5	53323	123630	2.24%	0.160%
48	11.247	1569	1580	1588	rBV4	79000	295028	5.34%	0.382%
49	11.353	1595	1598	1602	rVV5	51834	91096	1.65%	0.118%
50	11.394	1602	1605	1610	rVV4	56256	90699	1.64%	0.117%
51	11.547	1627	1631	1636	rBV4	55635	91773	1.66%	0.119%
52	11.618	1636	1643	1647	rVV2	117725	225546	4.08%	0.292%
53	11.724	1655	1661	1666	rBV	142053	253824	4.59%	0.328%
54	11.841	1673	1681	1688	rBV	773847	1445384	26.15%	1.870%
55	11.941	1688	1698	1708	rVV	1126321	2012136	36.40%	2.603%
56	12.041	1708	1715	1727	rVV	529367	1171462	21.19%	1.516%
57	12.341	1761	1766	1770	rBV3	60849	123471	2.23%	0.160%
58	12.453	1781	1785	1791	rVB2	61035	109356	1.98%	0.141%
59	12.541	1791	1800	1811	rBV2	48893	215539	3.90%	0.279%
60	12.671	1815	1822	1832	rBV	910443	1667356	30.16%	2.157%
61	12.824	1842	1848	1858	rVB	570350	1204494	21.79%	1.558%
62	13.012	1873	1880	1887	rBV	3431647	5527574	100.00%	7.152%
63	13.071	1887	1890	1892	rVV	68636	101394	1.83%	0.131%
64	13.106	1892	1896	1900	rVV	238420	434652	7.86%	0.562%
65	13.147	1900	1903	1911	rVB	298409	486479	8.80%	0.629%
66	13.312	1922	1931	1938	rBV	464485	887431	16.05%	1.148%
67	13.406	1943	1947	1952	rVB2	43238	73186	1.32%	0.095%
68	13.459	1952	1956	1960	rVB	64642	92358	1.67%	0.119%
69	13.588	1968	1978	1985	rBV3	384247	1042697	18.86%	1.349%
70	13.647	1985	1988	1993	rVB	90559	135821	2.46%	0.176%
71	13.700	1993	1997	2003	rBV4	104303	202785	3.67%	0.262%
72	13.770	2003	2009	2011	rBV	736019	1289270	23.32%	1.668%
73	13.923	2029	2035	2039	rBV	1294384	2161318	39.10%	2.796%
74	13.970	2039	2043	2047	rVV	1809099	3349550	60.60%	4.334%
75	14.006	2047	2049	2059	rVB3	953712	1971377	35.66%	2.551%
76	14.088	2059	2063	2069	rVB	228004	365013	6.60%	0.472%

Sample Results: **VN088375.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120125\
Data File : VN088375.D
Acq On : 01 Dec 2025 12:30
Operator : JC\MD
Sample : Q3715-02 4X
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
MW6

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Title : SW846 8260

77	14.159	2069	2075	2081	rVB	266712	420766	7.61%	0.544%
78	14.218	2081	2085	2088	rBV	80822	126930	2.30%	0.164%
79	14.306	2093	2100	2106	rBV	2842721	4489495	81.22%	5.809%
80	14.370	2106	2111	2114	rVV	237367	413393	7.48%	0.535%
81	14.418	2114	2119	2126	rVB2	1003612	1754180	31.74%	2.270%
82	14.547	2136	2141	2147	rBV2	196767	310058	5.61%	0.401%
83	14.629	2147	2155	2163	rVB	1525597	2523833	45.66%	3.266%
84	14.706	2163	2168	2173	rBV	260461	401822	7.27%	0.520%
85	14.900	2196	2201	2206	rBV	941281	1574782	28.49%	2.038%
86	15.023	2213	2222	2228	rBV3	1514901	3540184	64.05%	4.581%
87	15.070	2228	2230	2244	rVB2	216963	410688	7.43%	0.531%
88	15.182	2244	2249	2256	rBV3	98312	179592	3.25%	0.232%
89	15.288	2256	2267	2272	rVV2	412677	963528	17.43%	1.247%
90	15.335	2272	2275	2280	rVV2	127284	217242	3.93%	0.281%
91	15.406	2280	2287	2295	rVB2	283734	705370	12.76%	0.913%
92	15.564	2307	2314	2316	rBV3	37957	77784	1.41%	0.101%
93	15.612	2316	2322	2329	rVB	255055	500671	9.06%	0.648%
94	15.723	2335	2341	2345	rBV4	81374	156148	2.82%	0.202%
95	15.776	2345	2350	2365	rVB3	83953	229664	4.15%	0.297%
96	15.917	2365	2374	2383	rBV	138888	318908	5.77%	0.413%
97	16.094	2393	2404	2414	rBV2	72212	237620	4.30%	0.307%
98	16.217	2420	2425	2433	rBV3	45767	99929	1.81%	0.129%
99	16.306	2433	2440	2449	rVB5	62215	160183	2.90%	0.207%
100	16.747	2508	2515	2522	rBV2	118529	273888	4.95%	0.354%

Sum of corrected areas: 77287716

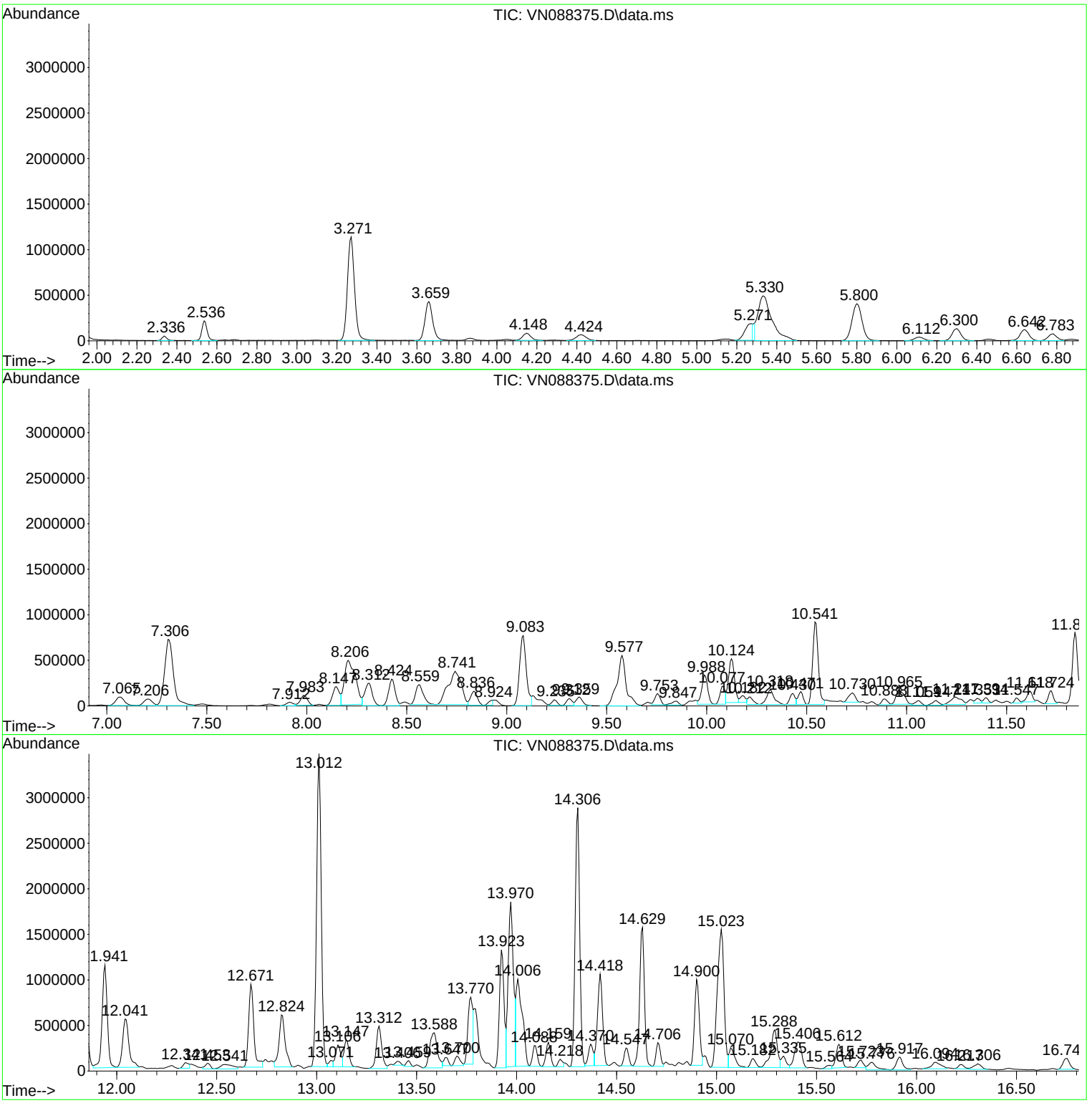
Sample Results: **VN088375.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120125\
Data File : VN088375.D
Acq On : 01 Dec 2025 12:30
Operator : JC\MD
Sample : Q3715-02 4X
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
MW6

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260

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



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Sample : Q3715-02 4X
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
MW6

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260

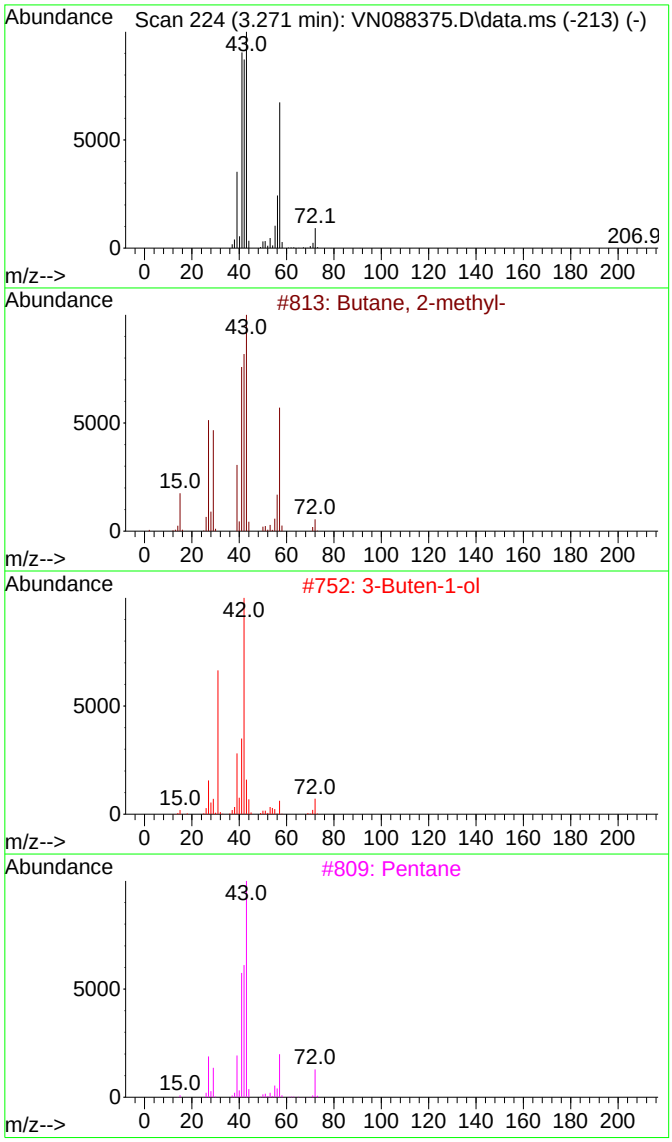
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

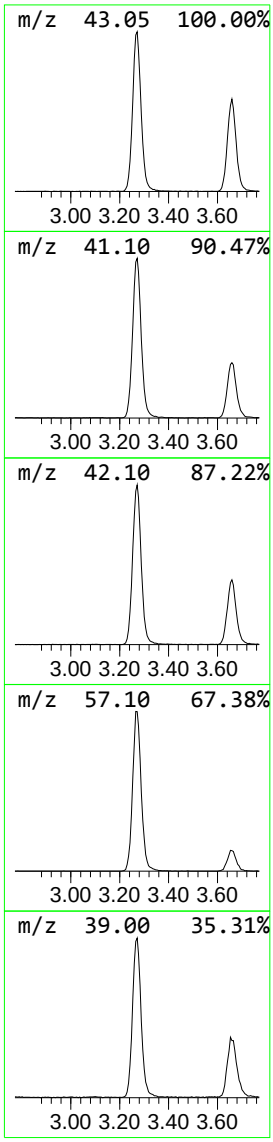
****

Peak Number 1 Butane, 2-methyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.271	75.10 ug/l	2789570	Pentafluorobenzene	8.206

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 2-methyl-	72	C5H12	000078-78-4	86
2	3-Buten-1-ol	72	C4H8O	000627-27-0	40
3	Pentane	72	C5H12	000109-66-0	36
4	2(3H)-Furanone, dihydro-4-methyl-	100	C5H8O2	001679-49-8	33
5	1-Butene	56	C4H8	000106-98-9	14





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Acq On : 01 Dec 2025 12:30
Operator : JC\MD
Sample : Q3715-02 4X
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
MW6

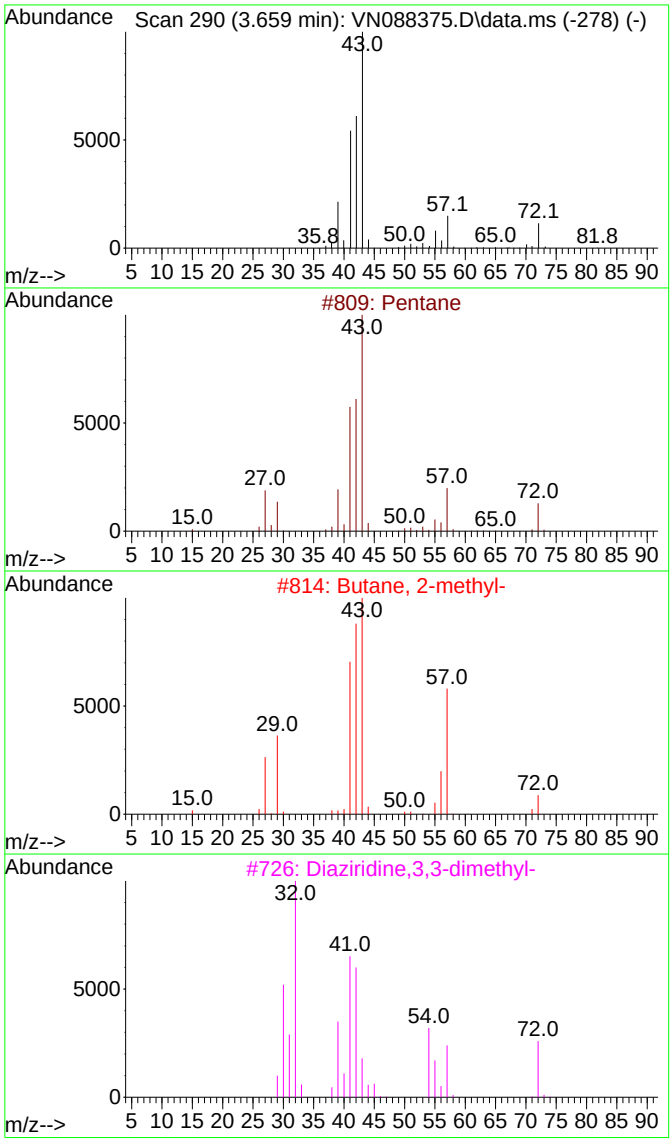
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260

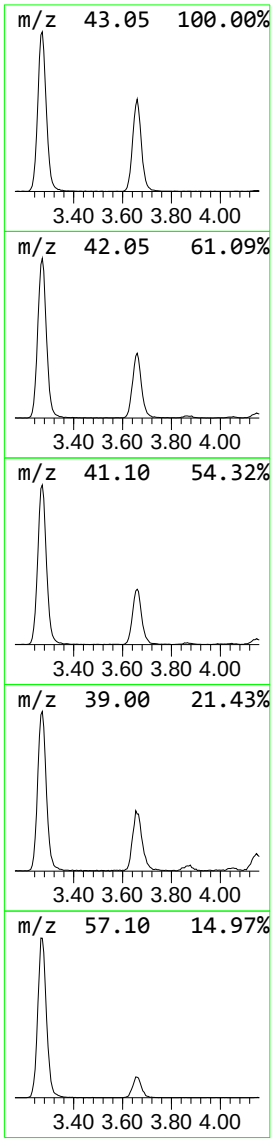
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 2 Pentane Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.659	30.54 ug/l	1134410	Pentafluorobenzene	8.206

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane	72	C5H12	000109-66-0	91
2	Butane, 2-methyl-	72	C5H12	000078-78-4	50
3	Diaziridine,3,3-dimethyl-	72	C3H8N2	004901-76-2	43
4	Oxirane, ethyl-	72	C4H8O	000106-88-7	40
5	Cyclobutane, methyl-	70	C5H10	000598-61-8	32





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Data File : VN088375.D
Acq On : 01 Dec 2025 12:30
Operator : JC\MD
Sample : Q3715-02 4X
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
MW6

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260

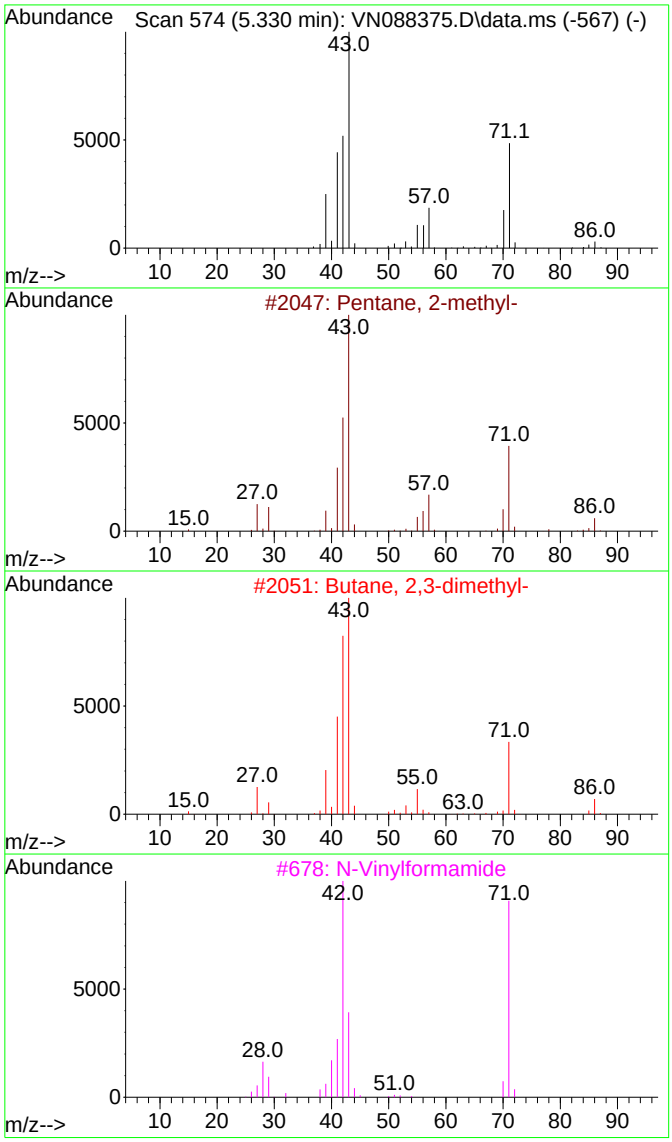
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

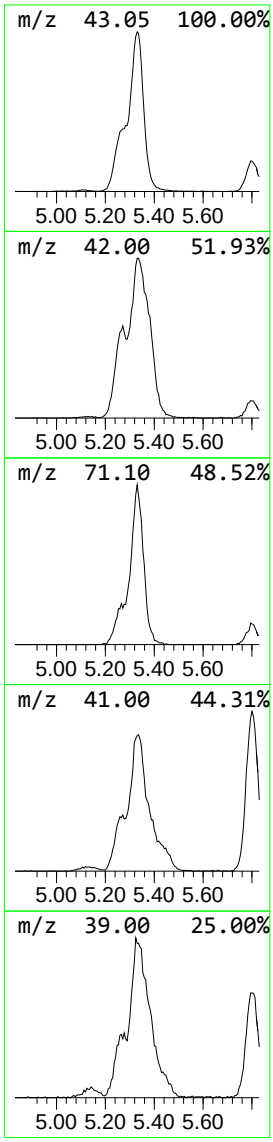
****

Peak Number 3 Pentane, 2-methyl- Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.330	63.29 ug/l	2350830	Pentafluorobenzene	8.206

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 2-methyl-	86	C6H14	000107-83-5	91
2	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	59
3	N-Vinylformamide	71	C3H5NO	013162-05-5	50
4	Pentane, 3,3-dimethyl-	100	C7H16	000562-49-2	37
5	Hexane, 2,3-dimethyl-	114	C8H18	000584-94-1	28





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Acq On : 01 Dec 2025 12:30
Operator : JC\MD
Sample : Q3715-02 4X
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
MW6

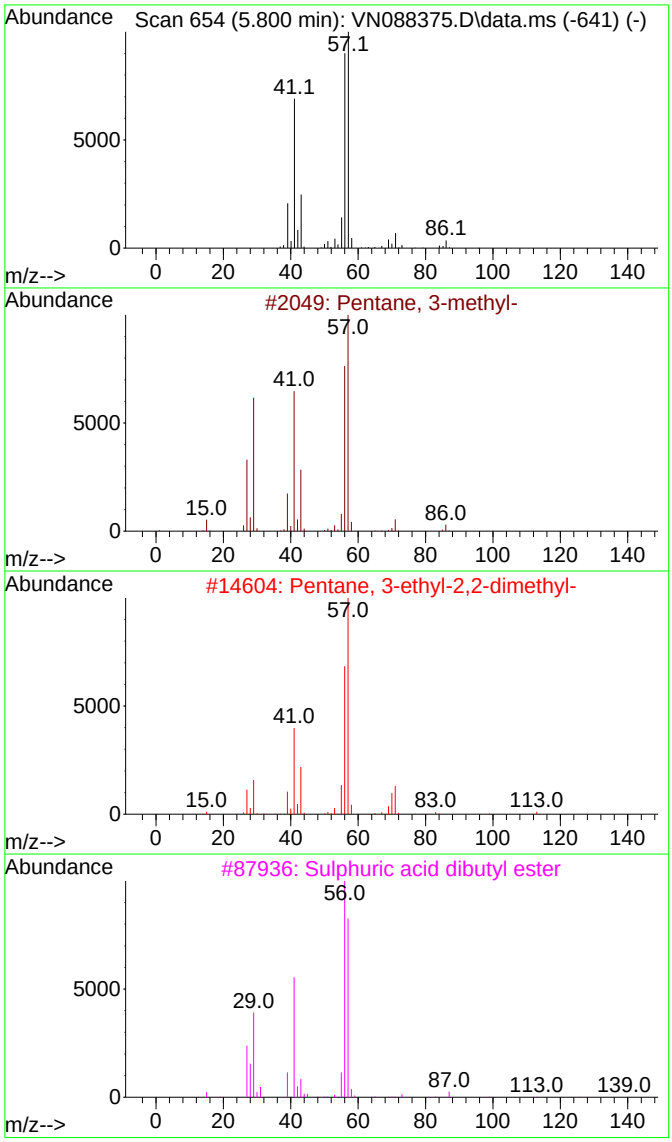
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260

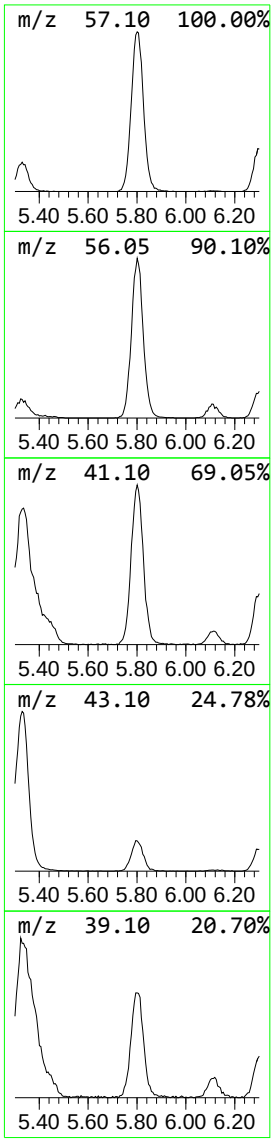
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 4 Pentane, 3-methyl- Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.800	38.06 ug/l	1413570	Pentafluorobenzene	8.206

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 3-methyl-	86	C6H14	000096-14-0	86
2	Pentane, 3-ethyl-2,2-dimethyl-	128	C9H20	016747-32-3	56
3	Sulphuric acid dibutyl ester	210	C8H18O4S	000625-22-9	50
4	Propane, 2-cyclopropyl-	84	C6H12	003638-35-5	42
5	Oxirane, (1-methylethyl)-	86	C5H10O	001438-14-8	42





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Acq On : 01 Dec 2025 12:30
Operator : JC\MD
Sample : Q3715-02 4X
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
MW6

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260

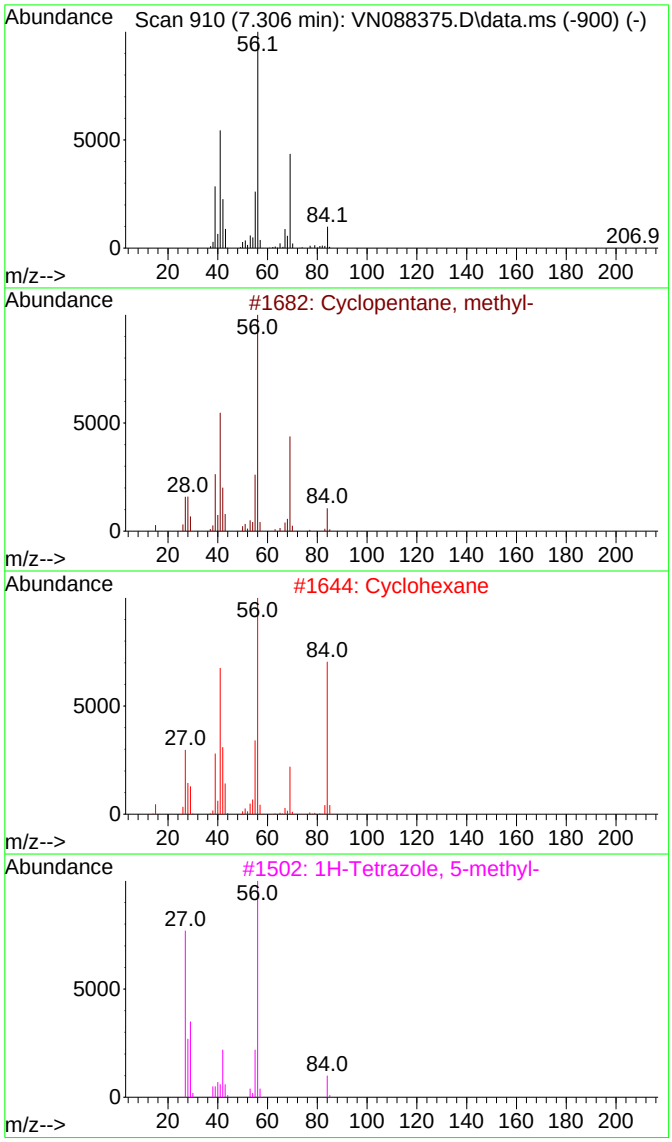
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

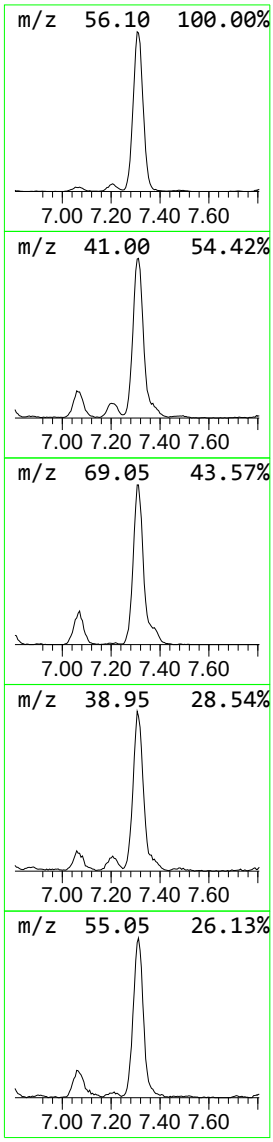
****

Peak Number 5 Cyclopentane, methyl- Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.306	59.88 ug/l	2224360	Pentafluorobenzene	8.206

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopentane, methyl-	84	C6H12	000096-37-7	91
2	Cyclohexane	84	C6H12	000110-82-7	90
3	1H-Tetrazole, 5-methyl-	84	C2H4N4	004076-36-2	72
4	Cyclobutane, ethyl-	84	C6H12	004806-61-5	64
5	Cyclobutane	56	C4H8	000287-23-0	53





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Acq On : 01 Dec 2025 12:30
Operator : JC\MD
Sample : Q3715-02 4X
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
MW6

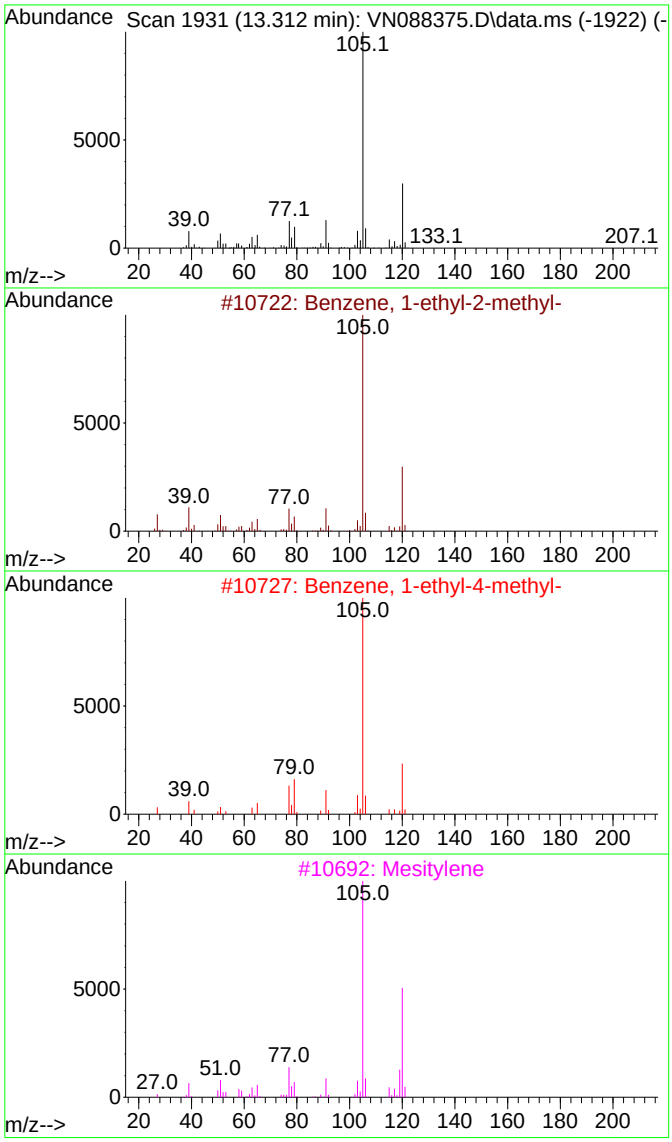
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260

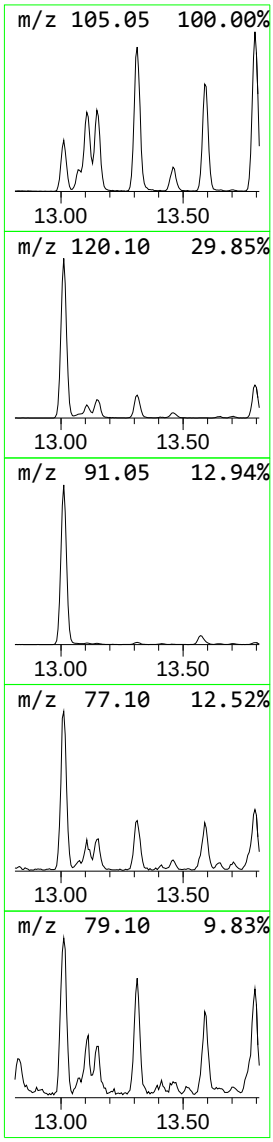
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 7 Benzene, 1-ethyl-2-methyl- Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.312	34.42 ug/l	887431	1,4-Dichlorobenzene-d4	13.765

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	94
2	Benzene, 1-ethyl-4-methyl-	120	C9H12	000622-96-8	94
3	Mesitylene	120	C9H12	000108-67-8	91
4	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	91
5	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	91





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Acq On : 01 Dec 2025 12:30
Operator : JC\MD
Sample : Q3715-02 4X
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
MW6

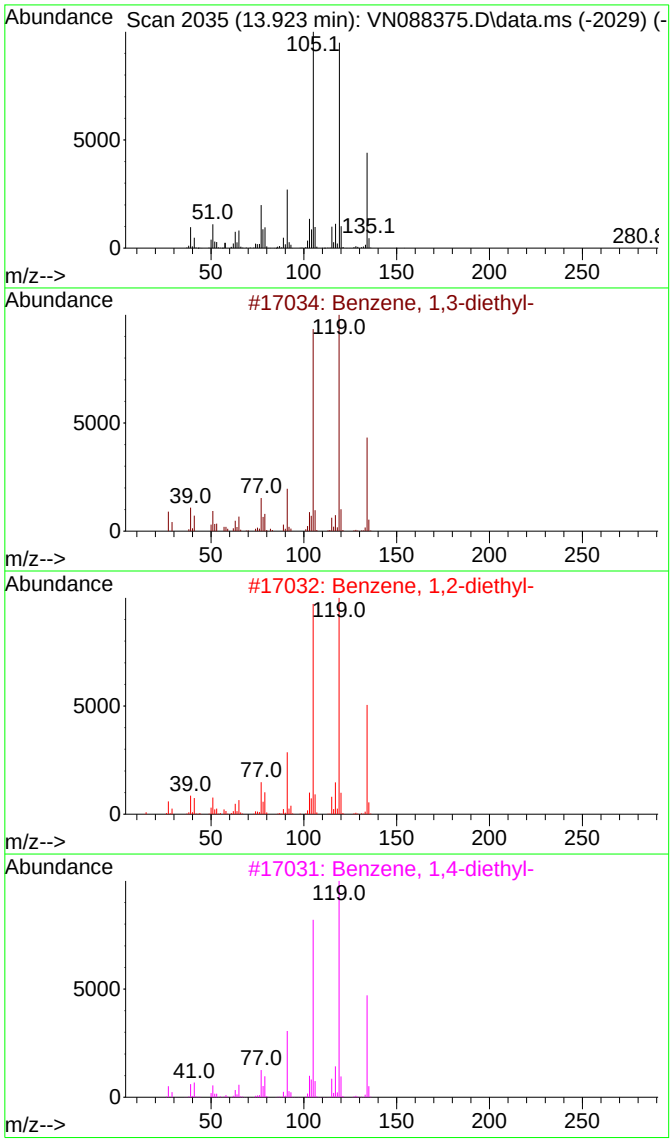
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260

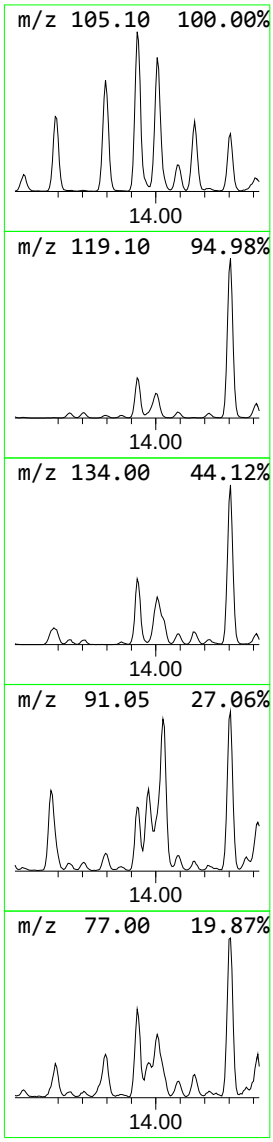
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 8 Benzene, 1,3-diethyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.923	83.82 ug/l	2161320	1,4-Dichlorobenzene-d4	13.765

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,3-diethyl-	134	C10H14	000141-93-5	97
2	Benzene, 1,2-diethyl-	134	C10H14	000135-01-3	96
3	Benzene, 1,4-diethyl-	134	C10H14	000105-05-5	94
4	Benzene, 1-ethyl-3,5-dimethyl-	134	C10H14	000934-74-7	87
5	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	81





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Acq On : 01 Dec 2025 12:30
Operator : JC\MD
Sample : Q3715-02 4X
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
MW6

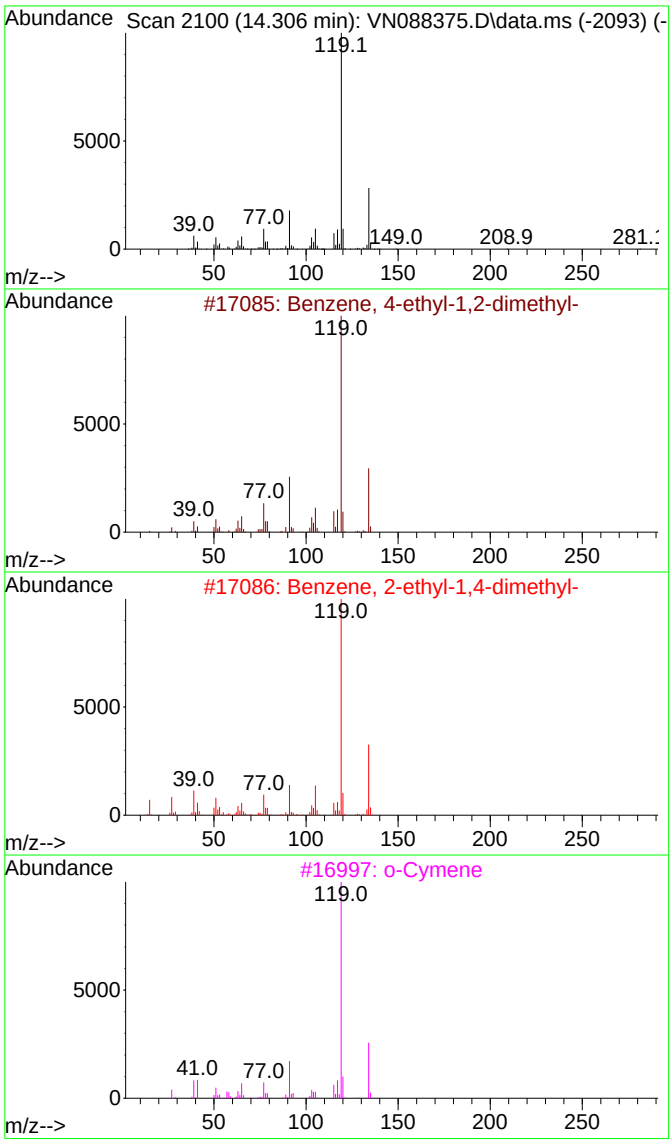
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260

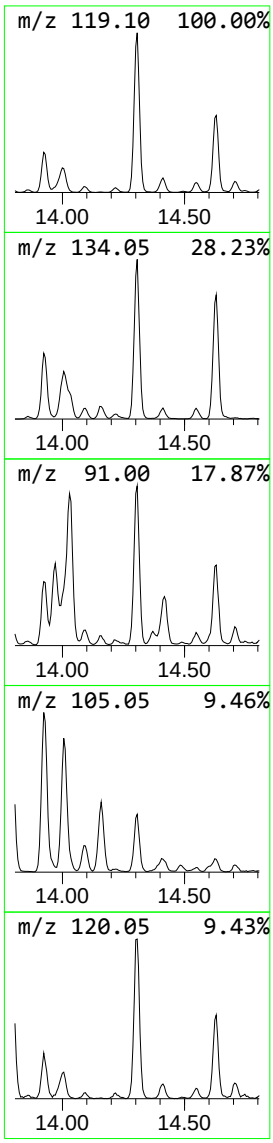
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 10 Benzene, 4-ethyl-1,2-dimethyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.306	174.11 ug/l	4489500	1,4-Dichlorobenzene-d4	13.765

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	96
2	Benzene, 2-ethyl-1,4-dimethyl-	134	C10H14	001758-88-9	95
3	o-Cymene	134	C10H14	000527-84-4	95
4	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	95
5	p-Cymene	134	C10H14	000099-87-6	95





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Acq On : 01 Dec 2025 12:30
Operator : JC\MD
Sample : Q3715-02 4X
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
MW6

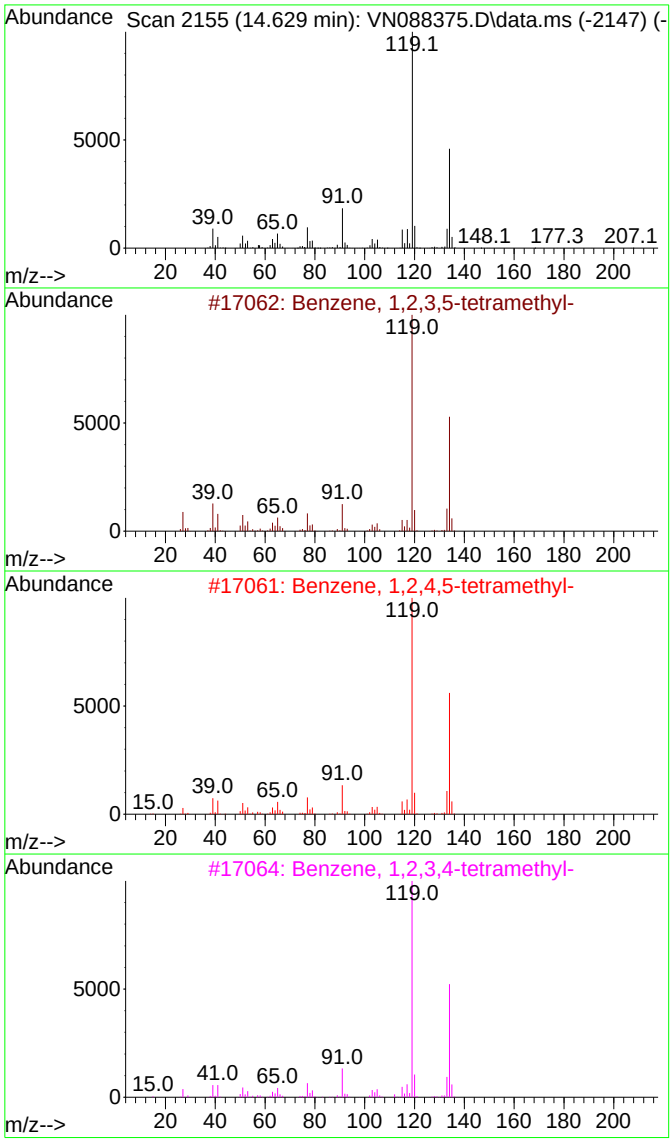
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260

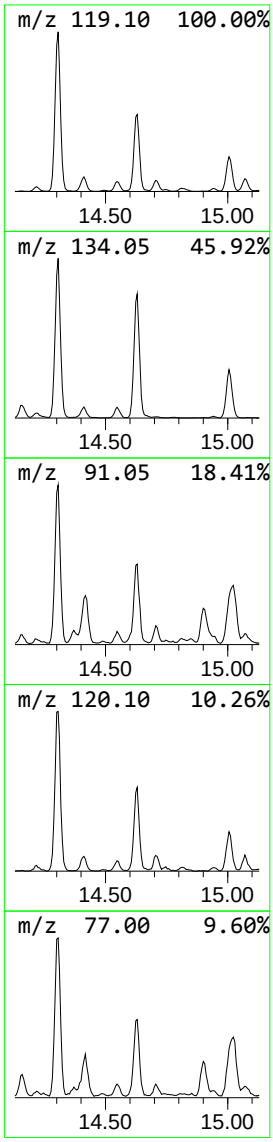
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 12 Benzene, 1,2,3,5-tetramethyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.629	97.88 ug/l	2523830	1,4-Dichlorobenzene-d4	13.765

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	96
2	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	95
3	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	95
4	o-Cymene	134	C10H14	000527-84-4	95
5	p-Cymene	134	C10H14	000099-87-6	94





Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120125\
Data File : VN088375.D
Acq On : 01 Dec 2025 12:30
Operator : JC\MD
Sample : Q3715-02 4X
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
MW6

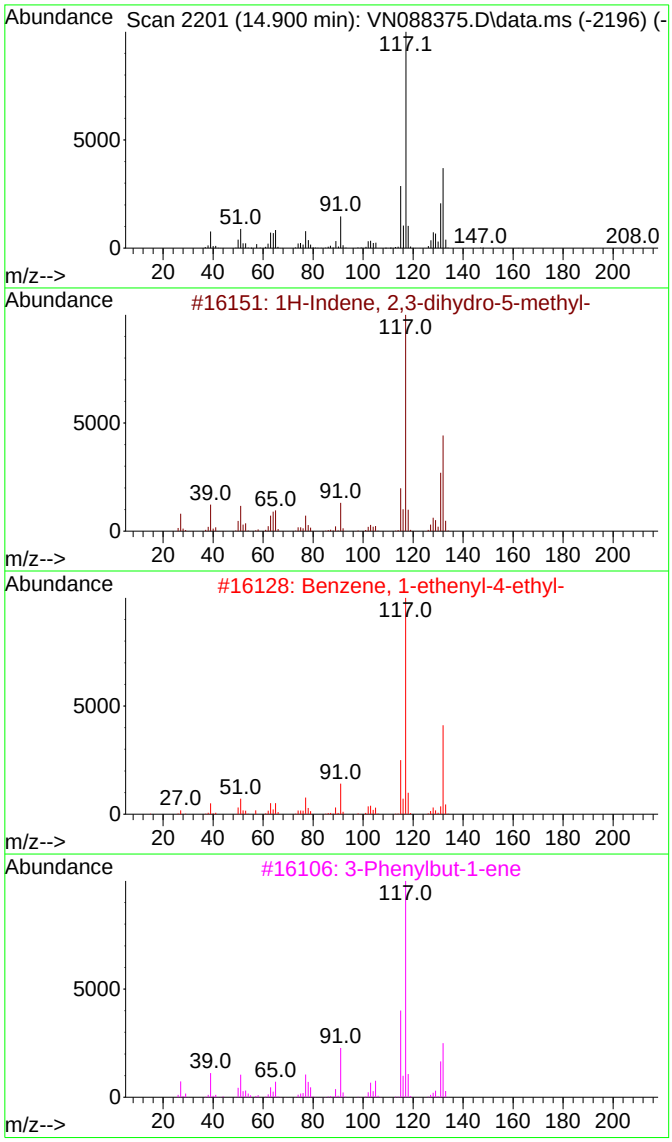
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260

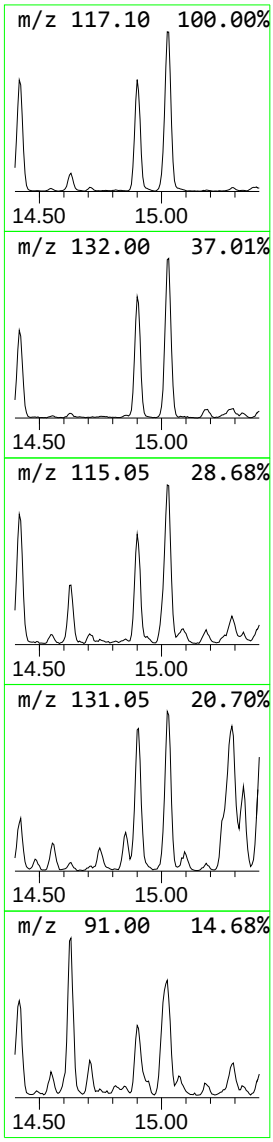
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 13 1H-Indene, 2,3-dihydro-5-me... Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.900	61.07 ug/l	1574780	1,4-Dichlorobenzene-d4	13.765

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Indene, 2,3-dihydro-5-methyl-	132	C10H12	000874-35-1	96
2	Benzene, 1-ethenyl-4-ethyl-	132	C10H12	003454-07-7	94
3	3-Phenylbut-1-ene	132	C10H12	000934-10-1	91
4	1H-Indene, 2,3-dihydro-4-methyl-	132	C10H12	000824-22-6	91
5	Benzene, (2-methyl-2-propenyl)-	132	C10H12	003290-53-7	87





Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120125\
Data File : VN088375.D
Acq On : 01 Dec 2025 12:30
Operator : JC\MD
Sample : Q3715-02 4X
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
MW6

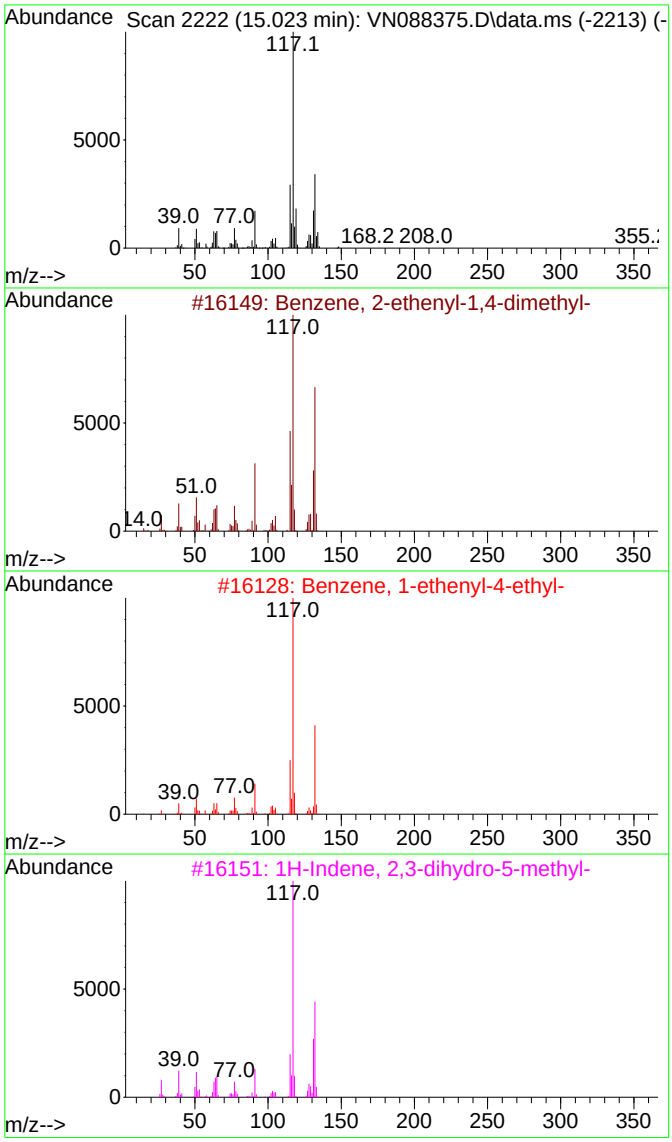
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260

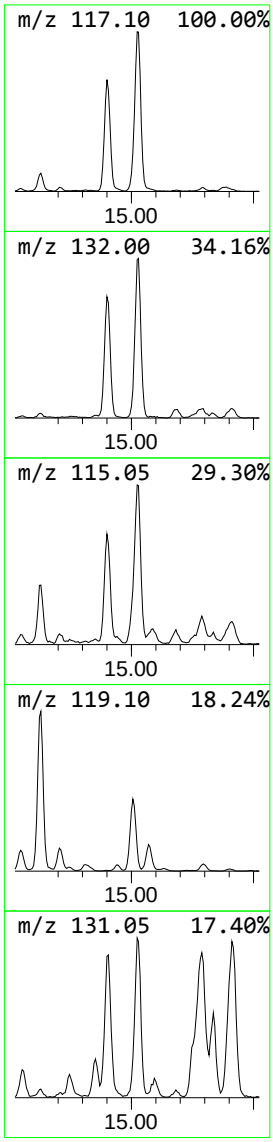
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 14 Benzene, 2-ethenyl-1,4-dime... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.023	137.29 ug/l	3540180	1,4-Dichlorobenzene-d4	13.765

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 2-ethenyl-1,4-dimethyl-	132	C10H12	002039-89-6	96
2	Benzene, 1-ethenyl-4-ethyl-	132	C10H12	003454-07-7	94
3	1H-Indene, 2,3-dihydro-5-methyl-	132	C10H12	000874-35-1	94
4	1H-Indene, 2,3-dihydro-4-methyl-	132	C10H12	000824-22-6	93
5	3-Phenylbut-1-ene	132	C10H12	000934-10-1	93





Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120125\
Data File : VN088375.D
Acq On : 01 Dec 2025 12:30
Operator : JC\MD
Sample : Q3715-02 4X
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
MW6

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260

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

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Butane, 2-methyl-	3.271	75.1	ug/l	2789570	1	8.206	1857230	50.0
Pentane	3.659	30.5	ug/l	1134410	1	8.206	1857230	50.0
Pentane, 2-methyl-	5.330	63.3	ug/l	2350830	1	8.206	1857230	50.0
Pentane, 3-methyl-	5.800	38.1	ug/l	1413570	1	8.206	1857230	50.0
Cyclopentane, m...	7.306	59.9	ug/l	2224360	1	8.206	1857230	50.0
Benzene, 1-ethy...	13.312	34.4	ug/l	887431	4	13.765	1289270	50.0
Benzene, 1,3-di...	13.923	83.8	ug/l	2161320	4	13.765	1289270	50.0
Benzene, 4-ethy...	14.306	174.1	ug/l	4489500	4	13.765	1289270	50.0
Benzene, 1,2,3,...	14.629	97.9	ug/l	2523830	4	13.765	1289270	50.0
1H-Indene, 2,3-...	14.900	61.1	ug/l	1574780	4	13.765	1289270	50.0
Benzene, 2-ethe...	15.023	137.3	ug/l	3540180	4	13.765	1289270	50.0

Raw Data: **VX048679.D**

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

Report of Analysis

Client:	G Environmental			Date Collected:	11/24/25
Project:	Union			Date Received:	11/24/25
Client Sample ID:	MW7			SDG No.:	Q3715
Lab Sample ID:	Q3715-03			Matrix:	Water
Analytical Method:	8260D	Level:	LOW	% Solid:	0
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL	Test:	VOCMS Group1

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
TARGETS									
75-71-8	Dichlorodifluoromethane	0.22	U	1	0.22	1.00	ug/L	11/25/25 13:00	VX112525
74-87-3	Chloromethane	0.52	J	1	0.32	1.00	ug/L	11/25/25 13:00	VX112525
75-01-4	Vinyl Chloride	0.26	U	1	0.26	1.00	ug/L	11/25/25 13:00	VX112525
74-83-9	Bromomethane	1.40	U	1	1.40	5.00	ug/L	11/25/25 13:00	VX112525
75-00-3	Chloroethane	0.47	U	1	0.47	1.00	ug/L	11/25/25 13:00	VX112525
75-69-4	Trichlorofluoromethane	0.33	U	1	0.33	1.00	ug/L	11/25/25 13:00	VX112525
76-13-1	1,1,2-Trichlorotrifluoroethane	0.25	U	1	0.25	1.00	ug/L	11/25/25 13:00	VX112525
75-65-0	Tert butyl alcohol	5.50	U	1	5.50	25.0	ug/L	11/25/25 13:00	VX112525
75-35-4	1,1-Dichloroethene	0.23	U	1	0.23	1.00	ug/L	11/25/25 13:00	VX112525
67-64-1	Acetone	1.50	U	1	1.50	5.00	ug/L	11/25/25 13:00	VX112525
75-15-0	Carbon Disulfide	0.21	U	1	0.21	1.00	ug/L	11/25/25 13:00	VX112525
1634-04-4	Methyl tert-butyl Ether	0.16	U	1	0.16	1.00	ug/L	11/25/25 13:00	VX112525
79-20-9	Methyl Acetate	0.27	U	1	0.27	1.00	ug/L	11/25/25 13:00	VX112525
75-09-2	Methylene Chloride	0.28	U	1	0.28	1.00	ug/L	11/25/25 13:00	VX112525
156-60-5	trans-1,2-Dichloroethene	0.23	U	1	0.23	1.00	ug/L	11/25/25 13:00	VX112525
75-34-3	1,1-Dichloroethane	0.23	U	1	0.23	1.00	ug/L	11/25/25 13:00	VX112525
110-82-7	Cyclohexane	1.50	U	1	1.50	5.00	ug/L	11/25/25 13:00	VX112525
78-93-3	2-Butanone	0.98	U	1	0.98	5.00	ug/L	11/25/25 13:00	VX112525
56-23-5	Carbon Tetrachloride	0.25	U	1	0.25	1.00	ug/L	11/25/25 13:00	VX112525
156-59-2	cis-1,2-Dichloroethene	0.19	U	1	0.19	1.00	ug/L	11/25/25 13:00	VX112525
74-97-5	Bromochloromethane	0.22	U	1	0.22	1.00	ug/L	11/25/25 13:00	VX112525
67-66-3	Chloroform	0.25	U	1	0.25	1.00	ug/L	11/25/25 13:00	VX112525
71-55-6	1,1,1-Trichloroethane	0.20	U	1	0.20	1.00	ug/L	11/25/25 13:00	VX112525
108-87-2	Methylcyclohexane	0.16	U	1	0.16	1.00	ug/L	11/25/25 13:00	VX112525
71-43-2	Benzene	0.15	U	1	0.15	1.00	ug/L	11/25/25 13:00	VX112525
107-06-2	1,2-Dichloroethane	0.22	U	1	0.22	1.00	ug/L	11/25/25 13:00	VX112525
79-01-6	Trichloroethene	0.090	U	1	0.090	1.00	ug/L	11/25/25 13:00	VX112525
78-87-5	1,2-Dichloropropane	0.20	U	1	0.20	1.00	ug/L	11/25/25 13:00	VX112525
75-27-4	Bromodichloromethane	0.22	U	1	0.22	1.00	ug/L	11/25/25 13:00	VX112525
108-10-1	4-Methyl-2-Pentanone	0.68	U	1	0.68	5.00	ug/L	11/25/25 13:00	VX112525
108-88-3	Toluene	0.14	U	1	0.14	1.00	ug/L	11/25/25 13:00	VX112525
10061-02-6	t-1,3-Dichloropropene	0.17	U	1	0.17	1.00	ug/L	11/25/25 13:00	VX112525
10061-01-5	cis-1,3-Dichloropropene	0.16	U	1	0.16	1.00	ug/L	11/25/25 13:00	VX112525
79-00-5	1,1,2-Trichloroethane	0.21	U	1	0.21	1.00	ug/L	11/25/25 13:00	VX112525
591-78-6	2-Hexanone	0.89	U	1	0.89	5.00	ug/L	11/25/25 13:00	VX112525
124-48-1	Dibromochloromethane	0.18	U	1	0.18	1.00	ug/L	11/25/25 13:00	VX112525
106-93-4	1,2-Dibromoethane	0.15	U	1	0.15	1.00	ug/L	11/25/25 13:00	VX112525
127-18-4	Tetrachloroethene	2.50		1	0.23	1.00	ug/L	11/25/25 13:00	VX112525
108-90-7	Chlorobenzene	0.12	U	1	0.12	1.00	ug/L	11/25/25 13:00	VX112525
100-41-4	Ethyl Benzene	0.13	U	1	0.13	1.00	ug/L	11/25/25 13:00	VX112525
179601-23-1	m/p-Xylenes	0.24	U	1	0.24	2.00	ug/L	11/25/25 13:00	VX112525
95-47-6	o-Xylene	0.12	U	1	0.12	1.00	ug/L	11/25/25 13:00	VX112525
100-42-5	Styrene	0.15	U	1	0.15	1.00	ug/L	11/25/25 13:00	VX112525

Raw Data: **VX048679.D**

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

Report of Analysis

Client:	G Environmental	Date Collected:	11/24/25
Project:	Union	Date Received:	11/24/25
Client Sample ID:	MW7	SDG No.:	Q3715
Lab Sample ID:	Q3715-03	Matrix:	Water
Analytical Method:	8260D	Level: LOW	% Solid: 0
Sample Wt/Vol:	5 mL	Final Vol: 5000 uL	Test: VOCMS Group1

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
75-25-2	Bromoform	0.19	U	1	0.19	1.00	ug/L	11/25/25 13:00	VX112525
98-82-8	Isopropylbenzene	0.12	U	1	0.12	1.00	ug/L	11/25/25 13:00	VX112525
79-34-5	1,1,2,2-Tetrachloroethane	0.26	U	1	0.26	1.00	ug/L	11/25/25 13:00	VX112525
541-73-1	1,3-Dichlorobenzene	0.16	U	1	0.16	1.00	ug/L	11/25/25 13:00	VX112525
106-46-7	1,4-Dichlorobenzene	0.19	U	1	0.19	1.00	ug/L	11/25/25 13:00	VX112525
95-50-1	1,2-Dichlorobenzene	0.16	U	1	0.16	1.00	ug/L	11/25/25 13:00	VX112525
96-12-8	1,2-Dibromo-3-Chloropropane	0.53	U	1	0.53	1.00	ug/L	11/25/25 13:00	VX112525
120-82-1	1,2,4-Trichlorobenzene	0.20	U	1	0.20	1.00	ug/L	11/25/25 13:00	VX112525
87-61-6	1,2,3-Trichlorobenzene	0.20	U	1	0.20	1.00	ug/L	11/25/25 13:00	VX112525
SURROGATES									
17060-07-0	1,2-Dichloroethane-d4	51.4			70 (74) - 130 (125)	103%	SPK: 50		
1868-53-7	Dibromofluoromethane	47.1			70 (75) - 130 (124)	94%	SPK: 50		
2037-26-5	Toluene-d8	55.2			70 (86) - 130 (113)	110%	SPK: 50		
460-00-4	4-Bromofluorobenzene	60.0			70 (77) - 130 (121)	120%	SPK: 50		
INTERNAL STANDARDS		**Area Count**							
363-72-4	Pentafluorobenzene	167000							
540-36-3	1,4-Difluorobenzene	306000							
3114-55-4	Chlorobenzene-d5	379000							
3855-82-1	1,4-Dichlorobenzene-d4	189000							

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\VX112525\
Data File : VX048679.D
Acq On : 25 Nov 2025 13:00
Operator : JC/MD
Sample : Q3715-03
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
MW7

Quant Time: Nov 26 01:00:07 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 05:08:11 2025
Response via : Initial Calibration

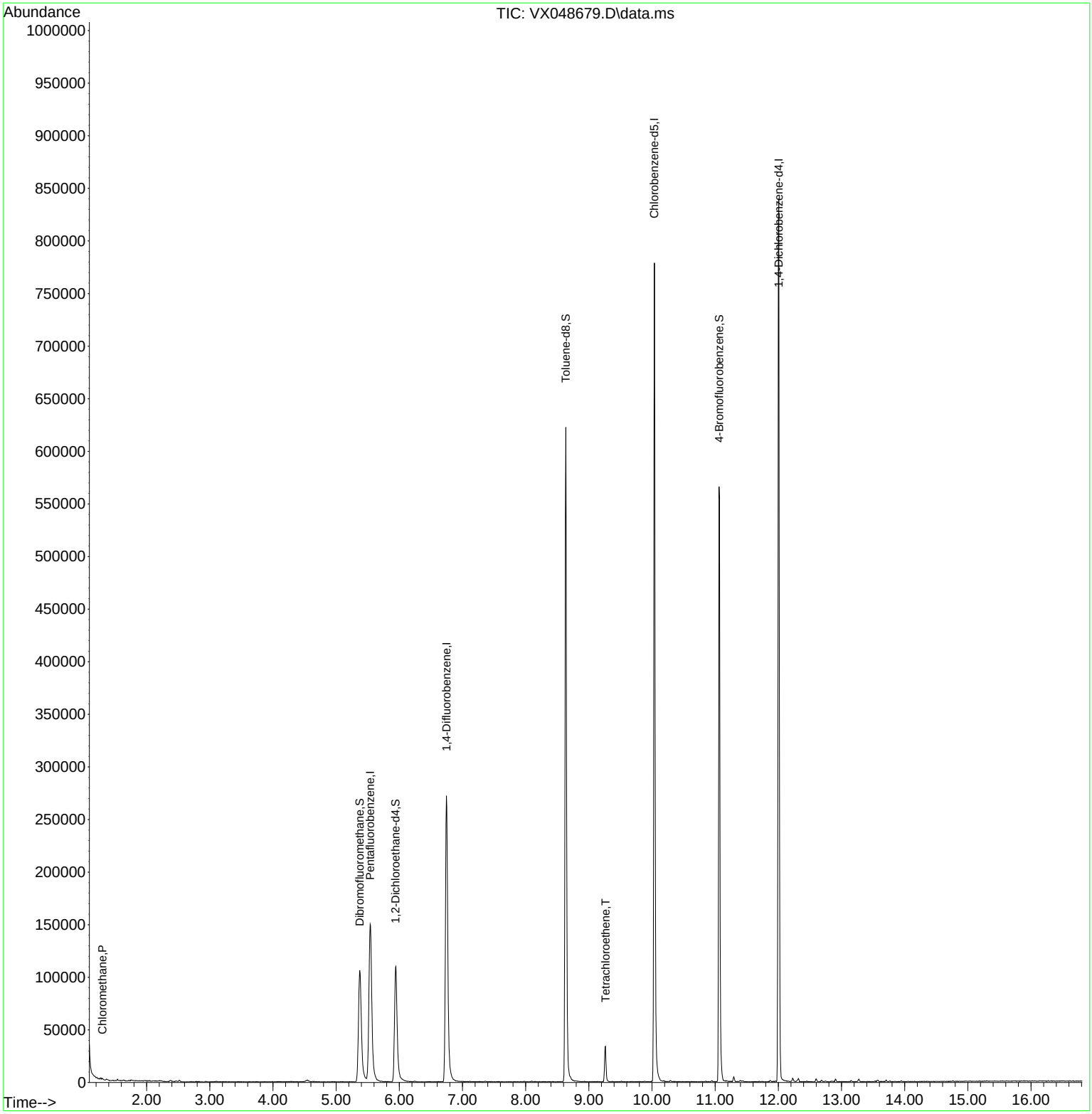
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.538	168	166997	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.745	114	305521	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.037	117	379381	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.006	152	188892	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.940	65	119607	51.400	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 102.800%			
35) Dibromofluoromethane	5.373	113	108925	47.105	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 94.220%			
50) Toluene-d8	8.635	98	397876	55.169	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery = 110.340%			
62) 4-Bromofluorobenzene	11.061	95	161369	60.041	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery = 120.080%			
Target Compounds						Qvalue
3) Chloromethane	1.301	50	930	0.518	ug/l #	80
64) Tetrachloroethene	9.263	164	7016	2.546	ug/l	93

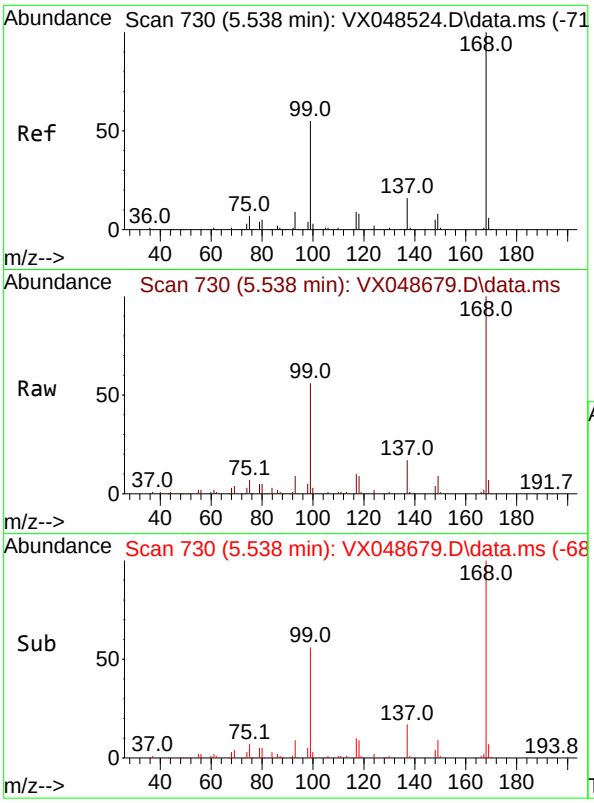
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112525\
Data File : VX048679.D
Acq On : 25 Nov 2025 13:00
Operator : JC/MD
Sample : Q3715-03
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
MW7

Quant Time: Nov 26 01:00:07 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 05:08:11 2025
Response via : Initial Calibration



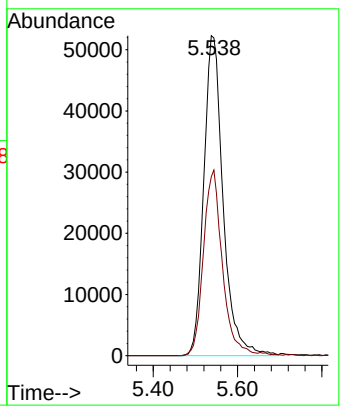


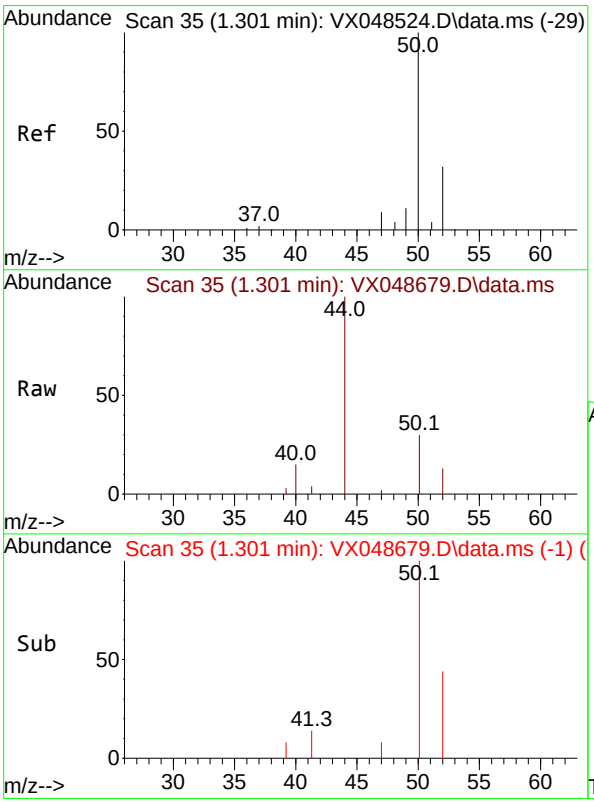
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.538 min Scan# 7
Delta R.T. -0.000 min
Lab File: VX048679.D
Acq: 25 Nov 2025 13:00

Instrument :
MSVOA_X
ClientSampleId :
MW7

Tgt Ion:168 Resp: 166997

Ion	Ratio	Lower	Upper
168	100		
99	55.9	45.2	67.8

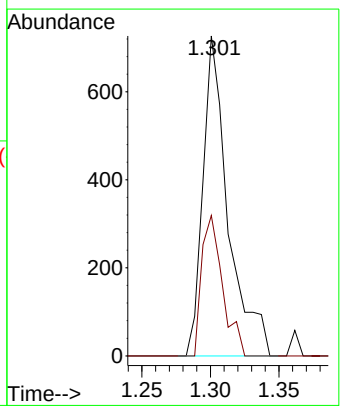


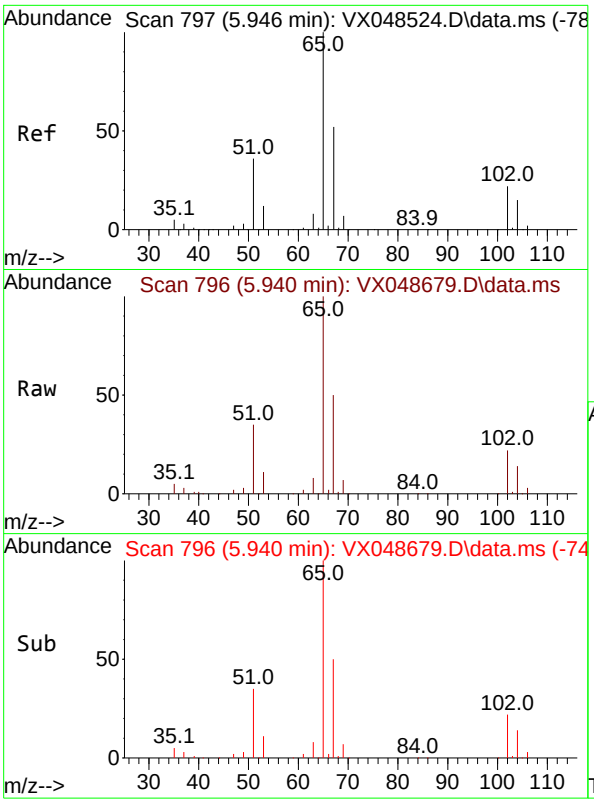


#3
Chloromethane
Concen: 0.518 ug/l
RT: 1.301 min Scan# 35
Delta R.T. -0.000 min
Lab File: VX048679.D
Acq: 25 Nov 2025 13:00

Tgt Ion: 50 Resp: 930

Ion	Ratio	Lower	Upper
50	100		
52	43.9	26.0	39.0#



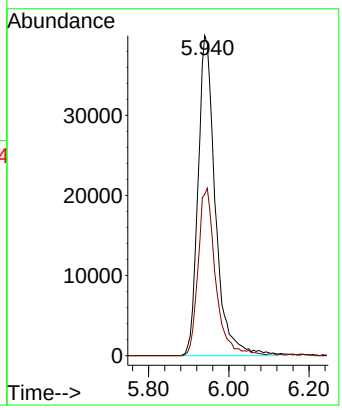


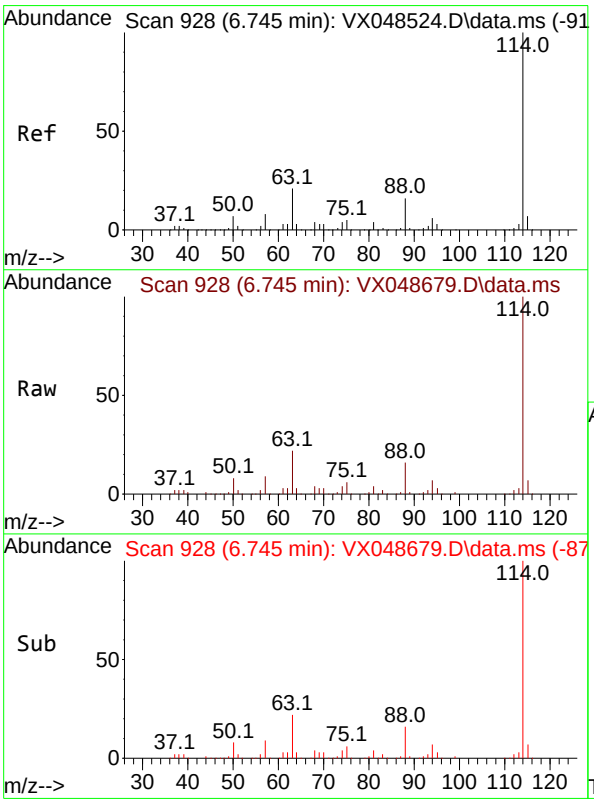
#33
1,2-Dichloroethane-d4
Concen: 51.400 ug/l
RT: 5.940 min Scan# 7
Delta R.T. -0.006 min
Lab File: VX048679.D
Acq: 25 Nov 2025 13:00

Instrument :
MSVOA_X
ClientSampleId :
MW7

Tgt Ion: 65 Resp: 119607

Ion	Ratio	Lower	Upper
65	100		
67	53.0	0.0	106.2

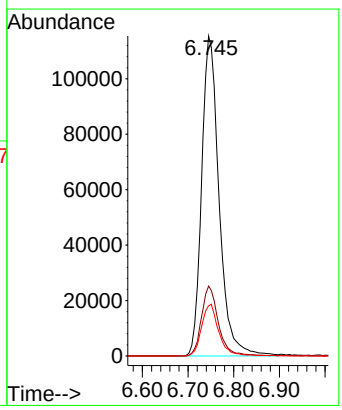


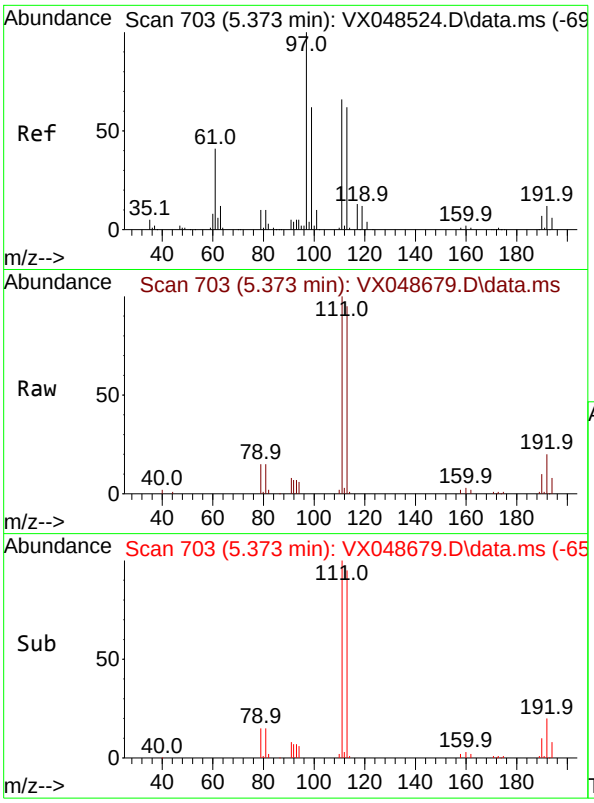


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.745 min Scan# 928
Delta R.T. -0.000 min
Lab File: VX048679.D
Acq: 25 Nov 2025 13:00

Tgt Ion:114 Resp: 305521

Ion	Ratio	Lower	Upper
114	100		
63	21.8	0.0	41.2
88	15.7	0.0	32.2



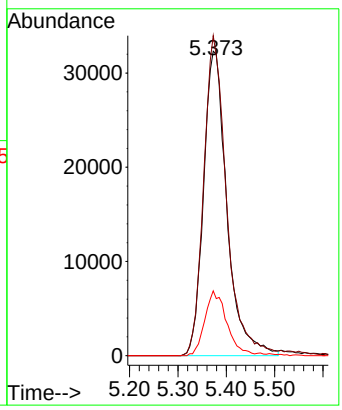


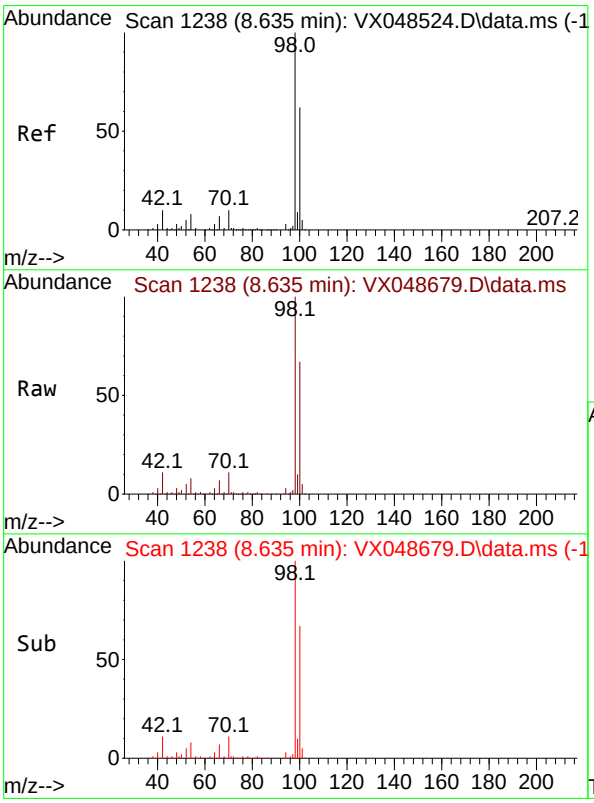
#35
Dibromofluoromethane
Concen: 47.105 ug/l
RT: 5.373 min Scan# 7
Delta R.T. -0.000 min
Lab File: VX048679.D
Acq: 25 Nov 2025 13:00

Instrument :
MSVOA_X
ClientSampleId :
MW7

Tgt Ion:113 Resp: 108925

Ion	Ratio	Lower	Upper
113	100		
111	102.5	81.9	122.9
192	19.9	15.8	23.6

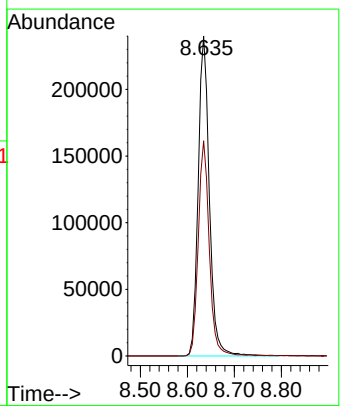


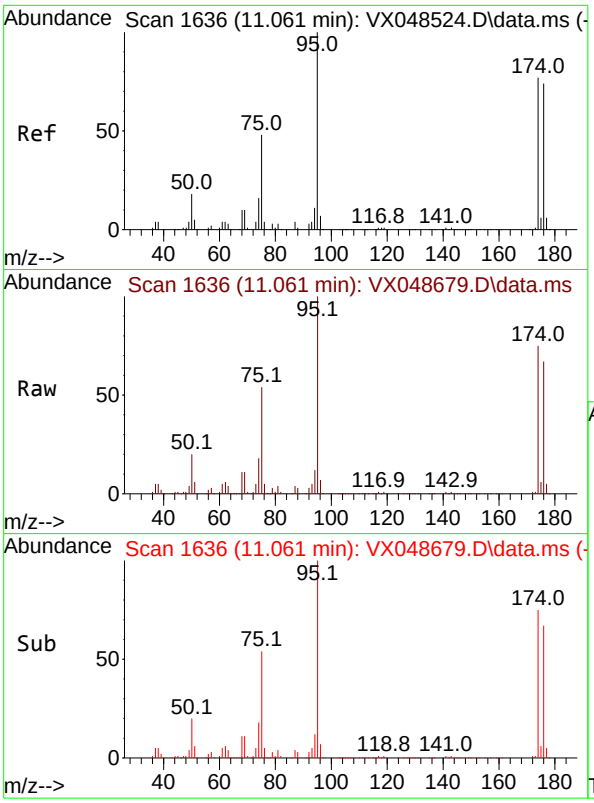


#50
Toluene-d8
Concen: 55.169 ug/l
RT: 8.635 min Scan# 1238
Delta R.T. -0.000 min
Lab File: VX048679.D
Acq: 25 Nov 2025 13:00

Tgt Ion: 98 Resp: 397876

Ion	Ratio	Lower	Upper
98	100		
100	66.3	53.6	80.4



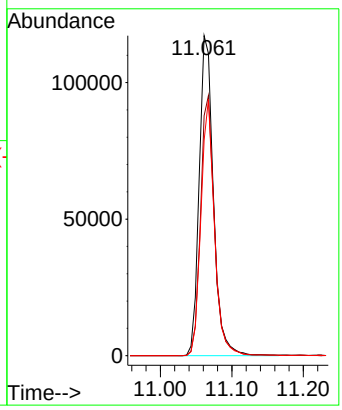


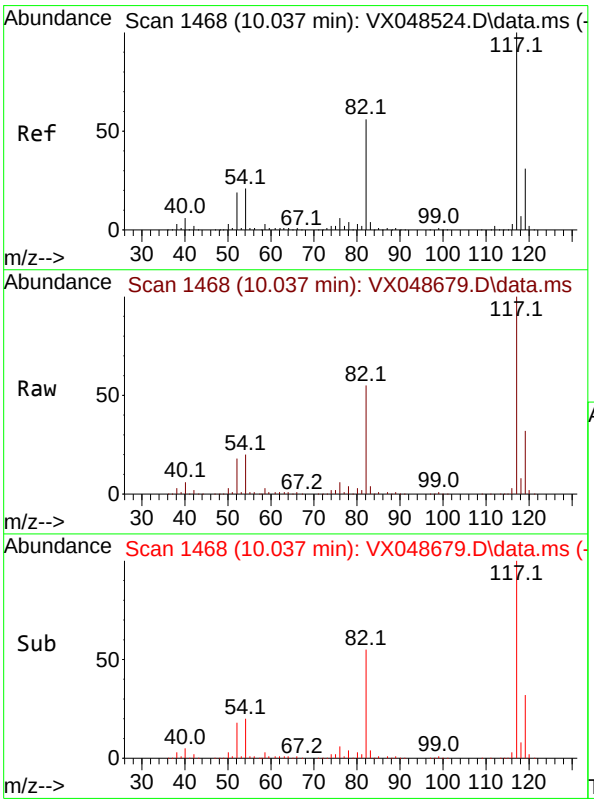
#62
4-Bromofluorobenzene
Concen: 60.041 ug/l
RT: 11.061 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX048679.D
Acq: 25 Nov 2025 13:00

Instrument :
MSVOA_X
ClientSampleId :
MW7

Tgt Ion: 95 Resp: 161369

Ion	Ratio	Lower	Upper
95	100		
174	80.3	0.0	161.8
176	76.4	0.0	153.6

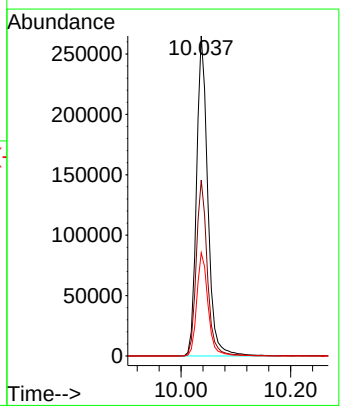


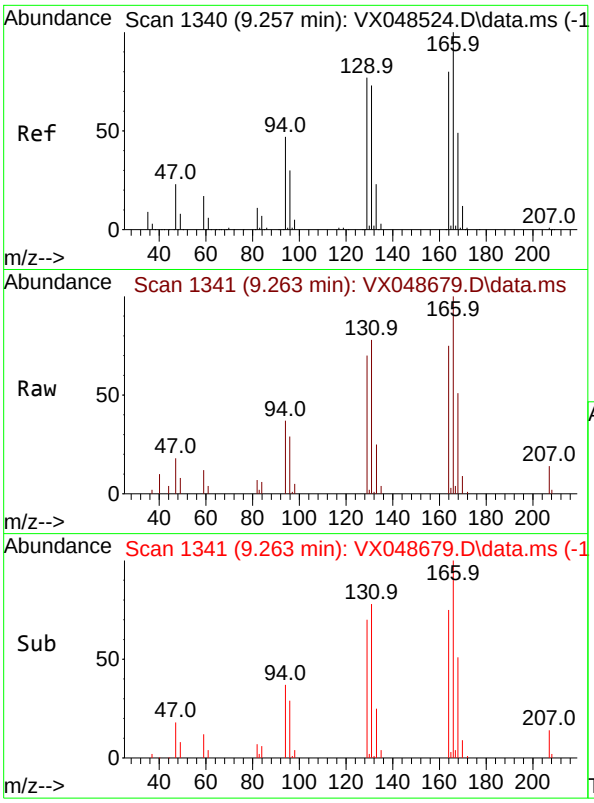


#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.037 min Scan# 1468
Delta R.T. -0.000 min
Lab File: VX048679.D
Acq: 25 Nov 2025 13:00

Tgt Ion:117 Resp: 379381

Ion	Ratio	Lower	Upper
117	100		
82	55.0	44.4	66.6
119	32.2	25.1	37.7



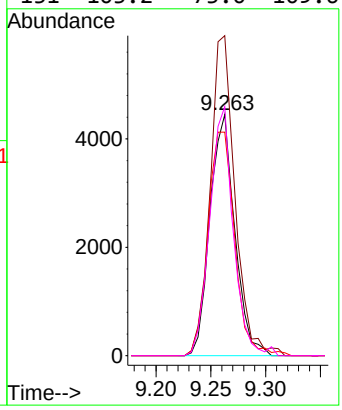


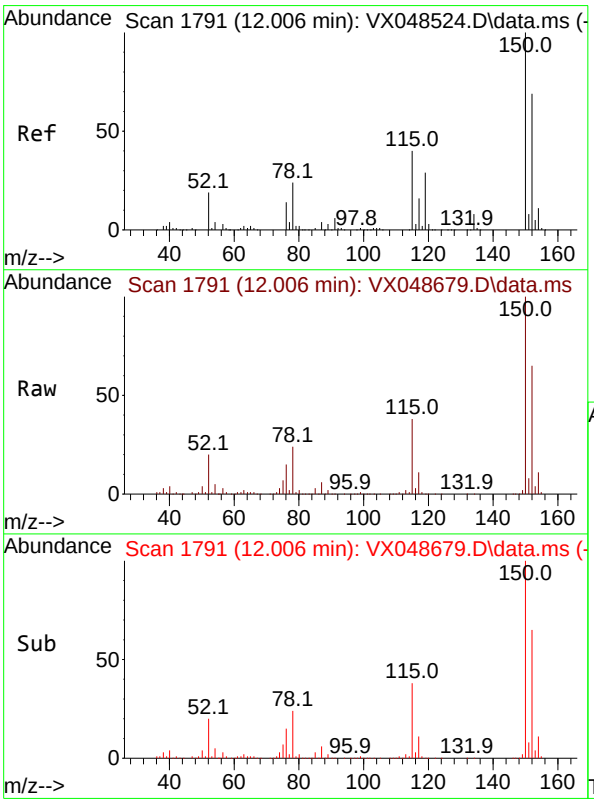
#64
Tetrachloroethene
Concen: 2.546 ug/l
RT: 9.263 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX048679.D
Acq: 25 Nov 2025 13:00

Instrument :
MSVOA_X
ClientSampleId :
MW7

Tgt Ion:164 Resp: 7016

Ion	Ratio	Lower	Upper
164	100		
166	132.7	100.6	150.8
129	92.7	77.6	116.4
131	103.2	73.0	109.6

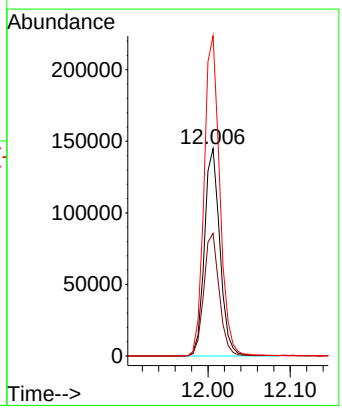




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.006 min Scan# 1791
Delta R.T. -0.000 min
Lab File: VX048679.D
Acq: 25 Nov 2025 13:00

Tgt Ion:152 Resp: 188892

Ion	Ratio	Lower	Upper
152	100		
115	59.0	39.2	117.6
150	156.6	0.0	347.0



Sample Results: **VX048679.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112525\
Data File : VX048679.D
Acq On : 25 Nov 2025 13:00
Operator : JC/MD
Sample : Q3715-03
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
MW7

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Title : SW846 8260

Signal : TIC: VX048679.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.373	691	703	721	rBV	106101	350909	31.08%	5.854%
2	5.538	721	730	756	rVB	149459	483984	42.87%	8.074%
3	5.946	786	797	820	rBV	109677	327911	29.04%	5.471%
4	6.745	919	928	952	rBV	271774	719351	63.72%	12.001%
5	8.635	1231	1238	1256	rBV	621774	1028262	91.08%	17.155%
6	9.263	1334	1341	1353	rVB	33684	55192	4.89%	0.921%
7	10.037	1462	1468	1490	rBV	777875	1111078	98.41%	18.536%
8	11.061	1631	1636	1647	rBV	565561	788330	69.83%	13.152%
9	12.006	1785	1791	1801	rBV	839197	1128992	100.00%	18.835%

Sum of corrected areas: 5994009

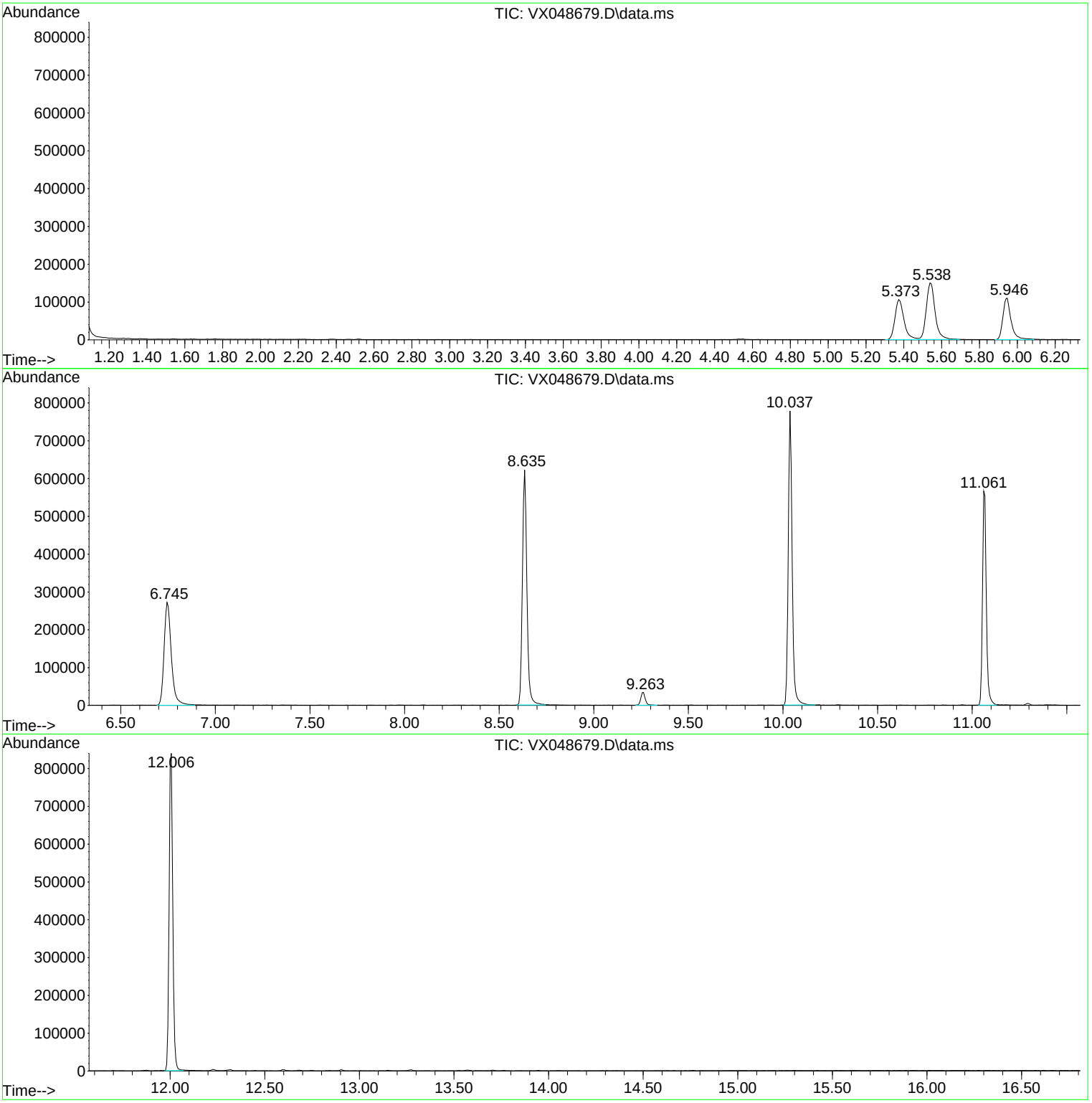
Sample Results: **VX048679.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112525\
Data File : VX048679.D
Acq On : 25 Nov 2025 13:00
Operator : JC/MD
Sample : Q3715-03
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
MW7

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260

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



Library Search Compound Report

Sample Results: **VX048679.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112525\
Data File : VX048679.D
Acq On : 25 Nov 2025 13:00
Operator : JC/MD
Sample : Q3715-03
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
MW7

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260

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

No Library Search Compounds Detected
****

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112525\
Data File : VX048679.D
Acq On : 25 Nov 2025 13:00
Operator : JC/MD
Sample : Q3715-03
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
MW7

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260

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

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

CALIBRATION SUMMARY

Raw Data

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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alliance Contract: GENV01

Lab Code: ACE SDG No.: Q3715

Instrument ID: MSVOA_N Calibration Date(s): 11/24/2025 11/24/2025

Heated Purge: (Y/N) N Calibration Time(s): 12:38 14:35

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

LAB FILE ID: RRF001 = VN088344.D RRF005 = VN088345.D RRF020 = VN088346.D
RRF050 = VN088347.D RRF100 = VN088348.D RRF150 = VN088349.D

COMPOUND	RRF001	RRF005	RRF020	RRF050	RRF100	RRF150	$\overline{RRF}$	% RSD
Dichlorodifluoromethane	0.719	0.676	0.796	0.741	0.838	0.736	0.751	7.7
Chloromethane	0.911	0.800	0.805	0.801	0.759	0.764	0.807	6.8
Vinyl Chloride	0.804	0.844	0.856	0.812	0.837	0.772	0.821	3.8
Bromomethane		0.407	0.392	0.396	0.387	0.392	0.395	1.9
Chloroethane	0.555	0.503	0.496	0.505	0.502	0.485	0.508	4.8
Trichlorofluoromethane	1.234	1.170	1.168	1.092	1.201	1.055	1.153	5.8
1,1,2-Trichlorotrifluoroethane	0.660	0.635	0.639	0.564	0.633	0.553	0.614	7.2
Tert butyl alcohol		0.151	0.149	0.161	0.142	0.148	0.150	4.6
1,1-Dichloroethene	0.722	0.620	0.601	0.568	0.595	0.554	0.610	9.8
Acetone	0.412	0.355	0.322	0.335	0.305	0.314	0.341	11.5
Carbon Disulfide	2.061	2.043	2.043	1.983	1.996	1.833	1.993	4.2
Methyl tert-butyl Ether	2.126	2.239	2.245	2.504	2.265	2.333	2.285	5.5
Methyl Acetate	1.072	1.048	0.957	1.049	0.972	0.985	1.014	4.7
Methylene Chloride	0.797	0.752	0.704	0.756	0.686	0.678	0.729	6.4
trans-1,2-Dichloroethene	0.752	0.668	0.676	0.686	0.647	0.626	0.676	6.4
1,1-Dichloroethane	1.389	1.431	1.348	1.427	1.321	1.286	1.367	4.3
Cyclohexane		1.450	1.264	1.133	1.237	1.109	1.239	10.9
2-Butanone	0.509	0.538	0.548	0.596	0.540	0.556	0.548	5.2
Carbon Tetrachloride	0.565	0.504	0.548	0.499	0.570	0.509	0.532	6
cis-1,2-Dichloroethene	0.797	0.801	0.794	0.829	0.747	0.744	0.785	4.2
Bromochloromethane	0.724	0.722	0.684	0.735	0.624	0.597	0.681	8.5
Chloroform	1.377	1.362	1.351	1.392	1.291	1.285	1.343	3.3
1,1,1-Trichloroethane	1.247	1.219	1.192	1.158	1.166	1.104	1.181	4.3
Methylcyclohexane	0.534	0.542	0.606	0.527	0.662	0.561	0.572	9.1
Benzene	1.658	1.555	1.609	1.559	1.559	1.477	1.570	3.9
1,2-Dichloroethane	0.583	0.614	0.596	0.615	0.597	0.587	0.599	2.3
Trichloroethene	0.382	0.385	0.383	0.357	0.371	0.348	0.371	4.1
1,2-Dichloropropane	0.426	0.402	0.402	0.406	0.396	0.381	0.402	3.6
Bromodichloromethane	0.602	0.586	0.586	0.589	0.583	0.566	0.586	2
4-Methyl-2-Pentanone	0.540	0.616	0.661	0.673	0.658	0.651	0.633	7.8

* 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

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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alliance Contract: GENV01

Lab Code: ACE SDG No.: Q3715

Instrument ID: MSVOA_N Calibration Date(s): 11/24/2025 11/24/2025

Heated Purge: (Y/N) N Calibration Time(s): 12:38 14:35

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

LAB FILE ID: RRF001 = VN088344.D RRF005 = VN088345.D RRF020 = VN088346.D
RRF050 = VN088347.D RRF100 = VN088348.D RRF150 = VN088349.D

COMPOUND	RRF001	RRF005	RRF020	RRF050	RRF100	RRF150	$\overline{RRF}$	% RSD
Toluene	0.829	0.885	0.940	0.913	0.960	0.911	0.906	5.1
t-1,3-Dichloropropene	0.567	0.553	0.598	0.631	0.631	0.625	0.601	5.7
cis-1,3-Dichloropropene	0.590	0.618	0.628	0.662	0.654	0.640	0.632	4.2
1,1,2-Trichloroethane	0.350	0.359	0.364	0.353	0.341	0.336	0.351	3
2-Hexanone	0.359	0.301	0.406	0.436	0.442	0.450	0.399	14.7
Dibromochloromethane	0.384	0.386	0.406	0.409	0.410	0.404	0.400	2.9
1,2-Dibromoethane	0.304	0.367	0.364	0.369	0.367	0.359	0.355	7.2
Tetrachloroethene	0.426	0.388	0.413	0.377	0.407	0.367	0.396	5.7
Chlorobenzene	1.114	1.142	1.161	1.106	1.145	1.070	1.123	3
Ethyl Benzene	1.881	1.860	2.014	1.938	2.133	1.952	1.963	5.1
m/p-Xylenes	0.658	0.690	0.769	0.733	0.788	0.728	0.728	6.6
o-Xylene	0.670	0.619	0.722	0.696	0.749	0.708	0.694	6.5
Styrene	0.884	1.025	1.163	1.193	1.284	1.210	1.127	12.9
Bromoform	0.224	0.273	0.285	0.285	0.302	0.295	0.277	10.1
Isopropylbenzene	3.339	3.528	3.944	3.624	4.040	3.706	3.697	7.1
1,1,2,2-Tetrachloroethane	1.377	1.218	1.231	1.127	1.135	1.082	1.195	8.9
1,3-Dichlorobenzene	1.730	1.573	1.720	1.606	1.676	1.574	1.647	4.3
1,4-Dichlorobenzene	1.747	1.825	1.786	1.681	1.702	1.608	1.725	4.5
1,2-Dichlorobenzene	1.518	1.574	1.583	1.521	1.595	1.505	1.550	2.5
1,2-Dibromo-3-Chloropropane	0.284	0.284	0.284	0.288	0.300	0.300	0.290	2.8
1,2,4-Trichlorobenzene	0.998	0.864	0.901	0.889	0.955	0.917	0.921	5.3
1,2,3-Trichlorobenzene	0.942	0.850	0.888	0.875	0.930	0.891	0.896	3.8
1,2-Dichloroethane-d4		0.954	0.916	0.999	0.882	0.960	0.942	4.7
Dibromofluoromethane		0.361	0.350	0.350	0.334	0.337	0.346	3.2
Toluene-d8		1.249	1.292	1.285	1.308	1.313	1.289	2
4-Bromofluorobenzene		0.402	0.413	0.448	0.466	0.482	0.442	7.7

* 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_N_NEW

Method Path : Z:\voasrv\HPCHEM1\MSVOA_N\methods\
Method File : 82N112425W.M
Title : SW846 8260
Last Update : Tue Nov 25 01:34:52 2025
Response Via : Initial Calibration

Calibration Files
1 =VN088344.D 5 =VN088345.D 20 =VN088346.D 50 =VN088347.D 100 =VN088348.D 150 =VN088349.D

		Compound	1	5	20	50	100	150	Avg	%RSD
1)	I	Pentafluorobenzene	----------ISTD----------							
2)	T	Dichlorodifluo...	0.719	0.676	0.796	0.741	0.838	0.736	0.751	7.67
3)	P	Chloromethane	0.911	0.800	0.805	0.801	0.759	0.764	0.807	6.79
4)	C	Vinyl Chloride	0.804	0.844	0.856	0.812	0.837	0.772	0.821	3.78#
5)	T	Bromomethane		0.407	0.392	0.396	0.387	0.392	0.395	1.85
6)	T	Chloroethane	0.555	0.503	0.496	0.505	0.502	0.485	0.508	4.82
7)	T	Trichlorofluor...	1.234	1.170	1.168	1.092	1.201	1.055	1.153	5.84
8)	T	Diethyl Ether	0.495	0.451	0.395	0.444	0.401	0.411	0.433	8.73
9)	T	1,1,2-Trichlor...	0.660	0.635	0.639	0.564	0.633	0.553	0.614	7.17
10)	T	Methyl Iodide		0.498	0.584	0.662	0.660	0.636	0.608	11.40
11)	T	Tert butyl alc...		0.151	0.149	0.161	0.142	0.148	0.150	4.64
12)	CM	1,1-Dichloroet...	0.722	0.620	0.601	0.568	0.595	0.554	0.610	9.83#
13)	T	Acrolein		0.146	0.132	0.151	0.143	0.147	0.144	5.00
14)	T	Allyl chloride	1.107	1.143	1.117	1.149	1.132	1.135	1.131	1.38
15)	T	Acrylonitrile	0.435	0.435	0.432	0.466	0.416	0.418	0.434	4.14
16)	T	Acetone	0.412	0.355	0.322	0.335	0.305	0.314	0.341	11.49
17)	T	Carbon Disulfide	2.061	2.043	2.043	1.983	1.996	1.833	1.993	4.22
18)	T	Methyl Acetate	1.072	1.048	0.957	1.049	0.972	0.985	1.014	4.74
19)	T	Methyl tert-bu...	2.126	2.239	2.245	2.504	2.265	2.333	2.285	5.53
20)	T	Methylene Chlo...	0.797	0.752	0.704	0.756	0.686	0.678	0.729	6.44
21)	T	trans-1,2-Dich...	0.752	0.668	0.676	0.686	0.647	0.626	0.676	6.39
22)	T	Diisopropyl ether	2.267	2.415	2.439	2.580	2.359	2.424	2.414	4.26
23)	T	Vinyl Acetate	1.711	1.879	1.997	2.137	1.943	2.002	1.945	7.35
24)	P	1,1-Dichloroet...	1.389	1.431	1.348	1.427	1.321	1.286	1.367	4.27
25)	T	2-Butanone	0.509	0.538	0.548	0.596	0.540	0.556	0.548	5.17
26)	T	2,2-Dichloropr...	1.245	1.133	1.185	1.204	1.176	1.137	1.180	3.56
27)	T	cis-1,2-Dichlo...	0.797	0.801	0.794	0.829	0.747	0.744	0.785	4.22
28)	T	Bromochloromet...	0.724	0.722	0.684	0.735	0.624	0.597	0.681	8.47
29)	T	Tetrahydrofuran	0.354	0.397	0.394	0.429	0.384	0.398	0.393	6.18
30)	C	Chloroform	1.377	1.362	1.351	1.392	1.291	1.285	1.343	3.33#
31)	T	Cyclohexane		1.450	1.264	1.133	1.237	1.109	1.239	10.92
32)	T	1,1,1-Trichlor...	1.247	1.219	1.192	1.158	1.166	1.104	1.181	4.27
33)	S	1,2-Dichloroet...		0.954	0.916	0.999	0.882	0.960	0.942	4.74
34)	I	1,4-Difluorobenzene	----------ISTD----------							
35)	S	Dibromofluorom...		0.361	0.350	0.350	0.334	0.337	0.346	3.17
36)	T	1,1-Dichloropr...	0.607	0.542	0.531	0.491	0.547	0.490	0.535	8.09
37)	T	Ethyl Acetate	0.735	0.678	0.724	0.720	0.681	0.681	0.703	3.69
38)	T	Carbon Tetrach...	0.565	0.504	0.548	0.499	0.570	0.509	0.532	6.04
39)	T	Methylcyclohexane	0.534	0.542	0.606	0.527	0.662	0.561	0.572	9.14
40)	TM	Benzene	1.658	1.555	1.609	1.559	1.559	1.477	1.570	3.86
41)	T	Methacrylonitrile	0.360	0.323	0.351	0.357	0.349	0.350	0.348	3.74
42)	TM	1,2-Dichloroet...	0.583	0.614	0.596	0.615	0.597	0.587	0.599	2.27
43)	T	Isopropyl Acetate	1.098	1.019	1.063	1.116	1.076	1.074	1.074	3.11
44)	TM	Trichloroethene	0.382	0.385	0.383	0.357	0.371	0.348	0.371	4.13
45)	C	1,2-Dichloropr...	0.426	0.402	0.402	0.406	0.396	0.381	0.402	3.62#
46)	T	Dibromomethane	0.288	0.292	0.289	0.293	0.283	0.277	0.287	2.08
47)	T	Bromodichlorom...	0.602	0.586	0.586	0.589	0.583	0.566	0.586	1.96
48)	T	Methyl methacr...	0.480	0.433	0.491	0.513	0.511	0.513	0.490	6.35
49)	T	1,4-Dioxane	0.005	0.006	0.007	0.007	0.006	0.006	0.006	8.55
50)	S	Toluene-d8		1.249	1.292	1.285	1.308	1.313	1.289	1.96
51)	T	4-Methyl-2-Pen...	0.540	0.616	0.661	0.673	0.658	0.651	0.633	7.79
52)	CM	Toluene	0.829	0.885	0.940	0.913	0.960	0.911	0.906	5.05#
53)	T	t-1,3-Dichloro...	0.567	0.553	0.598	0.631	0.631	0.625	0.601	5.72
54)	T	cis-1,3-Dichlo...	0.590	0.618	0.628	0.662	0.654	0.640	0.632	4.16
55)	T	1,1,2-Trichlor...	0.350	0.359	0.364	0.353	0.341	0.336	0.351	2.98
56)	T	Ethyl methacry...	0.417	0.482	0.558	0.616	0.624	0.626	0.554	15.71

Method Path : Z:\voasrv\HPCHEM1\MSVOA_N\methods\
Method File : 82N112425W.M

57)	T	1,3-Dichloropr...	0.607	0.638	0.647	0.644	0.638	0.622	0.633	2.42
58)	T	2-Chloroethyl ...	0.258	0.323	0.333	0.364	0.337	0.301	0.319	11.41
59)	T	2-Hexanone	0.359	0.301	0.406	0.436	0.442	0.450	0.399	14.66
60)	T	Dibromochlorom...	0.384	0.386	0.406	0.409	0.410	0.404	0.400	2.87
61)	T	1,2-Dibromoethane	0.304	0.367	0.364	0.369	0.367	0.359	0.355	7.16
62)	S	4-Bromofluorob...		0.402	0.413	0.448	0.466	0.482	0.442	7.67
63)	I	Chlorobenzene-d5	----------ISTD----------							
64)	T	Tetrachloroethene	0.426	0.388	0.413	0.377	0.407	0.367	0.396	5.73
65)	PM	Chlorobenzene	1.114	1.142	1.161	1.106	1.145	1.070	1.123	2.96
66)	T	1,1,1,2-Tetrac...	0.378	0.372	0.394	0.383	0.386	0.361	0.379	3.04
67)	C	Ethyl Benzene	1.881	1.860	2.014	1.938	2.133	1.952	1.963	5.06#
68)	T	m/p-Xylenes	0.658	0.690	0.769	0.733	0.788	0.728	0.728	6.64
69)	T	o-Xylene	0.670	0.619	0.722	0.696	0.749	0.708	0.694	6.51
70)	T	Styrene	0.884	1.025	1.163	1.193	1.284	1.210	1.127	12.94
71)	P	Bromoform	0.224	0.273	0.285	0.285	0.302	0.295	0.277	10.12
72)	I	1,4-Dichlorobenzen...	----------ISTD----------							
73)	T	Isopropylbenzene	3.339	3.528	3.944	3.624	4.040	3.706	3.697	7.07
74)	T	N-amyl acetate			1.173	1.045	1.338	1.480	1.259	15.09
75)	P	1,1,2,2-Tetrac...	1.377	1.218	1.231	1.127	1.135	1.082	1.195	8.87
76)	T	1,2,3-Trichlor...	1.036	1.199	1.268	1.202	1.177	1.145	1.171	6.63
77)	T	Bromobenzene	0.781	0.885	0.866	0.863	0.865	0.816	0.846	4.66
78)	T	n-propylbenzene	4.076	4.270	4.925	4.439	4.931	4.496	4.523	7.66
79)	T	2-Chlorotoluene	2.707	2.799	2.851	2.699	2.835	2.681	2.762	2.72
80)	T	1,3,5-Trimethy...	2.650	2.988	3.315	3.051	3.307	3.069	3.063	7.99
81)	T	trans-1,4-Dich...		0.355	0.364	0.430	0.452	0.462	0.413	12.09
82)	T	4-Chlorotoluene	2.093	2.830	2.935	2.854	2.944	2.803	2.743	11.80
83)	T	tert-Butylbenzene	2.509	2.468	2.773	2.509	2.816	2.549	2.604	5.78
84)	T	1,2,4-Trimethy...	2.572	2.827	3.310	3.112	3.344	3.105	3.045	9.74
85)	T	sec-Butylbenzene	3.457	3.614	3.971	3.609	4.122	3.674	3.741	6.73
86)	T	p-Isopropyltol...	2.714	2.808	3.330	3.047	3.435	3.073	3.068	9.18
87)	T	1,3-Dichlorobe...	1.730	1.573	1.720	1.606	1.676	1.574	1.647	4.34
88)	T	1,4-Dichlorobe...	1.747	1.825	1.786	1.681	1.702	1.608	1.725	4.52
89)	T	n-Butylbenzene	2.827	2.664	3.155	2.873	3.373	2.979	2.979	8.49
90)	T	Hexachloroethane	0.549	0.550	0.571	0.535	0.604	0.553	0.560	4.36
91)	T	1,2-Dichlorobe...	1.518	1.574	1.583	1.521	1.595	1.505	1.550	2.52
92)	T	1,2-Dibromo-3-...	0.284	0.284	0.284	0.288	0.300	0.300	0.290	2.80
93)	T	1,2,4-Trichlor...	0.998	0.864	0.901	0.889	0.955	0.917	0.921	5.26
94)	T	Hexachlorobuta...	0.362	0.316	0.349	0.297	0.354	0.307	0.331	8.32
95)	T	Naphthalene	2.946	2.864	3.163	3.292	3.483	3.395	3.190	7.74
96)	T	1,2,3-Trichlor...	0.942	0.850	0.888	0.875	0.930	0.891	0.896	3.83

(#) = Out of Range

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN112425\
Data File : VN088344.D
Acq On : 24 Nov 2025 12:38
Operator : JC\MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 25 01:09:22 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:08:44 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :John Carlone
11/25/2025
Supervised By :Mahesh Dadoda
11/26/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.206	168	286338	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.082	114	535294	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.841	117	458943	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.770	152	203454	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	0.000	65	0d	0.000	ug/l	
Spiked Amount 50.000	Range 74 - 125		Recovery =	0.000%#		
35) Dibromofluoromethane	0.000	113	0d	0.000	ug/l	
Spiked Amount 50.000	Range 75 - 124		Recovery =	0.000%#		
50) Toluene-d8	0.000	98	0d	0.000	ug/l	
Spiked Amount 50.000	Range 86 - 113		Recovery =	0.000%#		
62) 4-Bromofluorobenzene	0.000	95	0d	0.000	ug/l	
Spiked Amount 50.000	Range 77 - 121		Recovery =	0.000%#		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.142	85	4116	1.176	ug/l	88
3) Chloromethane	2.383	50	5215	1.282	ug/l	92
4) Vinyl Chloride	2.536	62	4602	1.055	ug/l	98
6) Chloroethane	3.148	64	3181	1.036	ug/l #	78
7) Trichlorofluoromethane	3.512	101	7064	1.049	ug/l #	82
8) Diethyl Ether	3.953	74	2832	1.101	ug/l	94
9) 1,1,2-Trichlorotrifluo...	4.359	101	3781	1.083	ug/l	91
12) 1,1-Dichloroethene	4.336	96	4136m	1.118	ug/l	
14) Allyl chloride	5.012	41	6342	0.957	ug/l	95
15) Acrylonitrile	5.712	53	12465	5.068	ug/l	98
16) Acetone	4.424	43	11802	4.716	ug/l	98
17) Carbon Disulfide	4.694	76	11805	1.034	ug/l #	85
18) Methyl Acetate	5.006	43	6138	1.129	ug/l	95
19) Methyl tert-butyl Ether	5.783	73	12174	0.876	ug/l	96
20) Methylene Chloride	5.265	84	4566	1.042	ug/l #	70
21) trans-1,2-Dichloroethene	5.783	96	4308	1.053	ug/l #	94
22) Diisopropyl ether	6.665	45	12982m	0.932	ug/l	
23) Vinyl Acetate	6.594	43	48988	3.972	ug/l	96
24) 1,1-Dichloroethane	6.547	63	7954	1.029	ug/l #	95
25) 2-Butanone	7.471	43	14574	4.283	ug/l #	82
26) 2,2-Dichloropropane	7.465	77	7127	1.026	ug/l #	77
27) cis-1,2-Dichloroethene	7.465	96	4562m	0.962	ug/l	
28) Bromochloromethane	7.788	49	4148	1.149	ug/l #	92
29) Tetrahydrofuran	7.835	42	10143	4.482	ug/l	96
30) Chloroform	7.947	83	7885	1.027	ug/l	97
32) 1,1,1-Trichloroethane	8.153	97	7143	1.055	ug/l #	46
36) 1,1-Dichloropropene	8.341	75	6499	1.203	ug/l #	80
37) Ethyl Acetate	7.553	43	7870	1.095	ug/l #	94
38) Carbon Tetrachloride	8.347	117	6045	1.085	ug/l	84
39) Methylcyclohexane	9.582	83	5715	0.846	ug/l	87
40) Benzene	8.582	78	17750	1.069	ug/l #	88
41) Methacrylonitrile	7.759	41	3857	1.037	ug/l #	83
42) 1,2-Dichloroethane	8.659	62	6237	1.039	ug/l	99
43) Isopropyl Acetate	8.677	43	11759	1.073	ug/l #	94
44) Trichloroethene	9.335	130	4088	1.057	ug/l	73
45) 1,2-Dichloropropane	9.600	63	4559	1.082	ug/l #	78

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN112425\
Data File : VN088344.D
Acq On : 24 Nov 2025 12:38
Operator : JC\MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 25 01:09:22 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:08:44 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :John Carlone
11/25/2025
Supervised By :Mahesh Dadoda
11/26/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) Dibromomethane	9.694	93	3080	1.022	ug/l		88
47) Bromodichloromethane	9.865	83	6445	1.068	ug/l	#	89
48) Methyl methacrylate	9.665	41	5144	1.017	ug/l	#	86
49) 1,4-Dioxane	9.688	88	1133	17.773	ug/l	#	72
51) 4-Methyl-2-Pentanone	10.429	43	28924	4.454	ug/l		97
52) Toluene	10.612	92	8872	0.875	ug/l		97
53) t-1,3-Dichloropropene	10.812	75	6068	0.947	ug/l		89
54) cis-1,3-Dichloropropene	10.294	75	6312	0.928	ug/l		94
55) 1,1,2-Trichloroethane	11.000	97	3748	0.969	ug/l	#	72
56) Ethyl methacrylate	10.859	69	4463	0.723	ug/l	#	72
57) 1,3-Dichloropropane	11.147	76	6496	0.952	ug/l		95
58) 2-Chloroethyl Vinyl ether	10.141	63	13790	4.190	ug/l		92
59) 2-Hexanone	11.188	43	19197m	4.495	ug/l		
60) Dibromochloromethane	11.335	129	4116	0.936	ug/l		98
61) 1,2-Dibromoethane	11.447	107	3251	0.814	ug/l		96
64) Tetrachloroethene	11.076	164	3914	1.220	ug/l	#	86
65) Chlorobenzene	11.871	112	10226	0.958	ug/l	#	84
66) 1,1,1,2-Tetrachloroethane	11.941	131	3473	0.985	ug/l	#	57
67) Ethyl Benzene	11.941	91	17267	0.922	ug/l		92
68) m/p-Xylenes	12.047	106	12077	1.724	ug/l		99
69) o-Xylene	12.382	106	6153	0.927	ug/l		91
70) Styrene	12.394	104	8118	0.747	ug/l		100
71) Bromoform	12.559	173	2054	0.782	ug/l	#	82
73) Isopropylbenzene	12.676	105	13585	0.849	ug/l		99
75) 1,1,2,2-Tetrachloroethane	12.918	83	5605	1.121	ug/l	#	83
76) 1,2,3-Trichloropropane	12.982	75	4214m	0.871	ug/l		
77) Bromobenzene	12.965	156	3176	0.907	ug/l		100
78) n-propylbenzene	13.017	91	16584	0.851	ug/l		98
79) 2-Chlorotoluene	13.106	91	11013	0.981	ug/l		100
80) 1,3,5-Trimethylbenzene	13.153	105	10783	0.811	ug/l		96
82) 4-Chlorotoluene	13.212	91	8516	0.700	ug/l		84
83) tert-Butylbenzene	13.417	119	10210	0.869	ug/l		95
84) 1,2,4-Trimethylbenzene	13.465	105	10464	0.786	ug/l		89
85) sec-Butylbenzene	13.594	105	14068	0.819	ug/l		99
86) p-Isopropyltoluene	13.706	119	11043	0.798	ug/l		97
87) 1,3-Dichlorobenzene	13.712	146	7040	1.019	ug/l		95
88) 1,4-Dichlorobenzene	13.782	146	7109m	0.955	ug/l		
89) n-Butylbenzene	14.035	91	11505	0.845	ug/l		93
90) Hexachloroethane	14.312	117	2233	0.841	ug/l		98
91) 1,2-Dichlorobenzene	14.082	146	6178	0.927	ug/l		97
92) 1,2-Dibromo-3-Chloropr...	14.694	75	1155	0.973	ug/l		93
93) 1,2,4-Trichlorobenzene	15.376	180	4059	1.011	ug/l		91
94) Hexachlorobutadiene	15.476	225	1474	1.002	ug/l		93
95) Naphthalene	15.623	128	11988	0.863	ug/l	#	93
96) 1,2,3-Trichlorobenzene	15.823	180	3833	0.989	ug/l		100

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

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN112425\
Data File : VN088344.D
Acq On : 24 Nov 2025 12:38
Operator : JC\MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 25 01:09:22 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:08:44 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

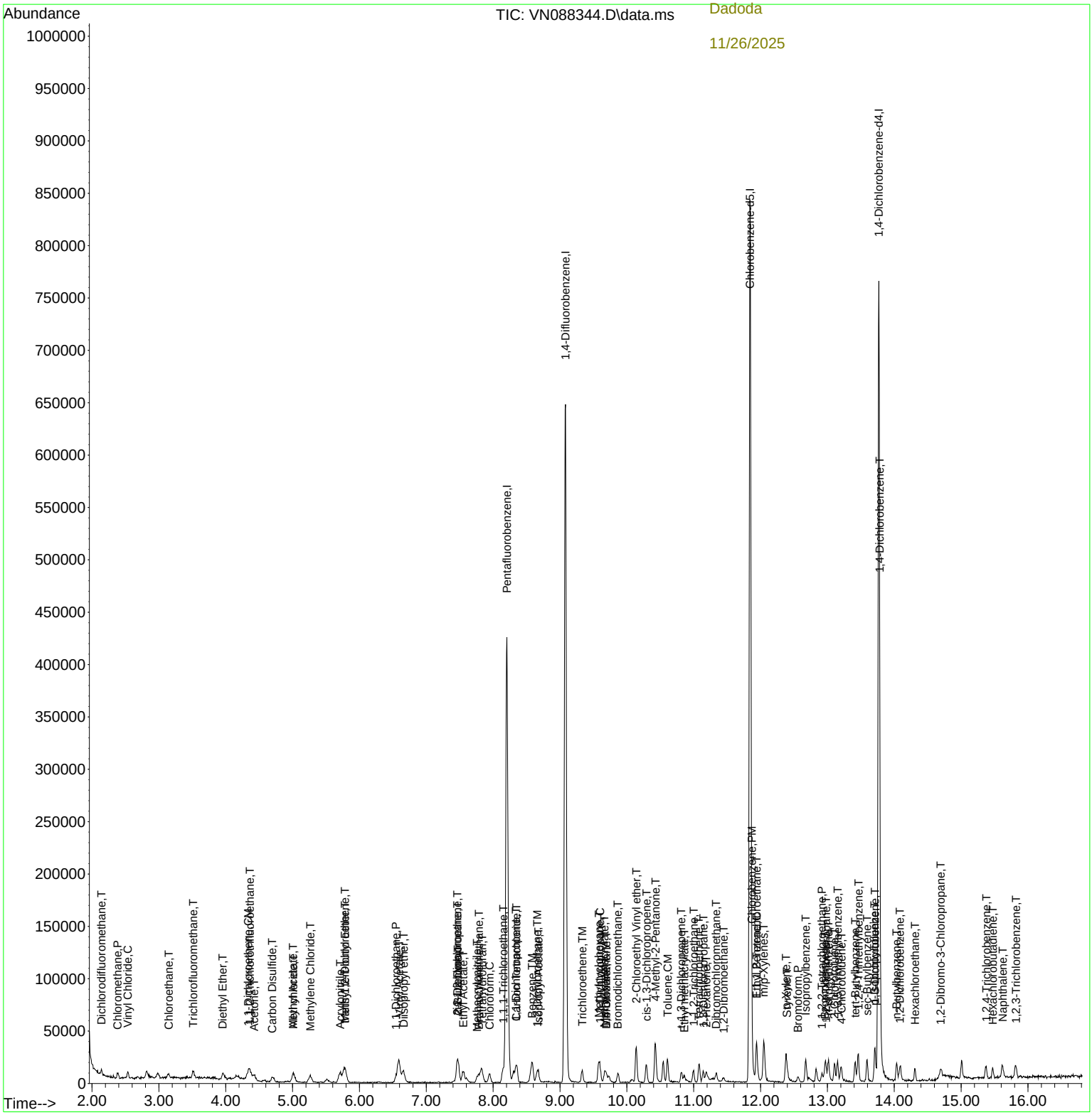
Manual Integrations APPROVED

Reviewed By :John Carlone

11/25/2025

Supervised By :Mahesh Dadoda

11/26/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN112425\
Data File : VN088345.D
Acq On : 24 Nov 2025 13:11
Operator : JC\MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 25 01:10:10 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:08:44 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :John Carlone 11/25/2025
Supervised By :Mahesh Dadoda 11/26/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.206	168	277017	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.083	114	520222	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.841	117	454370	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.771	152	210682	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.553	65	26416	5.272	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 10.540%#			
35) Dibromofluoromethane	8.153	113	18802	5.271	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 10.540%#			
50) Toluene-d8	10.547	98	64962	4.778	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 9.560%#			
62) 4-Bromofluorobenzene	12.829	95	20929	4.383	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 8.760%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.142	85	18728	5.530	ug/l	78
3) Chloromethane	2.383	50	22161	5.630	ug/l	96
4) Vinyl Chloride	2.536	62	23377	5.542	ug/l	95
5) Bromomethane	2.971	94	11265	4.586	ug/l	89
6) Chloroethane	3.142	64	13946	4.694	ug/l	90
7) Trichlorofluoromethane	3.512	101	32404	4.974	ug/l	99
8) Diethyl Ether	3.959	74	12500	5.022	ug/l	96
9) 1,1,2-Trichlorotrifluo...	4.365	101	17577	5.203	ug/l	97
10) Methyl Iodide	4.577	142	13782	4.252	ug/l #	86
11) Tert butyl alcohol	5.524	59	20975	23.946	ug/l	98
12) 1,1-Dichloroethene	4.342	96	17186	4.802	ug/l #	75
13) Acrolein	4.171	56	20281	21.167	ug/l	95
14) Allyl chloride	5.006	41	31674	4.939	ug/l	98
15) Acrylonitrile	5.706	53	60208	25.303	ug/l	99
16) Acetone	4.424	43	49209	20.327	ug/l	97
17) Carbon Disulfide	4.695	76	56594	5.124	ug/l	98
18) Methyl Acetate	5.012	43	29034	5.519	ug/l	99
19) Methyl tert-butyl Ether	5.783	73	62035	4.613	ug/l	96
20) Methylene Chloride	5.271	84	20834	4.915	ug/l #	80
21) trans-1,2-Dichloroethene	5.777	96	18495	4.671	ug/l	96
22) Diisopropyl ether	6.653	45	66886	4.963	ug/l	94
23) Vinyl Acetate	6.589	43	260201m	21.808	ug/l	
24) 1,1-Dichloroethane	6.547	63	39629	5.298	ug/l	98
25) 2-Butanone	7.465	43	74555	22.648	ug/l	97
26) 2,2-Dichloropropane	7.465	77	31387	4.669	ug/l	99
27) cis-1,2-Dichloroethene	7.471	96	22190	4.838	ug/l	96
28) Bromochloromethane	7.794	49	19995	5.723	ug/l	99
29) Tetrahydrofuran	7.824	42	54983	25.113	ug/l	100
30) Chloroform	7.953	83	37740	5.081	ug/l	99
31) Cyclohexane	8.241	56	40171	5.829	ug/l	96
32) 1,1,1-Trichloroethane	8.147	97	33772	5.154	ug/l #	85
36) 1,1-Dichloropropene	8.347	75	28193	5.368	ug/l	96
37) Ethyl Acetate	7.547	43	35286	5.054	ug/l	98
38) Carbon Tetrachloride	8.341	117	26194	4.839	ug/l	89
39) Methylcyclohexane	9.583	83	28179	4.292	ug/l	95
40) Benzene	8.588	78	80904	5.014	ug/l	91

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN112425\
Data File : VN088345.D
Acq On : 24 Nov 2025 13:11
Operator : JC\MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 25 01:10:10 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:08:44 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :John Carlone 11/25/2025
Supervised By :Mahesh Dadoda 11/26/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.765	41	16819	4.652	ug/l		95
42) 1,2-Dichloroethane	8.653	62	31962	5.480	ug/l		98
43) Isopropyl Acetate	8.677	43	52990	4.976	ug/l		99
44) Trichloroethene	9.335	130	20005	5.321	ug/l		89
45) 1,2-Dichloropropane	9.600	63	20897	5.101	ug/l		96
46) Dibromomethane	9.688	93	15209	5.195	ug/l		98
47) Bromodichloromethane	9.865	83	30479	5.198	ug/l	#	91
48) Methyl methacrylate	9.665	41	22513	4.579	ug/l		95
49) 1,4-Dioxane	9.688	88	6435	103.870	ug/l	#	96
51) 4-Methyl-2-Pentanone	10.424	43	160328	25.401	ug/l		100
52) Toluene	10.606	92	46057	4.673	ug/l		99
53) t-1,3-Dichloropropene	10.812	75	28774	4.621	ug/l		98
54) cis-1,3-Dichloropropene	10.288	75	32170	4.869	ug/l		98
55) 1,1,2-Trichloroethane	10.994	97	18669	4.965	ug/l		96
56) Ethyl methacrylate	10.859	69	25089	4.184	ug/l		98
57) 1,3-Dichloropropane	11.141	76	33183	5.006	ug/l		96
58) 2-Chloroethyl Vinyl ether	10.141	63	83959	26.251	ug/l		98
59) 2-Hexanone	11.182	43	78248	18.852	ug/l		96
60) Dibromochloromethane	11.335	129	20078	4.697	ug/l		96
61) 1,2-Dibromoethane	11.447	107	19090	4.919	ug/l		95
64) Tetrachloroethene	11.077	164	17642	5.552	ug/l		92
65) Chlorobenzene	11.871	112	51903	4.912	ug/l		100
66) 1,1,1,2-Tetrachloroethane	11.935	131	16899	4.842	ug/l		95
67) Ethyl Benzene	11.941	91	84509	4.556	ug/l		97
68) m/p-Xylenes	12.047	106	62717	9.044	ug/l		96
69) o-Xylene	12.382	106	28111	4.278	ug/l		94
70) Styrene	12.394	104	46583	4.327	ug/l		99
71) Bromoform	12.565	173	12418	4.774	ug/l	#	98
73) Isopropylbenzene	12.676	105	74324	4.486	ug/l		96
75) 1,1,2,2-Tetrachloroethane	12.918	83	25666	4.956	ug/l		99
76) 1,2,3-Trichloropropane	12.971	75	25268m	5.045	ug/l		
77) Bromobenzene	12.959	156	18654	5.143	ug/l		93
78) n-propylbenzene	13.018	91	89952	4.455	ug/l		97
79) 2-Chlorotoluene	13.106	91	58975	5.072	ug/l		99
80) 1,3,5-Trimethylbenzene	13.153	105	62949	4.574	ug/l		97
81) trans-1,4-Dichloro-2-b...	12.729	75	7483	4.106	ug/l	#	78
82) 4-Chlorotoluene	13.200	91	59617	4.734	ug/l		97
83) tert-Butylbenzene	13.418	119	51988	4.275	ug/l		99
84) 1,2,4-Trimethylbenzene	13.465	105	59560	4.319	ug/l		99
85) sec-Butylbenzene	13.594	105	76137	4.278	ug/l		99
86) p-Isopropyltoluene	13.706	119	59155	4.127	ug/l		99
87) 1,3-Dichlorobenzene	13.712	146	33144	4.633	ug/l		97
88) 1,4-Dichlorobenzene	13.788	146	38453	4.987	ug/l		93
89) n-Butylbenzene	14.035	91	56132	3.979	ug/l		99
90) Hexachloroethane	14.312	117	11594	4.214	ug/l		98
91) 1,2-Dichlorobenzene	14.088	146	33169	4.804	ug/l		97
92) 1,2-Dibromo-3-Chloropr...	14.700	75	5979	4.862	ug/l		93
93) 1,2,4-Trichlorobenzene	15.370	180	18203	4.379	ug/l		99
94) Hexachlorobutadiene	15.476	225	6667	4.376	ug/l		95
95) Naphthalene	15.617	128	60329	4.195	ug/l		98
96) 1,2,3-Trichlorobenzene	15.817	180	17918	4.465	ug/l		96

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN112425\
Data File : VN088345.D
Acq On : 24 Nov 2025 13:11
Operator : JC\MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :John Carlone 11/25/2025
Supervised By :Mahesh Dadoda 11/26/2025

Quant Time: Nov 25 01:10:10 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:08:44 2025
Response via : Initial Calibration

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

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

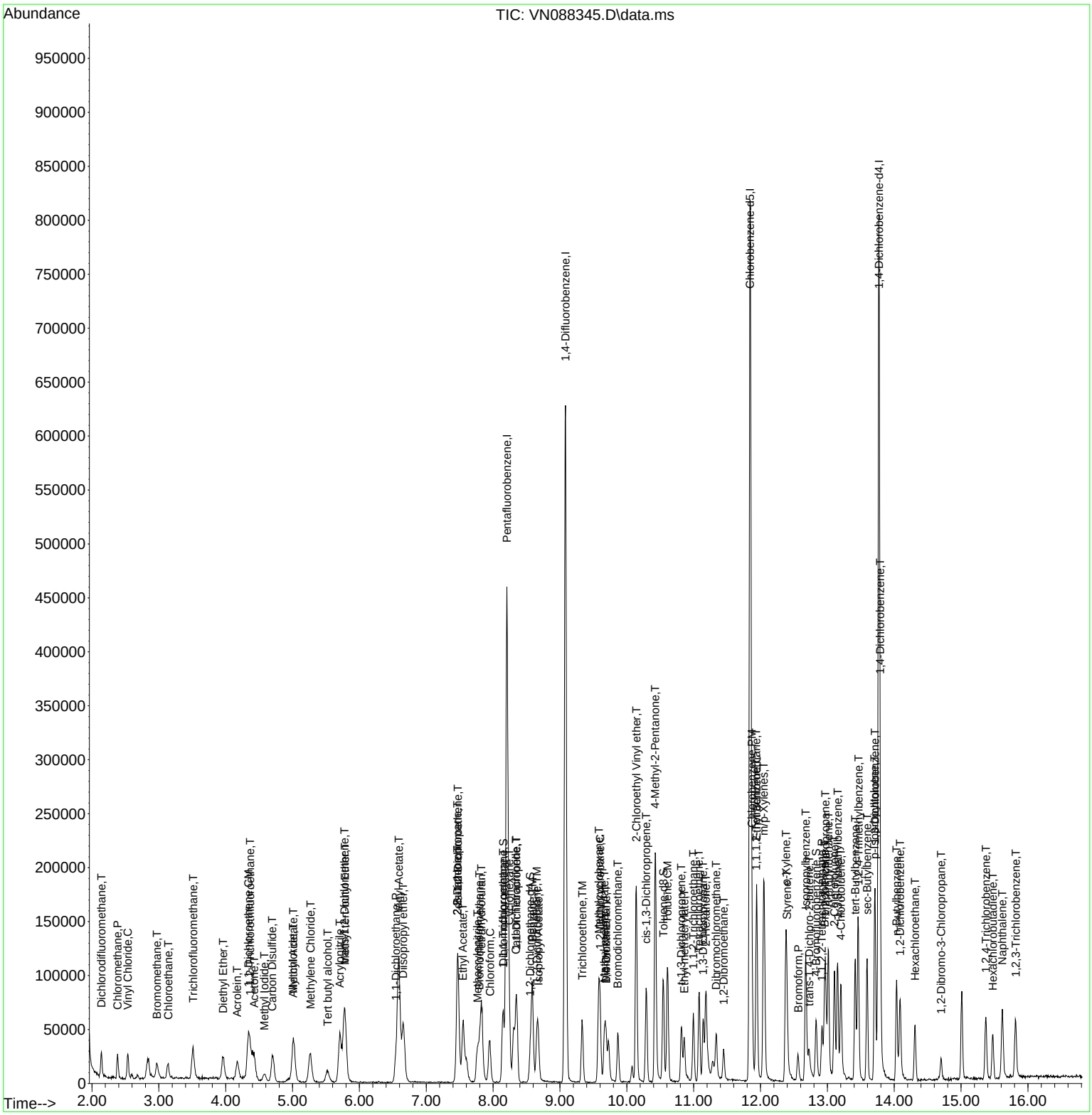
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN112425\
Data File : VN088345.D
Acq On : 24 Nov 2025 13:11
Operator : JC\MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 25 01:10:10 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:08:44 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :John Carlone 11/25/2025
Supervised By :Mahesh Dadoda 11/26/2025



ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN112425\
Data File : VN088346.D
Acq On : 24 Nov 2025 13:32
Operator : JC\MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 25 01:10:54 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:08:44 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :John Carlone 11/25/2025
Supervised By :Mahesh Dadoda 11/26/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.206	168	289343	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.082	114	521967	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.847	117	446626	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.770	152	210470	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.565	65	106028	20.258	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 40.520%#			
35) Dibromofluoromethane	8.147	113	73055	20.412	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 40.820%#			
50) Toluene-d8	10.547	98	269703	19.772	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 39.540%#			
62) 4-Bromofluorobenzene	12.823	95	86319	18.015	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 36.020%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.142	85	92076	26.032	ug/l	100
3) Chloromethane	2.383	50	93182	22.664	ug/l	98
4) Vinyl Chloride	2.542	62	99078	22.487	ug/l	96
5) Bromomethane	2.983	94	45414	17.699	ug/l	100
6) Chloroethane	3.142	64	57451	18.515	ug/l	96
7) Trichlorofluoromethane	3.518	101	135233	19.875	ug/l	92
8) Diethyl Ether	3.965	74	45755	17.600	ug/l	98
9) 1,1,2-Trichlorotrifluo...	4.377	101	73956	20.959	ug/l	98
10) Methyl Iodide	4.583	142	67559	19.958	ug/l	92
11) Tert butyl alcohol	5.518	59	86464	94.506	ug/l	98
12) 1,1-Dichloroethene	4.341	96	69587	18.614	ug/l	85
13) Acrolein	4.177	56	76430	76.371	ug/l	97
14) Allyl chloride	5.012	41	129326	19.307	ug/l	97
15) Acrylonitrile	5.712	53	250269	100.698	ug/l	99
16) Acetone	4.424	43	186448	73.735	ug/l	96
17) Carbon Disulfide	4.706	76	236468	20.496	ug/l	96
18) Methyl Acetate	5.018	43	110778	20.161	ug/l	100
19) Methyl tert-butyl Ether	5.788	73	259864	18.502	ug/l	94
20) Methylene Chloride	5.265	84	81446	18.395	ug/l	97
21) trans-1,2-Dichloroethene	5.777	96	78223	18.913	ug/l	98
22) Diisopropyl ether	6.659	45	282262	20.050	ug/l	96
23) Vinyl Acetate	6.588	43	1155611m	92.730	ug/l	
24) 1,1-Dichloroethane	6.553	63	156012	19.969	ug/l	100
25) 2-Butanone	7.471	43	316859	92.154	ug/l	99
26) 2,2-Dichloropropane	7.471	77	137140	19.531	ug/l	99
27) cis-1,2-Dichloroethene	7.471	96	91877	19.178	ug/l	97
28) Bromochloromethane	7.794	49	79117	21.681	ug/l	100
29) Tetrahydrofuran	7.829	42	228189	99.785	ug/l	99
30) Chloroform	7.953	83	156345	20.153	ug/l	99
31) Cyclohexane	8.235	56	146307	20.327	ug/l	98
32) 1,1,1-Trichloroethane	8.153	97	137952	20.154	ug/l	98
36) 1,1-Dichloropropene	8.353	75	110824	21.032	ug/l	98
37) Ethyl Acetate	7.547	43	151153	21.576	ug/l	99
38) Carbon Tetrachloride	8.347	117	114374	21.060	ug/l	95
39) Methylcyclohexane	9.582	83	126502	19.203	ug/l	96
40) Benzene	8.588	78	335961	20.753	ug/l	98

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN112425\
Data File : VN088346.D
Acq On : 24 Nov 2025 13:32
Operator : JC\MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 25 01:10:54 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:08:44 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :John Carlone 11/25/2025
Supervised By :Mahesh Dadoda 11/26/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.759	41	73287	20.203	ug/l		96
42) 1,2-Dichloroethane	8.653	62	124453	21.266	ug/l		98
43) Isopropyl Acetate	8.671	43	221861	20.765	ug/l		98
44) Trichloroethene	9.329	130	79876	21.175	ug/l		91
45) 1,2-Dichloropropane	9.600	63	83979	20.433	ug/l	#	87
46) Dibromomethane	9.688	93	60253	20.513	ug/l		98
47) Bromodichloromethane	9.865	83	122415	20.808	ug/l		93
48) Methyl methacrylate	9.659	41	102560	20.792	ug/l		97
49) 1,4-Dioxane	9.676	88	28593	459.989	ug/l	#	98
51) 4-Methyl-2-Pentanone	10.423	43	689576	108.887	ug/l		99
52) Toluene	10.612	92	196223	19.843	ug/l		99
53) t-1,3-Dichloropropene	10.818	75	124926	19.996	ug/l		99
54) cis-1,3-Dichloropropene	10.288	75	131162	19.787	ug/l		98
55) 1,1,2-Trichloroethane	10.994	97	75992	20.142	ug/l		96
56) Ethyl methacrylate	10.853	69	116597	19.380	ug/l		97
57) 1,3-Dichloropropane	11.141	76	135028	20.301	ug/l		99
58) 2-Chloroethyl Vinyl ether	10.141	63	347449	108.270	ug/l		98
59) 2-Hexanone	11.176	43	424244	101.867	ug/l		98
60) Dibromochloromethane	11.335	129	84716	19.753	ug/l		99
61) 1,2-Dibromoethane	11.447	107	76002	19.518	ug/l		99
64) Tetrachloroethene	11.076	164	73746	23.611	ug/l		96
65) Chlorobenzene	11.870	112	207406	19.968	ug/l		98
66) 1,1,1,2-Tetrachloroethane	11.935	131	70330	20.500	ug/l		98
67) Ethyl Benzene	11.941	91	359781	19.735	ug/l		96
68) m/p-Xylenes	12.047	106	274942	40.335	ug/l		99
69) o-Xylene	12.376	106	128919	19.957	ug/l		96
70) Styrene	12.388	104	207850	19.642	ug/l		99
71) Bromoform	12.559	173	50951	19.929	ug/l	#	98
73) Isopropylbenzene	12.670	105	332053	20.064	ug/l		100
74) N-amyl acetate	12.682	43	98732m	20.946	ug/l		
75) 1,1,2,2-Tetrachloroethane	12.917	83	103664	20.037	ug/l		97
76) 1,2,3-Trichloropropane	12.970	75	106718m	21.331	ug/l		
77) Bromobenzene	12.959	156	72921	20.125	ug/l		98
78) n-propylbenzene	13.011	91	414648	20.557	ug/l		99
79) 2-Chlorotoluene	13.100	91	240017	20.663	ug/l		100
80) 1,3,5-Trimethylbenzene	13.147	105	279116	20.300	ug/l		98
81) trans-1,4-Dichloro-2-b...	12.717	75	30676	16.850	ug/l	#	72
82) 4-Chlorotoluene	13.200	91	247131	19.645	ug/l		97
83) tert-Butylbenzene	13.417	119	233493	19.219	ug/l		99
84) 1,2,4-Trimethylbenzene	13.459	105	278702	20.229	ug/l		98
85) sec-Butylbenzene	13.594	105	334307	18.805	ug/l		99
86) p-Isopropyltoluene	13.706	119	280364	19.577	ug/l		99
87) 1,3-Dichlorobenzene	13.711	146	144838	20.267	ug/l		98
88) 1,4-Dichlorobenzene	13.788	146	150329	19.514	ug/l		99
89) n-Butylbenzene	14.035	91	265582	18.845	ug/l		99
90) Hexachloroethane	14.311	117	48067	17.489	ug/l		97
91) 1,2-Dichlorobenzene	14.088	146	133291	19.325	ug/l		98
92) 1,2-Dibromo-3-Chloropr...	14.694	75	23868	19.429	ug/l		99
93) 1,2,4-Trichlorobenzene	15.370	180	75854	18.265	ug/l		95
94) Hexachlorobutadiene	15.470	225	29359	19.288	ug/l		98
95) Naphthalene	15.611	128	266281	18.533	ug/l		99
96) 1,2,3-Trichlorobenzene	15.817	180	74795	18.658	ug/l		98

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN112425\
Data File : VN088346.D
Acq On : 24 Nov 2025 13:32
Operator : JC\MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :John Carlone 11/25/2025
Supervised By :Mahesh Dadoda 11/26/2025

Quant Time: Nov 25 01:10:54 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:08:44 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

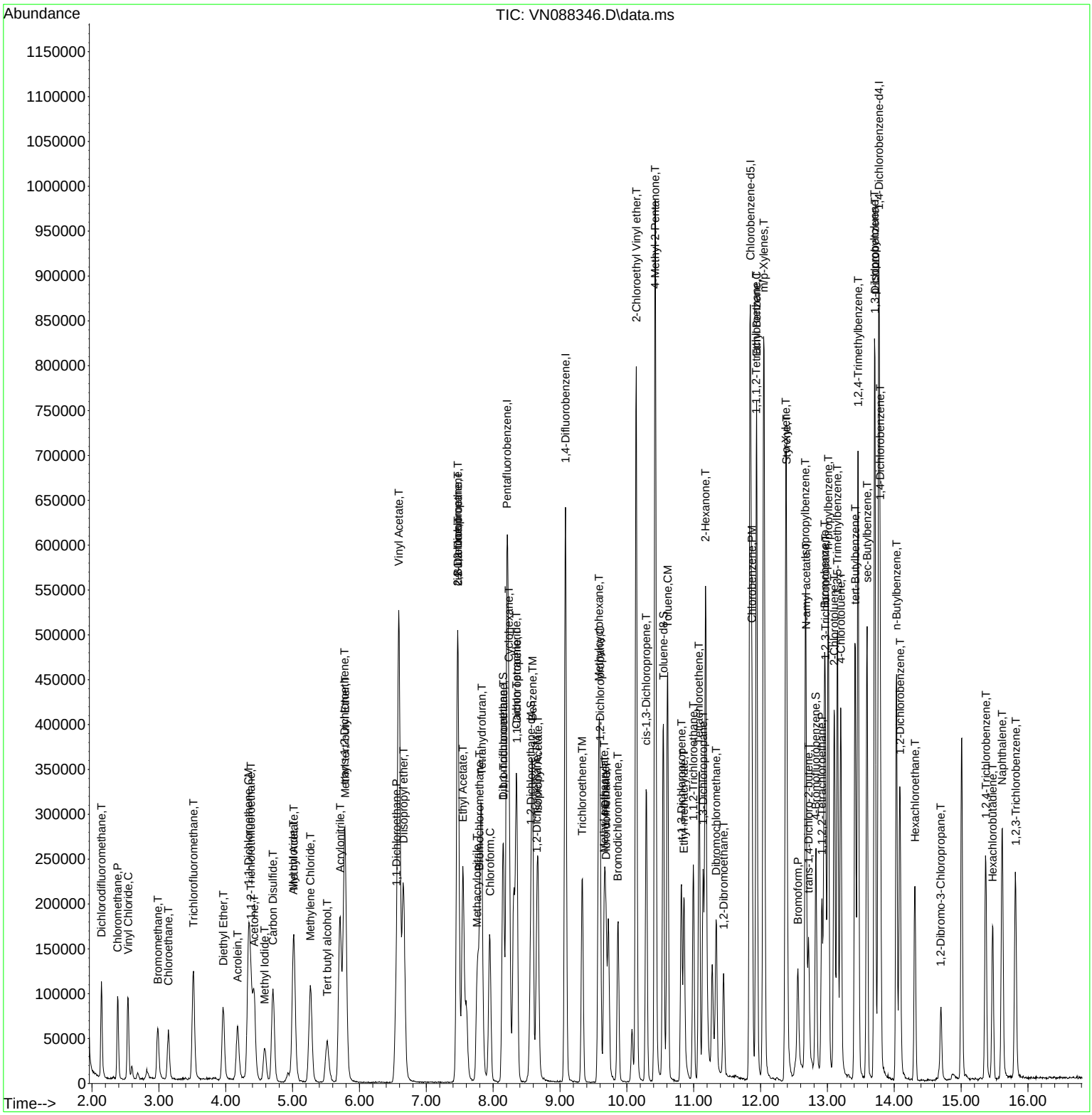
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN112425\
Data File : VN088346.D
Acq On : 24 Nov 2025 13:32
Operator : JC\MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 25 01:10:54 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:08:44 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :John Carlone 11/25/2025
Supervised By :Mahesh Dadoda 11/26/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN112425\
Data File : VN088347.D
Acq On : 24 Nov 2025 13:53
Operator : JC\MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 11/25/2025
Supervised By :Mahesh Dadoda 11/26/2025

Quant Time: Nov 25 01:11:39 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:08:44 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.206	168	254412	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.082	114	480905	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.847	117	425874	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.770	152	208615	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.559	65	254050	55.205	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 110.400%			
35) Dibromofluoromethane	8.153	113	168216	51.013	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 102.020%			
50) Toluene-d8	10.547	98	618062	49.180	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 98.360%			
62) 4-Bromofluorobenzene	12.823	95	215443	48.802	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 97.600%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.142	85	188518	60.616	ug/l	100
3) Chloromethane	2.383	50	203776	56.367	ug/l	100
4) Vinyl Chloride	2.536	62	206493	53.300	ug/l	100
5) Bromomethane	2.977	94	100800	44.679	ug/l	100
6) Chloroethane	3.142	64	128383	47.055	ug/l	100
7) Trichlorofluoromethane	3.512	101	277710	46.418	ug/l	100
8) Diethyl Ether	3.959	74	112943	49.408	ug/l	100
9) 1,1,2-Trichlorotrifluo...	4.365	101	143560	46.270	ug/l	100
10) Methyl Iodide	4.589	142	168409	56.580	ug/l	100
11) Tert butyl alcohol	5.512	59	205132	254.997	ug/l	100
12) 1,1-Dichloroethene	4.336	96	144499	43.959	ug/l	100
13) Acrolein	4.177	56	191880	218.057	ug/l	100
14) Allyl chloride	5.012	41	292223	49.615	ug/l	100
15) Acrylonitrile	5.706	53	593191	271.445	ug/l	100
16) Acetone	4.418	43	425884	191.549	ug/l	100
17) Carbon Disulfide	4.706	76	504570	49.738	ug/l	100
18) Methyl Acetate	5.018	43	266978	55.261	ug/l	100
19) Methyl tert-butyl Ether	5.783	73	637167	51.594	ug/l	100
20) Methylene Chloride	5.265	84	192304	49.396	ug/l	100
21) trans-1,2-Dichloroethene	5.771	96	174454	47.971	ug/l	100
22) Diisopropyl ether	6.659	45	656293	53.019	ug/l	100
23) Vinyl Acetate	6.588	43	2718764m	248.116	ug/l	
24) 1,1-Dichloroethane	6.559	63	362987	52.841	ug/l	100
25) 2-Butanone	7.465	43	757688	250.619	ug/l	100
26) 2,2-Dichloropropane	7.471	77	306308	49.612	ug/l	100
27) cis-1,2-Dichloroethene	7.471	96	210902	50.066	ug/l	100
28) Bromochloromethane	7.794	49	186871	58.241	ug/l	100
29) Tetrahydrofuran	7.824	42	545947	271.517	ug/l	100
30) Chloroform	7.947	83	354218	51.927	ug/l	100
31) Cyclohexane	8.235	56	288267	45.549	ug/l	100
32) 1,1,1-Trichloroethane	8.153	97	294555	48.942	ug/l	100
36) 1,1-Dichloropropene	8.353	75	236320	48.678	ug/l	100
37) Ethyl Acetate	7.547	43	346328	53.657	ug/l	100
38) Carbon Tetrachloride	8.347	117	240067	47.979	ug/l	100
39) Methylcyclohexane	9.582	83	253638	41.789	ug/l	100
40) Benzene	8.588	78	749637	50.260	ug/l	100

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN112425\
Data File : VN088347.D
Acq On : 24 Nov 2025 13:53
Operator : JC\MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 25 01:11:39 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:08:44 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 11/25/2025
Supervised By :Mahesh Dadoda 11/26/2025

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
41) Methacrylonitrile	7.759	41	171571	51.334 ug/l	100
42) 1,2-Dichloroethane	8.653	62	295993	54.896 ug/l	100
43) Isopropyl Acetate	8.671	43	536716	54.522 ug/l	100
44) Trichloroethene	9.329	130	171828	49.440 ug/l	100
45) 1,2-Dichloropropane	9.600	63	195340	51.585 ug/l	100
46) Dibromomethane	9.688	93	140875	52.056 ug/l	100
47) Bromodichloromethane	9.871	83	283447	52.293 ug/l	100
48) Methyl methacrylate	9.659	41	246767	54.300 ug/l	100
49) 1,4-Dioxane	9.676	88	63666	1111.677 ug/l #	100
51) 4-Methyl-2-Pentanone	10.423	43	1618000	277.304 ug/l	100
52) Toluene	10.606	92	439167	48.202 ug/l	100
53) t-1,3-Dichloropropene	10.812	75	303537	52.732 ug/l	100
54) cis-1,3-Dichloropropene	10.294	75	318360	52.127 ug/l	100
55) 1,1,2-Trichloroethane	10.994	97	169966	48.898 ug/l	100
56) Ethyl methacrylate	10.853	69	296224	53.440 ug/l	100
57) 1,3-Dichloropropane	11.141	76	309692	50.536 ug/l	100
58) 2-Chloroethyl Vinyl ether	10.141	63	875006	295.946 ug/l	100
59) 2-Hexanone	11.176	43	1048582	273.278 ug/l	100
60) Dibromochloromethane	11.335	129	196756	49.794 ug/l	100
61) 1,2-Dibromoethane	11.447	107	177630	49.512 ug/l	100
64) Tetrachloroethene	11.082	164	160566	53.914 ug/l	100
65) Chlorobenzene	11.870	112	471088	47.564 ug/l	100
66) 1,1,1,2-Tetrachloroethane	11.941	131	162993	49.826 ug/l	100
67) Ethyl Benzene	11.941	91	825262	47.473 ug/l	100
68) m/p-Xylenes	12.047	106	624414	96.067 ug/l	100
69) o-Xylene	12.376	106	296307	48.105 ug/l	100
70) Styrene	12.388	104	508032	50.349 ug/l	100
71) Bromoform	12.559	173	121394	49.795 ug/l #	100
73) Isopropylbenzene	12.670	105	756073	46.091 ug/l	100
74) N-amyl acetate	12.500	43	218031	46.667 ug/l	100
75) 1,1,2,2-Tetrachloroethane	12.917	83	235147	45.856 ug/l	100
76) 1,2,3-Trichloropropane	12.970	75	250728m	50.561 ug/l	
77) Bromobenzene	12.959	156	179949	50.105 ug/l	100
78) n-propylbenzene	13.012	91	926041	46.319 ug/l	100
79) 2-Chlorotoluene	13.100	91	563004	48.901 ug/l	100
80) 1,3,5-Trimethylbenzene	13.153	105	636506	46.704 ug/l	100
81) trans-1,4-Dichloro-2-b...	12.717	75	89717	49.717 ug/l #	100
82) 4-Chlorotoluene	13.200	91	595484	47.756 ug/l	100
83) tert-Butylbenzene	13.412	119	523419	43.467 ug/l	100
84) 1,2,4-Trimethylbenzene	13.459	105	649135	47.534 ug/l	100
85) sec-Butylbenzene	13.594	105	752927	42.729 ug/l	100
86) p-Isopropyltoluene	13.706	119	635661	44.782 ug/l	100
87) 1,3-Dichlorobenzene	13.711	146	334974	47.290 ug/l	100
88) 1,4-Dichlorobenzene	13.788	146	350784	45.940 ug/l	100
89) n-Butylbenzene	14.035	91	599399	42.911 ug/l	100
90) Hexachloroethane	14.306	117	111560	40.952 ug/l	100
91) 1,2-Dichlorobenzene	14.082	146	317314	46.414 ug/l	100
92) 1,2-Dibromo-3-Chloropr...	14.694	75	60137	49.387 ug/l	100
93) 1,2,4-Trichlorobenzene	15.364	180	185506	45.066 ug/l	100
94) Hexachlorobutadiene	15.470	225	61955	41.064 ug/l	100
95) Naphthalene	15.611	128	686671	48.217 ug/l	100
96) 1,2,3-Trichlorobenzene	15.811	180	182475	45.925 ug/l	100

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN112425\
Data File : VN088347.D
Acq On : 24 Nov 2025 13:53
Operator : JC\MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 11/25/2025
Supervised By :Mahesh Dadoda 11/26/2025

Quant Time: Nov 25 01:11:39 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:08:44 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

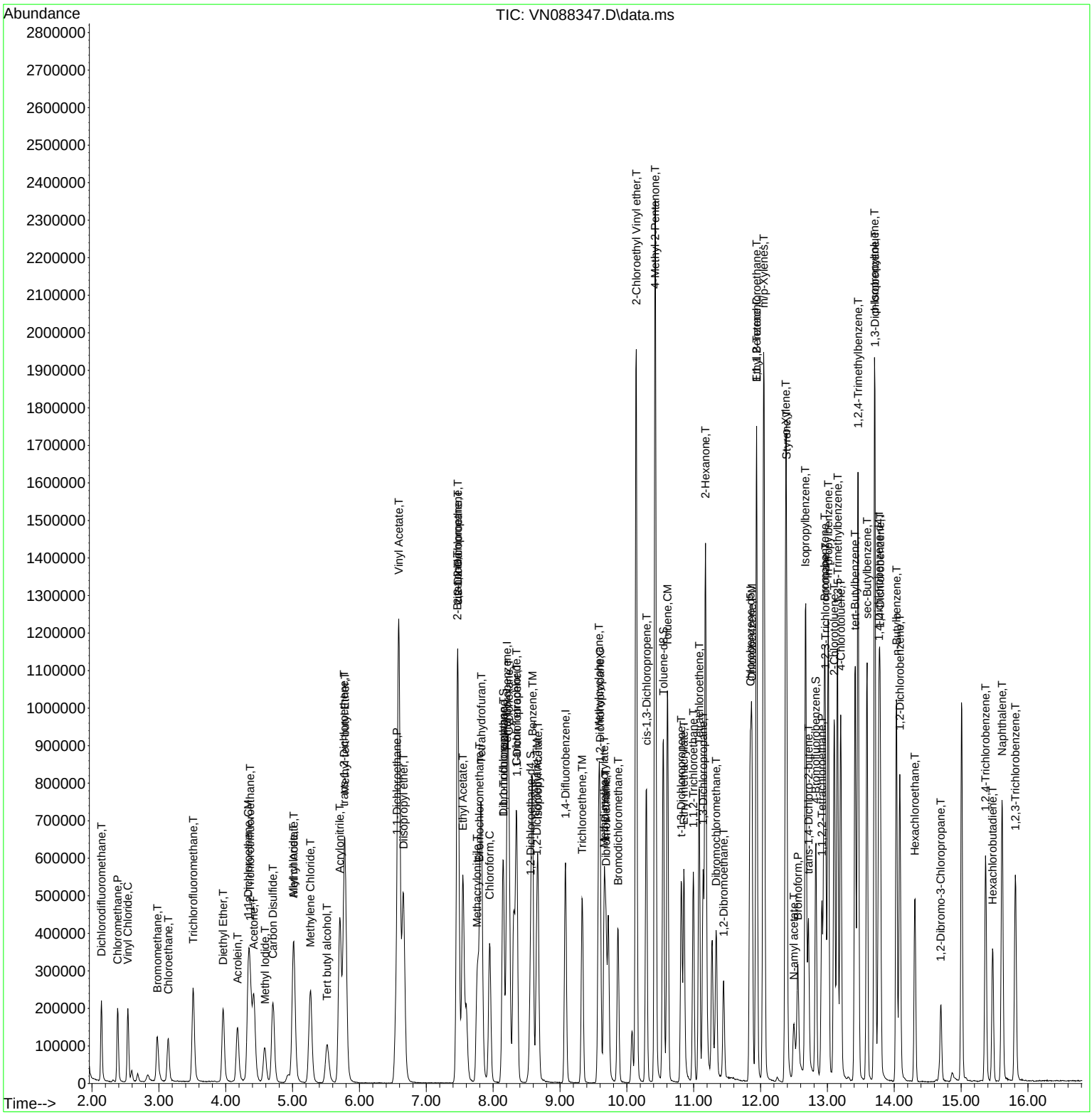
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN112425\
Data File : VN088347.D
Acq On : 24 Nov 2025 13:53
Operator : JC\MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 25 01:11:39 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:08:44 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 11/25/2025
Supervised By :Mahesh Dadoda 11/26/2025



ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN112425\
Data File : VN088348.D
Acq On : 24 Nov 2025 14:14
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 25 01:12:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:08:44 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :John Carlone 11/25/2025
Supervised By :Mahesh Dadoda 11/26/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.206	168	285895	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.083	114	501695	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.847	117	439316	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.770	152	219473	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.559	65	504045	97.467	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 194.940%#			
35) Dibromofluoromethane	8.147	113	335348	97.484	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 194.960%#			
50) Toluene-d8	10.547	98	1312124	100.081	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 200.160%#			
62) 4-Bromofluorobenzene	12.829	95	467895	101.595	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 203.200%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.142	85	479358	137.160	ug/l	100
3) Chloromethane	2.383	50	434116	106.858	ug/l	98
4) Vinyl Chloride	2.536	62	478320	109.869	ug/l	98
5) Bromomethane	2.965	94	221311	87.292	ug/l	99
6) Chloroethane	3.130	64	287091	93.637	ug/l	96
7) Trichlorofluoromethane	3.506	101	686944	102.176	ug/l	99
8) Diethyl Ether	3.959	74	229525	89.352	ug/l	99
9) 1,1,2-Trichlorotrifluo...	4.365	101	361718	103.745	ug/l	100
10) Methyl Iodide	4.577	142	377533	112.872	ug/l	97
11) Tert butyl alcohol	5.524	59	406566	449.741	ug/l	100
12) 1,1-Dichloroethene	4.336	96	340010	92.046	ug/l	96
13) Acrolein	4.177	56	409205	413.820	ug/l	99
14) Allyl chloride	5.012	41	647046m	97.762	ug/l	
15) Acrylonitrile	5.706	53	1189524	484.386	ug/l	99
16) Acetone	4.418	43	872591	349.245	ug/l	98
17) Carbon Disulfide	4.706	76	1141513	100.133	ug/l	99
18) Methyl Acetate	5.018	43	555796	102.374	ug/l	100
19) Methyl tert-butyl Ether	5.783	73	1295144	93.325	ug/l	100
20) Methylene Chloride	5.265	84	392179	89.644	ug/l	99
21) trans-1,2-Dichloroethene	5.777	96	369984	90.533	ug/l	98
22) Diisopropyl ether	6.659	45	1349029	96.981	ug/l	97
23) Vinyl Acetate	6.589	43	5554188m	451.061	ug/l	
24) 1,1-Dichloroethane	6.553	63	755476	97.866	ug/l	98
25) 2-Butanone	7.471	43	1542855	454.129	ug/l	97
26) 2,2-Dichloropropane	7.477	77	672523	96.933	ug/l	100
27) cis-1,2-Dichloroethene	7.471	96	427126	90.230	ug/l	98
28) Bromochloromethane	7.800	49	356867	98.975	ug/l	99
29) Tetrahydrofuran	7.824	42	1096740	485.379	ug/l	99
30) Chloroform	7.947	83	738399	96.326	ug/l	100
31) Cyclohexane	8.241	56	707339	99.459	ug/l	99
32) 1,1,1-Trichloroethane	8.147	97	666887	98.605	ug/l	98
36) 1,1-Dichloropropene	8.353	75	549319	108.461	ug/l	99
37) Ethyl Acetate	7.547	43	682857	101.412	ug/l	99
38) Carbon Tetrachloride	8.341	117	571861	109.553	ug/l	97
39) Methylcyclohexane	9.577	83	663987	104.863	ug/l	96
40) Benzene	8.588	78	1564367	100.538	ug/l	99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN112425\
Data File : VN088348.D
Acq On : 24 Nov 2025 14:14
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 25 01:12:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:08:44 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :John Carlone 11/25/2025
Supervised By :Mahesh Dadoda 11/26/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.759	41	349832	100.333	ug/l		98
42) 1,2-Dichloroethane	8.653	62	599011	106.490	ug/l		100
43) Isopropyl Acetate	8.671	43	1079559	105.122	ug/l		99
44) Trichloroethene	9.335	130	372568	102.756	ug/l		98
45) 1,2-Dichloropropane	9.600	63	396928	100.477	ug/l		96
46) Dibromomethane	9.688	93	284059	100.615	ug/l		99
47) Bromodichloromethane	9.871	83	585372	103.520	ug/l		100
48) Methyl methacrylate	9.659	41	512503	108.100	ug/l		99
49) 1,4-Dioxane	9.682	88	124110	2077.291	ug/l	#	98
51) 4-Methyl-2-Pentanone	10.424	43	3302590	542.564	ug/l		100
52) Toluene	10.606	92	962754	101.291	ug/l		98
53) t-1,3-Dichloropropene	10.818	75	633621	105.515	ug/l		99
54) cis-1,3-Dichloropropene	10.294	75	656506	103.040	ug/l		97
55) 1,1,2-Trichloroethane	10.994	97	342175	94.361	ug/l		97
56) Ethyl methacrylate	10.853	69	625749	108.210	ug/l		99
57) 1,3-Dichloropropane	11.141	76	640348	100.162	ug/l		99
58) 2-Chloroethyl Vinyl ether	10.141	63	1692209	548.624	ug/l		100
59) 2-Hexanone	11.177	43	2217550	553.982	ug/l		99
60) Dibromochloromethane	11.335	129	410889	99.677	ug/l		98
61) 1,2-Dibromoethane	11.447	107	368152	98.366	ug/l		100
64) Tetrachloroethene	11.082	164	357404	116.335	ug/l		95
65) Chlorobenzene	11.871	112	1006420	98.505	ug/l		99
66) 1,1,1,2-Tetrachloroethane	11.941	131	338748	100.385	ug/l		99
67) Ethyl Benzene	11.941	91	1873691	104.486	ug/l		99
68) m/p-Xylenes	12.047	106	1384206	206.446	ug/l		97
69) o-Xylene	12.376	106	657970	103.552	ug/l		99
70) Styrene	12.388	104	1127962	108.366	ug/l		99
71) Bromoform	12.559	173	265738	105.669	ug/l	#	98
73) Isopropylbenzene	12.671	105	1773457	102.764	ug/l		100
74) N-amyl acetate	12.488	43	587472	119.520	ug/l		95
75) 1,1,2,2-Tetrachloroethane	12.918	83	498007	92.311	ug/l		100
76) 1,2,3-Trichloropropane	12.971	75	516579m	99.018	ug/l		
77) Bromobenzene	12.959	156	379553	100.455	ug/l		99
78) n-propylbenzene	13.012	91	2164268	102.898	ug/l		99
79) 2-Chlorotoluene	13.106	91	1244218	102.723	ug/l		99
80) 1,3,5-Trimethylbenzene	13.153	105	1451677	101.248	ug/l		99
81) trans-1,4-Dichloro-2-b...	12.718	75	198381	104.496	ug/l	#	88
82) 4-Chlorotoluene	13.200	91	1292288	98.511	ug/l		100
83) tert-Butylbenzene	13.418	119	1236180	97.579	ug/l		99
84) 1,2,4-Trimethylbenzene	13.459	105	1467849	102.168	ug/l		98
85) sec-Butylbenzene	13.594	105	1809286	97.599	ug/l		100
86) p-Isopropyltoluene	13.706	119	1507703	100.961	ug/l		99
87) 1,3-Dichlorobenzene	13.712	146	735647	98.718	ug/l		99
88) 1,4-Dichlorobenzene	13.788	146	746880	92.975	ug/l		99
89) n-Butylbenzene	14.035	91	1480732	100.761	ug/l		99
90) Hexachloroethane	14.312	117	265251	92.554	ug/l		99
91) 1,2-Dichlorobenzene	14.082	146	700211	97.354	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	14.700	75	131734	102.833	ug/l		99
93) 1,2,4-Trichlorobenzene	15.364	180	419347	96.834	ug/l		97
94) Hexachlorobutadiene	15.476	225	155408	97.909	ug/l		97
95) Naphthalene	15.612	128	1528952	102.050	ug/l		99
96) 1,2,3-Trichlorobenzene	15.812	180	408194	97.651	ug/l		98

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN112425\
Data File : VN088348.D
Acq On : 24 Nov 2025 14:14
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :John Carlone 11/25/2025
Supervised By :Mahesh Dadoda 11/26/2025

Quant Time: Nov 25 01:12:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:08:44 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

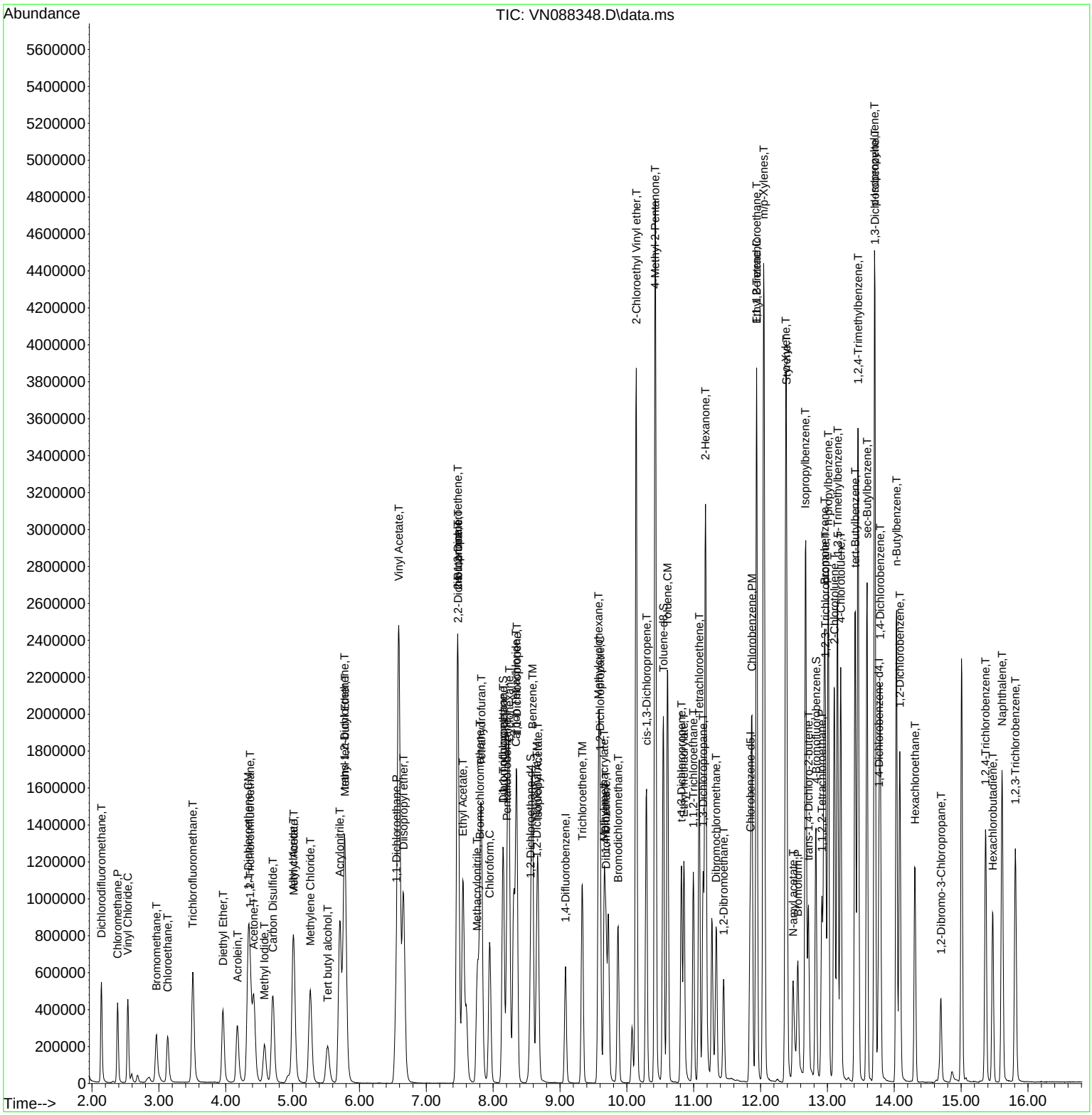
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN112425\
Data File : VN088348.D
Acq On : 24 Nov 2025 14:14
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 25 01:12:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:08:44 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :John Carlone 11/25/2025
Supervised By :Mahesh Dadoda 11/26/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN112425\
Data File : VN088349.D
Acq On : 24 Nov 2025 14:35
Operator : JC\MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Nov 25 01:13:19 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:08:44 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :John Carlone 11/25/2025
Supervised By :Mahesh Dadoda 11/26/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.206	168	278091	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.083	114	508326	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.847	117	457447	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.770	152	226673	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.559	65	800654	159.167	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 318.340%#			
35) Dibromofluoromethane	8.147	113	514160	147.513	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 295.020%#			
50) Toluene-d8	10.547	98	2002008	150.709	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 301.420%#			
62) 4-Bromofluorobenzene	12.829	95	734676	157.441	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 314.880%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.142	85	614298	180.703	ug/l	97
3) Chloromethane	2.383	50	637070	161.216	ug/l	98
4) Vinyl Chloride	2.536	62	643786	152.025	ug/l	99
5) Bromomethane	2.948	94	327351	132.741	ug/l	99
6) Chloroethane	3.124	64	404469	135.623	ug/l	99
7) Trichlorofluoromethane	3.506	101	880178	134.591	ug/l	97
8) Diethyl Ether	3.959	74	342692	137.150	ug/l	100
9) 1,1,2-Trichlorotrifluo...	4.365	101	461517	136.083	ug/l	99
10) Methyl Iodide	4.583	142	530186	162.959	ug/l	96
11) Tert butyl alcohol	5.524	59	615624	700.111	ug/l	99
12) 1,1-Dichloroethene	4.336	96	461833	128.534	ug/l	95
13) Acrolein	4.177	56	614784	639.165	ug/l	98
14) Allyl chloride	5.012	41	947252m	147.136	ug/l	
15) Acrylonitrile	5.706	53	1745154	730.587	ug/l	100
16) Acetone	4.418	43	1310595	539.272	ug/l	100
17) Carbon Disulfide	4.700	76	1529256	137.911	ug/l	99
18) Methyl Acetate	5.018	43	822075	155.669	ug/l	100
19) Methyl tert-butyl Ether	5.783	73	1946194	144.173	ug/l	97
20) Methylene Chloride	5.259	84	565609	132.915	ug/l	99
21) trans-1,2-Dichloroethene	5.771	96	522186	131.362	ug/l	100
22) Diisopropyl ether	6.659	45	2022262	149.459	ug/l	98
23) Vinyl Acetate	6.589	43	8352858m	697.381	ug/l	
24) 1,1-Dichloroethane	6.553	63	1073175	142.923	ug/l	98
25) 2-Butanone	7.471	43	2317712	701.347	ug/l	96
26) 2,2-Dichloropropane	7.477	77	948461	140.541	ug/l	99
27) cis-1,2-Dichloroethene	7.471	96	621100	134.889	ug/l	99
28) Bromochloromethane	7.794	49	498418	142.113	ug/l	100
29) Tetrahydrofuran	7.824	42	1661991	756.181	ug/l	99
30) Chloroform	7.947	83	1072381	143.821	ug/l	95
31) Cyclohexane	8.236	56	925517	133.789	ug/l	98
32) 1,1,1-Trichloroethane	8.153	97	920717	139.956	ug/l	96
36) 1,1-Dichloropropene	8.353	75	747080	145.584	ug/l	100
37) Ethyl Acetate	7.547	43	1038194	152.172	ug/l	100
38) Carbon Tetrachloride	8.341	117	776182	146.756	ug/l	96
39) Methylcyclohexane	9.583	83	856176	133.452	ug/l	96
40) Benzene	8.588	78	2252306	142.862	ug/l	98

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN112425\
Data File : VN088349.D
Acq On : 24 Nov 2025 14:35
Operator : JC\MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Nov 25 01:13:19 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:08:44 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :John Carlone 11/25/2025
Supervised By :Mahesh Dadoda 11/26/2025

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
41) Methacrylonitrile	7.759	41	533051	150.887 ug/l		98
42) 1,2-Dichloroethane	8.653	62	895667	157.152 ug/l		99
43) Isopropyl Acetate	8.671	43	1638317	157.450 ug/l		99
44) Trichloroethene	9.335	130	529981	144.265 ug/l		98
45) 1,2-Dichloropropane	9.600	63	581336	145.238 ug/l		95
46) Dibromomethane	9.688	93	422737	147.782 ug/l		100
47) Bromodichloromethane	9.871	83	863631	150.736 ug/l		100
48) Methyl methacrylate	9.665	41	781838	162.758 ug/l		99
49) 1,4-Dioxane	9.683	88	191377	3161.388 ug/l	#	97
51) 4-Methyl-2-Pentanone	10.424	43	4963362	804.767 ug/l		99
52) Toluene	10.612	92	1389323	144.264 ug/l		99
53) t-1,3-Dichloropropene	10.818	75	953623	156.732 ug/l		99
54) cis-1,3-Dichloropropene	10.294	75	975877	151.168 ug/l		98
55) 1,1,2-Trichloroethane	10.994	97	513073	139.644 ug/l		99
56) Ethyl methacrylate	10.853	69	954630	162.929 ug/l		99
57) 1,3-Dichloropropane	11.141	76	948252	146.389 ug/l		99
58) 2-Chloroethyl Vinyl ether	10.141	63	2298552	735.483 ug/l		100
59) 2-Hexanone	11.177	43	3427514	845.082 ug/l		99
60) Dibromochloromethane	11.335	129	615359	147.332 ug/l		98
61) 1,2-Dibromoethane	11.447	107	548222	144.568 ug/l		99
64) Tetrachloroethene	11.082	164	503663	157.444 ug/l		98
65) Chlorobenzene	11.871	112	1467895	137.978 ug/l		100
66) 1,1,1,2-Tetrachloroethane	11.941	131	494738	140.800 ug/l		98
67) Ethyl Benzene	11.941	91	2679329	143.490 ug/l		99
68) m/p-Xylenes	12.047	106	1999338	286.370 ug/l		98
69) o-Xylene	12.376	106	971419	146.823 ug/l		99
70) Styrene	12.388	104	1660474	153.203 ug/l		99
71) Bromoform	12.559	173	404703	154.550 ug/l	#	99
73) Isopropylbenzene	12.671	105	2520465	141.411 ug/l		99
74) N-amyl acetate	12.482	43	1006304	198.228 ug/l	#	95
75) 1,1,2,2-Tetrachloroethane	12.918	83	735899	132.074 ug/l		100
76) 1,2,3-Trichloropropane	12.971	75	778772m	144.533 ug/l		
77) Bromobenzene	12.959	156	554789	142.170 ug/l		97
78) n-propylbenzene	13.012	91	3057578	140.752 ug/l		100
79) 2-Chlorotoluene	13.100	91	1823307	145.751 ug/l		100
80) 1,3,5-Trimethylbenzene	13.153	105	2086957	140.933 ug/l		99
81) trans-1,4-Dichloro-2-b...	12.718	75	314465	160.381 ug/l	#	91
82) 4-Chlorotoluene	13.200	91	1905793	140.664 ug/l		99
83) tert-Butylbenzene	13.418	119	1733611	132.498 ug/l		99
84) 1,2,4-Trimethylbenzene	13.459	105	2111285	142.286 ug/l		99
85) sec-Butylbenzene	13.594	105	2498053	130.473 ug/l		100
86) p-Isopropyltoluene	13.706	119	2089505	135.476 ug/l		99
87) 1,3-Dichlorobenzene	13.712	146	1070574	139.099 ug/l		100
88) 1,4-Dichlorobenzene	13.788	146	1093471	131.796 ug/l		99
89) n-Butylbenzene	14.035	91	2025634	133.462 ug/l		99
90) Hexachloroethane	14.306	117	376335	127.143 ug/l		99
91) 1,2-Dichlorobenzene	14.082	146	1023417	137.771 ug/l		100
92) 1,2-Dibromo-3-Chloropr...	14.700	75	204222	154.355 ug/l		100
93) 1,2,4-Trichlorobenzene	15.365	180	623560	139.416 ug/l		99
94) Hexachlorobutadiene	15.470	225	208495	127.182 ug/l		97
95) Naphthalene	15.612	128	2308447	149.183 ug/l		99
96) 1,2,3-Trichlorobenzene	15.812	180	605584	140.271 ug/l		98

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN112425\
Data File : VN088349.D
Acq On : 24 Nov 2025 14:35
Operator : JC\MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :John Carlone 11/25/2025
Supervised By :Mahesh Dadoda 11/26/2025

Quant Time: Nov 25 01:13:19 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:08:44 2025
Response via : Initial Calibration

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

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

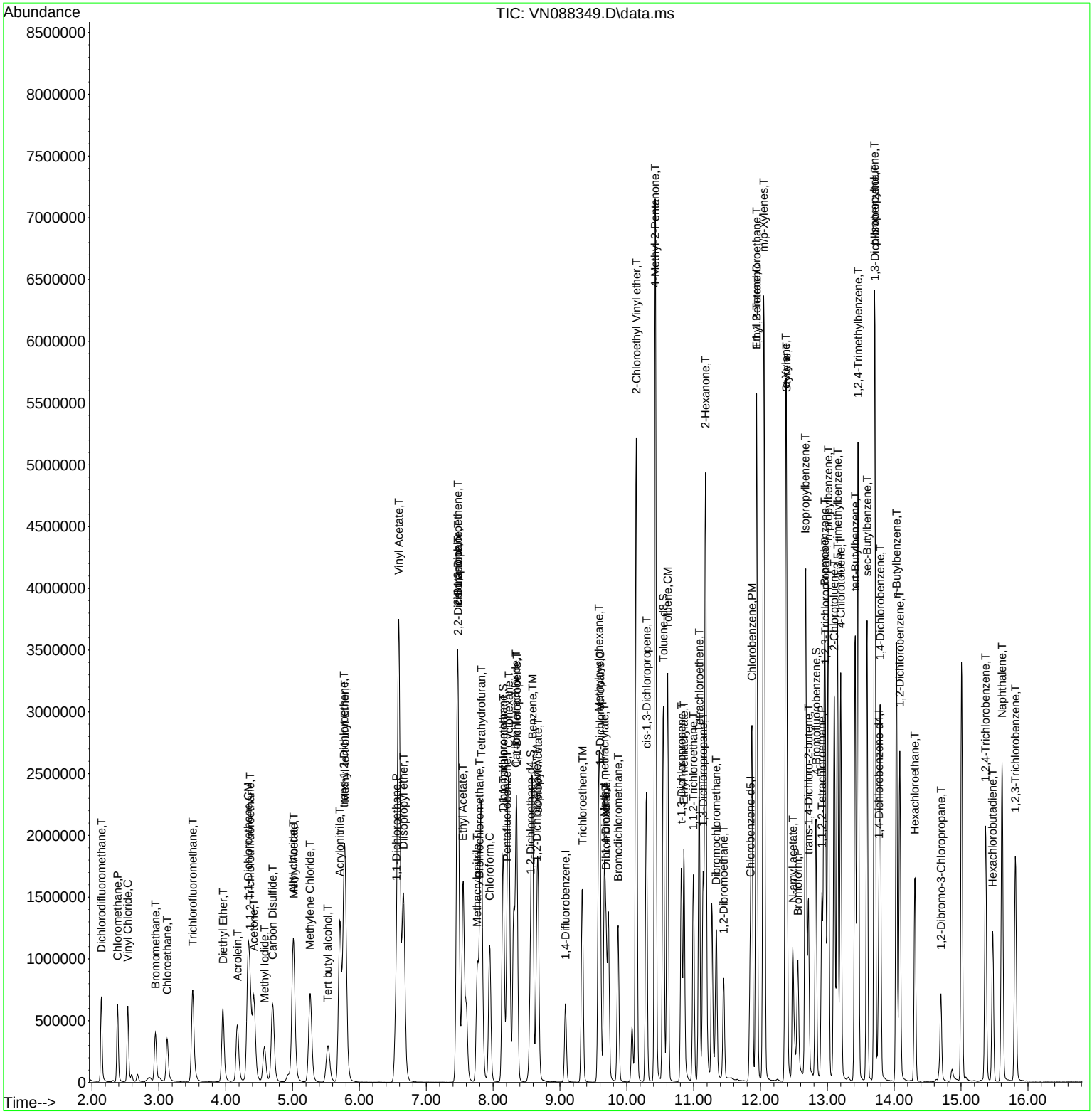
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN112425\
Data File : VN088349.D
Acq On : 24 Nov 2025 14:35
Operator : JC\MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Nov 25 01:13:19 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:08:44 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :John Carlone 11/25/2025
Supervised By :Mahesh Dadoda 11/26/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN112425\
Data File : VN088351.D
Acq On : 24 Nov 2025 15:18
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Nov 25 01:39:30 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:34:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
ICVVN112425

Manual Integrations APPROVED

Reviewed By :John Carlone 11/25/2025
Supervised By :Mahesh Dadoda 11/26/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.206	168	264693	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.082	114	504031	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.841	117	443578	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.770	152	211823	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.559	65	234844	47.098	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 94.200%			
35) Dibromofluoromethane	8.153	113	152840	43.757	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 87.520%			
50) Toluene-d8	10.547	98	574351	44.193	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 88.380%			
62) 4-Bromofluorobenzene	12.829	95	199878	44.823	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 89.640%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.142	85	204306	51.389	ug/l	96
3) Chloromethane	2.383	50	224506	52.578	ug/l	98
4) Vinyl Chloride	2.536	62	216512	49.842	ug/l	99
5) Bromomethane	2.977	94	113722	54.393	ug/l	95
6) Chloroethane	3.142	64	138310	51.450	ug/l	96
7) Trichlorofluoromethane	3.512	101	304206	49.826	ug/l	96
8) Diethyl Ether	3.965	74	122332	53.384	ug/l	99
9) 1,1,2-Trichlorotrifluo...	4.365	101	153067	47.094	ug/l	96
10) Methyl Iodide	4.589	142	173671	53.976	ug/l	95
11) Tert butyl alcohol	5.518	59	213569	268.272	ug/l	99
12) 1,1-Dichloroethene	4.342	96	158096	48.957	ug/l	94
13) Acrolein	4.177	56	203235	266.656	ug/l	99
14) Allyl chloride	5.018	41	321979	53.793	ug/l	99
15) Acrylonitrile	5.706	53	637644	277.614	ug/l	99
16) Acetone	4.418	43	450459	249.797	ug/l	100
17) Carbon Disulfide	4.706	76	544067	51.558	ug/l	100
18) Methyl Acetate	5.018	43	290918	54.196	ug/l	99
19) Methyl tert-butyl Ether	5.783	73	694497	57.401	ug/l	95
20) Methylene Chloride	5.265	84	208952	54.158	ug/l	98
21) trans-1,2-Dichloroethene	5.777	96	191102	53.421	ug/l	99
22) Diisopropyl ether	6.653	45	719883	56.335	ug/l	97
23) Vinyl Acetate	6.588	43	2915087m	283.141	ug/l	
24) 1,1-Dichloroethane	6.559	63	394512	54.516	ug/l	99
25) 2-Butanone	7.471	43	807706	278.613	ug/l	97
26) 2,2-Dichloropropane	7.471	77	337031	53.957	ug/l	99
27) cis-1,2-Dichloroethene	7.471	96	223944	53.866	ug/l	99
28) Bromochloromethane	7.794	49	167723	46.526	ug/l	100
29) Tetrahydrofuran	7.824	42	581218	279.515	ug/l	99
30) Chloroform	7.947	83	383675	53.957	ug/l	95
31) Cyclohexane	8.241	56	316159	48.211	ug/l	94
32) 1,1,1-Trichloroethane	8.147	97	319795	51.150	ug/l	100
36) 1,1-Dichloropropene	8.353	75	253183	46.967	ug/l	98
37) Ethyl Acetate	7.547	43	364546	51.431	ug/l	99
38) Carbon Tetrachloride	8.341	117	262078	48.837	ug/l	98
39) Methylcyclohexane	9.577	83	276272	47.913	ug/l	98
40) Benzene	8.588	78	803742	50.800	ug/l	100

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN112425\
Data File : VN088351.D
Acq On : 24 Nov 2025 15:18
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Nov 25 01:39:30 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:34:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
ICVVN112425

Manual Integrations APPROVED

Reviewed By :John Carlone 11/25/2025
Supervised By :Mahesh Dadoda 11/26/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.765	41	189164	53.883	ug/l		98
42) 1,2-Dichloroethane	8.653	62	318757	52.806	ug/l		99
43) Isopropyl Acetate	8.671	43	575762	53.165	ug/l		100
44) Trichloroethene	9.335	130	184844	49.444	ug/l		97
45) 1,2-Dichloropropane	9.600	63	211177	52.095	ug/l		96
46) Dibromomethane	9.688	93	152417	52.686	ug/l		100
47) Bromodichloromethane	9.871	83	307856	52.155	ug/l		100
48) Methyl methacrylate	9.665	41	269474	54.535	ug/l		99
49) 1,4-Dioxane	9.682	88	64188	1021.452	ug/l	#	99
51) 4-Methyl-2-Pentanone	10.424	43	1745522	273.447	ug/l		100
52) Toluene	10.612	92	475044	51.998	ug/l		100
53) t-1,3-Dichloropropene	10.812	75	323712	53.428	ug/l		97
54) cis-1,3-Dichloropropene	10.294	75	344582	54.081	ug/l		98
55) 1,1,2-Trichloroethane	10.994	97	182138	51.530	ug/l		98
56) Ethyl methacrylate	10.853	69	323702	57.977	ug/l		98
57) 1,3-Dichloropropane	11.141	76	338609	53.102	ug/l		98
58) 2-Chloroethyl Vinyl ether	10.141	63	851755	264.613	ug/l		100
59) 2-Hexanone	11.176	43	1118254	278.086	ug/l		99
60) Dibromochloromethane	11.341	129	212150	52.650	ug/l		98
61) 1,2-Dibromoethane	11.447	107	191658	53.546	ug/l		99
64) Tetrachloroethene	11.082	164	164101	46.666	ug/l		96
65) Chlorobenzene	11.871	112	512644	51.452	ug/l		100
66) 1,1,1,2-Tetrachloroethane	11.941	131	174200	51.838	ug/l		98
67) Ethyl Benzene	11.941	91	899198	51.635	ug/l		100
68) m/p-Xylenes	12.047	106	679183	105.191	ug/l		99
69) o-Xylene	12.376	106	322403	52.376	ug/l		100
70) Styrene	12.388	104	550033	55.031	ug/l		100
71) Bromoform	12.559	173	132448	53.811	ug/l	#	100
73) Isopropylbenzene	12.670	105	827973	52.866	ug/l		100
74) N-amyl acetate	12.500	43	221082m	41.449	ug/l		
75) 1,1,2,2-Tetrachloroethane	12.917	83	253948	50.155	ug/l		100
76) 1,2,3-Trichloropropane	12.970	75	269266m	54.274	ug/l		
77) Bromobenzene	12.959	156	191381	53.406	ug/l		98
78) n-propylbenzene	13.012	91	1004887	52.446	ug/l		100
79) 2-Chlorotoluene	13.106	91	599091	51.202	ug/l		99
80) 1,3,5-Trimethylbenzene	13.153	105	687007	52.936	ug/l		99
81) trans-1,4-Dichloro-2-b...	12.717	75	96389	55.117	ug/l	#	95
82) 4-Chlorotoluene	13.200	91	628637	54.093	ug/l		99
83) tert-Butylbenzene	13.417	119	569932	51.660	ug/l		99
84) 1,2,4-Trimethylbenzene	13.459	105	703272	54.519	ug/l		98
85) sec-Butylbenzene	13.594	105	812817	51.285	ug/l		100
86) p-Isopropyltoluene	13.706	119	678617	52.216	ug/l		98
87) 1,3-Dichlorobenzene	13.712	146	357734	51.282	ug/l		99
88) 1,4-Dichlorobenzene	13.788	146	372290	50.949	ug/l		98
89) n-Butylbenzene	14.035	91	644062	51.040	ug/l		99
90) Hexachloroethane	14.306	117	118158	49.768	ug/l		97
91) 1,2-Dichlorobenzene	14.082	146	344212	52.435	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	14.700	75	62186	50.621	ug/l		98
93) 1,2,4-Trichlorobenzene	15.370	180	200095	51.301	ug/l		99
94) Hexachlorobutadiene	15.476	225	64430	45.969	ug/l		97
95) Naphthalene	15.611	128	719827	53.258	ug/l		99
96) 1,2,3-Trichlorobenzene	15.811	180	188353	49.620	ug/l		97

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN112425\
Data File : VN088351.D
Acq On : 24 Nov 2025 15:18
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN112425

Manual Integrations APPROVED

Reviewed By :John Carlone 11/25/2025
Supervised By :Mahesh Dadoda 11/26/2025

Quant Time: Nov 25 01:39:30 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:34:52 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

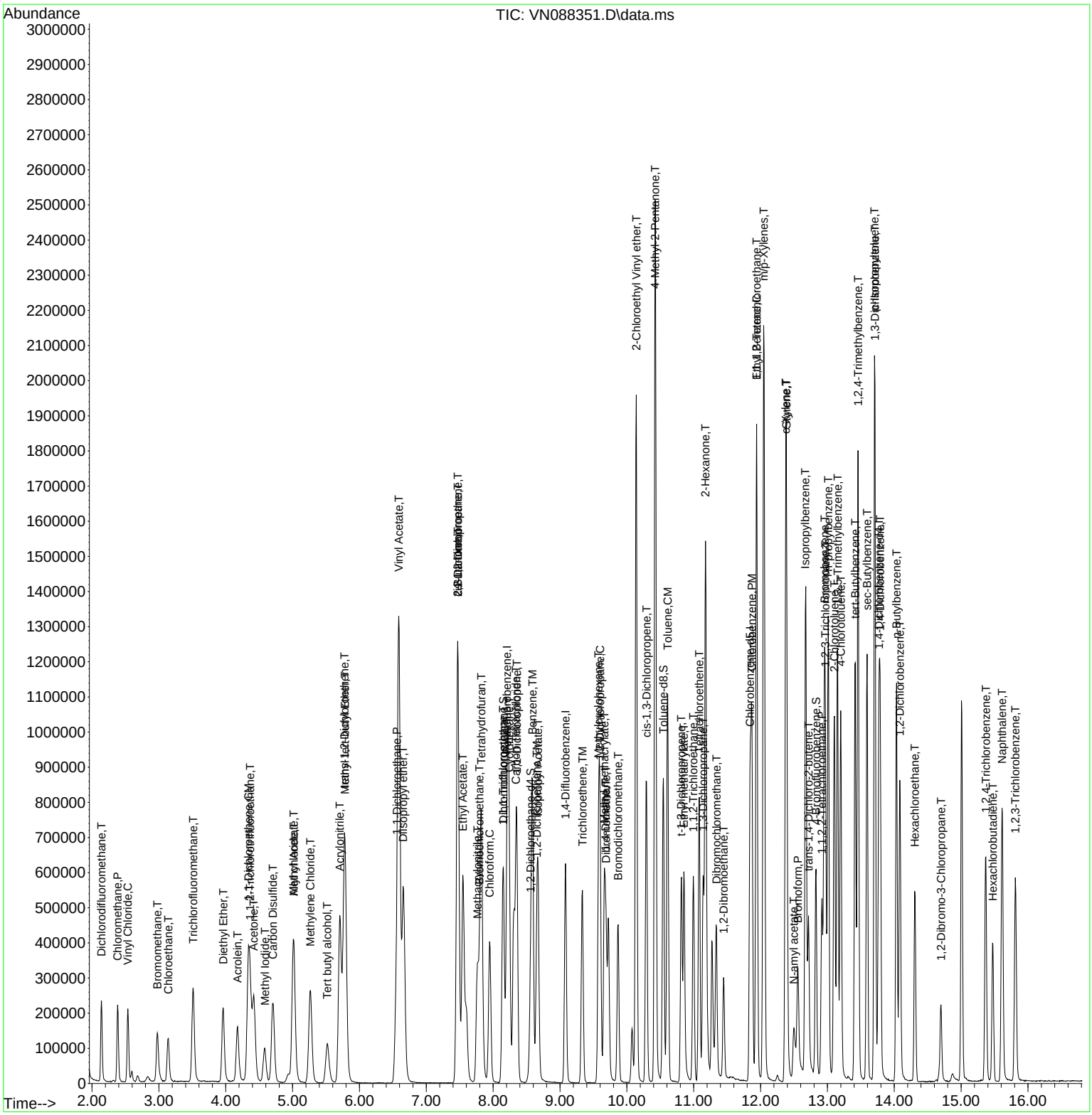
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN112425\
Data File : VN088351.D
Acq On : 24 Nov 2025 15:18
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Nov 25 01:39:30 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:34:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
ICVVN112425

Manual Integrations APPROVED

Reviewed By :John Carlone 11/25/2025
Supervised By :Mahesh Dadoda 11/26/2025



Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN112425\
Data File : VN088351.D
Acq On : 24 Nov 2025 15:18
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN112425

Quant Time: Nov 25 01:39:30 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:34:52 2025
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	104	0.00
2	T	Dichlorodifluoromethane	0.751	0.772	-2.8	108	0.00
3	P	Chloromethane	0.807	0.848	-5.1	110	0.00
4	C	Vinyl Chloride	0.821	0.818	0.4#	105	0.00
5	T	Bromomethane	0.395	0.430	-8.9	113	0.00
6	T	Chloroethane	0.508	0.523	-3.0	108	0.00
7	T	Trichlorofluoromethane	1.153	1.149	0.3	110	0.00
8	T	Diethyl Ether	0.433	0.462	-6.7	108	0.00
9	T	1,1,2-Trichlorotrifluoroeth	0.614	0.578	5.9	107	0.00
10	T	Methyl Iodide	0.608	0.656	-7.9	103	0.00
11	T	Tert butyl alcohol	0.150	0.161	-7.3	104	0.00
12	CM	1,1-Dichloroethene	0.610	0.597	2.1#	109	0.00
13	T	Acrolein	0.144	0.154	-6.9	106	0.00
14	T	Allyl chloride	1.131	1.216	-7.5	110	0.00
15	T	Acrylonitrile	0.434	0.482	-11.1	107	0.00
16	T	Acetone	0.341	0.340	0.3	106	0.00
17	T	Carbon Disulfide	1.993	2.055	-3.1	108	0.00
18	T	Methyl Acetate	1.014	1.099	-8.4	109	0.00
19	T	Methyl tert-butyl Ether	2.285	2.624	-14.8	109	0.00
20	T	Methylene Chloride	0.729	0.789	-8.2	109	0.00
21	T	trans-1,2-Dichloroethene	0.676	0.722	-6.8	110	0.00
22	T	Diisopropyl ether	2.414	2.720	-12.7	110	0.00
23	T	Vinyl Acetate	1.945	2.203	-13.3	107	0.00
24	P	1,1-Dichloroethane	1.367	1.490	-9.0	109	0.00
25	T	2-Butanone	0.548	0.610	-11.3	107	0.00
26	T	2,2-Dichloropropane	1.180	1.273	-7.9	110	0.00
27	T	cis-1,2-Dichloroethene	0.785	0.846	-7.8	106	0.00
28	T	Bromochloromethane	0.681	0.634	6.9	90	0.00
29	T	Tetrahydrofuran	0.393	0.439	-11.7	106	0.00
30	C	Chloroform	1.343	1.450	-8.0#	108	0.00
31	T	Cyclohexane	1.239	1.194	3.6	110	0.00
32	T	1,1,1-Trichloroethane	1.181	1.208	-2.3	109	0.00
33	S	1,2-Dichloroethane-d4	0.942	0.887	5.8	92	0.00
34	I	1,4-Difluorobenzene	1.000	1.000	0.0	105	0.00
35	S	Dibromofluoromethane	0.346	0.303	12.4	91	0.00
36	T	1,1-Dichloropropene	0.535	0.502	6.2	107	0.00
37	T	Ethyl Acetate	0.703	0.723	-2.8	105	0.00
38	T	Carbon Tetrachloride	0.532	0.520	2.3	109	0.00
39	T	Methylcyclohexane	0.572	0.548	4.2	109	0.00
40	TM	Benzene	1.570	1.595	-1.6	107	0.00
41	T	Methacrylonitrile	0.348	0.375	-7.8	110	0.00
42	TM	1,2-Dichloroethane	0.599	0.632	-5.5	108	0.00
43	T	Isopropyl Acetate	1.074	1.142	-6.3	107	0.00
44	TM	Trichloroethene	0.371	0.367	1.1	108	0.00
45	C	1,2-Dichloropropane	0.402	0.419	-4.2#	108	0.00
46	T	Dibromomethane	0.287	0.302	-5.2	108	0.00
47	T	Bromodichloromethane	0.586	0.611	-4.3	109	0.00
48	T	Methyl methacrylate	0.490	0.535	-9.2	109	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN112425\
Data File : VN088351.D
Acq On : 24 Nov 2025 15:18
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN112425

Quant Time: Nov 25 01:39:30 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:34:52 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	0.006	0.006	0.0	101	0.00
50	S	Toluene-d8	1.289	1.140	11.6	93	0.00
51	T	4-Methyl-2-Pentanone	0.633	0.693	-9.5	108	0.00
52	CM	Toluene	0.906	0.942	-4.0#	108	0.00
53	T	t-1,3-Dichloropropene	0.601	0.642	-6.8	107	0.00
54	T	cis-1,3-Dichloropropene	0.632	0.684	-8.2	108	0.00
55	T	1,1,2-Trichloroethane	0.351	0.361	-2.8	107	0.00
56	T	Ethyl methacrylate	0.554	0.642	-15.9	109	0.00
57	T	1,3-Dichloropropane	0.633	0.672	-6.2	109	0.00
58	T	2-Chloroethyl Vinyl ether	0.319	0.338	-6.0	97	0.00
59	T	2-Hexanone	0.399	0.444	-11.3	107	0.00
60	T	Dibromochloromethane	0.400	0.421	-5.2	108	0.00
61	T	1,2-Dibromoethane	0.355	0.380	-7.0	108	0.00
62	S	4-Bromofluorobenzene	0.442	0.397	10.2	93	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	104	0.00
64	T	Tetrachloroethene	0.396	0.370	6.6	102	0.00
65	PM	Chlorobenzene	1.123	1.156	-2.9	109	0.00
66	T	1,1,1,2-Tetrachloroethane	0.379	0.393	-3.7	107	0.00
67	C	Ethyl Benzene	1.963	2.027	-3.3#	109	0.00
68	T	m/p-Xylenes	0.728	0.766	-5.2	109	0.00
69	T	o-Xylene	0.694	0.727	-4.8	109	0.00
70	T	Styrene	1.127	1.240	-10.0	108	0.00
71	P	Bromoform	0.277	0.299	-7.9	109	0.00
72	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	102	0.00
73	T	Isopropylbenzene	3.697	3.909	-5.7	110	0.00
74	T	N-amyl acetate	1.259	1.044	17.1	101	0.00
75	P	1,1,2,2-Tetrachloroethane	1.195	1.199	-0.3	108	0.00
76	T	1,2,3-Trichloropropane	1.171	1.271	-8.5	107	0.00
77	T	Bromobenzene	0.846	0.903	-6.7	106	0.00
78	T	n-propylbenzene	4.523	4.744	-4.9	109	0.00
79	T	2-Chlorotoluene	2.762	2.828	-2.4	106	0.00
80	T	1,3,5-Trimethylbenzene	3.063	3.243	-5.9	108	0.00
81	T	trans-1,4-Dichloro-2-butene	0.413	0.455	-10.2	107	0.00
82	T	4-Chlorotoluene	2.743	2.968	-8.2	106	0.00
83	T	tert-Butylbenzene	2.604	2.691	-3.3	109	0.00
84	T	1,2,4-Trimethylbenzene	3.045	3.320	-9.0	108	0.00
85	T	sec-Butylbenzene	3.741	3.837	-2.6	108	0.00
86	T	p-Isopropyltoluene	3.068	3.204	-4.4	107	0.00
87	T	1,3-Dichlorobenzene	1.647	1.689	-2.6	107	0.00
88	T	1,4-Dichlorobenzene	1.725	1.758	-1.9	106	0.00
89	T	n-Butylbenzene	2.979	3.041	-2.1	107	0.00
90	T	Hexachloroethane	0.560	0.558	0.4	106	0.00
91	T	1,2-Dichlorobenzene	1.550	1.625	-4.8	108	0.00
92	T	1,2-Dibromo-3-Chloropropane	0.290	0.294	-1.4	103	0.00
93	T	1,2,4-Trichlorobenzene	0.921	0.945	-2.6	108	0.00
94	T	Hexachlorobutadiene	0.331	0.304	8.2	104	0.00
95	T	Naphthalene	3.190	3.398	-6.5	105	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN112425\
Data File : VN088351.D
Acq On : 24 Nov 2025 15:18
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN112425

Quant Time: Nov 25 01:39:30 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:34:52 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	0.896	0.889	0.8	103	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_N\Data\VN112425\
Data File : VN088351.D
Acq On : 24 Nov 2025 15:18
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN112425

Quant Time: Nov 25 01:39:30 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:34:52 2025
Response via : Initial Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	50.000	50.000	0.0	104	0.00
2	T	Dichlorodifluoromethane	50.000	51.389	-2.8	108	0.00
3	P	Chloromethane	50.000	52.578	-5.2	110	0.00
4	C	Vinyl Chloride	50.000	49.842	0.3#	105	0.00
5	T	Bromomethane	50.000	54.393	-8.8	113	0.00
6	T	Chloroethane	50.000	51.450	-2.9	108	0.00
7	T	Trichlorofluoromethane	50.000	49.826	0.3	110	0.00
8	T	Diethyl Ether	50.000	53.384	-6.8	108	0.00
9	T	1,1,2-Trichlorotrifluoroeth	50.000	47.094	5.8	107	0.00
10	T	Methyl Iodide	50.000	53.976	-8.0	103	0.00
11	T	Tert butyl alcohol	250.000	268.272	-7.3	104	0.00
12	CM	1,1-Dichloroethene	50.000	48.957	2.1#	109	0.00
13	T	Acrolein	250.000	266.656	-6.7	106	0.00
14	T	Allyl chloride	50.000	53.793	-7.6	110	0.00
15	T	Acrylonitrile	250.000	277.614	-11.0	107	0.00
16	T	Acetone	250.000	249.797	0.1	106	0.00
17	T	Carbon Disulfide	50.000	51.558	-3.1	108	0.00
18	T	Methyl Acetate	50.000	54.196	-8.4	109	0.00
19	T	Methyl tert-butyl Ether	50.000	57.401	-14.8	109	0.00
20	T	Methylene Chloride	50.000	54.158	-8.3	109	0.00
21	T	trans-1,2-Dichloroethene	50.000	53.421	-6.8	110	0.00
22	T	Diisopropyl ether	50.000	56.335	-12.7	110	0.00
23	T	Vinyl Acetate	250.000	283.141	-13.3	107	0.00
24	P	1,1-Dichloroethane	50.000	54.516	-9.0	109	0.00
25	T	2-Butanone	250.000	278.613	-11.4	107	0.00
26	T	2,2-Dichloropropane	50.000	53.957	-7.9	110	0.00
27	T	cis-1,2-Dichloroethene	50.000	53.866	-7.7	106	0.00
28	T	Bromochloromethane	50.000	46.526	6.9	90	0.00
29	T	Tetrahydrofuran	250.000	279.515	-11.8	106	0.00
30	C	Chloroform	50.000	53.957	-7.9#	108	0.00
31	T	Cyclohexane	50.000	48.211	3.6	110	0.00
32	T	1,1,1-Trichloroethane	50.000	51.150	-2.3	109	0.00
33	S	1,2-Dichloroethane-d4	50.000	47.098	5.8	92	0.00
34	I	1,4-Difluorobenzene	50.000	50.000	0.0	105	0.00
35	S	Dibromofluoromethane	50.000	43.757	12.5	91	0.00
36	T	1,1-Dichloropropene	50.000	46.967	6.1	107	0.00
37	T	Ethyl Acetate	50.000	51.431	-2.9	105	0.00
38	T	Carbon Tetrachloride	50.000	48.837	2.3	109	0.00
39	T	Methylcyclohexane	50.000	47.913	4.2	109	0.00
40	TM	Benzene	50.000	50.800	-1.6	107	0.00
41	T	Methacrylonitrile	50.000	53.883	-7.8	110	0.00
42	TM	1,2-Dichloroethane	50.000	52.806	-5.6	108	0.00
43	T	Isopropyl Acetate	50.000	53.165	-6.3	107	0.00
44	TM	Trichloroethene	50.000	49.444	1.1	108	0.00
45	C	1,2-Dichloropropane	50.000	52.095	-4.2#	108	0.00
46	T	Dibromomethane	50.000	52.686	-5.4	108	0.00
47	T	Bromodichloromethane	50.000	52.155	-4.3	109	0.00
48	T	Methyl methacrylate	50.000	54.535	-9.1	109	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN112425\
Data File : VN088351.D
Acq On : 24 Nov 2025 15:18
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN112425

Quant Time: Nov 25 01:39:30 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:34:52 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	1021.452	-2.1	101	0.00
50	S	Toluene-d8	50.000	44.193	11.6	93	0.00
51	T	4-Methyl-2-Pentanone	250.000	273.447	-9.4	108	0.00
52	CM	Toluene	50.000	51.998	-4.0#	108	0.00
53	T	t-1,3-Dichloropropene	50.000	53.428	-6.9	107	0.00
54	T	cis-1,3-Dichloropropene	50.000	54.081	-8.2	108	0.00
55	T	1,1,2-Trichloroethane	50.000	51.530	-3.1	107	0.00
56	T	Ethyl methacrylate	50.000	57.977	-16.0	109	0.00
57	T	1,3-Dichloropropane	50.000	53.102	-6.2	109	0.00
58	T	2-Chloroethyl Vinyl ether	250.000	264.613	-5.8	97	0.00
59	T	2-Hexanone	250.000	278.086	-11.2	107	0.00
60	T	Dibromochloromethane	50.000	52.650	-5.3	108	0.00
61	T	1,2-Dibromoethane	50.000	53.546	-7.1	108	0.00
62	S	4-Bromofluorobenzene	50.000	44.823	10.4	93	0.00
63	I	Chlorobenzene-d5	50.000	50.000	0.0	104	0.00
64	T	Tetrachloroethene	50.000	46.666	6.7	102	0.00
65	PM	Chlorobenzene	50.000	51.452	-2.9	109	0.00
66	T	1,1,1,2-Tetrachloroethane	50.000	51.838	-3.7	107	0.00
67	C	Ethyl Benzene	50.000	51.635	-3.3#	109	0.00
68	T	m/p-Xylenes	100.000	105.191	-5.2	109	0.00
69	T	o-Xylene	50.000	52.376	-4.8	109	0.00
70	T	Styrene	50.000	55.031	-10.1	108	0.00
71	P	Bromoform	50.000	53.811	-7.6	109	0.00
72	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	102	0.00
73	T	Isopropylbenzene	50.000	52.866	-5.7	110	0.00
74	T	N-amyl acetate	50.000	41.449	17.1	101	0.00
75	P	1,1,2,2-Tetrachloroethane	50.000	50.155	-0.3	108	0.00
76	T	1,2,3-Trichloropropane	50.000	54.274	-8.5	107	0.00
77	T	Bromobenzene	50.000	53.406	-6.8	106	0.00
78	T	n-propylbenzene	50.000	52.446	-4.9	109	0.00
79	T	2-Chlorotoluene	50.000	51.202	-2.4	106	0.00
80	T	1,3,5-Trimethylbenzene	50.000	52.936	-5.9	108	0.00
81	T	trans-1,4-Dichloro-2-butene	50.000	55.117	-10.2	107	0.00
82	T	4-Chlorotoluene	50.000	54.093	-8.2	106	0.00
83	T	tert-Butylbenzene	50.000	51.660	-3.3	109	0.00
84	T	1,2,4-Trimethylbenzene	50.000	54.519	-9.0	108	0.00
85	T	sec-Butylbenzene	50.000	51.285	-2.6	108	0.00
86	T	p-Isopropyltoluene	50.000	52.216	-4.4	107	0.00
87	T	1,3-Dichlorobenzene	50.000	51.282	-2.6	107	0.00
88	T	1,4-Dichlorobenzene	50.000	50.949	-1.9	106	0.00
89	T	n-Butylbenzene	50.000	51.040	-2.1	107	0.00
90	T	Hexachloroethane	50.000	49.768	0.5	106	0.00
91	T	1,2-Dichlorobenzene	50.000	52.435	-4.9	108	0.00
92	T	1,2-Dibromo-3-Chloropropane	50.000	50.621	-1.2	103	0.00
93	T	1,2,4-Trichlorobenzene	50.000	51.301	-2.6	108	0.00
94	T	Hexachlorobutadiene	50.000	45.969	8.1	104	0.00
95	T	Naphthalene	50.000	53.258	-6.5	105	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN112425\
Data File : VN088351.D
Acq On : 24 Nov 2025 15:18
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN112425

Quant Time: Nov 25 01:39:30 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:34:52 2025
Response via : Initial Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	50.000	49.620	0.8	103	0.00

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

Raw Data

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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alliance Contract: GENV01

Lab Code: ACE SDG No.: Q3715

Instrument ID: MSVOA_X Calibration Date(s): 11/07/2025 11/07/2025

Heated Purge: (Y/N) N Calibration Time(s): 13:35 16:29

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

LAB FILE ID: RRF001 = VX048516.D RRF005 = VX048517.D RRF020 = VX048518.D
RRF100 = VX048520.D RRF150 = VX048521.D RRF050 = VX048524.D

COMPOUND	RRF001	RRF005	RRF020	RRF100	RRF150	RRF050	$\overline{RRF}$	% RSD
Dichlorodifluoromethane	0.365	0.364	0.352	0.452	0.474	0.424	0.405	12.8
Chloromethane	0.603	0.457	0.425	0.581	0.565	0.592	0.537	14.2
Vinyl Chloride	0.666	0.579	0.608	0.601	0.597	0.600	0.608	4.9
Bromomethane		0.468	0.417	0.323	0.287	0.426	0.384	19.8
Chloroethane	0.465	0.419	0.397	0.370	0.357	0.383	0.398	9.8
Trichlorofluoromethane	0.982	1.030	1.019	0.919	0.939	0.886	0.963	6
1,1,2-Trichlorotrifluoroethane	0.552	0.556	0.616	0.546	0.558	0.515	0.557	5.9
Tert butyl alcohol		0.129	0.133	0.132	0.127	0.138	0.132	3.2
1,1-Dichloroethene	0.669	0.584	0.591	0.555	0.548	0.545	0.582	8
Acetone	0.383	0.318	0.318	0.317	0.313	0.330	0.330	8.1
Carbon Disulfide	2.045	1.739	1.609	1.468	1.477	1.489	1.638	13.7
Methyl tert-butyl Ether	2.163	2.158	2.049	1.984	1.861	2.117	2.055	5.7
Methyl Acetate	1.195	0.876	0.857	0.818	0.823	0.869	0.906	15.8
Methylene Chloride	0.845	0.689	0.663	0.624	0.595	0.653	0.678	13
trans-1,2-Dichloroethene	0.700	0.650	0.612	0.585	0.557	0.598	0.617	8.3
1,1-Dichloroethane	1.255	1.247	1.124	1.083	1.041	1.102	1.142	7.8
Cyclohexane		1.001	1.004	0.896	0.910	0.867	0.936	6.7
2-Butanone	0.474	0.502	0.511	0.470	0.465	0.506	0.488	4.2
Carbon Tetrachloride	0.640	0.766	0.546	0.520	0.504	0.486	0.577	18.6
cis-1,2-Dichloroethene	0.888	0.787	0.737	0.703	0.684	0.725	0.754	9.9
Bromochloromethane	0.640	0.630	0.533	0.522	0.497	0.543	0.561	10.6
Chloroform	1.357	1.277	1.162	1.105	1.052	1.120	1.179	9.8
1,1,1-Trichloroethane	1.160	1.087	1.026	0.979	0.947	0.973	1.029	7.9
Methylcyclohexane	0.585	0.607	0.558	0.561	0.592	0.510	0.569	6
Benzene	1.745	2.038	1.468	1.396	1.369	1.408	1.571	17
1,2-Dichloroethane	0.540	0.721	0.525	0.489	0.473	0.481	0.538	17.3
Trichloroethene	0.423	0.390	0.356	0.366	0.363	0.355	0.375	7.1
1,2-Dichloropropane	0.417	0.381	0.319	0.352	0.340	0.358	0.361	9.5
Bromodichloromethane	0.517	0.598	0.446	0.539	0.510	0.543	0.526	9.5
4-Methyl-2-Pentanone	0.505	0.667	0.514	0.573	0.546	0.620	0.571	11

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

Raw Data

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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alliance Contract: GENV01

Lab Code: ACE SDG No.: Q3715

Instrument ID: MSVOA_X Calibration Date(s): 11/07/2025 11/07/2025

Heated Purge: (Y/N) N Calibration Time(s): 13:35 16:29

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

LAB FILE ID: RRF001 = VX048516.D RRF005 = VX048517.D RRF020 = VX048518.D
RRF100 = VX048520.D RRF150 = VX048521.D RRF050 = VX048524.D

COMPOUND	RRF001	RRF005	RRF020	RRF100	RRF150	RRF050	$\overline{RRF}$	% RSD
Toluene	0.709	0.955	0.710	0.868	0.843	0.877	0.827	11.9
t-1,3-Dichloropropene	0.513	0.609	0.452	0.561	0.542	0.572	0.541	10
cis-1,3-Dichloropropene	0.472	0.633	0.481	0.595	0.578	0.606	0.561	12.1
1,1,2-Trichloroethane	0.289	0.373	0.286	0.345	0.329	0.361	0.330	11.1
2-Hexanone	0.360	0.487	0.390	0.429	0.416	0.464	0.425	11
Dibromochloromethane	0.347	0.468	0.351	0.428	0.404	0.436	0.406	12
1,2-Dibromoethane	0.309	0.417	0.308	0.374	0.358	0.381	0.358	11.9
Tetrachloroethene	0.444	0.364	0.352	0.344	0.348	0.327	0.363	11.4
Chlorobenzene	1.406	1.245	1.153	1.112	1.105	1.101	1.187	10.1
Ethyl Benzene	2.253	2.045	1.976	1.899	1.898	1.887	1.993	7.1
m/p-Xylenes	0.764	0.793	0.758	0.736	0.733	0.720	0.751	3.5
o-Xylene	0.795	0.746	0.721	0.714	0.726	0.703	0.734	4.5
Styrene	1.228	1.256	1.227	1.226	1.244	1.210	1.232	1.3
Bromoform	0.427	0.350	0.345	0.359	0.373	0.348	0.367	8.4
Isopropylbenzene	3.857	3.727	3.683	3.551	3.492	3.466	3.629	4.2
1,1,2,2-Tetrachloroethane	1.544	1.284	1.230	1.207	1.185	1.229	1.280	10.4
1,3-Dichlorobenzene	2.076	1.785	1.686	1.680	1.668	1.644	1.756	9.3
1,4-Dichlorobenzene	2.329	1.860	1.676	1.671	1.672	1.678	1.814	14.5
1,2-Dichlorobenzene	1.944	1.695	1.611	1.627	1.616	1.624	1.686	7.7
1,2-Dibromo-3-Chloropropane	0.304	0.308	0.294	0.298	0.285	0.297	0.297	2.7
1,2,4-Trichlorobenzene	1.353	1.032	1.057	1.097	1.117	1.066	1.120	10.5
1,2,3-Trichlorobenzene	1.170	0.973	0.994	1.049	1.051	1.016	1.042	6.7
1,2-Dichloroethane-d4		0.775	0.723	0.677	0.623	0.685	0.697	8.1
Dibromofluoromethane		0.484	0.374	0.356	0.327	0.351	0.378	16.2
Toluene-d8		1.341	1.021	1.210	1.128	1.202	1.180	10
4-Bromofluorobenzene		0.523	0.365	0.445	0.423	0.443	0.440	12.9

* 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 : 82X110725W.M
Title : SW846 8260
Last Update : Sat Nov 08 05:08:11 2025
Response Via : Initial Calibration

Calibration Files
1 =VX048516.D 5 =VX048517.D 20 =VX048518.D 50 =VX048524.D 100 =VX048520.D 150 =VX048521.D

		Compound	1	5	20	50	100	150	Avg	%RSD
1)	I	Pentafluorobenzene	----------ISTD----------							
2)	T	Dichlorodifluo...	0.365	0.364	0.352	0.424	0.452	0.474	0.405	12.78
3)	P	Chloromethane	0.603	0.457	0.425	0.592	0.581	0.565	0.537	14.19
4)	C	Vinyl Chloride	0.666	0.579	0.608	0.600	0.601	0.597	0.608	4.86#
5)	T	Bromomethane		0.468	0.417	0.426	0.323	0.287	0.384	19.75
6)	T	Chloroethane	0.465	0.419	0.397	0.383	0.370	0.357	0.398	9.77
7)	T	Trichlorofluor...	0.982	1.030	1.019	0.886	0.919	0.939	0.963	5.98
8)	T	Diethyl Ether	0.397	0.420	0.379	0.393	0.376	0.353	0.386	5.87
9)	T	1,1,2-Trichlor...	0.552	0.556	0.616	0.515	0.546	0.558	0.557	5.91
10)	T	Methyl Iodide		0.833	0.822	0.824	0.836	0.808	0.825	1.34
11)	T	Tert butyl alc...		0.129	0.133	0.138	0.132	0.127	0.132	3.25
12)	CM	1,1-Dichloroet...	0.669	0.584	0.591	0.545	0.555	0.548	0.582	8.02#
13)	T	Acrolein		0.023	0.015	0.020	0.017	0.020	0.019	16.42
14)	T	Allyl chloride	1.243	1.129	1.065	1.048	1.010	1.008	1.084	8.27
15)	T	Acrylonitrile	0.405	0.383	0.395	0.403	0.370	0.356	0.385	5.05
16)	T	Acetone	0.383	0.318	0.318	0.330	0.317	0.313	0.330	8.07
17)	T	Carbon Disulfide	2.045	1.739	1.609	1.489	1.468	1.477	1.638	13.75
18)	T	Methyl Acetate	1.195	0.876	0.857	0.869	0.818	0.823	0.906	15.80
19)	T	Methyl tert-bu...	2.163	2.158	2.049	2.117	1.984	1.861	2.055	5.70
20)	T	Methylene Chlo...	0.845	0.689	0.663	0.653	0.624	0.595	0.678	13.00
21)	T	trans-1,2-Dich...	0.700	0.650	0.612	0.598	0.585	0.557	0.617	8.29
22)	T	Diisopropyl ether	2.220	2.180	2.105	2.064	1.977	1.939	2.081	5.30
23)	T	Vinyl Acetate	1.912	1.901	1.838	1.827	1.747	1.710	1.822	4.43
24)	P	1,1-Dichloroet...	1.255	1.247	1.124	1.102	1.083	1.041	1.142	7.77
25)	T	2-Butanone	0.474	0.502	0.511	0.506	0.470	0.465	0.488	4.20
26)	T	2,2-Dichloropr...	1.079	1.044	0.975	0.883	0.934	0.925	0.973	7.71
27)	T	cis-1,2-Dichlo...	0.888	0.787	0.737	0.725	0.703	0.684	0.754	9.90
28)	T	Bromochloromet...	0.640	0.630	0.533	0.543	0.522	0.497	0.561	10.61
29)	T	Tetrahydrofuran	0.406	0.357	0.350	0.349	0.321	0.306	0.348	9.91
30)	C	Chloroform	1.357	1.277	1.162	1.120	1.105	1.052	1.179	9.79#
31)	T	Cyclohexane		1.001	1.004	0.867	0.896	0.910	0.936	6.73
32)	T	1,1,1-Trichlor...	1.160	1.087	1.026	0.973	0.979	0.947	1.029	7.90
33)	S	1,2-Dichloroet...		0.775	0.723	0.685	0.677	0.623	0.697	8.08
34)	I	1,4-Difluorobenzene	----------ISTD----------							
35)	S	Dibromofluorom...		0.484	0.374	0.351	0.356	0.327	0.378	16.22
36)	T	1,1-Dichloropr...	0.548	0.664	0.499	0.427	0.453	0.449	0.507	17.46
37)	T	Ethyl Acetate	0.748	0.901	0.676	0.667	0.648	0.639	0.713	13.96
38)	T	Carbon Tetrach...	0.640	0.766	0.546	0.486	0.520	0.504	0.577	18.63
39)	T	Methylcyclohexane	0.585	0.607	0.558	0.510	0.561	0.592	0.569	6.00
40)	TM	Benzene	1.745	2.038	1.468	1.408	1.396	1.369	1.571	16.99
41)	T	Methacrylonitrile	0.315	0.406	0.310	0.295	0.276	0.280	0.314	15.30
42)	TM	1,2-Dichloroet...	0.540	0.721	0.525	0.481	0.489	0.473	0.538	17.33
43)	T	Isopropyl Acetate	1.009	1.298	0.958	0.929	0.908	0.914	1.003	14.92
44)	TM	Trichloroethene	0.423	0.390	0.356	0.355	0.366	0.363	0.375	7.10
45)	C	1,2-Dichloropr...	0.417	0.381	0.319	0.358	0.352	0.340	0.361	9.45#
46)	T	Dibromomethane	0.278	0.303	0.217	0.268	0.264	0.251	0.263	10.84
47)	T	Bromodichlorom...	0.517	0.598	0.446	0.543	0.539	0.510	0.526	9.49
48)	T	Methyl methacr...	0.467	0.476	0.385	0.462	0.448	0.435	0.446	7.40
49)	T	1,4-Dioxane	0.006	0.007	0.006	0.007	0.008	0.007	0.007	12.02
50)	S	Toluene-d8		1.341	1.021	1.202	1.210	1.128	1.180	9.96
51)	T	4-Methyl-2-Pen...	0.505	0.667	0.514	0.620	0.573	0.546	0.571	11.02
52)	CM	Toluene	0.709	0.955	0.710	0.877	0.868	0.843	0.827	11.87#
53)	T	t-1,3-Dichloro...	0.513	0.609	0.452	0.572	0.561	0.542	0.541	10.02
54)	T	cis-1,3-Dichlo...	0.472	0.633	0.481	0.606	0.595	0.578	0.561	12.05
55)	T	1,1,2-Trichlor...	0.289	0.373	0.286	0.361	0.345	0.329	0.330	11.11
56)	T	Ethyl methacry...	0.446	0.594	0.474	0.618	0.594	0.573	0.550	13.05

Method Path : Z:\voasrv\HPCHEM1\MSVOA_X\Method\
Method File : 82X110725W.M

57)	T	1,3-Dichloropr...	0.529	0.674	0.498	0.618	0.581	0.551	0.575	11.11
58)	T	2-Chloroethyl ...	0.229	0.301	0.251	0.354	0.327	0.311	0.296	15.90
59)	T	2-Hexanone	0.360	0.487	0.390	0.464	0.429	0.416	0.425	10.96
60)	T	Dibromochlorom...	0.347	0.468	0.351	0.436	0.428	0.404	0.406	11.97
61)	T	1,2-Dibromoethane	0.309	0.417	0.308	0.381	0.374	0.358	0.358	11.93
62)	S	4-Bromofluorob...		0.523	0.365	0.443	0.445	0.423	0.440	12.88
63)	I	Chlorobenzene-d5	----------ISTD----------							
64)	T	Tetrachloroethene	0.444	0.364	0.352	0.327	0.344	0.348	0.363	11.38
65)	PM	Chlorobenzene	1.406	1.245	1.153	1.101	1.112	1.105	1.187	10.12
66)	T	1,1,1,2-Tetrac...	0.396	0.420	0.389	0.392	0.398	0.391	0.398	2.88
67)	C	Ethyl Benzene	2.253	2.045	1.976	1.887	1.899	1.898	1.993	7.08#
68)	T	m/p-Xylenes	0.764	0.793	0.758	0.720	0.736	0.733	0.751	3.49
69)	T	o-Xylene	0.795	0.746	0.721	0.703	0.714	0.726	0.734	4.50
70)	T	Styrene	1.228	1.256	1.227	1.210	1.226	1.244	1.232	1.30
71)	P	Bromoform	0.427	0.350	0.345	0.348	0.359	0.373	0.367	8.43
72)	I	1,4-Dichlorobenzen...	----------ISTD----------							
73)	T	Isopropylbenzene	3.857	3.727	3.683	3.466	3.551	3.492	3.629	4.20
74)	T	N-amyl acetate	1.998	1.826	1.851	1.793	1.739	1.727	1.822	5.41
75)	P	1,1,2,2-Tetrac...	1.544	1.284	1.230	1.229	1.207	1.185	1.280	10.45
76)	T	1,2,3-Trichlor...	1.270	1.113	1.134	1.470	1.128	1.112	1.205	11.88
77)	T	Bromobenzene	1.054	0.961	0.913	0.909	0.909	0.877	0.937	6.74
78)	T	n-propylbenzene	4.682	4.356	4.371	4.027	4.097	4.073	4.268	5.89
79)	T	2-Chlorotoluene	2.995	2.601	2.565	2.437	2.493	2.382	2.579	8.50
80)	T	1,3,5-Trimethy...	3.172	2.990	3.003	2.819	2.913	2.855	2.959	4.30
81)	T	trans-1,4-Dich...		0.376	0.398	0.433	0.444	0.454	0.421	7.75
82)	T	4-Chlorotoluene	3.437	3.105	2.985	2.866	2.916	2.842	3.025	7.37
83)	T	tert-Butylbenzene	3.231	3.058	3.080	2.945	3.036	3.010	3.060	3.13
84)	T	1,2,4-Trimethy...	3.224	2.963	2.991	2.897	2.951	2.886	2.985	4.14
85)	T	sec-Butylbenzene	4.137	3.883	3.841	3.496	3.643	3.693	3.782	5.90
86)	T	p-Isopropyltol...	3.445	3.138	3.226	2.988	3.123	3.159	3.180	4.76
87)	T	1,3-Dichlorobe...	2.076	1.785	1.686	1.644	1.680	1.668	1.756	9.34
88)	T	1,4-Dichlorobe...	2.329	1.860	1.676	1.678	1.671	1.672	1.814	14.49
89)	T	n-Butylbenzene	3.281	3.038	3.007	2.718	2.883	2.972	2.983	6.23
90)	T	Hexachloroethane	0.679	0.611	0.600	0.551	0.597	0.596	0.606	6.82
91)	T	1,2-Dichlorobe...	1.944	1.695	1.611	1.624	1.627	1.616	1.686	7.71
92)	T	1,2-Dibromo-3-...	0.304	0.308	0.294	0.297	0.298	0.285	0.297	2.66
93)	T	1,2,4-Trichlor...	1.353	1.032	1.057	1.066	1.097	1.117	1.120	10.53
94)	T	Hexachlorobuta...	0.611	0.467	0.450	0.406	0.421	0.455	0.468	15.66
95)	T	Naphthalene	3.675	3.299	3.529	3.700	3.732	3.682	3.603	4.56
96)	T	1,2,3-Trichlor...	1.170	0.973	0.994	1.016	1.049	1.051	1.042	6.70

(#) = Out of Range

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX110725\
Data File : VX048516.D
Acq On : 07 Nov 2025 13:35
Operator : JC/MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :John Carlone 11/10/2025
Supervised By :Semsettin Yesilyurt 11/10/2025

Quant Time: Nov 08 04:38:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 04:36:23 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.531	168	195603	50.000	ug/l		0.00
34) 1,4-Difluorobenzene	6.738	114	335919	50.000	ug/l		0.00
63) Chlorobenzene-d5	10.037	117	223304	50.000	ug/l		0.00
72) 1,4-Dichlorobenzene-d4	12.006	152	110981	50.000	ug/l		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4	0.000	65	0d	0.000	ug/l		
Spiked Amount 50.000	Range 78 - 117		Recovery =	0.000%#			
35) Dibromofluoromethane	0.000	113	0d	0.000	ug/l		
Spiked Amount 50.000	Range 75 - 124		Recovery =	0.000%#			
50) Toluene-d8	0.000	98	0d	0.000	ug/l		
Spiked Amount 50.000	Range 92 - 112		Recovery =	0.000%#			
62) 4-Bromofluorobenzene	0.000	95	0d	0.000	ug/l		
Spiked Amount 50.000	Range 83 - 123		Recovery =	0.000%#			
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.172	85	1427	0.900	ug/l		95
3) Chloromethane	1.300	50	2360	1.123	ug/l	#	87
4) Vinyl Chloride	1.380	62	2604	1.094	ug/l		99
6) Chloroethane	1.697	64	1819	1.167	ug/l	#	77
7) Trichlorofluoromethane	1.892	101	3842	1.020	ug/l		98
8) Diethyl Ether	2.130	74	1554	1.028	ug/l		85
9) 1,1,2-Trichlorotrifluo...	2.331	101	2160	0.991	ug/l	#	90
12) 1,1-Dichloroethene	2.319	96	2617	1.149	ug/l	#	86
14) Allyl chloride	2.666	41	4862	1.147	ug/l		95
15) Acrylonitrile	3.056	53	7915	5.250	ug/l		97
16) Acetone	2.373	43	7490	5.805	ug/l		98
17) Carbon Disulfide	2.514	76	8000	1.249	ug/l	#	93
18) Methyl Acetate	2.703	43	4673	1.318	ug/l		93
19) Methyl tert-butyl Ether	3.105	73	8461	1.052	ug/l	#	89
20) Methylene Chloride	2.788	84	3307	1.247	ug/l	#	87
21) trans-1,2-Dichloroethene	3.087	96	2739	1.135	ug/l		97
22) Diisopropyl ether	3.757	45	8684	1.067	ug/l		86
23) Vinyl Acetate	3.721	43	37398	5.246	ug/l		97
24) 1,1-Dichloroethane	3.605	63	4909	1.099	ug/l		95
25) 2-Butanone	4.544	43	9269	4.857	ug/l		95
26) 2,2-Dichloropropane	4.464	77	4220	1.108	ug/l		92
27) cis-1,2-Dichloroethene	4.477	96	3475	1.178	ug/l		96
28) Bromochloromethane	4.885	49	2504	1.141	ug/l	#	99
29) Tetrahydrofuran	4.995	42	7932	5.835	ug/l		92
30) Chloroform	5.080	83	5308	1.151	ug/l		84
32) 1,1,1-Trichloroethane	5.367	97	4539	1.128	ug/l	#	49
36) 1,1-Dichloropropene	5.678	75	3685	1.082	ug/l		99
37) Ethyl Acetate	4.714	43	5027	1.049	ug/l	#	88
38) Carbon Tetrachloride	5.659	117	4298	1.109	ug/l		89
39) Methylcyclohexane	7.360	83	3932	1.029	ug/l	#	88
40) Benzene	6.025	78	11724	1.111	ug/l		98
41) Methacrylonitrile	4.910	41	2117	1.005	ug/l	#	74
42) 1,2-Dichloroethane	6.068	62	3627	1.003	ug/l		94
43) Isopropyl Acetate	6.330	43	6781	1.007	ug/l		94
44) Trichloroethene	7.110	130	2845	1.128	ug/l		76
45) 1,2-Dichloropropane	7.409	63	2802	1.155	ug/l		91

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX110725\
Data File : VX048516.D
Acq On : 07 Nov 2025 13:35
Operator : JC/MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :John Carlone 11/10/2025
Supervised By :Semsettin Yesilyurt 11/10/2025

Quant Time: Nov 08 04:38:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 04:36:23 2025
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46)	Dibromomethane	7.561	93	1870	1.057	ug/l		97
47)	Bromodichloromethane	7.805	83	3471	0.983	ug/l	#	73
48)	Methyl methacrylate	7.690	41	3138	1.048	ug/l		90
49)	1,4-Dioxane	7.653	88	811	17.773	ug/l	#	86
51)	4-Methyl-2-Pentanone	8.555	43	16970	4.426	ug/l		90
52)	Toluene	8.702	92	4764	0.857	ug/l		98
53)	t-1,3-Dichloropropene	8.964	75	3445	0.947	ug/l	#	86
54)	cis-1,3-Dichloropropene	8.354	75	3173	0.842	ug/l	#	78
55)	1,1,2-Trichloroethane	9.140	97	1939	0.874	ug/l	#	87
56)	Ethyl methacrylate	9.104	69	2995	0.811	ug/l	#	89
57)	1,3-Dichloropropane	9.293	76	3551	0.919	ug/l		97
58)	2-Chloroethyl Vinyl ether	8.226	63	7704m	3.915	ug/l		
59)	2-Hexanone	9.415	43	12104	4.243	ug/l		91
60)	Dibromochloromethane	9.500	129	2328	0.854	ug/l		92
61)	1,2-Dibromoethane	9.598	107	2078	0.864	ug/l		87
64)	Tetrachloroethene	9.250	164	1983	1.223	ug/l	#	83
65)	Chlorobenzene	10.067	112	6278	1.184	ug/l		95
66)	1,1,1,2-Tetrachloroethane	10.140	131	1769	0.996	ug/l	#	55
67)	Ethyl Benzene	10.177	91	10060	1.130	ug/l		96
68)	m/p-Xylenes	10.287	106	6820	2.035	ug/l		96
69)	o-Xylene	10.622	106	3552	1.083	ug/l		98
70)	Styrene	10.640	104	5483	0.997	ug/l		94
71)	Bromoform	10.787	173	1905	1.163	ug/l	#	89
73)	Isopropylbenzene	10.945	105	8562	1.063	ug/l		99
74)	N-amyl acetate	10.829	43	4435	1.096	ug/l	#	91
75)	1,1,2,2-Tetrachloroethane	11.195	83	3428	1.207	ug/l		97
76)	1,2,3-Trichloropropane	11.219	75	2820m	1.192	ug/l		
77)	Bromobenzene	11.183	156	2339	1.124	ug/l		98
78)	n-propylbenzene	11.286	91	10393	1.097	ug/l		99
79)	2-Chlorotoluene	11.347	91	6648	1.161	ug/l		98
80)	1,3,5-Trimethylbenzene	11.433	105	7041	1.072	ug/l		94
82)	4-Chlorotoluene	11.439	91	7628	1.136	ug/l		97
83)	tert-Butylbenzene	11.695	119	7172	1.056	ug/l		100
84)	1,2,4-Trimethylbenzene	11.731	105	7156	1.080	ug/l		97
85)	sec-Butylbenzene	11.872	105	9183	1.094	ug/l		96
86)	p-Isopropyltoluene	11.994	119	7646	1.083	ug/l		92
87)	1,3-Dichlorobenzene	11.951	146	4609	1.182	ug/l		96
88)	1,4-Dichlorobenzene	12.018	146	5170m	1.314	ug/l		
89)	n-Butylbenzene	12.317	91	7282	1.100	ug/l		94
90)	Hexachloroethane	12.518	117	1507	1.121	ug/l		95
91)	1,2-Dichlorobenzene	12.323	146	4315	1.153	ug/l		97
92)	1,2-Dibromo-3-Chloropr...	12.932	75	674	1.021	ug/l		96
93)	1,2,4-Trichlorobenzene	13.567	180	3004	1.208	ug/l		96
94)	Hexachlorobutadiene	13.707	225	1356	1.304	ug/l		97
95)	Naphthalene	13.762	128	8156	1.020	ug/l		98
96)	1,2,3-Trichlorobenzene	13.944	180	2598	1.123	ug/l		89

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

ICAL Form

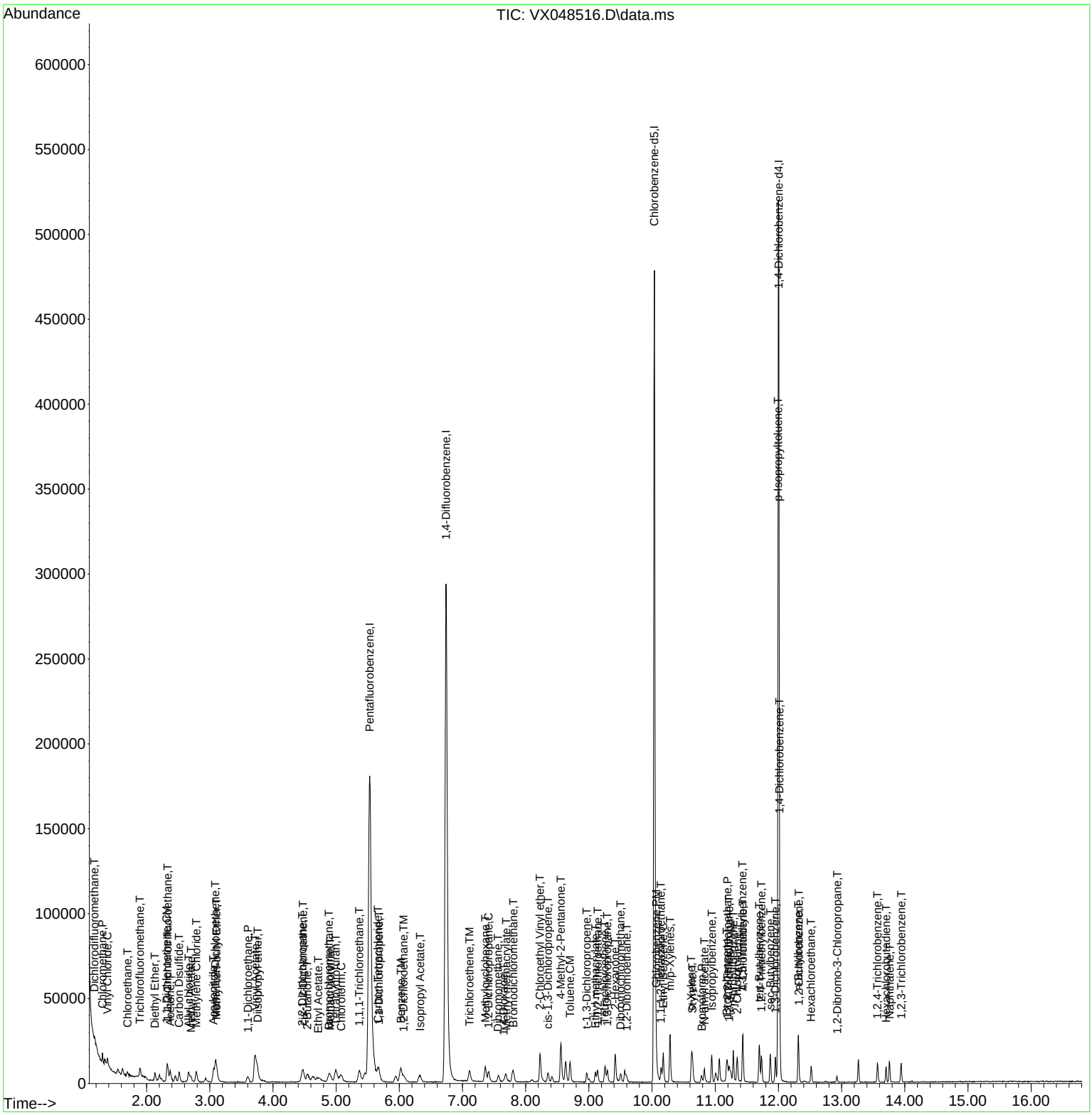
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX110725\
Data File : VX048516.D
Acq On : 07 Nov 2025 13:35
Operator : JC/MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 08 04:38:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 04:36:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :John Carlone 11/10/2025
Supervised By :Semsettin Yesilyurt 11/10/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX110725\
Data File : VX048517.D
Acq On : 07 Nov 2025 13:56
Operator : JC/MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :John Carlone 11/10/2025
Supervised By :Semsettin Yesilyurt 11/10/2025

Quant Time: Nov 08 04:38:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 04:36:23 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.538	168	193270	50.000	ug/l		0.00
34) 1,4-Difluorobenzene	6.745	114	250338	50.000	ug/l		0.00
63) Chlorobenzene-d5	10.037	117	225597	50.000	ug/l		0.00
72) 1,4-Dichlorobenzene-d4	12.006	152	118579	50.000	ug/l		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4	5.946	65	14969	5.558	ug/l		0.00
Spiked Amount 50.000	Range 78 - 117		Recovery =	11.120%#			
35) Dibromofluoromethane	5.373	113	12118	6.396	ug/l		0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	12.800%#			
50) Toluene-d8	8.635	98	33563	5.680	ug/l		0.00
Spiked Amount 50.000	Range 92 - 112		Recovery =	11.360%#			
62) 4-Bromofluorobenzene	11.061	95	13095	5.946	ug/l		0.00
Spiked Amount 50.000	Range 83 - 123		Recovery =	11.900%#			
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.173	85	7029	4.488	ug/l		98
3) Chloromethane	1.301	50	8841	4.256	ug/l		89
4) Vinyl Chloride	1.380	62	11197	4.761	ug/l		89
5) Bromomethane	1.611	94	9050	6.088	ug/l		100
6) Chloroethane	1.691	64	8089	5.252	ug/l		90
7) Trichlorofluoromethane	1.892	101	19916	5.353	ug/l		97
8) Diethyl Ether	2.136	74	8115	5.434	ug/l		97
9) 1,1,2-Trichlorotrifluo...	2.331	101	10746	4.989	ug/l		98
10) Methyl Iodide	2.453	142	16103	5.052	ug/l		94
11) Tert butyl alcohol	2.947	59	12490	24.476	ug/l		99
12) 1,1-Dichloroethene	2.325	96	11295	5.020	ug/l		90
13) Acrolein	2.246	56	2253	30.799	ug/l		94
14) Allyl chloride	2.666	41	21817	5.208	ug/l		95
15) Acrylonitrile	3.056	53	37042	24.865	ug/l		94
16) Acetone	2.374	43	30713	24.093	ug/l		98
17) Carbon Disulfide	2.514	76	33603	5.308	ug/l		99
18) Methyl Acetate	2.697	43	16930	4.833	ug/l		98
19) Methyl tert-butyl Ether	3.105	73	41711	5.250	ug/l		98
20) Methylene Chloride	2.788	84	13313	5.080	ug/l		93
21) trans-1,2-Dichloroethene	3.093	96	12560	5.267	ug/l		87
22) Diisopropyl ether	3.751	45	42130	5.238	ug/l		92
23) Vinyl Acetate	3.715	43	183665	26.073	ug/l		95
24) 1,1-Dichloroethane	3.605	63	24095	5.459	ug/l		98
25) 2-Butanone	4.544	43	48544	25.742	ug/l		90
26) 2,2-Dichloropropane	4.471	77	20186	5.365	ug/l		100
27) cis-1,2-Dichloroethene	4.477	96	15219	5.221	ug/l		95
28) Bromochloromethane	4.885	49	12176	5.616	ug/l		96
29) Tetrahydrofuran	5.001	42	34508	25.691	ug/l		98
30) Chloroform	5.080	83	24671	5.415	ug/l		98
31) Cyclohexane	5.464	56	19337	5.347	ug/l		98
32) 1,1,1-Trichloroethane	5.373	97	21014	5.285	ug/l		98
36) 1,1-Dichloropropene	5.678	75	16623	6.552	ug/l		97
37) Ethyl Acetate	4.702	43	22548	6.314	ug/l		98
38) Carbon Tetrachloride	5.666	117	19186	6.643	ug/l	#	97
39) Methylcyclohexane	7.367	83	15183	5.330	ug/l		95
40) Benzene	6.025	78	51007	6.486	ug/l		95

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX110725\
Data File : VX048517.D
Acq On : 07 Nov 2025 13:56
Operator : JC/MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :John Carlone 11/10/2025
Supervised By :Semsettin Yesilyurt 11/10/2025

Quant Time: Nov 08 04:38:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 04:36:23 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	4.910	41	10171	6.476	ug/l		99
42) 1,2-Dichloroethane	6.080	62	18051	6.699	ug/l		98
43) Isopropyl Acetate	6.324	43	32505	6.475	ug/l		96
44) Trichloroethene	7.117	130	9754	5.189	ug/l		97
45) 1,2-Dichloropropane	7.415	63	9530	5.270	ug/l		97
46) Dibromomethane	7.568	93	7573	5.742	ug/l		96
47) Bromodichloromethane	7.812	83	14970	5.690	ug/l	#	97
48) Methyl methacrylate	7.684	41	11928	5.345	ug/l		93
49) 1,4-Dioxane	7.647	88	3476	102.220	ug/l	#	93
51) 4-Methyl-2-Pentanone	8.555	43	83493	29.217	ug/l		95
52) Toluene	8.708	92	23897	5.772	ug/l		95
53) t-1,3-Dichloropropene	8.964	75	15253	5.626	ug/l		100
54) cis-1,3-Dichloropropene	8.354	75	15836	5.641	ug/l		92
55) 1,1,2-Trichloroethane	9.135	97	9348	5.651	ug/l		96
56) Ethyl methacrylate	9.104	69	14858	5.398	ug/l		89
57) 1,3-Dichloropropane	9.293	76	16872	5.860	ug/l		98
58) 2-Chloroethyl Vinyl ether	8.226	63	37670m	25.686	ug/l		
59) 2-Hexanone	9.415	43	60936	28.666	ug/l		94
60) Dibromochloromethane	9.506	129	11712	5.766	ug/l		98
61) 1,2-Dibromoethane	9.598	107	10441	5.827	ug/l		100
64) Tetrachloroethene	9.256	164	8201	5.005	ug/l		98
65) Chlorobenzene	10.061	112	28081	5.244	ug/l		95
66) 1,1,1,2-Tetrachloroethane	10.147	131	9473	5.280	ug/l		94
67) Ethyl Benzene	10.177	91	46125	5.130	ug/l		98
68) m/p-Xylenes	10.287	106	35759	10.559	ug/l		100
69) o-Xylene	10.628	106	16824	5.078	ug/l		99
70) Styrene	10.640	104	28334	5.098	ug/l		97
71) Bromoform	10.787	173	7895	4.770	ug/l	#	99
73) Isopropylbenzene	10.945	105	44193	5.134	ug/l		99
74) N-amyl acetate	10.829	43	21656	5.011	ug/l		95
75) 1,1,2,2-Tetrachloroethane	11.195	83	15227	5.017	ug/l		100
76) 1,2,3-Trichloropropane	11.226	75	13198m	5.220	ug/l		
77) Bromobenzene	11.183	156	11396	5.127	ug/l		99
78) n-propylbenzene	11.287	91	51649	5.103	ug/l		100
79) 2-Chlorotoluene	11.348	91	30839	5.043	ug/l		98
80) 1,3,5-Trimethylbenzene	11.433	105	35455	5.053	ug/l		99
81) trans-1,4-Dichloro-2-b...	11.000	75	4463	4.469	ug/l	#	80
82) 4-Chlorotoluene	11.439	91	36813	5.132	ug/l		99
83) tert-Butylbenzene	11.695	119	36264	4.997	ug/l		97
84) 1,2,4-Trimethylbenzene	11.732	105	35130	4.962	ug/l		100
85) sec-Butylbenzene	11.872	105	46046	5.133	ug/l		100
86) p-Isopropyltoluene	11.994	119	37206	4.934	ug/l		97
87) 1,3-Dichlorobenzene	11.951	146	21165	5.081	ug/l		99
88) 1,4-Dichlorobenzene	12.024	146	22051	5.247	ug/l		95
89) n-Butylbenzene	12.317	91	36025	5.092	ug/l		98
90) Hexachloroethane	12.518	117	7251	5.047	ug/l		97
91) 1,2-Dichlorobenzene	12.317	146	20105	5.028	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	12.927	75	3647	5.170	ug/l		90
93) 1,2,4-Trichlorobenzene	13.573	180	12241	4.606	ug/l		99
94) Hexachlorobutadiene	13.707	225	5537	4.984	ug/l		99
95) Naphthalene	13.756	128	39122	4.579	ug/l		98
96) 1,2,3-Trichlorobenzene	13.945	180	11538	4.668	ug/l		99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX110725\
Data File : VX048517.D
Acq On : 07 Nov 2025 13:56
Operator : JC/MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :John Carlone 11/10/2025
Supervised By :Semsettin Yesilyurt 11/10/2025

Quant Time: Nov 08 04:38:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 04:36:23 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

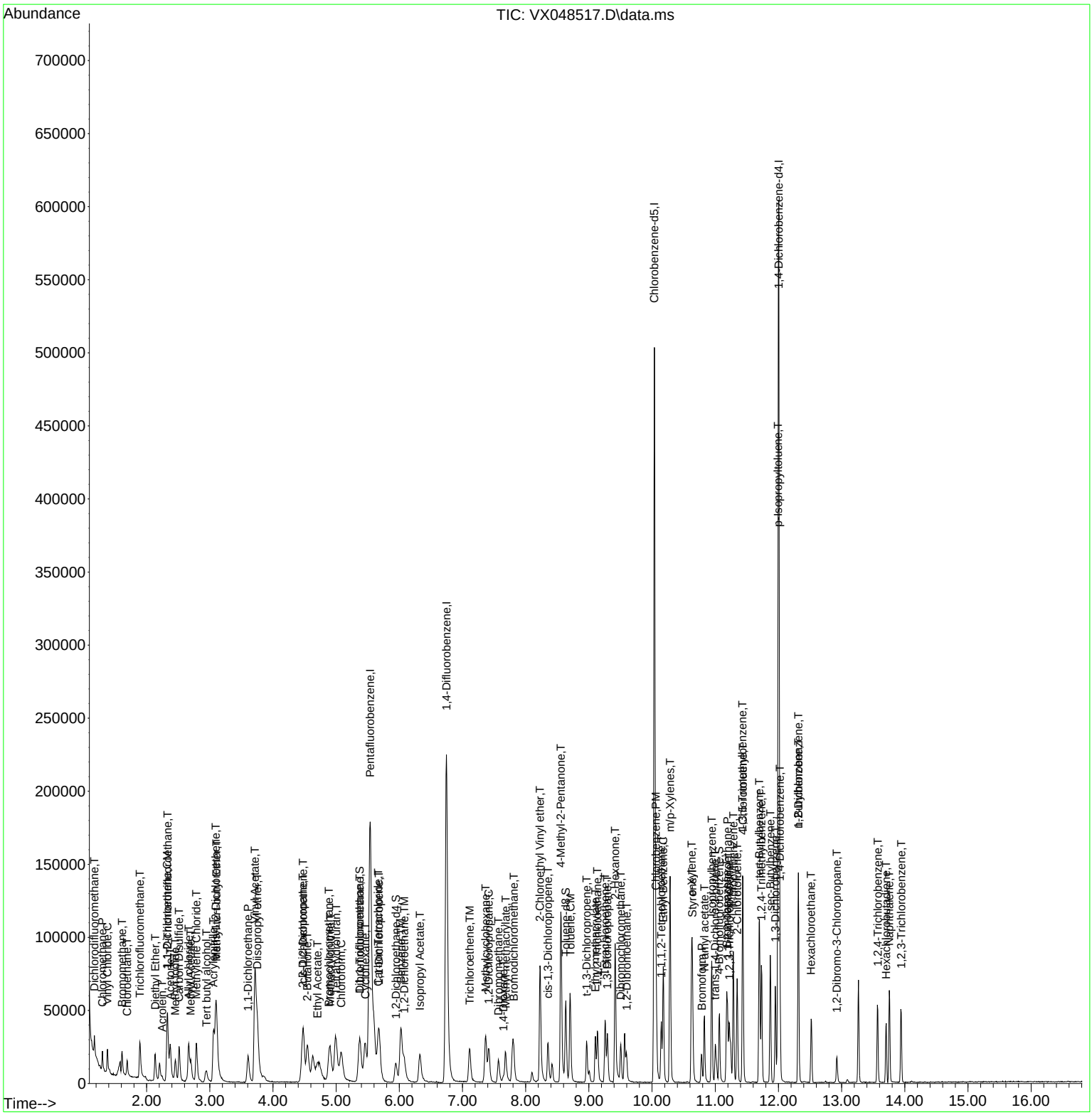
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX110725\
Data File : VX048517.D
Acq On : 07 Nov 2025 13:56
Operator : JC/MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 08 04:38:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 04:36:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :John Carlone 11/10/2025
Supervised By :Semsettin Yesilyurt 11/10/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX110725\
Data File : VX048518.D
Acq On : 07 Nov 2025 14:16
Operator : JC/MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :John Carlone 11/10/2025
Supervised By :Semsettin Yesilyurt 11/10/2025

Quant Time: Nov 08 04:39:45 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 04:36:23 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.538	168	203076	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.745	114	331319	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.037	117	232027	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.006	152	120318	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.946	65	58757	20.764	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery =	41.520%#		
35) Dibromofluoromethane	5.373	113	49531	19.752	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	39.500%#		
50) Toluene-d8	8.635	98	135275	17.297	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery =	34.600%#		
62) 4-Bromofluorobenzene	11.061	95	48386	16.601	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery =	33.200%#		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.173	85	28628	17.397	ug/l	98
3) Chloromethane	1.301	50	34522	15.817	ug/l	99
4) Vinyl Chloride	1.380	62	49358	19.974	ug/l	97
5) Bromomethane	1.618	94	33868	21.683	ug/l	98
6) Chloroethane	1.697	64	32257	19.932	ug/l	98
7) Trichlorofluoromethane	1.898	101	82782	21.175	ug/l	95
8) Diethyl Ether	2.136	74	30818	19.639	ug/l	91
9) 1,1,2-Trichlorotrifluo...	2.337	101	50073	22.124	ug/l	97
10) Methyl Iodide	2.459	142	66788	19.940	ug/l	100
11) Tert butyl alcohol	2.941	59	53988	100.687	ug/l	98
12) 1,1-Dichloroethene	2.325	96	48003	20.306	ug/l	95
13) Acrolein	2.239	56	6094m	79.282	ug/l	
14) Allyl chloride	2.666	41	86510	19.655	ug/l	97
15) Acrylonitrile	3.056	53	160471	102.519	ug/l	99
16) Acetone	2.374	43	129334	96.557	ug/l	97
17) Carbon Disulfide	2.514	76	130735	19.652	ug/l	99
18) Methyl Acetate	2.697	43	69637	18.918	ug/l	99
19) Methyl tert-butyl Ether	3.105	73	166418	19.935	ug/l	100
20) Methylene Chloride	2.788	84	53829	19.547	ug/l	94
21) trans-1,2-Dichloroethene	3.093	96	49731	19.848	ug/l	98
22) Diisopropyl ether	3.751	45	170973	20.230	ug/l	98
23) Vinyl Acetate	3.715	43	746382	100.838	ug/l	98
24) 1,1-Dichloroethane	3.605	63	91293	19.686	ug/l	98
25) 2-Butanone	4.538	43	207425	104.681	ug/l	98
26) 2,2-Dichloropropane	4.471	77	79199	20.032	ug/l	100
27) cis-1,2-Dichloroethene	4.483	96	59896	19.557	ug/l	98
28) Bromochloromethane	4.885	49	43296	19.005	ug/l	99
29) Tetrahydrofuran	4.989	42	142200	100.757	ug/l	98
30) Chloroform	5.087	83	94424	19.723	ug/l	98
31) Cyclohexane	5.464	56	81570	21.467	ug/l	96
32) 1,1,1-Trichloroethane	5.373	97	83345	19.948	ug/l	98
36) 1,1-Dichloropropene	5.684	75	66129	19.694	ug/l	97
37) Ethyl Acetate	4.696	43	89614	18.959	ug/l	100
38) Carbon Tetrachloride	5.666	117	72325	18.922	ug/l	98
39) Methylcyclohexane	7.367	83	73943	19.612	ug/l	99
40) Benzene	6.025	78	194589	18.695	ug/l	95

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX110725\
Data File : VX048518.D
Acq On : 07 Nov 2025 14:16
Operator : JC/MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :John Carlone 11/10/2025
Supervised By :Semsettin Yesilyurt 11/10/2025

Quant Time: Nov 08 04:39:45 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 04:36:23 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
41) Methacrylonitrile	4.904	41	41068	19.757 ug/l	97
42) 1,2-Dichloroethane	6.074	62	69540	19.499 ug/l	99
43) Isopropyl Acetate	6.324	43	126911	19.101 ug/l	99
44) Trichloroethene	7.117	130	47204	18.973 ug/l	99
45) 1,2-Dichloropropane	7.415	63	42265	17.660 ug/l	98
46) Dibromomethane	7.568	93	28753	16.472 ug/l	96
47) Bromodichloromethane	7.806	83	59084	16.967 ug/l	99
48) Methyl methacrylate	7.678	41	51074	17.292 ug/l	91
49) 1,4-Dioxane	7.641	88	14684	326.274 ug/l #	94
51) 4-Methyl-2-Pentanone	8.555	43	340555	90.045 ug/l	97
52) Toluene	8.702	92	94154	17.182 ug/l	98
53) t-1,3-Dichloropropene	8.964	75	59921	16.700 ug/l	99
54) cis-1,3-Dichloropropene	8.354	75	63747	17.157 ug/l	93
55) 1,1,2-Trichloroethane	9.135	97	37862	17.293 ug/l	96
56) Ethyl methacrylate	9.098	69	62768	17.232 ug/l #	90
57) 1,3-Dichloropropane	9.293	76	65949	17.306 ug/l	97
58) 2-Chloroethyl Vinyl ether	8.226	63	166309m	85.683 ug/l	
59) 2-Hexanone	9.415	43	258663	91.942 ug/l	96
60) Dibromochloromethane	9.506	129	46524	17.307 ug/l	97
61) 1,2-Dibromoethane	9.592	107	40837	17.221 ug/l	99
64) Tetrachloroethene	9.256	164	32666	19.383 ug/l	98
65) Chlorobenzene	10.061	112	106968	19.423 ug/l	98
66) 1,1,1,2-Tetrachloroethane	10.147	131	36079	19.552 ug/l	98
67) Ethyl Benzene	10.177	91	183401	19.832 ug/l	97
68) m/p-Xylenes	10.287	106	140701	40.397 ug/l	96
69) o-Xylene	10.628	106	66957	19.649 ug/l	98
70) Styrene	10.640	104	113854	19.917 ug/l	98
71) Bromoform	10.781	173	32046	18.824 ug/l #	98
73) Isopropylbenzene	10.945	105	177238	20.294 ug/l	98
74) N-amyl acetate	10.823	43	89078	20.313 ug/l	96
75) 1,1,2,2-Tetrachloroethane	11.195	83	59190	19.218 ug/l	99
76) 1,2,3-Trichloropropane	11.220	75	54573m	21.273 ug/l	
77) Bromobenzene	11.183	156	43931	19.480 ug/l	98
78) n-propylbenzene	11.287	91	210347	20.483 ug/l	98
79) 2-Chlorotoluene	11.348	91	123455	19.895 ug/l	98
80) 1,3,5-Trimethylbenzene	11.433	105	144509	20.297 ug/l	99
81) trans-1,4-Dichloro-2-b...	11.000	75	19161	18.908 ug/l	90
82) 4-Chlorotoluene	11.439	91	143646	19.735 ug/l	99
83) tert-Butylbenzene	11.695	119	148245	20.131 ug/l	97
84) 1,2,4-Trimethylbenzene	11.732	105	143930	20.036 ug/l	100
85) sec-Butylbenzene	11.872	105	184842	20.309 ug/l	99
86) p-Isopropyltoluene	11.994	119	155276	20.293 ug/l	98
87) 1,3-Dichlorobenzene	11.951	146	81125	19.193 ug/l	99
88) 1,4-Dichlorobenzene	12.024	146	80643	18.910 ug/l	97
89) n-Butylbenzene	12.311	91	144697	20.158 ug/l	98
90) Hexachloroethane	12.518	117	28866	19.800 ug/l	100
91) 1,2-Dichlorobenzene	12.317	146	77511	19.103 ug/l	99
92) 1,2-Dibromo-3-Chloropr...	12.920	75	14148	19.767 ug/l	95
93) 1,2,4-Trichlorobenzene	13.567	180	50883	18.871 ug/l	99
94) Hexachlorobutadiene	13.707	225	21648	19.206 ug/l	100
95) Naphthalene	13.756	128	169835	19.591 ug/l	100
96) 1,2,3-Trichlorobenzene	13.939	180	47818	19.066 ug/l	99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX110725\
Data File : VX048518.D
Acq On : 07 Nov 2025 14:16
Operator : JC/MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :John Carlone 11/10/2025
Supervised By :Semsettin Yesilyurt 11/10/2025

Quant Time: Nov 08 04:39:45 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 04:36:23 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

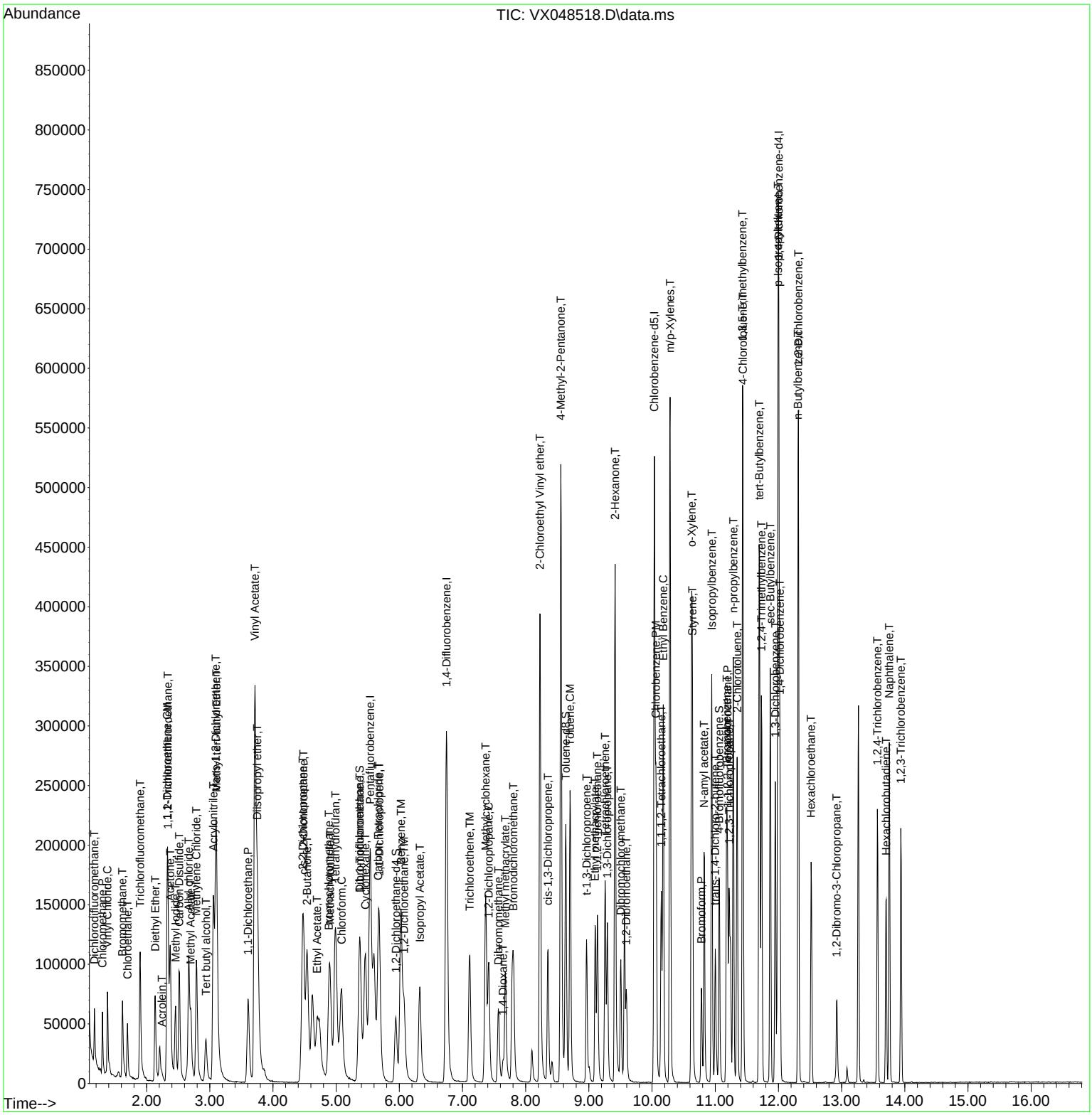
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX110725\
Data File : VX048518.D
Acq On : 07 Nov 2025 14:16
Operator : JC/MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 08 04:39:45 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 04:36:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :John Carlone 11/10/2025
Supervised By :Semsettin Yesilyurt 11/10/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX110725\
Data File : VX048520.D
Acq On : 07 Nov 2025 14:58
Operator : JC/MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :John Carlone 11/10/2025
Supervised By :Semsettin Yesilyurt 11/10/2025

Quant Time: Nov 08 04:41:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 04:36:23 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.544	168	179485	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.745	114	297765	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.037	117	257038	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.006	152	132080	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.940	65	243155	97.224	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 194.440%#			
35) Dibromofluoromethane	5.373	113	212256	94.182	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 188.360%#			
50) Toluene-d8	8.635	98	720420	102.495	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery = 204.980%#			
62) 4-Bromofluorobenzene	11.061	95	264846	101.109	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery = 202.220%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.173	85	162366	111.639	ug/l	99
3) Chloromethane	1.301	50	208707	108.195	ug/l	99
4) Vinyl Chloride	1.380	62	215712	98.767	ug/l	99
5) Bromomethane	1.605	94	115797m	83.881	ug/l	
6) Chloroethane	1.685	64	132914	92.926	ug/l	100
7) Trichlorofluoromethane	1.892	101	329740	95.432	ug/l	99
8) Diethyl Ether	2.136	74	134965	97.310	ug/l	100
9) 1,1,2-Trichlorotrifluo...	2.331	101	196084	98.026	ug/l	99
10) Methyl Iodide	2.453	142	300124	101.382	ug/l	99
11) Tert butyl alcohol	2.959	59	237309	500.751	ug/l	98
12) 1,1-Dichloroethene	2.325	96	199260	95.367	ug/l	96
13) Acrolein	2.239	56	31030	456.759	ug/l	97
14) Allyl chloride	2.666	41	362419	93.164	ug/l	99
15) Acrylonitrile	3.056	53	663857	479.859	ug/l	99
16) Acetone	2.374	43	568356	480.092	ug/l	99
17) Carbon Disulfide	2.514	76	527024	89.637	ug/l	100
18) Methyl Acetate	2.697	43	293788	90.303	ug/l	99
19) Methyl tert-butyl Ether	3.105	73	712323	96.543	ug/l	99
20) Methylene Chloride	2.788	84	223836	91.966	ug/l	99
21) trans-1,2-Dichloroethene	3.087	96	209909	94.789	ug/l	98
22) Diisopropyl ether	3.751	45	709722	95.012	ug/l	97
23) Vinyl Acetate	3.715	43	3136295	479.414	ug/l	100
24) 1,1-Dichloroethane	3.605	63	388811	94.862	ug/l	99
25) 2-Butanone	4.538	43	843690	481.750	ug/l	99
26) 2,2-Dichloropropane	4.465	77	335236	95.939	ug/l	100
27) cis-1,2-Dichloroethene	4.477	96	252407	93.248	ug/l	98
28) Bromochloromethane	4.885	49	187288	93.016	ug/l	99
29) Tetrahydrofuran	4.989	42	575336	461.240	ug/l	99
30) Chloroform	5.086	83	396642	93.738	ug/l	99
31) Cyclohexane	5.458	56	321505	95.734	ug/l	98
32) 1,1,1-Trichloroethane	5.373	97	351320	95.136	ug/l	99
36) 1,1-Dichloropropene	5.678	75	269881	89.431	ug/l	99
37) Ethyl Acetate	4.696	43	386137	90.900	ug/l	99
38) Carbon Tetrachloride	5.666	117	309414	90.070	ug/l	99
39) Methylcyclohexane	7.367	83	334291	98.656	ug/l	96
40) Benzene	6.025	78	831305	88.867	ug/l	99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX110725\
Data File : VX048520.D
Acq On : 07 Nov 2025 14:58
Operator : JC/MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :John Carlone 11/10/2025
Supervised By :Semsettin Yesilyurt 11/10/2025

Quant Time: Nov 08 04:41:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 04:36:23 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	4.904	41	164274	87.935	ug/l	95
42) 1,2-Dichloroethane	6.068	62	291402	90.918	ug/l	99
43) Isopropyl Acetate	6.324	43	540612	90.535	ug/l	100
44) Trichloroethene	7.110	130	218005	97.499	ug/l	98
45) 1,2-Dichloropropane	7.415	63	209425	97.368	ug/l	100
46) Dibromomethane	7.568	93	156924	100.030	ug/l	98
47) Bromodichloromethane	7.805	83	321173	102.623	ug/l	97
48) Methyl methacrylate	7.677	41	266560	100.420	ug/l	100
49) 1,4-Dioxane	7.647	88	89615	2215.601	ug/l	97
51) 4-Methyl-2-Pentanone	8.561	43	1705402	501.730	ug/l	99
52) Toluene	8.702	92	517017	104.979	ug/l	99
53) t-1,3-Dichloropropene	8.964	75	334066	103.593	ug/l	99
54) cis-1,3-Dichloropropene	8.354	75	354217	106.080	ug/l	98
55) 1,1,2-Trichloroethane	9.134	97	205483	104.430	ug/l	98
56) Ethyl methacrylate	9.104	69	353946	108.118	ug/l	98
57) 1,3-Dichloropropane	9.293	76	345885	100.991	ug/l	100
58) 2-Chloroethyl Vinyl ether	8.226	63	972237	557.345	ug/l	100
59) 2-Hexanone	9.415	43	1278151	505.516	ug/l	100
60) Dibromochloromethane	9.506	129	255107	105.596	ug/l	98
61) 1,2-Dibromoethane	9.592	107	222500	104.402	ug/l	100
64) Tetrachloroethene	9.256	164	177093	94.858	ug/l	96
65) Chlorobenzene	10.061	112	571492	93.674	ug/l	99
66) 1,1,1,2-Tetrachloroethane	10.147	131	204743	100.159	ug/l	99
67) Ethyl Benzene	10.177	91	976399	95.307	ug/l	98
68) m/p-Xylenes	10.287	106	756955	196.183	ug/l	99
69) o-Xylene	10.628	106	367131	97.252	ug/l	100
70) Styrene	10.640	104	630372	99.544	ug/l	100
71) Bromoform	10.781	173	184392	97.773	ug/l	99
73) Isopropylbenzene	10.945	105	937990	97.838	ug/l	99
74) N-amyl acetate	10.829	43	459285	95.409	ug/l	99
75) 1,1,2,2-Tetrachloroethane	11.195	83	318823	94.300	ug/l	100
76) 1,2,3-Trichloropropane	11.219	75	298071m	105.844	ug/l	
77) Bromobenzene	11.183	156	240181	97.018	ug/l	99
78) n-propylbenzene	11.287	91	1082239	96.002	ug/l	99
79) 2-Chlorotoluene	11.348	91	658434	96.659	ug/l	100
80) 1,3,5-Trimethylbenzene	11.433	105	769561	98.464	ug/l	99
81) trans-1,4-Dichloro-2-b...	11.000	75	117309	105.450	ug/l	98
82) 4-Chlorotoluene	11.439	91	770164	96.385	ug/l	100
83) tert-Butylbenzene	11.695	119	801942	99.204	ug/l	99
84) 1,2,4-Trimethylbenzene	11.732	105	779410	98.837	ug/l	99
85) sec-Butylbenzene	11.872	105	962376	96.323	ug/l	100
86) p-Isopropyltoluene	11.994	119	825080	98.227	ug/l	99
87) 1,3-Dichlorobenzene	11.951	146	443784	95.645	ug/l	99
88) 1,4-Dichlorobenzene	12.024	146	441447	94.299	ug/l	99
89) n-Butylbenzene	12.317	91	761466	96.635	ug/l	99
90) Hexachloroethane	12.518	117	157787	98.594	ug/l	100
91) 1,2-Dichlorobenzene	12.317	146	429792	96.491	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	12.920	75	78635	100.084	ug/l	98
93) 1,2,4-Trichlorobenzene	13.567	180	289894	97.941	ug/l	99
94) Hexachlorobutadiene	13.707	225	111275	89.932	ug/l	98
95) Naphthalene	13.756	128	985717	103.580	ug/l	100
96) 1,2,3-Trichlorobenzene	13.939	180	277082	100.642	ug/l	100

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX110725\
Data File : VX048520.D
Acq On : 07 Nov 2025 14:58
Operator : JC/MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :John Carlone 11/10/2025
Supervised By :Semsettin Yesilyurt 11/10/2025

Quant Time: Nov 08 04:41:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 04:36:23 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

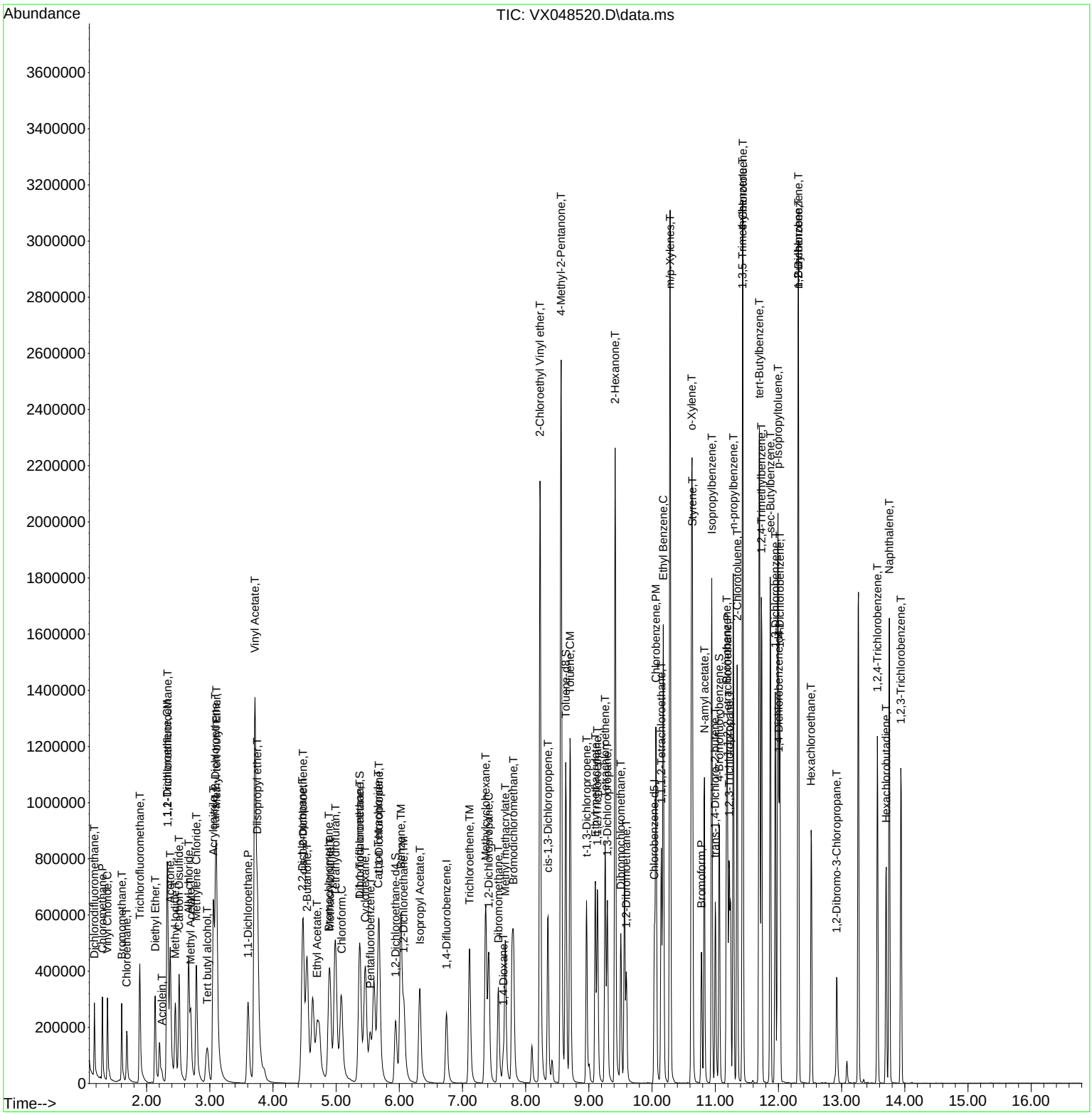
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX110725\
Data File : VX048520.D
Acq On : 07 Nov 2025 14:58
Operator : JC/MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 08 04:41:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 04:36:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :John Carlone 11/10/2025
Supervised By :Semsettin Yesilyurt 11/10/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX110725\
Data File : VX048521.D
Acq On : 07 Nov 2025 15:18
Operator : JC/MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :John Carlone 11/10/2025
Supervised By :Semsettin Yesilyurt 11/10/2025

Quant Time: Nov 08 04:42:04 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 04:36:23 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene	5.538	168	178567	50.000 ug/l	0.00
34) 1,4-Difluorobenzene	6.745	114	292795	50.000 ug/l	0.00
63) Chlorobenzene-d5	10.037	117	246117	50.000 ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.006	152	131303	50.000 ug/l	# 0.00
System Monitoring Compounds					
33) 1,2-Dichloroethane-d4	5.940	65	333785	134.148 ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 268.300%#		
35) Dibromofluoromethane	5.373	113	287214	129.606 ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 259.220%#		
50) Toluene-d8	8.635	98	990842	143.361 ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery = 286.720%#		
62) 4-Bromofluorobenzene	11.067	95	371661	144.295 ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery = 288.600%#		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.173	85	253735	175.359 ug/l	99
3) Chloromethane	1.301	50	302480	157.614 ug/l	99
4) Vinyl Chloride	1.380	62	320003	147.272 ug/l	99
5) Bromomethane	1.605	94	153950	112.091 ug/l	96
6) Chloroethane	1.685	64	191395	134.501 ug/l	99
7) Trichlorofluoromethane	1.892	101	503070	146.345 ug/l	100
8) Diethyl Ether	2.136	74	188944	136.929 ug/l	96
9) 1,1,2-Trichlorotrifluo...	2.331	101	298670	150.078 ug/l	98
10) Methyl Iodide	2.453	142	432790	146.948 ug/l	99
11) Tert butyl alcohol	2.977	59	340733	722.684 ug/l	98
12) 1,1-Dichloroethene	2.319	96	293656	141.269 ug/l	97
13) Acrolein	2.239	56	52843	781.843 ug/l	96
14) Allyl chloride	2.666	41	540073	139.545 ug/l	100
15) Acrylonitrile	3.056	53	953673	692.892 ug/l	99
16) Acetone	2.373	43	838719	712.110 ug/l	100
17) Carbon Disulfide	2.514	76	791417	135.297 ug/l	99
18) Methyl Acetate	2.697	43	440781	136.181 ug/l	100
19) Methyl tert-butyl Ether	3.111	73	997177	135.845 ug/l	99
20) Methylene Chloride	2.788	84	318695	131.614 ug/l	98
21) trans-1,2-Dichloroethene	3.093	96	298171	135.338 ug/l	98
22) Diisopropyl ether	3.751	45	1038977	139.806 ug/l	97
23) Vinyl Acetate	3.715	43	4581534	703.934 ug/l	99
24) 1,1-Dichloroethane	3.605	63	557501	136.718 ug/l	99
25) 2-Butanone	4.544	43	1244508	714.272 ug/l	97
26) 2,2-Dichloropropane	4.471	77	495685	142.586 ug/l	99
27) cis-1,2-Dichloroethene	4.477	96	366206	135.984 ug/l	99
28) Bromochloromethane	4.891	49	266434	133.003 ug/l	100
29) Tetrahydrofuran	4.989	42	818751	659.757 ug/l	98
30) Chloroform	5.080	83	563304	133.810 ug/l	98
31) Cyclohexane	5.458	56	487596	145.937 ug/l	96
32) 1,1,1-Trichloroethane	5.373	97	507525	138.143 ug/l	99
36) 1,1-Dichloropropene	5.678	75	394330	132.888 ug/l	100
37) Ethyl Acetate	4.696	43	561632	134.458 ug/l	99
38) Carbon Tetrachloride	5.666	117	442446	130.982 ug/l	97
39) Methylcyclohexane	7.367	83	520380	156.182 ug/l	96
40) Benzene	6.025	78	1202907	130.774 ug/l	99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX110725\
Data File : VX048521.D
Acq On : 07 Nov 2025 15:18
Operator : JC/MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Nov 08 04:42:04 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 04:36:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :John Carlone 11/10/2025
Supervised By :Semsettin Yesilyurt 11/10/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	4.904	41	245609	133.706	ug/l	98
42) 1,2-Dichloroethane	6.074	62	415612	131.873	ug/l	99
43) Isopropyl Acetate	6.324	43	802693	136.707	ug/l	100
44) Trichloroethene	7.110	130	318538	144.879	ug/l	97
45) 1,2-Dichloropropane	7.415	63	298821	141.289	ug/l	98
46) Dibromomethane	7.568	93	220703	143.074	ug/l	99
47) Bromodichloromethane	7.805	83	447995	145.576	ug/l	100
48) Methyl methacrylate	7.677	41	382424	146.515	ug/l	99
49) 1,4-Dioxane	7.653	88	128773	3237.768	ug/l	98
51) 4-Methyl-2-Pentanone	8.561	43	2398543	717.630	ug/l	100
52) Toluene	8.702	92	740196	152.846	ug/l	99
53) t-1,3-Dichloropropene	8.964	75	475896	150.079	ug/l	99
54) cis-1,3-Dichloropropene	8.354	75	507432	154.544	ug/l	99
55) 1,1,2-Trichloroethane	9.134	97	288895	149.313	ug/l	97
56) Ethyl methacrylate	9.104	69	503008	156.260	ug/l	99
57) 1,3-Dichloropropane	9.293	76	484188	143.772	ug/l	99
58) 2-Chloroethyl Vinyl ether	8.232	63	1366958	796.924	ug/l	100
59) 2-Hexanone	9.415	43	1828924	735.629	ug/l	100
60) Dibromochloromethane	9.506	129	354928	149.408	ug/l	99
61) 1,2-Dibromoethane	9.598	107	314737	150.188	ug/l	100
64) Tetrachloroethene	9.256	164	256641	143.566	ug/l	99
65) Chlorobenzene	10.061	112	815516	139.603	ug/l	100
66) 1,1,1,2-Tetrachloroethane	10.146	131	288555	147.422	ug/l	100
67) Ethyl Benzene	10.177	91	1401386	142.860	ug/l	98
68) m/p-Xylenes	10.287	106	1082548	293.018	ug/l	99
69) o-Xylene	10.628	106	536318	148.373	ug/l	100
70) Styrene	10.640	104	918795	151.528	ug/l	100
71) Bromoform	10.781	173	275305	152.457	ug/l	99
73) Isopropylbenzene	10.945	105	1375604	144.333	ug/l	99
74) N-amyl acetate	10.829	43	680374	142.173	ug/l	100
75) 1,1,2,2-Tetrachloroethane	11.195	83	466659	138.843	ug/l	100
76) 1,2,3-Trichloropropane	11.219	75	437992m	156.450	ug/l	
77) Bromobenzene	11.183	156	345419	140.354	ug/l	98
78) n-propylbenzene	11.287	91	1604351	143.159	ug/l	100
79) 2-Chlorotoluene	11.348	91	938129	138.534	ug/l	100
80) 1,3,5-Trimethylbenzene	11.433	105	1124584	144.740	ug/l	99
81) trans-1,4-Dichloro-2-b...	11.000	75	178669	161.557	ug/l	99
82) 4-Chlorotoluene	11.439	91	1119611	140.947	ug/l	99
83) tert-Butylbenzene	11.695	119	1185835	147.561	ug/l	99
84) 1,2,4-Trimethylbenzene	11.732	105	1136998	145.036	ug/l	98
85) sec-Butylbenzene	11.872	105	1454720	146.463	ug/l	100
86) p-Isopropyltoluene	11.994	119	1244220	149.002	ug/l	99
87) 1,3-Dichlorobenzene	11.951	146	657153	142.468	ug/l	100
88) 1,4-Dichlorobenzene	12.024	146	658598	141.517	ug/l	100
89) n-Butylbenzene	12.317	91	1170811	149.462	ug/l	99
90) Hexachloroethane	12.518	117	234767	147.563	ug/l	97
91) 1,2-Dichlorobenzene	12.317	146	636660	143.779	ug/l	100
92) 1,2-Dibromo-3-Chloropr...	12.920	75	112194	143.641	ug/l	95
93) 1,2,4-Trichlorobenzene	13.567	180	439995	149.532	ug/l	99
94) Hexachlorobutadiene	13.707	225	179249	145.725	ug/l	98
95) Naphthalene	13.756	128	1450179	153.288	ug/l	100
96) 1,2,3-Trichlorobenzene	13.938	180	414012	151.267	ug/l	100

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX110725\
Data File : VX048521.D
Acq On : 07 Nov 2025 15:18
Operator : JC/MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :John Carlone 11/10/2025
Supervised By :Semsettin Yesilyurt 11/10/2025

Quant Time: Nov 08 04:42:04 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 04:36:23 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

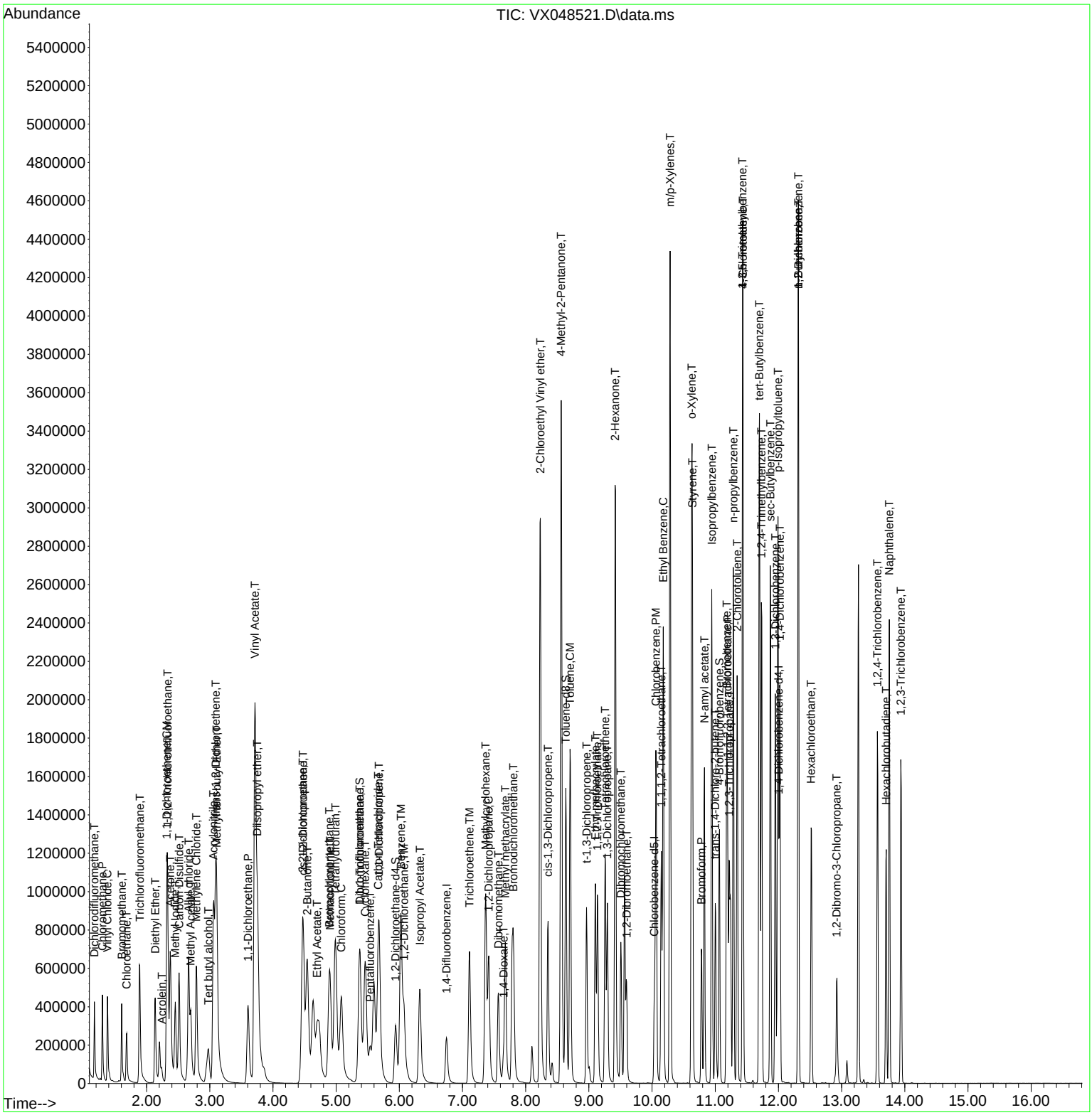
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX110725\
Data File : VX048521.D
Acq On : 07 Nov 2025 15:18
Operator : JC/MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Nov 08 04:42:04 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 04:36:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :John Carlone 11/10/2025
Supervised By :Semsettin Yesilyurt 11/10/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX110725\
Data File : VX048524.D
Acq On : 07 Nov 2025 16:29
Operator : JC/MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 11/10/2025
Supervised By :Semsettin Yesilyurt 11/10/2025

Quant Time: Nov 08 04:43:36 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 04:36:23 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.538	168	180041	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.745	114	307413	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.037	117	271611	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.006	152	137081	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.946	65	123374	49.178	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 98.360%			
35) Dibromofluoromethane	5.373	113	107888	46.370	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 92.740%			
50) Toluene-d8	8.635	98	369557	50.927	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery = 101.860%			
62) 4-Bromofluorobenzene	11.061	95	136244	50.381	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery = 100.760%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.173	85	76351	52.335	ug/l	100
3) Chloromethane	1.301	50	106667	55.126	ug/l	100
4) Vinyl Chloride	1.380	62	107960	49.279	ug/l	100
5) Bromomethane	1.612	94	76656	55.356	ug/l	100
6) Chloroethane	1.691	64	68875	48.005	ug/l	100
7) Trichlorofluoromethane	1.892	101	159505	46.021	ug/l	100
8) Diethyl Ether	2.136	74	70765	50.864	ug/l	100
9) 1,1,2-Trichlorotrifluo...	2.331	101	92738	46.218	ug/l	100
10) Methyl Iodide	2.453	142	148356	49.960	ug/l	100
11) Tert butyl alcohol	2.941	59	124670	262.256	ug/l	100
12) 1,1-Dichloroethene	2.325	96	98074	46.794	ug/l	100
13) Acrolein	2.240	56	18158	266.459	ug/l	100
14) Allyl chloride	2.666	41	188637	48.341	ug/l	100
15) Acrylonitrile	3.056	53	363119	261.664	ug/l	100
16) Acetone	2.374	43	296864	249.987	ug/l	100
17) Carbon Disulfide	2.514	76	268053	45.450	ug/l	100
18) Methyl Acetate	2.697	43	156429	47.934	ug/l	100
19) Methyl tert-butyl Ether	3.105	73	381141	51.497	ug/l	100
20) Methylene Chloride	2.788	84	117536	48.142	ug/l	100
21) trans-1,2-Dichloroethene	3.093	96	107632	48.453	ug/l	100
22) Diisopropyl ether	3.751	45	371667	49.602	ug/l	100
23) Vinyl Acetate	3.715	43	1644477	250.599	ug/l	100
24) 1,1-Dichloroethane	3.605	63	198326	48.238	ug/l	100
25) 2-Butanone	4.538	43	455146	259.087	ug/l	100
26) 2,2-Dichloropropane	4.465	77	159000	45.363	ug/l	100
27) cis-1,2-Dichloroethene	4.483	96	130445	48.042	ug/l	100
28) Bromochloromethane	4.885	49	97819	48.431	ug/l	100
29) Tetrahydrofuran	4.989	42	313988	250.943	ug/l	100
30) Chloroform	5.087	83	201702	47.521	ug/l	100
31) Cyclohexane	5.458	56	156130	46.347	ug/l	100
32) 1,1,1-Trichloroethane	5.373	97	175119	47.275	ug/l	100
36) 1,1-Dichloropropene	5.678	75	131207	42.114	ug/l	100
37) Ethyl Acetate	4.696	43	205009	46.746	ug/l	100
38) Carbon Tetrachloride	5.666	117	149370	42.117	ug/l	100
39) Methylcyclohexane	7.367	83	156904	44.852	ug/l	100
40) Benzene	6.025	78	432976	44.833	ug/l	100

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX110725\
Data File : VX048524.D
Acq On : 07 Nov 2025 16:29
Operator : JC/MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Nov 08 04:43:36 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 04:36:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 11/10/2025
Supervised By :Semsettin Yesilyurt 11/10/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	4.904	41	90811	47.085	ug/l	100
42) 1,2-Dichloroethane	6.074	62	147877	44.690	ug/l	100
43) Isopropyl Acetate	6.324	43	285622	46.331	ug/l	100
44) Trichloroethene	7.111	130	109058	47.244	ug/l	100
45) 1,2-Dichloropropane	7.415	63	110204	49.629	ug/l	100
46) Dibromomethane	7.568	93	82377	50.863	ug/l	100
47) Bromodichloromethane	7.806	83	167028	51.695	ug/l	100
48) Methyl methacrylate	7.678	41	142167	51.877	ug/l	100
49) 1,4-Dioxane	7.647	88	45365	1086.384	ug/l	100
51) 4-Methyl-2-Pentanone	8.555	43	952270	271.365	ug/l	100
52) Toluene	8.702	92	269581	53.020	ug/l	100
53) t-1,3-Dichloropropene	8.964	75	175854	52.820	ug/l	100
54) cis-1,3-Dichloropropene	8.354	75	186249	54.027	ug/l	100
55) 1,1,2-Trichloroethane	9.135	97	110910	54.597	ug/l	100
56) Ethyl methacrylate	9.098	69	190086	56.242	ug/l	100
57) 1,3-Dichloropropane	9.293	76	190119	53.768	ug/l	100
58) 2-Chloroethyl Vinyl ether	8.226	63	544454	302.318	ug/l	100
59) 2-Hexanone	9.415	43	713506	273.339	ug/l	100
60) Dibromochloromethane	9.507	129	134082	53.758	ug/l	100
61) 1,2-Dibromoethane	9.592	107	117046	53.197	ug/l	100
64) Tetrachloroethene	9.257	164	88926	45.076	ug/l	100
65) Chlorobenzene	10.061	112	299156	46.404	ug/l	100
66) 1,1,1,2-Tetrachloroethane	10.147	131	106481	49.295	ug/l	100
67) Ethyl Benzene	10.177	91	512428	47.335	ug/l	100
68) m/p-Xylenes	10.287	106	391085	95.921	ug/l	100
69) o-Xylene	10.622	106	190935	47.864	ug/l	100
70) Styrene	10.634	104	328665	49.116	ug/l	100
71) Bromoform	10.781	173	94463	47.401	ug/l	100
73) Isopropylbenzene	10.945	105	475097	47.748	ug/l	100
74) N-amyl acetate	10.823	43	245758	49.190	ug/l	100
75) 1,1,2,2-Tetrachloroethane	11.195	83	168512	48.023	ug/l	100
76) 1,2,3-Trichloropropane	11.220	75	138398m	47.352	ug/l	
77) Bromobenzene	11.177	156	124641	48.510	ug/l	100
78) n-propylbenzene	11.287	91	551985	47.178	ug/l	100
79) 2-Chlorotoluene	11.348	91	334083	47.255	ug/l	100
80) 1,3,5-Trimethylbenzene	11.433	105	386446	47.641	ug/l	100
81) trans-1,4-Dichloro-2-b...	11.000	75	59424	51.468	ug/l	100
82) 4-Chlorotoluene	11.433	91	392809	47.366	ug/l	100
83) tert-Butylbenzene	11.695	119	403731	48.121	ug/l	100
84) 1,2,4-Trimethylbenzene	11.732	105	397157	48.526	ug/l	100
85) sec-Butylbenzene	11.872	105	479253	46.218	ug/l	100
86) p-Isopropyltoluene	11.988	119	409592	46.983	ug/l	100
87) 1,3-Dichlorobenzene	11.951	146	225309	46.787	ug/l	100
88) 1,4-Dichlorobenzene	12.024	146	230056	47.350	ug/l	100
89) n-Butylbenzene	12.311	91	372536	45.552	ug/l	100
90) Hexachloroethane	12.518	117	75599	45.515	ug/l	100
91) 1,2-Dichlorobenzene	12.317	146	222592	48.150	ug/l	100
92) 1,2-Dibromo-3-Chloropr...	12.921	75	40699	49.910	ug/l	100
93) 1,2,4-Trichlorobenzene	13.567	180	146070	47.549	ug/l	100
94) Hexachlorobutadiene	13.707	225	55716	43.386	ug/l	100
95) Naphthalene	13.756	128	507140	51.347	ug/l	100
96) 1,2,3-Trichlorobenzene	13.939	180	139324	48.759	ug/l	100

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX110725\
Data File : VX048524.D
Acq On : 07 Nov 2025 16:29
Operator : JC/MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 11/10/2025
Supervised By :Semsettin Yesilyurt 11/10/2025

Quant Time: Nov 08 04:43:36 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 04:36:23 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

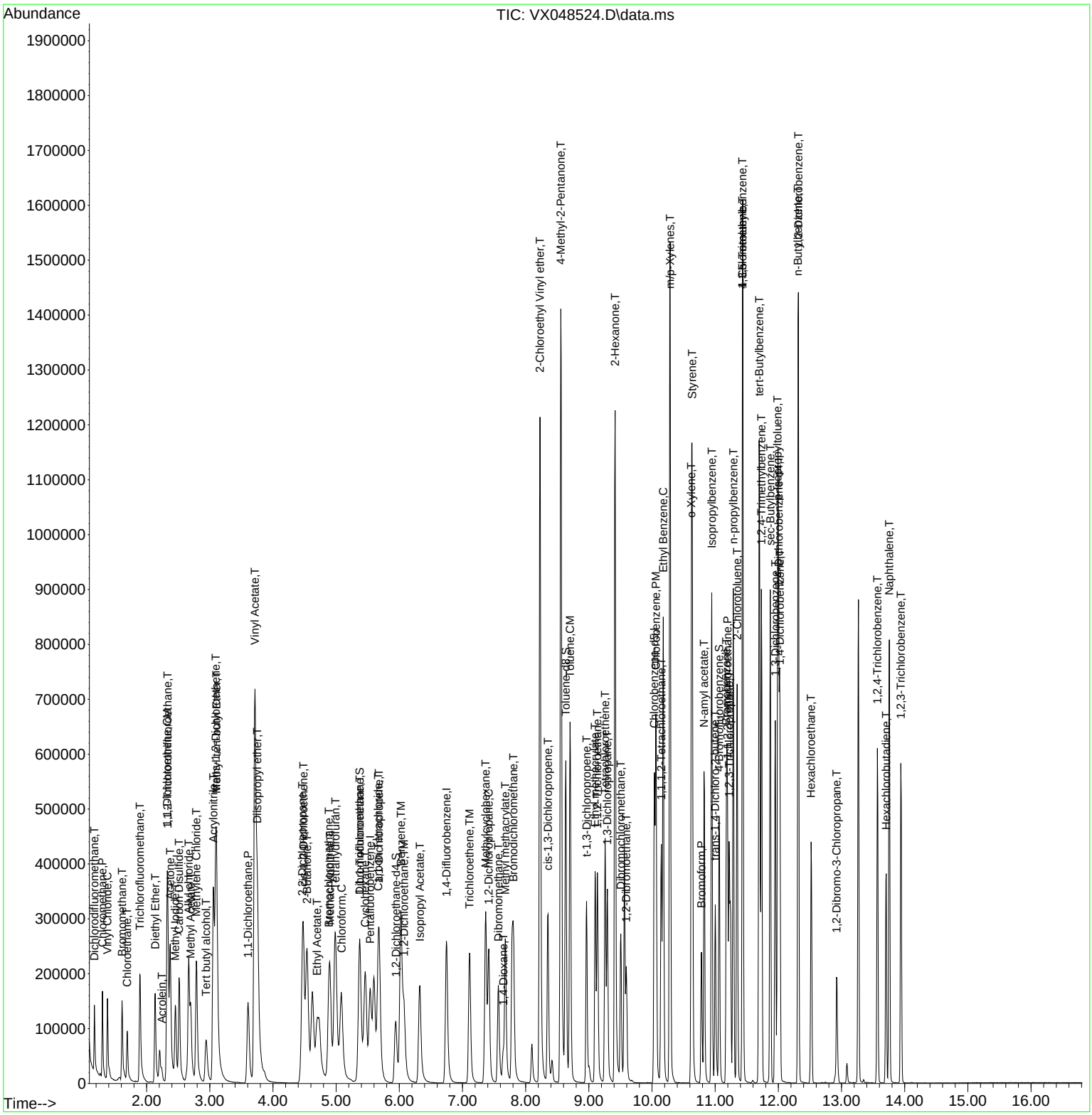
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX110725\
Data File : VX048524.D
Acq On : 07 Nov 2025 16:29
Operator : JC/MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Nov 08 04:43:36 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 04:36:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 11/10/2025
Supervised By :Semsettin Yesilyurt 11/10/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX110725\
Data File : VX048525.D
Acq On : 07 Nov 2025 16:50
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX110725

Manual Integrations APPROVED

Reviewed By :John Carlone 11/10/2025
Supervised By :Semsettin Yesilyurt 11/10/2025

Quant Time: Nov 08 05:04:12 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 05:01:56 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.544	168	175429	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.745	114	300694	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.037	117	261891	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.006	152	133606	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.940	65	125725	51.433	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 102.860%			
35) Dibromofluoromethane	5.373	113	104074	45.730	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 91.460%			
50) Toluene-d8	8.635	98	360437	50.780	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery = 101.560%			
62) 4-Bromofluorobenzene	11.061	95	134490	50.843	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery = 101.680%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.173	85	79523	55.942	ug/l	99
3) Chloromethane	1.301	50	100103	53.094	ug/l	100
4) Vinyl Chloride	1.380	62	105708	49.519	ug/l	96
5) Bromomethane	1.611	94	74133	54.997	ug/l	97
6) Chloroethane	1.691	64	66991	47.919	ug/l	100
7) Trichlorofluoromethane	1.892	101	163901	48.532	ug/l	98
8) Diethyl Ether	2.136	74	68302	50.384	ug/l	99
9) 1,1,2-Trichlorotrifluo...	2.337	101	97010	49.618	ug/l	99
10) Methyl Iodide	2.453	142	148327	51.263	ug/l	99
11) Tert butyl alcohol	2.941	59	119049	257.016	ug/l	98
12) 1,1-Dichloroethene	2.325	96	96593	47.299	ug/l	95
13) Acrolein	2.239	56	17055	254.482	ug/l	98
14) Allyl chloride	2.666	41	180497	47.471	ug/l	99
15) Acrylonitrile	3.056	53	339497	251.074	ug/l	99
16) Acetone	2.374	43	289425	250.130	ug/l	98
17) Carbon Disulfide	2.514	76	263284	45.815	ug/l	100
18) Methyl Acetate	2.697	43	151597	47.674	ug/l	99
19) Methyl tert-butyl Ether	3.105	73	366166	50.775	ug/l	100
20) Methylene Chloride	2.788	84	112574	47.322	ug/l	93
21) trans-1,2-Dichloroethene	3.093	96	104272	48.175	ug/l	97
22) Diisopropyl ether	3.751	45	365126	50.011	ug/l	98
23) Vinyl Acetate	3.715	43	1623158	253.844	ug/l	99
24) 1,1-Dichloroethane	3.605	63	193671	48.344	ug/l	99
25) 2-Butanone	4.538	43	453513	264.945	ug/l	97
26) 2,2-Dichloropropane	4.465	77	162290	47.519	ug/l	100
27) cis-1,2-Dichloroethene	4.483	96	129253	48.854	ug/l	98
28) Bromochloromethane	4.885	49	97361	49.472	ug/l	98
29) Tetrahydrofuran	4.989	42	307563	251.928	ug/l	99
30) Chloroform	5.080	83	203402	49.181	ug/l	99
31) Cyclohexane	5.464	56	166346	50.678	ug/l	98
32) 1,1,1-Trichloroethane	5.373	97	177144	49.079	ug/l	100
36) 1,1-Dichloropropene	5.678	75	136129	44.670	ug/l	98
37) Ethyl Acetate	4.696	43	206366	48.107	ug/l	98
38) Carbon Tetrachloride	5.666	117	153372	44.212	ug/l	97
39) Methylcyclohexane	7.367	83	168487	49.240	ug/l	98
40) Benzene	6.025	78	428574	45.369	ug/l	99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX110725\
Data File : VX048525.D
Acq On : 07 Nov 2025 16:50
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX110725

Manual Integrations APPROVED

Reviewed By :John Carlone 11/10/2025
Supervised By :Semsettin Yesilyurt 11/10/2025

Quant Time: Nov 08 05:04:12 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 05:01:56 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	4.904	41	96023	50.900	ug/l		95
42) 1,2-Dichloroethane	6.074	62	149489	46.187	ug/l		99
43) Isopropyl Acetate	6.324	43	292708	48.542	ug/l		99
44) Trichloroethene	7.111	130	108399	48.007	ug/l		95
45) 1,2-Dichloropropane	7.415	63	109605	50.462	ug/l		97
46) Dibromomethane	7.568	93	81296	51.317	ug/l		97
47) Bromodichloromethane	7.806	83	164733	52.124	ug/l		99
48) Methyl methacrylate	7.677	41	141804	52.901	ug/l		99
49) 1,4-Dioxane	7.647	88	43542	1066.027	ug/l		97
51) 4-Methyl-2-Pentanone	8.555	43	943143	274.770	ug/l		99
52) Toluene	8.702	92	263658	53.014	ug/l		99
53) t-1,3-Dichloropropene	8.964	75	172732	53.042	ug/l		99
54) cis-1,3-Dichloropropene	8.354	75	183768	54.498	ug/l		99
55) 1,1,2-Trichloroethane	9.135	97	109093	54.903	ug/l		98
56) Ethyl methacrylate	9.098	69	186912	56.539	ug/l		98
57) 1,3-Dichloropropane	9.293	76	182103	52.652	ug/l		100
58) 2-Chloroethyl Vinyl ether	8.226	63	533039	299.907	ug/l		100
59) 2-Hexanone	9.415	43	708416	277.453	ug/l		99
60) Dibromochloromethane	9.506	129	130424	53.460	ug/l		100
61) 1,2-Dibromoethane	9.592	107	115352	53.598	ug/l		99
64) Tetrachloroethene	9.256	164	91541	48.124	ug/l		96
65) Chlorobenzene	10.061	112	292507	47.057	ug/l		99
66) 1,1,1,2-Tetrachloroethane	10.147	131	103725	49.801	ug/l		99
67) Ethyl Benzene	10.177	91	505794	48.456	ug/l		97
68) m/p-Xylenes	10.287	106	391090	99.482	ug/l		98
69) o-Xylene	10.622	106	190122	49.430	ug/l		98
70) Styrene	10.640	104	318495	49.362	ug/l		99
71) Bromoform	10.781	173	92512	48.145	ug/l	#	100
73) Isopropylbenzene	10.945	105	479112	49.403	ug/l		99
74) N-amyl acetate	10.823	43	244571	50.225	ug/l		98
75) 1,1,2,2-Tetrachloroethane	11.195	83	167085	48.855	ug/l		99
76) 1,2,3-Trichloropropane	11.220	75	133852m	41.585	ug/l		
77) Bromobenzene	11.183	156	120400	48.079	ug/l		98
78) n-propylbenzene	11.287	91	560609	49.162	ug/l		100
79) 2-Chlorotoluene	11.348	91	336034	48.767	ug/l		99
80) 1,3,5-Trimethylbenzene	11.433	105	396355	50.134	ug/l		99
81) trans-1,4-Dichloro-2-b...	11.000	75	57267	50.890	ug/l		96
82) 4-Chlorotoluene	11.433	91	396344	49.035	ug/l		100
83) tert-Butylbenzene	11.695	119	406392	49.698	ug/l		98
84) 1,2,4-Trimethylbenzene	11.732	105	399935	50.137	ug/l		99
85) sec-Butylbenzene	11.872	105	498225	49.297	ug/l		99
86) p-Isopropyltoluene	11.988	119	419888	49.417	ug/l		99
87) 1,3-Dichlorobenzene	11.951	146	223034	47.519	ug/l		99
88) 1,4-Dichlorobenzene	12.024	146	225606	46.536	ug/l		99
89) n-Butylbenzene	12.311	91	390447	48.984	ug/l		100
90) Hexachloroethane	12.518	117	78393	48.425	ug/l		100
91) 1,2-Dichlorobenzene	12.317	146	216201	47.984	ug/l		98
92) 1,2-Dibromo-3-Chloropr...	12.920	75	40188	50.566	ug/l		99
93) 1,2,4-Trichlorobenzene	13.567	180	148227	49.507	ug/l		99
94) Hexachlorobutadiene	13.707	225	58865	47.031	ug/l		99
95) Naphthalene	13.756	128	506116	52.576	ug/l		100
96) 1,2,3-Trichlorobenzene	13.939	180	140560	50.471	ug/l		100

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX110725\
Data File : VX048525.D
Acq On : 07 Nov 2025 16:50
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX110725

Manual Integrations APPROVED

Reviewed By :John Carlone 11/10/2025
Supervised By :Semsettin Yesilyurt 11/10/2025

Quant Time: Nov 08 05:04:12 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 05:01:56 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

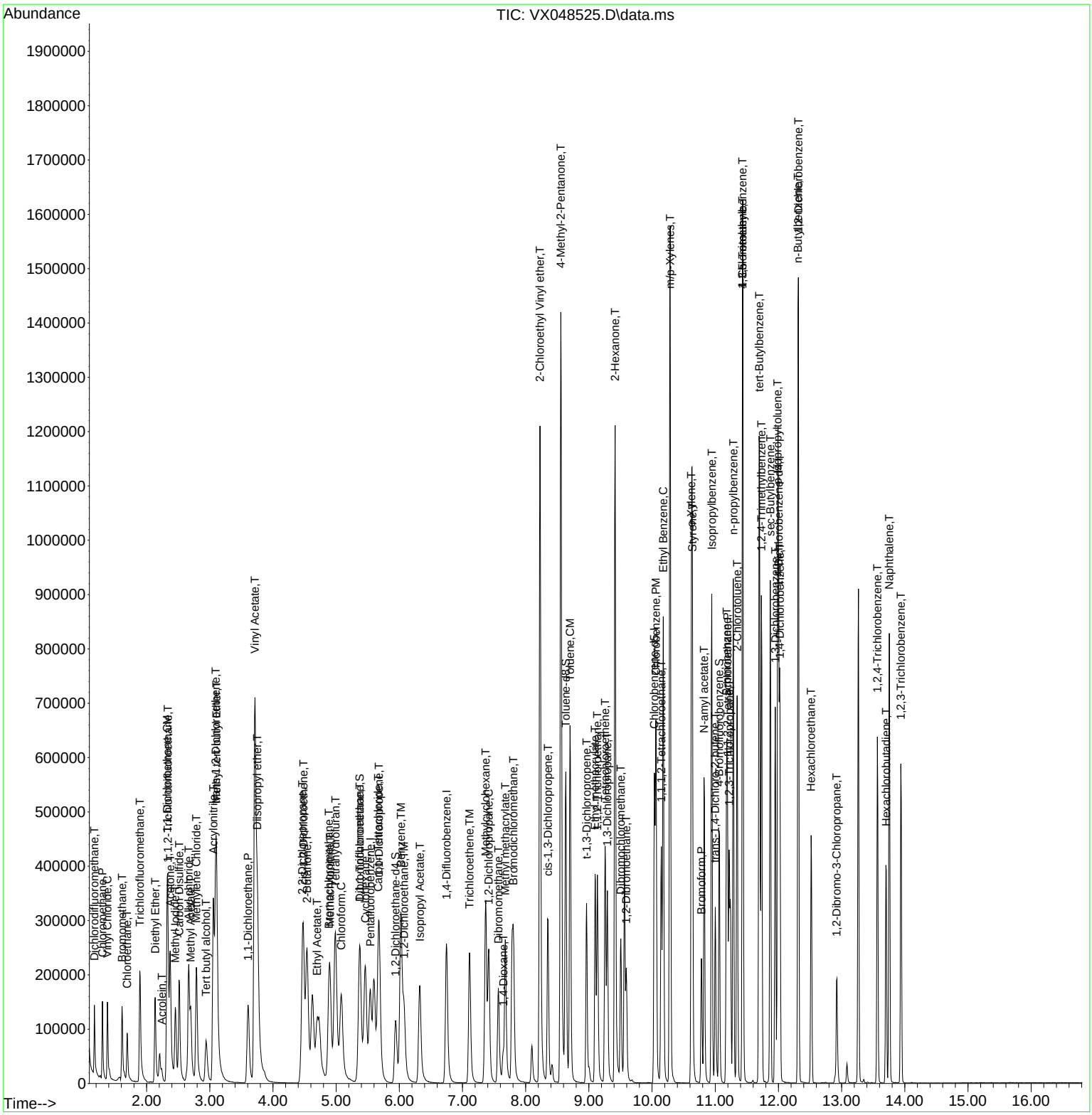
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX110725\
Data File : VX048525.D
Acq On : 07 Nov 2025 16:50
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Nov 08 05:04:12 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 05:01:56 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
ICVVX110725

Manual Integrations APPROVED

Reviewed By :John Carlone 11/10/2025
Supervised By :Semsettin Yesilyurt 11/10/2025



Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX110725\
Data File : VX048525.D
Acq On : 07 Nov 2025 16:50
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX110725

Quant Time: Nov 08 05:04:12 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 05:01:56 2025
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	97	0.00
2	T	Dichlorodifluoromethane	0.405	0.453	-11.9	104	0.00
3	P	Chloromethane	0.537	0.571	-6.3	94	0.00
4	C	Vinyl Chloride	0.608	0.603	0.8#	98	0.00
5	T	Bromomethane	0.384	0.423	-10.2	97	0.00
6	T	Chloroethane	0.398	0.382	4.0	97	0.00
7	T	Trichlorofluoromethane	0.963	0.934	3.0	103	0.00
8	T	Diethyl Ether	0.386	0.389	-0.8	97	0.00
9	T	1,1,2-Trichlorotrifluoroeth	0.557	0.553	0.7	105	0.00
10	T	Methyl Iodide	0.825	0.846	-2.5	100	0.00
11	T	Tert butyl alcohol	0.132	0.136	-3.0	95	0.00
12	CM	1,1-Dichloroethene	0.582	0.551	5.3#	98	0.00
13	T	Acrolein	0.019	0.019	0.0	94	0.00
14	T	Allyl chloride	1.084	1.029	5.1	96	0.00
15	T	Acrylonitrile	0.385	0.387	-0.5	93	0.00
16	T	Acetone	0.330	0.330	0.0	97	0.00
17	T	Carbon Disulfide	1.638	1.501	8.4	98	0.00
18	T	Methyl Acetate	0.906	0.864	4.6	97	0.00
19	T	Methyl tert-butyl Ether	2.055	2.087	-1.6	96	0.00
20	T	Methylene Chloride	0.678	0.642	5.3	96	0.00
21	T	trans-1,2-Dichloroethene	0.617	0.594	3.7	97	0.00
22	T	Diisopropyl ether	2.081	2.081	0.0	98	0.00
23	T	Vinyl Acetate	1.822	1.851	-1.6	99	0.00
24	P	1,1-Dichloroethane	1.142	1.104	3.3	98	0.00
25	T	2-Butanone	0.488	0.517	-5.9	100	0.00
26	T	2,2-Dichloropropane	0.973	0.925	4.9	102	0.00
27	T	cis-1,2-Dichloroethene	0.754	0.737	2.3	99	0.00
28	T	Bromochloromethane	0.561	0.555	1.1	100	0.00
29	T	Tetrahydrofuran	0.348	0.351	-0.9	98	0.00
30	C	Chloroform	1.179	1.159	1.7#	101	0.00
31	T	Cyclohexane	0.936	0.948	-1.3	107	0.00
32	T	1,1,1-Trichloroethane	1.029	1.010	1.8	101	0.00
33	S	1,2-Dichloroethane-d4	0.697	0.717	-2.9	102	0.00
34	I	1,4-Difluorobenzene	1.000	1.000	0.0	98	0.00
35	S	Dibromofluoromethane	0.378	0.346	8.5	96	0.00
36	T	1,1-Dichloropropene	0.507	0.453	10.7	104	0.00
37	T	Ethyl Acetate	0.713	0.686	3.8	101	0.00
38	T	Carbon Tetrachloride	0.577	0.510	11.6	103	0.00
39	T	Methylcyclohexane	0.569	0.560	1.6	107	0.00
40	TM	Benzene	1.571	1.425	9.3	99	0.00
41	T	Methacrylonitrile	0.314	0.319	-1.6	106	0.00
42	TM	1,2-Dichloroethane	0.538	0.497	7.6	101	0.00
43	T	Isopropyl Acetate	1.003	0.973	3.0	102	0.00
44	TM	Trichloroethene	0.375	0.360	4.0	99	0.00
45	C	1,2-Dichloropropane	0.361	0.365	-1.1#	99	0.00
46	T	Dibromomethane	0.263	0.270	-2.7	99	0.00
47	T	Bromodichloromethane	0.526	0.548	-4.2	99	0.00
48	T	Methyl methacrylate	0.446	0.472	-5.8	100	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX110725\
Data File : VX048525.D
Acq On : 07 Nov 2025 16:50
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX110725

Quant Time: Nov 08 05:04:12 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 05:01:56 2025
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	T	1,4-Dioxane	0.007	0.007	0.0	96	0.00
50	S	Toluene-d8	1.180	1.199	-1.6	98	0.00
51	T	4-Methyl-2-Pentanone	0.571	0.627	-9.8	99	0.00
52	CM	Toluene	0.827	0.877	-6.0#	98	0.00
53	T	t-1,3-Dichloropropene	0.541	0.574	-6.1	98	0.00
54	T	cis-1,3-Dichloropropene	0.561	0.611	-8.9	99	0.00
55	T	1,1,2-Trichloroethane	0.330	0.363	-10.0	98	0.00
56	T	Ethyl methacrylate	0.550	0.622	-13.1	98	0.00
57	T	1,3-Dichloropropane	0.575	0.606	-5.4	96	0.00
58	T	2-Chloroethyl Vinyl ether	0.296	0.355	-19.9	98	0.00
59	T	2-Hexanone	0.425	0.471	-10.8	99	0.00
60	T	Dibromochloromethane	0.406	0.434	-6.9	97	0.00
61	T	1,2-Dibromoethane	0.358	0.384	-7.3	99	0.00
62	S	4-Bromofluorobenzene	0.440	0.447	-1.6	99	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	96	0.00
64	T	Tetrachloroethene	0.363	0.350	3.6	103	0.00
65	PM	Chlorobenzene	1.187	1.117	5.9	98	0.00
66	T	1,1,1,2-Tetrachloroethane	0.398	0.396	0.5	97	0.00
67	C	Ethyl Benzene	1.993	1.931	3.1#	99	0.00
68	T	m/p-Xylenes	0.751	0.747	0.5	100	0.00
69	T	o-Xylene	0.734	0.726	1.1	100	0.00
70	T	Styrene	1.232	1.216	1.3	97	0.00
71	P	Bromoform	0.367	0.353	3.8	98	0.00
72	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	97	0.00
73	T	Isopropylbenzene	3.629	3.586	1.2	101	0.00
74	T	N-amyl acetate	1.822	1.831	-0.5	100	0.00
75	P	1,1,2,2-Tetrachloroethane	1.280	1.251	2.3	99	0.00
76	T	1,2,3-Trichloropropane	1.205	1.002	16.8	66	0.00
77	T	Bromobenzene	0.937	0.901	3.8	97	0.00
78	T	n-propylbenzene	4.268	4.196	1.7	102	0.00
79	T	2-Chlorotoluene	2.579	2.515	2.5	101	0.00
80	T	1,3,5-Trimethylbenzene	2.959	2.967	-0.3	103	0.00
81	T	trans-1,4-Dichloro-2-butene	0.421	0.429	-1.9	96	0.00
82	T	4-Chlorotoluene	3.025	2.967	1.9	101	0.00
83	T	tert-Butylbenzene	3.060	3.042	0.6	101	0.00
84	T	1,2,4-Trimethylbenzene	2.985	2.993	-0.3	101	0.00
85	T	sec-Butylbenzene	3.782	3.729	1.4	104	0.00
86	T	p-Isopropyltoluene	3.180	3.143	1.2	103	0.00
87	T	1,3-Dichlorobenzene	1.756	1.669	5.0	99	0.00
88	T	1,4-Dichlorobenzene	1.814	1.689	6.9	98	0.00
89	T	n-Butylbenzene	2.983	2.922	2.0	105	0.00
90	T	Hexachloroethane	0.606	0.587	3.1	104	0.00
91	T	1,2-Dichlorobenzene	1.686	1.618	4.0	97	0.00
92	T	1,2-Dibromo-3-Chloropropane	0.297	0.301	-1.3	99	0.00
93	T	1,2,4-Trichlorobenzene	1.120	1.109	1.0	101	0.00
94	T	Hexachlorobutadiene	0.468	0.441	5.8	106	0.00
95	T	Naphthalene	3.603	3.788	-5.1	100	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX110725\
Data File : VX048525.D
Acq On : 07 Nov 2025 16:50
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX110725

Quant Time: Nov 08 05:04:12 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 05:01:56 2025
Response via : Initial Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	1.042	1.052	-1.0	101	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\VX110725\
Data File : VX048525.D
Acq On : 07 Nov 2025 16:50
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX110725

Quant Time: Nov 08 05:04:12 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 05:01:56 2025
Response via : Initial Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	50.000	50.000	0.0	97	0.00
2	T	Dichlorodifluoromethane	50.000	55.942	-11.9	104	0.00
3	P	Chloromethane	50.000	53.094	-6.2	94	0.00
4	C	Vinyl Chloride	50.000	49.519	1.0#	98	0.00
5	T	Bromomethane	50.000	54.997	-10.0	97	0.00
6	T	Chloroethane	50.000	47.919	4.2	97	0.00
7	T	Trichlorofluoromethane	50.000	48.532	2.9	103	0.00
8	T	Diethyl Ether	50.000	50.384	-0.8	97	0.00
9	T	1,1,2-Trichlorotrifluoroeth	50.000	49.618	0.8	105	0.00
10	T	Methyl Iodide	50.000	51.263	-2.5	100	0.00
11	T	Tert butyl alcohol	250.000	257.016	-2.8	95	0.00
12	CM	1,1-Dichloroethene	50.000	47.299	5.4#	98	0.00
13	T	Acrolein	250.000	254.482	-1.8	94	0.00
14	T	Allyl chloride	50.000	47.471	5.1	96	0.00
15	T	Acrylonitrile	250.000	251.074	-0.4	93	0.00
16	T	Acetone	250.000	250.130	-0.1	97	0.00
17	T	Carbon Disulfide	50.000	45.815	8.4	98	0.00
18	T	Methyl Acetate	50.000	47.674	4.7	97	0.00
19	T	Methyl tert-butyl Ether	50.000	50.775	-1.5	96	0.00
20	T	Methylene Chloride	50.000	47.322	5.4	96	0.00
21	T	trans-1,2-Dichloroethene	50.000	48.175	3.7	97	0.00
22	T	Diisopropyl ether	50.000	50.011	-0.0	98	0.00
23	T	Vinyl Acetate	250.000	253.844	-1.5	99	0.00
24	P	1,1-Dichloroethane	50.000	48.344	3.3	98	0.00
25	T	2-Butanone	250.000	264.945	-6.0	100	0.00
26	T	2,2-Dichloropropane	50.000	47.519	5.0	102	0.00
27	T	cis-1,2-Dichloroethene	50.000	48.854	2.3	99	0.00
28	T	Bromochloromethane	50.000	49.472	1.1	100	0.00
29	T	Tetrahydrofuran	250.000	251.928	-0.8	98	0.00
30	C	Chloroform	50.000	49.181	1.6#	101	0.00
31	T	Cyclohexane	50.000	50.678	-1.4	107	0.00
32	T	1,1,1-Trichloroethane	50.000	49.079	1.8	101	0.00
33	S	1,2-Dichloroethane-d4	50.000	51.433	-2.9	102	0.00
34	I	1,4-Difluorobenzene	50.000	50.000	0.0	98	0.00
35	S	Dibromofluoromethane	50.000	45.730	8.5	96	0.00
36	T	1,1-Dichloropropene	50.000	44.670	10.7	104	0.00
37	T	Ethyl Acetate	50.000	48.107	3.8	101	0.00
38	T	Carbon Tetrachloride	50.000	44.212	11.6	103	0.00
39	T	Methylcyclohexane	50.000	49.240	1.5	107	0.00
40	TM	Benzene	50.000	45.369	9.3	99	0.00
41	T	Methacrylonitrile	50.000	50.900	-1.8	106	0.00
42	TM	1,2-Dichloroethane	50.000	46.187	7.6	101	0.00
43	T	Isopropyl Acetate	50.000	48.542	2.9	102	0.00
44	TM	Trichloroethene	50.000	48.007	4.0	99	0.00
45	C	1,2-Dichloropropane	50.000	50.462	-0.9#	99	0.00
46	T	Dibromomethane	50.000	51.317	-2.6	99	0.00
47	T	Bromodichloromethane	50.000	52.124	-4.2	99	0.00
48	T	Methyl methacrylate	50.000	52.901	-5.8	100	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX110725\
Data File : VX048525.D
Acq On : 07 Nov 2025 16:50
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX110725

Quant Time: Nov 08 05:04:12 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 05:01:56 2025
Response via : Initial Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
49	T	1,4-Dioxane	1000.000	1066.027	-6.6	96	0.00
50	S	Toluene-d8	50.000	50.780	-1.6	98	0.00
51	T	4-Methyl-2-Pentanone	250.000	274.770	-9.9	99	0.00
52	CM	Toluene	50.000	53.014	-6.0#	98	0.00
53	T	t-1,3-Dichloropropene	50.000	53.042	-6.1	98	0.00
54	T	cis-1,3-Dichloropropene	50.000	54.498	-9.0	99	0.00
55	T	1,1,2-Trichloroethane	50.000	54.903	-9.8	98	0.00
56	T	Ethyl methacrylate	50.000	56.539	-13.1	98	0.00
57	T	1,3-Dichloropropane	50.000	52.652	-5.3	96	0.00
58	T	2-Chloroethyl Vinyl ether	250.000	299.907	-20.0	98	0.00
59	T	2-Hexanone	250.000	277.453	-11.0	99	0.00
60	T	Dibromochloromethane	50.000	53.460	-6.9	97	0.00
61	T	1,2-Dibromoethane	50.000	53.598	-7.2	99	0.00
62	S	4-Bromofluorobenzene	50.000	50.843	-1.7	99	0.00
63	I	Chlorobenzene-d5	50.000	50.000	0.0	96	0.00
64	T	Tetrachloroethene	50.000	48.124	3.8	103	0.00
65	PM	Chlorobenzene	50.000	47.057	5.9	98	0.00
66	T	1,1,1,2-Tetrachloroethane	50.000	49.801	0.4	97	0.00
67	C	Ethyl Benzene	50.000	48.456	3.1#	99	0.00
68	T	m/p-Xylenes	100.000	99.482	0.5	100	0.00
69	T	o-Xylene	50.000	49.430	1.1	100	0.00
70	T	Styrene	50.000	49.362	1.3	97	0.00
71	P	Bromoform	50.000	48.145	3.7	98	0.00
72	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	97	0.00
73	T	Isopropylbenzene	50.000	49.403	1.2	101	0.00
74	T	N-amyl acetate	50.000	50.225	-0.5	100	0.00
75	P	1,1,2,2-Tetrachloroethane	50.000	48.855	2.3	99	0.00
76	T	1,2,3-Trichloropropane	50.000	41.585	16.8	66	0.00
77	T	Bromobenzene	50.000	48.079	3.8	97	0.00
78	T	n-propylbenzene	50.000	49.162	1.7	102	0.00
79	T	2-Chlorotoluene	50.000	48.767	2.5	101	0.00
80	T	1,3,5-Trimethylbenzene	50.000	50.134	-0.3	103	0.00
81	T	trans-1,4-Dichloro-2-butene	50.000	50.890	-1.8	96	0.00
82	T	4-Chlorotoluene	50.000	49.035	1.9	101	0.00
83	T	tert-Butylbenzene	50.000	49.698	0.6	101	0.00
84	T	1,2,4-Trimethylbenzene	50.000	50.137	-0.3	101	0.00
85	T	sec-Butylbenzene	50.000	49.297	1.4	104	0.00
86	T	p-Isopropyltoluene	50.000	49.417	1.2	103	0.00
87	T	1,3-Dichlorobenzene	50.000	47.519	5.0	99	0.00
88	T	1,4-Dichlorobenzene	50.000	46.536	6.9	98	0.00
89	T	n-Butylbenzene	50.000	48.984	2.0	105	0.00
90	T	Hexachloroethane	50.000	48.425	3.2	104	0.00
91	T	1,2-Dichlorobenzene	50.000	47.984	4.0	97	0.00
92	T	1,2-Dibromo-3-Chloropropane	50.000	50.566	-1.1	99	0.00
93	T	1,2,4-Trichlorobenzene	50.000	49.507	1.0	101	0.00
94	T	Hexachlorobutadiene	50.000	47.031	5.9	106	0.00
95	T	Naphthalene	50.000	52.576	-5.2	100	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX110725\
Data File : VX048525.D
Acq On : 07 Nov 2025 16:50
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX110725

Quant Time: Nov 08 05:04:12 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 05:01:56 2025
Response via : Initial Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	50.000	50.471	-0.9	101	0.00

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

Raw Data: **VN088370.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:	Alliance	Contract:	GENV01
Lab Code:	ACE	SDG No.:	Q3715
Instrument ID:	MSVOA_N	Calibration Date/Time:	12/01/2025 09:58
Lab File ID:	VN088370.D	Init. Calib. Date(s):	11/24/2025 11/24/2025
Heated Purge: (Y/N)	N	Init. Calib. Time(s):	12:38 14:35

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Dichlorodifluoromethane	0.751	0.815		8.52	20
Chloromethane	0.807	0.858	0.1	6.32	20
Vinyl Chloride	0.821	0.851		3.65	20
Bromomethane	0.395	0.408		3.29	20
Chloroethane	0.508	0.525		3.35	20
Trichlorofluoromethane	1.153	1.195		3.64	20
1,1,2-Trichlorotrifluoroethane	0.614	0.636		3.58	20
Tert butyl alcohol	0.150	0.157		4.67	20
1,1-Dichloroethene	0.610	0.607		-0.49	20
Acetone	0.341	0.269		-21.11	20
Carbon Disulfide	1.993	2.083		4.52	20
Methyl tert-butyl Ether	2.285	2.626		14.92	20
Methyl Acetate	1.014	1.108		9.27	20
Methylene Chloride	0.729	0.791		8.51	20
trans-1,2-Dichloroethene	0.676	0.724		7.1	20
1,1-Dichloroethane	1.367	1.456	0.1	6.51	20
Cyclohexane	1.239	1.285		3.71	20
2-Butanone	0.548	0.541		-1.28	20
Carbon Tetrachloride	0.532	0.584		9.77	20
cis-1,2-Dichloroethene	0.785	0.861		9.68	20
Bromochloromethane	0.681	0.672		-1.32	20
Chloroform	1.343	1.443		7.45	20
1,1,1-Trichloroethane	1.181	1.220		3.3	20
Methylcyclohexane	0.572	0.664		16.08	20
Benzene	1.570	1.738		10.7	20
1,2-Dichloroethane	0.599	0.676		12.85	20
Trichloroethene	0.371	0.415		11.86	20
1,2-Dichloropropane	0.402	0.453		12.69	20
Bromodichloromethane	0.586	0.670		14.33	20
4-Methyl-2-Pentanone	0.633	0.747		18.01	20
Toluene	0.906	1.034		14.13	20
t-1,3-Dichloropropene	0.601	0.701		16.64	20
cis-1,3-Dichloropropene	0.632	0.748		18.35	20
1,1,2-Trichloroethane	0.351	0.400		13.96	20
2-Hexanone	0.399	0.458		14.79	20
Dibromochloromethane	0.400	0.464		16	20
1,2-Dibromoethane	0.355	0.413		16.34	20
Tetrachloroethene	0.396	0.425		7.32	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: **VN088370.D**

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Alliance Contract: GENV01

Lab Code: ACE SDG No.: Q3715

Instrument ID: MSVOA_N Calibration Date/Time: 12/01/2025 09:58

Lab File ID: VN088370.D Init. Calib. Date(s): 11/24/2025 11/24/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 12:38 14:35

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Chlorobenzene	1.123	1.242	0.3	10.6	20
Ethyl Benzene	1.963	2.187		11.41	20
m/p-Xylenes	0.728	0.816		12.09	20
o-Xylene	0.694	0.778		12.1	20
Styrene	1.127	1.336		18.55	20
Bromoform	0.277	0.337	0.1	21.66	20
Isopropylbenzene	3.697	4.179		13.04	20
1,1,2,2-Tetrachloroethane	1.195	1.313	0.3	9.87	20
1,3-Dichlorobenzene	1.647	1.852		12.45	20
1,4-Dichlorobenzene	1.725	1.901		10.2	20
1,2-Dichlorobenzene	1.550	1.757		13.35	20
1,2-Dibromo-3-Chloropropane	0.290	0.317		9.31	20
1,2,4-Trichlorobenzene	0.921	1.042		13.14	20
1,2,3-Trichlorobenzene	0.896	0.989		10.38	20
1,2-Dichloroethane-d4	0.942	0.958		1.7	20
Dibromofluoromethane	0.346	0.377		8.96	20
Toluene-d8	1.289	1.356		5.2	20
4-Bromofluorobenzene	0.442	0.472		6.79	20

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120125\
Data File : VN088370.D
Acq On : 01 Dec 2025 09:58
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 02 00:07:59 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:34:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 12/02/2025
Supervised By :Mahesh Dadoda 12/02/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.200	168	262500	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.082	114	457607	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.841	117	408098	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.765	152	197460	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.559	65	251592	50.878	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 101.760%			
35) Dibromofluoromethane	8.147	113	172647	54.442	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 108.880%			
50) Toluene-d8	10.541	98	620606	52.597	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 105.200%			
62) 4-Bromofluorobenzene	12.823	95	216098	53.376	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 106.760%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.142	85	213988	54.274	ug/l	98
3) Chloromethane	2.383	50	225109	53.159	ug/l	97
4) Vinyl Chloride	2.536	62	223310	51.837	ug/l	98
5) Bromomethane	2.977	94	107123	51.665	ug/l	97
6) Chloroethane	3.136	64	137709	51.654	ug/l	96
7) Trichlorofluoromethane	3.512	101	313594	51.793	ug/l	100
8) Diethyl Ether	3.965	74	122135	53.743	ug/l	100
9) 1,1,2-Trichlorotrifluo...	4.365	101	166917	51.784	ug/l	97
10) Methyl Iodide	4.577	142	178922	56.072	ug/l	100
11) Tert butyl alcohol	5.518	59	205497	260.289	ug/l	97
12) 1,1-Dichloroethene	4.342	96	159359	49.760	ug/l	98
13) Acrolein	4.171	56	291964	386.274	ug/l	98
14) Allyl chloride	5.012	41	306169	51.579	ug/l	99
15) Acrylonitrile	5.706	53	631123	277.070	ug/l	99
16) Acetone	4.418	43	353017	197.397	ug/l	99
17) Carbon Disulfide	4.700	76	546678	52.238	ug/l	100
18) Methyl Acetate	5.012	43	290775	54.622	ug/l	100
19) Methyl tert-butyl Ether	5.783	73	689442	57.460	ug/l	96
20) Methylene Chloride	5.265	84	207762	54.299	ug/l	98
21) trans-1,2-Dichloroethene	5.771	96	190100	53.585	ug/l	98
22) Diisopropyl ether	6.653	45	704752	55.612	ug/l	98
23) Vinyl Acetate	6.589	43	2933303m	287.290	ug/l	
24) 1,1-Dichloroethane	6.553	63	382166	53.252	ug/l	99
25) 2-Butanone	7.465	43	709877	246.913	ug/l	99
26) 2,2-Dichloropropane	7.471	77	325483	52.543	ug/l	98
27) cis-1,2-Dichloroethene	7.471	96	225942	54.801	ug/l	98
28) Bromochloromethane	7.794	49	176525	49.377	ug/l	99
29) Tetrahydrofuran	7.824	42	580681	281.590	ug/l	99
30) Chloroform	7.947	83	378896	53.730	ug/l	95
31) Cyclohexane	8.235	56	337193	51.848	ug/l	98
32) 1,1,1-Trichloroethane	8.147	97	320304	51.659	ug/l	99
36) 1,1-Dichloropropene	8.353	75	257172	52.546	ug/l	98
37) Ethyl Acetate	7.541	43	351134	54.564	ug/l	98
38) Carbon Tetrachloride	8.341	117	267192	54.841	ug/l	95
39) Methylcyclohexane	9.582	83	303843	58.041	ug/l	97
40) Benzene	8.588	78	795502	55.380	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120125\
Data File : VN088370.D
Acq On : 01 Dec 2025 09:58
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 02 00:07:59 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:34:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 12/02/2025
Supervised By :Mahesh Dadoda 12/02/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.759	41	178298m	55.940	ug/l		
42) 1,2-Dichloroethane	8.653	62	309394	56.455	ug/l		99
43) Isopropyl Acetate	8.671	43	566144	57.580	ug/l		99
44) Trichloroethene	9.330	130	189717	55.896	ug/l		99
45) 1,2-Dichloropropane	9.600	63	207193	56.298	ug/l		94
46) Dibromomethane	9.688	93	152439	58.039	ug/l		98
47) Bromodichloromethane	9.865	83	306641	57.219	ug/l		99
48) Methyl methacrylate	9.659	41	262260	58.460	ug/l		99
49) 1,4-Dioxane	9.682	88	61264	1073.826	ug/l	#	98
51) 4-Methyl-2-Pentanone	10.424	43	1709516	294.976	ug/l		99
52) Toluene	10.606	92	472964	57.023	ug/l		98
53) t-1,3-Dichloropropene	10.812	75	320705	58.302	ug/l		99
54) cis-1,3-Dichloropropene	10.294	75	342246	59.163	ug/l		96
55) 1,1,2-Trichloroethane	10.994	97	183113	57.061	ug/l		99
56) Ethyl methacrylate	10.853	69	317004	62.537	ug/l		98
57) 1,3-Dichloropropane	11.141	76	338648	58.496	ug/l		100
58) 2-Chloroethyl Vinyl ether	10.135	63	944366	323.148	ug/l		99
59) 2-Hexanone	11.176	43	1048679	287.241	ug/l		99
60) Dibromochloromethane	11.335	129	212408	58.062	ug/l		98
61) 1,2-Dibromoethane	11.447	107	189124	58.199	ug/l		99
64) Tetrachloroethene	11.082	164	173317	53.571	ug/l		99
65) Chlorobenzene	11.871	112	506678	55.274	ug/l		98
66) 1,1,1,2-Tetrachloroethane	11.935	131	176540	57.102	ug/l		100
67) Ethyl Benzene	11.941	91	892546	55.709	ug/l		99
68) m/p-Xylenes	12.047	106	666195	112.150	ug/l		99
69) o-Xylene	12.376	106	317531	56.069	ug/l		98
70) Styrene	12.388	104	545300	59.301	ug/l		99
71) Bromoform	12.559	173	137488	60.715	ug/l	#	100
73) Isopropylbenzene	12.670	105	825111	56.515	ug/l		99
74) N-amyl acetate	12.494	43	246831m	49.643	ug/l		
75) 1,1,2,2-Tetrachloroethane	12.918	83	259360	54.950	ug/l		99
76) 1,2,3-Trichloropropane	12.970	75	258773m	55.953	ug/l		
77) Bromobenzene	12.959	156	190979	57.171	ug/l		98
78) n-propylbenzene	13.012	91	1008099	56.441	ug/l		100
79) 2-Chlorotoluene	13.100	91	601237	55.123	ug/l		99
80) 1,3,5-Trimethylbenzene	13.147	105	692333	57.227	ug/l		100
81) trans-1,4-Dichloro-2-b...	12.718	75	97180	59.611	ug/l	#	87
82) 4-Chlorotoluene	13.200	91	633461	58.473	ug/l		99
83) tert-Butylbenzene	13.412	119	573074	55.723	ug/l		100
84) 1,2,4-Trimethylbenzene	13.459	105	704771	58.609	ug/l		99
85) sec-Butylbenzene	13.594	105	840504	56.889	ug/l		100
86) p-Isopropyltoluene	13.706	119	696965	57.528	ug/l		99
87) 1,3-Dichlorobenzene	13.712	146	365660	56.231	ug/l		99
88) 1,4-Dichlorobenzene	13.788	146	375462	55.121	ug/l		99
89) n-Butylbenzene	14.029	91	663659	56.418	ug/l		100
90) Hexachloroethane	14.306	117	124701	56.344	ug/l		99
91) 1,2-Dichlorobenzene	14.082	146	346992	56.704	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	14.694	75	62609	54.672	ug/l		98
93) 1,2,4-Trichlorobenzene	15.364	180	205849	56.615	ug/l		98
94) Hexachlorobutadiene	15.470	225	69826	53.442	ug/l		98
95) Naphthalene	15.611	128	732311	58.123	ug/l		99
96) 1,2,3-Trichlorobenzene	15.811	180	195344	55.205	ug/l		97

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120125\
Data File : VN088370.D
Acq On : 01 Dec 2025 09:58
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 02 00:07:59 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:34:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 12/02/2025
Supervised By :Mahesh Dadoda 12/02/2025

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

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

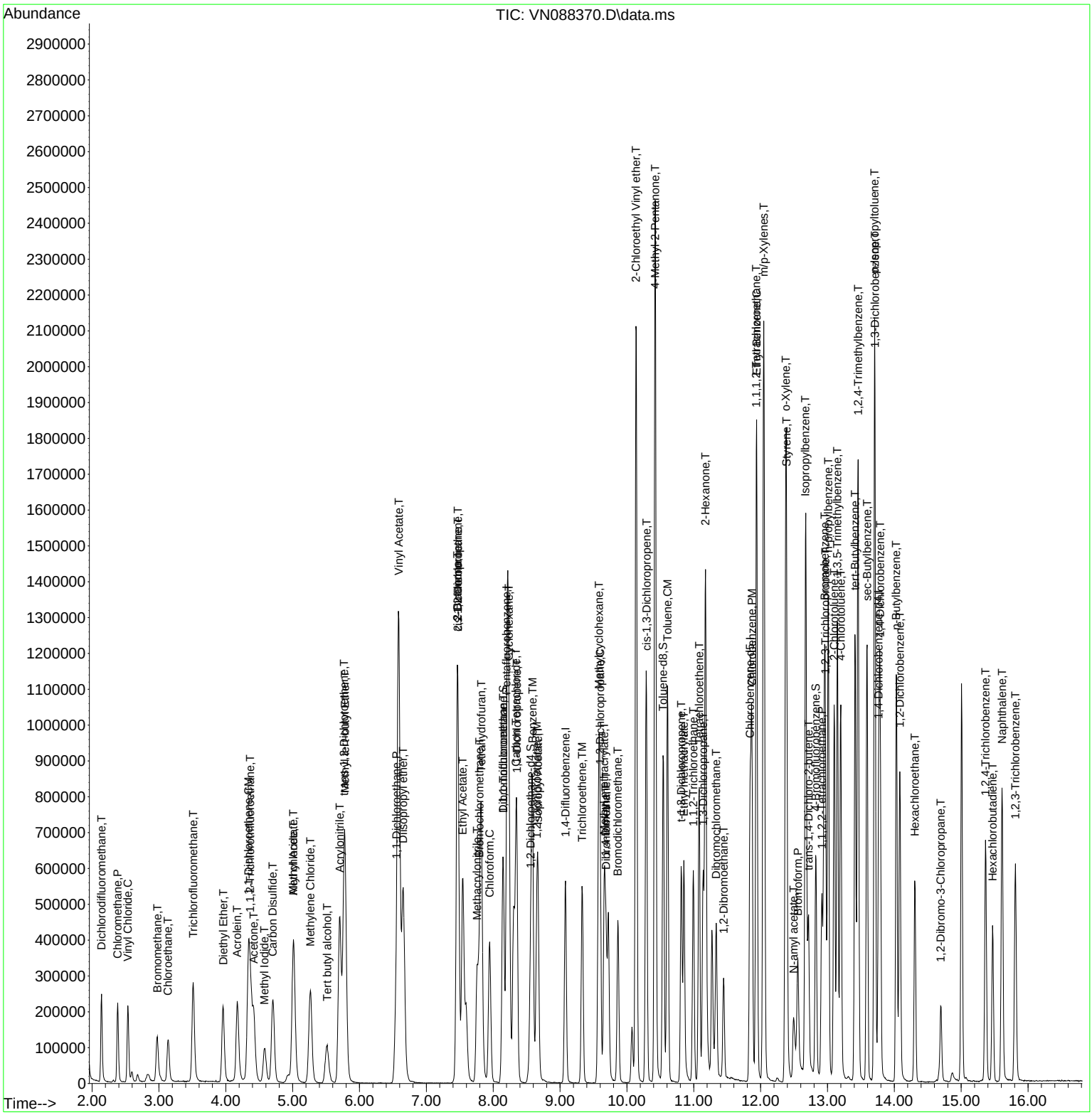
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120125\
Data File : VN088370.D
Acq On : 01 Dec 2025 09:58
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 02 00:07:59 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:34:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 12/02/2025
Supervised By :Mahesh Dadoda 12/02/2025



Sample Results: **VN088370.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120125\
Data File : VN088370.D
Acq On : 01 Dec 2025 09:58
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Dec 02 00:07:59 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:34:52 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	103	0.00
2	T	Dichlorodifluoromethane	0.751	0.815	-8.5	114	0.00
3	P	Chloromethane	0.807	0.858	-6.3	110	0.00
4	C	Vinyl Chloride	0.821	0.851	-3.7#	108	0.00
5	T	Bromomethane	0.395	0.408	-3.3	106	0.00
6	T	Chloroethane	0.508	0.525	-3.3	107	0.00
7	T	Trichlorofluoromethane	1.153	1.195	-3.6	113	0.00
8	T	Diethyl Ether	0.433	0.465	-7.4	108	0.00
9	T	1,1,2-Trichlorotrifluoroeth	0.614	0.636	-3.6	116	0.00
10	T	Methyl Iodide	0.608	0.682	-12.2	106	-0.01
11	T	Tert butyl alcohol	0.150	0.157	-4.7	100	0.00
12	CM	1,1-Dichloroethene	0.610	0.607	0.5#	110	0.00
13	T	Acrolein	0.144	0.222	-54.2#	152#	0.00
14	T	Allyl chloride	1.131	1.166	-3.1	105	0.00
15	T	Acrylonitrile	0.434	0.481	-10.8	106	0.00
16	T	Acetone	0.341	0.269	21.1	83	0.00
17	T	Carbon Disulfide	1.993	2.083	-4.5	108	0.00
18	T	Methyl Acetate	1.014	1.108	-9.3	109	0.00
19	T	Methyl tert-butyl Ether	2.285	2.626	-14.9	108	0.00
20	T	Methylene Chloride	0.729	0.791	-8.5	108	0.00
21	T	trans-1,2-Dichloroethene	0.676	0.724	-7.1	109	0.00
22	T	Diisopropyl ether	2.414	2.685	-11.2	107	0.00
23	T	Vinyl Acetate	1.945	2.235	-14.9	108	0.00
24	P	1,1-Dichloroethane	1.367	1.456	-6.5	105	0.00
25	T	2-Butanone	0.548	0.541	1.3	94	0.00
26	T	2,2-Dichloropropane	1.180	1.240	-5.1	106	0.00
27	T	cis-1,2-Dichloroethene	0.785	0.861	-9.7	107	0.00
28	T	Bromochloromethane	0.681	0.672	1.3	94	0.00
29	T	Tetrahydrofuran	0.393	0.442	-12.5	106	0.00
30	C	Chloroform	1.343	1.443	-7.4#	107	0.00
31	T	Cyclohexane	1.239	1.285	-3.7	117	0.00
32	T	1,1,1-Trichloroethane	1.181	1.220	-3.3	109	0.00
33	S	1,2-Dichloroethane-d4	0.942	0.958	-1.7	99	0.00
34	I	1,4-Difluorobenzene	1.000	1.000	0.0	95	0.00
35	S	Dibromofluoromethane	0.346	0.377	-9.0	103	0.00
36	T	1,1-Dichloropropene	0.535	0.562	-5.0	109	0.00
37	T	Ethyl Acetate	0.703	0.767	-9.1	101	0.00
38	T	Carbon Tetrachloride	0.532	0.584	-9.8	111	0.00
39	T	Methylcyclohexane	0.572	0.664	-16.1	120	0.00
40	TM	Benzene	1.570	1.738	-10.7	106	0.00
41	T	Methacrylonitrile	0.348	0.390	-12.1	104	0.00
42	TM	1,2-Dichloroethane	0.599	0.676	-12.9	105	0.00
43	T	Isopropyl Acetate	1.074	1.237	-15.2	105	0.00
44	TM	Trichloroethene	0.371	0.415	-11.9	110	0.00
45	C	1,2-Dichloropropane	0.402	0.453	-12.7#	106	0.00
46	T	Dibromomethane	0.287	0.333	-16.0	108	0.00
47	T	Bromodichloromethane	0.586	0.670	-14.3	108	0.00
48	T	Methyl methacrylate	0.490	0.573	-16.9	106	0.00

Sample Results: **VN088370.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120125\
Data File : VN088370.D
Acq On : 01 Dec 2025 09:58
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Dec 02 00:07:59 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:34:52 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	0.006	0.007	-16.7	96	0.00
50	S	Toluene-d8	1.289	1.356	-5.2	100	0.00
51	T	4-Methyl-2-Pentanone	0.633	0.747	-18.0	106	0.00
52	CM	Toluene	0.906	1.034	-14.1#	108	0.00
53	T	t-1,3-Dichloropropene	0.601	0.701	-16.6	106	0.00
54	T	cis-1,3-Dichloropropene	0.632	0.748	-18.4	108	0.00
55	T	1,1,2-Trichloroethane	0.351	0.400	-14.0	108	0.00
56	T	Ethyl methacrylate	0.554	0.693	-25.1#	107	0.00
57	T	1,3-Dichloropropane	0.633	0.740	-16.9	109	0.00
58	T	2-Chloroethyl Vinyl ether	0.319	0.413	-29.5#	108	0.00
59	T	2-Hexanone	0.399	0.458	-14.8	100	0.00
60	T	Dibromochloromethane	0.400	0.464	-16.0	108	0.00
61	T	1,2-Dibromoethane	0.355	0.413	-16.3	106	0.00
62	S	4-Bromofluorobenzene	0.442	0.472	-6.8	100	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	96	0.00
64	T	Tetrachloroethene	0.396	0.425	-7.3	108	0.00
65	PM	Chlorobenzene	1.123	1.242	-10.6	108	0.00
66	T	1,1,1,2-Tetrachloroethane	0.379	0.433	-14.2	108	0.00
67	C	Ethyl Benzene	1.963	2.187	-11.4#	108	0.00
68	T	m/p-Xylenes	0.728	0.816	-12.1	107	0.00
69	T	o-Xylene	0.694	0.778	-12.1	107	0.00
70	T	Styrene	1.127	1.336	-18.5	107	0.00
71	P	Bromoform	0.277	0.337	-21.7	113	0.00
72	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	95	0.00
73	T	Isopropylbenzene	3.697	4.179	-13.0	109	0.00
74	T	N-amyl acetate	1.259	1.250	0.7	113	0.00
75	P	1,1,2,2-Tetrachloroethane	1.195	1.313	-9.9	110	0.00
76	T	1,2,3-Trichloropropane	1.171	1.311	-12.0	103	0.00
77	T	Bromobenzene	0.846	0.967	-14.3	106	0.00
78	T	n-propylbenzene	4.523	5.105	-12.9	109	0.00
79	T	2-Chlorotoluene	2.762	3.045	-10.2	107	0.00
80	T	1,3,5-Trimethylbenzene	3.063	3.506	-14.5	109	0.00
81	T	trans-1,4-Dichloro-2-butene	0.413	0.492	-19.1	108	0.00
82	T	4-Chlorotoluene	2.743	3.208	-17.0	106	0.00
83	T	tert-Butylbenzene	2.604	2.902	-11.4	109	0.00
84	T	1,2,4-Trimethylbenzene	3.045	3.569	-17.2	109	0.00
85	T	sec-Butylbenzene	3.741	4.257	-13.8	112	0.00
86	T	p-Isopropyltoluene	3.068	3.530	-15.1	110	0.00
87	T	1,3-Dichlorobenzene	1.647	1.852	-12.4	109	0.00
88	T	1,4-Dichlorobenzene	1.725	1.901	-10.2	107	0.00
89	T	n-Butylbenzene	2.979	3.361	-12.8	111	0.00
90	T	Hexachloroethane	0.560	0.632	-12.9	112	0.00
91	T	1,2-Dichlorobenzene	1.550	1.757	-13.4	109	0.00
92	T	1,2-Dibromo-3-Chloropropane	0.290	0.317	-9.3	104	0.00
93	T	1,2,4-Trichlorobenzene	0.921	1.042	-13.1	111	0.00
94	T	Hexachlorobutadiene	0.331	0.354	-6.9	113	0.00
95	T	Naphthalene	3.190	3.709	-16.3	107	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120125\
Data File : VN088370.D
Acq On : 01 Dec 2025 09:58
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Dec 02 00:07:59 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:34:52 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	0.896	0.989	-10.4	107	0.00

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

Sample Results: **VN088370.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120125\
Data File : VN088370.D
Acq On : 01 Dec 2025 09:58
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Dec 02 00:07:59 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:34:52 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	103	0.00
2	T	Dichlorodifluoromethane	50.000	54.274	-8.5	114	0.00
3	P	Chloromethane	50.000	53.159	-6.3	110	0.00
4	C	Vinyl Chloride	50.000	51.837	-3.7#	108	0.00
5	T	Bromomethane	50.000	51.665	-3.3	106	0.00
6	T	Chloroethane	50.000	51.654	-3.3	107	0.00
7	T	Trichlorofluoromethane	50.000	51.793	-3.6	113	0.00
8	T	Diethyl Ether	50.000	53.743	-7.5	108	0.00
9	T	1,1,2-Trichlorotrifluoroeth	50.000	51.784	-3.6	116	0.00
10	T	Methyl Iodide	50.000	56.072	-12.1	106	-0.01
11	T	Tert butyl alcohol	250.000	260.289	-4.1	100	0.00
12	CM	1,1-Dichloroethene	50.000	49.760	0.5#	110	0.00
13	T	Acrolein	250.000	386.274	-54.5#	152	0.00
14	T	Allyl chloride	50.000	51.579	-3.2	105	0.00
15	T	Acrylonitrile	250.000	277.070	-10.8	106	0.00
16	T	Acetone	250.000	197.397	21.0	83	0.00
17	T	Carbon Disulfide	50.000	52.238	-4.5	108	0.00
18	T	Methyl Acetate	50.000	54.622	-9.2	109	0.00
19	T	Methyl tert-butyl Ether	50.000	57.460	-14.9	108	0.00
20	T	Methylene Chloride	50.000	54.299	-8.6	108	0.00
21	T	trans-1,2-Dichloroethene	50.000	53.585	-7.2	109	0.00
22	T	Diisopropyl ether	50.000	55.612	-11.2	107	0.00
23	T	Vinyl Acetate	250.000	287.290	-14.9	108	0.00
24	P	1,1-Dichloroethane	50.000	53.252	-6.5	105	0.00
25	T	2-Butanone	250.000	246.913	1.2	94	0.00
26	T	2,2-Dichloropropane	50.000	52.543	-5.1	106	0.00
27	T	cis-1,2-Dichloroethene	50.000	54.801	-9.6	107	0.00
28	T	Bromochloromethane	50.000	49.377	1.2	94	0.00
29	T	Tetrahydrofuran	250.000	281.590	-12.6	106	0.00
30	C	Chloroform	50.000	53.730	-7.5#	107	0.00
31	T	Cyclohexane	50.000	51.848	-3.7	117	0.00
32	T	1,1,1-Trichloroethane	50.000	51.659	-3.3	109	0.00
33	S	1,2-Dichloroethane-d4	50.000	50.878	-1.8	99	0.00
34	I	1,4-Difluorobenzene	50.000	50.000	0.0	95	0.00
35	S	Dibromofluoromethane	50.000	54.442	-8.9	103	0.00
36	T	1,1-Dichloropropene	50.000	52.546	-5.1	109	0.00
37	T	Ethyl Acetate	50.000	54.564	-9.1	101	0.00
38	T	Carbon Tetrachloride	50.000	54.841	-9.7	111	0.00
39	T	Methylcyclohexane	50.000	58.041	-16.1	120	0.00
40	TM	Benzene	50.000	55.380	-10.8	106	0.00
41	T	Methacrylonitrile	50.000	55.940	-11.9	104	0.00
42	TM	1,2-Dichloroethane	50.000	56.455	-12.9	105	0.00
43	T	Isopropyl Acetate	50.000	57.580	-15.2	105	0.00
44	TM	Trichloroethene	50.000	55.896	-11.8	110	0.00
45	C	1,2-Dichloropropane	50.000	56.298	-12.6#	106	0.00
46	T	Dibromomethane	50.000	58.039	-16.1	108	0.00
47	T	Bromodichloromethane	50.000	57.219	-14.4	108	0.00
48	T	Methyl methacrylate	50.000	58.460	-16.9	106	0.00

Sample Results: **VN088370.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120125\
Data File : VN088370.D
Acq On : 01 Dec 2025 09:58
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Dec 02 00:07:59 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:34:52 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	1073.826	-7.4	96	0.00
50	S	Toluene-d8	50.000	52.597	-5.2	100	0.00
51	T	4-Methyl-2-Pentanone	250.000	294.976	-18.0	106	0.00
52	CM	Toluene	50.000	57.023	-14.0#	108	0.00
53	T	t-1,3-Dichloropropene	50.000	58.302	-16.6	106	0.00
54	T	cis-1,3-Dichloropropene	50.000	59.163	-18.3	108	0.00
55	T	1,1,2-Trichloroethane	50.000	57.061	-14.1	108	0.00
56	T	Ethyl methacrylate	50.000	62.537	-25.1#	107	0.00
57	T	1,3-Dichloropropane	50.000	58.496	-17.0	109	0.00
58	T	2-Chloroethyl Vinyl ether	250.000	323.148	-29.3#	108	0.00
59	T	2-Hexanone	250.000	287.241	-14.9	100	0.00
60	T	Dibromochloromethane	50.000	58.062	-16.1	108	0.00
61	T	1,2-Dibromoethane	50.000	58.199	-16.4	106	0.00
62	S	4-Bromofluorobenzene	50.000	53.376	-6.8	100	0.00
63	I	Chlorobenzene-d5	50.000	50.000	0.0	96	0.00
64	T	Tetrachloroethene	50.000	53.571	-7.1	108	0.00
65	PM	Chlorobenzene	50.000	55.274	-10.5	108	0.00
66	T	1,1,1,2-Tetrachloroethane	50.000	57.102	-14.2	108	0.00
67	C	Ethyl Benzene	50.000	55.709	-11.4#	108	0.00
68	T	m/p-Xylenes	100.000	112.150	-12.2	107	0.00
69	T	o-Xylene	50.000	56.069	-12.1	107	0.00
70	T	Styrene	50.000	59.301	-18.6	107	0.00
71	P	Bromoform	50.000	60.715	-21.4	113	0.00
72	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	95	0.00
73	T	Isopropylbenzene	50.000	56.515	-13.0	109	0.00
74	T	N-amyl acetate	50.000	49.643	0.7	113	0.00
75	P	1,1,2,2-Tetrachloroethane	50.000	54.950	-9.9	110	0.00
76	T	1,2,3-Trichloropropane	50.000	55.953	-11.9	103	0.00
77	T	Bromobenzene	50.000	57.171	-14.3	106	0.00
78	T	n-propylbenzene	50.000	56.441	-12.9	109	0.00
79	T	2-Chlorotoluene	50.000	55.123	-10.2	107	0.00
80	T	1,3,5-Trimethylbenzene	50.000	57.227	-14.5	109	0.00
81	T	trans-1,4-Dichloro-2-butene	50.000	59.611	-19.2	108	0.00
82	T	4-Chlorotoluene	50.000	58.473	-16.9	106	0.00
83	T	tert-Butylbenzene	50.000	55.723	-11.4	109	0.00
84	T	1,2,4-Trimethylbenzene	50.000	58.609	-17.2	109	0.00
85	T	sec-Butylbenzene	50.000	56.889	-13.8	112	0.00
86	T	p-Isopropyltoluene	50.000	57.528	-15.1	110	0.00
87	T	1,3-Dichlorobenzene	50.000	56.231	-12.5	109	0.00
88	T	1,4-Dichlorobenzene	50.000	55.121	-10.2	107	0.00
89	T	n-Butylbenzene	50.000	56.418	-12.8	111	0.00
90	T	Hexachloroethane	50.000	56.344	-12.7	112	0.00
91	T	1,2-Dichlorobenzene	50.000	56.704	-13.4	109	0.00
92	T	1,2-Dibromo-3-Chloropropane	50.000	54.672	-9.3	104	0.00
93	T	1,2,4-Trichlorobenzene	50.000	56.615	-13.2	111	0.00
94	T	Hexachlorobutadiene	50.000	53.442	-6.9	113	0.00
95	T	Naphthalene	50.000	58.123	-16.2	107	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120125\
Data File : VN088370.D
Acq On : 01 Dec 2025 09:58
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Dec 02 00:07:59 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:34:52 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	55.205	-10.4	107	0.00

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

Raw Data: **VX048672.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: Alliance
Contract: GENV01
Lab Code: ACE
SDG No.: Q3715
Instrument ID: MSVOA_X
Calibration Date/Time: 11/25/2025 09:48
Lab File ID: VX048672.D
Init. Calib. Date(s): 11/07/2025 11/07/2025
Heated Purge: (Y/N) N
Init. Calib. Time(s): 13:35 16:29
GC Column: DB-624UI ID: 0.18 (mm)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Dichlorodifluoromethane	0.405	0.413		1.98	20
Chloromethane	0.537	0.483	0.1	-10.06	20
Vinyl Chloride	0.608	0.527		-13.32	20
Bromomethane	0.384	0.368		-4.17	20
Chloroethane	0.398	0.346		-13.06	20
Trichlorofluoromethane	0.963	0.919		-4.57	20
1,1,2-Trichlorotrifluoroethane	0.557	0.610		9.52	20
Tert butyl alcohol	0.132	0.165		25	20
1,1-Dichloroethene	0.582	0.575		-1.2	20
Acetone	0.330	0.314		-4.85	20
Carbon Disulfide	1.638	1.321		-19.35	20
Methyl tert-butyl Ether	2.055	2.362		14.94	20
Methyl Acetate	0.906	1.064		17.44	20
Methylene Chloride	0.678	0.693		2.21	20
trans-1,2-Dichloroethene	0.617	0.606		-1.78	20
1,1-Dichloroethane	1.142	1.173	0.1	2.71	20
Cyclohexane	0.936	0.866		-7.48	20
2-Butanone	0.488	0.538		10.25	20
Carbon Tetrachloride	0.577	0.548		-5.03	20
cis-1,2-Dichloroethene	0.754	0.757		0.4	20
Bromochloromethane	0.561	0.864		54.01	20
Chloroform	1.179	1.265		7.29	20
1,1,1-Trichloroethane	1.029	1.095		6.41	20
Methylcyclohexane	0.569	0.528		-7.21	20
Benzene	1.571	1.400		-10.89	20
1,2-Dichloroethane	0.538	0.542		0.74	20
Trichloroethene	0.375	0.353		-5.87	20
1,2-Dichloropropane	0.361	0.377		4.43	20
Bromodichloromethane	0.526	0.600		14.07	20
4-Methyl-2-Pentanone	0.571	0.690		20.84	20
Toluene	0.827	0.885		7.01	20
t-1,3-Dichloropropene	0.541	0.605		11.83	20
cis-1,3-Dichloropropene	0.561	0.636		13.37	20
1,1,2-Trichloroethane	0.330	0.390		18.18	20
2-Hexanone	0.425	0.503		18.35	20
Dibromochloromethane	0.406	0.481		18.47	20
1,2-Dibromoethane	0.358	0.410		14.52	20
Tetrachloroethene	0.363	0.366		0.83	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: Alliance
Contract: GENV01
Lab Code: ACE
SDG No.: Q3715
Instrument ID: MSVOA_X
Calibration Date/Time: 11/25/2025 09:48
Lab File ID: VX048672.D
Init. Calib. Date(s): 11/07/2025 11/07/2025
Heated Purge: (Y/N) N
Init. Calib. Time(s): 13:35 16:29
GC Column: DB-624UI ID: 0.18 (mm)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Chlorobenzene	1.187	1.213	0.3	2.19	20
Ethyl Benzene	1.993	2.042		2.46	20
m/p-Xylenes	0.751	0.787		4.79	20
o-Xylene	0.734	0.771		5.04	20
Styrene	1.232	1.356		10.06	20
Bromoform	0.367	0.411	0.1	11.99	20
Isopropylbenzene	3.629	3.740		3.06	20
1,1,2,2-Tetrachloroethane	1.280	1.355	0.3	5.86	20
1,3-Dichlorobenzene	1.756	1.782		1.48	20
1,4-Dichlorobenzene	1.814	1.826		0.66	20
1,2-Dichlorobenzene	1.686	1.755		4.09	20
1,2-Dibromo-3-Chloropropane	0.297	0.273		-8.08	20
1,2,4-Trichlorobenzene	1.120	1.092		-2.5	20
1,2,3-Trichlorobenzene	1.042	1.065		2.21	20
1,2-Dichloroethane-d4	0.697	0.662		-5.02	20
Dibromofluoromethane	0.378	0.318		-15.87	20
Toluene-d8	1.180	1.034		-12.37	20
4-Bromofluorobenzene	0.440	0.397		-9.77	20

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

Sample Results: **VX048672.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112525\
Data File : VX048672.D
Acq On : 25 Nov 2025 09:48
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 26 00:52:57 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 05:08:11 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 11/26/2025
Supervised By :Mahesh Dadoda 11/26/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.525	168	150094	50.000	ug/l	-0.01
34) 1,4-Difluorobenzene	6.739	114	259657	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.037	117	217303	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.000	152	114893	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.934	65	99359	47.507	ug/l	-0.01
Spiked Amount 50.000	Range 78 - 117		Recovery = 95.020%			
35) Dibromofluoromethane	5.361	113	82600	42.030	ug/l	-0.01
Spiked Amount 50.000	Range 75 - 124		Recovery = 84.060%			
50) Toluene-d8	8.629	98	268427	43.794	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery = 87.580%#			
62) 4-Bromofluorobenzene	11.061	95	103115	45.143	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery = 90.280%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.173	85	61959	50.944	ug/l	99
3) Chloromethane	1.301	50	72542	44.970	ug/l	99
4) Vinyl Chloride	1.380	62	79088	43.303	ug/l	100
5) Bromomethane	1.611	94	55264	47.919	ug/l	92
6) Chloroethane	1.691	64	51909	43.398	ug/l	99
7) Trichlorofluoromethane	1.892	101	137952	47.743	ug/l	100
8) Diethyl Ether	2.130	74	57305	49.408	ug/l	94
9) 1,1,2-Trichlorotrifluo...	2.331	101	91534	54.720	ug/l	99
10) Methyl Iodide	2.453	142	121853	49.222	ug/l	100
11) Tert butyl alcohol	2.934	59	123729	312.208	ug/l	97
12) 1,1-Dichloroethene	2.319	96	86318	49.402	ug/l	92
13) Acrolein	2.233	56	18011	314.109	ug/l	97
14) Allyl chloride	2.660	41	163153	50.153	ug/l	99
15) Acrylonitrile	3.050	53	340970	294.727	ug/l	100
16) Acetone	2.367	43	235883	238.268	ug/l	100
17) Carbon Disulfide	2.514	76	198321	40.336	ug/l	98
18) Methyl Acetate	2.697	43	159729	58.710	ug/l	99
19) Methyl tert-butyl Ether	3.099	73	354535	57.460	ug/l	99
20) Methylene Chloride	2.782	84	104022	51.108	ug/l	92
21) trans-1,2-Dichloroethene	3.087	96	90979	49.128	ug/l	99
22) Diisopropyl ether	3.745	45	339010	54.271	ug/l	99
23) Vinyl Acetate	3.709	43	1491458	272.618	ug/l	100
24) 1,1-Dichloroethane	3.599	63	175996	51.348	ug/l	99
25) 2-Butanone	4.532	43	403609	275.591	ug/l	98
26) 2,2-Dichloropropane	4.459	77	153683	52.594	ug/l	99
27) cis-1,2-Dichloroethene	4.471	96	113644	50.205	ug/l	98
28) Bromochloromethane	4.879	49	129665	77.008	ug/l	100
29) Tetrahydrofuran	4.977	42	279786	267.859	ug/l	99
30) Chloroform	5.074	83	189796	53.638	ug/l	96
31) Cyclohexane	5.452	56	129946	46.271	ug/l	94
32) 1,1,1-Trichloroethane	5.367	97	164383	53.231	ug/l	100
36) 1,1-Dichloropropene	5.678	75	115113	43.743	ug/l	98
37) Ethyl Acetate	4.684	43	189772	51.231	ug/l	100
38) Carbon Tetrachloride	5.660	117	142421	47.543	ug/l	99
39) Methylcyclohexane	7.360	83	137017	46.371	ug/l	96
40) Benzene	6.019	78	363579	44.571	ug/l	97

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112525\
Data File : VX048672.D
Acq On : 25 Nov 2025 09:48
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 26 00:52:57 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 05:08:11 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 11/26/2025
Supervised By :Mahesh Dadoda 11/26/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	4.891	41	84855	52.089	ug/l		98
42) 1,2-Dichloroethane	6.068	62	140853	50.396	ug/l		99
43) Isopropyl Acetate	6.312	43	254892	48.951	ug/l		99
44) Trichloroethene	7.104	130	91660	47.010	ug/l		98
45) 1,2-Dichloropropane	7.409	63	97917	52.206	ug/l		98
46) Dibromomethane	7.562	93	74141	54.197	ug/l		97
47) Bromodichloromethane	7.799	83	155793	57.086	ug/l		99
48) Methyl methacrylate	7.671	41	132197	57.111	ug/l		97
49) 1,4-Dioxane	7.641	88	45216	1281.966	ug/l		98
51) 4-Methyl-2-Pentanone	8.555	43	896054	302.309	ug/l		99
52) Toluene	8.702	92	229826	53.514	ug/l		100
53) t-1,3-Dichloropropene	8.958	75	157151	55.884	ug/l		100
54) cis-1,3-Dichloropropene	8.348	75	165208	56.737	ug/l		98
55) 1,1,2-Trichloroethane	9.135	97	101162	58.957	ug/l		98
56) Ethyl methacrylate	9.098	69	169478	59.368	ug/l		97
57) 1,3-Dichloropropane	9.287	76	167687	56.147	ug/l		99
58) 2-Chloroethyl Vinyl ether	8.220	63	419414	273.272	ug/l		99
59) 2-Hexanone	9.409	43	653301	296.306	ug/l		98
60) Dibromochloromethane	9.506	129	124889	59.282	ug/l		99
61) 1,2-Dibromoethane	9.592	107	106508	57.310	ug/l		99
64) Tetrachloroethene	9.256	164	79609	50.439	ug/l		98
65) Chlorobenzene	10.061	112	263559	51.100	ug/l		100
66) 1,1,1,2-Tetrachloroethane	10.147	131	97940	56.672	ug/l		99
67) Ethyl Benzene	10.177	91	443778	51.238	ug/l		97
68) m/p-Xylenes	10.281	106	341983	104.840	ug/l		98
69) o-Xylene	10.622	106	167589	52.512	ug/l		99
70) Styrene	10.634	104	294678	55.042	ug/l		99
71) Bromoform	10.781	173	89325	56.025	ug/l	#	98
73) Isopropylbenzene	10.945	105	429714	51.527	ug/l		98
74) N-amyl acetate	10.823	43	222418	53.115	ug/l		99
75) 1,1,2,2-Tetrachloroethane	11.195	83	155698	52.941	ug/l		98
76) 1,2,3-Trichloropropane	11.220	75	128957m	46.589	ug/l		
77) Bromobenzene	11.177	156	110603	51.360	ug/l		99
78) n-propylbenzene	11.287	91	505897	51.590	ug/l		100
79) 2-Chlorotoluene	11.348	91	302426	51.038	ug/l		99
80) 1,3,5-Trimethylbenzene	11.433	105	351421	51.690	ug/l		98
81) trans-1,4-Dichloro-2-b...	11.000	75	54847	56.677	ug/l	#	83
82) 4-Chlorotoluene	11.433	91	355897	51.203	ug/l		100
83) tert-Butylbenzene	11.695	119	371014	52.762	ug/l		98
84) 1,2,4-Trimethylbenzene	11.732	105	356756	52.008	ug/l		100
85) sec-Butylbenzene	11.872	105	449565	51.727	ug/l		100
86) p-Isopropyltoluene	11.988	119	382972	52.414	ug/l		99
87) 1,3-Dichlorobenzene	11.951	146	204683	50.712	ug/l		99
88) 1,4-Dichlorobenzene	12.024	146	209755	50.313	ug/l		100
89) n-Butylbenzene	12.311	91	359622	52.465	ug/l		99
90) Hexachloroethane	12.518	117	73687	52.931	ug/l		98
91) 1,2-Dichlorobenzene	12.317	146	201679	52.051	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	12.920	75	31400	45.943	ug/l		91
93) 1,2,4-Trichlorobenzene	13.567	180	125421	48.712	ug/l		99
94) Hexachlorobutadiene	13.707	225	51519	47.866	ug/l		99
95) Naphthalene	13.756	128	416698	50.337	ug/l		100
96) 1,2,3-Trichlorobenzene	13.939	180	122416	51.115	ug/l		99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112525\
Data File : VX048672.D
Acq On : 25 Nov 2025 09:48
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 11/26/2025
Supervised By :Mahesh Dadoda 11/26/2025

Quant Time: Nov 26 00:52:57 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 05:08:11 2025
Response via : Initial Calibration

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

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

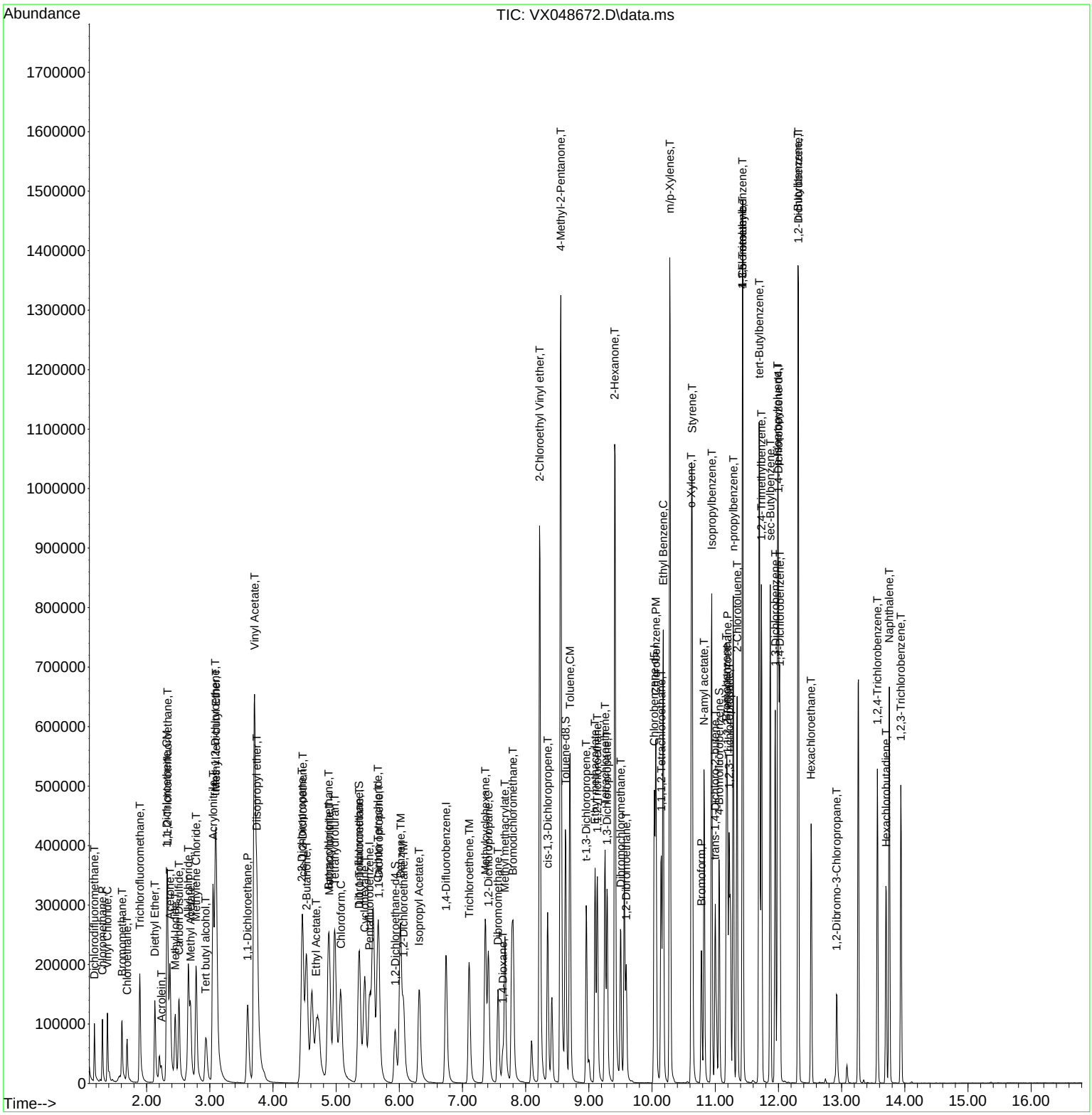
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112525\
Data File : VX048672.D
Acq On : 25 Nov 2025 09:48
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 26 00:52:57 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 05:08:11 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 11/26/2025
Supervised By :Mahesh Dadoda 11/26/2025



Sample Results: **VX048672.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112525\
Data File : VX048672.D
Acq On : 25 Nov 2025 09:48
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Nov 26 00:52:57 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 05:08:11 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	83	-0.01
2	T	Dichlorodifluoromethane	0.405	0.413	-2.0	81	0.00
3	P	Chloromethane	0.537	0.483	10.1	68	0.00
4	C	Vinyl Chloride	0.608	0.527	13.3#	73	0.00
5	T	Bromomethane	0.384	0.368	4.2	72	0.00
6	T	Chloroethane	0.398	0.346	13.1	75	0.00
7	T	Trichlorofluoromethane	0.963	0.919	4.6	86	0.00
8	T	Diethyl Ether	0.386	0.382	1.0	81	0.00
9	T	1,1,2-Trichlorotrifluoroeth	0.557	0.610	-9.5	99	0.00
10	T	Methyl Iodide	0.825	0.812	1.6	82	0.00
11	T	Tert butyl alcohol	0.132	0.165	-25.0	99	0.00
12	CM	1,1-Dichloroethene	0.582	0.575	1.2#	88	0.00
13	T	Acrolein	0.019	0.024	-26.3#	99	0.00
14	T	Allyl chloride	1.084	1.087	-0.3	86	0.00
15	T	Acrylonitrile	0.385	0.454	-17.9	94	0.00
16	T	Acetone	0.330	0.314	4.8	79	0.00
17	T	Carbon Disulfide	1.638	1.321	19.4	74	0.00
18	T	Methyl Acetate	0.906	1.064	-17.4	102	0.00
19	T	Methyl tert-butyl Ether	2.055	2.362	-14.9	93	0.00
20	T	Methylene Chloride	0.678	0.693	-2.2	89	0.00
21	T	trans-1,2-Dichloroethene	0.617	0.606	1.8	85	0.00
22	T	Diisopropyl ether	2.081	2.259	-8.6	91	0.00
23	T	Vinyl Acetate	1.822	1.987	-9.1	91	0.00
24	P	1,1-Dichloroethane	1.142	1.173	-2.7	89	0.00
25	T	2-Butanone	0.488	0.538	-10.2	89	0.00
26	T	2,2-Dichloropropane	0.973	1.024	-5.2	97	0.00
27	T	cis-1,2-Dichloroethene	0.754	0.757	-0.4	87	-0.01
28	T	Bromochloromethane	0.561	0.864	-54.0#	133	0.00
29	T	Tetrahydrofuran	0.348	0.373	-7.2	89	-0.01
30	C	Chloroform	1.179	1.265	-7.3#	94	-0.01
31	T	Cyclohexane	0.936	0.866	7.5	83	0.00
32	T	1,1,1-Trichloroethane	1.029	1.095	-6.4	94	0.00
33	S	1,2-Dichloroethane-d4	0.697	0.662	5.0	81	-0.01
34	I	1,4-Difluorobenzene	1.000	1.000	0.0	84	0.00
35	S	Dibromofluoromethane	0.378	0.318	15.9	77	-0.01
36	T	1,1-Dichloropropene	0.507	0.443	12.6	88	0.00
37	T	Ethyl Acetate	0.713	0.731	-2.5	93	-0.01
38	T	Carbon Tetrachloride	0.577	0.548	5.0	95	0.00
39	T	Methylcyclohexane	0.569	0.528	7.2	87	0.00
40	TM	Benzene	1.571	1.400	10.9	84	0.00
41	T	Methacrylonitrile	0.314	0.327	-4.1	93	-0.01
42	TM	1,2-Dichloroethane	0.538	0.542	-0.7	95	0.00
43	T	Isopropyl Acetate	1.003	0.982	2.1	89	-0.01
44	TM	Trichloroethene	0.375	0.353	5.9	84	0.00
45	C	1,2-Dichloropropane	0.361	0.377	-4.4#	89	0.00
46	T	Dibromomethane	0.263	0.286	-8.7	90	0.00
47	T	Bromodichloromethane	0.526	0.600	-14.1	93	0.00
48	T	Methyl methacrylate	0.446	0.509	-14.1	93	0.00

Sample Results: **VX048672.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112525\
Data File : VX048672.D
Acq On : 25 Nov 2025 09:48
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Nov 26 00:52:57 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 05:08:11 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	0.007	0.009	-28.6#	100	0.00
50	S	Toluene-d8	1.180	1.034	12.4	73	0.00
51	T	4-Methyl-2-Pentanone	0.571	0.690	-20.8	94	0.00
52	CM	Toluene	0.827	0.885	-7.0#	85	0.00
53	T	t-1,3-Dichloropropene	0.541	0.605	-11.8	89	0.00
54	T	cis-1,3-Dichloropropene	0.561	0.636	-13.4	89	0.00
55	T	1,1,2-Trichloroethane	0.330	0.390	-18.2	91	0.00
56	T	Ethyl methacrylate	0.550	0.653	-18.7	89	0.00
57	T	1,3-Dichloropropane	0.575	0.646	-12.3	88	0.00
58	T	2-Chloroethyl Vinyl ether	0.296	0.323	-9.1	77	0.00
59	T	2-Hexanone	0.425	0.503	-18.4	92	0.00
60	T	Dibromochloromethane	0.406	0.481	-18.5	93	0.00
61	T	1,2-Dibromoethane	0.358	0.410	-14.5	91	0.00
62	S	4-Bromofluorobenzene	0.440	0.397	9.8	76	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	80	0.00
64	T	Tetrachloroethene	0.363	0.366	-0.8	90	0.00
65	PM	Chlorobenzene	1.187	1.213	-2.2	88	0.00
66	T	1,1,1,2-Tetrachloroethane	0.398	0.451	-13.3	92	0.00
67	C	Ethyl Benzene	1.993	2.042	-2.5#	87	0.00
68	T	m/p-Xylenes	0.751	0.787	-4.8	87	0.00
69	T	o-Xylene	0.734	0.771	-5.0	88	0.00
70	T	Styrene	1.232	1.356	-10.1	90	0.00
71	P	Bromoform	0.367	0.411	-12.0	95	0.00
72	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	84	0.00
73	T	Isopropylbenzene	3.629	3.740	-3.1	90	0.00
74	T	N-amyl acetate	1.822	1.936	-6.3	91	0.00
75	P	1,1,2,2-Tetrachloroethane	1.280	1.355	-5.9	92	0.00
76	T	1,2,3-Trichloropropane	1.205	1.122	6.9	64	0.00
77	T	Bromobenzene	0.937	0.963	-2.8	89	0.00
78	T	n-propylbenzene	4.268	4.403	-3.2	92	0.00
79	T	2-Chlorotoluene	2.579	2.632	-2.1	91	0.00
80	T	1,3,5-Trimethylbenzene	2.959	3.059	-3.4	91	0.00
81	T	trans-1,4-Dichloro-2-butene	0.421	0.477	-13.3	92	0.00
82	T	4-Chlorotoluene	3.025	3.098	-2.4	91	0.00
83	T	tert-Butylbenzene	3.060	3.229	-5.5	92	0.00
84	T	1,2,4-Trimethylbenzene	2.985	3.105	-4.0	90	0.00
85	T	sec-Butylbenzene	3.782	3.913	-3.5	94	0.00
86	T	p-Isopropyltoluene	3.180	3.333	-4.8	94	0.00
87	T	1,3-Dichlorobenzene	1.756	1.782	-1.5	91	0.00
88	T	1,4-Dichlorobenzene	1.814	1.826	-0.7	91	0.00
89	T	n-Butylbenzene	2.983	3.130	-4.9	97	0.00
90	T	Hexachloroethane	0.606	0.641	-5.8	97	0.00
91	T	1,2-Dichlorobenzene	1.686	1.755	-4.1	91	0.00
92	T	1,2-Dibromo-3-Chloropropane	0.297	0.273	8.1	77	0.00
93	T	1,2,4-Trichlorobenzene	1.120	1.092	2.5	86	0.00
94	T	Hexachlorobutadiene	0.468	0.448	4.3	92	0.00
95	T	Naphthalene	3.603	3.627	-0.7	82	0.00

Sample Results: **VX048672.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112525\
Data File : VX048672.D
Acq On : 25 Nov 2025 09:48
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Nov 26 00:52:57 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 05:08:11 2025
Response via : Initial Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	1.042	1.065	-2.2	88	0.00

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

Sample Results: **VX048672.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112525\
Data File : VX048672.D
Acq On : 25 Nov 2025 09:48
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Nov 26 00:52:57 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 05:08:11 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	83	-0.01
2	T	Dichlorodifluoromethane	50.000	50.944	-1.9	81	0.00
3	P	Chloromethane	50.000	44.970	10.1	68	0.00
4	C	Vinyl Chloride	50.000	43.303	13.4#	73	0.00
5	T	Bromomethane	50.000	47.919	4.2	72	0.00
6	T	Chloroethane	50.000	43.398	13.2	75	0.00
7	T	Trichlorofluoromethane	50.000	47.743	4.5	86	0.00
8	T	Diethyl Ether	50.000	49.408	1.2	81	0.00
9	T	1,1,2-Trichlorotrifluoroeth	50.000	54.720	-9.4	99	0.00
10	T	Methyl Iodide	50.000	49.222	1.6	82	0.00
11	T	Tert butyl alcohol	250.000	312.208	-24.9	99	0.00
12	CM	1,1-Dichloroethene	50.000	49.402	1.2#	88	0.00
13	T	Acrolein	250.000	314.109	-25.6#	99	0.00
14	T	Allyl chloride	50.000	50.153	-0.3	86	0.00
15	T	Acrylonitrile	250.000	294.727	-17.9	94	0.00
16	T	Acetone	250.000	238.268	4.7	79	0.00
17	T	Carbon Disulfide	50.000	40.336	19.3	74	0.00
18	T	Methyl Acetate	50.000	58.710	-17.4	102	0.00
19	T	Methyl tert-butyl Ether	50.000	57.460	-14.9	93	0.00
20	T	Methylene Chloride	50.000	51.108	-2.2	89	0.00
21	T	trans-1,2-Dichloroethene	50.000	49.128	1.7	85	0.00
22	T	Diisopropyl ether	50.000	54.271	-8.5	91	0.00
23	T	Vinyl Acetate	250.000	272.618	-9.0	91	0.00
24	P	1,1-Dichloroethane	50.000	51.348	-2.7	89	0.00
25	T	2-Butanone	250.000	275.591	-10.2	89	0.00
26	T	2,2-Dichloropropane	50.000	52.594	-5.2	97	0.00
27	T	cis-1,2-Dichloroethene	50.000	50.205	-0.4	87	-0.01
28	T	Bromochloromethane	50.000	77.008	-54.0#	133	0.00
29	T	Tetrahydrofuran	250.000	267.859	-7.1	89	-0.01
30	C	Chloroform	50.000	53.638	-7.3#	94	-0.01
31	T	Cyclohexane	50.000	46.271	7.5	83	0.00
32	T	1,1,1-Trichloroethane	50.000	53.231	-6.5	94	0.00
33	S	1,2-Dichloroethane-d4	50.000	47.507	5.0	81	-0.01
34	I	1,4-Difluorobenzene	50.000	50.000	0.0	84	0.00
35	S	Dibromofluoromethane	50.000	42.030	15.9	77	-0.01
36	T	1,1-Dichloropropene	50.000	43.743	12.5	88	0.00
37	T	Ethyl Acetate	50.000	51.231	-2.5	93	-0.01
38	T	Carbon Tetrachloride	50.000	47.543	4.9	95	0.00
39	T	Methylcyclohexane	50.000	46.371	7.3	87	0.00
40	TM	Benzene	50.000	44.571	10.9	84	0.00
41	T	Methacrylonitrile	50.000	52.089	-4.2	93	-0.01
42	TM	1,2-Dichloroethane	50.000	50.396	-0.8	95	0.00
43	T	Isopropyl Acetate	50.000	48.951	2.1	89	-0.01
44	TM	Trichloroethene	50.000	47.010	6.0	84	0.00
45	C	1,2-Dichloropropane	50.000	52.206	-4.4#	89	0.00
46	T	Dibromomethane	50.000	54.197	-8.4	90	0.00
47	T	Bromodichloromethane	50.000	57.086	-14.2	93	0.00
48	T	Methyl methacrylate	50.000	57.111	-14.2	93	0.00

Sample Results: **VX048672.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112525\
Data File : VX048672.D
Acq On : 25 Nov 2025 09:48
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Nov 26 00:52:57 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 05:08:11 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	1281.966	-28.2#	100	0.00
50	S	Toluene-d8	50.000	43.794	12.4	73	0.00
51	T	4-Methyl-2-Pentanone	250.000	302.309	-20.9	94	0.00
52	CM	Toluene	50.000	53.514	-7.0#	85	0.00
53	T	t-1,3-Dichloropropene	50.000	55.884	-11.8	89	0.00
54	T	cis-1,3-Dichloropropene	50.000	56.737	-13.5	89	0.00
55	T	1,1,2-Trichloroethane	50.000	58.957	-17.9	91	0.00
56	T	Ethyl methacrylate	50.000	59.368	-18.7	89	0.00
57	T	1,3-Dichloropropane	50.000	56.147	-12.3	88	0.00
58	T	2-Chloroethyl Vinyl ether	250.000	273.272	-9.3	77	0.00
59	T	2-Hexanone	250.000	296.306	-18.5	92	0.00
60	T	Dibromochloromethane	50.000	59.282	-18.6	93	0.00
61	T	1,2-Dibromoethane	50.000	57.310	-14.6	91	0.00
62	S	4-Bromofluorobenzene	50.000	45.143	9.7	76	0.00
63	I	Chlorobenzene-d5	50.000	50.000	0.0	80	0.00
64	T	Tetrachloroethene	50.000	50.439	-0.9	90	0.00
65	PM	Chlorobenzene	50.000	51.100	-2.2	88	0.00
66	T	1,1,1,2-Tetrachloroethane	50.000	56.672	-13.3	92	0.00
67	C	Ethyl Benzene	50.000	51.238	-2.5#	87	0.00
68	T	m/p-Xylenes	100.000	104.840	-4.8	87	0.00
69	T	o-Xylene	50.000	52.512	-5.0	88	0.00
70	T	Styrene	50.000	55.042	-10.1	90	0.00
71	P	Bromoform	50.000	56.025	-12.0	95	0.00
72	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	84	0.00
73	T	Isopropylbenzene	50.000	51.527	-3.1	90	0.00
74	T	N-amyl acetate	50.000	53.115	-6.2	91	0.00
75	P	1,1,2,2-Tetrachloroethane	50.000	52.941	-5.9	92	0.00
76	T	1,2,3-Trichloropropane	50.000	46.589	6.8	64	0.00
77	T	Bromobenzene	50.000	51.360	-2.7	89	0.00
78	T	n-propylbenzene	50.000	51.590	-3.2	92	0.00
79	T	2-Chlorotoluene	50.000	51.038	-2.1	91	0.00
80	T	1,3,5-Trimethylbenzene	50.000	51.690	-3.4	91	0.00
81	T	trans-1,4-Dichloro-2-butene	50.000	56.677	-13.4	92	0.00
82	T	4-Chlorotoluene	50.000	51.203	-2.4	91	0.00
83	T	tert-Butylbenzene	50.000	52.762	-5.5	92	0.00
84	T	1,2,4-Trimethylbenzene	50.000	52.008	-4.0	90	0.00
85	T	sec-Butylbenzene	50.000	51.727	-3.5	94	0.00
86	T	p-Isopropyltoluene	50.000	52.414	-4.8	94	0.00
87	T	1,3-Dichlorobenzene	50.000	50.712	-1.4	91	0.00
88	T	1,4-Dichlorobenzene	50.000	50.313	-0.6	91	0.00
89	T	n-Butylbenzene	50.000	52.465	-4.9	97	0.00
90	T	Hexachloroethane	50.000	52.931	-5.9	97	0.00
91	T	1,2-Dichlorobenzene	50.000	52.051	-4.1	91	0.00
92	T	1,2-Dibromo-3-Chloropropane	50.000	45.943	8.1	77	0.00
93	T	1,2,4-Trichlorobenzene	50.000	48.712	2.6	86	0.00
94	T	Hexachlorobutadiene	50.000	47.866	4.3	92	0.00
95	T	Naphthalene	50.000	50.337	-0.7	82	0.00

Sample Results: **VX048672.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112525\
Data File : VX048672.D
Acq On : 25 Nov 2025 09:48
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Nov 26 00:52:57 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 05:08:11 2025
Response via : Initial Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	50.000	51.115	-2.2	88	0.00

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

QC SAMPLE DATA

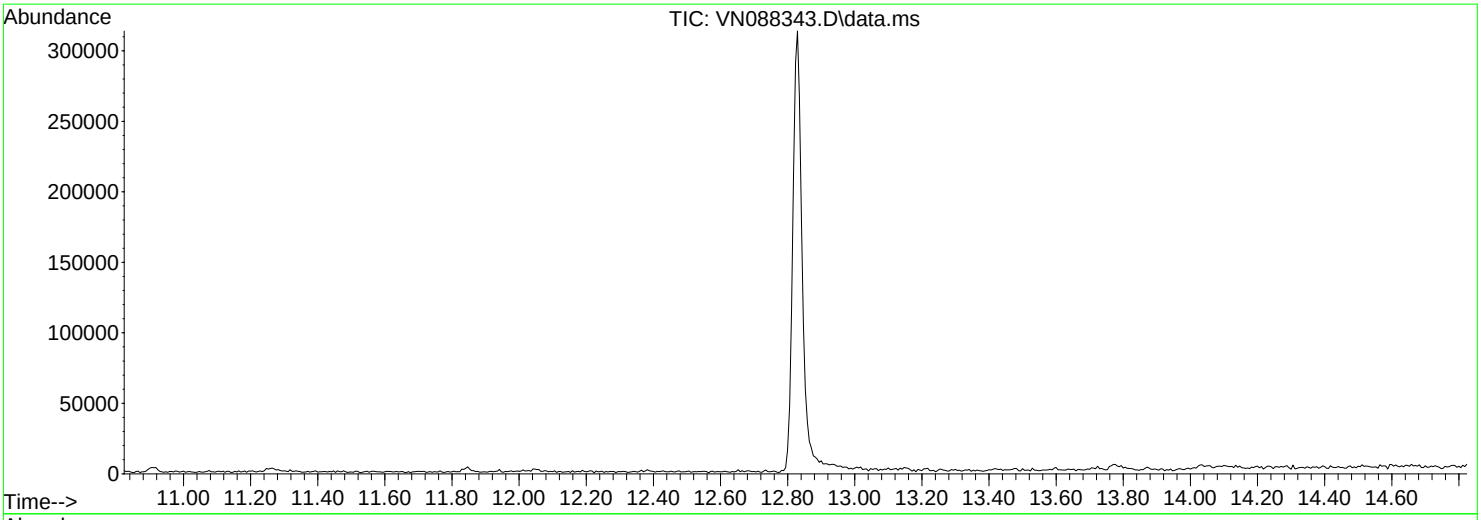
Sample Results: **VN088343.D**

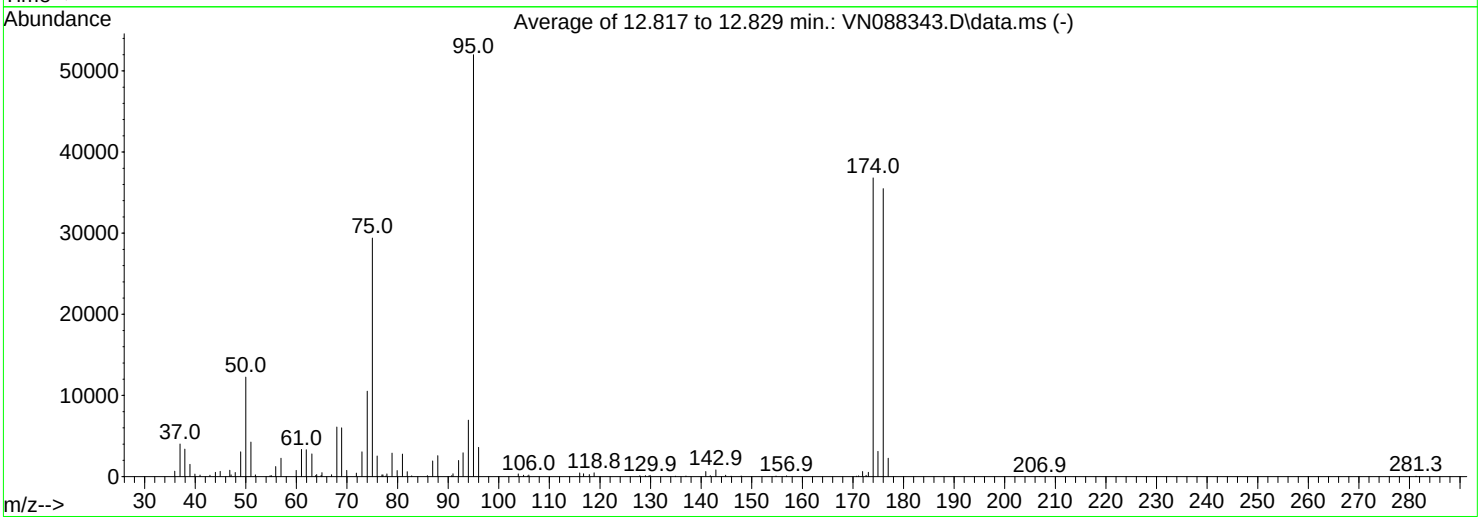
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN112425\
Data File : VN088343.D
Acq On : 24 Nov 2025 08:17
Operator : JC\MD
Sample : BFB
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Title : SW846 8260
Last Update : Tue Nov 25 01:34:52 2025





AutoFind: Scans 1847, 1848, 1849; Background Corrected with Scan 1839

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.6	12249	PASS
75	95	30	60	56.6	29403	PASS
95	95	100	100	100.0	51987	PASS
96	95	5	9	6.9	3605	PASS
173	174	0.00	2	1.4	523	PASS
174	95	50	100	70.8	36808	PASS
175	174	5	9	8.4	3099	PASS
176	174	95	101	96.4	35493	PASS
177	176	5	9	6.4	2260	PASS

Average of 12.817 to 12.829 min.: VN088343.D\data.ms
BFB
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.95	660	47.90	508	61.95	3309	72.95	3051
37.00	4014	49.00	3039	63.05	2784	74.00	10530
37.95	3391	50.00	12249	63.80	113	75.00	29405
38.95	1502	51.00	4245	64.00	255	75.95	2535
39.95	311	51.90	213	64.90	158	76.90	202
40.95	180	54.80	110	65.05	474	77.10	198
42.90	161	55.10	103	66.95	229	77.70	63
44.00	531	55.90	1233	68.00	6110	77.90	320
44.95	637	56.95	2258	68.95	5997	78.90	2897
46.85	771	59.95	755	69.95	751	79.90	742
47.10	213	61.00	3348	71.85	421	80.95	2778

Instrument :
MSVOA_N
ClientSampleId :
BFB

Average of 12.817 to 12.829 min.: VN088343.D\data.ms
BFB
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
81.90	605	96.00	3605	129.70	84	156.90	87
82.80	89	103.85	320	129.90	147	170.70	51
85.90	119	104.90	161	134.90	52	171.10	82
86.95	1933	105.70	75	137.00	60	171.90	617
87.95	2571	105.95	190	140.90	629	172.60	144
90.70	103	116.00	445	141.80	113	173.05	523
90.95	348	116.75	347	142.90	817	174.00	36808
92.05	1981	117.90	250	144.85	179	174.95	3099
92.95	2935	118.85	465	145.90	56	176.00	35493
94.00	6957	127.90	108	147.90	68	176.95	2260
95.00	51987	129.00	114	154.80	69	206.95	15

Average of 12.817 to 12.829 min.: VN088343.D\data.ms
BFB
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
281.30	53						

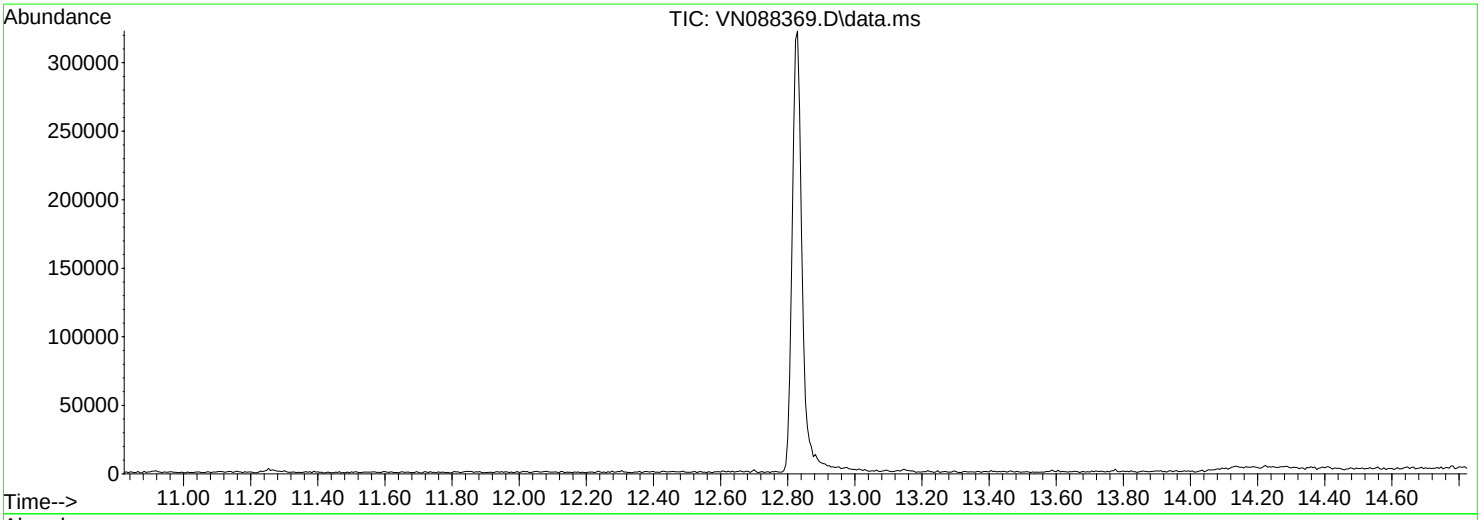
Sample Results: **VN088369.D**

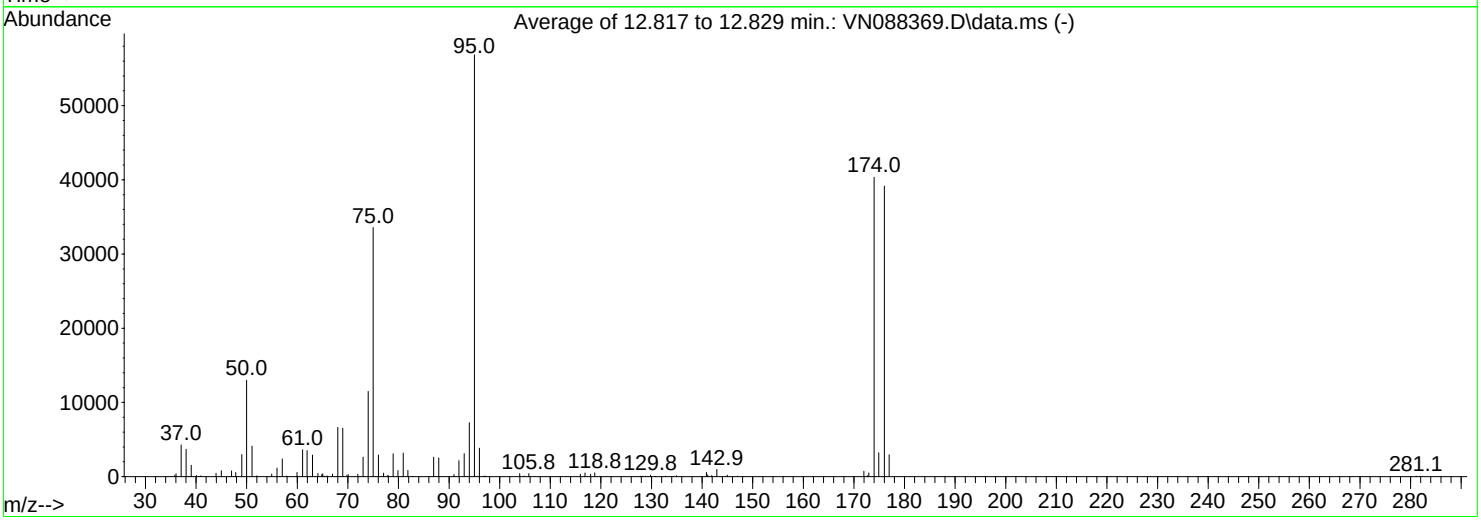
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120125\
Data File : VN088369.D
Acq On : 01 Dec 2025 08:49
Operator : JC\MD
Sample : BFB
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Title : SW846 8260
Last Update : Tue Nov 25 01:34:52 2025





AutoFind: Scans 1847, 1848, 1849; Background Corrected with Scan 1838

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.9	13006	PASS
75	95	30	60	59.1	33576	PASS
95	95	100	100	100.0	56845	PASS
96	95	5	9	6.7	3835	PASS
173	174	0.00	2	1.2	489	PASS
174	95	50	100	71.0	40341	PASS
175	174	5	9	8.0	3213	PASS
176	174	95	101	97.1	39165	PASS
177	176	5	9	7.5	2949	PASS

Average of 12.817 to 12.829 min.: VN088369.D\data.ms
BFB
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.80	190	49.05	2976	61.95	3517	70.05	31
36.05	384	50.00	13006	63.00	2917	71.95	33
37.05	4272	51.05	4113	64.10	433	73.00	263
38.05	3684	51.90	88	64.85	304	74.00	1149
39.05	1525	52.10	68	65.05	399	75.00	33576
40.10	142	54.95	339	65.40	72	76.05	2917
40.95	105	56.00	1161	65.90	102	77.05	468
43.95	455	57.05	2400	66.95	355	77.80	128
45.00	808	57.90	81	68.00	6639	78.00	126
47.00	782	59.95	560	69.00	6543	78.95	3079
47.85	567	61.05	3625	69.80	174	79.90	824

Instrument :
MSVOA_N
ClientSampleId :
BFB

Average of 12.817 to 12.829 min.: VN088369.D\data.ms
BFB
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
80.95	3198	96.00	3835	128.20	67	147.00	61
81.85	841	96.90	89	128.80	61	148.00	50
82.80	51	97.20	58	129.80	188	171.95	743
86.00	50	103.95	408	130.80	50	172.70	124
86.95	2627	104.80	82	132.80	67	172.95	489
87.95	2534	105.75	414	134.95	138	174.00	40341
90.95	286	115.95	332	140.85	577	174.90	3213
91.95	2167	116.85	505	141.10	238	176.00	39165
93.00	3106	117.95	315	141.90	151	176.95	2949
94.00	7272	118.80	513	142.90	969	281.10	73
95.00	56845	127.80	56	144.95	206		

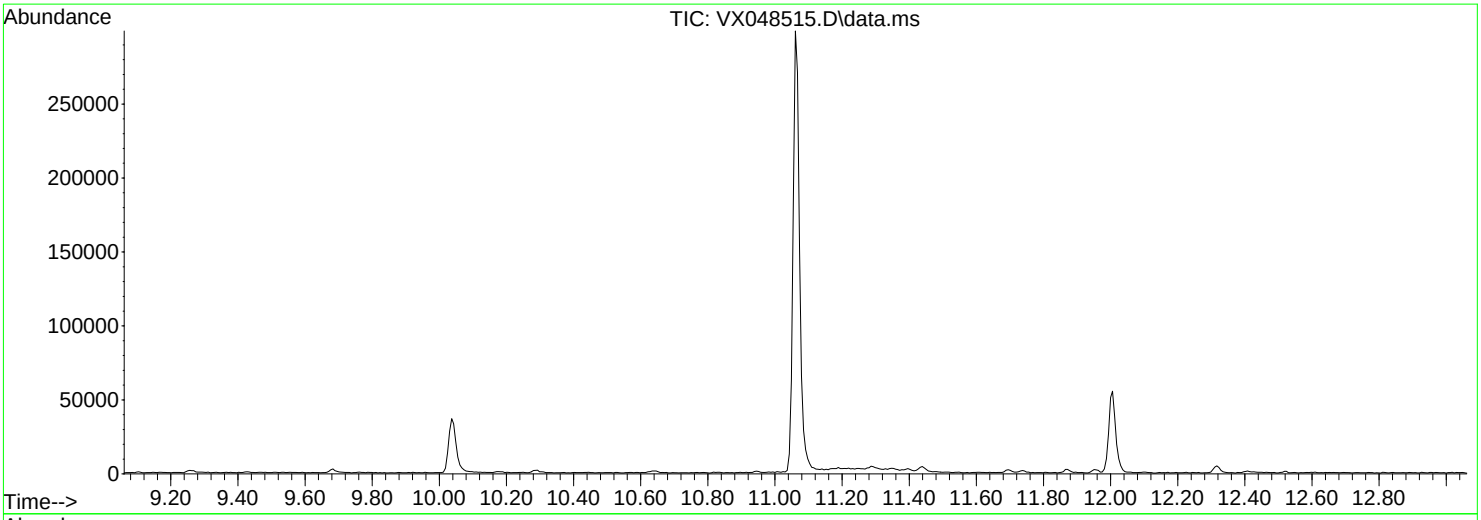
Sample Results: **VX048515.D**

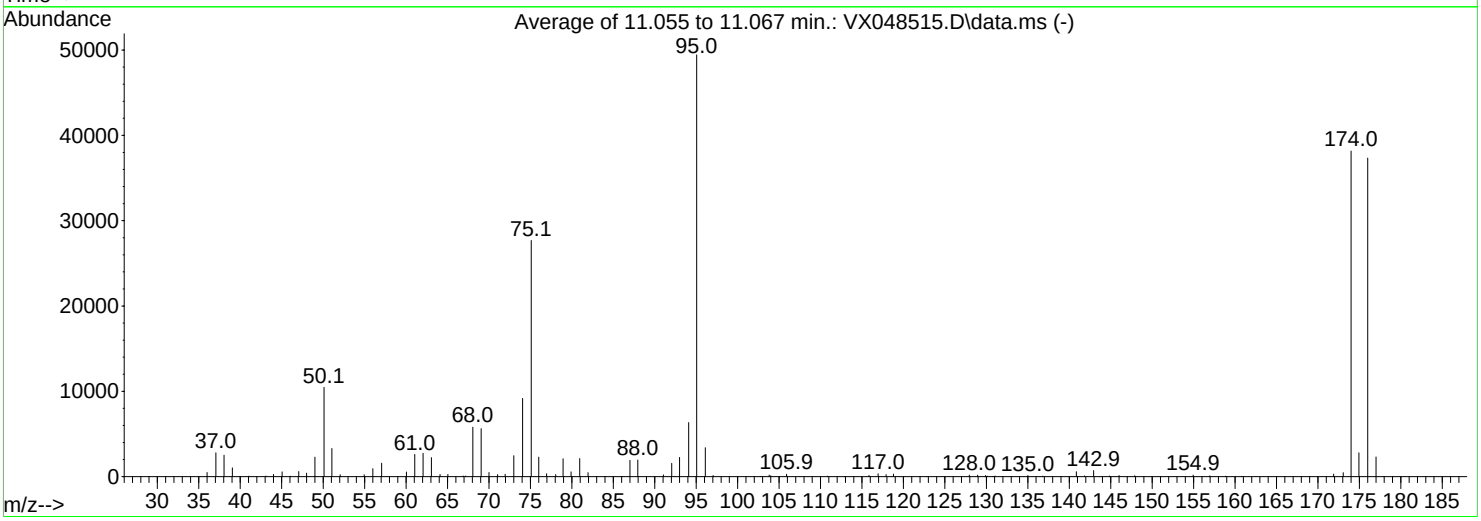
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX110725\
Data File : VX048515.D
Acq On : 07 Nov 2025 13:06
Operator : JC/MD
Sample : BFB
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Title : SW846 8260
Last Update : Sat Nov 08 05:08:11 2025





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

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.2	10458	PASS
75	95	30	60	56.0	27675	PASS
95	95	100	100	100.0	49437	PASS
96	95	5	9	6.8	3386	PASS
173	174	0.00	2	1.2	472	PASS
174	95	50	100	77.2	38160	PASS
175	174	5	9	7.3	2798	PASS
176	174	95	101	97.9	37347	PASS
177	176	5	9	6.2	2308	PASS

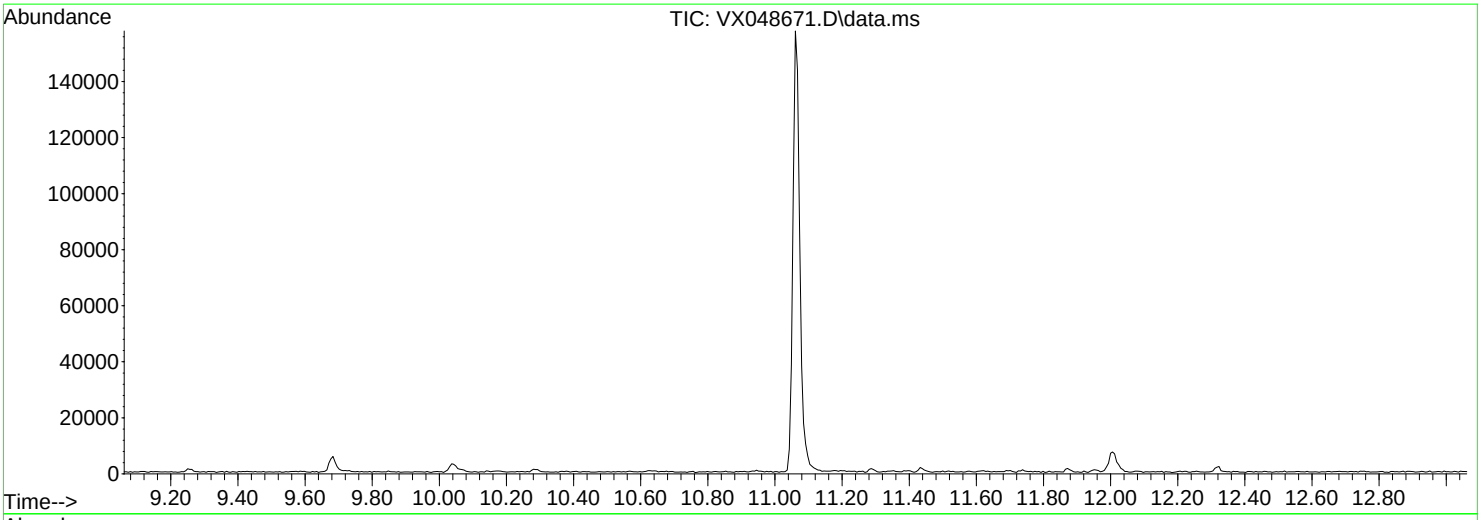
Sample Results: **VX048671.D**

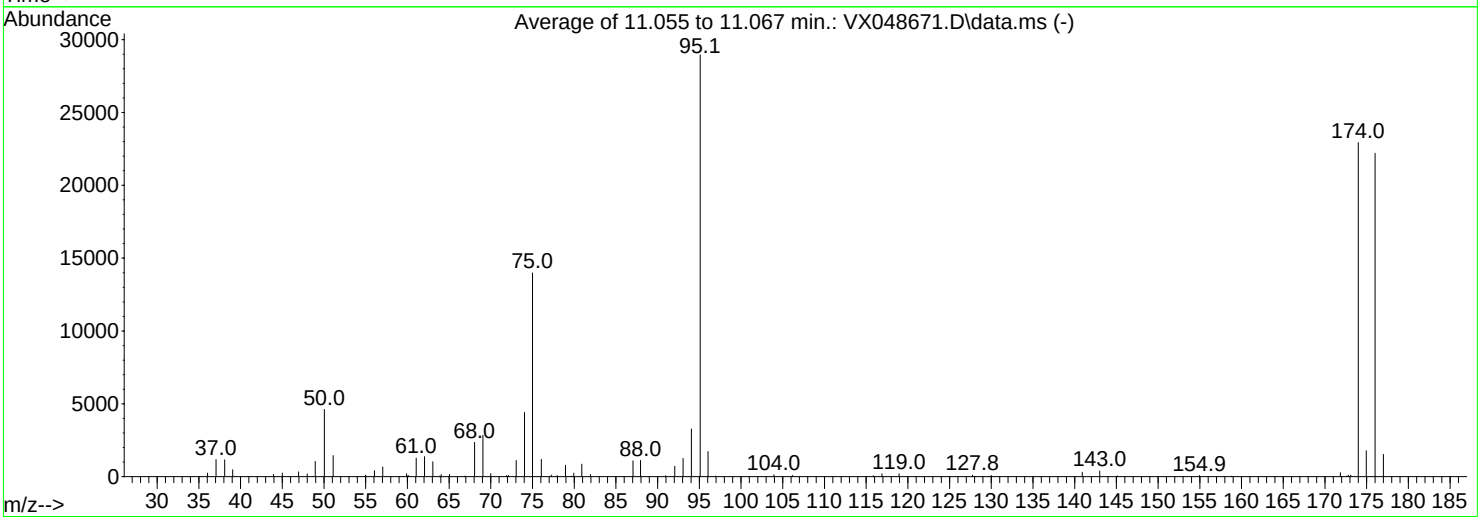
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112525\
Data File : VX048671.D
Acq On : 25 Nov 2025 08:48
Operator : JC/MD
Sample : BFB
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Title : SW846 8260
Last Update : Sat Nov 08 05:08:11 2025





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

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.9	4613	PASS
75	95	30	60	48.3	13980	PASS
95	95	100	100	100.0	28957	PASS
96	95	5	9	5.9	1720	PASS
173	174	0.00	2	0.4	100	PASS
174	95	50	100	79.2	22933	PASS
175	174	5	9	7.7	1775	PASS
176	174	95	101	96.8	22195	PASS
177	176	5	9	6.9	1525	PASS

Raw Data: **VN088372.D**

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

Report of Analysis

Client:	G Environmental			Date Collected:	
Project:	Union			Date Received:	
Client Sample ID:	VN1201WBL01			SDG No.:	Q3715
Lab Sample ID:	VN1201WBL01			Matrix:	Water
Analytical Method:	8260D	Level:	LOW	% Solid:	0
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL	Test:	VOCMS Group1

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
TARGETS									
75-71-8	Dichlorodifluoromethane	0.22	U	1	0.22	1.00	ug/L	12/01/25 10:53	VN120125
74-87-3	Chloromethane	0.32	U	1	0.32	1.00	ug/L	12/01/25 10:53	VN120125
75-01-4	Vinyl Chloride	0.26	U	1	0.26	1.00	ug/L	12/01/25 10:53	VN120125
74-83-9	Bromomethane	1.40	U	1	1.40	5.00	ug/L	12/01/25 10:53	VN120125
75-00-3	Chloroethane	0.47	U	1	0.47	1.00	ug/L	12/01/25 10:53	VN120125
75-69-4	Trichlorofluoromethane	0.33	U	1	0.33	1.00	ug/L	12/01/25 10:53	VN120125
76-13-1	1,1,2-Trichlorotrifluoroethane	0.25	U	1	0.25	1.00	ug/L	12/01/25 10:53	VN120125
75-65-0	Tert butyl alcohol	5.50	U	1	5.50	25.0	ug/L	12/01/25 10:53	VN120125
75-35-4	1,1-Dichloroethene	0.23	U	1	0.23	1.00	ug/L	12/01/25 10:53	VN120125
67-64-1	Acetone	1.50	U	1	1.50	5.00	ug/L	12/01/25 10:53	VN120125
75-15-0	Carbon Disulfide	0.21	U	1	0.21	1.00	ug/L	12/01/25 10:53	VN120125
1634-04-4	Methyl tert-butyl Ether	0.16	U	1	0.16	1.00	ug/L	12/01/25 10:53	VN120125
79-20-9	Methyl Acetate	0.27	U	1	0.27	1.00	ug/L	12/01/25 10:53	VN120125
75-09-2	Methylene Chloride	0.28	U	1	0.28	1.00	ug/L	12/01/25 10:53	VN120125
156-60-5	trans-1,2-Dichloroethene	0.23	U	1	0.23	1.00	ug/L	12/01/25 10:53	VN120125
75-34-3	1,1-Dichloroethane	0.23	U	1	0.23	1.00	ug/L	12/01/25 10:53	VN120125
110-82-7	Cyclohexane	1.50	U	1	1.50	5.00	ug/L	12/01/25 10:53	VN120125
78-93-3	2-Butanone	0.98	U	1	0.98	5.00	ug/L	12/01/25 10:53	VN120125
56-23-5	Carbon Tetrachloride	0.25	U	1	0.25	1.00	ug/L	12/01/25 10:53	VN120125
156-59-2	cis-1,2-Dichloroethene	0.19	U	1	0.19	1.00	ug/L	12/01/25 10:53	VN120125
74-97-5	Bromochloromethane	0.22	U	1	0.22	1.00	ug/L	12/01/25 10:53	VN120125
67-66-3	Chloroform	0.25	U	1	0.25	1.00	ug/L	12/01/25 10:53	VN120125
71-55-6	1,1,1-Trichloroethane	0.20	U	1	0.20	1.00	ug/L	12/01/25 10:53	VN120125
108-87-2	Methylcyclohexane	0.16	U	1	0.16	1.00	ug/L	12/01/25 10:53	VN120125
71-43-2	Benzene	0.15	U	1	0.15	1.00	ug/L	12/01/25 10:53	VN120125
107-06-2	1,2-Dichloroethane	0.22	U	1	0.22	1.00	ug/L	12/01/25 10:53	VN120125
79-01-6	Trichloroethene	0.090	U	1	0.090	1.00	ug/L	12/01/25 10:53	VN120125
78-87-5	1,2-Dichloropropane	0.20	U	1	0.20	1.00	ug/L	12/01/25 10:53	VN120125
75-27-4	Bromodichloromethane	0.22	U	1	0.22	1.00	ug/L	12/01/25 10:53	VN120125
108-10-1	4-Methyl-2-Pentanone	0.68	U	1	0.68	5.00	ug/L	12/01/25 10:53	VN120125
108-88-3	Toluene	0.14	U	1	0.14	1.00	ug/L	12/01/25 10:53	VN120125
10061-02-6	t-1,3-Dichloropropene	0.17	U	1	0.17	1.00	ug/L	12/01/25 10:53	VN120125
10061-01-5	cis-1,3-Dichloropropene	0.16	U	1	0.16	1.00	ug/L	12/01/25 10:53	VN120125
79-00-5	1,1,2-Trichloroethane	0.21	U	1	0.21	1.00	ug/L	12/01/25 10:53	VN120125
591-78-6	2-Hexanone	0.89	U	1	0.89	5.00	ug/L	12/01/25 10:53	VN120125
124-48-1	Dibromochloromethane	0.18	U	1	0.18	1.00	ug/L	12/01/25 10:53	VN120125
106-93-4	1,2-Dibromoethane	0.15	U	1	0.15	1.00	ug/L	12/01/25 10:53	VN120125
127-18-4	Tetrachloroethene	0.23	U	1	0.23	1.00	ug/L	12/01/25 10:53	VN120125
108-90-7	Chlorobenzene	0.12	U	1	0.12	1.00	ug/L	12/01/25 10:53	VN120125
100-41-4	Ethyl Benzene	0.13	U	1	0.13	1.00	ug/L	12/01/25 10:53	VN120125
179601-23-1	m/p-Xylenes	0.24	U	1	0.24	2.00	ug/L	12/01/25 10:53	VN120125
95-47-6	o-Xylene	0.12	U	1	0.12	1.00	ug/L	12/01/25 10:53	VN120125
100-42-5	Styrene	0.15	U	1	0.15	1.00	ug/L	12/01/25 10:53	VN120125

Raw Data: **VN088372.D**

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

Report of Analysis

Client:	G Environmental			Date Collected:	
Project:	Union			Date Received:	
Client Sample ID:	VN1201WBL01			SDG No.:	Q3715
Lab Sample ID:	VN1201WBL01			Matrix:	Water
Analytical Method:	8260D	Level:	LOW	% Solid:	0
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL	Test:	VOCMS Group1

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
75-25-2	Bromoform	0.19	U	1	0.19	1.00	ug/L	12/01/25 10:53	VN120125
98-82-8	Isopropylbenzene	0.12	U	1	0.12	1.00	ug/L	12/01/25 10:53	VN120125
79-34-5	1,1,2,2-Tetrachloroethane	0.26	U	1	0.26	1.00	ug/L	12/01/25 10:53	VN120125
541-73-1	1,3-Dichlorobenzene	0.16	U	1	0.16	1.00	ug/L	12/01/25 10:53	VN120125
106-46-7	1,4-Dichlorobenzene	0.19	U	1	0.19	1.00	ug/L	12/01/25 10:53	VN120125
95-50-1	1,2-Dichlorobenzene	0.16	U	1	0.16	1.00	ug/L	12/01/25 10:53	VN120125
96-12-8	1,2-Dibromo-3-Chloropropane	0.53	U	1	0.53	1.00	ug/L	12/01/25 10:53	VN120125
120-82-1	1,2,4-Trichlorobenzene	0.20	U	1	0.20	1.00	ug/L	12/01/25 10:53	VN120125
87-61-6	1,2,3-Trichlorobenzene	0.20	U	1	0.20	1.00	ug/L	12/01/25 10:53	VN120125
SURROGATES									
17060-07-0	1,2-Dichloroethane-d4	57.8			70 (74) - 130 (125)	116%	SPK: 50		
1868-53-7	Dibromofluoromethane	52.2			70 (75) - 130 (124)	104%	SPK: 50		
2037-26-5	Toluene-d8	50.0			70 (86) - 130 (113)	100%	SPK: 50		
460-00-4	4-Bromofluorobenzene	52.4			70 (77) - 130 (121)	105%	SPK: 50		
INTERNAL STANDARDS		**Area Count**							
363-72-4	Pentafluorobenzene	188000							
540-36-3	1,4-Difluorobenzene	435000							
3114-55-4	Chlorobenzene-d5	418000							
3855-82-1	1,4-Dichlorobenzene-d4	199000							

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120125\
Data File : VN088372.D
Acq On : 01 Dec 2025 10:53
Operator : JC\MD
Sample : VN1201WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN1201WBL01

Quant Time: Dec 02 00:09:38 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:34:52 2025
Response via : Initial Calibration

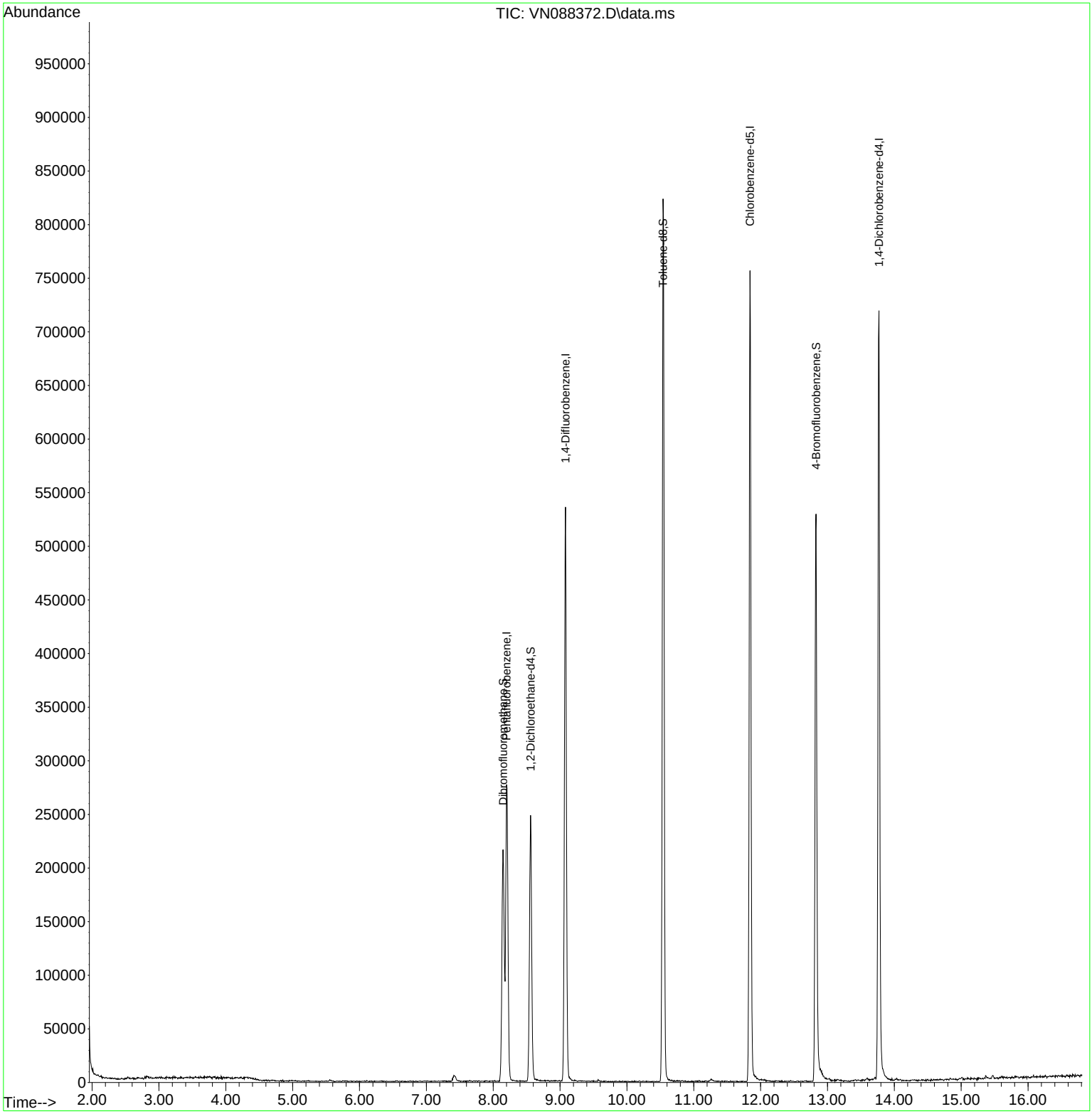
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.200	168	188076	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.082	114	435319	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.841	117	418422	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.770	152	198799	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.559	65	204928	57.841	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 115.680%			
35) Dibromofluoromethane	8.147	113	157356	52.161	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 104.320%			
50) Toluene-d8	10.541	98	561082	49.987	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 99.980%			
62) 4-Bromofluorobenzene	12.829	95	201912	52.426	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 104.860%			
Target Compounds						Qvalue

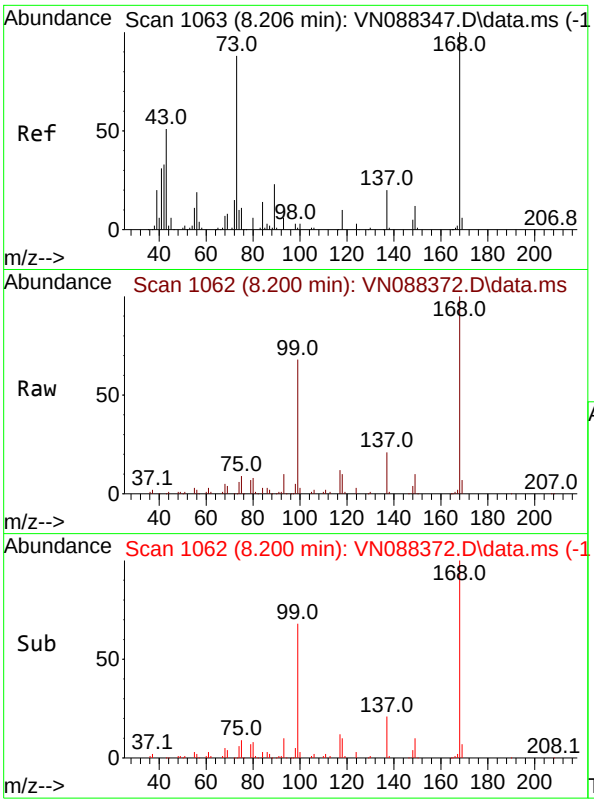
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120125\
Data File : VN088372.D
Acq On : 01 Dec 2025 10:53
Operator : JC\MD
Sample : VN1201WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN1201WBL01

Quant Time: Dec 02 00:09:38 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:34:52 2025
Response via : Initial Calibration



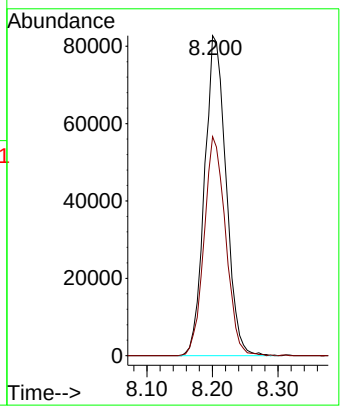


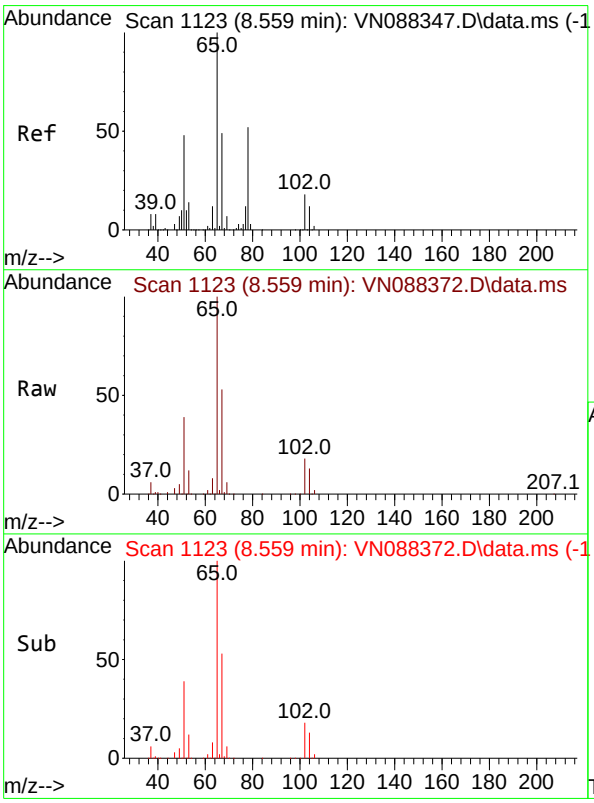
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.200 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN088372.D
Acq: 01 Dec 2025 10:53

Instrument :
MSVOA_N
ClientSampleId :
VN1201WBL01

Tgt Ion:168 Resp: 188076

Ion	Ratio	Lower	Upper
168	100		
99	68.5	57.1	85.7

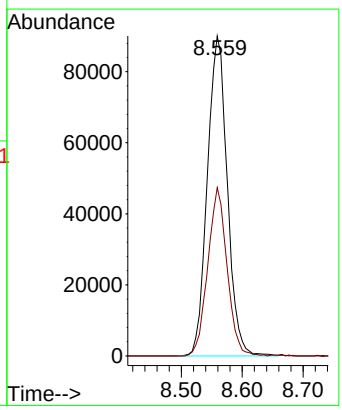


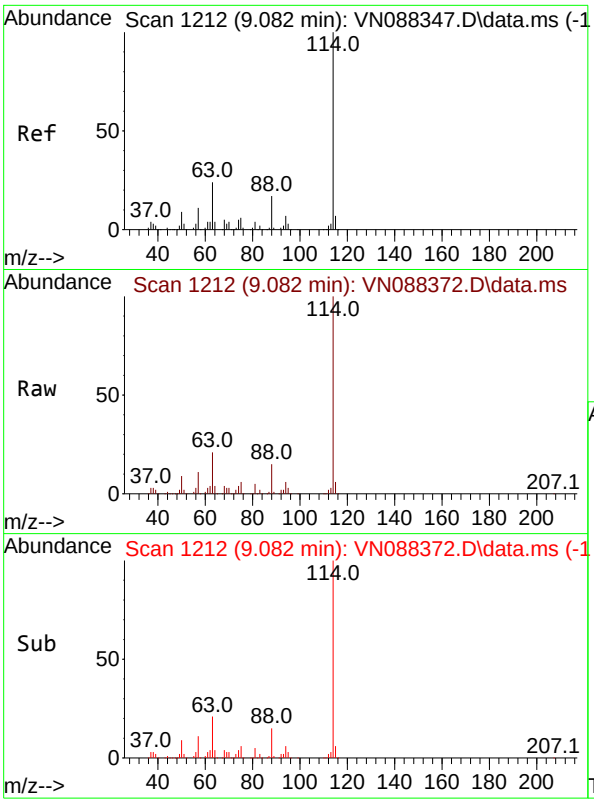


#33
1,2-Dichloroethane-d4
Concen: 57.841 ug/l
RT: 8.559 min Scan# 1123
Delta R.T. 0.000 min
Lab File: VN088372.D
Acq: 01 Dec 2025 10:53

Tgt Ion: 65 Resp: 204928

Ion	Ratio	Lower	Upper
65	100		
67	50.8	0.0	100.8



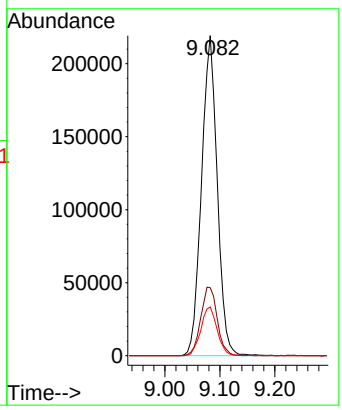


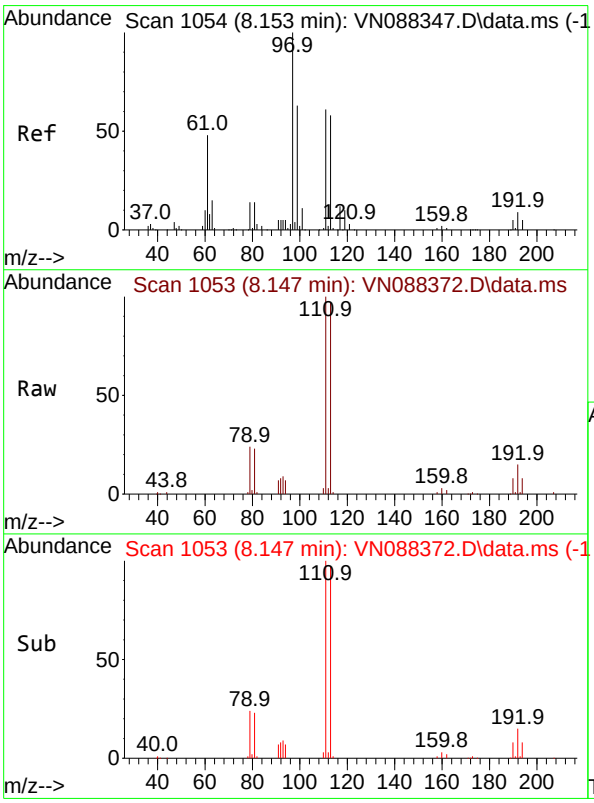
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.082 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN088372.D
Acq: 01 Dec 2025 10:53

Instrument :
MSVOA_N
ClientSampleId :
VN1201WBL01

Tgt Ion:114 Resp: 435319

Ion	Ratio	Lower	Upper
114	100		
63	21.3	0.0	49.0
88	15.3	0.0	34.0

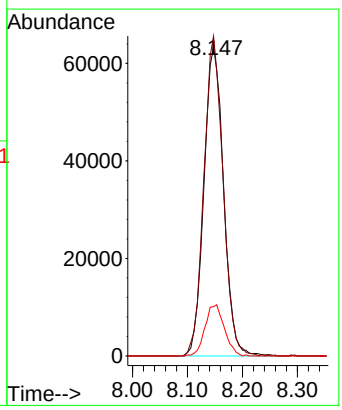


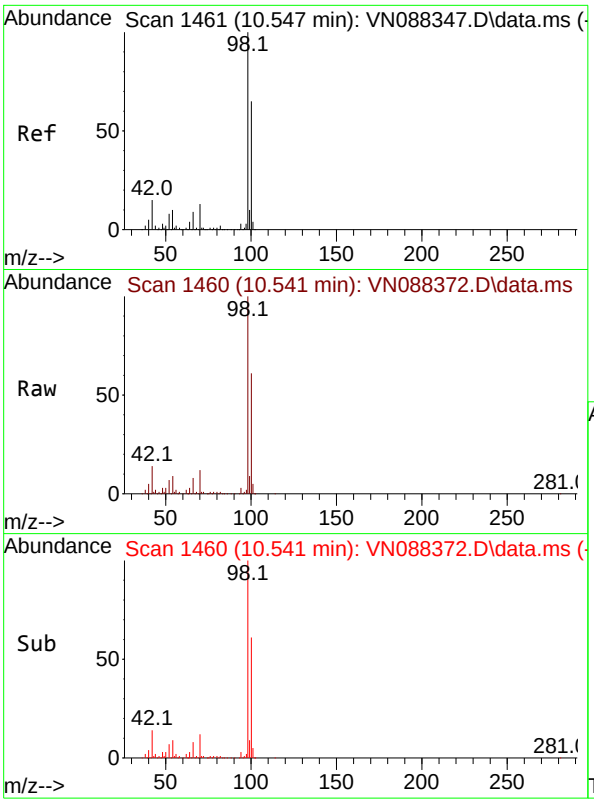


#35
Dibromofluoromethane
Concen: 52.161 ug/l
RT: 8.147 min Scan# 1053
Delta R.T. -0.006 min
Lab File: VN088372.D
Acq: 01 Dec 2025 10:53

Tgt Ion:113 Resp: 157356

Ion	Ratio	Lower	Upper
113	100		
111	101.1	82.5	123.7
192	16.3	12.8	19.2



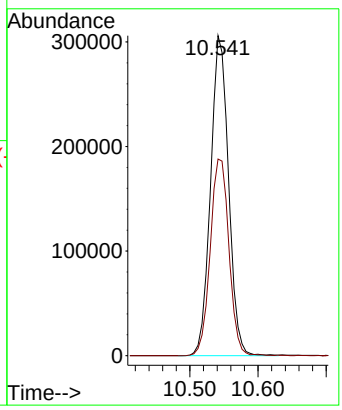


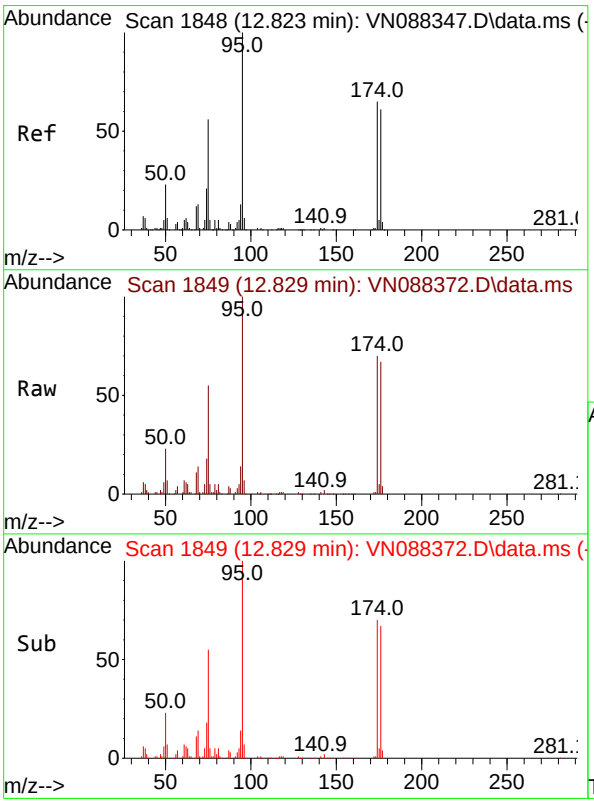
#50
Toluene-d8
Concen: 49.987 ug/l
RT: 10.541 min Scan# 14
Delta R.T. -0.006 min
Lab File: VN088372.D
Acq: 01 Dec 2025 10:53

Instrument :
MSVOA_N
ClientSampleId :
VN1201WBL01

Tgt Ion: 98 Resp: 561082

Ion	Ratio	Lower	Upper
98	100		
100	64.0	52.2	78.2

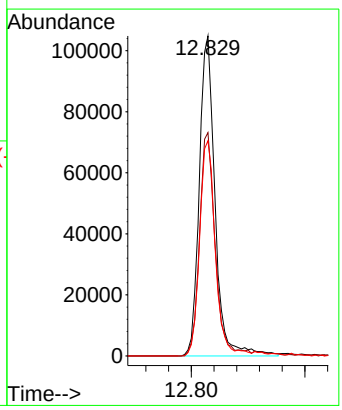


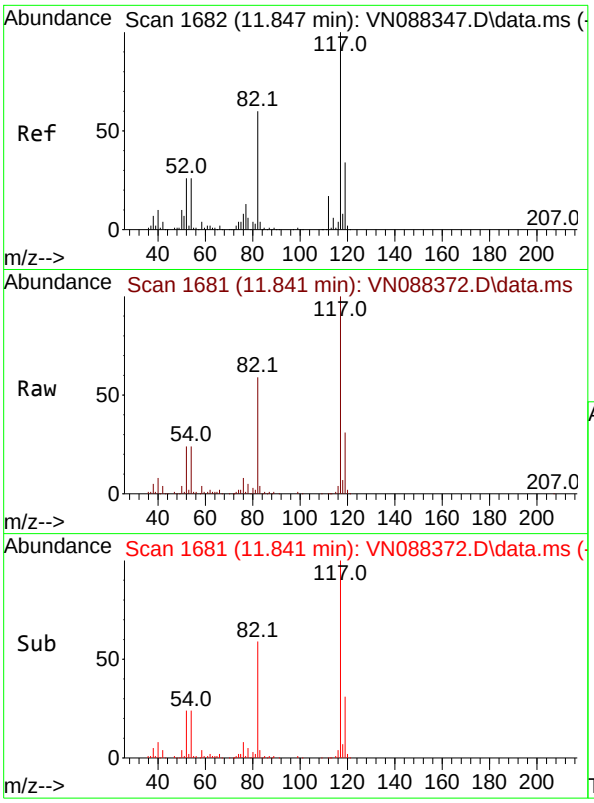


#62
4-Bromofluorobenzene
Concen: 52.426 ug/l
RT: 12.829 min Scan# 1849
Delta R.T. 0.006 min
Lab File: VN088372.D
Acq: 01 Dec 2025 10:53

Tgt Ion: 95 Resp: 201912

Ion	Ratio	Lower	Upper
95	100		
174	69.2	0.0	139.0
176	67.0	0.0	132.4



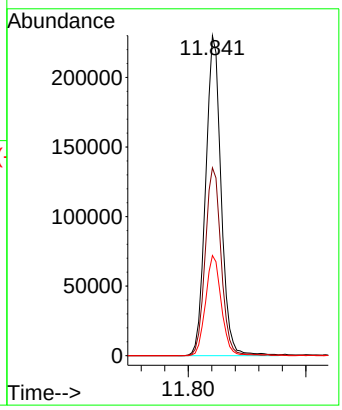


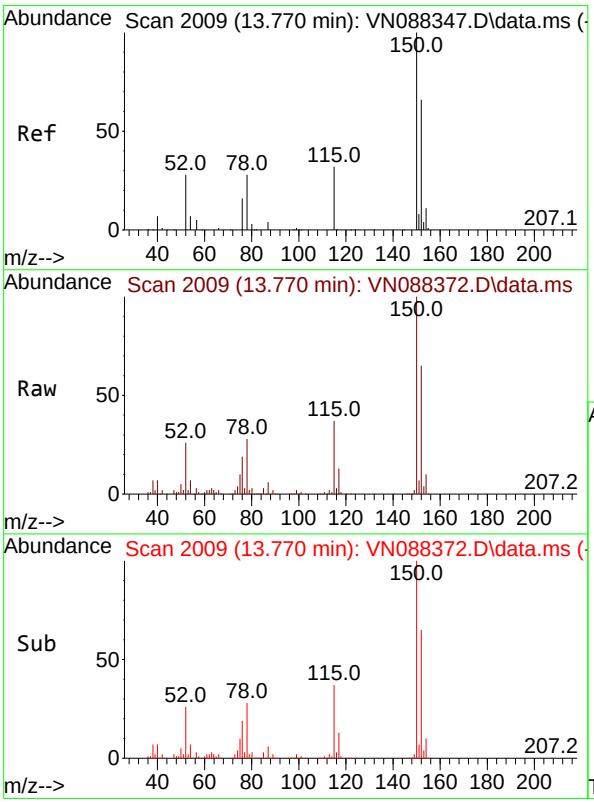
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.841 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN088372.D
Acq: 01 Dec 2025 10:53

Instrument :
MSVOA_N
ClientSampleId :
VN1201WBL01

Tgt Ion:117 Resp: 418422

Ion	Ratio	Lower	Upper
117	100		
82	58.7	47.8	71.8
119	31.3	26.9	40.3

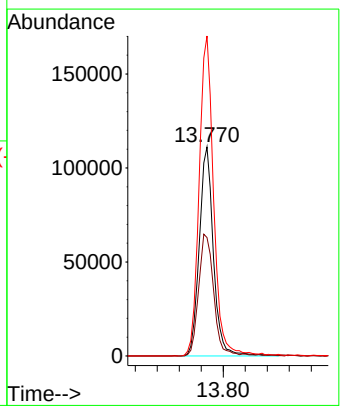




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.770 min Scan# 2009
Delta R.T. 0.000 min
Lab File: VN088372.D
Acq: 01 Dec 2025 10:53

Tgt Ion:152 Resp: 198799

Ion	Ratio	Lower	Upper
152	100		
115	62.5	33.0	98.9
150	156.8	0.0	349.0



Sample Results: **VN088372.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120125\
Data File : VN088372.D
Acq On : 01 Dec 2025 10:53
Operator : JC\MD
Sample : VN1201WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN1201WBL01

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Title : SW846 8260

Signal : TIC: VN088372.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	7.412	921	928	937	rBV3	5682	16399	1.06%	0.202%
2	8.147	1042	1053	1058	rBV2	216362	540527	34.79%	6.646%
3	8.200	1058	1062	1077	rVB	276320	627960	40.42%	7.721%
4	8.559	1114	1123	1133	rBV	247884	561166	36.12%	6.900%
5	9.082	1203	1212	1228	rBV	535181	1099272	70.76%	13.516%
6	10.541	1452	1460	1475	rBV	822937	1553554	100.00%	19.101%
7	11.841	1672	1681	1694	rBV	756205	1399467	90.08%	17.207%
8	12.829	1841	1849	1859	rBV	529059	1004686	64.67%	12.353%
9	13.770	2001	2009	2027	rBV	716850	1330258	85.63%	16.356%

Sum of corrected areas: 8133289

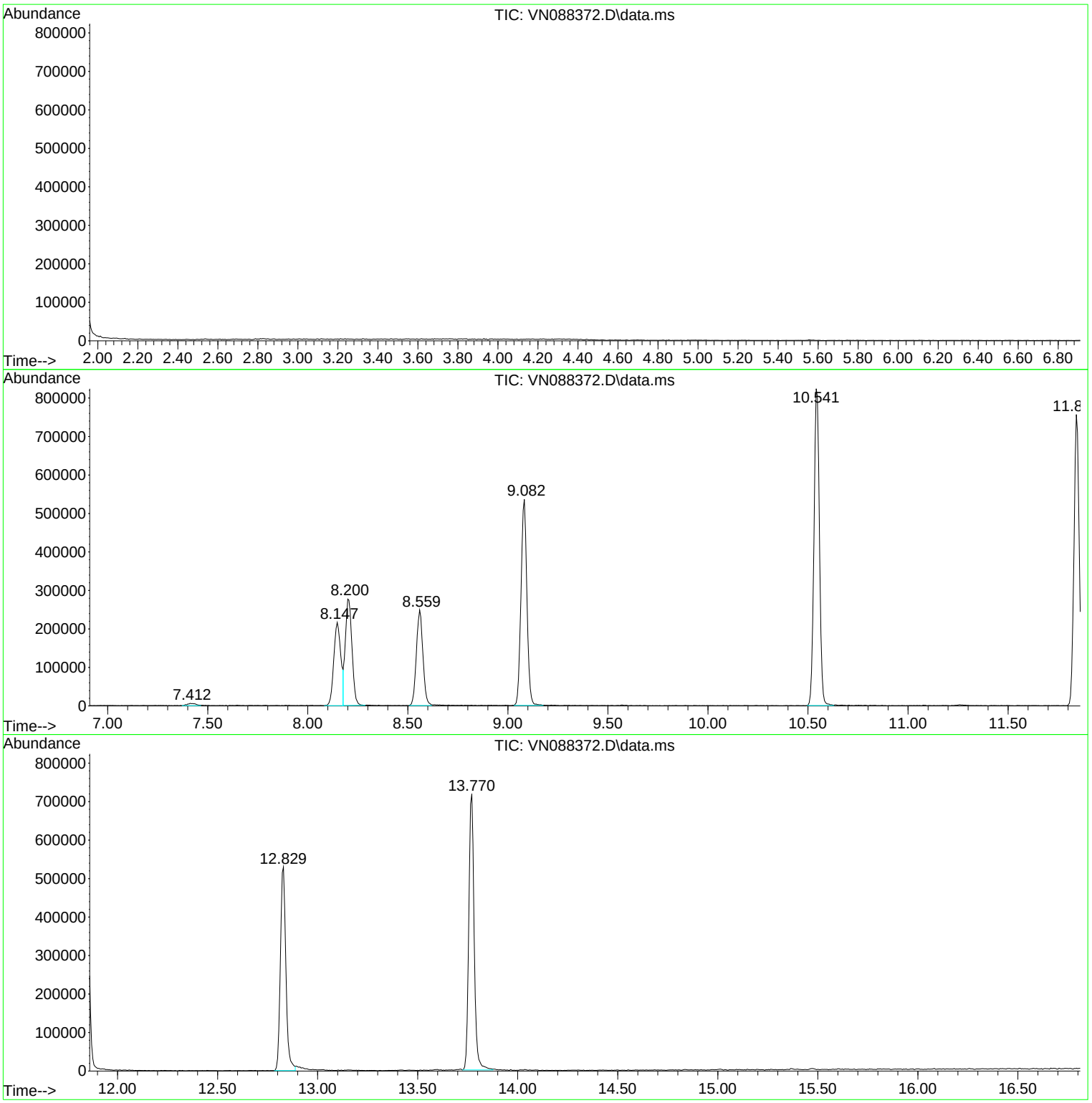
Sample Results: **VN088372.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120125\
Data File : VN088372.D
Acq On : 01 Dec 2025 10:53
Operator : JC\MD
Sample : VN1201WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN1201WBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260

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



Library Search Compound Report

Sample Results: **VN088372.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120125\
Data File : VN088372.D
Acq On : 01 Dec 2025 10:53
Operator : JC\MD
Sample : VN1201WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN1201WBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260

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

No Library Search Compounds Detected
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Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120125\
Data File : VN088372.D
Acq On : 01 Dec 2025 10:53
Operator : JC\MD
Sample : VN1201WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN1201WBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260

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

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

Raw Data: **VX048674.D**

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

Report of Analysis

Client:	G Environmental			Date Collected:	
Project:	Union			Date Received:	
Client Sample ID:	VX1125WBL01			SDG No.:	Q3715
Lab Sample ID:	VX1125WBL01			Matrix:	Water
Analytical Method:	8260D	Level:	LOW	% Solid:	0
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL	Test:	VOCMS Group1

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
TARGETS									
75-71-8	Dichlorodifluoromethane	0.22	U	1	0.22	1.00	ug/L	11/25/25 10:38	VX112525
74-87-3	Chloromethane	0.32	U	1	0.32	1.00	ug/L	11/25/25 10:38	VX112525
75-01-4	Vinyl Chloride	0.26	U	1	0.26	1.00	ug/L	11/25/25 10:38	VX112525
74-83-9	Bromomethane	1.40	U	1	1.40	5.00	ug/L	11/25/25 10:38	VX112525
75-00-3	Chloroethane	0.47	U	1	0.47	1.00	ug/L	11/25/25 10:38	VX112525
75-69-4	Trichlorofluoromethane	0.33	U	1	0.33	1.00	ug/L	11/25/25 10:38	VX112525
76-13-1	1,1,2-Trichlorotrifluoroethane	0.25	U	1	0.25	1.00	ug/L	11/25/25 10:38	VX112525
75-65-0	Tert butyl alcohol	5.50	U	1	5.50	25.0	ug/L	11/25/25 10:38	VX112525
75-35-4	1,1-Dichloroethene	0.23	U	1	0.23	1.00	ug/L	11/25/25 10:38	VX112525
67-64-1	Acetone	1.50	U	1	1.50	5.00	ug/L	11/25/25 10:38	VX112525
75-15-0	Carbon Disulfide	0.21	U	1	0.21	1.00	ug/L	11/25/25 10:38	VX112525
1634-04-4	Methyl tert-butyl Ether	0.16	U	1	0.16	1.00	ug/L	11/25/25 10:38	VX112525
79-20-9	Methyl Acetate	0.27	U	1	0.27	1.00	ug/L	11/25/25 10:38	VX112525
75-09-2	Methylene Chloride	0.28	U	1	0.28	1.00	ug/L	11/25/25 10:38	VX112525
156-60-5	trans-1,2-Dichloroethene	0.23	U	1	0.23	1.00	ug/L	11/25/25 10:38	VX112525
75-34-3	1,1-Dichloroethane	0.23	U	1	0.23	1.00	ug/L	11/25/25 10:38	VX112525
110-82-7	Cyclohexane	1.50	U	1	1.50	5.00	ug/L	11/25/25 10:38	VX112525
78-93-3	2-Butanone	0.98	U	1	0.98	5.00	ug/L	11/25/25 10:38	VX112525
56-23-5	Carbon Tetrachloride	0.25	U	1	0.25	1.00	ug/L	11/25/25 10:38	VX112525
156-59-2	cis-1,2-Dichloroethene	0.19	U	1	0.19	1.00	ug/L	11/25/25 10:38	VX112525
74-97-5	Bromochloromethane	0.22	U	1	0.22	1.00	ug/L	11/25/25 10:38	VX112525
67-66-3	Chloroform	0.25	U	1	0.25	1.00	ug/L	11/25/25 10:38	VX112525
71-55-6	1,1,1-Trichloroethane	0.20	U	1	0.20	1.00	ug/L	11/25/25 10:38	VX112525
108-87-2	Methylcyclohexane	0.16	U	1	0.16	1.00	ug/L	11/25/25 10:38	VX112525
71-43-2	Benzene	0.15	U	1	0.15	1.00	ug/L	11/25/25 10:38	VX112525
107-06-2	1,2-Dichloroethane	0.22	U	1	0.22	1.00	ug/L	11/25/25 10:38	VX112525
79-01-6	Trichloroethene	0.090	U	1	0.090	1.00	ug/L	11/25/25 10:38	VX112525
78-87-5	1,2-Dichloropropane	0.20	U	1	0.20	1.00	ug/L	11/25/25 10:38	VX112525
75-27-4	Bromodichloromethane	0.22	U	1	0.22	1.00	ug/L	11/25/25 10:38	VX112525
108-10-1	4-Methyl-2-Pentanone	0.68	U	1	0.68	5.00	ug/L	11/25/25 10:38	VX112525
108-88-3	Toluene	0.14	U	1	0.14	1.00	ug/L	11/25/25 10:38	VX112525
10061-02-6	t-1,3-Dichloropropene	0.17	U	1	0.17	1.00	ug/L	11/25/25 10:38	VX112525
10061-01-5	cis-1,3-Dichloropropene	0.16	U	1	0.16	1.00	ug/L	11/25/25 10:38	VX112525
79-00-5	1,1,2-Trichloroethane	0.21	U	1	0.21	1.00	ug/L	11/25/25 10:38	VX112525
591-78-6	2-Hexanone	0.89	U	1	0.89	5.00	ug/L	11/25/25 10:38	VX112525
124-48-1	Dibromochloromethane	0.18	U	1	0.18	1.00	ug/L	11/25/25 10:38	VX112525
106-93-4	1,2-Dibromoethane	0.15	U	1	0.15	1.00	ug/L	11/25/25 10:38	VX112525
127-18-4	Tetrachloroethene	0.23	U	1	0.23	1.00	ug/L	11/25/25 10:38	VX112525
108-90-7	Chlorobenzene	0.12	U	1	0.12	1.00	ug/L	11/25/25 10:38	VX112525
100-41-4	Ethyl Benzene	0.13	U	1	0.13	1.00	ug/L	11/25/25 10:38	VX112525
179601-23-1	m/p-Xylenes	0.24	U	1	0.24	2.00	ug/L	11/25/25 10:38	VX112525
95-47-6	o-Xylene	0.12	U	1	0.12	1.00	ug/L	11/25/25 10:38	VX112525
100-42-5	Styrene	0.15	U	1	0.15	1.00	ug/L	11/25/25 10:38	VX112525

Raw Data: **VX048674.D**

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

Report of Analysis

Client:	G Environmental			Date Collected:	
Project:	Union			Date Received:	
Client Sample ID:	VX1125WBL01			SDG No.:	Q3715
Lab Sample ID:	VX1125WBL01			Matrix:	Water
Analytical Method:	8260D	Level:	LOW	% Solid:	0
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL	Test:	VOCMS Group1

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
75-25-2	Bromoform	0.19	U	1	0.19	1.00	ug/L	11/25/25 10:38	VX112525
98-82-8	Isopropylbenzene	0.12	U	1	0.12	1.00	ug/L	11/25/25 10:38	VX112525
79-34-5	1,1,2,2-Tetrachloroethane	0.26	U	1	0.26	1.00	ug/L	11/25/25 10:38	VX112525
541-73-1	1,3-Dichlorobenzene	0.16	U	1	0.16	1.00	ug/L	11/25/25 10:38	VX112525
106-46-7	1,4-Dichlorobenzene	0.19	U	1	0.19	1.00	ug/L	11/25/25 10:38	VX112525
95-50-1	1,2-Dichlorobenzene	0.16	U	1	0.16	1.00	ug/L	11/25/25 10:38	VX112525
96-12-8	1,2-Dibromo-3-Chloropropane	0.53	U	1	0.53	1.00	ug/L	11/25/25 10:38	VX112525
120-82-1	1,2,4-Trichlorobenzene	0.20	U	1	0.20	1.00	ug/L	11/25/25 10:38	VX112525
87-61-6	1,2,3-Trichlorobenzene	0.20	U	1	0.20	1.00	ug/L	11/25/25 10:38	VX112525
SURROGATES									
17060-07-0	1,2-Dichloroethane-d4	56.6			70 (74) - 130 (125)	113%	SPK: 50		
1868-53-7	Dibromofluoromethane	46.3			70 (75) - 130 (124)	93%	SPK: 50		
2037-26-5	Toluene-d8	48.8			70 (86) - 130 (113)	98%	SPK: 50		
460-00-4	4-Bromofluorobenzene	57.4			70 (77) - 130 (121)	115%	SPK: 50		
INTERNAL STANDARDS		**Area Count**							
363-72-4	Pentafluorobenzene	176000							
540-36-3	1,4-Difluorobenzene	347000							
3114-55-4	Chlorobenzene-d5	372000							
3855-82-1	1,4-Dichlorobenzene-d4	201000							

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\VX112525\
Data File : VX048674.D
Acq On : 25 Nov 2025 10:38
Operator : JC/MD
Sample : VX1125WBL01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VX1125WBL01

Quant Time: Nov 26 00:57:28 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 05:08:11 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.538	168	175748	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.745	114	347104	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.037	117	371931	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.006	152	201273	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.940	65	138616	56.603	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 113.200%			
35) Dibromofluoromethane	5.373	113	121627	46.297	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 92.600%			
50) Toluene-d8	8.635	98	399765	48.791	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery = 97.580%			
62) 4-Bromofluorobenzene	11.061	95	175172	57.369	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery = 114.740%			

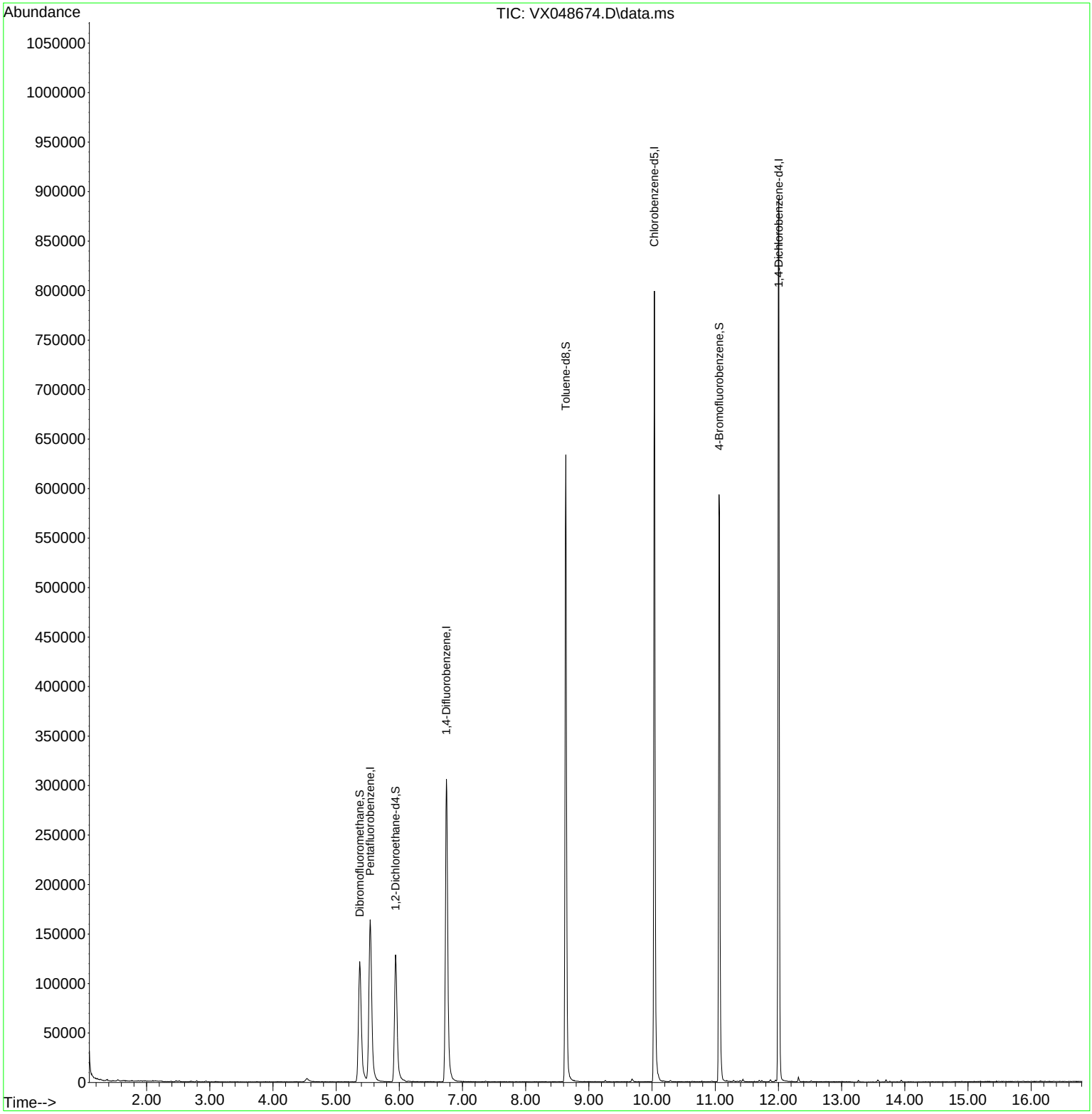
Target Compounds Qvalue

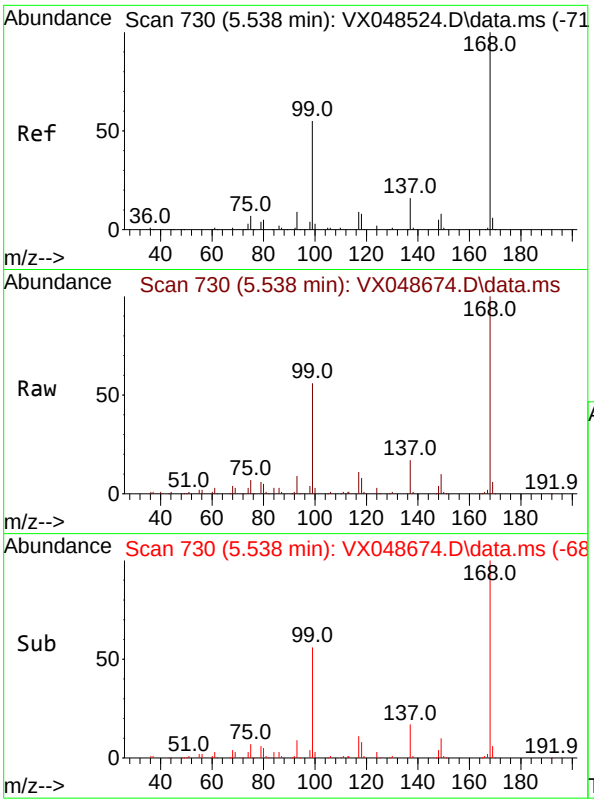
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112525\
Data File : VX048674.D
Acq On : 25 Nov 2025 10:38
Operator : JC/MD
Sample : VX1125WBL01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VX1125WBL01

Quant Time: Nov 26 00:57:28 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 05:08:11 2025
Response via : Initial Calibration



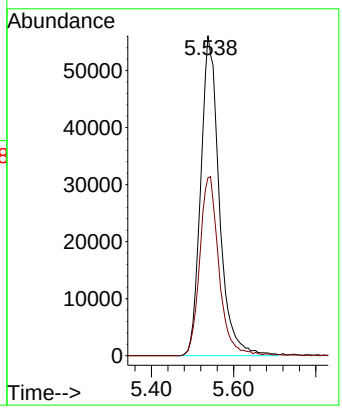


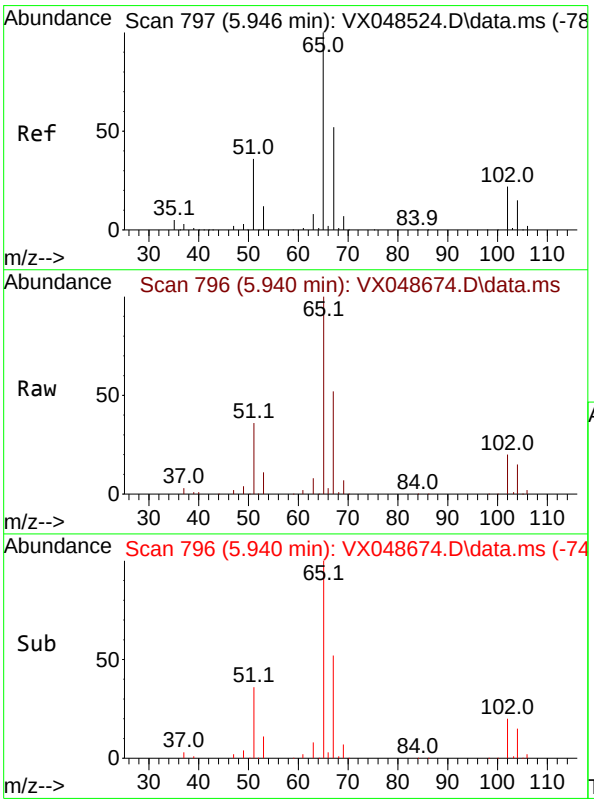
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.538 min Scan# 7
Delta R.T. -0.000 min
Lab File: VX048674.D
Acq: 25 Nov 2025 10:38

Instrument :
MSVOA_X
ClientSampleId :
VX1125WBL01

Tgt Ion:168 Resp: 175748

Ion	Ratio	Lower	Upper
168	100		
99	55.6	45.2	67.8

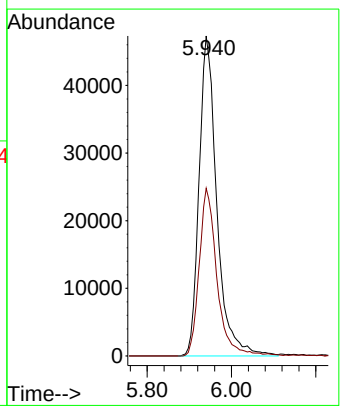


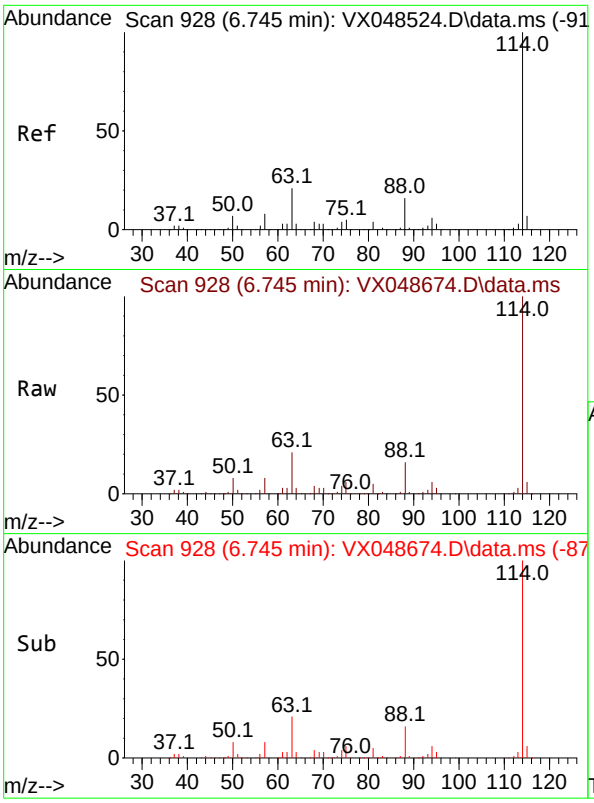


#33
1,2-Dichloroethane-d4
Concen: 56.603 ug/l
RT: 5.940 min Scan# 796
Delta R.T. -0.006 min
Lab File: VX048674.D
Acq: 25 Nov 2025 10:38

Tgt Ion: 65 Resp: 138616

Ion	Ratio	Lower	Upper
65	100		
67	52.1	0.0	106.2



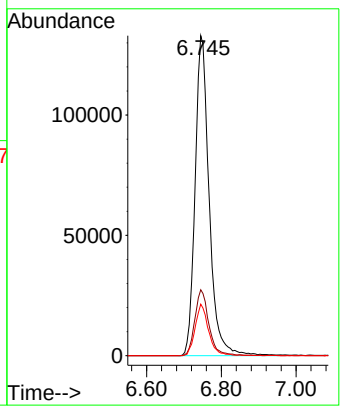


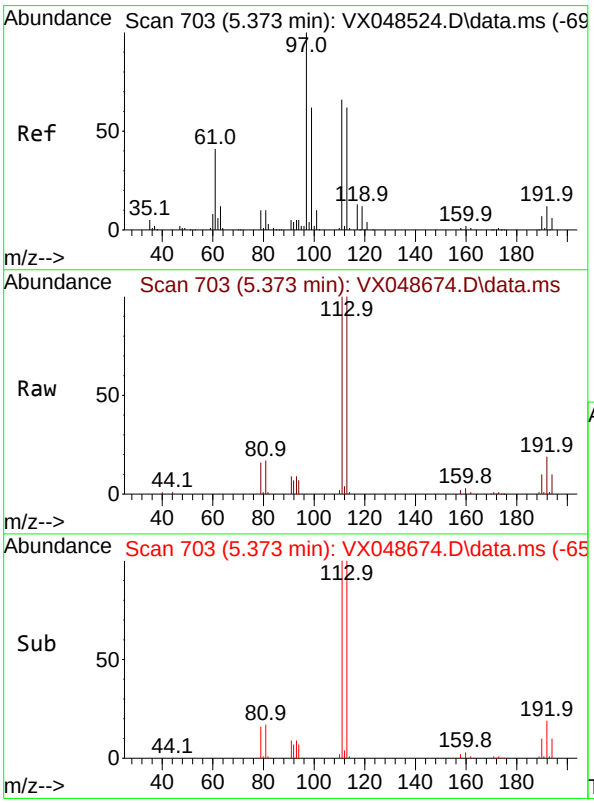
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.745 min Scan# 9
Delta R.T. -0.000 min
Lab File: VX048674.D
Acq: 25 Nov 2025 10:38

Instrument :
MSVOA_X
ClientSampleId :
VX1125WBL01

Tgt Ion:114 Resp: 347104

Ion	Ratio	Lower	Upper
114	100		
63	20.6	0.0	41.2
88	16.1	0.0	32.2

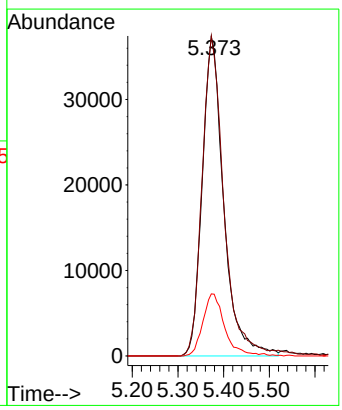


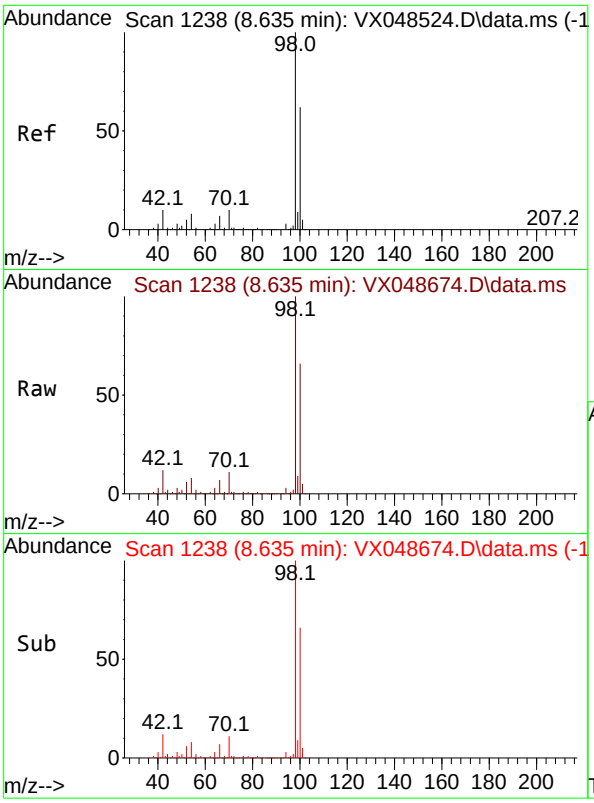


#35
Dibromofluoromethane
Concen: 46.297 ug/l
RT: 5.373 min Scan# 703
Delta R.T. -0.000 min
Lab File: VX048674.D
Acq: 25 Nov 2025 10:38

Tgt Ion:113 Resp: 121627

Ion	Ratio	Lower	Upper
113	100		
111	102.3	81.9	122.9
192	19.6	15.8	23.6



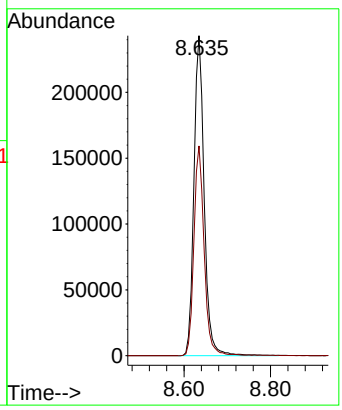


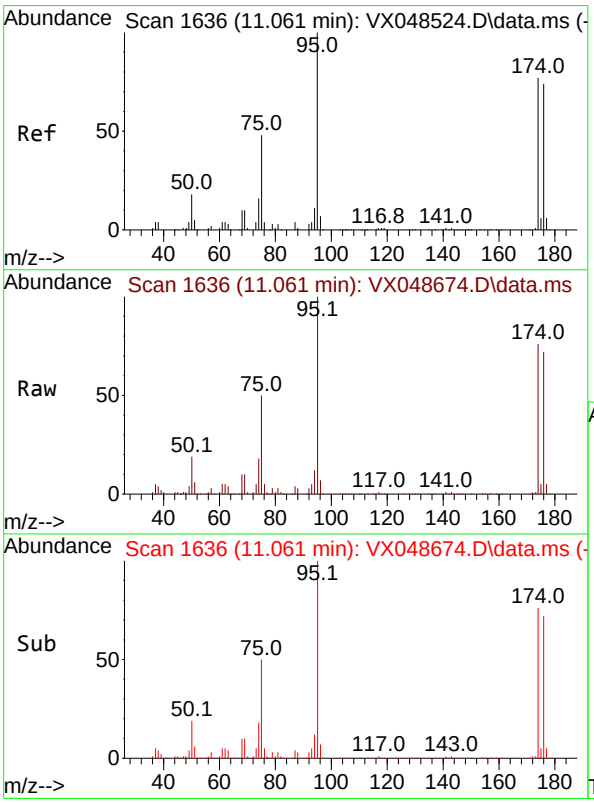
#50
Toluene-d8
Concen: 48.791 ug/l
RT: 8.635 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX048674.D
Acq: 25 Nov 2025 10:38

Instrument :
MSVOA_X
ClientSampleId :
VX1125WBL01

Tgt Ion: 98 Resp: 399765

Ion	Ratio	Lower	Upper
98	100		
100	65.3	53.6	80.4

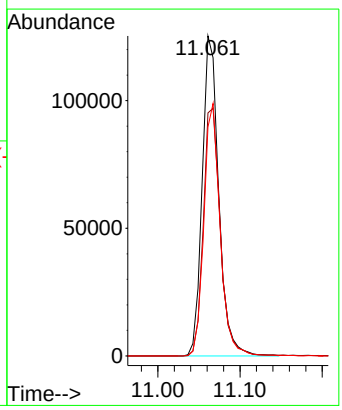


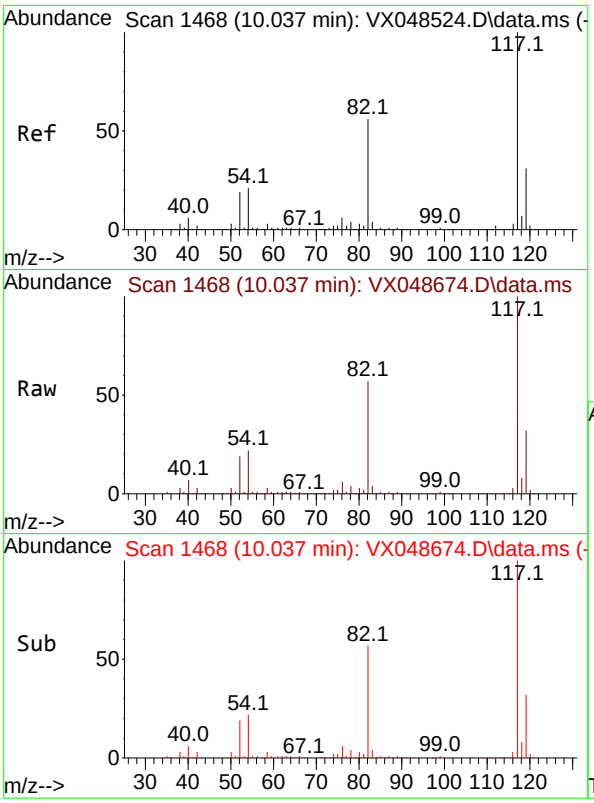


#62
4-Bromofluorobenzene
Concen: 57.369 ug/l
RT: 11.061 min Scan# 1636
Delta R.T. -0.000 min
Lab File: VX048674.D
Acq: 25 Nov 2025 10:38

Tgt Ion: 95 Resp: 175172

Ion	Ratio	Lower	Upper
95	100		
174	79.6	0.0	161.8
176	77.6	0.0	153.6



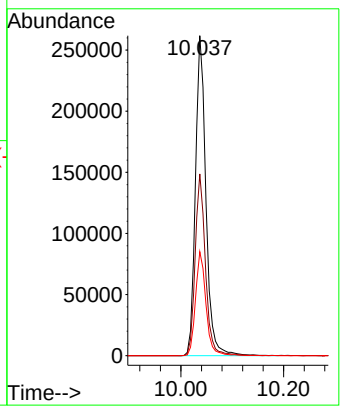


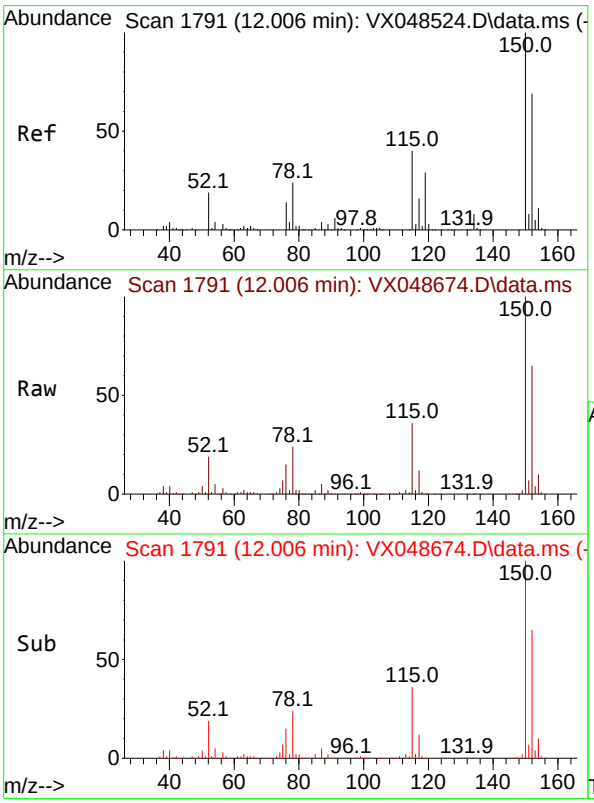
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.037 min Scan# 14
Delta R.T. -0.000 min
Lab File: VX048674.D
Acq: 25 Nov 2025 10:38

Instrument :
MSVOA_X
ClientSampleId :
VX1125WBL01

Tgt Ion:117 Resp: 371931

Ion	Ratio	Lower	Upper
117	100		
82	56.8	44.4	66.6
119	32.5	25.1	37.7

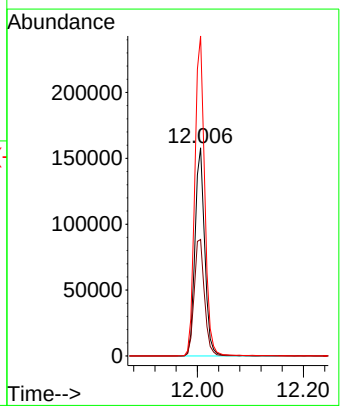




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.006 min Scan# 1791
Delta R.T. -0.000 min
Lab File: VX048674.D
Acq: 25 Nov 2025 10:38

Tgt Ion:152 Resp: 201273

Ion	Ratio	Lower	Upper
152	100		
115	59.2	39.2	117.6
150	156.4	0.0	347.0



Raw Data: **VN088373.D**

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

Report of Analysis

Client:	G Environmental			Date Collected:	
Project:	Union			Date Received:	
Client Sample ID:	VN1201WBS01			SDG No.:	Q3715
Lab Sample ID:	VN1201WBS01			Matrix:	Water
Analytical Method:	8260D	Level:	LOW	% Solid:	0
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL	Test:	VOCMS Group1

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
TARGETS									
75-71-8	Dichlorodifluoromethane	18.2		1	0.22	1.00	ug/L	12/01/25 11:27	VN120125
74-87-3	Chloromethane	19.4		1	0.32	1.00	ug/L	12/01/25 11:27	VN120125
75-01-4	Vinyl Chloride	18.9		1	0.26	1.00	ug/L	12/01/25 11:27	VN120125
74-83-9	Bromomethane	19.7		1	1.40	5.00	ug/L	12/01/25 11:27	VN120125
75-00-3	Chloroethane	19.5		1	0.47	1.00	ug/L	12/01/25 11:27	VN120125
75-69-4	Trichlorofluoromethane	18.6		1	0.33	1.00	ug/L	12/01/25 11:27	VN120125
76-13-1	1,1,2-Trichlorotrifluoroethane	18.6		1	0.25	1.00	ug/L	12/01/25 11:27	VN120125
75-65-0	Tert butyl alcohol	87.5		1	5.50	25.0	ug/L	12/01/25 11:27	VN120125
75-35-4	1,1-Dichloroethene	19.0		1	0.23	1.00	ug/L	12/01/25 11:27	VN120125
67-64-1	Acetone	87.9		1	1.50	5.00	ug/L	12/01/25 11:27	VN120125
75-15-0	Carbon Disulfide	19.4		1	0.21	1.00	ug/L	12/01/25 11:27	VN120125
1634-04-4	Methyl tert-butyl Ether	19.9		1	0.16	1.00	ug/L	12/01/25 11:27	VN120125
79-20-9	Methyl Acetate	19.1		1	0.27	1.00	ug/L	12/01/25 11:27	VN120125
75-09-2	Methylene Chloride	20.0		1	0.28	1.00	ug/L	12/01/25 11:27	VN120125
156-60-5	trans-1,2-Dichloroethene	19.6		1	0.23	1.00	ug/L	12/01/25 11:27	VN120125
75-34-3	1,1-Dichloroethane	19.8		1	0.23	1.00	ug/L	12/01/25 11:27	VN120125
110-82-7	Cyclohexane	17.9		1	1.50	5.00	ug/L	12/01/25 11:27	VN120125
78-93-3	2-Butanone	96.0		1	0.98	5.00	ug/L	12/01/25 11:27	VN120125
56-23-5	Carbon Tetrachloride	18.3		1	0.25	1.00	ug/L	12/01/25 11:27	VN120125
156-59-2	cis-1,2-Dichloroethene	20.1		1	0.19	1.00	ug/L	12/01/25 11:27	VN120125
74-97-5	Bromochloromethane	19.3		1	0.22	1.00	ug/L	12/01/25 11:27	VN120125
67-66-3	Chloroform	20.3		1	0.25	1.00	ug/L	12/01/25 11:27	VN120125
71-55-6	1,1,1-Trichloroethane	18.8		1	0.20	1.00	ug/L	12/01/25 11:27	VN120125
108-87-2	Methylcyclohexane	17.1		1	0.16	1.00	ug/L	12/01/25 11:27	VN120125
71-43-2	Benzene	19.4		1	0.15	1.00	ug/L	12/01/25 11:27	VN120125
107-06-2	1,2-Dichloroethane	19.6		1	0.22	1.00	ug/L	12/01/25 11:27	VN120125
79-01-6	Trichloroethene	18.8		1	0.090	1.00	ug/L	12/01/25 11:27	VN120125
78-87-5	1,2-Dichloropropane	19.8		1	0.20	1.00	ug/L	12/01/25 11:27	VN120125
75-27-4	Bromodichloromethane	19.5		1	0.22	1.00	ug/L	12/01/25 11:27	VN120125
108-10-1	4-Methyl-2-Pentanone	98.3		1	0.68	5.00	ug/L	12/01/25 11:27	VN120125
108-88-3	Toluene	19.5		1	0.14	1.00	ug/L	12/01/25 11:27	VN120125
10061-02-6	t-1,3-Dichloropropene	19.9		1	0.17	1.00	ug/L	12/01/25 11:27	VN120125
10061-01-5	cis-1,3-Dichloropropene	20.1		1	0.16	1.00	ug/L	12/01/25 11:27	VN120125
79-00-5	1,1,2-Trichloroethane	20.2		1	0.21	1.00	ug/L	12/01/25 11:27	VN120125
591-78-6	2-Hexanone	93.5		1	0.89	5.00	ug/L	12/01/25 11:27	VN120125
124-48-1	Dibromochloromethane	20.1		1	0.18	1.00	ug/L	12/01/25 11:27	VN120125
106-93-4	1,2-Dibromoethane	20.6		1	0.15	1.00	ug/L	12/01/25 11:27	VN120125
127-18-4	Tetrachloroethene	17.9		1	0.23	1.00	ug/L	12/01/25 11:27	VN120125
108-90-7	Chlorobenzene	19.5		1	0.12	1.00	ug/L	12/01/25 11:27	VN120125
100-41-4	Ethyl Benzene	18.6		1	0.13	1.00	ug/L	12/01/25 11:27	VN120125
179601-23-1	m/p-Xylenes	37.0		1	0.24	2.00	ug/L	12/01/25 11:27	VN120125
95-47-6	o-Xylene	18.3		1	0.12	1.00	ug/L	12/01/25 11:27	VN120125
100-42-5	Styrene	19.6		1	0.15	1.00	ug/L	12/01/25 11:27	VN120125

Raw Data: **VN088373.D**

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

Report of Analysis

Client:	G Environmental			Date Collected:	
Project:	Union			Date Received:	
Client Sample ID:	VN1201WBS01			SDG No.:	Q3715
Lab Sample ID:	VN1201WBS01			Matrix:	Water
Analytical Method:	8260D	Level:	LOW	% Solid:	0
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL	Test:	VOCMS Group1

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
75-25-2	Bromoform	20.0		1	0.19	1.00	ug/L	12/01/25 11:27	VN120125
98-82-8	Isopropylbenzene	18.6		1	0.12	1.00	ug/L	12/01/25 11:27	VN120125
79-34-5	1,1,2,2-Tetrachloroethane	20.1		1	0.26	1.00	ug/L	12/01/25 11:27	VN120125
541-73-1	1,3-Dichlorobenzene	19.0		1	0.16	1.00	ug/L	12/01/25 11:27	VN120125
106-46-7	1,4-Dichlorobenzene	18.5		1	0.19	1.00	ug/L	12/01/25 11:27	VN120125
95-50-1	1,2-Dichlorobenzene	19.4		1	0.16	1.00	ug/L	12/01/25 11:27	VN120125
96-12-8	1,2-Dibromo-3-Chloropropane	18.2		1	0.53	1.00	ug/L	12/01/25 11:27	VN120125
120-82-1	1,2,4-Trichlorobenzene	18.5		1	0.20	1.00	ug/L	12/01/25 11:27	VN120125
87-61-6	1,2,3-Trichlorobenzene	18.3		1	0.20	1.00	ug/L	12/01/25 11:27	VN120125
SURROGATES									
17060-07-0	1,2-Dichloroethane-d4	56.0			70 (74) - 130 (125)	112%	SPK: 50		
1868-53-7	Dibromofluoromethane	55.1			70 (75) - 130 (124)	110%	SPK: 50		
2037-26-5	Toluene-d8	54.9			70 (86) - 130 (113)	110%	SPK: 50		
460-00-4	4-Bromofluorobenzene	53.3			70 (77) - 130 (121)	107%	SPK: 50		
INTERNAL STANDARDS		**Area Count**							
363-72-4	Pentafluorobenzene	257000							
540-36-3	1,4-Difluorobenzene	487000							
3114-55-4	Chlorobenzene-d5	435000							
3855-82-1	1,4-Dichlorobenzene-d4	207000							

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120125\
Data File : VN088373.D
Acq On : 01 Dec 2025 11:27
Operator : JC\MD
Sample : VN1201WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 02 00:10:02 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:34:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN1201WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 12/02/2025
Supervised By :Mahesh Dadoda 12/02/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.206	168	256678	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.083	114	487472	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.841	117	435019	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.770	152	207303	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.559	65	271013	56.049	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 112.100%			
35) Dibromofluoromethane	8.147	113	186190	55.116	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 110.240%			
50) Toluene-d8	10.541	98	690335	54.922	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 109.840%			
62) 4-Bromofluorobenzene	12.829	95	230018	53.334	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 106.660%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.142	85	70210	18.211	ug/l	99
3) Chloromethane	2.383	50	80214	19.372	ug/l	94
4) Vinyl Chloride	2.536	62	79487	18.870	ug/l	99
5) Bromomethane	2.989	94	39940	19.700	ug/l	96
6) Chloroethane	3.142	64	50911	19.530	ug/l	99
7) Trichlorofluoromethane	3.512	101	109953	18.572	ug/l	94
8) Diethyl Ether	3.965	74	43004	19.352	ug/l	94
9) 1,1,2-Trichlorotrifluo...	4.371	101	58508	18.563	ug/l	97
10) Methyl Iodide	4.583	142	59901	19.198	ug/l	98
11) Tert butyl alcohol	5.512	59	67525	87.469	ug/l	97
12) 1,1-Dichloroethene	4.336	96	59547	19.015	ug/l	87
13) Acrolein	4.177	56	88765	120.102	ug/l	97
14) Allyl chloride	5.018	41	108153	18.633	ug/l	98
15) Acrylonitrile	5.706	53	218028	97.888	ug/l	98
16) Acetone	4.418	43	153779	87.939	ug/l	94
17) Carbon Disulfide	4.706	76	198994	19.446	ug/l	100
18) Methyl Acetate	5.018	43	99423	19.100	ug/l	98
19) Methyl tert-butyl Ether	5.783	73	233707	19.919	ug/l	100
20) Methylene Chloride	5.271	84	74861	20.009	ug/l	83
21) trans-1,2-Dichloroethene	5.771	96	68123	19.638	ug/l	89
22) Diisopropyl ether	6.653	45	255505	20.619	ug/l	93
23) Vinyl Acetate	6.589	43	1003026m	100.465	ug/l	
24) 1,1-Dichloroethane	6.547	63	139057	19.816	ug/l	100
25) 2-Butanone	7.465	43	269940	96.022	ug/l	97
26) 2,2-Dichloropropane	7.471	77	115800	19.118	ug/l	98
27) cis-1,2-Dichloroethene	7.465	96	80954	20.080	ug/l	98
28) Bromochloromethane	7.789	49	67630	19.346	ug/l #	98
29) Tetrahydrofuran	7.818	42	200576	99.471	ug/l	99
30) Chloroform	7.941	83	140173	20.329	ug/l	100
31) Cyclohexane	8.241	56	114116	17.945	ug/l	98
32) 1,1,1-Trichloroethane	8.147	97	114251	18.845	ug/l	96
36) 1,1-Dichloropropene	8.353	75	93124	17.862	ug/l	99
37) Ethyl Acetate	7.547	43	129007	18.819	ug/l	100
38) Carbon Tetrachloride	8.341	117	94912	18.287	ug/l	96
39) Methylcyclohexane	9.583	83	95473	17.120	ug/l	97
40) Benzene	8.588	78	296136	19.353	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120125\
Data File : VN088373.D
Acq On : 01 Dec 2025 11:27
Operator : JC\MD
Sample : VN1201WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 02 00:10:02 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:34:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN1201WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 12/02/2025
Supervised By :Mahesh Dadoda 12/02/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.765	41	63234	18.624	ug/l		98
42) 1,2-Dichloroethane	8.653	62	114468	19.607	ug/l		98
43) Isopropyl Acetate	8.671	43	195071	18.624	ug/l		98
44) Trichloroethene	9.330	130	67826	18.759	ug/l		95
45) 1,2-Dichloropropane	9.600	63	77770	19.837	ug/l		93
46) Dibromomethane	9.688	93	55251	19.747	ug/l		98
47) Bromodichloromethane	9.871	83	111551	19.540	ug/l		92
48) Methyl methacrylate	9.659	41	87729	18.357	ug/l		97
49) 1,4-Dioxane	9.683	88	21595	355.324	ug/l	#	99
51) 4-Methyl-2-Pentanone	10.424	43	606997	98.320	ug/l		100
52) Toluene	10.606	92	172323	19.503	ug/l		99
53) t-1,3-Dichloropropene	10.812	75	116655	19.908	ug/l		98
54) cis-1,3-Dichloropropene	10.294	75	123675	20.070	ug/l		99
55) 1,1,2-Trichloroethane	10.994	97	68939	20.166	ug/l		96
56) Ethyl methacrylate	10.859	69	106640	19.749	ug/l		96
57) 1,3-Dichloropropane	11.141	76	122169	19.810	ug/l		98
58) 2-Chloroethyl Vinyl ether	10.135	63	278967	89.610	ug/l		97
59) 2-Hexanone	11.177	43	363554	93.479	ug/l		98
60) Dibromochloromethane	11.335	129	78151	20.054	ug/l		97
61) 1,2-Dibromoethane	11.447	107	71254	20.583	ug/l		98
64) Tetrachloroethene	11.082	164	61757	17.907	ug/l		96
65) Chlorobenzene	11.871	112	190129	19.458	ug/l		97
66) 1,1,1,2-Tetrachloroethane	11.935	131	65977	20.020	ug/l		98
67) Ethyl Benzene	11.941	91	316848	18.553	ug/l		99
68) m/p-Xylenes	12.047	106	234320	37.005	ug/l		97
69) o-Xylene	12.376	106	110515	18.307	ug/l		100
70) Styrene	12.388	104	191890	19.577	ug/l		99
71) Bromoform	12.559	173	48189	19.963	ug/l	#	99
73) Isopropylbenzene	12.676	105	285585	18.632	ug/l		99
74) N-amyl acetate	12.682	43	103450m	19.818	ug/l		
75) 1,1,2,2-Tetrachloroethane	12.912	83	99427	20.065	ug/l		97
76) 1,2,3-Trichloropropane	12.971	75	95762m	19.723	ug/l		
77) Bromobenzene	12.959	156	70858	20.205	ug/l		97
78) n-propylbenzene	13.012	91	349255	18.625	ug/l		100
79) 2-Chlorotoluene	13.100	91	213346	18.631	ug/l		98
80) 1,3,5-Trimethylbenzene	13.147	105	239698	18.872	ug/l		98
81) trans-1,4-Dichloro-2-b...	12.718	75	31603	18.465	ug/l	#	98
82) 4-Chlorotoluene	13.200	91	222136	19.531	ug/l		99
83) tert-Butylbenzene	13.412	119	195850	18.139	ug/l		99
84) 1,2,4-Trimethylbenzene	13.459	105	244186	19.342	ug/l		99
85) sec-Butylbenzene	13.594	105	282563	18.217	ug/l		100
86) p-Isopropyltoluene	13.706	119	237355	18.661	ug/l		99
87) 1,3-Dichlorobenzene	13.712	146	129958	19.036	ug/l		99
88) 1,4-Dichlorobenzene	13.788	146	131944	18.451	ug/l		97
89) n-Butylbenzene	14.029	91	220480	17.853	ug/l		100
90) Hexachloroethane	14.306	117	42679	18.368	ug/l		95
91) 1,2-Dichlorobenzene	14.082	146	124887	19.439	ug/l		98
92) 1,2-Dibromo-3-Chloropr...	14.694	75	21886	18.204	ug/l		99
93) 1,2,4-Trichlorobenzene	15.365	180	70611	18.498	ug/l		98
94) Hexachlorobutadiene	15.470	225	24611	17.942	ug/l		99
95) Naphthalene	15.612	128	234599	17.736	ug/l		99
96) 1,2,3-Trichlorobenzene	15.812	180	68004	18.306	ug/l		99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120125\
Data File : VN088373.D
Acq On : 01 Dec 2025 11:27
Operator : JC\MD
Sample : VN1201WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 02 00:10:02 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:34:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN1201WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 12/02/2025
Supervised By :Mahesh Dadoda 12/02/2025

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

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

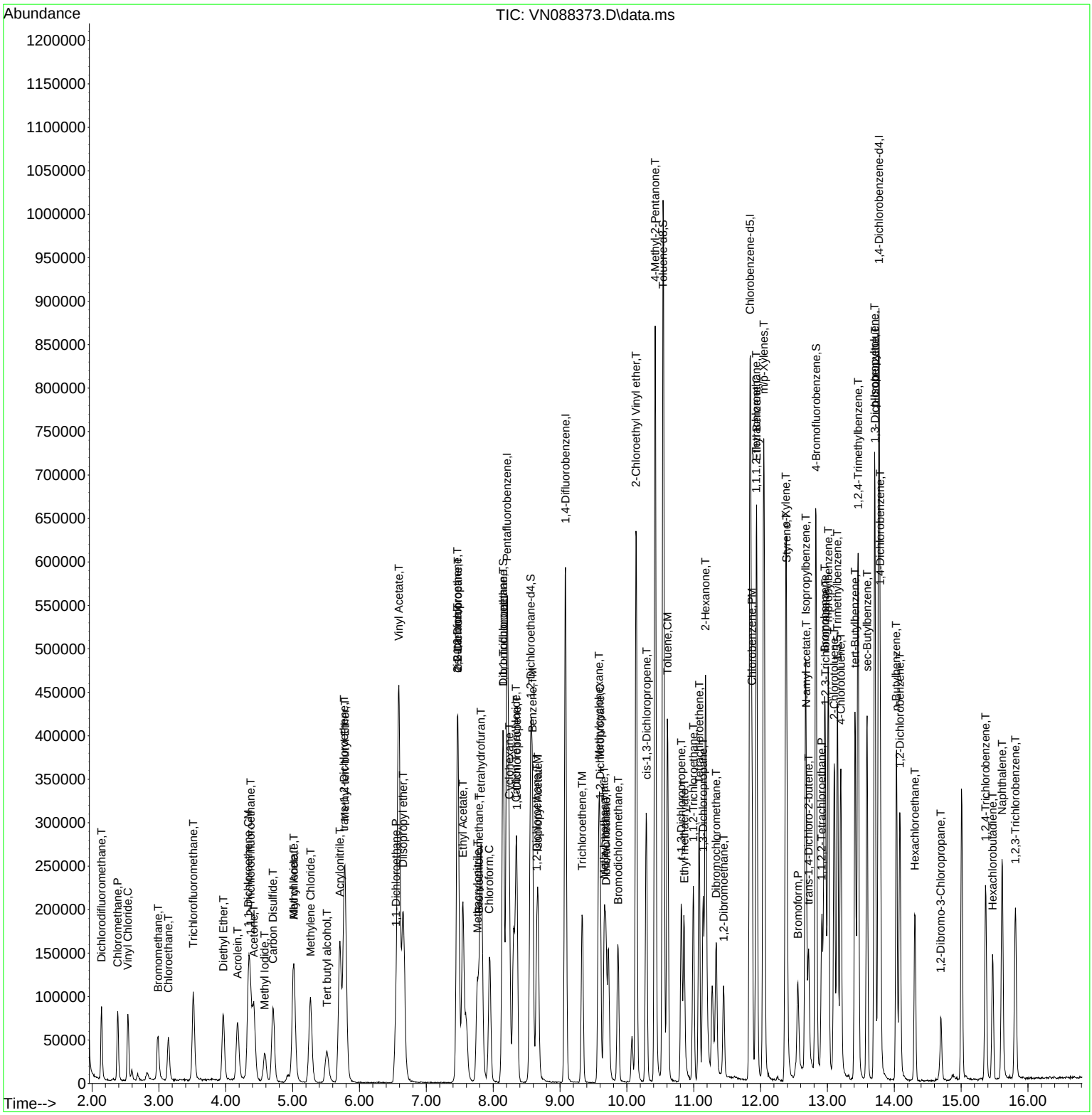
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120125\
Data File : VN088373.D
Acq On : 01 Dec 2025 11:27
Operator : JC\MD
Sample : VN1201WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 02 00:10:02 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:34:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN1201WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 12/02/2025
Supervised By :Mahesh Dadoda 12/02/2025



Raw Data: **VX048675.D**

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

Report of Analysis

Client:	G Environmental			Date Collected:	
Project:	Union			Date Received:	
Client Sample ID:	VX1125WBS01			SDG No.:	Q3715
Lab Sample ID:	VX1125WBS01			Matrix:	Water
Analytical Method:	8260D	Level:	LOW	% Solid:	0
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL	Test:	VOCMS Group1

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
TARGETS									
75-71-8	Dichlorodifluoromethane	17.9		1	0.22	1.00	ug/L	11/25/25 11:05	VX112525
74-87-3	Chloromethane	14.8		1	0.32	1.00	ug/L	11/25/25 11:05	VX112525
75-01-4	Vinyl Chloride	19.5		1	0.26	1.00	ug/L	11/25/25 11:05	VX112525
74-83-9	Bromomethane	21.9		1	1.40	5.00	ug/L	11/25/25 11:05	VX112525
75-00-3	Chloroethane	18.9		1	0.47	1.00	ug/L	11/25/25 11:05	VX112525
75-69-4	Trichlorofluoromethane	20.0		1	0.33	1.00	ug/L	11/25/25 11:05	VX112525
76-13-1	1,1,2-Trichlorotrifluoroethane	20.4		1	0.25	1.00	ug/L	11/25/25 11:05	VX112525
75-65-0	Tert butyl alcohol	91.1		1	5.50	25.0	ug/L	11/25/25 11:05	VX112525
75-35-4	1,1-Dichloroethene	18.6		1	0.23	1.00	ug/L	11/25/25 11:05	VX112525
67-64-1	Acetone	92.6		1	1.50	5.00	ug/L	11/25/25 11:05	VX112525
75-15-0	Carbon Disulfide	16.1		1	0.21	1.00	ug/L	11/25/25 11:05	VX112525
1634-04-4	Methyl tert-butyl Ether	18.0		1	0.16	1.00	ug/L	11/25/25 11:05	VX112525
79-20-9	Methyl Acetate	22.5		1	0.27	1.00	ug/L	11/25/25 11:05	VX112525
75-09-2	Methylene Chloride	19.7		1	0.28	1.00	ug/L	11/25/25 11:05	VX112525
156-60-5	trans-1,2-Dichloroethene	16.9		1	0.23	1.00	ug/L	11/25/25 11:05	VX112525
75-34-3	1,1-Dichloroethane	17.2		1	0.23	1.00	ug/L	11/25/25 11:05	VX112525
110-82-7	Cyclohexane	18.8		1	1.50	5.00	ug/L	11/25/25 11:05	VX112525
78-93-3	2-Butanone	82.8		1	0.98	5.00	ug/L	11/25/25 11:05	VX112525
56-23-5	Carbon Tetrachloride	20.3		1	0.25	1.00	ug/L	11/25/25 11:05	VX112525
156-59-2	cis-1,2-Dichloroethene	17.8		1	0.19	1.00	ug/L	11/25/25 11:05	VX112525
74-97-5	Bromochloromethane	21.1		1	0.22	1.00	ug/L	11/25/25 11:05	VX112525
67-66-3	Chloroform	21.7		1	0.25	1.00	ug/L	11/25/25 11:05	VX112525
71-55-6	1,1,1-Trichloroethane	21.0		1	0.20	1.00	ug/L	11/25/25 11:05	VX112525
108-87-2	Methylcyclohexane	18.3		1	0.16	1.00	ug/L	11/25/25 11:05	VX112525
71-43-2	Benzene	19.1		1	0.15	1.00	ug/L	11/25/25 11:05	VX112525
107-06-2	1,2-Dichloroethane	20.6		1	0.22	1.00	ug/L	11/25/25 11:05	VX112525
79-01-6	Trichloroethene	20.3		1	0.090	1.00	ug/L	11/25/25 11:05	VX112525
78-87-5	1,2-Dichloropropane	21.6		1	0.20	1.00	ug/L	11/25/25 11:05	VX112525
75-27-4	Bromodichloromethane	23.3		1	0.22	1.00	ug/L	11/25/25 11:05	VX112525
108-10-1	4-Methyl-2-Pentanone	120		1	0.68	5.00	ug/L	11/25/25 11:05	VX112525
108-88-3	Toluene	22.2		1	0.14	1.00	ug/L	11/25/25 11:05	VX112525
10061-02-6	t-1,3-Dichloropropene	22.7		1	0.17	1.00	ug/L	11/25/25 11:05	VX112525
10061-01-5	cis-1,3-Dichloropropene	22.7		1	0.16	1.00	ug/L	11/25/25 11:05	VX112525
79-00-5	1,1,2-Trichloroethane	23.9		1	0.21	1.00	ug/L	11/25/25 11:05	VX112525
591-78-6	2-Hexanone	120		1	0.89	5.00	ug/L	11/25/25 11:05	VX112525
124-48-1	Dibromochloromethane	23.9		1	0.18	1.00	ug/L	11/25/25 11:05	VX112525
106-93-4	1,2-Dibromoethane	22.7		1	0.15	1.00	ug/L	11/25/25 11:05	VX112525
127-18-4	Tetrachloroethene	18.9		1	0.23	1.00	ug/L	11/25/25 11:05	VX112525
108-90-7	Chlorobenzene	19.0		1	0.12	1.00	ug/L	11/25/25 11:05	VX112525
100-41-4	Ethyl Benzene	19.3		1	0.13	1.00	ug/L	11/25/25 11:05	VX112525
179601-23-1	m/p-Xylenes	38.8		1	0.24	2.00	ug/L	11/25/25 11:05	VX112525
95-47-6	o-Xylene	19.2		1	0.12	1.00	ug/L	11/25/25 11:05	VX112525
100-42-5	Styrene	20.3		1	0.15	1.00	ug/L	11/25/25 11:05	VX112525

Raw Data: **VX048675.D**

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

Report of Analysis

Client:	G Environmental			Date Collected:	
Project:	Union			Date Received:	
Client Sample ID:	VX1125WBS01			SDG No.:	Q3715
Lab Sample ID:	VX1125WBS01			Matrix:	Water
Analytical Method:	8260D	Level:	LOW	% Solid:	0
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL	Test:	VOCMS Group1

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
75-25-2	Bromoform	19.9		1	0.19	1.00	ug/L	11/25/25 11:05	VX112525
98-82-8	Isopropylbenzene	19.9		1	0.12	1.00	ug/L	11/25/25 11:05	VX112525
79-34-5	1,1,2,2-Tetrachloroethane	20.3		1	0.26	1.00	ug/L	11/25/25 11:05	VX112525
541-73-1	1,3-Dichlorobenzene	19.7		1	0.16	1.00	ug/L	11/25/25 11:05	VX112525
106-46-7	1,4-Dichlorobenzene	19.5		1	0.19	1.00	ug/L	11/25/25 11:05	VX112525
95-50-1	1,2-Dichlorobenzene	19.8		1	0.16	1.00	ug/L	11/25/25 11:05	VX112525
96-12-8	1,2-Dibromo-3-Chloropropane	20.3		1	0.53	1.00	ug/L	11/25/25 11:05	VX112525
120-82-1	1,2,4-Trichlorobenzene	19.0		1	0.20	1.00	ug/L	11/25/25 11:05	VX112525
87-61-6	1,2,3-Trichlorobenzene	19.1		1	0.20	1.00	ug/L	11/25/25 11:05	VX112525
SURROGATES									
17060-07-0	1,2-Dichloroethane-d4	51.2			70 (74) - 130 (125)	102%	SPK: 50		
1868-53-7	Dibromofluoromethane	45.9			70 (75) - 130 (124)	92%	SPK: 50		
2037-26-5	Toluene-d8	50.1			70 (86) - 130 (113)	100%	SPK: 50		
460-00-4	4-Bromofluorobenzene	49.1			70 (77) - 130 (121)	98%	SPK: 50		
INTERNAL STANDARDS		**Area Count**							
363-72-4	Pentafluorobenzene	153000							
540-36-3	1,4-Difluorobenzene	255000							
3114-55-4	Chlorobenzene-d5	234000							
3855-82-1	1,4-Dichlorobenzene-d4	119000							

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\VX112525\
Data File : VX048675.D
Acq On : 25 Nov 2025 11:05
Operator : JC/MD
Sample : VX1125WBS01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 26 00:57:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 05:08:11 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX1125WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 11/26/2025
Supervised By :Mahesh Dadoda 11/26/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.531	168	152887	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.745	114	255033	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.037	117	234446	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.006	152	118863	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.934	65	109025	51.177	ug/l	-0.01
Spiked Amount 50.000	Range 78 - 117		Recovery = 102.360%			
35) Dibromofluoromethane	5.367	113	88585	45.893	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 91.780%			
50) Toluene-d8	8.628	98	301514	50.084	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery = 100.160%			
62) 4-Bromofluorobenzene	11.061	95	110201	49.120	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery = 98.240%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.172	85	22127	17.861	ug/l	94
3) Chloromethane	1.300	50	24295	14.786	ug/l	99
4) Vinyl Chloride	1.380	62	36219	19.468	ug/l	99
5) Bromomethane	1.617	94	25740	21.911	ug/l	97
6) Chloroethane	1.697	64	23018	18.893	ug/l	99
7) Trichlorofluoromethane	1.892	101	59009	20.049	ug/l	99
8) Diethyl Ether	2.130	74	22761	19.266	ug/l	92
9) 1,1,2-Trichlorotrifluo...	2.337	101	34759	20.400	ug/l	98
10) Methyl Iodide	2.453	142	42210	16.739	ug/l	94
11) Tert butyl alcohol	2.934	59	36758	91.058	ug/l	96
12) 1,1-Dichloroethene	2.325	96	33081	18.587	ug/l	97
13) Acrolein	2.233	56	6194	106.049	ug/l	98
14) Allyl chloride	2.666	41	66933	20.199	ug/l	96
15) Acrylonitrile	3.056	53	98033	83.190	ug/l	97
16) Acetone	2.367	43	93404	92.625	ug/l	93
17) Carbon Disulfide	2.514	76	80445	16.062	ug/l	97
18) Methyl Acetate	2.697	43	62349	22.498	ug/l	97
19) Methyl tert-butyl Ether	3.105	73	112823	17.951	ug/l	98
20) Methylene Chloride	2.788	84	40943	19.749	ug/l	89
21) trans-1,2-Dichloroethene	3.087	96	31963	16.945	ug/l	93
22) Diisopropyl ether	3.745	45	106967	16.811	ug/l	98
23) Vinyl Acetate	3.709	43	440895	79.117	ug/l	97
24) 1,1-Dichloroethane	3.599	63	60180	17.237	ug/l	99
25) 2-Butanone	4.532	43	123469	82.766	ug/l	99
26) 2,2-Dichloropropane	4.458	77	52507	17.641	ug/l	97
27) cis-1,2-Dichloroethene	4.477	96	41109	17.829	ug/l	97
28) Bromochloromethane	4.879	49	36231	21.124	ug/l	95
29) Tetrahydrofuran	4.989	42	109256	102.688	ug/l	99
30) Chloroform	5.074	83	78377	21.745	ug/l	99
31) Cyclohexane	5.458	56	53720	18.779	ug/l	97
32) 1,1,1-Trichloroethane	5.367	97	66040	20.995	ug/l	97
36) 1,1-Dichloropropene	5.672	75	48847	18.899	ug/l	99
37) Ethyl Acetate	4.696	43	61527m	16.911	ug/l	
38) Carbon Tetrachloride	5.659	117	59766	20.313	ug/l	97
39) Methylcyclohexane	7.360	83	53181	18.325	ug/l	97
40) Benzene	6.025	78	153258	19.129	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112525\
Data File : VX048675.D
Acq On : 25 Nov 2025 11:05
Operator : JC/MD
Sample : VX1125WBS01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 26 00:57:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 05:08:11 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX1125WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 11/26/2025
Supervised By :Mahesh Dadoda 11/26/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	4.891	41	33806	21.128	ug/l		98
42) 1,2-Dichloroethane	6.068	62	56550	20.600	ug/l		99
43) Isopropyl Acetate	6.318	43	100417	19.634	ug/l		99
44) Trichloroethene	7.110	130	38829	20.275	ug/l		99
45) 1,2-Dichloropropane	7.409	63	39781	21.594	ug/l		100
46) Dibromomethane	7.561	93	29613	22.039	ug/l		96
47) Bromodichloromethane	7.799	83	62360	23.264	ug/l		97
48) Methyl methacrylate	7.671	41	49966	21.977	ug/l		96
49) 1,4-Dioxane	7.641	88	13134	379.127	ug/l	#	86
51) 4-Methyl-2-Pentanone	8.555	43	351138	120.614	ug/l		96
52) Toluene	8.702	92	93662	22.204	ug/l		96
53) t-1,3-Dichloropropene	8.964	75	62706	22.703	ug/l		95
54) cis-1,3-Dichloropropene	8.348	75	64782	22.651	ug/l		95
55) 1,1,2-Trichloroethane	9.134	97	40322	23.926	ug/l		97
56) Ethyl methacrylate	9.098	69	62837	22.411	ug/l		94
57) 1,3-Dichloropropane	9.293	76	66685	22.733	ug/l		100
58) 2-Chloroethyl Vinyl ether	8.226	63	153820	102.040	ug/l		99
59) 2-Hexanone	9.415	43	257854	119.070	ug/l		96
60) Dibromochloromethane	9.506	129	49363	23.856	ug/l		99
61) 1,2-Dibromoethane	9.592	107	41447	22.706	ug/l		98
64) Tetrachloroethene	9.256	164	32185	18.901	ug/l		96
65) Chlorobenzene	10.061	112	105854	19.023	ug/l		98
66) 1,1,1,2-Tetrachloroethane	10.146	131	38749	20.782	ug/l		97
67) Ethyl Benzene	10.177	91	180626	19.330	ug/l		99
68) m/p-Xylenes	10.287	106	136619	38.820	ug/l		95
69) o-Xylene	10.622	106	66180	19.220	ug/l		98
70) Styrene	10.640	104	117078	20.270	ug/l		98
71) Bromoform	10.780	173	34220	19.894	ug/l	#	100
73) Isopropylbenzene	10.945	105	172094	19.946	ug/l		100
74) N-amyl acetate	10.823	43	85016	19.624	ug/l		97
75) 1,1,2,2-Tetrachloroethane	11.195	83	61624	20.254	ug/l		99
76) 1,2,3-Trichloropropane	11.219	75	49164m	17.169	ug/l		
77) Bromobenzene	11.177	156	44598	20.018	ug/l		96
78) n-propylbenzene	11.286	91	202964	20.006	ug/l		100
79) 2-Chlorotoluene	11.347	91	123789	20.193	ug/l		98
80) 1,3,5-Trimethylbenzene	11.433	105	141282	20.087	ug/l		96
81) trans-1,4-Dichloro-2-b...	11.000	75	19410	19.388	ug/l	#	85
82) 4-Chlorotoluene	11.439	91	145988	20.302	ug/l		98
83) tert-Butylbenzene	11.695	119	145973	20.065	ug/l		98
84) 1,2,4-Trimethylbenzene	11.731	105	143093	20.163	ug/l		99
85) sec-Butylbenzene	11.872	105	179563	19.971	ug/l		100
86) p-Isopropyltoluene	11.994	119	153747	20.339	ug/l		97
87) 1,3-Dichlorobenzene	11.951	146	82209	19.688	ug/l		99
88) 1,4-Dichlorobenzene	12.024	146	84197	19.521	ug/l		98
89) n-Butylbenzene	12.317	91	139614	19.688	ug/l		100
90) Hexachloroethane	12.518	117	28897	20.064	ug/l		100
91) 1,2-Dichlorobenzene	12.317	146	79354	19.796	ug/l		100
92) 1,2-Dibromo-3-Chloropr...	12.926	75	14359	20.308	ug/l		94
93) 1,2,4-Trichlorobenzene	13.567	180	50576	18.987	ug/l		97
94) Hexachlorobutadiene	13.707	225	21406	19.224	ug/l		96
95) Naphthalene	13.756	128	164281	19.182	ug/l		99
96) 1,2,3-Trichlorobenzene	13.944	180	47215	19.056	ug/l		99

Sample Results: **VX048675.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112525\
Data File : VX048675.D
Acq On : 25 Nov 2025 11:05
Operator : JC/MD
Sample : VX1125WBS01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VX1125WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 11/26/2025
Supervised By :Mahesh Dadoda 11/26/2025

Quant Time: Nov 26 00:57:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 05:08:11 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: **VX048675.D**

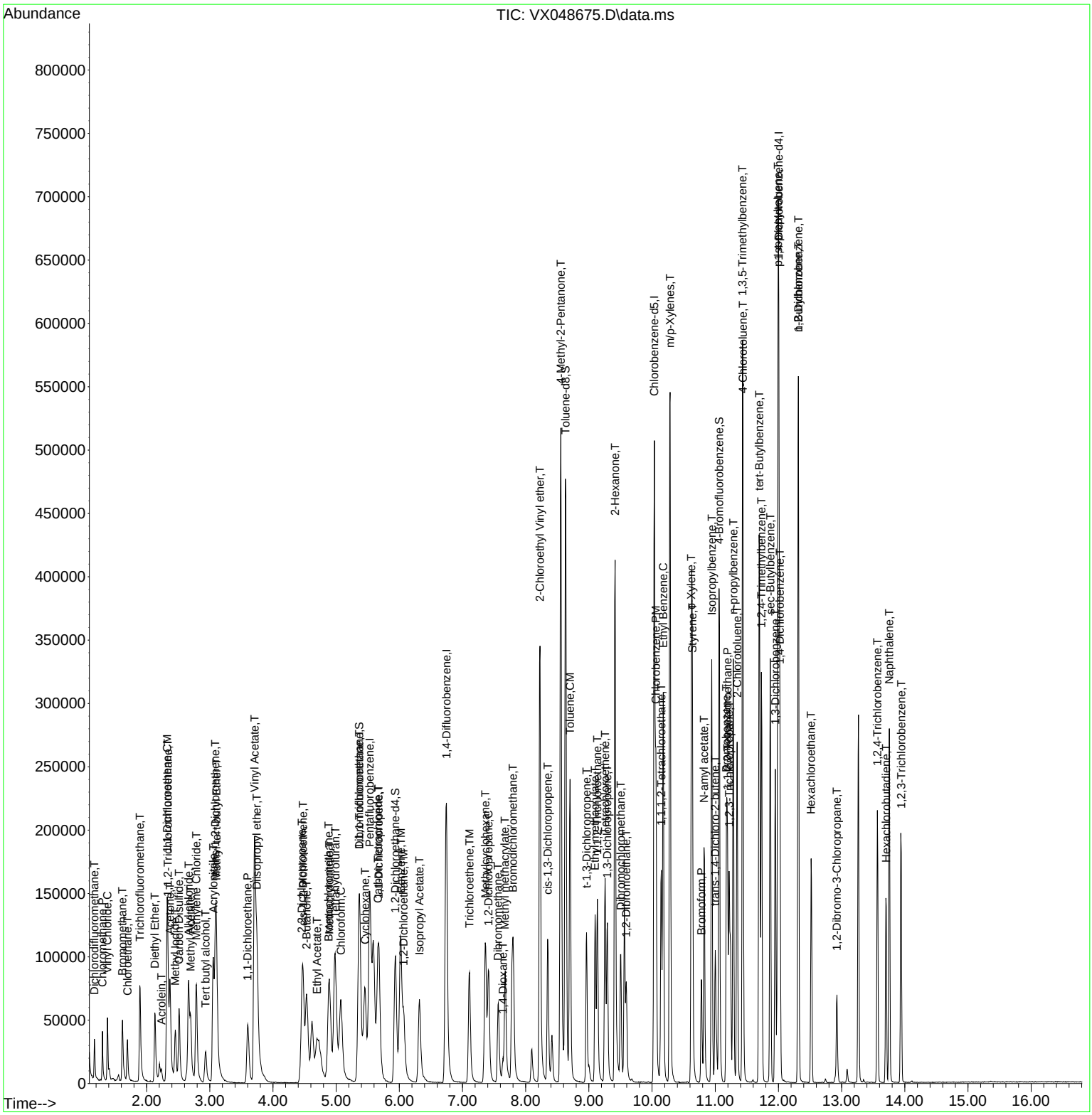
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112525\
Data File : VX048675.D
Acq On : 25 Nov 2025 11:05
Operator : JC/MD
Sample : VX1125WBS01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 26 00:57:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X110725W.M
Quant Title : SW846 8260
QLast Update : Sat Nov 08 05:08:11 2025
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX1125WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 11/26/2025
Supervised By :Mahesh Dadoda 11/26/2025



Raw Data: **VN088374.D**

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

Report of Analysis

Client:	G Environmental			Date Collected:	
Project:	Union			Date Received:	
Client Sample ID:	VN1201WBSD01			SDG No.:	Q3715
Lab Sample ID:	VN1201WBSD01			Matrix:	Water
Analytical Method:	8260D	Level:	LOW	% Solid:	0
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL	Test:	VOCMS Group1

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
TARGETS									
75-71-8	Dichlorodifluoromethane	18.9		1	0.22	1.00	ug/L	12/01/25 12:10	VN120125
74-87-3	Chloromethane	19.4		1	0.32	1.00	ug/L	12/01/25 12:10	VN120125
75-01-4	Vinyl Chloride	18.7		1	0.26	1.00	ug/L	12/01/25 12:10	VN120125
74-83-9	Bromomethane	20.2		1	1.40	5.00	ug/L	12/01/25 12:10	VN120125
75-00-3	Chloroethane	19.3		1	0.47	1.00	ug/L	12/01/25 12:10	VN120125
75-69-4	Trichlorofluoromethane	18.7		1	0.33	1.00	ug/L	12/01/25 12:10	VN120125
76-13-1	1,1,2-Trichlorotrifluoroethane	18.5		1	0.25	1.00	ug/L	12/01/25 12:10	VN120125
75-65-0	Tert butyl alcohol	88.0		1	5.50	25.0	ug/L	12/01/25 12:10	VN120125
75-35-4	1,1-Dichloroethene	18.8		1	0.23	1.00	ug/L	12/01/25 12:10	VN120125
67-64-1	Acetone	87.0		1	1.50	5.00	ug/L	12/01/25 12:10	VN120125
75-15-0	Carbon Disulfide	18.8		1	0.21	1.00	ug/L	12/01/25 12:10	VN120125
1634-04-4	Methyl tert-butyl Ether	19.4		1	0.16	1.00	ug/L	12/01/25 12:10	VN120125
79-20-9	Methyl Acetate	19.0		1	0.27	1.00	ug/L	12/01/25 12:10	VN120125
75-09-2	Methylene Chloride	20.2		1	0.28	1.00	ug/L	12/01/25 12:10	VN120125
156-60-5	trans-1,2-Dichloroethene	19.6		1	0.23	1.00	ug/L	12/01/25 12:10	VN120125
75-34-3	1,1-Dichloroethane	19.1		1	0.23	1.00	ug/L	12/01/25 12:10	VN120125
110-82-7	Cyclohexane	18.5		1	1.50	5.00	ug/L	12/01/25 12:10	VN120125
78-93-3	2-Butanone	96.2		1	0.98	5.00	ug/L	12/01/25 12:10	VN120125
56-23-5	Carbon Tetrachloride	18.8		1	0.25	1.00	ug/L	12/01/25 12:10	VN120125
156-59-2	cis-1,2-Dichloroethene	19.4		1	0.19	1.00	ug/L	12/01/25 12:10	VN120125
74-97-5	Bromochloromethane	18.5		1	0.22	1.00	ug/L	12/01/25 12:10	VN120125
67-66-3	Chloroform	19.6		1	0.25	1.00	ug/L	12/01/25 12:10	VN120125
71-55-6	1,1,1-Trichloroethane	19.0		1	0.20	1.00	ug/L	12/01/25 12:10	VN120125
108-87-2	Methylcyclohexane	18.5		1	0.16	1.00	ug/L	12/01/25 12:10	VN120125
71-43-2	Benzene	19.1		1	0.15	1.00	ug/L	12/01/25 12:10	VN120125
107-06-2	1,2-Dichloroethane	19.4		1	0.22	1.00	ug/L	12/01/25 12:10	VN120125
79-01-6	Trichloroethene	19.1		1	0.090	1.00	ug/L	12/01/25 12:10	VN120125
78-87-5	1,2-Dichloropropane	19.2		1	0.20	1.00	ug/L	12/01/25 12:10	VN120125
75-27-4	Bromodichloromethane	19.3		1	0.22	1.00	ug/L	12/01/25 12:10	VN120125
108-10-1	4-Methyl-2-Pentanone	98.5		1	0.68	5.00	ug/L	12/01/25 12:10	VN120125
108-88-3	Toluene	19.8		1	0.14	1.00	ug/L	12/01/25 12:10	VN120125
10061-02-6	t-1,3-Dichloropropene	19.1		1	0.17	1.00	ug/L	12/01/25 12:10	VN120125
10061-01-5	cis-1,3-Dichloropropene	19.5		1	0.16	1.00	ug/L	12/01/25 12:10	VN120125
79-00-5	1,1,2-Trichloroethane	20.0		1	0.21	1.00	ug/L	12/01/25 12:10	VN120125
591-78-6	2-Hexanone	94.4		1	0.89	5.00	ug/L	12/01/25 12:10	VN120125
124-48-1	Dibromochloromethane	20.3		1	0.18	1.00	ug/L	12/01/25 12:10	VN120125
106-93-4	1,2-Dibromoethane	19.9		1	0.15	1.00	ug/L	12/01/25 12:10	VN120125
127-18-4	Tetrachloroethene	19.0		1	0.23	1.00	ug/L	12/01/25 12:10	VN120125
108-90-7	Chlorobenzene	19.8		1	0.12	1.00	ug/L	12/01/25 12:10	VN120125
100-41-4	Ethyl Benzene	18.9		1	0.13	1.00	ug/L	12/01/25 12:10	VN120125
179601-23-1	m/p-Xylenes	37.8		1	0.24	2.00	ug/L	12/01/25 12:10	VN120125
95-47-6	o-Xylene	19.2		1	0.12	1.00	ug/L	12/01/25 12:10	VN120125
100-42-5	Styrene	19.4		1	0.15	1.00	ug/L	12/01/25 12:10	VN120125

Raw Data: **VN088374.D**

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

Report of Analysis

Client:	G Environmental			Date Collected:	
Project:	Union			Date Received:	
Client Sample ID:	VN1201WBSD01			SDG No.:	Q3715
Lab Sample ID:	VN1201WBSD01			Matrix:	Water
Analytical Method:	8260D	Level:	LOW	% Solid:	0
Sample Wt/Vol:	5 mL	Final Vol:	5000 uL	Test:	VOCMS Group1

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
75-25-2	Bromoform	20.1		1	0.19	1.00	ug/L	12/01/25 12:10	VN120125
98-82-8	Isopropylbenzene	19.3		1	0.12	1.00	ug/L	12/01/25 12:10	VN120125
79-34-5	1,1,2,2-Tetrachloroethane	19.5		1	0.26	1.00	ug/L	12/01/25 12:10	VN120125
541-73-1	1,3-Dichlorobenzene	19.5		1	0.16	1.00	ug/L	12/01/25 12:10	VN120125
106-46-7	1,4-Dichlorobenzene	19.0		1	0.19	1.00	ug/L	12/01/25 12:10	VN120125
95-50-1	1,2-Dichlorobenzene	19.0		1	0.16	1.00	ug/L	12/01/25 12:10	VN120125
96-12-8	1,2-Dibromo-3-Chloropropane	18.5		1	0.53	1.00	ug/L	12/01/25 12:10	VN120125
120-82-1	1,2,4-Trichlorobenzene	18.0		1	0.20	1.00	ug/L	12/01/25 12:10	VN120125
87-61-6	1,2,3-Trichlorobenzene	19.1		1	0.20	1.00	ug/L	12/01/25 12:10	VN120125
SURROGATES									
17060-07-0	1,2-Dichloroethane-d4	52.2			70 (74) - 130 (125)	104%	SPK: 50		
1868-53-7	Dibromofluoromethane	52.3			70 (75) - 130 (124)	105%	SPK: 50		
2037-26-5	Toluene-d8	53.2			70 (86) - 130 (113)	106%	SPK: 50		
460-00-4	4-Bromofluorobenzene	51.1			70 (77) - 130 (121)	102%	SPK: 50		
INTERNAL STANDARDS		**Area Count**							
363-72-4	Pentafluorobenzene	257000							
540-36-3	1,4-Difluorobenzene	473000							
3114-55-4	Chlorobenzene-d5	413000							
3855-82-1	1,4-Dichlorobenzene-d4	197000							

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120125\
Data File : VN088374.D
Acq On : 01 Dec 2025 12:10
Operator : JC\MD
Sample : VN1201WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 02 00:11:04 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:34:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN1201WBSD01

Manual Integrations APPROVED

Reviewed By :John Carlone 12/02/2025
Supervised By :Mahesh Dadoda 12/02/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.206	168	257123	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.082	114	472668	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.841	117	413438	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.770	152	196888	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.559	65	252803	52.192	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 104.380%			
35) Dibromofluoromethane	8.147	113	171251	52.281	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 104.560%			
50) Toluene-d8	10.541	98	648629	53.220	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 106.440%			
62) 4-Bromofluorobenzene	12.829	95	213607	51.080	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 102.160%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.142	85	72877	18.870	ug/l	98
3) Chloromethane	2.383	50	80587	19.429	ug/l	94
4) Vinyl Chloride	2.536	62	79060	18.736	ug/l	99
5) Bromomethane	2.989	94	40980	20.178	ug/l	99
6) Chloroethane	3.148	64	50269	19.250	ug/l	90
7) Trichlorofluoromethane	3.512	101	110683	18.663	ug/l	99
8) Diethyl Ether	3.965	74	42809	19.231	ug/l	98
9) 1,1,2-Trichlorotrifluo...	4.377	101	58334	18.476	ug/l	98
10) Methyl Iodide	4.583	142	60569	19.379	ug/l	96
11) Tert butyl alcohol	5.512	59	68039	87.983	ug/l #	81
12) 1,1-Dichloroethene	4.347	96	58831	18.754	ug/l	84
13) Acrolein	4.177	56	87619	118.346	ug/l	97
14) Allyl chloride	5.012	41	104505	17.974	ug/l	98
15) Acrylonitrile	5.706	53	213646	95.755	ug/l	98
16) Acetone	4.418	43	152332	86.961	ug/l	98
17) Carbon Disulfide	4.706	76	192813	18.810	ug/l	100
18) Methyl Acetate	5.018	43	99171	19.019	ug/l	99
19) Methyl tert-butyl Ether	5.783	73	228498	19.442	ug/l	95
20) Methylene Chloride	5.259	84	75693	20.196	ug/l	83
21) trans-1,2-Dichloroethene	5.771	96	68139	19.608	ug/l	92
22) Diisopropyl ether	6.653	45	244953	19.733	ug/l	96
23) Vinyl Acetate	6.588	43	972820m	97.271	ug/l	
24) 1,1-Dichloroethane	6.553	63	134006	19.063	ug/l	95
25) 2-Butanone	7.465	43	270811	96.165	ug/l	97
26) 2,2-Dichloropropane	7.477	77	112288	18.506	ug/l	95
27) cis-1,2-Dichloroethene	7.465	96	78314	19.392	ug/l	96
28) Bromochloromethane	7.794	49	64631	18.456	ug/l	99
29) Tetrahydrofuran	7.824	42	193749	95.919	ug/l	99
30) Chloroform	7.947	83	135282	19.585	ug/l	96
31) Cyclohexane	8.235	56	117687	18.475	ug/l	98
32) 1,1,1-Trichloroethane	8.147	97	115347	18.992	ug/l	95
36) 1,1-Dichloropropene	8.353	75	89956	17.794	ug/l	98
37) Ethyl Acetate	7.547	43	123427	18.569	ug/l	98
38) Carbon Tetrachloride	8.347	117	94617	18.801	ug/l	96
39) Methylcyclohexane	9.576	83	99985	18.491	ug/l	93
40) Benzene	8.588	78	284116	19.149	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120125\
Data File : VN088374.D
Acq On : 01 Dec 2025 12:10
Operator : JC\MD
Sample : VN1201WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 02 00:11:04 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:34:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN1201WBSD01

Manual Integrations APPROVED

Reviewed By :John Carlone 12/02/2025
Supervised By :Mahesh Dadoda 12/02/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.765	41	63105	19.168	ug/l		98
42) 1,2-Dichloroethane	8.647	62	109703	19.380	ug/l		98
43) Isopropyl Acetate	8.671	43	192472	18.952	ug/l		99
44) Trichloroethene	9.329	130	66801	19.054	ug/l		90
45) 1,2-Dichloropropane	9.600	63	72843	19.162	ug/l		100
46) Dibromomethane	9.688	93	54401	20.053	ug/l		98
47) Bromodichloromethane	9.865	83	106876	19.308	ug/l	#	93
48) Methyl methacrylate	9.659	41	84615	18.260	ug/l		99
49) 1,4-Dioxane	9.676	88	22017	373.614	ug/l	#	99
51) 4-Methyl-2-Pentanone	10.424	43	589357	98.453	ug/l		99
52) Toluene	10.606	92	170024	19.846	ug/l		98
53) t-1,3-Dichloropropene	10.818	75	108520	19.099	ug/l		99
54) cis-1,3-Dichloropropene	10.288	75	116758	19.541	ug/l		97
55) 1,1,2-Trichloroethane	10.994	97	66233	19.982	ug/l		95
56) Ethyl methacrylate	10.853	69	104863	20.028	ug/l		97
57) 1,3-Dichloropropane	11.141	76	120668	20.179	ug/l		99
58) 2-Chloroethyl Vinyl ether	10.141	63	276569	91.622	ug/l		99
59) 2-Hexanone	11.176	43	355826	94.358	ug/l		98
60) Dibromochloromethane	11.335	129	76699	20.298	ug/l		98
61) 1,2-Dibromoethane	11.447	107	66826	19.909	ug/l		97
64) Tetrachloroethene	11.076	164	62208	18.980	ug/l		95
65) Chlorobenzene	11.870	112	183680	19.779	ug/l		96
66) 1,1,1,2-Tetrachloroethane	11.941	131	61851	19.747	ug/l		99
67) Ethyl Benzene	11.941	91	306102	18.859	ug/l		97
68) m/p-Xylenes	12.053	106	227659	37.830	ug/l		99
69) o-Xylene	12.376	106	109896	19.155	ug/l		95
70) Styrene	12.388	104	181083	19.438	ug/l		99
71) Bromoform	12.559	173	46125	20.106	ug/l	#	99
73) Isopropylbenzene	12.670	105	280946	19.299	ug/l		100
74) N-amyl acetate	12.682	43	97186m	19.603	ug/l		
75) 1,1,2,2-Tetrachloroethane	12.917	83	91931	19.534	ug/l		97
76) 1,2,3-Trichloropropane	12.970	75	93113m	20.192	ug/l		
77) Bromobenzene	12.959	156	65049	19.529	ug/l		96
78) n-propylbenzene	13.012	91	348515	19.569	ug/l		100
79) 2-Chlorotoluene	13.100	91	204279	18.783	ug/l		99
80) 1,3,5-Trimethylbenzene	13.153	105	234071	19.404	ug/l		99
81) trans-1,4-Dichloro-2-b...	12.717	75	28199	17.348	ug/l	#	96
82) 4-Chlorotoluene	13.200	91	211139	19.546	ug/l		97
83) tert-Butylbenzene	13.412	119	192736	18.795	ug/l		99
84) 1,2,4-Trimethylbenzene	13.459	105	235984	19.682	ug/l		100
85) sec-Butylbenzene	13.594	105	283289	19.230	ug/l		100
86) p-Isopropyltoluene	13.706	119	228290	18.898	ug/l		98
87) 1,3-Dichlorobenzene	13.712	146	126657	19.534	ug/l		98
88) 1,4-Dichlorobenzene	13.788	146	129333	19.042	ug/l		98
89) n-Butylbenzene	14.029	91	219415	18.707	ug/l		99
90) Hexachloroethane	14.306	117	41810	18.946	ug/l		96
91) 1,2-Dichlorobenzene	14.082	146	115702	18.962	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	14.700	75	21103	18.481	ug/l		98
93) 1,2,4-Trichlorobenzene	15.370	180	65316	18.016	ug/l		95
94) Hexachlorobutadiene	15.470	225	24556	18.849	ug/l		94
95) Naphthalene	15.611	128	231154	18.400	ug/l		99
96) 1,2,3-Trichlorobenzene	15.811	180	67438	19.114	ug/l		98

Sample Results: **VN088374.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120125\
Data File : VN088374.D
Acq On : 01 Dec 2025 12:10
Operator : JC\MD
Sample : VN1201WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 02 00:11:04 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:34:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN1201WBSD01

Manual Integrations APPROVED

Reviewed By :John Carlone 12/02/2025
Supervised By :Mahesh Dadoda 12/02/2025

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

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

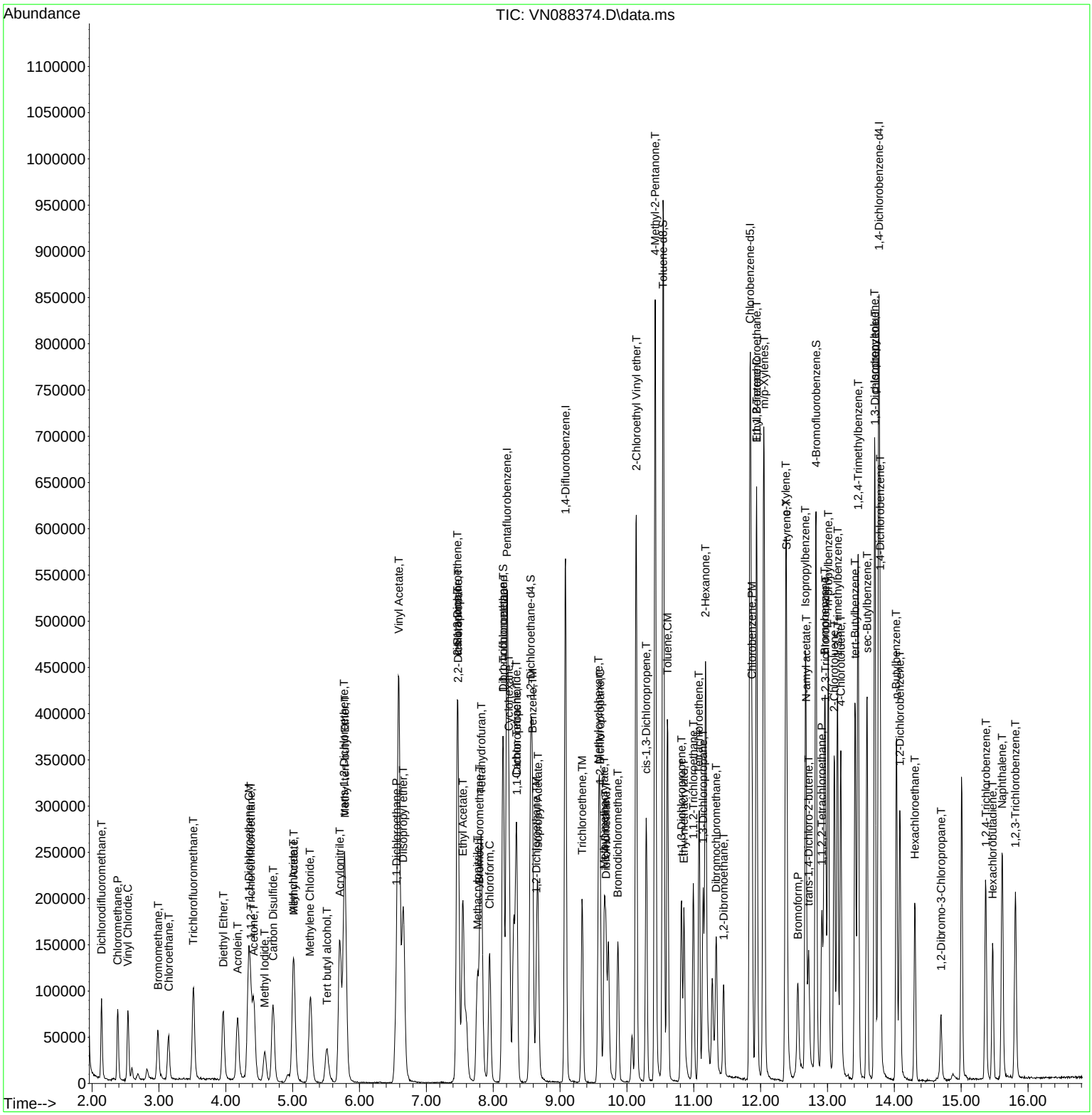
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN120125\
Data File : VN088374.D
Acq On : 01 Dec 2025 12:10
Operator : JC\MD
Sample : VN1201WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 02 00:11:04 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N112425W.M
Quant Title : SW846 8260
QLast Update : Tue Nov 25 01:34:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN1201WBSD01

Manual Integrations APPROVED

Reviewed By :John Carlone 12/02/2025
Supervised By :Mahesh Dadoda 12/02/2025



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

Manual Integration Report

Sequence:	VN112425	Instrument	MSVOA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC001	VN088344.D	1,1-Dichloroethene	JOHN	11/25/2025 9:35:55 AM	MMDadoda	11/26/2025 1:51:48 PM	Peak Integrated by Software
VSTDICC001	VN088344.D	1,2,3-Trichloropropane	JOHN	11/25/2025 9:35:55 AM	MMDadoda	11/26/2025 1:51:48 PM	Peak Integrated by Software
VSTDICC001	VN088344.D	1,4-Dichlorobenzene	JOHN	11/25/2025 9:35:55 AM	MMDadoda	11/26/2025 1:51:48 PM	Peak Integrated by Software
VSTDICC001	VN088344.D	2-Hexanone	JOHN	11/25/2025 9:35:55 AM	MMDadoda	11/26/2025 1:51:48 PM	Peak Integrated by Software
VSTDICC001	VN088344.D	cis-1,2-Dichloroethene	JOHN	11/25/2025 9:35:55 AM	MMDadoda	11/26/2025 1:51:48 PM	Peak Integrated by Software
VSTDICC001	VN088344.D	Diisopropyl ether	JOHN	11/25/2025 9:35:55 AM	MMDadoda	11/26/2025 1:51:48 PM	Peak Integrated by Software
VSTDICC005	VN088345.D	1,2,3-Trichloropropane	JOHN	11/25/2025 9:36:00 AM	MMDadoda	11/26/2025 1:51:51 PM	Peak Integrated by Software
VSTDICC005	VN088345.D	Vinyl Acetate	JOHN	11/25/2025 9:36:00 AM	MMDadoda	11/26/2025 1:51:51 PM	Peak Integrated by Software
VSTDICC020	VN088346.D	1,2,3-Trichloropropane	JOHN	11/25/2025 9:36:04 AM	MMDadoda	11/26/2025 1:51:55 PM	Peak Integrated by Software
VSTDICC020	VN088346.D	N-amyl acetate	JOHN	11/25/2025 9:36:04 AM	MMDadoda	11/26/2025 1:51:55 PM	Peak Integrated by Software
VSTDICC020	VN088346.D	Vinyl Acetate	JOHN	11/25/2025 9:36:04 AM	MMDadoda	11/26/2025 1:51:55 PM	Peak Integrated by Software
VSTDICCC050	VN088347.D	1,2,3-Trichloropropane	JOHN	11/25/2025 9:36:10 AM	MMDadoda	11/26/2025 1:51:58 PM	Peak Integrated by Software
VSTDICCC050	VN088347.D	Vinyl Acetate	JOHN	11/25/2025 9:36:10 AM	MMDadoda	11/26/2025 1:51:58 PM	Peak Integrated by Software

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

Manual Integration Report

Sequence:	VN112425	Instrument	MSVOA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC100	VN088348.D	1,2,3-Trichloropropane	JOHN	11/25/2025 9:36:15 AM	MMDadoda	11/26/2025 1:52:01 PM	Peak Integrated by Software
VSTDICC100	VN088348.D	Allyl chloride	JOHN	11/25/2025 9:36:15 AM	MMDadoda	11/26/2025 1:52:01 PM	Peak Integrated by Software
VSTDICC100	VN088348.D	Vinyl Acetate	JOHN	11/25/2025 9:36:15 AM	MMDadoda	11/26/2025 1:52:01 PM	Peak Integrated by Software
VSTDICC150	VN088349.D	1,2,3-Trichloropropane	JOHN	11/25/2025 9:36:20 AM	MMDadoda	11/26/2025 1:52:04 PM	Peak Integrated by Software
VSTDICC150	VN088349.D	Allyl chloride	JOHN	11/25/2025 9:36:20 AM	MMDadoda	11/26/2025 1:52:04 PM	Peak Integrated by Software
VSTDICC150	VN088349.D	Vinyl Acetate	JOHN	11/25/2025 9:36:20 AM	MMDadoda	11/26/2025 1:52:04 PM	Peak Integrated by Software
VSTDICV050	VN088351.D	1,2,3-Trichloropropane	JOHN	11/25/2025 9:36:25 AM	MMDadoda	11/26/2025 1:52:07 PM	Peak Integrated by Software
VSTDICV050	VN088351.D	N-amyl acetate	JOHN	11/25/2025 9:36:25 AM	MMDadoda	11/26/2025 1:52:07 PM	Peak Integrated by Software
VSTDICV050	VN088351.D	Vinyl Acetate	JOHN	11/25/2025 9:36:25 AM	MMDadoda	11/26/2025 1:52:07 PM	Peak Integrated by Software

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

Manual Integration Report

Sequence:	VN120125	Instrument	MSVOA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC050	VN088370.D	1,2,3-Trichloropropane	JOHN	12/2/2025 7:49:00 AM	MMDadoda	12/2/2025 1:11:28 PM	Peak Integrated by Software
VSTDCCC050	VN088370.D	Methacrylonitrile	JOHN	12/2/2025 7:49:00 AM	MMDadoda	12/2/2025 1:11:28 PM	Peak Integrated by Software
VSTDCCC050	VN088370.D	N-amyl acetate	JOHN	12/2/2025 7:49:00 AM	MMDadoda	12/2/2025 1:11:28 PM	Peak Integrated by Software
VSTDCCC050	VN088370.D	Vinyl Acetate	JOHN	12/2/2025 7:49:00 AM	MMDadoda	12/2/2025 1:11:28 PM	Peak Integrated by Software
VN1201WBS01	VN088373.D	1,2,3-Trichloropropane	JOHN	12/2/2025 7:49:05 AM	MMDadoda	12/2/2025 1:11:32 PM	Peak Integrated by Software
VN1201WBS01	VN088373.D	N-amyl acetate	JOHN	12/2/2025 7:49:05 AM	MMDadoda	12/2/2025 1:11:32 PM	Peak Integrated by Software
VN1201WBS01	VN088373.D	Vinyl Acetate	JOHN	12/2/2025 7:49:05 AM	MMDadoda	12/2/2025 1:11:32 PM	Peak Integrated by Software
VN1201WBSD01	VN088374.D	1,2,3-Trichloropropane	JOHN	12/2/2025 7:49:10 AM	MMDadoda	12/2/2025 1:11:38 PM	Peak Integrated by Software
VN1201WBSD01	VN088374.D	N-amyl acetate	JOHN	12/2/2025 7:49:10 AM	MMDadoda	12/2/2025 1:11:38 PM	Peak Integrated by Software
VN1201WBSD01	VN088374.D	Vinyl Acetate	JOHN	12/2/2025 7:49:10 AM	MMDadoda	12/2/2025 1:11:38 PM	Peak Integrated by Software
Q3715-02	VN088375.D	n-Butylbenzene	JOHN	12/2/2025 7:49:14 AM	MMDadoda	12/2/2025 1:11:48 PM	Peak Integrated by Software
Q3715-02	VN088375.D	o-Xylene	JOHN	12/2/2025 7:49:14 AM	MMDadoda	12/2/2025 1:11:48 PM	Peak Integrated by Software
VSTDCCC050	VN088394.D	1,2,3-Trichloropropane	JOHN	12/2/2025 7:49:42 AM	MMDadoda	12/2/2025 1:12:07 PM	Peak Integrated by Software

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Manual Integration Report

Sequence:	VN120125	Instrument	MSVOA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC050	VN088394.D	N-amyl acetate	JOHN	12/2/2025 7:49:42 AM	MMDadoda	12/2/2025 1:12:07 PM	Peak Integrated by Software
VSTDCCC050	VN088394.D	Vinyl Acetate	JOHN	12/2/2025 7:49:42 AM	MMDadoda	12/2/2025 1:12:07 PM	Peak Integrated by Software

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Manual Integration Report

Sequence:	VX110725	Instrument	MSVOA_x

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC001	VX048516.D	1,2,3-Trichloropropane	JOHN	11/10/2025 8:27:19 AM	sam	11/10/2025 10:11:26 AM	Peak Integrated by Software
VSTDICC001	VX048516.D	1,4-Dichlorobenzene	JOHN	11/10/2025 8:27:19 AM	sam	11/10/2025 10:11:26 AM	Peak Integrated by Software
VSTDICC001	VX048516.D	2-Chloroethyl Vinyl ether	JOHN	11/10/2025 8:27:19 AM	sam	11/10/2025 10:11:26 AM	Peak Integrated by Software
VSTDICC005	VX048517.D	1,2,3-Trichloropropane	JOHN	11/10/2025 8:27:24 AM	sam	11/10/2025 10:11:30 AM	Peak Integrated by Software
VSTDICC005	VX048517.D	2-Chloroethyl Vinyl ether	JOHN	11/10/2025 8:27:24 AM	sam	11/10/2025 10:11:30 AM	Peak Integrated by Software
VSTDICC020	VX048518.D	1,2,3-Trichloropropane	JOHN	11/10/2025 8:27:29 AM	sam	11/10/2025 10:11:35 AM	Peak Integrated by Software
VSTDICC020	VX048518.D	2-Chloroethyl Vinyl ether	JOHN	11/10/2025 8:27:29 AM	sam	11/10/2025 10:11:35 AM	Peak Integrated by Software
VSTDICC020	VX048518.D	Acrolein	JOHN	11/10/2025 8:27:29 AM	sam	11/10/2025 10:11:35 AM	Peak Integrated by Software
VSTDICC100	VX048520.D	1,2,3-Trichloropropane	JOHN	11/10/2025 8:27:38 AM	sam	11/10/2025 10:12:15 AM	Peak Integrated by Software
VSTDICC100	VX048520.D	Bromomethane	JOHN	11/10/2025 8:27:38 AM	sam	11/10/2025 10:12:15 AM	Peak Integrated by Software
VSTDICC150	VX048521.D	1,2,3-Trichloropropane	JOHN	11/10/2025 8:27:44 AM	sam	11/10/2025 10:11:39 AM	Peak Integrated by Software
VSTDICCC050	VX048524.D	1,2,3-Trichloropropane	JOHN	11/10/2025 8:27:53 AM	sam	11/10/2025 10:12:22 AM	Peak Integrated by Software
VSTDICV050	VX048525.D	1,2,3-Trichloropropane	JOHN	11/10/2025 8:27:58 AM	sam	11/10/2025 10:11:48 AM	Peak Integrated by Software

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Manual Integration Report

Sequence:	VX110725	Instrument	MSVOA_x

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

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Manual Integration Report

Sequence:	VX112525	Instrument	MSVOA_x

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC050	VX048672.D	1,2,3-Trichloropropane	JOHN	11/26/2025 8:19:05 AM	MMDadoda	11/26/2025 12:38:27 PM	Peak Integrated by Software
VX1125WBS01	VX048675.D	1,2,3-Trichloropropane	JOHN	11/26/2025 8:19:10 AM	MMDadoda	11/26/2025 12:38:32 PM	Peak Integrated by Software
VX1125WBS01	VX048675.D	Ethyl Acetate	JOHN	11/26/2025 8:19:10 AM	MMDadoda	11/26/2025 12:38:32 PM	Peak Integrated by Software
VSTDCCC050	VX048684.D	1,2,3-Trichloropropane	JOHN	11/26/2025 8:19:36 AM	MMDadoda	11/26/2025 12:38:52 PM	Peak Integrated by Software

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Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN112425

Review By	John Carlone	Review On	11/25/2025 9:36:43 AM				
Supervise By	Mahesh Dadoda	Supervise On	11/26/2025 1:52:19 PM				
SubDirectory	VN112425	HP Acquire Method	MSVOA_N		HP Processing Method	82N112425W.M	

STD. NAME	STD REF.#
Tune/Reschk	VP136378
Initial Calibration Stds	VP136444,VP136445,VP136446,VP136447,VP136448,VP136449
CCC	
Internal Standard/PEM	
ICV/I.BLK	VP136450
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VN088343.D	24 Nov 2025 08:17	JC\MD	Ok
2	VSTDICC001	VN088344.D	24 Nov 2025 12:38	JC\MD	Ok,M
3	VSTDICC005	VN088345.D	24 Nov 2025 13:11	JC\MD	Ok,M
4	VSTDICC020	VN088346.D	24 Nov 2025 13:32	JC\MD	Ok,M
5	VSTDICCC050	VN088347.D	24 Nov 2025 13:53	JC\MD	Ok,M
6	VSTDICC100	VN088348.D	24 Nov 2025 14:14	JC\MD	Ok,M
7	VSTDICC150	VN088349.D	24 Nov 2025 14:35	JC\MD	Ok,M
8	IBLK	VN088350.D	24 Nov 2025 14:56	JC\MD	Ok
9	VSTDICV050	VN088351.D	24 Nov 2025 15:18	JC\MD	Ok,M

M : Manual Integration

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Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN120125

Review By	Semsettin Yesilyurt	Review On	12/4/2025 10:27:11 AM				
Supervise By	John Carlone	Supervise On	12/4/2025 10:36:07 AM				
SubDirectory	VN120125	HP Acquire Method	MSVOA_N		HP Processing Method	82N112425W.M	

STD. NAME	STD REF.#
Tune/Reschk	VP136451
Initial Calibration Stds	
CCC	VP136452,VP136453
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VN088369.D	01 Dec 2025 08:49	JC\MD	Ok
2	VSTDCCC050	VN088370.D	01 Dec 2025 09:58	JC\MD	Ok,M
3	VN1201MBL01	VN088371.D	01 Dec 2025 10:33	JC\MD	Ok
4	VN1201WBL01	VN088372.D	01 Dec 2025 10:53	JC\MD	Ok
5	VN1201WBS01	VN088373.D	01 Dec 2025 11:27	JC\MD	Ok,M
6	VN1201WBSD01	VN088374.D	01 Dec 2025 12:10	JC\MD	Ok,M
7	Q3715-02	VN088375.D	01 Dec 2025 12:30	JC\MD	Ok,M
8	Q3741-07	VN088376.D	01 Dec 2025 12:51	JC\MD	Ok
9	Q3716-01	VN088377.D	01 Dec 2025 13:11	JC\MD	Dilution
10	Q3716-03	VN088378.D	01 Dec 2025 13:32	JC\MD	Not Ok
11	Q3716-04	VN088379.D	01 Dec 2025 13:52	JC\MD	Dilution
12	Q3715-01	VN088380.D	01 Dec 2025 14:13	JC\MD	ReRun
13	Q3716-02	VN088381.D	01 Dec 2025 14:33	JC\MD	Ok
14	Q3738-01	VN088382.D	01 Dec 2025 14:54	JC\MD	Not Ok
15	Q3738-03	VN088383.D	01 Dec 2025 15:15	JC\MD	Ok
16	Q3738-02	VN088384.D	01 Dec 2025 15:35	JC\MD	Ok,M
17	Q3745-01	VN088385.D	01 Dec 2025 15:56	JC\MD	ReRun
18	Q3745-02	VN088386.D	01 Dec 2025 16:16	JC\MD	Ok
19	Q3745-03	VN088387.D	01 Dec 2025 16:37	JC\MD	Ok
20	Q3745-04	VN088388.D	01 Dec 2025 16:58	JC\MD	Ok
21	Q3743-03	VN088389.D	01 Dec 2025 17:18	JC\MD	Ok

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Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN120125

Review By	Semsettin Yesilyurt	Review On	12/4/2025 10:27:11 AM				
Supervise By	John Carlone	Supervise On	12/4/2025 10:36:07 AM				
SubDirectory	VN120125	HP Acquire Method	MSVOA_N		HP Processing Method	82N112425W.M	

STD. NAME	STD REF.#
Tune/Reschk	VP136451
Initial Calibration Stds	
CCC	VP136452,VP136453
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

22	Q3743-04	VN088390.D	01 Dec 2025 17:39	JC\MD	Ok
23	Q3743-05	VN088391.D	01 Dec 2025 18:00	JC\MD	Not Ok
24	Q3743-01	VN088392.D	01 Dec 2025 18:20	JC\MD	Ok
25	Q3743-02	VN088393.D	01 Dec 2025 18:41	JC\MD	Ok
26	VSTDCCC050	VN088394.D	01 Dec 2025 19:01	JC\MD	Ok,M

M : Manual Integration

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Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QCBatch ID # VX110725

Review By	John Carlone	Review On	11/10/2025 8:28:24 AM				
Supervise By	Amit Patel	Supervise On	11/10/2025 9:54:56 AM				
SubDirectory	VX110725	HP Acquire Method	MSVOA_X		HP Processing Method	82X110725W.M	

STD. NAME	STD REF.#
Tune/Reschk	VP136104
Initial Calibration Stds	VP136097,VP136098,VP135099,VP136100,VP136101,VP135102
CCC	
Internal Standard/PEM	
ICV/I.BLK	VP136103
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VX048515.D	07 Nov 2025 13:06	JC/MD	Ok
2	VSTDICC001	VX048516.D	07 Nov 2025 13:35	JC/MD	Ok,M
3	VSTDICC005	VX048517.D	07 Nov 2025 13:56	JC/MD	Ok,M
4	VSTDICC020	VX048518.D	07 Nov 2025 14:16	JC/MD	Ok,M
5	VSTDICCC050	VX048519.D	07 Nov 2025 14:37	JC/MD	Not Ok
6	VSTDICC100	VX048520.D	07 Nov 2025 14:58	JC/MD	Ok,M
7	VSTDICC150	VX048521.D	07 Nov 2025 15:18	JC/MD	Ok,M
8	VIBLK	VX048522.D	07 Nov 2025 15:39	JC/MD	Ok
9	VSTDICC005	VX048523.D	07 Nov 2025 16:08	JC/MD	Not Ok
10	VSTDICCC050	VX048524.D	07 Nov 2025 16:29	JC/MD	Ok,M
11	VSTDICV050	VX048525.D	07 Nov 2025 16:50	JC/MD	Ok,M

M : Manual Integration

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Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QCBatch ID # VX112525

Review By	John Carlone	Review On	11/26/2025 8:21:34 AM		
Supervise By	Mahesh Dadoda	Supervise On	11/26/2025 12:39:09 PM		
SubDirectory	VX112525	HP Acquire Method		HP Processing Method	82X110725W.M

STD. NAME	STD REF.#
Tune/Reschk	VP136388
Initial Calibration Stds	
CCC	VP136389,VP136390
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VX048671.D	25 Nov 2025 08:48	JC/MD	Ok
2	VSTDCCC050	VX048672.D	25 Nov 2025 09:48	JC/MD	Ok,M
3	VX1125MBL01	VX048673.D	25 Nov 2025 10:17	JC/MD	Ok
4	VX1125WBL01	VX048674.D	25 Nov 2025 10:38	JC/MD	Ok
5	VX1125WBS01	VX048675.D	25 Nov 2025 11:05	JC/MD	Ok,M
6	VX1125WBSD01	VX048676.D	25 Nov 2025 11:32	JC/MD	Ok,M
7	Q3715-02	VX048677.D	25 Nov 2025 12:19	JC/MD	Not Ok
8	Q3715-01	VX048678.D	25 Nov 2025 12:39	JC/MD	Ok
9	Q3715-03	VX048679.D	25 Nov 2025 13:00	JC/MD	Ok
10	Q3716-01DL	VX048680.D	25 Nov 2025 13:21	JC/MD	Not Ok
11	Q3716-02	VX048681.D	25 Nov 2025 13:41	JC/MD	Not Ok
12	Q3716-03	VX048682.D	25 Nov 2025 14:02	JC/MD	Not Ok
13	Q3716-04	VX048683.D	25 Nov 2025 14:23	JC/MD	Not Ok
14	VSTDCCC050	VX048684.D	25 Nov 2025 14:43	JC/MD	Ok,M

M : Manual Integration

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Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN112425

Review By	John Carlone	Review On	11/25/2025 9:36:43 AM		
Supervise By	Mahesh Dadoda	Supervise On	11/26/2025 1:52:19 PM		
SubDirectory	VN112425	HP Acquire Method	MSVOA_N	HP Processing Method	82N112425W.M

STD. NAME	STD REF.#
Tune/Reschk	VP136378
Initial Calibration Stds	VP136444,VP136445,VP136446,VP136447,VP136448,VP136449
CCC	
Internal Standard/PEM	
ICV/I.BLK	VP136450
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VN088343.D	24 Nov 2025 08:17		JC\MD	Ok
2	VSTDICC001	VSTDICC001	VN088344.D	24 Nov 2025 12:38		JC\MD	Ok,M
3	VSTDICC005	VSTDICC005	VN088345.D	24 Nov 2025 13:11	COM.#74 Peak not detected in 1 and 5 PPB	JC\MD	Ok,M
4	VSTDICC020	VSTDICC020	VN088346.D	24 Nov 2025 13:32		JC\MD	Ok,M
5	VSTDICCC050	VSTDICCC050	VN088347.D	24 Nov 2025 13:53	Method failed for Comp. #74	JC\MD	Ok,M
6	VSTDICC100	VSTDICC100	VN088348.D	24 Nov 2025 14:14		JC\MD	Ok,M
7	VSTDICC150	VSTDICC150	VN088349.D	24 Nov 2025 14:35		JC\MD	Ok,M
8	IBLK	IBLK	VN088350.D	24 Nov 2025 14:56		JC\MD	Ok
9	VSTDICV050	ICVVN112425	VN088351.D	24 Nov 2025 15:18		JC\MD	Ok,M

M : Manual Integration

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Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN120125

Review By	Semsettin Yesilyurt	Review On	12/4/2025 10:27:11 AM		
Supervise By	John Carlone	Supervise On	12/4/2025 10:36:07 AM		
SubDirectory	VN120125	HP Acquire Method	MSVOA_N	HP Processing Method	82N112425W.M

STD. NAME	STD REF.#
Tune/Reschk	VP136451
Initial Calibration Stds	
CCC	VP136452,VP136453
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	VN088369.D	01 Dec 2025 08:49		JC\MD	Ok
2	VSTDCCC050	VSTDCCC050	VN088370.D	01 Dec 2025 09:58	pH#Lot#V12668	JC\MD	Ok,M
3	VN1201MBL01	VN1201MBL01	VN088371.D	01 Dec 2025 10:33		JC\MD	Ok
4	VN1201WBL01	VN1201WBL01	VN088372.D	01 Dec 2025 10:53		JC\MD	Ok
5	VN1201WBS01	VN1201WBS01	VN088373.D	01 Dec 2025 11:27		JC\MD	Ok,M
6	VN1201WBSD01	VN1201WBSD01	VN088374.D	01 Dec 2025 12:10		JC\MD	Ok,M
7	Q3715-02	MW6	VN088375.D	01 Dec 2025 12:30	vial A pH<2	JC\MD	Ok,M
8	Q3741-07	TB-1	VN088376.D	01 Dec 2025 12:51	vial A pH<2 TB	JC\MD	Ok
9	Q3716-01	MW5	VN088377.D	01 Dec 2025 13:11	vial A pH<2 Need 20X	JC\MD	Dilution
10	Q3716-03	MW4	VN088378.D	01 Dec 2025 13:32	Need Straight Run	JC\MD	Not Ok
11	Q3716-04	MW7	VN088379.D	01 Dec 2025 13:52	Need 200X	JC\MD	Dilution
12	Q3715-01	MW2	VN088380.D	01 Dec 2025 14:13	E flag of previous sample	JC\MD	ReRun
13	Q3716-02	MW3	VN088381.D	01 Dec 2025 14:33	vial A pH<2	JC\MD	Ok
14	Q3738-01	MW4	VN088382.D	01 Dec 2025 14:54	Run @ Lower Dilution	JC\MD	Not Ok
15	Q3738-03	Field	VN088383.D	01 Dec 2025 15:15	vial A pH<2 FB	JC\MD	Ok
16	Q3738-02	MW5	VN088384.D	01 Dec 2025 15:35	vial A pH<2	JC\MD	Ok,M
17	Q3745-01	STORAGE-BLANK-SO	VN088385.D	01 Dec 2025 15:56	vial A pH<2 Tics Contamination	JC\MD	ReRun
18	Q3745-02	STORAGE-BLANK-WA	VN088386.D	01 Dec 2025 16:16	vial A pH<2	JC\MD	Ok

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Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN120125

Review By	Semsettin Yesilyurt	Review On	12/4/2025 10:27:11 AM		
Supervise By	John Carlone	Supervise On	12/4/2025 10:36:07 AM		
SubDirectory	VN120125	HP Acquire Method	MSVOA_N	HP Processing Method	82N112425W.M

STD. NAME	STD REF.#
Tune/Reschk	VP136451
Initial Calibration Stds	
CCC	VP136452,VP136453
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

19	Q3745-03	STORAGE-BLANK-WA	VN088387.D	01 Dec 2025 16:37	vial A pH<2	JC\MD	Ok
20	Q3745-04	STORAGE-BLANK-SAI	VN088388.D	01 Dec 2025 16:58	vial A pH<2	JC\MD	Ok
21	Q3743-03	TB	VN088389.D	01 Dec 2025 17:18	vial A pH<2 TB	JC\MD	Ok
22	Q3743-04	TB	VN088390.D	01 Dec 2025 17:39	vial A pH<2 TB	JC\MD	Ok
23	Q3743-05	TB	VN088391.D	01 Dec 2025 18:00	SIM Method on login	JC\MD	Not Ok
24	Q3743-01	TW-1125-1	VN088392.D	01 Dec 2025 18:20	vial A pH<2	JC\MD	Ok
25	Q3743-02	TW-1125-2	VN088393.D	01 Dec 2025 18:41	vial A pH<2	JC\MD	Ok
26	VSTDCCC050	VSTDCCC050EC	VN088394.D	01 Dec 2025 19:01		JC\MD	Ok,M

M : Manual Integration

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Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QCBatch ID # VX110725

Review By	John Carlone	Review On	11/10/2025 8:28:24 AM		
Supervise By	Amit Patel	Supervise On	11/10/2025 9:54:56 AM		
SubDirectory	VX110725	HP Acquire Method	MSVOA_X	HP Processing Method	82X110725W.M

STD. NAME	STD REF.#
Tune/Reschk	VP136104
Initial Calibration Stds	VP136097,VP136098,VP135099,VP136100,VP136101,VP135102
CCC	
Internal Standard/PEM	
ICV/I.BLK	VP136103
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VX048515.D	07 Nov 2025 13:06		JC/MD	Ok
2	VSTDICC001	VSTDICC001	VX048516.D	07 Nov 2025 13:35		JC/MD	Ok,M
3	VSTDICC005	VSTDICC005	VX048517.D	07 Nov 2025 13:56		JC/MD	Ok,M
4	VSTDICC020	VSTDICC020	VX048518.D	07 Nov 2025 14:16		JC/MD	Ok,M
5	VSTDICCC050	VSTDICCC050	VX048519.D	07 Nov 2025 14:37	spiked low	JC/MD	Not Ok
6	VSTDICC100	VSTDICC100	VX048520.D	07 Nov 2025 14:58		JC/MD	Ok,M
7	VSTDICC150	VSTDICC150	VX048521.D	07 Nov 2025 15:18		JC/MD	Ok,M
8	VIBLK	VIBLK	VX048522.D	07 Nov 2025 15:39		JC/MD	Ok
9	VSTDICC005	VSTDICC005	VX048523.D	07 Nov 2025 16:08	spike error	JC/MD	Not Ok
10	VSTDICCC050	VSTDICCC050	VX048524.D	07 Nov 2025 16:29		JC/MD	Ok,M
11	VSTDICV050	ICVVX110725	VX048525.D	07 Nov 2025 16:50		JC/MD	Ok,M

M : Manual Integration

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Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QCBatch ID # VX112525

Review By	John Carlone	Review On	11/26/2025 8:21:34 AM		
Supervise By	Mahesh Dadoda	Supervise On	11/26/2025 12:39:09 PM		
SubDirectory	VX112525	HP Acquire Method		HP Processing Method	82X110725W.M

STD. NAME	STD REF.#
Tune/Reschk	VP136388
Initial Calibration Stds	
CCC	VP136389,VP136390
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	VX048671.D	25 Nov 2025 08:48		JC/MD	Ok
2	VSTDCCC050	VSTDCCC050	VX048672.D	25 Nov 2025 09:48	pH#Lot#V12668	JC/MD	Ok,M
3	VX1125MBL01	VX1125MBL01	VX048673.D	25 Nov 2025 10:17		JC/MD	Ok
4	VX1125WBL01	VX1125WBL01	VX048674.D	25 Nov 2025 10:38		JC/MD	Ok
5	VX1125WBS01	VX1125WBS01	VX048675.D	25 Nov 2025 11:05		JC/MD	Ok,M
6	VX1125WBSD01	VX1125WBSD01	VX048676.D	25 Nov 2025 11:32		JC/MD	Ok,M
7	Q3715-02	MW6	VX048677.D	25 Nov 2025 12:19	Run @ Lower Dilution	JC/MD	Not Ok
8	Q3715-01	MW2	VX048678.D	25 Nov 2025 12:39	vial A pH<2	JC/MD	Ok
9	Q3715-03	MW7	VX048679.D	25 Nov 2025 13:00	vial A pH<2	JC/MD	Ok
10	Q3716-01DL	MW5DL	VX048680.D	25 Nov 2025 13:21	Not match exactly please check	JC/MD	Not Ok
11	Q3716-02	MW3	VX048681.D	25 Nov 2025 13:41	Surrogate Fail;BS,BSD failed high for comp. #52;Run @ Lower Dilution	JC/MD	Not Ok
12	Q3716-03	MW4	VX048682.D	25 Nov 2025 14:02	BS,BSD failed high for comp. #52;Run @ Lower Dilution	JC/MD	Not Ok
13	Q3716-04	MW7	VX048683.D	25 Nov 2025 14:23	vial A pH<2 BS,BSD failed high for comp. #52;Need 200X	JC/MD	Not Ok
14	VSTDCCC050	VSTDCCC050EC	VX048684.D	25 Nov 2025 14:43		JC/MD	Ok,M

M : Manual Integration

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Prep Standard - Chemical Standard Summary

Order ID : Q3715

Test : VOCMS Group1

Prepbatch ID :

Sequence ID/Qc Batch ID: VN120125,VX112525,

Standard ID :
VP134142,VP134149,VP135878,VP136027,VP136145,VP136354,VP136376,VP136388,VP136389,VP136390,VP136451,VP136452,VP136453,

Chemical ID :
V13392,V14291,V14511,V14512,V14533,V14534,V14636,V14637,V14638,V14639,V14668,V14671,V14673,V14675,V14697,V14698,V14701,V14735,V14738,V14813,V14816,V14844,V14909,V14926,V14929,V14931,V14936,V14937,V14955,V14956,V15122,V15123,V15124,V15125,W3112,

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VOC STANDARD PREPARATION LOG

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

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

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

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

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VOC STANDARD PREPARATION LOG

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

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

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
257	8260 Calibration Working STD Mix-First source, 160PPM	VP136027	11/04/2025	12/15/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 11/04/2025

FROM 0.40000ml of V14844 + 1.00000ml of V14511 + 1.00000ml of V14512 + 1.00000ml of V14533 + 1.00000ml of V14534 + 1.00000ml of V14701 + 1.00000ml of V14735 + 1.00000ml of V14738 + 1.00000ml of V14813 + 1.00000ml of V14816 + 1.00000ml of V14955 + 1.00000ml of V14956 + 1.50000ml of V14697 + 1.50000ml of V14698 + 10.60000ml of V14931 = Final Quantity: 25.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
247	8260 Internal Standard, 250PPM	VP136145	11/11/2025	04/30/2026	Semsettin Yesilyurt	None	None	Mahesh Dadoda 11/12/2025

FROM 0.25000ml of V14291 + 24.75000ml of V14937 = Final Quantity: 25.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
51	8260 Working STD (Acrolein) -first source, 800PPM	VP136354	11/20/2025	12/19/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 11/21/2025

FROM 1.00000ml of V15122 + 1.00000ml of V15123 + 1.00000ml of V15124 + 1.00000ml of V15125 + 21.00000ml of V14937 = 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
218	BFB, 25PPM	VP136376	11/24/2025	05/24/2026	Semsettin Yesilyurt	None	None	Mahesh Dadoda 11/25/2025

FROM 0.50000ml of V13392 + 49.50000ml of V14936 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
589	BFB TUNE CHECK	VP136388	11/25/2025	11/26/2025	John Carlone	None	None	Mahesh Dadoda 11/26/2025

FROM 39.98400ml of W3112 + 0.01600ml of VP136376 = 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	VP136389	11/25/2025	11/26/2025	John Carlone	None	None	Mahesh Dadoda 11/26/2025

FROM 39.94450ml of W3112 + 0.00500ml of VP134142 + 0.00500ml of VP135878 + 0.00800ml of VP136145 + 0.01250ml of VP134149 + 0.01250ml of VP136027 + 0.01250ml of VP136354 = 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	VP136390	11/25/2025	11/26/2025	John Carlone	None	None	Mahesh Dadoda 11/26/2025

FROM 39.94450ml of W3112 + 0.00500ml of VP134142 + 0.00500ml of VP135878 + 0.00800ml of VP136145 + 0.01250ml of VP134149 + 0.01250ml of VP136027 + 0.01250ml of VP136354 = 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
589	BFB TUNE CHECK	VP136451	12/01/2025	12/02/2025	John Carlone	None	None	Mahesh Dadoda 12/02/2025

FROM 39.98400ml of W3112 + 0.01600ml of VP136376 = 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	VP136452	12/01/2025	12/02/2025	John Carlone	None	None	Mahesh Dadoda 12/02/2025

FROM 39.94450ml of W3112 + 0.00500ml of VP134142 + 0.00500ml of VP135878 + 0.00800ml of VP136145 + 0.01250ml of VP134149 + 0.01250ml of VP136027 + 0.01250ml of VP136354 = 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	VP136453	12/01/2025	12/02/2025	John Carlone	None	None	Mahesh Dadoda 12/02/2025

FROM 39.94450ml of W3112 + 0.00500ml of VP134142 + 0.00500ml of VP135878 + 0.00800ml of VP136145 + 0.01250ml of VP134149 + 0.01250ml of VP136027 + 0.01250ml of VP136354 = 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	11/24/2026	11/24/2025 / sam	01/13/2023 / SAM	V13392

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	11/11/2026	11/11/2025 / sam	04/15/2024 / SAM	V14291

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	04/30/2026	10/31/2025 / sam	09/17/2024 / SAM	V14511

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	04/30/2026	10/31/2025 / sam	09/17/2024 / SAM	V14512

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	04/30/2026	10/31/2025 / sam	09/18/2024 / SAM	V14533

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	04/30/2026	10/31/2025 / sam	09/18/2024 / SAM	V14534

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CHEMICAL RECEIPT LOG BOOK

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

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

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

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

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

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

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CHEMICAL RECEIPT LOG BOOK

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

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml	A02110618	04/30/2026	10/31/2025 / sam	12/17/2024 / SAM	V14697

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	04/30/2026	10/31/2025 / sam	12/17/2024 / SAM	V14698

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	04/30/2026	10/31/2025 / sam	12/17/2024 / SAM	V14701

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	04/30/2026	10/31/2025 / sam	12/17/2024 / SAM	V14735

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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	04/30/2026	10/31/2025 / sam	12/17/2024 / SAM	V14738

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	04/30/2026	10/31/2025 / sam	01/08/2025 / SAM	V14813

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	04/30/2026	10/31/2025 / sam	01/08/2025 / SAM	V14816

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

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

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

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CHEMICAL RECEIPT LOG BOOK

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	24G0262002	04/27/2026	10/27/2025 / sam	05/09/2025 / SAM	V14931

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	24G0262002	05/24/2026	11/24/2025 / sam	05/09/2025 / SAM	V14936

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	24G0262002	04/30/2026	10/31/2025 / Amit	05/09/2025 / SAM	V14937

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30489 / VOA Mix, 8260B Acetates Mix, P&TM, 1mL	A0222076	04/30/2026	10/31/2025 / sam	05/19/2025 / SAM	V14955

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30489 / VOA Mix, 8260B Acetates Mix, P&TM, 1mL	A0222076	04/30/2026	10/31/2025 / sam	05/19/2025 / SAM	V14956

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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)	111925	12/19/2025	11/20/2025 / sam	11/20/2025 / sam	V15122

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	111925	12/19/2025	11/20/2025 / sam	11/20/2025 / sam	V15123

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	111925	12/19/2025	11/20/2025 / sam	11/20/2025 / sam	V15124

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	111925	12/19/2025	11/20/2025 / sam	11/20/2025 / sam	V15125

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

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

Certified Reference Material CRM

Rec 09/17/24

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

CERTIFIED WEIGHT REPORT

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

Solvent(s): Lot#
Methanol EG359-USQ12

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

Formulated By: Prashant Chauhan 021624 DATE

Reviewed By: Pedro L. Rentas 021624 DATE

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

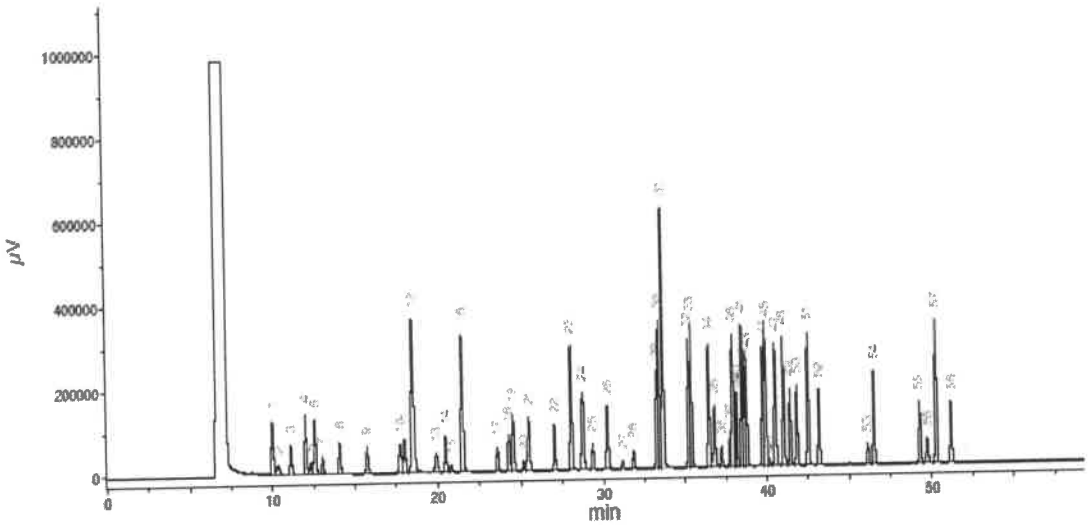
- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value,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

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

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

Comments

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



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

Absolute Standards Inc.

PO Box 5585
Hamden, CT 06518-0585

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

Safety Data Sheet (SDS) GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

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

Section II - Hazards Identification

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

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

Signal Word: DANGER

Section III - Composition

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

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

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

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

Section V. FIREFIGHTING MEASURES

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

Section VI. ACCIDENTAL RELEASE MEASURES

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

Section VII. HANDLING AND STORAGE

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

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Section IX - Physical/Chemical Characteristics

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

Solubility in Water COMPLETE

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

Section X. STABILITY AND REACTIVITY

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

Section XI. TOXICOLOGICAL INFORMATION

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

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

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

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

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

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

Section XV. REGULATORY INFORMATION

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

Section XVI. Misc. INFORMATION

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

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

Certified Reference Material CRM

Rec 09/17/24

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

CERTIFIED WEIGHT REPORT

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

Solvent(s): Lot#
Methanol EG359-USQ12

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

Formulated By: Prashant Chauhan 021624 DATE

Reviewed By: Pedro L. Rentas 021624 DATE

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

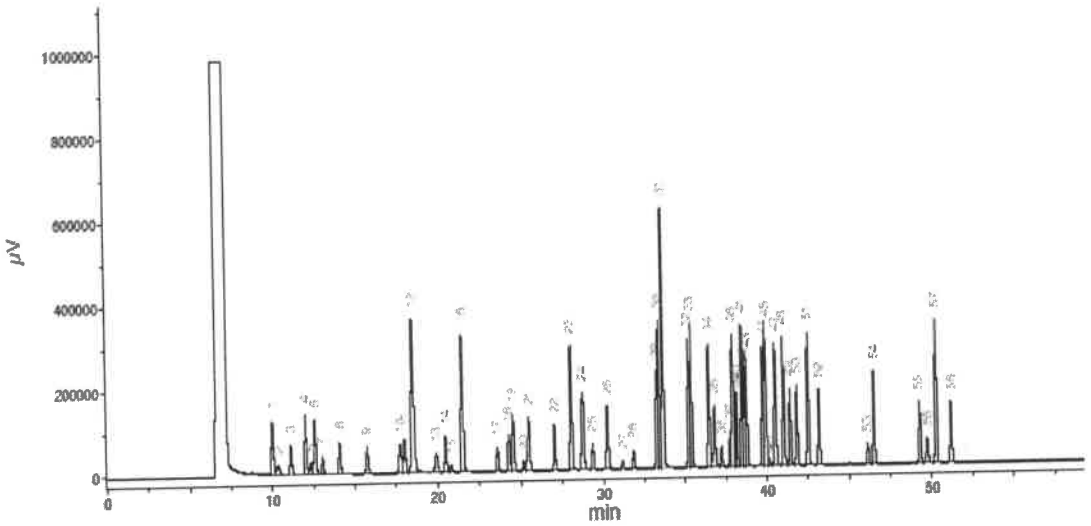
- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value,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

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

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

Comments

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



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

Absolute Standards Inc.

PO Box 5585
Hamden, CT 06518-0585

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

Safety Data Sheet (SDS) GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

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

Section II - Hazards Identification

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

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

Signal Word: DANGER

Section III - Composition

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

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

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

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

Section V. FIREFIGHTING MEASURES

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

Section VI. ACCIDENTAL RELEASE MEASURES

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

Section VII. HANDLING AND STORAGE

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

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Section IX - Physical/Chemical Characteristics

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

Solubility in Water COMPLETE

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

Section X. STABILITY AND REACTIVITY

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

Section XI. TOXICOLOGICAL INFORMATION

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

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

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

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

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

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

Section XV. REGULATORY INFORMATION

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

Section XVI. Misc. INFORMATION

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

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

Certified Reference Material CRM

Rec 09/16/24 2 Vials

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

CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 091424
Description: Acrolein

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

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

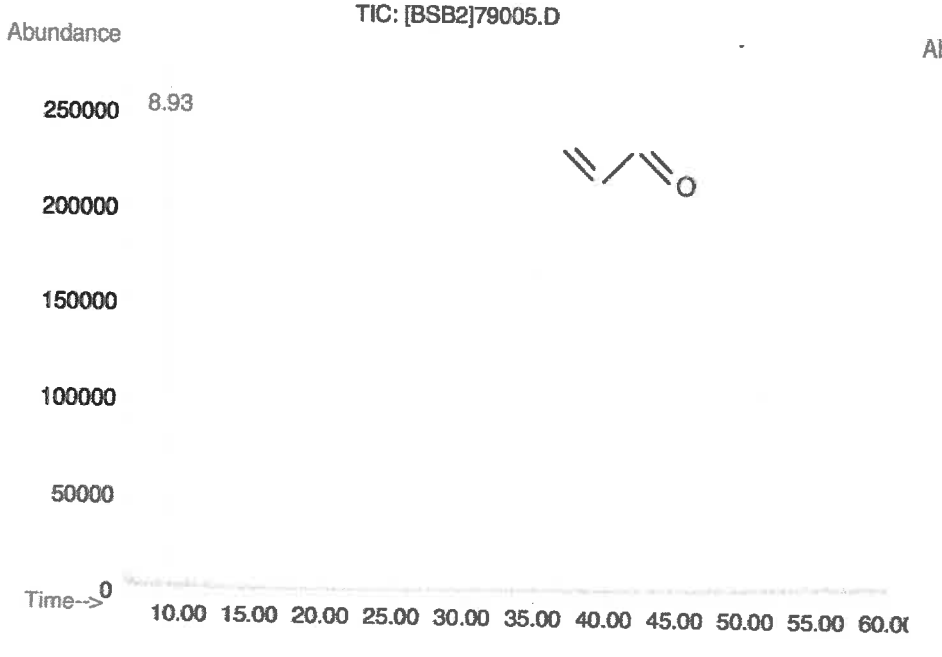
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

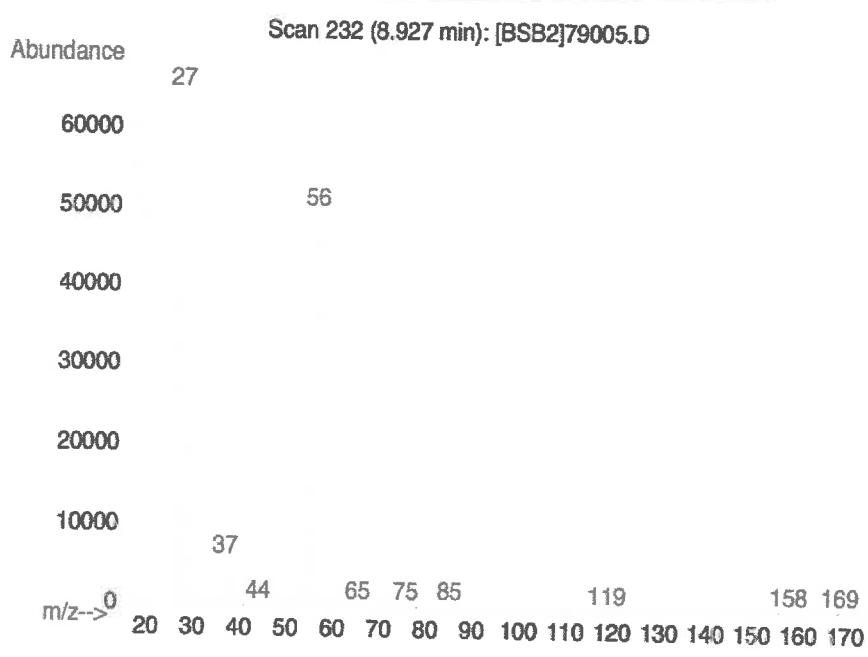
Formulated By: Justin Dippold 091424 DATE

Reviewed By: Pedro L. Rentas 091424 DATE

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

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





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

Absolute Standards, Inc.
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Certified Reference Material CRM

Rec 09/16/24 2 Vials

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CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 091424
Description: Acrolein

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

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

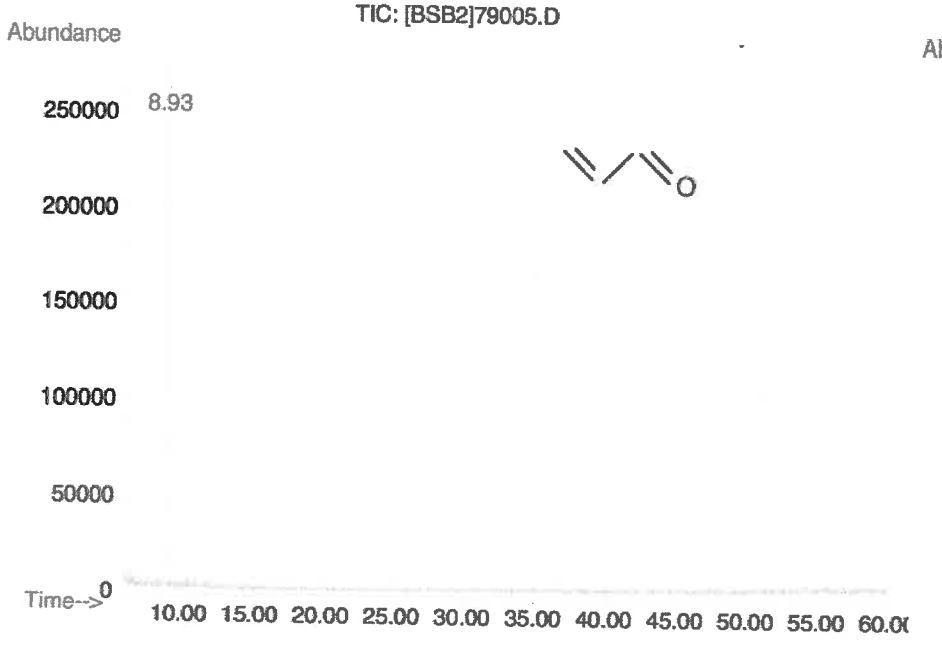
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

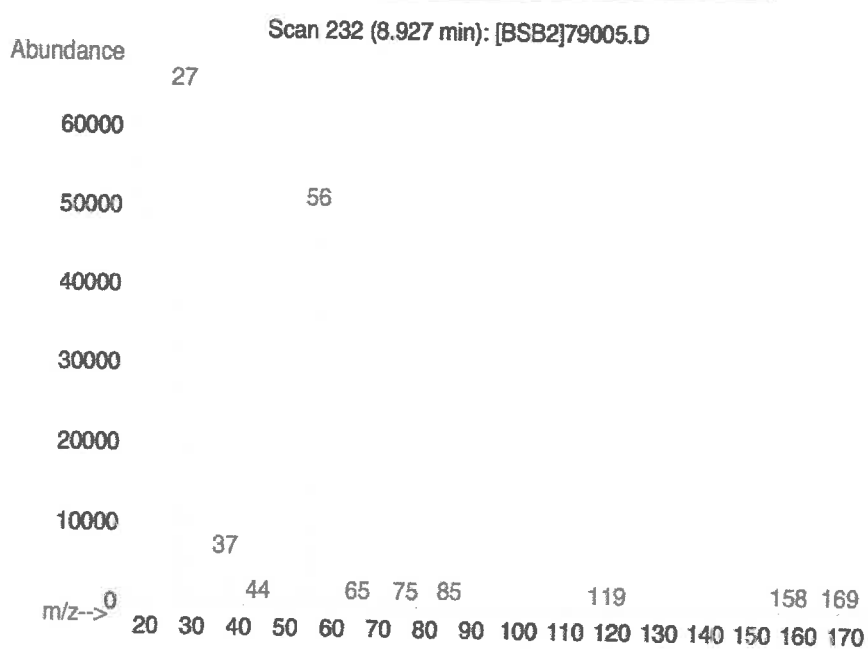
Formulated By: Justin Dippold 091424 DATE

Reviewed By: Pedro L. Rentas 091424 DATE

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

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





- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
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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

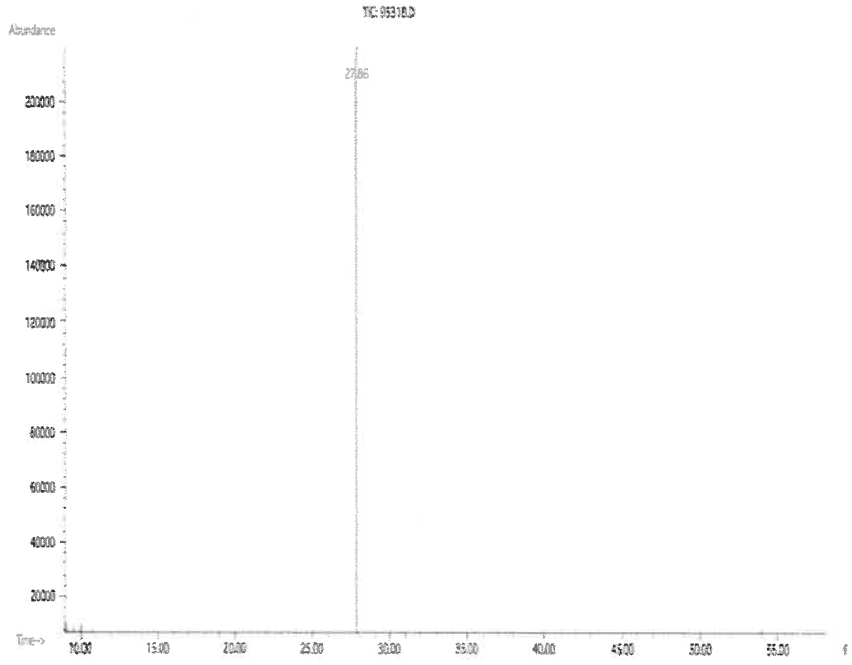
V14630 to V14649

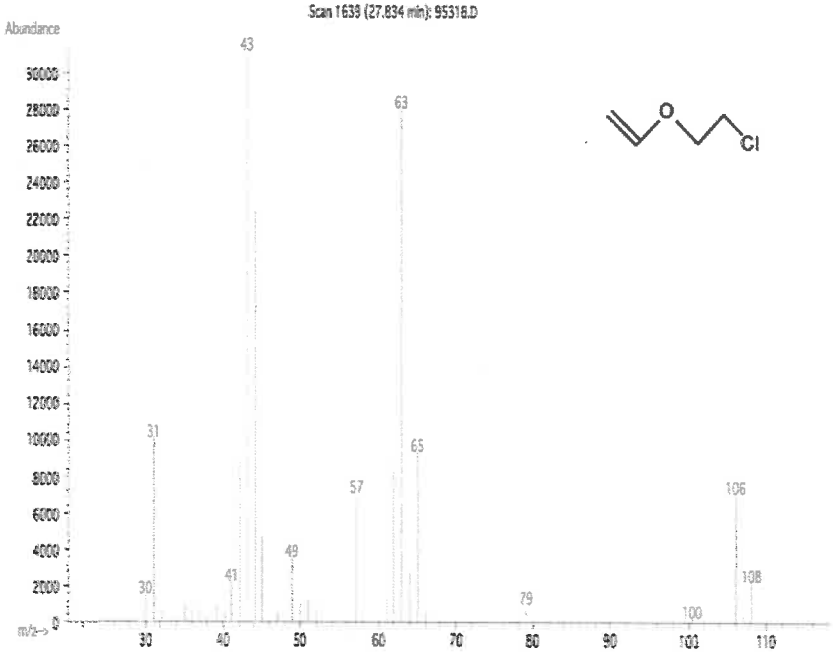
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 50.0 0.001 Flask Uncertainty

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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- 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.
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Hamden, CT 06518-0585
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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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Rec 12/6/24
20 vial

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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

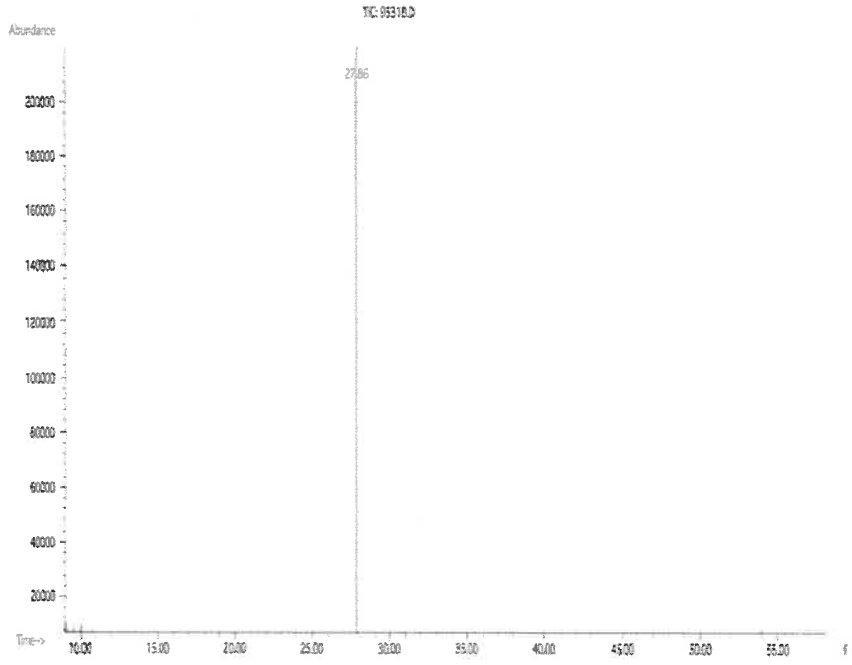
V14630 to V14649

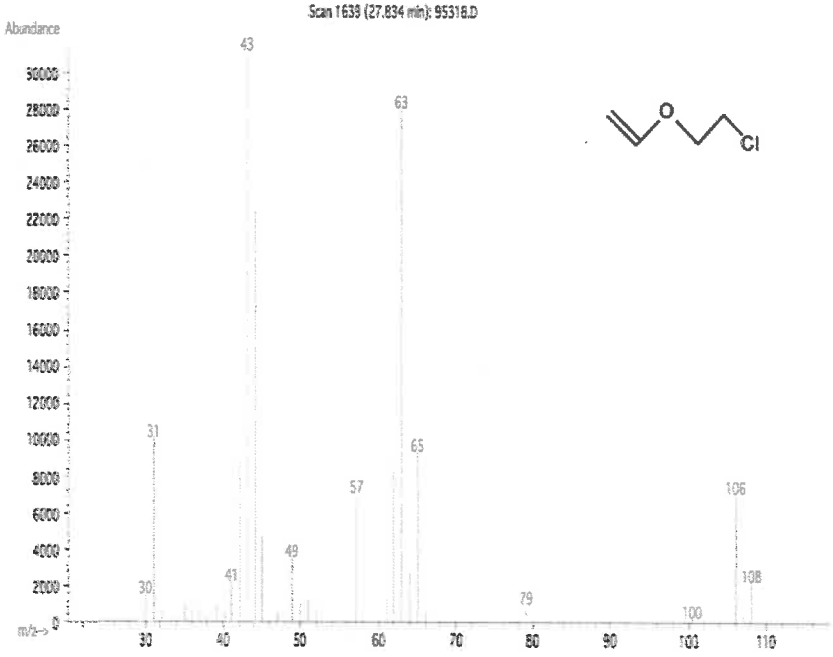
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 50.0 0.001 Flask Uncertainty

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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- 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).

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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

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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

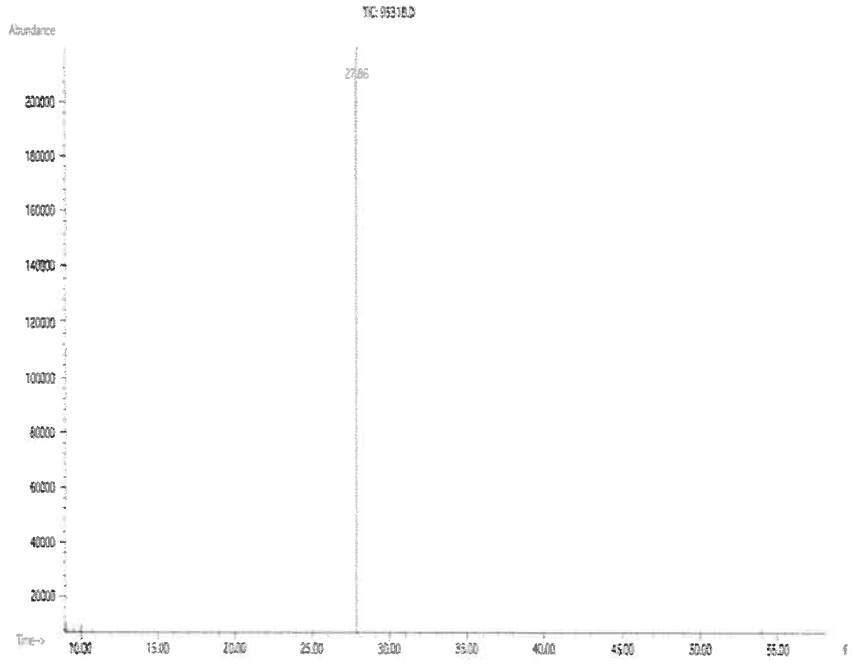
V14630 to V14649

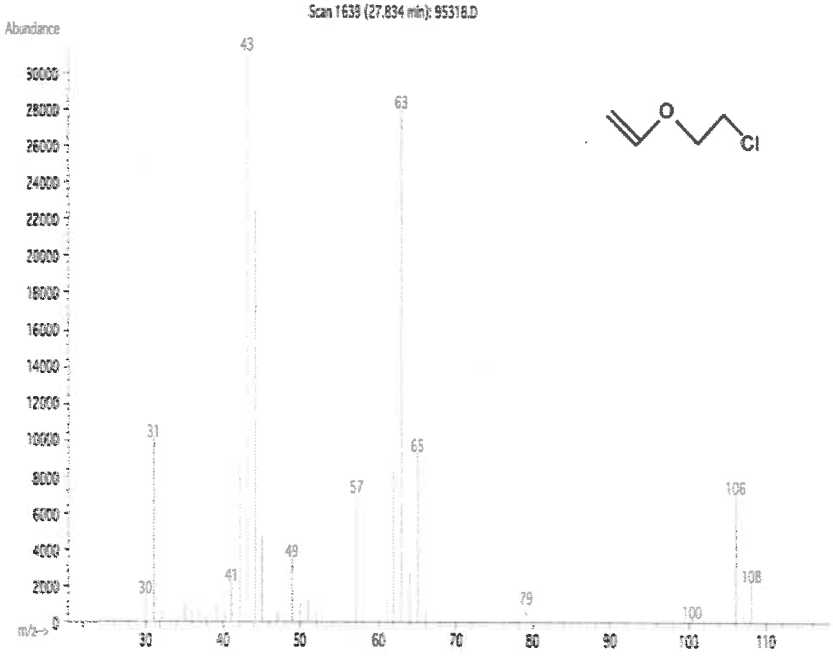
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 50.0 0.001 Flask Uncertainty

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.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

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

Safety Data Sheet (SDS) GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

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

Section II - Hazards Identification

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

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

Signal Word: DANGER

Section III - Composition

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

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

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

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

Section V. FIREFIGHTING MEASURES

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

Section VI. ACCIDENTAL RELEASE MEASURES

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

Section VII. HANDLING AND STORAGE

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

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol 67-56-1 TWA 200 ppm
Skin notation TWA 200 ppm
Potential for skin absorption , ingestion and inhalation.
Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
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Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6

Solubility in Water COMPLETE

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

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Expiration Date: 120527
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Nominal Concentration (µg/mL): 10000
NIST Test ID#: 6UTB

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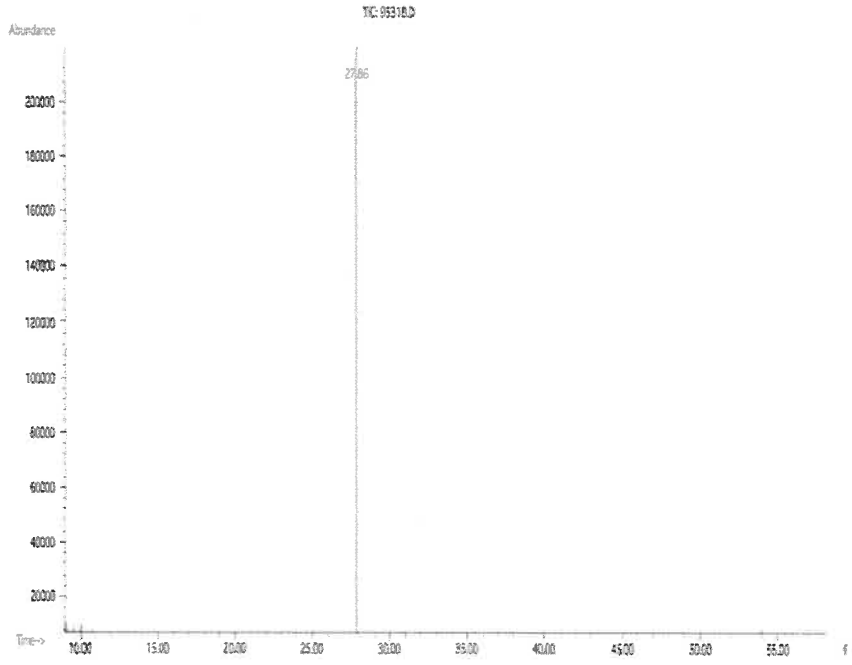

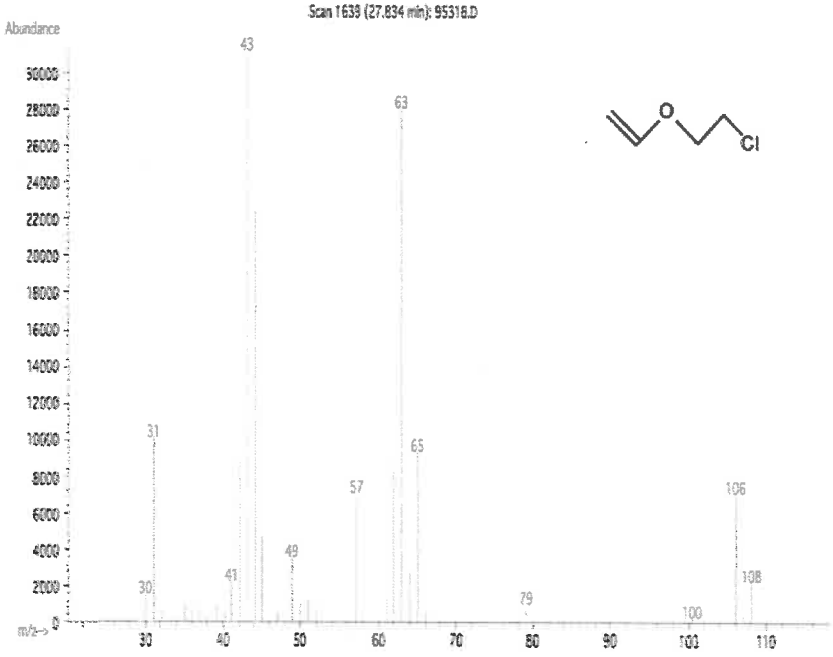

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UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : 4-Bromofluorobenzene Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

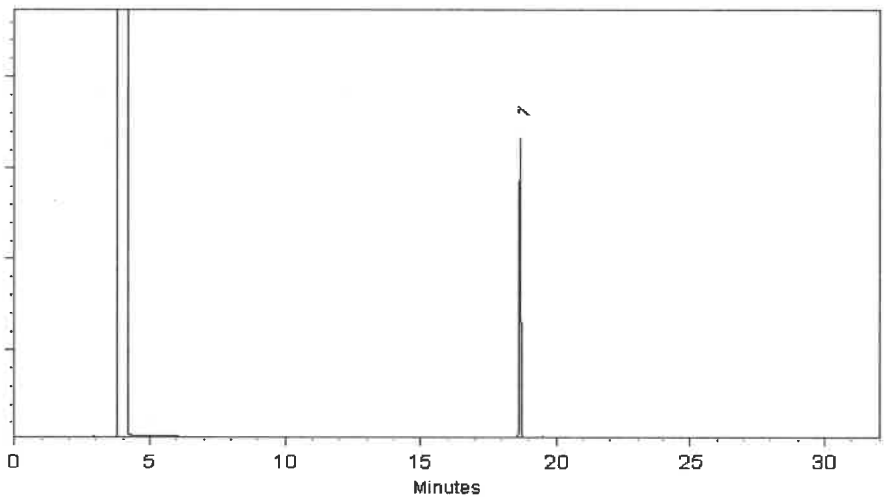
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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

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

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

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

RESTEK
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

gravimetric

ISO 17034 Accredited
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. : 555581 **Lot No.:** A0210184

Description : Custom 8260 Internal Standard Mix

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

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

John Friedline - Operations Technician I

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

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

  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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CERTIFIED REFERENCE MATERIAL

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30006 **Lot No.:** A0210618

Description : VOA Calibration Mix #1

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Acetone	67-64-1	SHBQ8504	99%	5,014.8 µg/mL	+/- 173.2883
2	2-Butanone (MEK)	78-93-3	SHBQ4704	99%	5,012.4 µg/mL	+/- 173.2054
3	4-Methyl-2-pentanone (MIBK)	108-10-1	SHBP9200	99%	5,011.6 µg/mL	+/- 173.1777
4	2-Hexanone	591-78-6	MKCQ6663	99%	5,013.0 µg/mL	+/- 173.2261

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

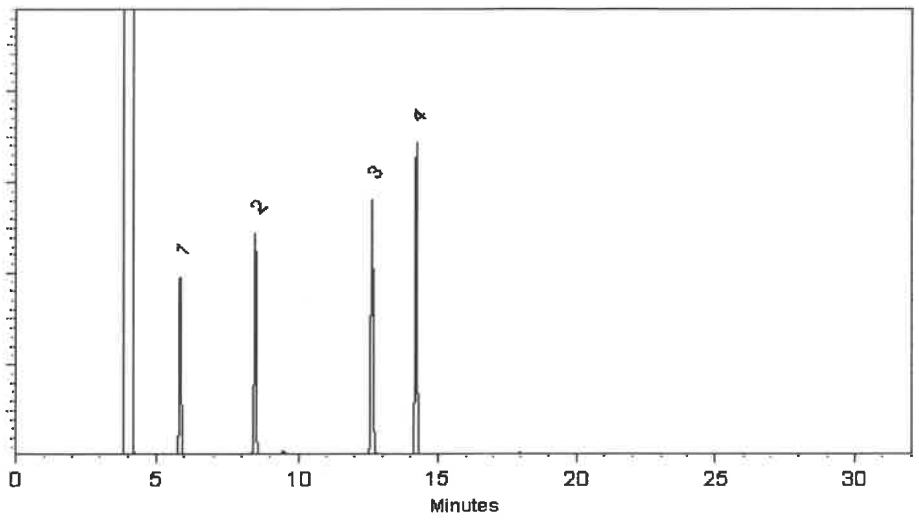
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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

Dakota Parson - Operations Technician I

Date Mixed: 22-Apr-2024 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 24-Apr-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

Manufacturing Notes:

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

Handling Notes:

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

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Catalog No. : 30006 **Lot No.:** A0210618

Description : VOA Calibration Mix #1

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Acetone	67-64-1	SHBQ8504	99%	5,014.8 µg/mL	+/- 173.2883
2	2-Butanone (MEK)	78-93-3	SHBQ4704	99%	5,012.4 µg/mL	+/- 173.2054
3	4-Methyl-2-pentanone (MIBK)	108-10-1	SHBP9200	99%	5,011.6 µg/mL	+/- 173.1777
4	2-Hexanone	591-78-6	MKCQ6663	99%	5,013.0 µg/mL	+/- 173.2261

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

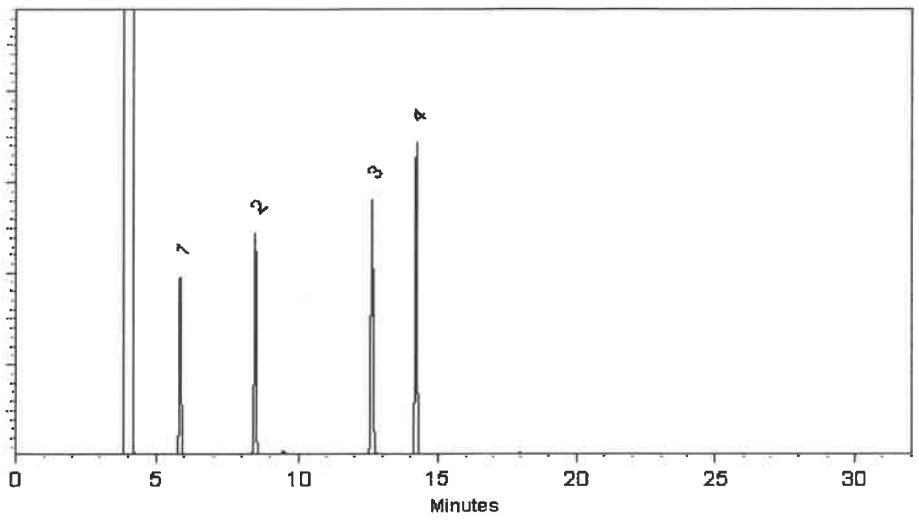
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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Dakota Parson - Operations Technician I

Date Mixed: 22-Apr-2024 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 24-Apr-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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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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Catalog No. : 30006 **Lot No.:** A0210618

Description : VOA Calibration Mix #1

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Acetone	67-64-1	SHBQ8504	99%	5,014.8 µg/mL	+/- 173.2883
2	2-Butanone (MEK)	78-93-3	SHBQ4704	99%	5,012.4 µg/mL	+/- 173.2054
3	4-Methyl-2-pentanone (MIBK)	108-10-1	SHBP9200	99%	5,011.6 µg/mL	+/- 173.1777
4	2-Hexanone	591-78-6	MKCQ6663	99%	5,013.0 µg/mL	+/- 173.2261

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

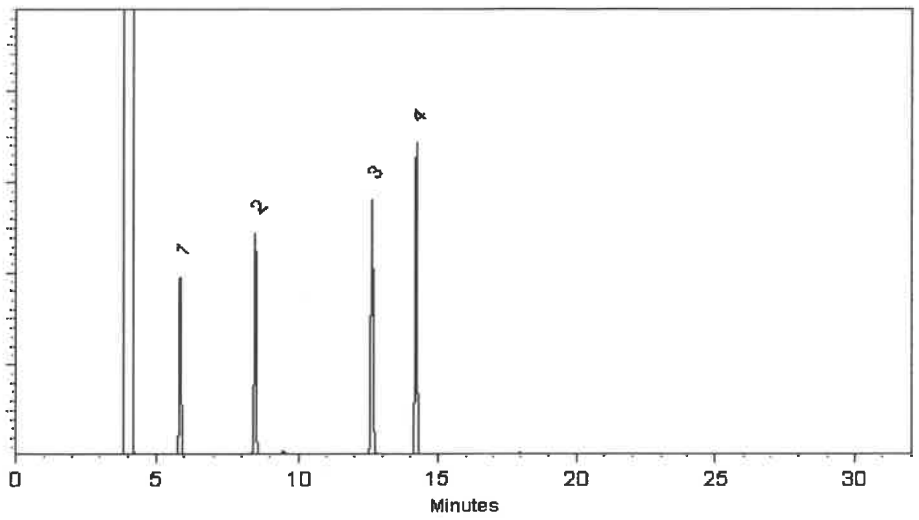
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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Dakota Parson - Operations Technician I

Date Mixed: 22-Apr-2024 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 24-Apr-2024

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

General Certified Reference Material Notes

Expiration Notes:

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Purity Notes:

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

Certified Uncertainty Value Notes:

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

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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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10 vial.

CERTIFIED REFERENCE MATERIAL

Dec: 12/09/24

Certificate of Analysis

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V14667 to
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Certificate #3222.02

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

Description : Bromochloromethane Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

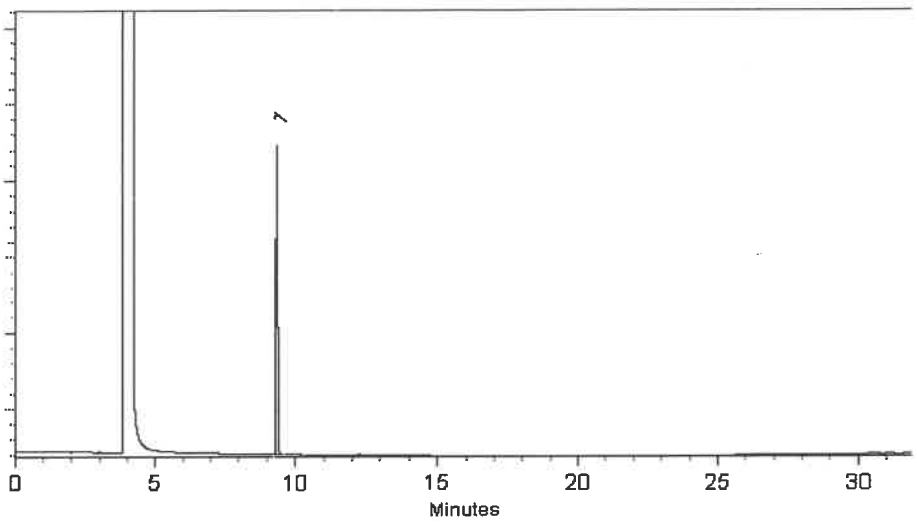
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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Stacey Wanner - Operations Technician I

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

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Aug-2024

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

General Certified Reference Material Notes

Expiration Notes:

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Manufacturing Notes:

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Handling Notes:

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10 vial.

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Dec: 12/09/24

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

Description : Bromochloromethane Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

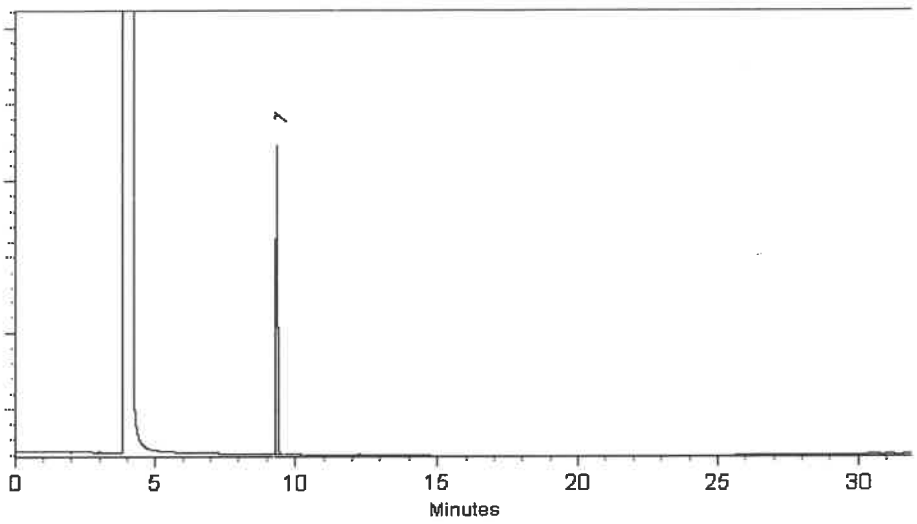
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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Stacey Wanner - Operations Technician I

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

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Aug-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

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CERTIFIED REFERENCE MATERIAL

Dec: 12/09/24

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chromatographic plus

V14667 to
V14676

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Reference Material Producer
Certificate #3222.01

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

Description : Bromochloromethane Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

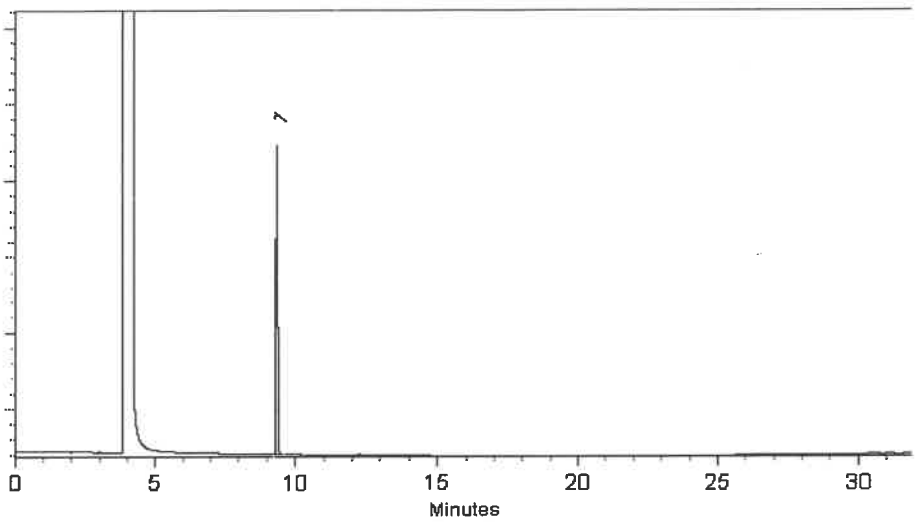
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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

Stacey Wanner - Operations Technician I

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

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Aug-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Dec: 12/09/24

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

Description : Bromochloromethane Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

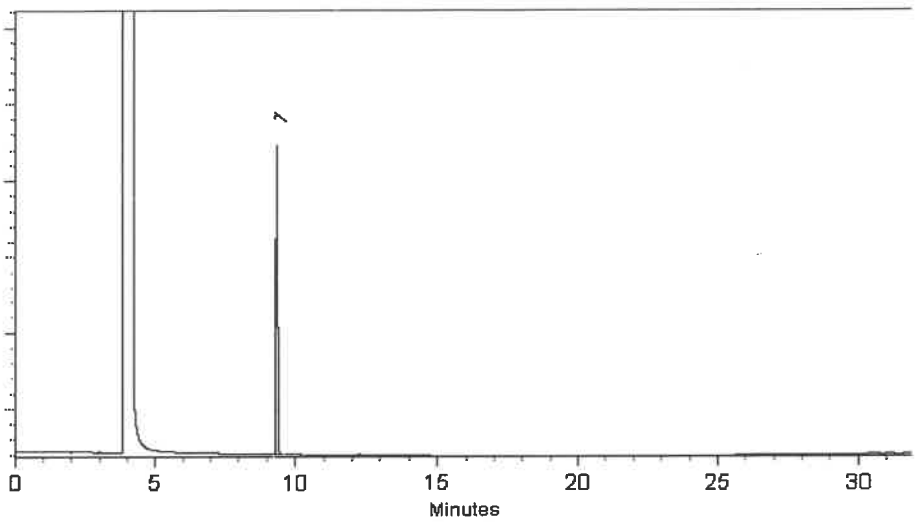
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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Stacey Wanner - Operations Technician I

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

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Aug-2024

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

General Certified Reference Material Notes

Expiration Notes:

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Purity Notes:

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Manufacturing Notes:

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CERTIFIED REFERENCE MATERIAL

30 Vial

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : 502.2 Calibration Mix #1

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

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

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

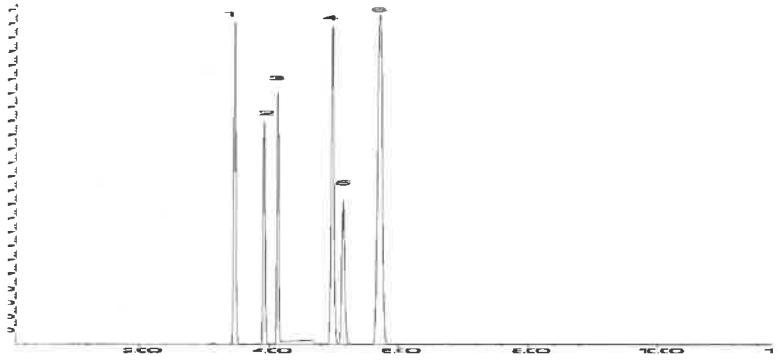
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD

Split Vent:
Split ratio 10:1

Inj. Vol
1µl



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

Tom Suckar - Mix Technician

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

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 04-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

30 Vial

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V14727 to
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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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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.

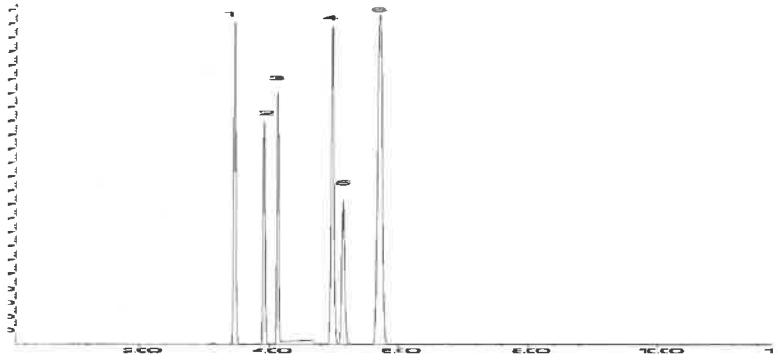
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD

Split Vent:
Split ratio 10:1

Inj. Vol
1µl



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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

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Certified Uncertainty Value Notes:

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

Manufacturing Notes:

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Handling Notes:

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30470 **Lot No.:** A0217535

Description : tert-Butanol Standard

tert-Butanol Std 50,000µg/mL, P&T Methanol, 1mL/ampul

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	tert-Butanol (TBA)	75-65-0	SHBQ8002-1	99%	50,007.5 µg/mL	+/- 717.6137

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

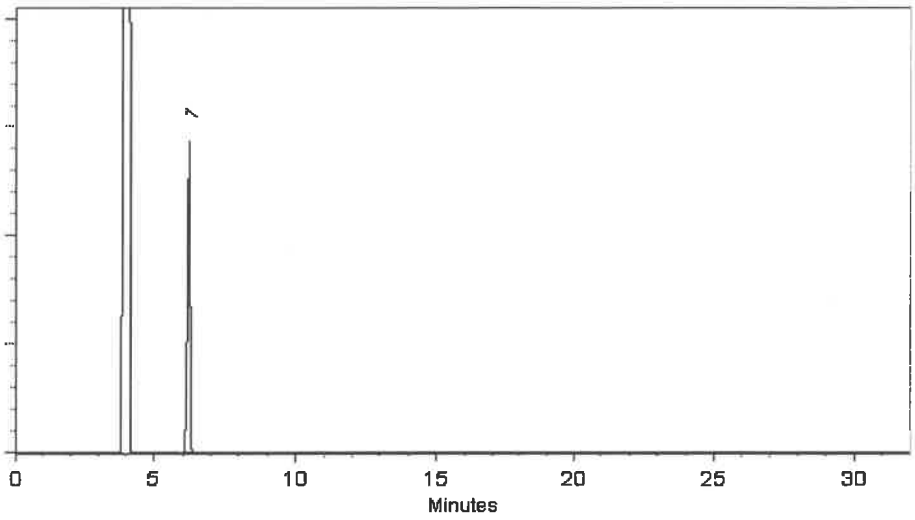
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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Aaron Enyart - Operations Tech I

Date Mixed: 07-Oct-2024 **Balance Serial #** B251644995

Brittany Federinko - Operations Tech I

Date Passed: 09-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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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:

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

Zoviny Rec 01/08/21

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

V14803 - V14822

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 555408-SL **Lot No.:** A0220471

Description : Custom Vinyl Acetate Standard

Custom Vinyl Acetate Standard 8,000µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : June 30, 2026 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Vinyl acetate	108-05-4	RD240423RSR	99%	8,066.0 µg/mL	+/- 278.7979

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

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

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

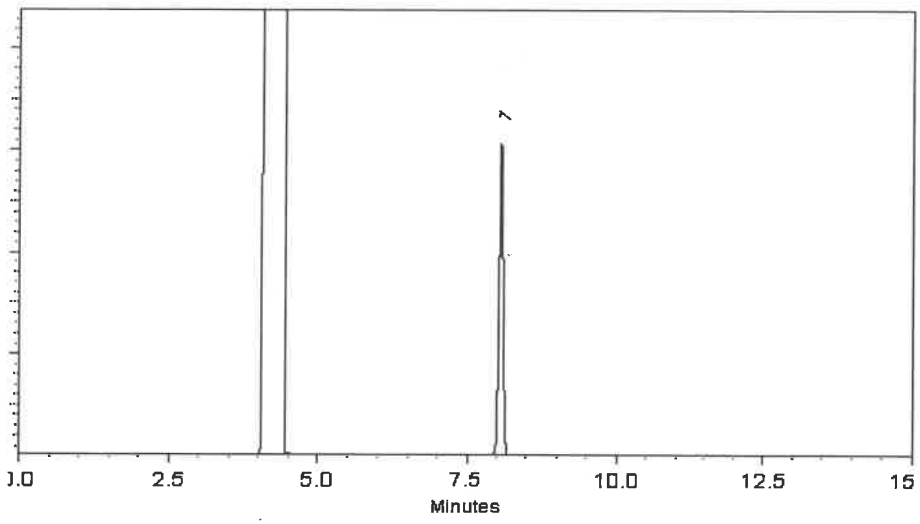
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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

Ethan Winiarski - Operations Tech I

Date Mixed: 24-Dec-2024 **Balance Serial #** 1127510105

Dillan Murphy - Operations Technician I

Date Passed: 02-Jan-2025

REVIEWED

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Zoviny Rec 01/08/21

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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.)

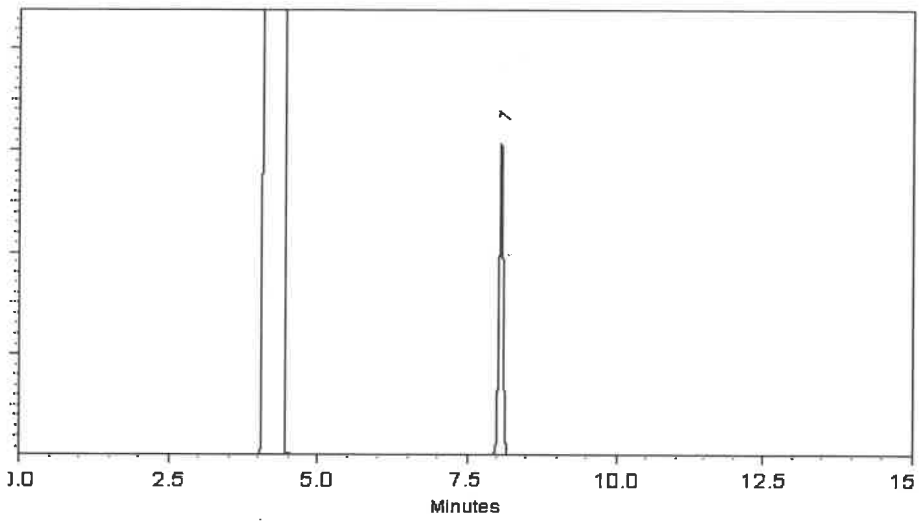
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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

Ethan Winiarski - Operations Tech I

Date Mixed: 24-Dec-2024 **Balance Serial #** 1127510105

Dillan Murphy - Operations Technician I

Date Passed: 02-Jan-2025

REVIEWED

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

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10 vial

CERTIFIED REFERENCE MATERIAL

Lee 03/31/25

Certificate of Analysis

gravimetric

V14904 to V14913

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 555582 **Lot No.:** A0223904

Description : Custom 8260A/B Surrogate Mix

Custom 8260A/B Surrogate Mix 25,000µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : March 31, 2028 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2-Dichloroethane-d4	17060-07-0	PR-33313	99%	25,108.0 µg/mL	+/- 1,421.9957
2	1-Bromo-4-fluorobenzene (BFB)	460-00-4	0000268853	99%	25,108.0 µg/mL	+/- 1,421.9957
3	Dibromofluoromethane	1868-53-7	VENKAT02	99%	25,232.0 µg/mL	+/- 1,429.0184
4	Toluene-d8	2037-26-5	PR-34141	99%	25,156.0 µg/mL	+/- 1,424.7141

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

Brittany Federinko - Operations Tech I

Date Mixed: 27-Mar-2025 **Balance:** B251644995

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

Rec 05/09/25

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V14921 to
V14938

Material No.: 9077-02
Batch No.: 24G0262002
Manufactured Date: 2024-05-14
Expiration Date: 2027-05-14
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (CH_3OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.3 ppm
Titrable Acid (µeq/g)	≤ 0.3	0.3
Titrable Base (µeq/g)	≤ 0.10	0.03
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis - Below EPA 8260B CRQL	Conforms	Conforms

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

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

JCroak

Jamie Croak
Director Quality Operations, Bioscience Production

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

Rec 05/09/25

avantor™ | J.T.Baker®

V14921 to
V14938

Material No.: 9077-02
Batch No.: 24G0262002
Manufactured Date: 2024-05-14
Expiration Date: 2027-05-14
Revision No.: 0

Certificate of Analysis

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Volatile Organic Trace Analysis - Below EPA 8260B CRQL	Conforms	Conforms

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

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

JCroak

Jamie Croak
Director Quality Operations, Bioscience Production

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

Rec 05/09/25

avantor™ | J.T.Baker®

V14921 to
V14938

Material No.: 9077-02
Batch No.: 24G0262002
Manufactured Date: 2024-05-14
Expiration Date: 2027-05-14
Revision No.: 0

Certificate of Analysis

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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

JCroak

Jamie Croak
Director Quality Operations, Bioscience Production

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

Rec 05/09/25

avantor™ | J.T.Baker®

V14921 to
V14938

Material No.: 9077-02
Batch No.: 24G0262002
Manufactured Date: 2024-05-14
Expiration Date: 2027-05-14
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (CH_3OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.3 ppm
Titrable Acid (µeq/g)	≤ 0.3	0.3
Titrable Base (µeq/g)	≤ 0.10	0.03
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis - Below EPA 8260B CRQL	Conforms	Conforms

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

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

JCroak

Jamie Croak
Director Quality Operations, Bioscience Production

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

Rec 05/09/25

avantor™ | J.T.Baker®

V14921 to
V14938

Material No.: 9077-02
Batch No.: 24G0262002
Manufactured Date: 2024-05-14
Expiration Date: 2027-05-14
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (CH_3OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.3 ppm
Titrable Acid (µeq/g)	≤ 0.3	0.3
Titrable Base (µeq/g)	≤ 0.10	0.03
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis - Below EPA 8260B CRQL	Conforms	Conforms

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

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

JCroak

Jamie Croak
Director Quality Operations, Bioscience Production

Rec 05/19/25

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CERTIFIED REFERENCE MATERIAL
20 Vial

Certificate of Analysis

chromatographic plus

VJ14951 to VJ14970

ACCREDITED
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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. : 30489 **Lot No.:** A0222076

Description : 8260B Acetates Mix

8260B Acetates Mix 2,000 µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : August 31, 2026 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Methyl acetate	79-20-9	SHBR1889	99%	2,004.0 µg/mL	+/- 69.2674
2	Vinyl acetate	108-05-4	RD240423RSR	99%	2,010.0 µg/mL	+/- 69.4748
3	Ethyl acetate	141-78-6	SHBS3323	99%	2,019.3 µg/mL	+/- 69.7974
4	Isopropyl acetate	108-21-4	BCCG7069	99%	2,008.0 µg/mL	+/- 69.4057
5	Propyl acetate	109-60-4	P8XLN	99%	2,008.0 µg/mL	+/- 69.4057
6	Butyl acetate	123-86-4	SHBR2024	99%	2,008.0 µg/mL	+/- 69.4057
7	Amyl acetate	628-63-7	BCBT7442	99%	2,006.7 µg/mL	+/- 69.3596

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

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

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this

Rec 05/19/25

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CERTIFIED REFERENCE MATERIAL
20 Vial

Certificate of Analysis

chromatographic plus

VJ14951 to VJ14970

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30489 **Lot No.:** A0222076

Description : 8260B Acetates Mix

8260B Acetates Mix 2,000 µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : August 31, 2026 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Methyl acetate	79-20-9	SHBR1889	99%	2,004.0 µg/mL	+/- 69.2674
2	Vinyl acetate	108-05-4	RD240423RSR	99%	2,010.0 µg/mL	+/- 69.4748
3	Ethyl acetate	141-78-6	SHBS3323	99%	2,019.3 µg/mL	+/- 69.7974
4	Isopropyl acetate	108-21-4	BCCG7069	99%	2,008.0 µg/mL	+/- 69.4057
5	Propyl acetate	109-60-4	P8XLN	99%	2,008.0 µg/mL	+/- 69.4057
6	Butyl acetate	123-86-4	SHBR2024	99%	2,008.0 µg/mL	+/- 69.4057
7	Amyl acetate	628-63-7	BCBT7442	99%	2,006.7 µg/mL	+/- 69.3596

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

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

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this

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

Certified Reference Material CRM

Rec 11/20/25

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

CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 111925
Description: Acrolein

Expiration Date: 121925
Recommended Storage: Refrigerate (2°C to 8°C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

Weight(s) shown below were combined and diluted to (mL): 10.0

Solvent(s):	Lot#
Water	041725Q

5 vial

V15/21 to V15/25

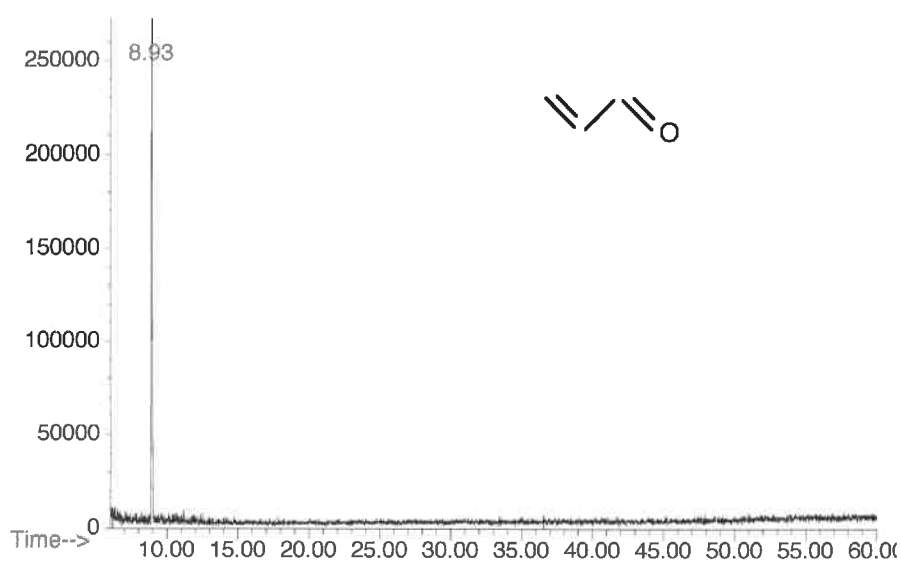
5E-05 Balance Uncertainty
0.001 Flask Uncertainty

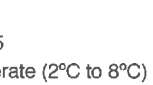
Formulated By:	Prashant Chauhan	111925 DATE
Reviewed By:	Pedro L. Rentas	111925 DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Acrolein	5	103755V10F	5000	97	0.5	0.05166	0.05180	5013.7	52.6	107-02-8	0.1 ppm	orl-rat 46mg/kg

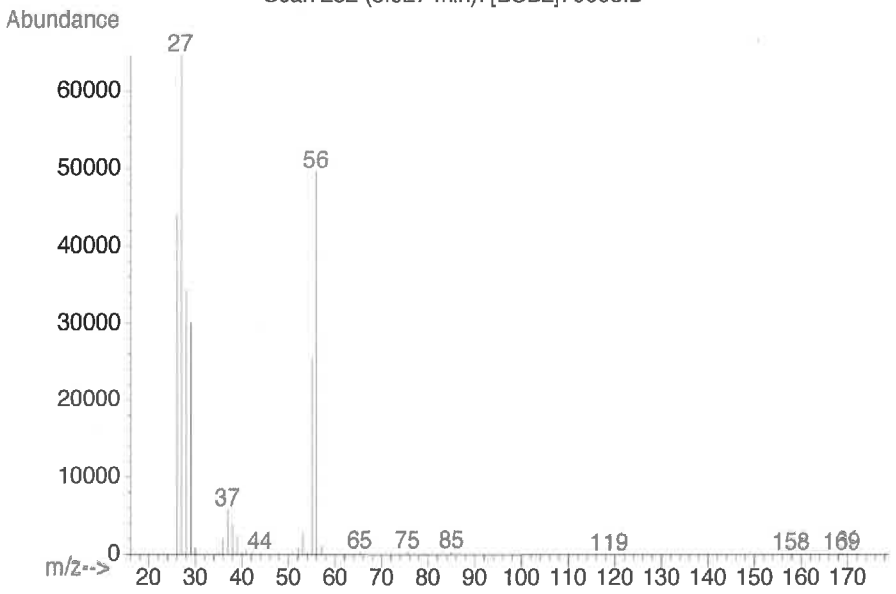
Method: GC6MSD-1. **Detector:** Mass Selective Detector (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C (Time 2 = 8.75 min.) Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. **Analyst:** Pedro Rentas.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

TIC: [BSB2]79005.D





Scan 232 (8.927 min): [BSB2]79005.D



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  Rev 1.0, 2/25/2025

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

Certified Reference Material CRM

Rec 11/20/25

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

CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 111925
Description: Acrolein

Expiration Date: 121925
Recommended Storage: Refrigerate (2°C to 8°C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

Weight(s) shown below were combined and diluted to (mL): 10.0

Solvent(s):	Lot#
Water	041725Q

5 vial

V15/21 to V15/25

5E-05 Balance Uncertainty
0.001 Flask Uncertainty

Formulated By:	Prashant Chauhan	111925 DATE
Reviewed By:	Pedro L. Rentas	111925 DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
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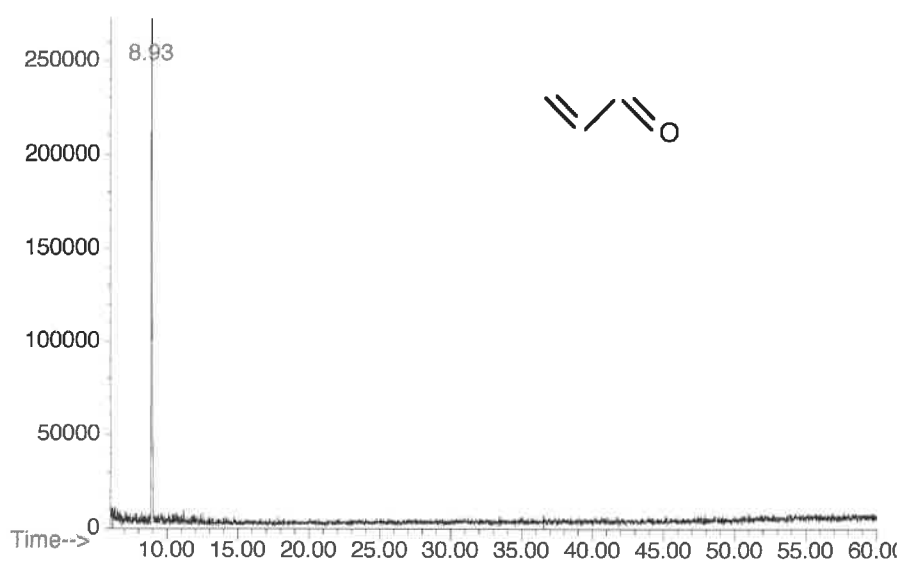

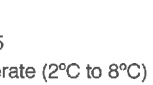

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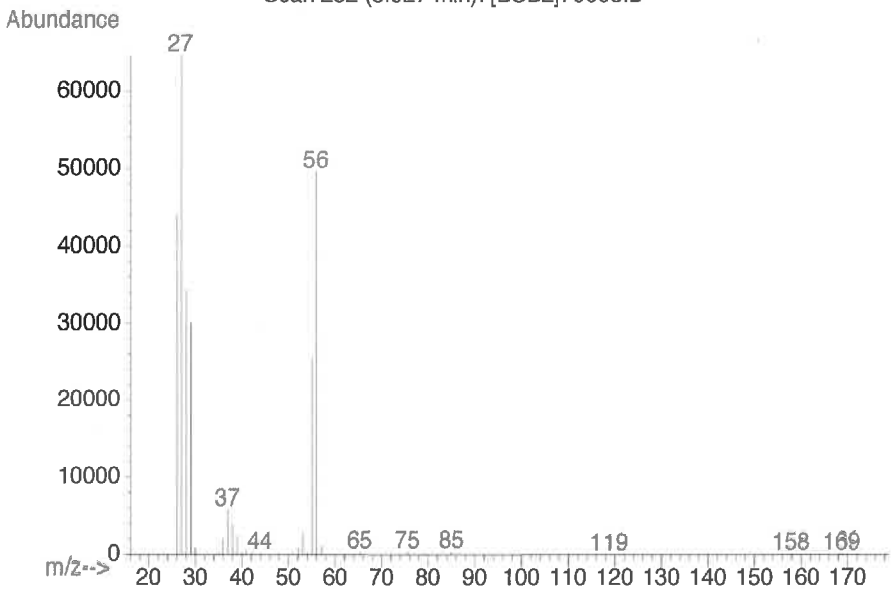

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CERTIFIED WEIGHT REPORT

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Expiration Date: 121925
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Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

Weight(s) shown below were combined and diluted to (mL): 10.0

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Water	041725Q

5 vial

V15/21 to V15/25

5E-05 Balance Uncertainty
0.001 Flask Uncertainty

Formulated By:	Prashant Chauhan	111925 DATE
Reviewed By:	Pedro L. Rentas	111925 DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
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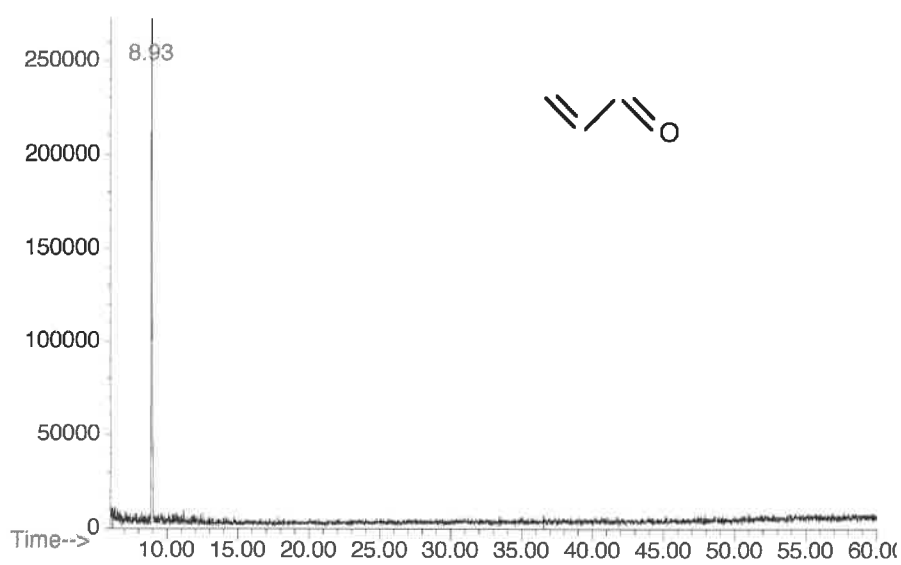

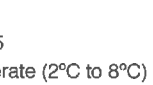

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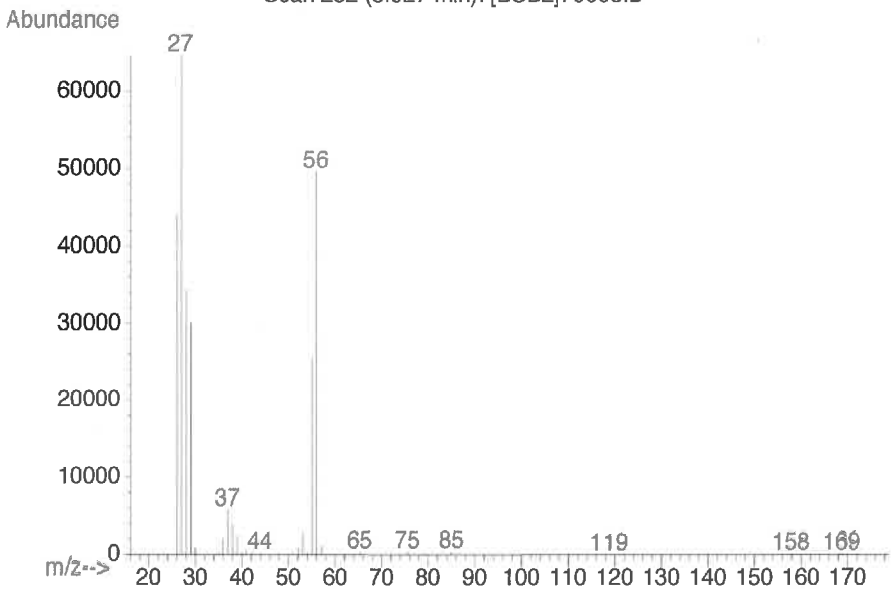

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Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

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V15/21 to V15/25

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0.001 Flask Uncertainty

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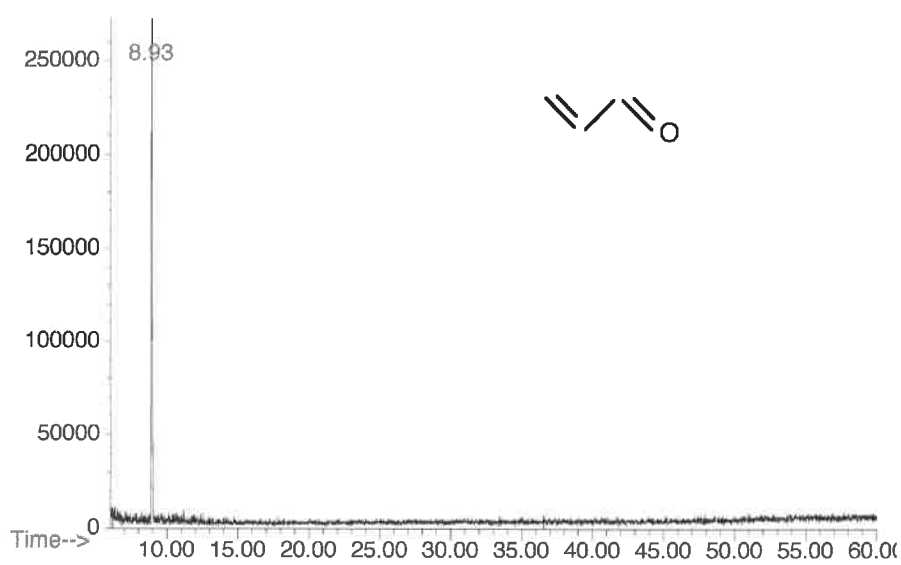

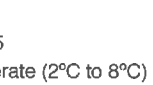

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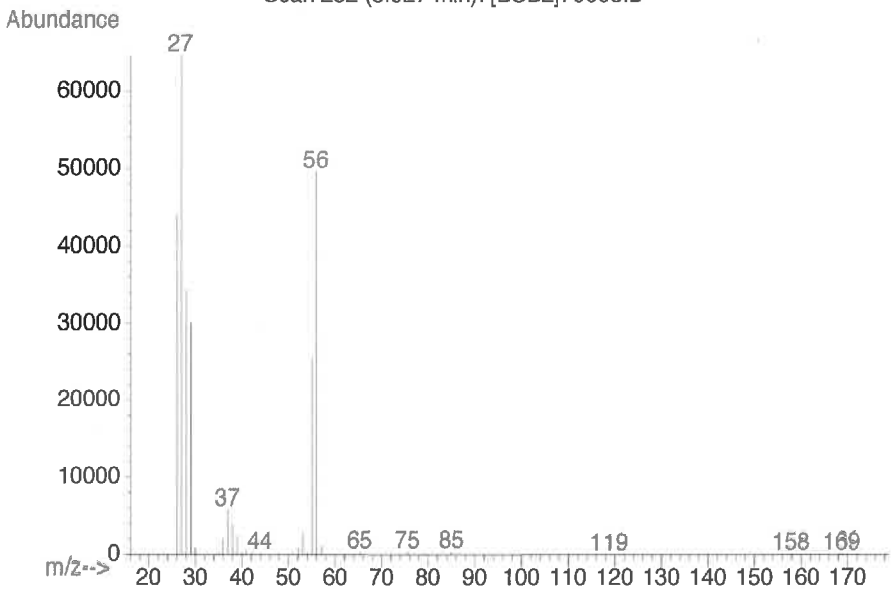

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  Rev 1.0, 2/25/2025

SHIPPING DOCUMENTS

Alliance TECHNICAL GROUP

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 • Fax (908) 789-8922
www.chemtech.net

ALLIANCE PROJECT NO.
QUOTE NO. Q 3715
COC Number 2046961

CLIENT INFORMATION

(REPORT TO BE SENT TO:)

COMPANY: G Environmental
ADDRESS: 8 Carriage
CITY Succasunna STATE: NJ ZIP:
ATTENTION:
PHONE: FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: Union
PROJECT NO.: LOCATION: NJ
PROJECT MANAGER: GL
e-mail:
PHONE: FAX:

CLIENT BILLING INFORMATION

BILL TO: G Environmental PO#:
ADDRESS: 8 Carriage
CITY Succasunna STATE: NJ ZIP:
ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

FAX (RUSH) _____ DAYS*
HARDCOPY (DATA PACKAGE): Standard DAYS*
EDD: _____ DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

DATA DELIVERABLE INFORMATION

- ☐ Level 1 (Results Only)
- ☐ Level 2 (Results + QC)
- ☐ Level 3 (Results + QC + Raw Data)
- ☐ Level 4 (QC + Full Raw Data)
- X NJ Reduced
- ☐ US EPA CLP
- ☐ NYS ASP A
- ☐ NYS ASP B
- ☐ Other
- X EDD FORMAT Excel pdf

ANALYSIS

TCL VOCs 1,4 Dioxane

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	PRESERVATIVES 1	2	3	4	5	6	7	8	9
								HCl								
1.	MW2	GW		X	11/24/25	1320	2	X								
2.	MW6	GW		X	"	~~1330~~	2	X								
3.	MW7	GW		X	11/24/25	1345	2	X								
4.						1345										
5.																
6.																
7.																
8.																
9.																
10.																

COMMENTS

← Specify Preservatives
A-HCl D-NaOH
B-HN03 E-ICE
C-H2SO4 F-OTHER

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1.	1406 11-24-2025	1.
2.		2.
3.		3.

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT X COOLER TEMP 1.5 °C
Comments: 1.0° + 0.5 = 1.0°

Page ____ of

CLIENT: ☐ Hand Delivered ☐ Other

Shipment Complete
☐ YES ☐ NO

WHITE - ALLIANCE COPY FOR RETURN TO CLIENT YELLOW - ALLIANCE COPY PINK - SAMPLER COPY

284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Laboratory Certification

Certified By	License No.
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255425
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	TX-C25-00189
Virginia	460312

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q3715 GENV01
Client Name : G Environmental
Client Contact : Gary Landis
Invoice Name : G Environmental
Invoice Contact : Gary Landis

Order Date : 11/24/2025 2:29:36 PM
Project Name : Union
Receive DateTime : 11/24/2025 2:06:00 PM
Purchase Order :

Project Mgr :
Report Type : Level 1
EDD Type : Excel NJ
Hard Copy Date :
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q3715-01	MW2	Water	11/24/2025	13:20					
					VOC-TCLVOA-10		8260-Low		10 Bus. Days
Q3715-02	MW6	Water	11/24/2025	12:45					
					VOC-TCLVOA-10		8260-Low		10 Bus. Days
Q3715-03	MW7	Water	11/24/2025	13:45					
					VOC-TCLVOA-10		8260-Low		10 Bus. Days

Relinguished By :
Date / Time : 11/24/25 1531

Received By :
Date / Time : 11/24/25 1531

Storage Area : VOA Refridgerator Room