

Cover Page

Order ID : Q2600

Project ID : Kingsland Point Park Water Main

Client : T&A Construction Inc

Lab Sample Number

Q2600-01
Q2600-02
Q2600-03
Q2600-04
Q2600-05
Q2600-06
Q2600-07
Q2600-08
Q2600-09
Q2600-10
Q2600-11
Q2600-12

Client Sample Number

TRENCH
TRENCH
TRENCH
TRENCH
STOCK-PILE
STOCK-PILE
STOCK-PILE
STOCK-PILE
END-OF-TRENCH
END-OF-TRENCH
END-OF-TRENCH
END-OF-TRENCH

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

Signature : _____

Date: 7/22/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

DATA REPORTING QUALIFIERS- ORGANIC

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

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

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q2600

Completed

For thorough review, the report must have the following:

GENERAL:

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

✓

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

✓

Is the chain of custody signed and complete

✓

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

✓

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

✓

COVER PAGE:

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

✓

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

✓

CHAIN OF CUSTODY:

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

✓

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

✓

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

✓

Were the samples received within hold time

✓

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

✓

ANALYTICAL:

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

QA Review Signature: MAHESH PATEL

Date: 07/22/2025

LAB CHRONICLE

OrderID:	Q2600	OrderDate:	7/14/2025 2:21:01 PM
Client:	T&A Construction Inc	Project:	Kingsland Point Park Water Main
Contact:	Garrett Johnson	Location:	D41,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2600-03	TRENCH	SOIL	VOC-TCLVOA-10	8260D	07/14/25		07/15/25	07/14/25
Q2600-04	TRENCH	TCLP	TCLP VOA	8260D	07/14/25		07/16/25	07/14/25
Q2600-07	STOCK-PILE	SOIL	VOC-TCLVOA-10	8260D	07/14/25		07/15/25	07/14/25
Q2600-08	STOCK-PILE	TCLP	TCLP VOA	8260D	07/14/25		07/16/25	07/14/25
Q2600-11	END-OF-TRENCH	SOIL	VOC-TCLVOA-10	8260D	07/14/25		07/15/25	07/14/25
Q2600-11DL	END-OF-TRENCHDL	SOIL	VOC-TCLVOA-10	8260D	07/14/25		07/16/25	07/14/25
Q2600-12	END-OF-TRENCH	TCLP	TCLP VOA	8260D	07/14/25		07/16/25	07/14/25

Hit Summary Sheet
SW-846

SDG No.: Q2600
Client: T&A Construction Inc

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID:	TRENCH							
Q2600-03	TRENCH	SOIL	Methylcyclohexane	280		49.9	270	ug/Kg
Q2600-03	TRENCH	SOIL	Isopropylbenzene	280		42.8	270	ug/Kg
			Total Voc :			560		
Q2600-03	TRENCH	SOIL	Benzene, 1,2-diethyl-	* 4500	J	0	0	ug/Kg
Q2600-03	TRENCH	SOIL	o-Cymene	* 6200	J	0	0	ug/Kg
Q2600-03	TRENCH	SOIL	Cyclohexane, (1-methylethyl)-	* 7800	J	0	0	ug/Kg
Q2600-03	TRENCH	SOIL	Benzene, 1-ethyl-2,3-dimethyl-	* 7100	J	0	0	ug/Kg
Q2600-03	TRENCH	SOIL	Octane, 2,6-dimethyl-	* 5100	J	0	0	ug/Kg
Q2600-03	TRENCH	SOIL	Cyclohexane, 1,4-dimethyl-, tr	* 4600	J	0	0	ug/Kg
Q2600-03	TRENCH	SOIL	Benzene, (2-methyl-2-propenyl	* 5800	J	0	0	ug/Kg
Q2600-03	TRENCH	SOIL	2-Octene, 2,6-dimethyl-	* 4700	J	0	0	ug/Kg
Q2600-03	TRENCH	SOIL	Oxalic acid, cyclohexylmethyl	* 6100	J	0	0	ug/Kg
Q2600-03	TRENCH	SOIL	unknown11.628	* 4500	J	0	0	ug/Kg
Q2600-03	TRENCH	SOIL	sec-Butylbenzene	* 1200	J	36.2	270	ug/Kg
Q2600-03	TRENCH	SOIL	n-Butylbenzene	* 820	J	79.6	270	ug/Kg
			Total Tics :			58400		
			Total Concentration:			59000		
Client ID:	STOCK-PILE							
Q2600-07	STOCK-PILE	SOIL	Cyclohexane	46.1	J	34.9	220	ug/Kg
Q2600-07	STOCK-PILE	SOIL	Methylcyclohexane	530		40.1	220	ug/Kg
Q2600-07	STOCK-PILE	SOIL	Ethyl Benzene	72.2	J	29.6	220	ug/Kg
Q2600-07	STOCK-PILE	SOIL	Isopropylbenzene	300		34.4	220	ug/Kg
			Total Voc :			948		
Q2600-07	STOCK-PILE	SOIL	Benzene, 1,2-diethyl-	* 3000	J	0	0	ug/Kg
Q2600-07	STOCK-PILE	SOIL	Benzene, 1-methyl-3-(1-methyl	* 3300	J	0	0	ug/Kg
Q2600-07	STOCK-PILE	SOIL	Cyclohexane, (1-methylethyl)-	* 6700	J	0	0	ug/Kg
Q2600-07	STOCK-PILE	SOIL	Benzene, (2-methyl-1-propenyl	* 3400	J	0	0	ug/Kg
Q2600-07	STOCK-PILE	SOIL	Benzene, 1-ethyl-2,3-dimethyl-	* 4100	J	0	0	ug/Kg
Q2600-07	STOCK-PILE	SOIL	2-Octene, 2,6-dimethyl-	* 2900	J	0	0	ug/Kg
Q2600-07	STOCK-PILE	SOIL	Cyclohexane, 1-ethyl-2-methyl	* 3000	J	0	0	ug/Kg
Q2600-07	STOCK-PILE	SOIL	Octane, 3,6-dimethyl-	* 4400	J	0	0	ug/Kg
Q2600-07	STOCK-PILE	SOIL	3-Hexene, 3-ethyl-2,5-dimethyl	* 3000	J	0	0	ug/Kg
Q2600-07	STOCK-PILE	SOIL	Oxalic acid, butyl cyclohexylm	* 4300	J	0	0	ug/Kg
Q2600-07	STOCK-PILE	SOIL	n-propylbenzene	* 400	J	32.2	220	ug/Kg
Q2600-07	STOCK-PILE	SOIL	sec-Butylbenzene	* 960	J	29.1	220	ug/Kg
Q2600-07	STOCK-PILE	SOIL	n-Butylbenzene	* 680	J	64.0	220	ug/Kg

Hit Summary Sheet
SW-846

SDG No.: Q2600

Client: T&A Construction Inc

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Total Tics :				40100				
Total Concentration:				41100				
Client ID:	END-OF-TRENCH							
Q2600-11	END-OF-TRENCH SOIL	Cyclohexane		3800		46.0	290	ug/Kg
Q2600-11	END-OF-TRENCH SOIL	Methylcyclohexane		51500	E	53.0	290	ug/Kg
Q2600-11	END-OF-TRENCH SOIL	Toluene		93.9	J	45.4	290	ug/Kg
Q2600-11	END-OF-TRENCH SOIL	Ethyl Benzene		9800	E	39.0	290	ug/Kg
Q2600-11	END-OF-TRENCH SOIL	m/p-Xylenes		930		72.2	580	ug/Kg
Q2600-11	END-OF-TRENCH SOIL	Isopropylbenzene		8300		45.4	290	ug/Kg
Total Voc :				74400				
Q2600-11	END-OF-TRENCH SOIL	Heptane, 3-methyl-	*	16300	J	0	0	ug/Kg
Q2600-11	END-OF-TRENCH SOIL	trans-1,2-Diethyl cyclopentane	*	19400	J	0	0	ug/Kg
Q2600-11	END-OF-TRENCH SOIL	Cyclohexane, ethyl-	*	19100	J	0	0	ug/Kg
Q2600-11	END-OF-TRENCH SOIL	Cyclohexane, propyl-	*	33200	J	0	0	ug/Kg
Q2600-11	END-OF-TRENCH SOIL	Octane, 2,6-dimethyl-	*	28400	J	0	0	ug/Kg
Q2600-11	END-OF-TRENCH SOIL	Heptane, 2,5-dimethyl-	*	17300	J	0	0	ug/Kg
Q2600-11	END-OF-TRENCH SOIL	Octane, 4-methyl-	*	20100	J	0	0	ug/Kg
Q2600-11	END-OF-TRENCH SOIL	Cyclohexane, 1,1,3-trimethyl-	*	16200	J	0	0	ug/Kg
Q2600-11	END-OF-TRENCH SOIL	Octane, 2-methyl-	*	16800	J	0	0	ug/Kg
Q2600-11	END-OF-TRENCH SOIL	unknown9.823	*	19400	J	0	0	ug/Kg
Q2600-11	END-OF-TRENCH SOIL	n-propylbenzene	*	35200	J	42.5	290	ug/Kg
Q2600-11	END-OF-TRENCH SOIL	1,2,4-Trimethylbenzene	*	25900	J	37.3	290	ug/Kg
Q2600-11	END-OF-TRENCH SOIL	sec-Butylbenzene	*	6300	J	38.5	290	ug/Kg
Q2600-11	END-OF-TRENCH SOIL	p-Isopropyltoluene	*	1100	J	36.1	290	ug/Kg
Q2600-11	END-OF-TRENCH SOIL	n-Butylbenzene	*	8200	J	84.5	290	ug/Kg
Total Tics :				283000				
Total Concentration:				357000				
Client ID:	END-OF-TRENCHDL							
Q2600-11DL	END-OF-TRENCH SOIL	Cyclohexane		3400	JD	920	5800	ug/Kg
Q2600-11DL	END-OF-TRENCH SOIL	Methylcyclohexane		53000	D	1100	5800	ug/Kg
Q2600-11DL	END-OF-TRENCH SOIL	Ethyl Benzene		9800	D	780	5800	ug/Kg
Q2600-11DL	END-OF-TRENCH SOIL	Isopropylbenzene		8800	D	910	5800	ug/Kg
Total Voc :				75000				
Total Concentration:				75000				



QC SUMMARY

Surrogate Summary

SDG No.: **Q2600**

Client: **T&A Construction Inc**

Analytical Method: **SW8260D**

Lab Sample ID	Client ID	Parameter	Spike	Result	Recovery (%)	Qual	Limits (%)	
							Low	High
Q2600-03	TRENCH	1,2-Dichloroethane-d4	50	51.7	103		63	155
		Dibromofluoromethane	50	47.1	94		70	134
		Toluene-d8	50	47.6	95		74	123
		4-Bromofluorobenzene	50	50.1	100		17	146
Q2600-07	STOCK-PILE	1,2-Dichloroethane-d4	50	51.4	103		63	155
		Dibromofluoromethane	50	46.4	93		70	134
		Toluene-d8	50	47.8	96		74	123
		4-Bromofluorobenzene	50	51.4	103		17	146
Q2600-11	END-OF-TRENCH	1,2-Dichloroethane-d4	50	49.7	99		63	155
		Dibromofluoromethane	50	48.8	98		70	134
		Toluene-d8	50	46.7	93		74	123
		4-Bromofluorobenzene	50	58.2	116		17	146
Q2600-11DL	END-OF-TRENCHDL	1,2-Dichloroethane-d4	50	52.9	106		63	155
		Dibromofluoromethane	50	49.5	99		70	134
		Toluene-d8	50	47.6	95		74	123
		4-Bromofluorobenzene	50	52.6	105		17	146
VX0715MBL01	VX0715MBL01	1,2-Dichloroethane-d4	50	52.4	105		63	155
		Dibromofluoromethane	50	48.5	97		70	134
		Toluene-d8	50	48.5	97		74	123
		4-Bromofluorobenzene	50	52.2	104		17	146
VX0715MBS01	VX0715MBS01	1,2-Dichloroethane-d4	50	53.9	108		63	155
		Dibromofluoromethane	50	50.2	100		70	134
		Toluene-d8	50	48.5	97		74	123
		4-Bromofluorobenzene	50	51.5	103		17	146
VX0715MBSD0	VX0715MBSD01	1,2-Dichloroethane-d4	50	55.3	111		63	155
		Dibromofluoromethane	50	50.8	102		70	134
		Toluene-d8	50	48.4	97		74	123
		4-Bromofluorobenzene	50	52.7	105		17	146
VX0716MBL01	VX0716MBL01	1,2-Dichloroethane-d4	50	54.3	109		63	155
		Dibromofluoromethane	50	49.1	98		70	134
		Toluene-d8	50	48.9	98		74	123
		4-Bromofluorobenzene	50	53.5	107		17	146
VX0716MBS01	VX0716MBS01	1,2-Dichloroethane-d4	50	50.9	102		63	155
		Dibromofluoromethane	50	48.6	97		70	134
		Toluene-d8	50	46.0	92		74	123
		4-Bromofluorobenzene	50	49.8	100		17	146

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.:	Q2600	Analytical Method:	SW8260D
Client:	T&A Construction Inc	Datafile :	VX047007.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VX0715MBS01	Dichlorodifluoromethane	2000	1700	ug/Kg	85			64	136	
	Chloromethane	2000	1700	ug/Kg	85			52	151	
	Vinyl chloride	2000	1800	ug/Kg	90			56	148	
	Bromomethane	2000	1800	ug/Kg	90			58	141	
	Chloroethane	2000	1900	ug/Kg	95			69	130	
	Trichlorofluoromethane	2000	1900	ug/Kg	95			69	134	
	1,1,2-Trichlorotrifluoroethane	2000	1900	ug/Kg	95			81	123	
	1,1-Dichloroethene	2000	1900	ug/Kg	95			79	121	
	Acetone	10000	12400	ug/Kg	124			40	171	
	Carbon disulfide	2000	1500	ug/Kg	75			59	130	
	Methyl tert-butyl Ether	2000	2400	ug/Kg	120			77	129	
	Methyl Acetate	2000	3100	ug/Kg	155		*	69	149	
	Methylene Chloride	2000	2000	ug/Kg	100			72	131	
	trans-1,2-Dichloroethene	2000	1900	ug/Kg	95			80	123	
	1,1-Dichloroethane	2000	2000	ug/Kg	100			82	123	
	Cyclohexane	2000	1900	ug/Kg	95			76	122	
	2-Butanone	10000	14000	ug/Kg	140		*	69	131	
	Carbon Tetrachloride	2000	1900	ug/Kg	95			76	129	
	cis-1,2-Dichloroethene	2000	2000	ug/Kg	100			82	123	
	Bromochloromethane	2000	2200	ug/Kg	110			80	127	
	Chloroform	2000	2100	ug/Kg	105			82	125	
	1,1,1-Trichloroethane	2000	2100	ug/Kg	105			80	126	
	Methylcyclohexane	2000	1700	ug/Kg	85			77	123	
	Benzene	2000	1900	ug/Kg	95			84	121	
	1,2-Dichloroethane	2000	2100	ug/Kg	105			81	126	
	Trichloroethene	2000	1800	ug/Kg	90			83	122	
	1,2-Dichloropropane	2000	2000	ug/Kg	100			83	122	
	Bromodichloromethane	2000	2000	ug/Kg	100			82	123	
	4-Methyl-2-Pentanone	10000	13900	ug/Kg	139		*	70	135	
	Toluene	2000	2000	ug/Kg	100			83	122	
	t-1,3-Dichloropropene	2000	2000	ug/Kg	100			78	124	
	cis-1,3-Dichloropropene	2000	2000	ug/Kg	100			81	122	
	1,1,2-Trichloroethane	2000	2100	ug/Kg	105			82	125	
	2-Hexanone	10000	14500	ug/Kg	145		*	66	138	
	Dibromochloromethane	2000	2000	ug/Kg	100			79	125	
	1,2-Dibromoethane	2000	2100	ug/Kg	105			80	125	
	Tetrachloroethene	2000	1800	ug/Kg	90			83	125	
	Chlorobenzene	2000	2000	ug/Kg	100			84	122	
	Ethyl Benzene	2000	2000	ug/Kg	100			82	124	
	m/p-Xylenes	4000	3900	ug/Kg	98			83	124	
	o-Xylene	2000	2000	ug/Kg	100			83	123	
	Styrene	2000	2000	ug/Kg	100			82	124	
	Bromoform	2000	2100	ug/Kg	105			75	127	
	Isopropylbenzene	2000	2000	ug/Kg	100			82	124	
	1,1,2,2-Tetrachloroethane	2000	2400	ug/Kg	120			77	127	
	1,3-Dichlorobenzene	2000	2000	ug/Kg	100			83	122	
	1,4-Dichlorobenzene	2000	1900	ug/Kg	95			84	121	
	1,2-Dichlorobenzene	2000	2000	ug/Kg	100			83	124	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.:	<u>Q2600</u>	Analytical Method:	<u>SW8260D</u>
Client:	<u>T&A Construction Inc</u>	Datafile :	<u>VX047007.D</u>

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits	RPD
									High	
VX0715MBS01	1,2-Dibromo-3-Chloropropane	2000	2600	ug/Kg	130			66	134	
	1,2,4-Trichlorobenzene	2000	1900	ug/Kg	95			78	127	
	1,2,3-Trichlorobenzene	2000	2000	ug/Kg	100			70	137	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.:	Q2600	Analytical Method:	SW8260D
Client:	T&A Construction Inc	Datafile :	VX047008.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VX0715MBS01	Dichlorodifluoromethane	2000	1700	ug/Kg	85	0		64	136	20
	Chloromethane	2000	1700	ug/Kg	85	0		52	151	20
	Vinyl chloride	2000	1700	ug/Kg	85	6		56	148	20
	Bromomethane	2000	1800	ug/Kg	90	0		58	141	20
	Chloroethane	2000	1800	ug/Kg	90	5		69	130	20
	Trichlorofluoromethane	2000	1900	ug/Kg	95	0		69	134	20
	1,1,2-Trichlorotrifluoroethane	2000	1800	ug/Kg	90	5		81	123	20
	1,1-Dichloroethene	2000	1800	ug/Kg	90	5		79	121	20
	Acetone	10000	12700	ug/Kg	127	2		40	171	20
	Carbon disulfide	2000	1500	ug/Kg	75	0		59	130	20
	Methyl tert-butyl Ether	2000	2500	ug/Kg	125	4		77	129	20
	Methyl Acetate	2000	3200	ug/Kg	160	3	*	69	149	20
	Methylene Chloride	2000	2000	ug/Kg	100	0		72	131	20
	trans-1,2-Dichloroethene	2000	1900	ug/Kg	95	0		80	123	20
	1,1-Dichloroethane	2000	2100	ug/Kg	105	5		82	123	20
	Cyclohexane	2000	1900	ug/Kg	95	0		76	122	20
	2-Butanone	10000	14700	ug/Kg	147	5	*	69	131	20
	Carbon Tetrachloride	2000	1900	ug/Kg	95	0		76	129	20
	cis-1,2-Dichloroethene	2000	2100	ug/Kg	105	5		82	123	20
	Bromochloromethane	2000	2200	ug/Kg	110	0		80	127	20
	Chloroform	2000	2100	ug/Kg	105	0		82	125	20
	1,1,1-Trichloroethane	2000	2100	ug/Kg	105	0		80	126	20
	Methylcyclohexane	2000	1600	ug/Kg	80	6		77	123	20
	Benzene	2000	1900	ug/Kg	95	0		84	121	20
	1,2-Dichloroethane	2000	2100	ug/Kg	105	0		81	126	20
	Trichloroethene	2000	1800	ug/Kg	90	0		83	122	20
	1,2-Dichloropropane	2000	2000	ug/Kg	100	0		83	122	20
	Bromodichloromethane	2000	2000	ug/Kg	100	0		82	123	20
	4-Methyl-2-Pentanone	10000	14400	ug/Kg	144	4	*	70	135	20
	Toluene	2000	2000	ug/Kg	100	0		83	122	20
	t-1,3-Dichloropropene	2000	2000	ug/Kg	100	0		78	124	20
	cis-1,3-Dichloropropene	2000	2000	ug/Kg	100	0		81	122	20
	1,1,2-Trichloroethane	2000	2200	ug/Kg	110	5		82	125	20
	2-Hexanone	10000	15000	ug/Kg	150	3	*	66	138	20
	Dibromochloromethane	2000	2100	ug/Kg	105	5		79	125	20
	1,2-Dibromoethane	2000	2200	ug/Kg	110	5		80	125	20
	Tetrachloroethene	2000	1800	ug/Kg	90	0		83	125	20
	Chlorobenzene	2000	2000	ug/Kg	100	0		84	122	20
	Ethyl Benzene	2000	2000	ug/Kg	100	0		82	124	20
	m/p-Xylenes	4000	4000	ug/Kg	100	2		83	124	20
	o-Xylene	2000	2100	ug/Kg	105	5		83	123	20
	Styrene	2000	2100	ug/Kg	105	5		82	124	20
	Bromoform	2000	2200	ug/Kg	110	5		75	127	20
	Isopropylbenzene	2000	2000	ug/Kg	100	0		82	124	20
	1,1,2,2-Tetrachloroethane	2000	2400	ug/Kg	120	0		77	127	20
	1,3-Dichlorobenzene	2000	2000	ug/Kg	100	0		83	122	20
	1,4-Dichlorobenzene	2000	2000	ug/Kg	100	5		84	121	20
	1,2-Dichlorobenzene	2000	2000	ug/Kg	100	0		83	124	20

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.:	<u>Q2600</u>	Analytical Method:	<u>SW8260D</u>
Client:	<u>T&A Construction Inc</u>	Datafile :	<u>VX047008.D</u>

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VX0715MBSD01	1,2-Dibromo-3-Chloropropane	2000	2700	ug/Kg	135	4	*	66	134	20
	1,2,4-Trichlorobenzene	2000	2000	ug/Kg	100	5		78	127	20
	1,2,3-Trichlorobenzene	2000	2100	ug/Kg	105	5		70	137	20

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.:	<u>Q2600</u>	Analytical Method:	<u>SW8260D</u>
Client:	<u>T&A Construction Inc</u>	Datafile :	<u>VX047019.D</u>

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VX0716MBS01	Dichlorodifluoromethane	2000	1700	ug/Kg	85			64	136	
	Chloromethane	2000	1700	ug/Kg	85			52	151	
	Vinyl chloride	2000	1800	ug/Kg	90			56	148	
	Bromomethane	2000	1800	ug/Kg	90			58	141	
	Chloroethane	2000	1700	ug/Kg	85			69	130	
	Trichlorofluoromethane	2000	1900	ug/Kg	95			69	134	
	1,1,2-Trichlorotrifluoroethane	2000	1900	ug/Kg	95			81	123	
	1,1-Dichloroethene	2000	1900	ug/Kg	95			79	121	
	Acetone	10000	11800	ug/Kg	118			40	171	
	Carbon disulfide	2000	1400	ug/Kg	70			59	130	
	Methyl tert-butyl Ether	2000	2300	ug/Kg	115			77	129	
	Methyl Acetate	2000	3000	ug/Kg	150		*	69	149	
	Methylene Chloride	2000	1900	ug/Kg	95			72	131	
	trans-1,2-Dichloroethene	2000	1800	ug/Kg	90			80	123	
	1,1-Dichloroethane	2000	2000	ug/Kg	100			82	123	
	Cyclohexane	2000	1900	ug/Kg	95			76	122	
	2-Butanone	10000	13600	ug/Kg	136		*	69	131	
	Carbon Tetrachloride	2000	1900	ug/Kg	95			76	129	
	cis-1,2-Dichloroethene	2000	1900	ug/Kg	95			82	123	
	Bromochloromethane	2000	2300	ug/Kg	115			80	127	
	Chloroform	2000	2000	ug/Kg	100			82	125	
	1,1,1-Trichloroethane	2000	2000	ug/Kg	100			80	126	
	Methylcyclohexane	2000	1800	ug/Kg	90			77	123	
	Benzene	2000	1900	ug/Kg	95			84	121	
	1,2-Dichloroethane	2000	2100	ug/Kg	105			81	126	
	Trichloroethene	2000	1800	ug/Kg	90			83	122	
	1,2-Dichloropropane	2000	2000	ug/Kg	100			83	122	
	Bromodichloromethane	2000	2000	ug/Kg	100			82	123	
	4-Methyl-2-Pentanone	10000	13500	ug/Kg	135			70	135	
	Toluene	2000	1900	ug/Kg	95			83	122	
	t-1,3-Dichloropropene	2000	2000	ug/Kg	100			78	124	
	cis-1,3-Dichloropropene	2000	2000	ug/Kg	100			81	122	
	1,1,2-Trichloroethane	2000	2100	ug/Kg	105			82	125	
	2-Hexanone	10000	14200	ug/Kg	142		*	66	138	
	Dibromochloromethane	2000	2000	ug/Kg	100			79	125	
	1,2-Dibromoethane	2000	2100	ug/Kg	105			80	125	
	Tetrachloroethene	2000	1800	ug/Kg	90			83	125	
	Chlorobenzene	2000	1900	ug/Kg	95			84	122	
	Ethyl Benzene	2000	2000	ug/Kg	100			82	124	
	m/p-Xylenes	4000	3900	ug/Kg	98			83	124	
	o-Xylene	2000	2000	ug/Kg	100			83	123	
	Styrene	2000	2000	ug/Kg	100			82	124	
	Bromoform	2000	2000	ug/Kg	100			75	127	
	Isopropylbenzene	2000	2000	ug/Kg	100			82	124	
	1,1,2,2-Tetrachloroethane	2000	2200	ug/Kg	110			77	127	
	1,3-Dichlorobenzene	2000	2000	ug/Kg	100			83	122	
	1,4-Dichlorobenzene	2000	1900	ug/Kg	95			84	121	
	1,2-Dichlorobenzene	2000	2000	ug/Kg	100			83	124	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.:	<u>Q2600</u>	Analytical Method:	<u>SW8260D</u>
Client:	<u>T&A Construction Inc</u>	Datafile :	<u>VX047019.D</u>

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits	RPD
									High	
VX0716MBS01	1,2-Dibromo-3-Chloropropane	2000	2500	ug/Kg	125			66	134	
	1,2,4-Trichlorobenzene	2000	1900	ug/Kg	95			78	127	
	1,2,3-Trichlorobenzene	2000	2000	ug/Kg	100			70	137	

VOLATILE METHOD BLANK SUMMARY

Client ID

VX0715MBL01

Lab Name: Alliance

Contract: TAC001

Lab Code: ACE

SDG NO.: Q2600

Lab File ID: VX046989.D

Lab Sample ID: VX0715MBL01

Date Analyzed: 07/15/2025

Time Analyzed: 10:39

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
VX0715MBS01	VX0715MBS01	VX047007.D	07/15/2025
VX0715MBSD01	VX0715MBSD01	VX047008.D	07/15/2025
TRENCH	Q2600-03	VX047011.D	07/15/2025
STOCK-PILE	Q2600-07	VX047012.D	07/15/2025
END-OF-TRENCH	Q2600-11	VX047013.D	07/15/2025

COMMENTS: _____

VOLATILE METHOD BLANK SUMMARY

Client ID

VX0716MBL01

Lab Name: Alliance

Contract: TAC001

Lab Code: ACE

SDG NO.: Q2600

Lab File ID: VX047017.D

Lab Sample ID: VX0716MBL01

Date Analyzed: 07/16/2025

Time Analyzed: 10:13

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
VX0716MBS01	VX0716MBS01	VX047019.D	07/16/2025
END-OF-TRENCHDL	Q2600-11DL	VX047021.D	07/16/2025

COMMENTS: _____



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

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alliance

Contract: TACO01

Lab Code: ACE

SDG NO.: Q2600

Lab File ID: VX046859.D

BFB Injection Date: 07/02/2025

Instrument ID: MSVOA_X

BFB Injection Time: 11:12

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

Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.2
75	30.0 - 60.0% of mass 95	50.1
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.4
173	Less than 2.0% of mass 174	0.8 (1) 1
174	50.0 - 100.0% of mass 95	75.5
175	5.0 - 9.0% of mass 174	5.6 (7.4) 1
176	95.0 - 101.0% of mass 174	73.3 (97.1) 1
177	5.0 - 9.0% of mass 176	4.9 (6.7) 2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDIC001	VSTDIC001	VX046860.D	07/02/2025	12:11
VSTDIC005	VSTDIC005	VX046861.D	07/02/2025	12:37
VSTDIC020	VSTDIC020	VX046862.D	07/02/2025	13:18
VSTDIC050	VSTDIC050	VX046863.D	07/02/2025	13:39
VSTDIC100	VSTDIC100	VX046864.D	07/02/2025	14:10
VSTDIC150	VSTDIC150	VX046865.D	07/02/2025	14:31



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Fax : 908 789 8922

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alliance
Lab Code: ACE
Lab File ID: VX046987.D
Instrument ID: MSVOA_X
GC Column: DB-624UI ID: 0.18 (mm)

Contract: TACO01
SDG NO.: Q2600
BFB Injection Date: 07/15/2025
BFB Injection Time: 08:29
Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.9
75	30.0 - 60.0% of mass 95	52
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	0.5 (0.7) 1
174	50.0 - 100.0% of mass 95	74.1
175	5.0 - 9.0% of mass 174	5.5 (7.4) 1
176	95.0 - 101.0% of mass 174	72.6 (97.9) 1
177	5.0 - 9.0% of mass 176	4.6 (6.4) 2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VX046988.D	07/15/2025	10:18
VX0715MBL01	VX0715MBL01	VX046989.D	07/15/2025	10:39
VX0715MBS01	VX0715MBS01	VX047007.D	07/15/2025	17:06
VX0715MBSD01	VX0715MBSD01	VX047008.D	07/15/2025	17:27
TRENCH	Q2600-03	VX047011.D	07/15/2025	18:31
STOCK-PILE	Q2600-07	VX047012.D	07/15/2025	18:52
END-OF-TRENCH	Q2600-11	VX047013.D	07/15/2025	19:13



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Fax : 908 789 8922

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alliance

Contract: TACO01

Lab Code: ACE

SDG NO.: Q2600

Lab File ID: VX047015.D

BFB Injection Date: 07/16/2025

Instrument ID: MSVOA_X

BFB Injection Time: 08:58

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	19.7
75	30.0 - 60.0% of mass 95	51.4
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.8 (1) 1
174	50.0 - 100.0% of mass 95	72
175	5.0 - 9.0% of mass 174	5.4 (7.6) 1
176	95.0 - 101.0% of mass 174	69.2 (96.1) 1
177	5.0 - 9.0% of mass 176	4.6 (6.6) 2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VX047016.D	07/16/2025	09:26
VX0716MBL01	VX0716MBL01	VX047017.D	07/16/2025	10:13
VX0716MBS01	VX0716MBS01	VX047019.D	07/16/2025	11:02
END-OF-TRENCHDL	Q2600-11DL	VX047021.D	07/16/2025	11:50

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance Contract: TACO01
Lab Code: ACE SDG NO.: Q2600
Lab File ID: VX046988.D Date Analyzed: 07/15/2025
Instrument ID: MSVOA_X Time Analyzed: 10:18
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	298555	5.56	499158	6.76	443564	10.06
UPPER LIMIT	597110	6.056	998316	7.263	887128	10.555
LOWER LIMIT	149278	5.056	249579	6.263	221782	9.555
EPA SAMPLE NO.						
TRENCH	342096	5.56	576254	6.76	518427	10.06
STOCK-PILE	340958	5.56	581697	6.76	519348	10.06
END-OF-TRENCH	300812	5.56	484192	6.76	369331	10.06
VX0715MBL01	342671	5.56	579223	6.77	530422	10.06
VX0715MBS01	310444	5.57	528338	6.77	471044	10.06
VX0715MBSD01	285726	5.57	492414	6.77	437242	10.06

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

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

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

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance Contract: TACO01
 Lab Code: ACE SDG NO.: Q2600
 Lab File ID: VX046988.D Date Analyzed: 07/15/2025
 Instrument ID: MSVOA_X Time Analyzed: 10:18
 GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	217822	12.018				
UPPER LIMIT	435644	12.518				
LOWER LIMIT	108911	11.518				
EPA SAMPLE NO.						
TRENCH	226022	12.02				
STOCK-PILE	233909	12.02				
END-OF-TRENCH	180753	12.02				
VX0715MBL01	275487	12.02				
VX0715MBS01	239011	12.02				
VX0715MBSD01	224565	12.02				

IS4 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

* Values outside of QC limits.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance Contract: TACO01
Lab Code: ACE SDG NO.: Q2600
Lab File ID: VX047016.D Date Analyzed: 07/16/2025
Instrument ID: MSVOA_X Time Analyzed: 09:26
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	329194	5.56	557691	6.76	489553	10.06
UPPER LIMIT	658388	6.056	1115380	7.263	979106	10.555
LOWER LIMIT	164597	5.056	278846	6.263	244777	9.555
EPA SAMPLE NO.						
END-OF-TRENCHDL	320742	5.56	537318	6.77	482473	10.06
VX0716MBL01	319061	5.56	562969	6.77	523286	10.06
VX0716MBS01	328600	5.56	550527	6.76	493708	10.06

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

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

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

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance Contract: TACO01
 Lab Code: ACE SDG NO.: Q2600
 Lab File ID: VX047016.D Date Analyzed: 07/16/2025
 Instrument ID: MSVOA_X Time Analyzed: 09:26
 GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	242580	12.018				
UPPER LIMIT	485160	12.518				
LOWER LIMIT	121290	11.518				
EPA SAMPLE NO.						
END-OF-TRENCHDL	236691	12.02				
VX0716MBL01	270042	12.02				
VX0716MBS01	253419	12.02				

IS4 = 1,4-Dichlorobenzene-d4

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

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



SAMPLE DATA

Report of Analysis

Client:	T&A Construction Inc	Date Collected:	07/14/25
Project:	Kingsland Point Park Water Main	Date Received:	07/14/25
Client Sample ID:	TRENCH	SDG No.:	Q2600
Lab Sample ID:	Q2600-03	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	80.2
Sample Wt/Vol:	5.68 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10
GC Column:	DB-624UI ID : 0.18	Level :	MED
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VX047011.D	1	07/15/25 18:31	VX071525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	62.6	U	62.6	270	ug/Kg
74-87-3	Chloromethane	62.6	U	62.6	270	ug/Kg
75-01-4	Vinyl Chloride	43.4	U	43.4	270	ug/Kg
74-83-9	Bromomethane	58.7	U	58.7	270	ug/Kg
75-00-3	Chloroethane	69.1	U	69.1	270	ug/Kg
75-69-4	Trichlorofluoromethane	66.4	U	66.4	270	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	58.2	U	58.2	270	ug/Kg
75-35-4	1,1-Dichloroethene	54.9	U	54.9	270	ug/Kg
67-64-1	Acetone	260	U	260	1400	ug/Kg
75-15-0	Carbon Disulfide	58.2	U	58.2	270	ug/Kg
1634-04-4	Methyl tert-butyl Ether	40.1	U	40.1	270	ug/Kg
79-20-9	Methyl Acetate	84.5	UQ	84.5	270	ug/Kg
75-09-2	Methylene Chloride	190	U	190	550	ug/Kg
156-60-5	trans-1,2-Dichloroethene	47.2	U	47.2	270	ug/Kg
75-34-3	1,1-Dichloroethane	43.9	U	43.9	270	ug/Kg
110-82-7	Cyclohexane	43.4	U	43.4	270	ug/Kg
78-93-3	2-Butanone	360	UQ	360	1400	ug/Kg
56-23-5	Carbon Tetrachloride	53.2	U	53.2	270	ug/Kg
156-59-2	cis-1,2-Dichloroethene	41.2	U	41.2	270	ug/Kg
74-97-5	Bromochloromethane	63.1	U	63.1	270	ug/Kg
67-66-3	Chloroform	46.1	U	46.1	270	ug/Kg
71-55-6	1,1,1-Trichloroethane	51.0	U	51.0	270	ug/Kg
108-87-2	Methylcyclohexane	280		49.9	270	ug/Kg
71-43-2	Benzene	43.4	U	43.4	270	ug/Kg
107-06-2	1,2-Dichloroethane	43.4	U	43.4	270	ug/Kg
79-01-6	Trichloroethene	44.5	U	44.5	270	ug/Kg
78-87-5	1,2-Dichloropropane	49.9	U	49.9	270	ug/Kg
75-27-4	Bromodichloromethane	42.8	U	42.8	270	ug/Kg
108-10-1	4-Methyl-2-Pentanone	200	UQ	200	1400	ug/Kg
108-88-3	Toluene	42.8	U	42.8	270	ug/Kg

Report of Analysis

Client:	T&A Construction Inc			Date Collected:	07/14/25
Project:	Kingsland Point Park Water Main			Date Received:	07/14/25
Client Sample ID:	TRENCH			SDG No.:	Q2600
Lab Sample ID:	Q2600-03			Matrix:	SOIL
Analytical Method:	8260D			% Solid:	80.2
Sample Wt/Vol:	5.68	Units:	g	Final Vol:	5000 uL
Soil Aliquot Vol:	100		uL	Test:	VOC-TCLVOA-10
GC Column:	DB-624UI	ID :	0.18	Level :	MED
Prep Method :					

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VX047011.D	1	07/15/25 18:31	VX071525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	35.7	U	35.7	270	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	34.0	U	34.0	270	ug/Kg
79-00-5	1,1,2-Trichloroethane	50.5	U	50.5	270	ug/Kg
591-78-6	2-Hexanone	200	UQ	200	1400	ug/Kg
124-48-1	Dibromochloromethane	47.7	U	47.7	270	ug/Kg
106-93-4	1,2-Dibromoethane	48.3	U	48.3	270	ug/Kg
127-18-4	Tetrachloroethene	57.6	U	57.6	270	ug/Kg
108-90-7	Chlorobenzene	49.9	U	49.9	270	ug/Kg
100-41-4	Ethyl Benzene	36.8	U	36.8	270	ug/Kg
179601-23-1	m/p-Xylenes	68.1	U	68.1	550	ug/Kg
95-47-6	o-Xylene	45.0	U	45.0	270	ug/Kg
100-42-5	Styrene	39.0	U	39.0	270	ug/Kg
75-25-2	Bromoform	47.2	U	47.2	270	ug/Kg
98-82-8	Isopropylbenzene	280		42.8	270	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	66.4	U	66.4	270	ug/Kg
541-73-1	1,3-Dichlorobenzene	93.8	U	93.8	270	ug/Kg
106-46-7	1,4-Dichlorobenzene	85.6	U	85.6	270	ug/Kg
95-50-1	1,2-Dichlorobenzene	79.6	U	79.6	270	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	100	UQ	100	270	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	160	U	160	270	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	170	U	170	270	ug/Kg

SURROGATES

17060-07-0	1,2-Dichloroethane-d4	51.7	63 - 155	103%	SPK: 50
1868-53-7	Dibromofluoromethane	47.1	70 - 134	94%	SPK: 50
2037-26-5	Toluene-d8	47.6	74 - 123	95%	SPK: 50
460-00-4	4-Bromofluorobenzene	50.1	17 - 146	100%	SPK: 50

INTERNAL STANDARDS

363-72-4	Pentafluorobenzene	342000	5.556
540-36-3	1,4-Difluorobenzene	576000	6.763
3114-55-4	Chlorobenzene-d5	518000	10.055
3855-82-1	1,4-Dichlorobenzene-d4	226000	12.024

TENTATIVE IDENTIFIED COMPOUNDS

Report of Analysis

Client:	T&A Construction Inc	Date Collected:	07/14/25
Project:	Kingsland Point Park Water Main	Date Received:	07/14/25
Client Sample ID:	TRENCH	SDG No.:	Q2600
Lab Sample ID:	Q2600-03	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	80.2
Sample Wt/Vol:	5.68 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10
GC Column:	DB-624UI ID : 0.18	Level :	MED
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VX047011.D	1	07/15/25 18:31	VX071525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
002051-30-1	Octane, 2,6-dimethyl-	5100	J		10.8	ug/Kg
000696-29-7	Cyclohexane, (1-methylethyl)-	7800	J		10.9	ug/Kg
004057-42-5	2-Octene, 2,6-dimethyl-	4700	J		11.2	ug/Kg
002207-04-7	Cyclohexane, 1,4-dimethyl-, trans-	4600	J		11.4	ug/Kg
1000383-25-7	unknown11.628	4500	J		11.6	ug/Kg
135-98-8	sec-Butylbenzene	1200	J		11.9	ug/Kg
000135-01-3	Benzene, 1,2-diethyl-	4500	J		12.2	ug/Kg
104-51-8	n-Butylbenzene	820	J		12.3	ug/Kg
1000309-68-4	Oxalic acid, cyclohexylmethyl octy	6100	J		12.4	ug/Kg
000933-98-2	Benzene, 1-ethyl-2,3-dimethyl-	7100	J		12.6	ug/Kg
003290-53-7	Benzene, (2-methyl-2-propenyl)-	5800	J		12.7	ug/Kg
000527-84-4	o-Cymene	6200	J		13.3	ug/Kg

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\VX071525\
 Data File : VX047011.D
 Acq On : 15 Jul 2025 18:31
 Operator : JC/MD
 Sample : Q2600-03
 Misc : 5.68g/5mL/100uL/5.00mL/MSVOA_X/MEOH
 ALS Vial : 25 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 TRENCH

Manual Integrations
APPROVED

Reviewed By : John Carlone 07/16/2025
 Supervised By : Mahesh Dadoda 07/16/2025

Quant Time: Jul 16 02:33:11 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 03 05:51:11 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	5.556	168	342096	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.763	114	576254	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	518427	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.024	152	226022	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.958	65	233730	51.717	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 103.440%			
35) Dibromofluoromethane	5.391	113	184251	47.103	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 94.200%			
50) Toluene-d8	8.647	98	656434	47.564	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery = 95.120%			
62) 4-Bromofluorobenzene	11.079	95	262943	50.130	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery = 100.260%			
Target Compounds						
					Qvalue	
16) Acetone	2.416	43	4876	3.473	ug/l	96
39) Methylcyclohexane	7.379	83	33198	5.029	ug/l	96
73) Isopropylbenzene	10.963	105	82403	5.186	ug/l	97
85) sec-Butylbenzene	11.890	105	368959	21.946	ug/l	94
89) n-Butylbenzene	12.329	91	198737m	15.023	ug/l	

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

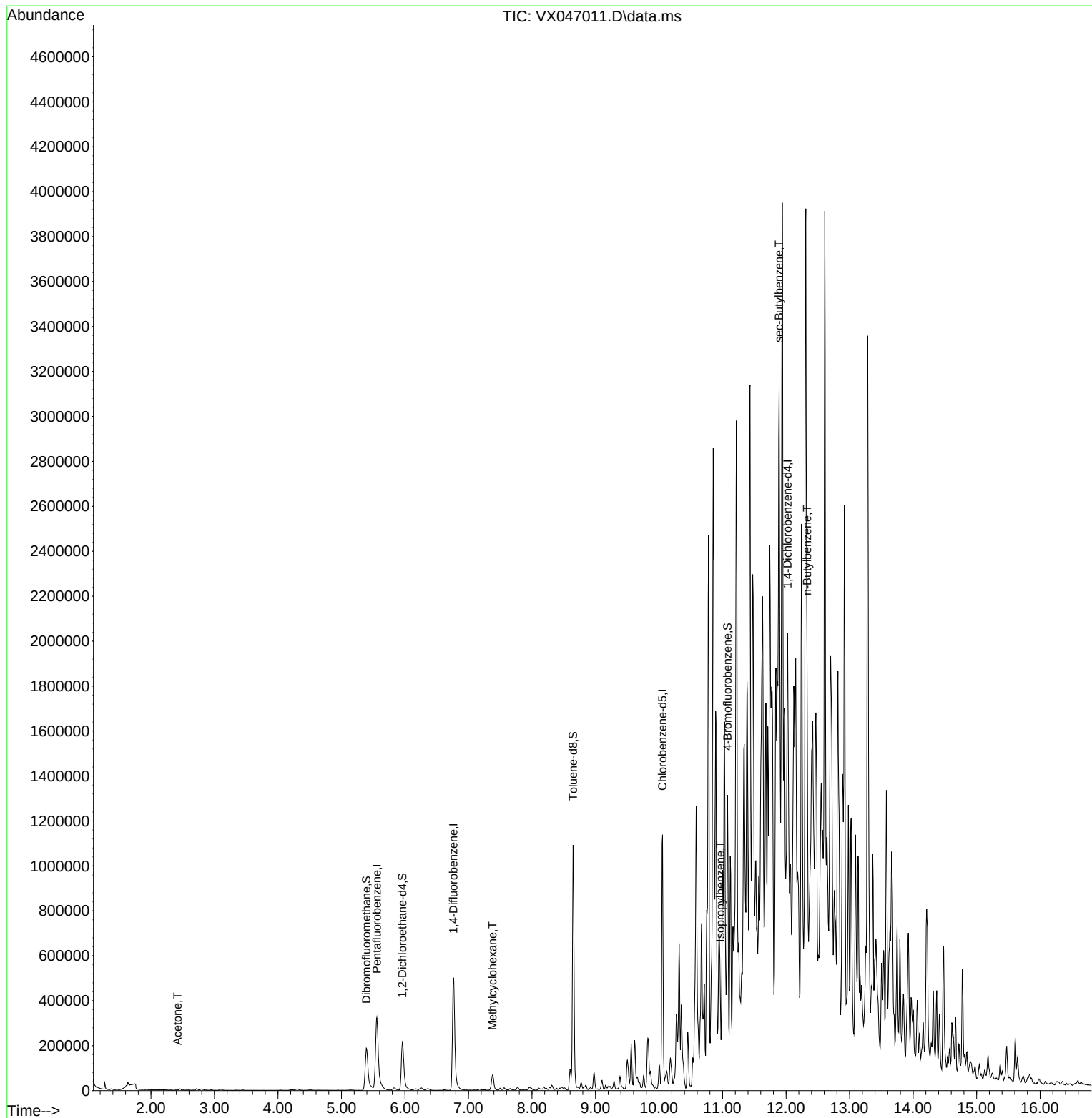
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Data File : VX047011.D
Acq On : 15 Jul 2025 18:31
Operator : JC/MD
Sample : Q2600-03
Misc : 5.68g/5mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 25 Sample Multiplier: 1

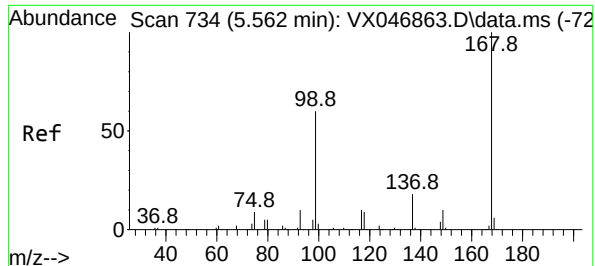
Instrument :
MSVOA_X
ClientSampleId :
TRENCH

Quant Time: Jul 16 02:33:11 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 03 05:51:11 2025
Response via : Initial Calibration

Manual Integrations
APPROVED

Reviewed By : John Carlone 07/16/2025
Supervised By : Mahesh Dadoda 07/16/2025





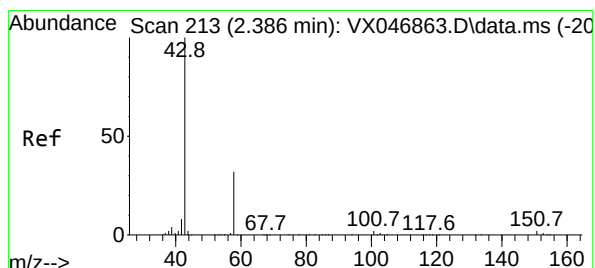
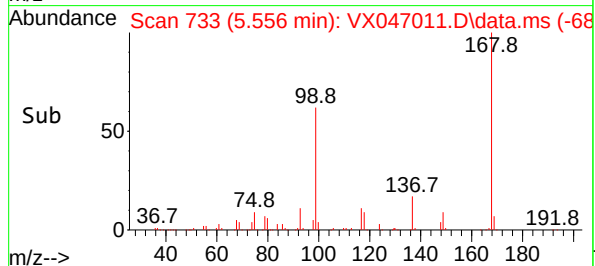
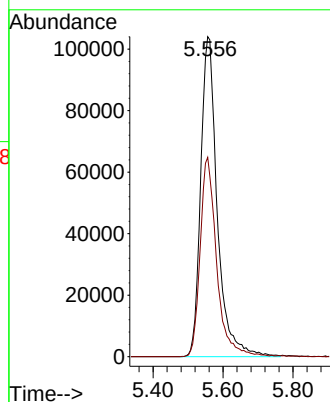
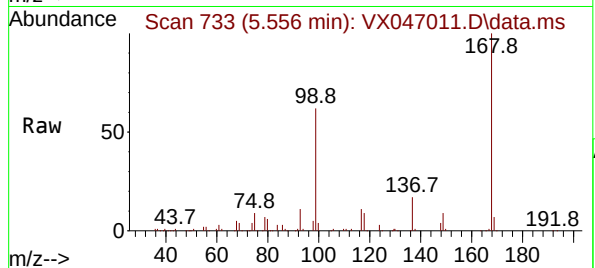
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.556 min Scan# 71
Delta R.T. -0.006 min
Lab File: VX047011.D
Acq: 15 Jul 2025 18:31

Instrument :
MSVOA_X
ClientSampleId :
TRENCH

Tgt Ion:168 Resp: 342090
Ion Ratio Lower Upper
168 100
99 62.3 48.8 73.2

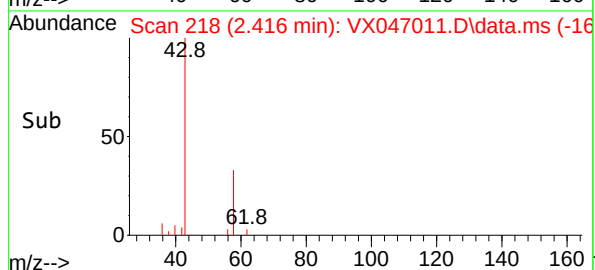
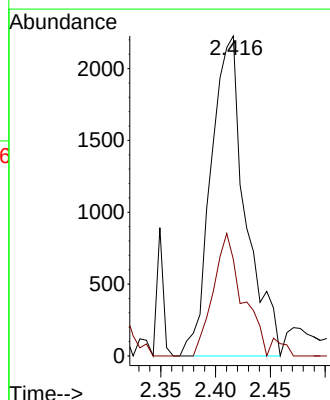
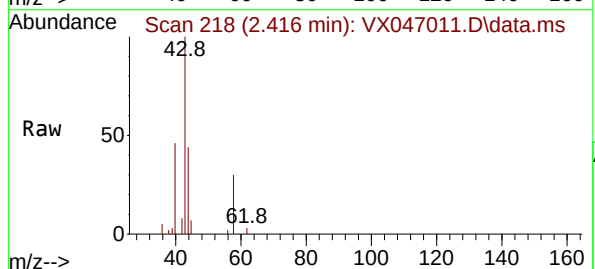
Manual Integrations
APPROVED

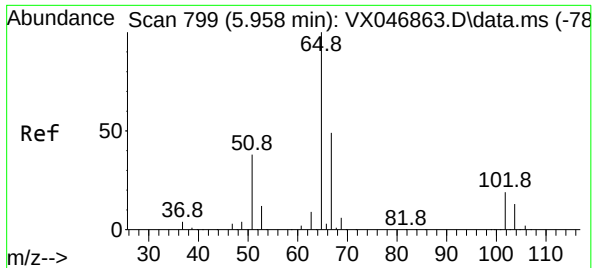
Reviewed By :John Carlone 07/16/2025
Supervised By :Mahesh Dadoda 07/16/2025



#16
Acetone
Concen: 3.473 ug/l
RT: 2.416 min Scan# 218
Delta R.T. 0.030 min
Lab File: VX047011.D
Acq: 15 Jul 2025 18:31

Tgt Ion: 43 Resp: 4876
Ion Ratio Lower Upper
43 100
58 30.2 25.8 38.6





#33

1,2-Dichloroethane-d4

Concen: 51.717 ug/l

RT: 5.958 min Scan# 799

Delta R.T. -0.000 min

Lab File: VX047011.D

Acq: 15 Jul 2025 18:31

Instrument :

MSVOA_X

ClientSampleId :

TRENCH

Tgt Ion: 65 Resp: 233730

Ion Ratio Lower Upper

65 100

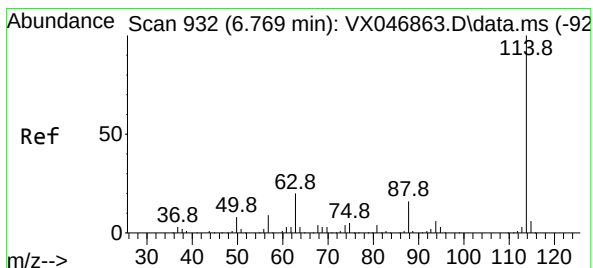
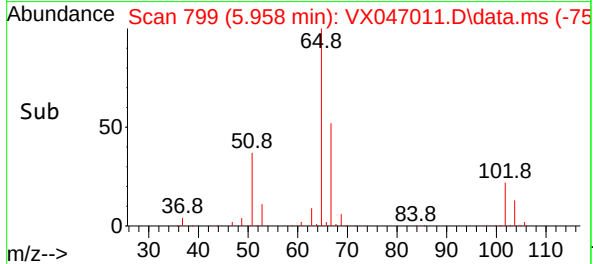
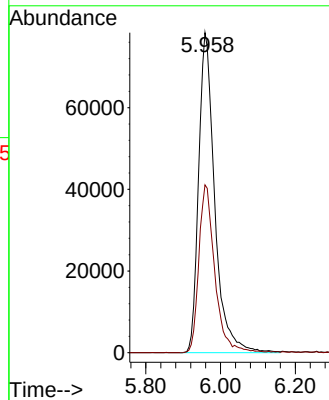
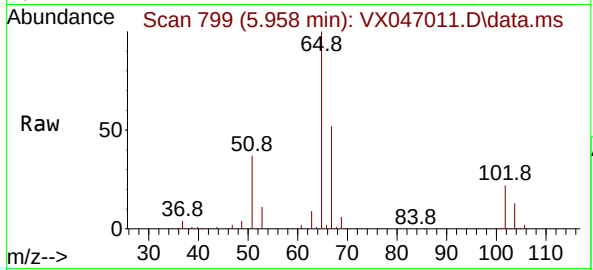
67 52.2 0.0 105.2

Manual Integrations

APPROVED

Reviewed By :John Carlone 07/16/2025

Supervised By :Mahesh Dadoda 07/16/2025



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 6.763 min Scan# 931

Delta R.T. -0.006 min

Lab File: VX047011.D

Acq: 15 Jul 2025 18:31

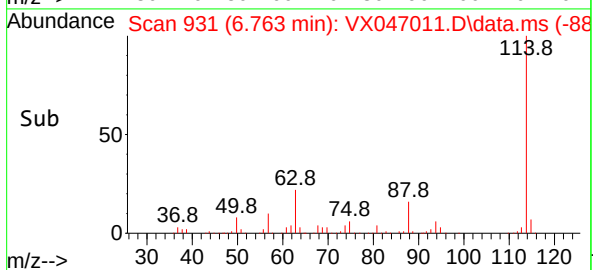
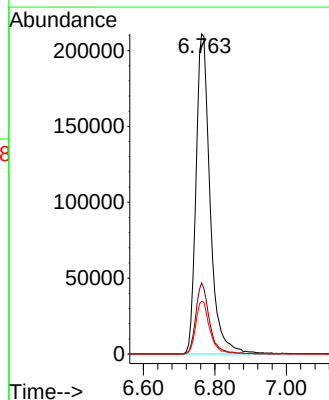
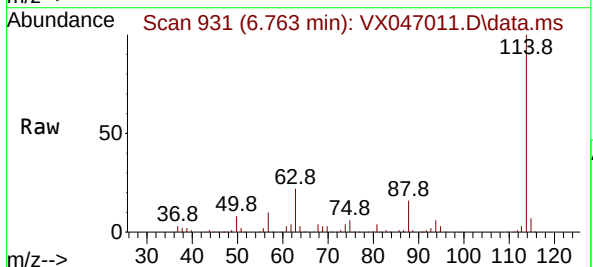
Tgt Ion:114 Resp: 576254

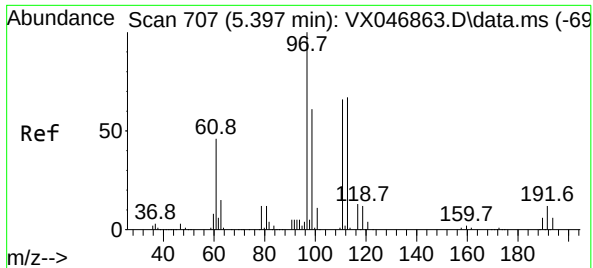
Ion Ratio Lower Upper

114 100

63 22.2 0.0 40.4

88 16.4 0.0 31.0





#35

Dibromofluoromethane

Concen: 47.103 ug/l

RT: 5.391 min Scan# 707

Delta R.T. -0.006 min

Lab File: VX047011.D

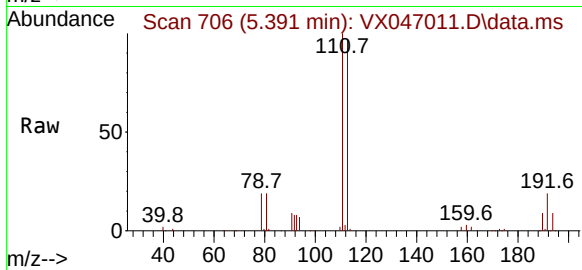
Acq: 15 Jul 2025 18:31

Instrument :

MSVOA_X

ClientSampleId :

TRENCH



Tgt Ion:113 Resp: 18425

Ion Ratio Lower Upper

113 100

111 102.6 81.2 121.8

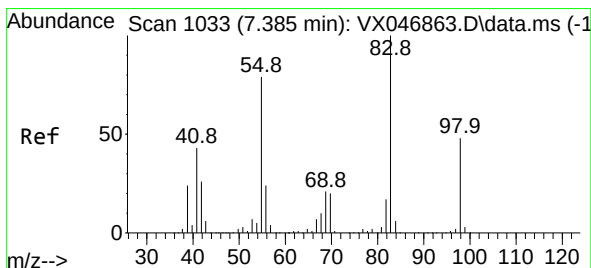
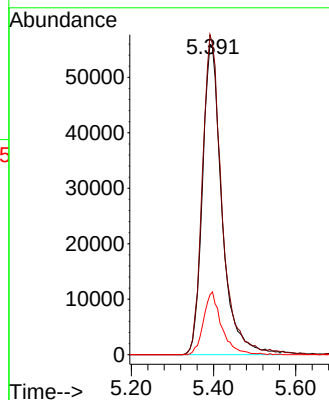
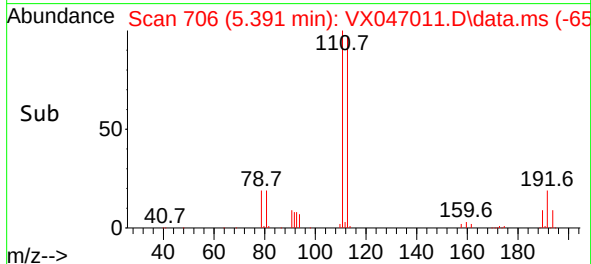
192 18.9 15.3 22.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 07/16/2025

Supervised By :Mahesh Dadoda 07/16/2025



#39

Methylcyclohexane

Concen: 5.029 ug/l

RT: 7.379 min Scan# 1032

Delta R.T. -0.006 min

Lab File: VX047011.D

Acq: 15 Jul 2025 18:31

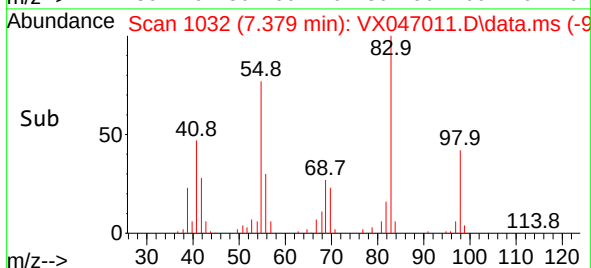
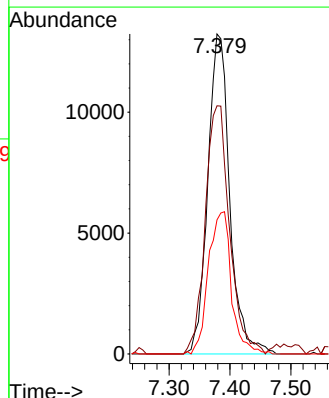
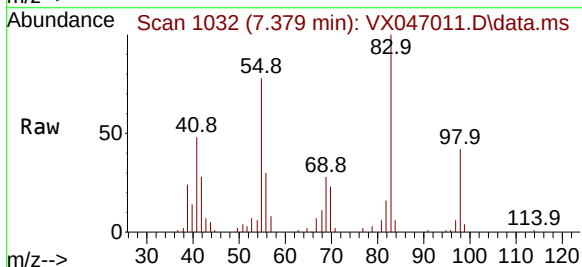
Tgt Ion: 83 Resp: 33198

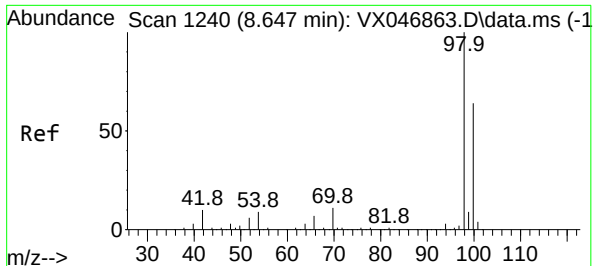
Ion Ratio Lower Upper

83 100

55 77.5 63.0 94.4

98 41.9 38.5 57.7





#50

Toluene-d8

Concen: 47.564 ug/l

RT: 8.647 min Scan# 1

Delta R.T. -0.000 min

Lab File: VX047011.D

Acq: 15 Jul 2025 18:31

Instrument :

MSVOA_X

ClientSampleId :

TRENCH

Tgt Ion: 98 Resp: 656434

Ion Ratio Lower Upper

98 100

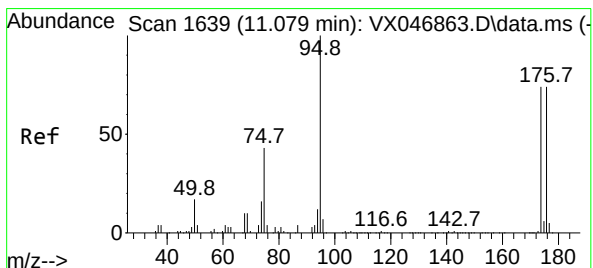
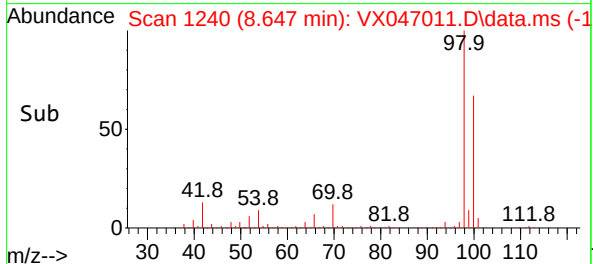
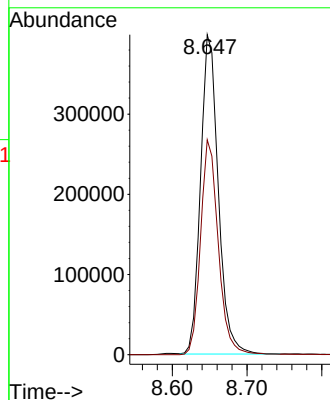
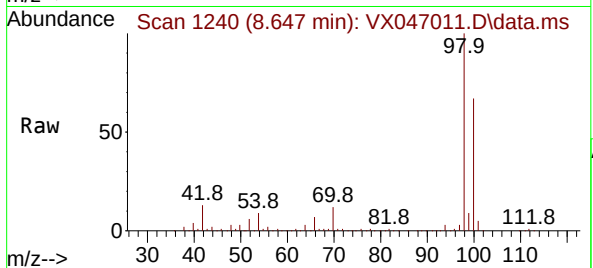
100 67.2 53.0 79.6

Manual Integrations

APPROVED

Reviewed By :John Carlone 07/16/2025

Supervised By :Mahesh Dadoda 07/16/2025



#62

4-Bromofluorobenzene

Concen: 50.130 ug/l

RT: 11.079 min Scan# 1639

Delta R.T. -0.000 min

Lab File: VX047011.D

Acq: 15 Jul 2025 18:31

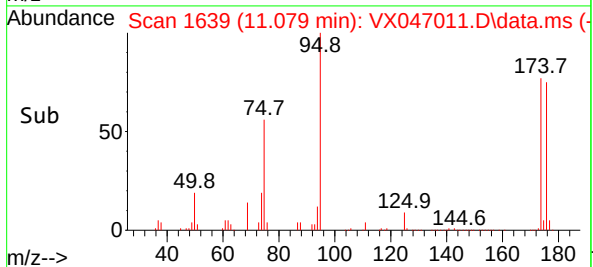
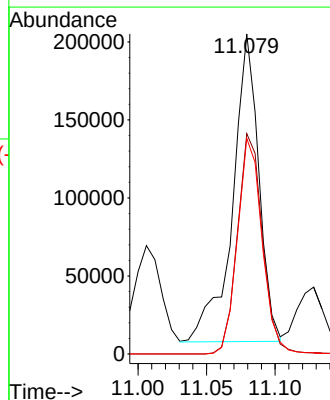
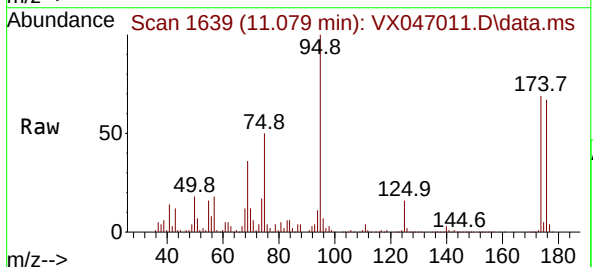
Tgt Ion: 95 Resp: 262943

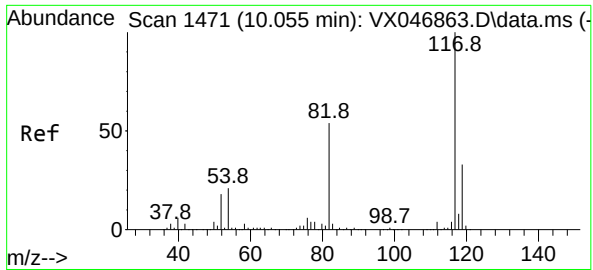
Ion Ratio Lower Upper

95 100

174 68.7 0.0 152.0

176 66.2 0.0 145.2





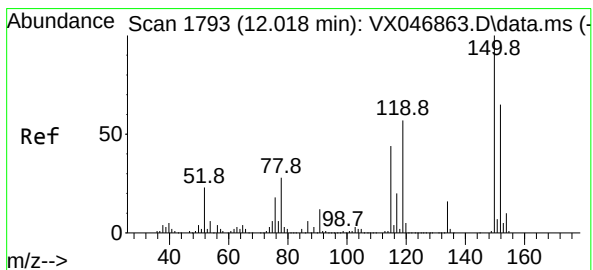
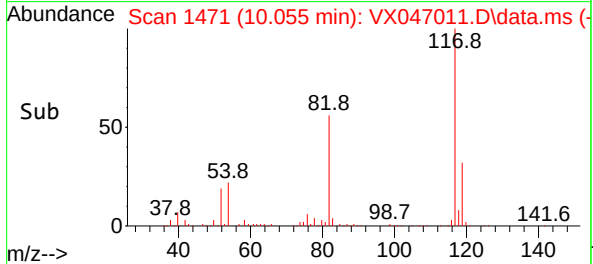
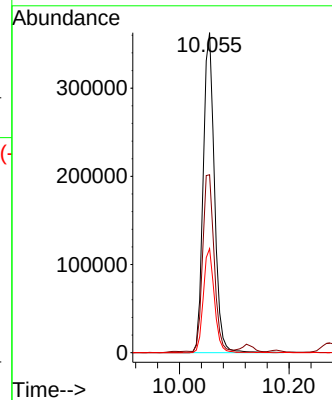
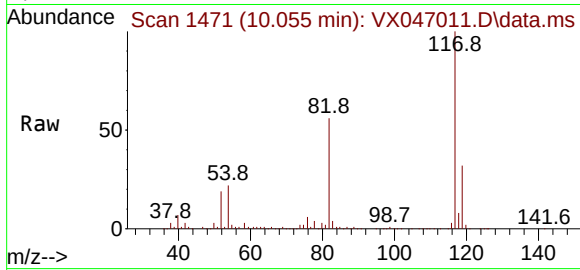
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.055 min Scan# 1471
Delta R.T. -0.000 min
Lab File: VX047011.D
Acq: 15 Jul 2025 18:31

Instrument :
MSVOA_X
ClientSampleId :
TRENCH

Tgt Ion:117 Resp: 51842
Ion Ratio Lower Upper
117 100
82 55.2 43.3 64.9
119 32.5 26.4 39.6

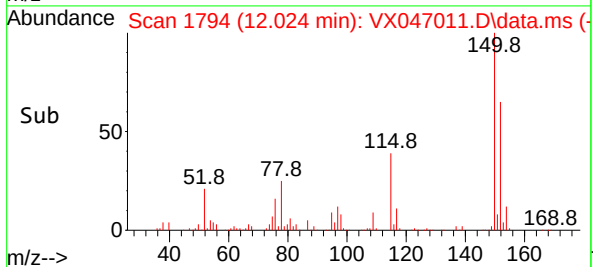
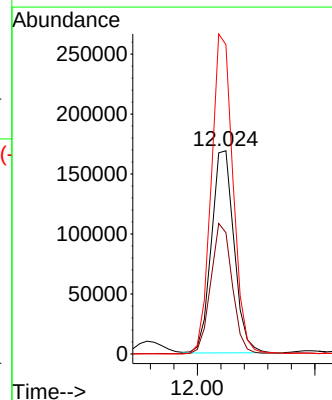
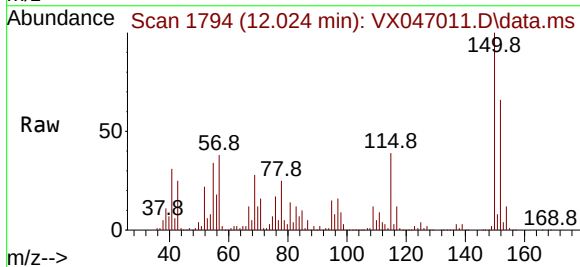
Manual Integrations
APPROVED

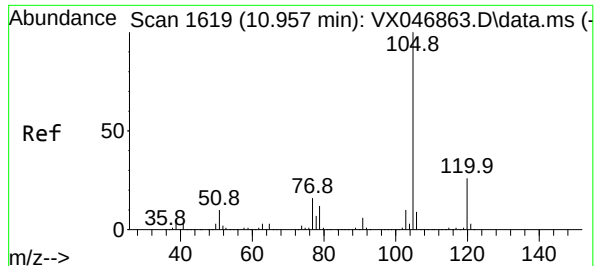
Reviewed By :John Carlone 07/16/2025
Supervised By :Mahesh Dadoda 07/16/2025



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.024 min Scan# 1794
Delta R.T. 0.006 min
Lab File: VX047011.D
Acq: 15 Jul 2025 18:31

Tgt Ion:152 Resp: 226022
Ion Ratio Lower Upper
152 100
115 60.9 42.4 127.1
150 152.0 0.0 349.2





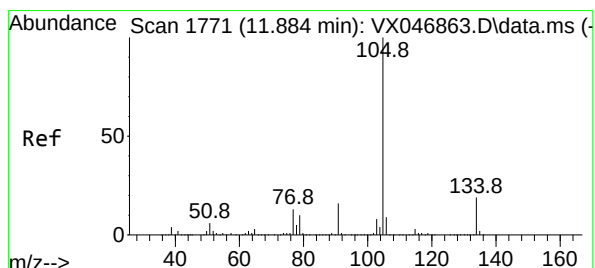
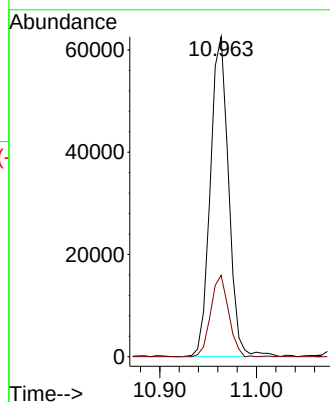
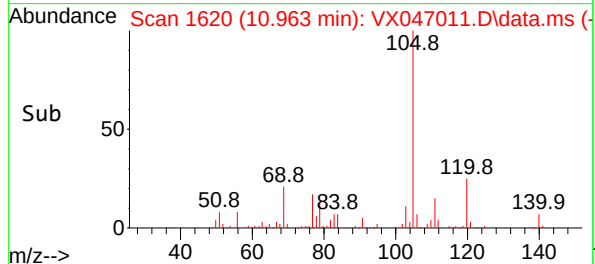
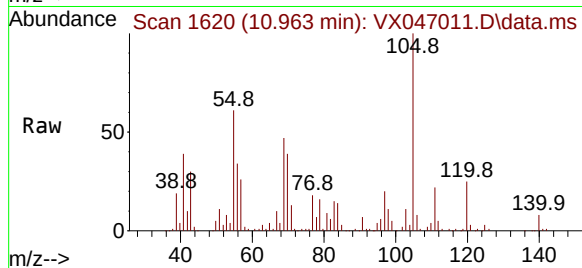
#73
Isopropylbenzene
Concen: 5.186 ug/l
RT: 10.963 min Scan# 1620
Delta R.T. 0.006 min
Lab File: VX047011.D
Acq: 15 Jul 2025 18:31

Instrument :
MSVOA_X
ClientSampleId :
TRENCH

Tgt Ion:105 Resp: 8240
Ion Ratio Lower Upper
105 100
120 24.8 13.2 39.5

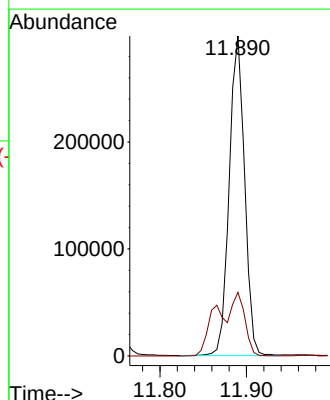
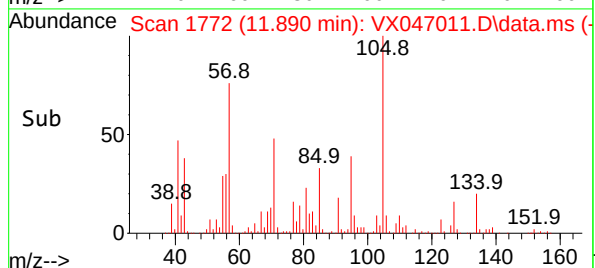
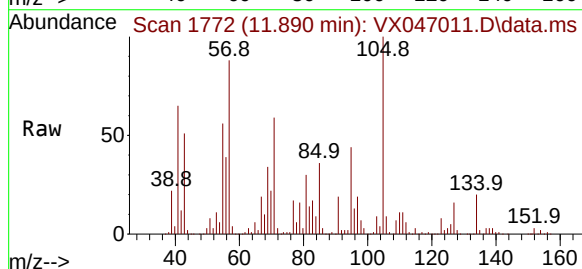
Manual Integrations
APPROVED

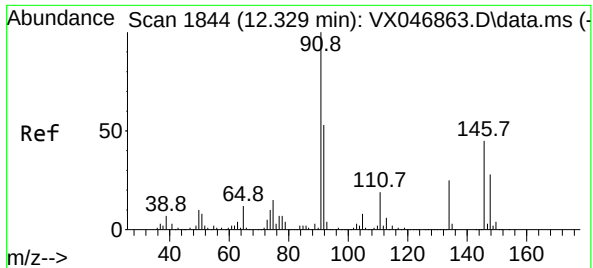
Reviewed By :John Carlone 07/16/2025
Supervised By :Mahesh Dadoda 07/16/2025



#85
sec-Butylbenzene
Concen: 21.946 ug/l
RT: 11.890 min Scan# 1772
Delta R.T. 0.006 min
Lab File: VX047011.D
Acq: 15 Jul 2025 18:31

Tgt Ion:105 Resp: 368959
Ion Ratio Lower Upper
105 100
134 17.1 9.9 29.7





#89

n-Butylbenzene

Concen: 15.023 ug/l m

RT: 12.329 min Scan# 1844

Delta R.T. -0.000 min

Lab File: VX047011.D

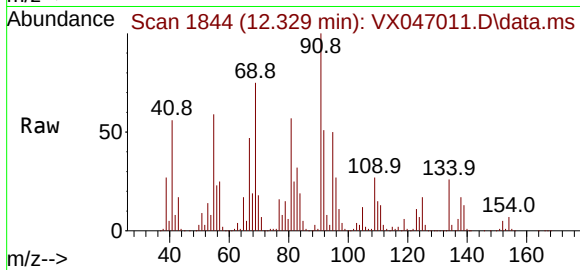
Acq: 15 Jul 2025 18:31

Instrument :

MSVOA_X

ClientSampleId :

TRENCH



Tgt Ion: 91 Resp: 19873

Ion Ratio Lower Upper

91 100

92 57.0 27.0 81.0

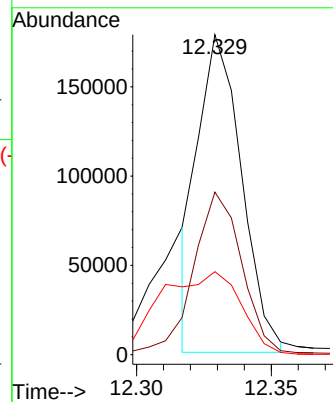
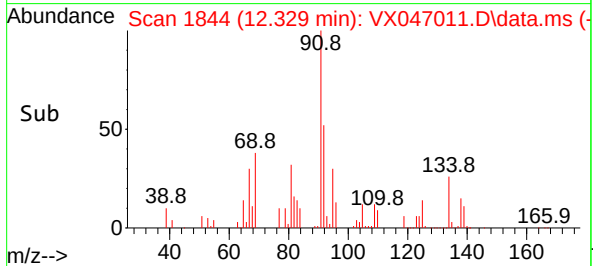
134 48.5 12.8 38.4

Manual Integrations

APPROVED

Reviewed By :John Carlone 07/16/2025

Supervised By :Mahesh Dadoda 07/16/2025



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
 Data File : VX047011.D
 Acq On : 15 Jul 2025 18:31
 Operator : JC/MD
 Sample : Q2600-03
 Misc : 5.68g/5mL/100uL/5.00mL/MSVOA_X/MEOH
 ALS Vial : 25 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 TRENCH

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\82X070225W.M
 Title : SW846 8260

Signal : TIC: VX047011.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.391	696	706	724	rBV4	186794	626108	8.92%	0.464%
2	5.556	724	733	761	rVB2	321046	1073875	15.29%	0.796%
3	5.958	790	799	824	rBV	212776	632915	9.01%	0.469%
4	6.763	919	931	957	rBV	500649	1357802	19.34%	1.007%
5	7.379	1021	1032	1046	rBV3	68139	184265	2.62%	0.137%
6	8.598	1225	1232	1235	rBV2	91550	168133	2.39%	0.125%
7	8.647	1235	1240	1250	rVB	1081287	1813809	25.83%	1.345%
8	8.976	1288	1294	1301	rVB2	75246	128235	1.83%	0.095%
9	9.500	1374	1380	1386	rBV3	126319	282265	4.02%	0.209%
10	9.561	1386	1390	1395	rVB	183369	248440	3.54%	0.184%
11	9.616	1395	1399	1403	rBV	199880	302252	4.30%	0.224%
12	9.823	1427	1433	1438	rVV3	219959	481473	6.86%	0.357%
13	10.006	1456	1463	1466	rBV	102355	171341	2.44%	0.127%
14	10.055	1466	1471	1476	rBV	1107781	1567787	22.33%	1.163%
15	10.177	1486	1491	1498	rBV2	113830	223977	3.19%	0.166%
16	10.275	1498	1507	1510	rBV2	309321	582853	8.30%	0.432%
17	10.317	1510	1514	1517	rVB	486196	589759	8.40%	0.437%
18	10.354	1517	1520	1531	rVB2	371510	713167	10.16%	0.529%
19	10.451	1531	1536	1543	rBV2	249520	389260	5.54%	0.289%
20	10.531	1545	1549	1551	rBV2	124694	175808	2.50%	0.130%
21	10.585	1551	1558	1566	rBV3	1142454	2088905	29.75%	1.549%
22	10.671	1566	1572	1576	rBV3	592733	1026423	14.62%	0.761%
23	10.714	1576	1579	1582	rVB2	317748	362188	5.16%	0.269%
24	10.750	1582	1585	1586	rBV	647370	691074	9.84%	0.512%
25	10.781	1586	1590	1594	rVB	2259889	2894970	41.23%	2.147%
26	10.854	1594	1602	1606	rBV	2646533	4474396	63.73%	3.318%
27	10.890	1606	1608	1613	rVB	1436617	1875929	26.72%	1.391%
28	10.945	1613	1617	1622	rVB3	486513	813164	11.58%	0.603%
29	11.000	1622	1626	1628	rBV2	755463	1104388	15.73%	0.819%
30	11.031	1628	1631	1635	rVB2	1214722	1605439	22.87%	1.190%
31	11.079	1635	1639	1643	rVB2	1060554	1331008	18.96%	0.987%
32	11.122	1643	1646	1650	rBV2	790684	988502	14.08%	0.733%
33	11.165	1650	1653	1655	rBV2	456468	639327	9.11%	0.474%
34	11.220	1657	1662	1666	rVB3	2366343	3271035	46.59%	2.426%
35	11.305	1673	1676	1677	rBV3	137670	161485	2.30%	0.120%
36	11.341	1677	1682	1686	rVV3	1074693	1963537	27.97%	1.456%

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
 Data File : VX047011.D
 Acq On : 15 Jul 2025 18:31
 Operator : JC/MD
 Sample : Q2600-03
 Misc : 5.68g/5mL/100uL/5.00mL/MSVOA_X/MEOH
 ALS Vial : 25 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 TRENCH

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\82X070225W.M
 Title : SW846 8260

37	11.384	1686	1689	1693	rVB3	1191809	1648172	23.47%	1.222%
38	11.433	1693	1697	1700	rBV	2425984	3203410	45.63%	2.375%
39	11.476	1700	1704	1709	rVB3	1517509	2294063	32.67%	1.701%
40	11.524	1709	1712	1717	rVB5	413885	598935	8.53%	0.444%
41	11.573	1717	1720	1722	rBV	345739	393203	5.60%	0.292%
42	11.628	1722	1729	1733	rVB5	1472219	3138874	44.71%	2.328%
43	11.683	1733	1738	1741	rBV3	998670	1262671	17.98%	0.936%
44	11.713	1741	1743	1745	rBV2	709342	676094	9.63%	0.501%
45	11.744	1745	1748	1751	rBV	1291376	1705721	24.29%	1.265%
46	11.841	1759	1764	1766	rBV2	1455986	2416157	34.41%	1.792%
47	11.890	1769	1772	1776	rVV3	2566942	4114051	58.60%	3.051%
48	11.939	1776	1780	1784	rVV2	3285781	5184802	73.85%	3.845%
49	11.975	1784	1786	1789	rVV3	954312	1122907	15.99%	0.833%
50	12.024	1790	1794	1799	rVB3	1170807	1927230	27.45%	1.429%
51	12.122	1805	1810	1812	rBV3	1108628	1826601	26.02%	1.354%
52	12.152	1812	1815	1818	rVB4	1020977	1393149	19.84%	1.033%
53	12.244	1825	1830	1835	rBV	2107755	3182288	45.32%	2.360%
54	12.311	1835	1841	1848	rVV4	3514874	7021155	100.00%	5.206%
55	12.414	1848	1858	1863	rVV3	1238954	4316310	61.48%	3.201%
56	12.469	1863	1867	1872	rVV3	1282240	2619350	37.31%	1.942%
57	12.555	1875	1881	1886	rVV5	973208	2792032	39.77%	2.070%
58	12.610	1886	1890	1894	rVV	3522741	4970622	70.79%	3.686%
59	12.640	1894	1895	1900	rVV3	737569	1188394	16.93%	0.881%
60	12.701	1900	1905	1912	rVV4	1549833	4049936	57.68%	3.003%
61	12.762	1912	1915	1920	rVV3	508574	1050124	14.96%	0.779%
62	12.817	1920	1924	1931	rVB4	1529136	3019549	43.01%	2.239%
63	12.890	1931	1936	1938	rBV2	1072122	1747087	24.88%	1.296%
64	12.920	1938	1941	1945	rVV	2231718	2680830	38.18%	1.988%
65	12.981	1947	1951	1954	rVV2	900274	1035315	14.75%	0.768%
66	13.024	1954	1958	1965	rVB2	957696	1544371	22.00%	1.145%
67	13.091	1965	1969	1973	rBV2	885529	1277505	18.20%	0.947%
68	13.134	1973	1976	1979	rVV2	683347	809129	11.52%	0.600%
69	13.164	1979	1981	1983	rVV	153734	147592	2.10%	0.109%
70	13.189	1983	1985	1990	rVB	177803	225451	3.21%	0.167%
71	13.256	1991	1996	1997	rBV2	339277	446903	6.37%	0.331%
72	13.286	1997	2001	2008	rVB2	3012781	4377139	62.34%	3.246%
73	13.365	2011	2014	2017	rVV	705728	785205	11.18%	0.582%
74	13.414	2017	2022	2033	rVB8	484885	1461693	20.82%	1.084%
75	13.506	2033	2037	2039	rBV2	376679	511887	7.29%	0.380%
76	13.536	2039	2042	2045	rVB3	305556	383144	5.46%	0.284%

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
 Data File : VX047011.D
 Acq On : 15 Jul 2025 18:31
 Operator : JC/MD
 Sample : Q2600-03
 Misc : 5.68g/5mL/100uL/5.00mL/MSVOA_X/MEOH
 ALS Vial : 25 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 TRENCH

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\82X070225W.M
 Title : SW846 8260

77	13.579	2045	2049	2053	rBV2	1017696	1296615	18.47%	0.961%
78	13.640	2053	2059	2060	rVV4	397059	744752	10.61%	0.552%
79	13.664	2060	2063	2071	rVB3	854175	1635092	23.29%	1.212%
80	13.750	2071	2077	2081	rBV3	522834	755353	10.76%	0.560%
81	13.792	2081	2084	2088	rVB2	448789	531821	7.57%	0.394%
82	13.847	2090	2093	2098	rVB3	275228	406672	5.79%	0.302%
83	13.926	2098	2106	2110	rBV3	547428	1080774	15.39%	0.801%
84	13.969	2110	2113	2116	rBV2	196723	280942	4.00%	0.208%
85	14.067	2125	2129	2132	rBV2	247242	339315	4.83%	0.252%
86	14.158	2138	2144	2148	rBV2	159770	258868	3.69%	0.192%
87	14.213	2148	2153	2162	rVV3	665286	1419608	20.22%	1.053%
88	14.317	2167	2170	2175	rVV	312443	422307	6.01%	0.313%
89	14.371	2175	2179	2183	rVV	317246	390166	5.56%	0.289%
90	14.414	2183	2186	2192	rVB	245587	331517	4.72%	0.246%
91	14.475	2192	2196	2204	rBV3	548972	901019	12.83%	0.668%
92	14.609	2215	2218	2221	rVV2	195699	284261	4.05%	0.211%
93	14.670	2225	2228	2232	rVB2	238333	296207	4.22%	0.220%
94	14.719	2232	2236	2240	rBV2	118747	173443	2.47%	0.129%
95	14.774	2241	2245	2250	rVV2	445282	672453	9.58%	0.499%
96	14.902	2260	2266	2273	rVB7	53408	143262	2.04%	0.106%
97	15.182	2307	2312	2318	rVV4	97874	184269	2.62%	0.137%
98	15.475	2352	2360	2366	rBV	151820	265149	3.78%	0.197%
99	15.609	2376	2382	2385	rBV	193672	302231	4.30%	0.224%
100	15.646	2385	2388	2396	rVB2	109637	184971	2.63%	0.137%

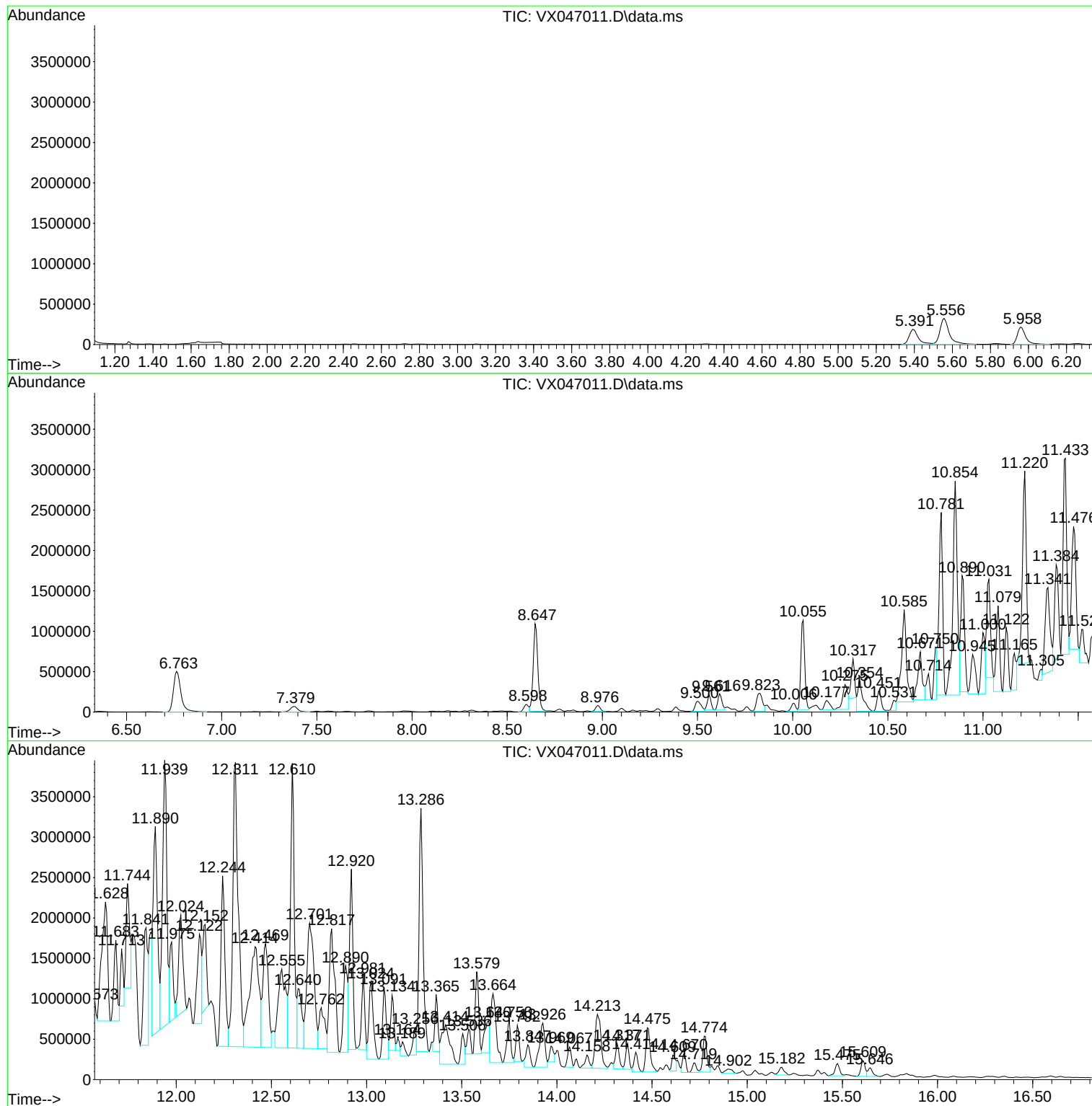
Sum of corrected areas: 134855412

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX047011.D
Acq On : 15 Jul 2025 18:31
Operator : JC/MD
Sample : Q2600-03
Misc : 5.68g/5mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 25 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
TRENCH

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX047011.D
Acq On : 15 Jul 2025 18:31
Operator : JC/MD
Sample : Q2600-03
Misc : 5.68g/5mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 25 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
TRENCH

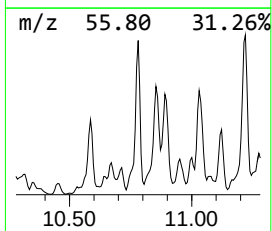
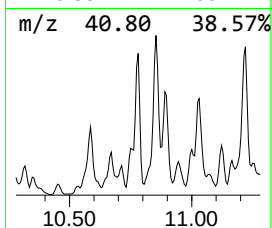
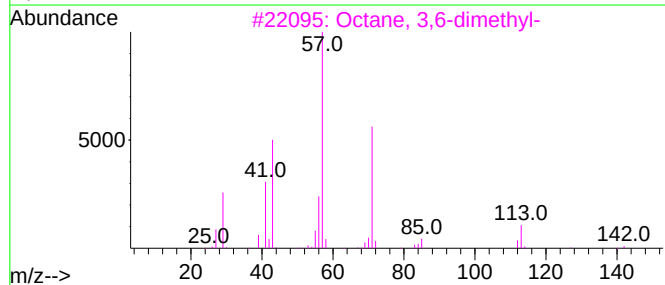
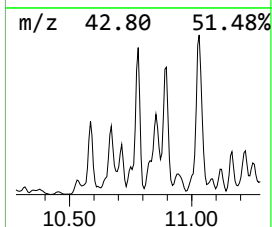
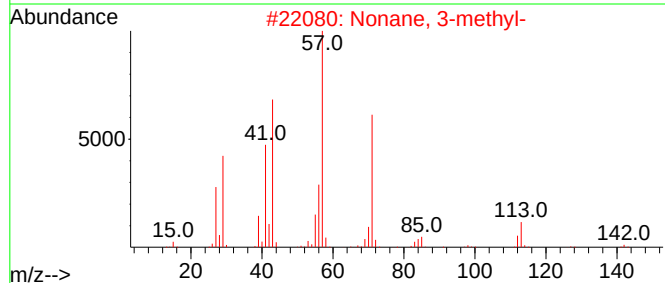
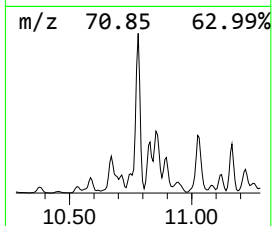
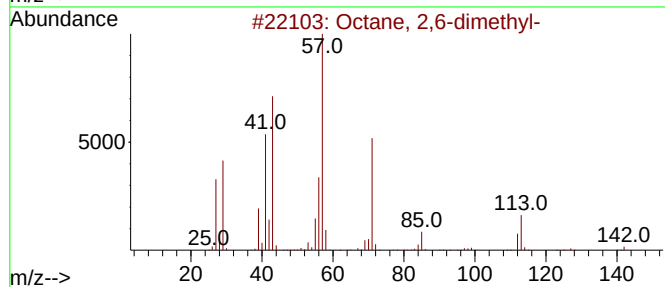
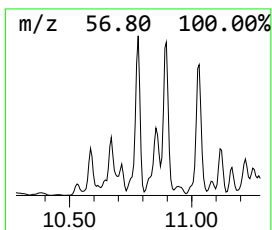
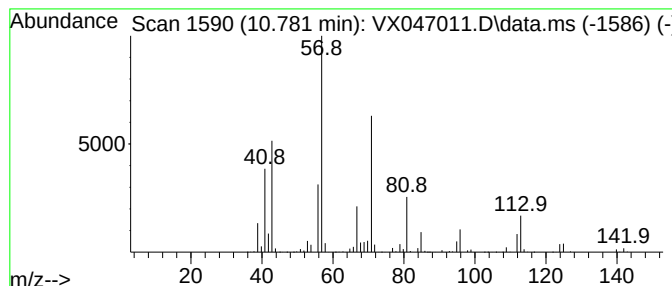
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260

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

Peak Number 1 Octane, 2,6-dimethyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.781	92.33 ug/l	2894970	Chlorobenzene-d5	10.055

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Octane, 2,6-dimethyl-	142	C10H22	002051-30-1	70
2			Nonane, 3-methyl-	142	C10H22	005911-04-6	64
3			Octane, 3,6-dimethyl-	142	C10H22	015869-94-0	52
4			Butane, 2,2-dimethyl-	86	C6H14	000075-83-2	43
5			Sulfurous acid, di(2-ethylhexyl)...	306	C16H34O3S	1000309-19-1	43



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX047011.D
Acq On : 15 Jul 2025 18:31
Operator : JC/MD
Sample : Q2600-03
Misc : 5.68g/5mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 25 Sample Multiplier: 1

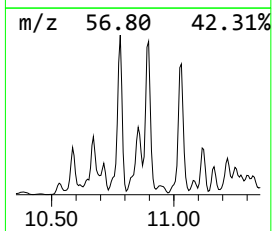
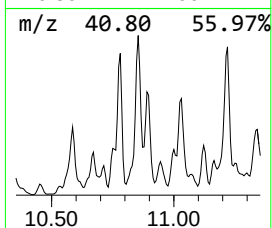
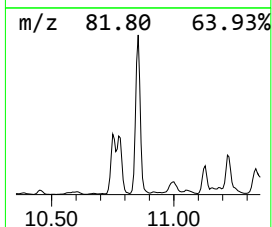
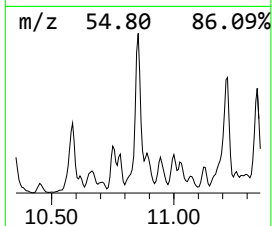
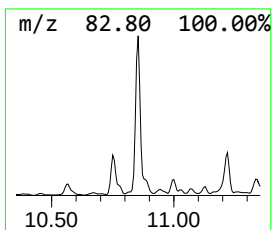
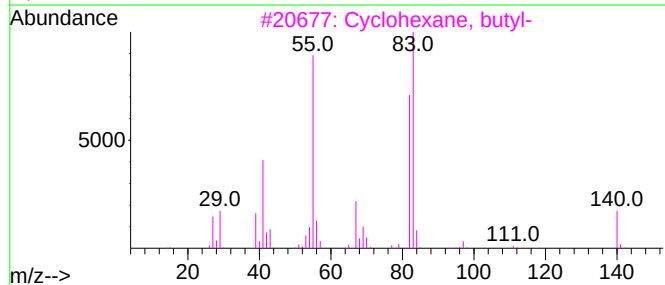
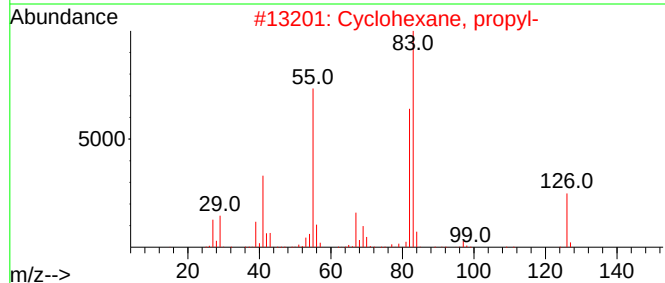
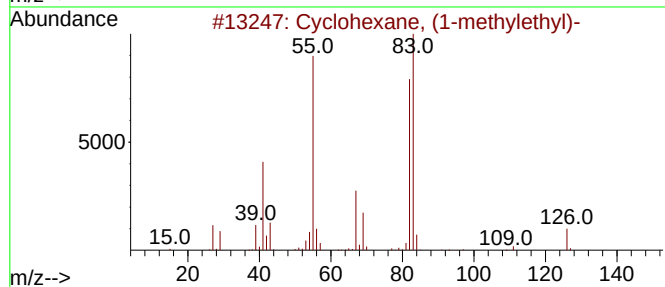
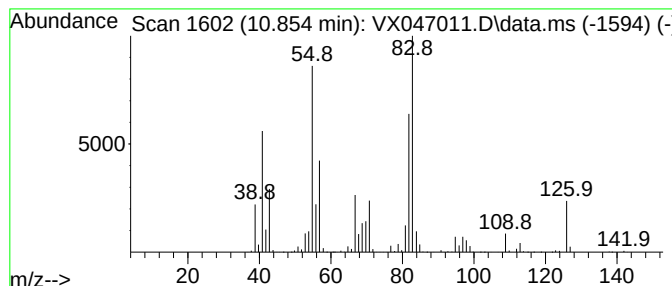
Instrument :
MSVOA_X
ClientSampleId :
TRENCH

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260

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

Peak Number 2 Cyclohexane, (1-methylethyl)- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.	
10.854	142.70 ug/l	4474400	Chlorobenzene-d5	10.055	
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, (1-methylethyl)-	126	C9H18	000696-29-7	81
2	Cyclohexane, propyl-	126	C9H18	001678-92-8	81
3	Cyclohexane, butyl-	140	C10H20	001678-93-9	59
4	Cyclohexane, ethyl-	112	C8H16	001678-91-7	53
5	Cyclohexane, 1,1'-(1,4-butanedi...	222	C16H30	006165-44-2	53



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX047011.D
Acq On : 15 Jul 2025 18:31
Operator : JC/MD
Sample : Q2600-03
Misc : 5.68g/5mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 25 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
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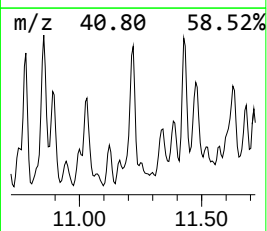
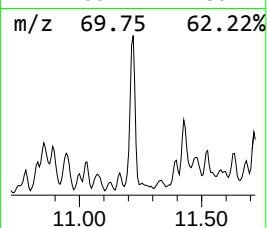
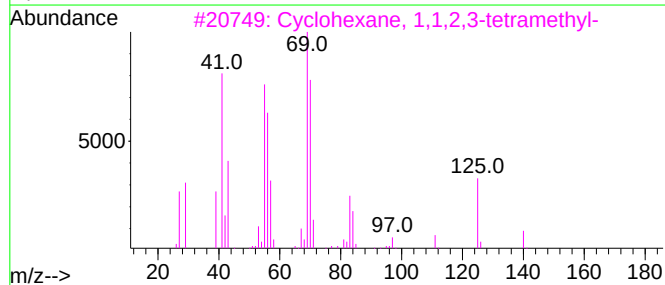
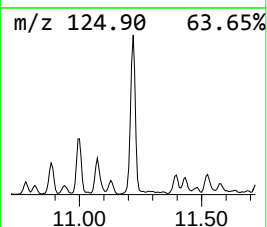
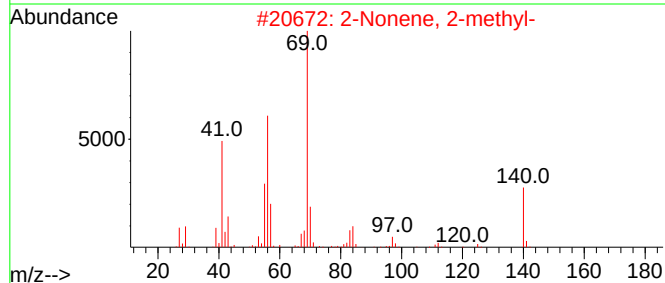
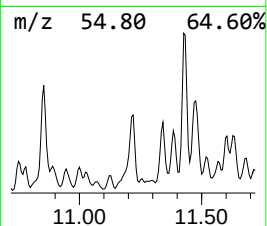
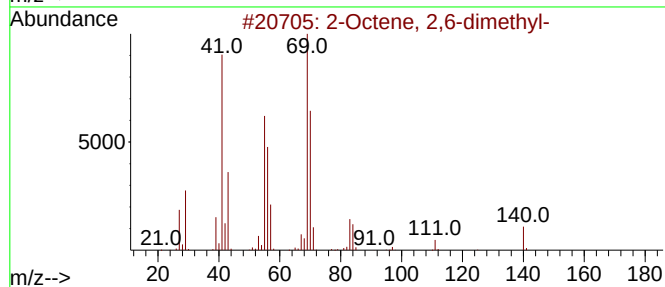
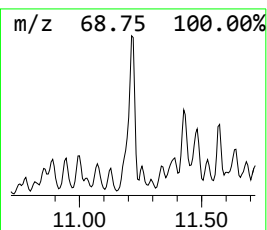
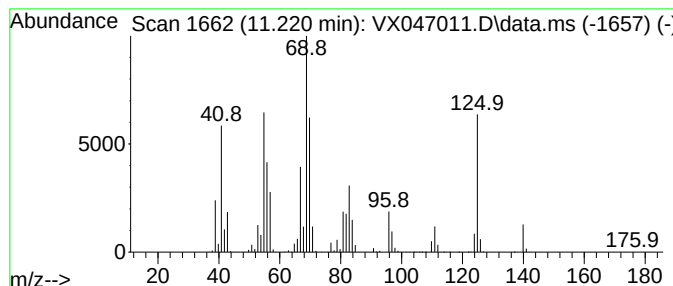
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Quant Title : SW846 8260

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

Peak Number 3 2-Octene, 2,6-dimethyl- Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.220	84.86 ug/l	3271040	1,4-Dichlorobenzene-d4	12.024

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			2-Octene, 2,6-dimethyl-	140	C10H20	004057-42-5	64
2			2-Nonene, 2-methyl-	140	C10H20	002129-95-5	49
3			Cyclohexane, 1,1,2,3-tetramethyl-	140	C10H20	006783-92-2	45
4			trans-4-Decene	140	C10H20	019398-89-1	43
5			trans-2-Methyl-3-octene	126	C9H18	052937-36-7	43



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX047011.D
Acq On : 15 Jul 2025 18:31
Operator : JC/MD
Sample : Q2600-03
Misc : 5.68g/5mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 25 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
TRENCH

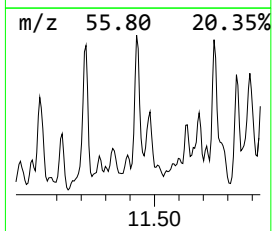
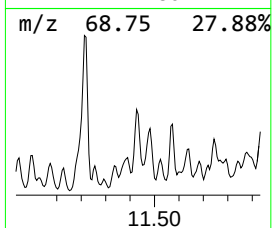
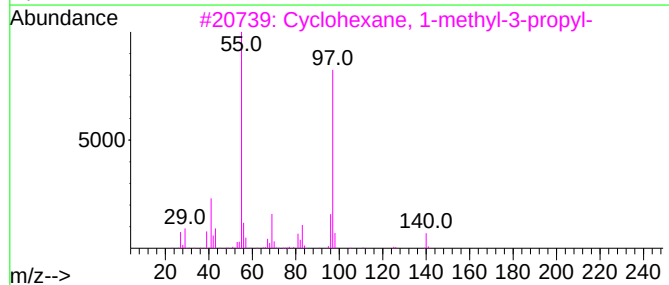
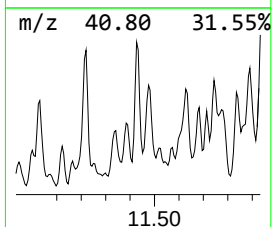
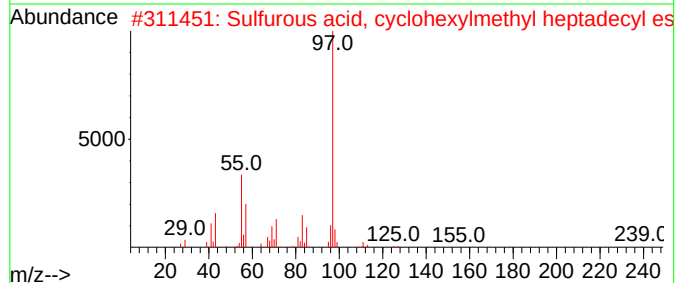
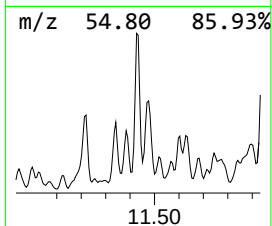
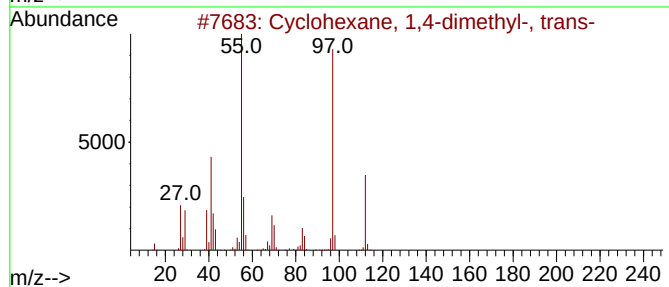
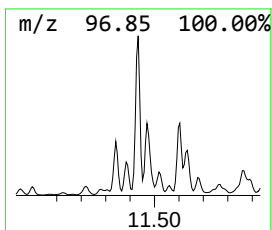
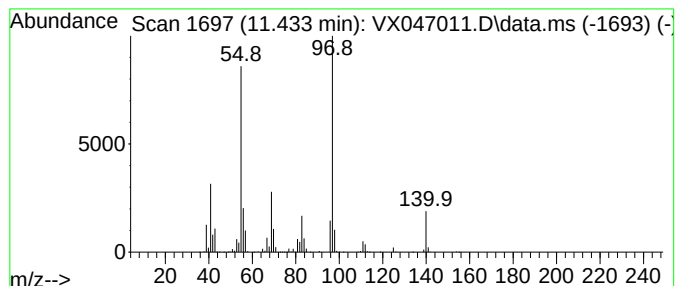
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Quant Title : SW846 8260

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

Peak Number 4 Cyclohexane, 1,4-dimethyl-,... Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.433	83.11 ug/l	3203410	1,4-Dichlorobenzene-d4	12.024

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Cyclohexane, 1,4-dimethyl-, trans-	112	C8H16	002207-04-7	72
2			Sulfurous acid, cyclohexylmethyl...	416	C24H48O3S	1000309-22-5	72
3			Cyclohexane, 1-methyl-3-propyl-	140	C10H20	004291-80-9	72
4			Cyclohexane, 1,1-dimethyl-	112	C8H16	000590-66-9	68
5			Cyclohexane, 1-methyl-2-propyl-	140	C10H20	004291-79-6	64



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX047011.D
Acq On : 15 Jul 2025 18:31
Operator : JC/MD
Sample : Q2600-03
Misc : 5.68g/5mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 25 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
TRENCH

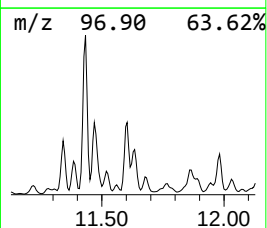
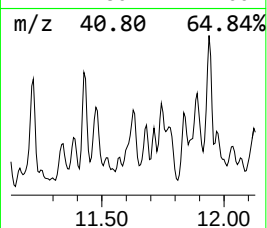
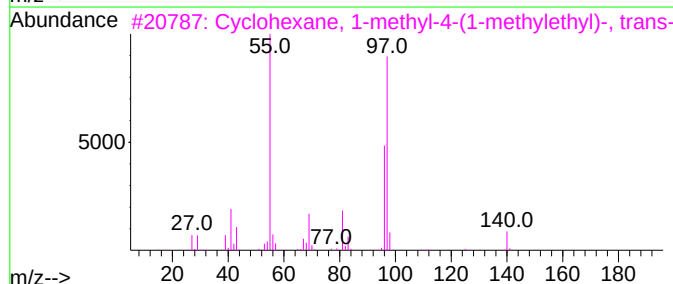
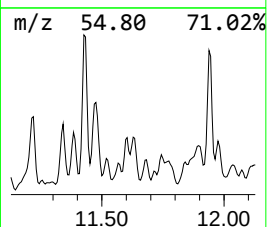
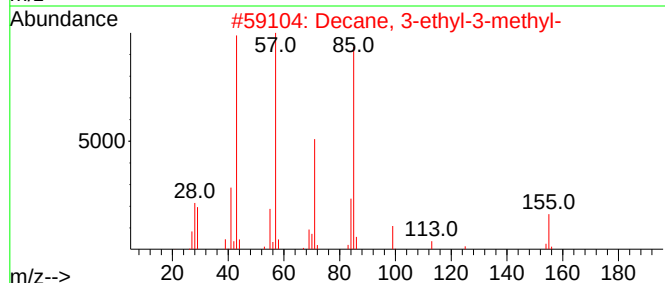
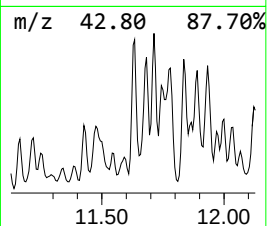
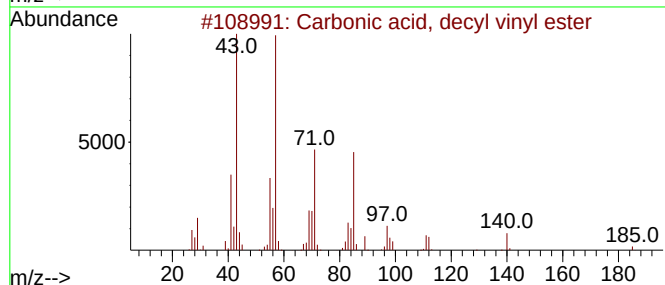
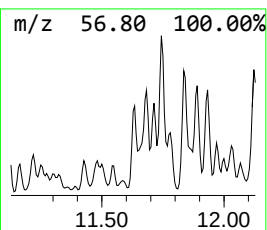
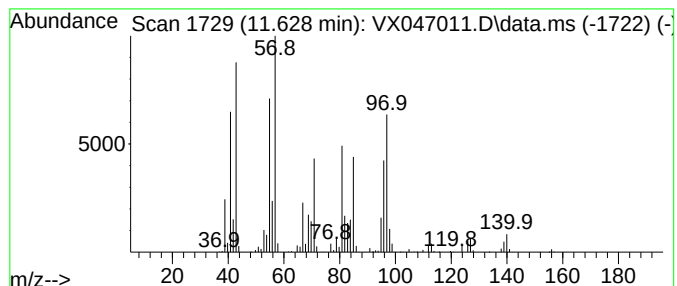
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Quant Title : SW846 8260

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

Peak Number 5 unknown11.628 Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.628	81.43 ug/l	3138870	1,4-Dichlorobenzene-d4	12.024

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Carbonic acid, decyl vinyl ester	228	C13H24O3	1000383-25-7	38
2			Decane, 3-ethyl-3-methyl-	184	C13H28	017312-66-2	35
3			Cyclohexane, 1-methyl-4-(1-methy...	140	C10H20	001678-82-6	30
4			Cyclopentane, 1-methyl-3-(2-meth...	140	C10H20	029053-04-1	30
5			Ether, 6-methylheptyl vinyl	156	C10H20O	010573-35-0	30



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX047011.D
Acq On : 15 Jul 2025 18:31
Operator : JC/MD
Sample : Q2600-03
Misc : 5.68g/5mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 25 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
TRENCH

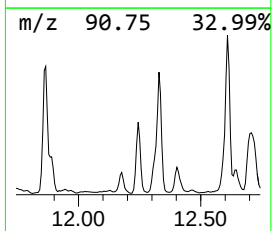
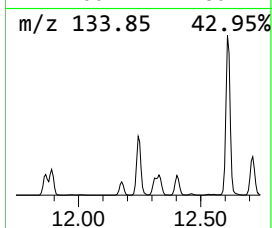
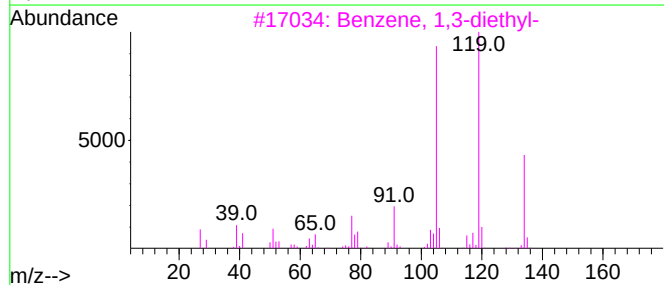
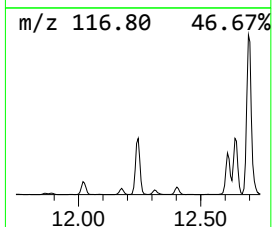
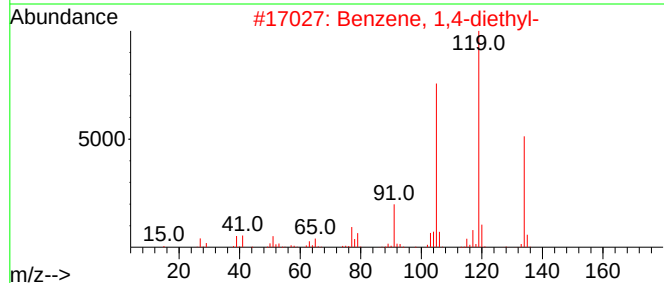
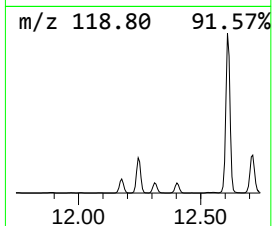
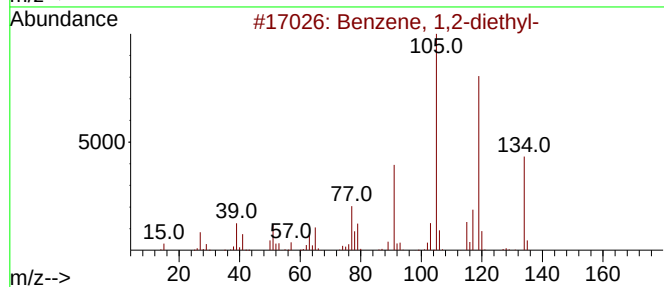
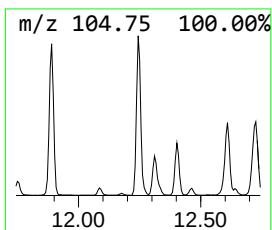
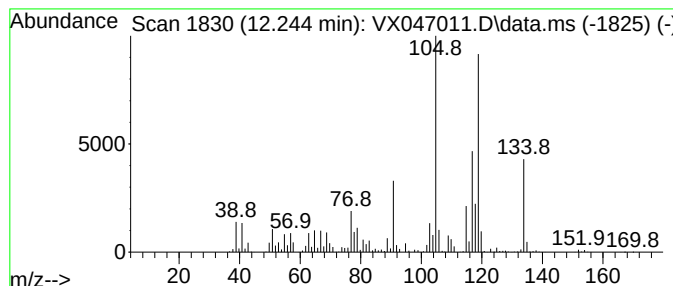
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Quant Title : SW846 8260

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

Peak Number 6 Benzene, 1,2-diethyl- Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.244	82.56 ug/l	3182290	1,4-Dichlorobenzene-d4	12.024

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Benzene, 1,2-diethyl-	134	C10H14	000135-01-3	96
2			Benzene, 1,4-diethyl-	134	C10H14	000105-05-5	76
3			Benzene, 1,3-diethyl-	134	C10H14	000141-93-5	76
4			Ethanone, 1-(4-methylphenyl)-	134	C9H10O	000122-00-9	50
5			o-Cymene	134	C10H14	000527-84-4	49



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX047011.D
Acq On : 15 Jul 2025 18:31
Operator : JC/MD
Sample : Q2600-03
Misc : 5.68g/5mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 25 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
TRENCH

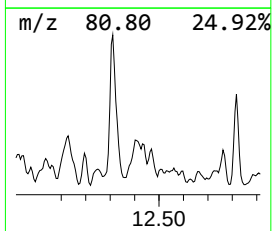
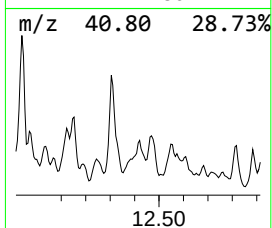
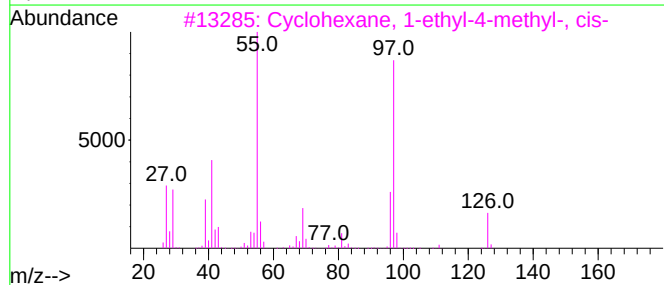
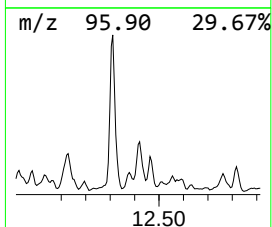
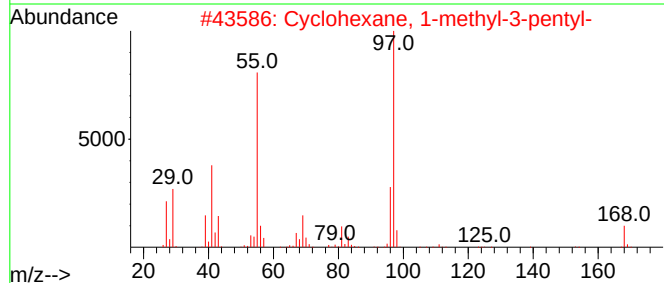
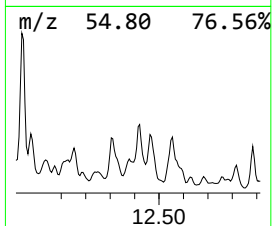
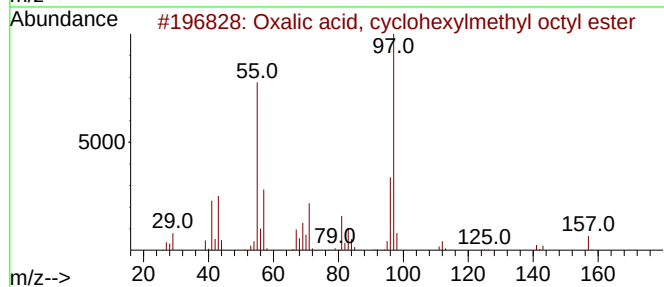
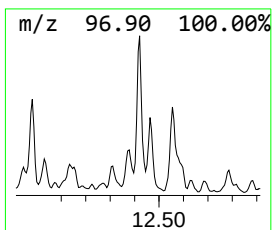
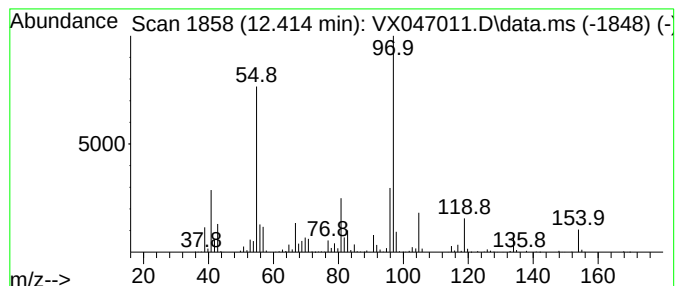
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Quant Title : SW846 8260

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

Peak Number 7 Oxalic acid, cyclohexylmeth... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.414	111.98 ug/l	4316310	1,4-Dichlorobenzene-d4	12.024

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Oxalic acid, cyclohexylmethyl oc...	298	C17H30O4	1000309-68-4	59
2			Cyclohexane, 1-methyl-3-pentyl-	168	C12H24	054411-02-8	59
3			Cyclohexane, 1-ethyl-4-methyl-, ...	126	C9H18	004926-78-7	59
4			Cyclohexane, 1-ethyl-4-methyl-, ...	126	C9H18	006236-88-0	59
5			Oxalic acid, cyclohexylmethyl is...	270	C15H26O4	1000309-68-3	59



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX047011.D
Acq On : 15 Jul 2025 18:31
Operator : JC/MD
Sample : Q2600-03
Misc : 5.68g/5mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 25 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
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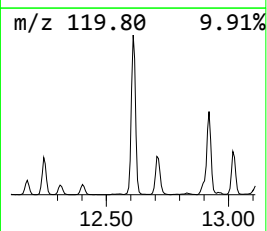
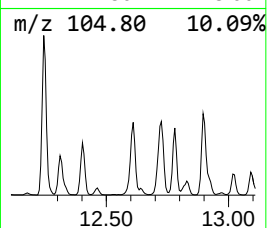
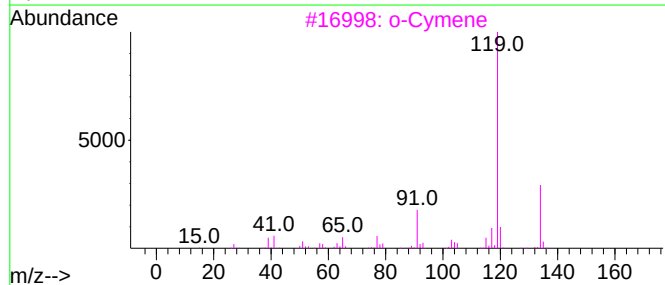
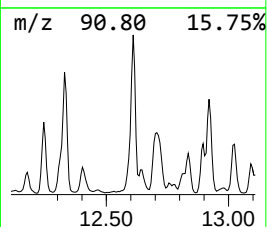
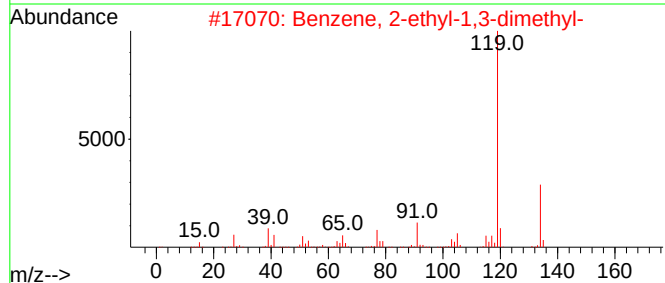
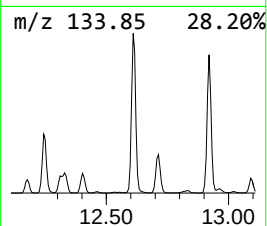
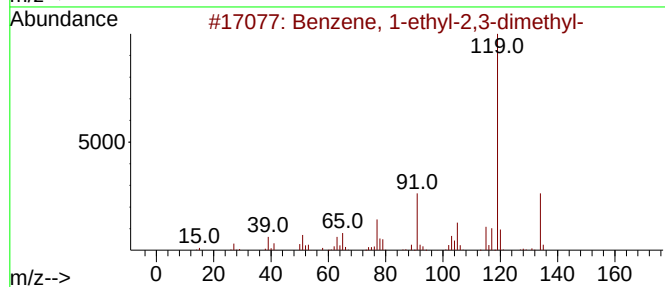
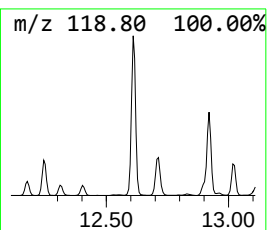
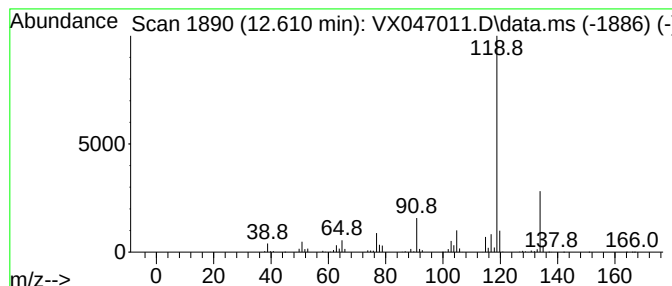
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Quant Title : SW846 8260

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

Peak Number 8 Benzene, 1-ethyl-2,3-dimethyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.610	128.96 ug/l	4970620	1,4-Dichlorobenzene-d4	12.024

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Benzene, 1-ethyl-2,3-dimethyl-	134	C10H14	000933-98-2	96
2			Benzene, 2-ethyl-1,3-dimethyl-	134	C10H14	002870-04-4	95
3			o-Cymene	134	C10H14	000527-84-4	95
4			Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	95
5			Benzene, 2-ethyl-1,4-dimethyl-	134	C10H14	001758-88-9	95



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX047011.D
Acq On : 15 Jul 2025 18:31
Operator : JC/MD
Sample : Q2600-03
Misc : 5.68g/5mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 25 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
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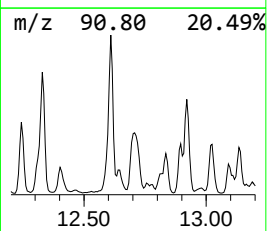
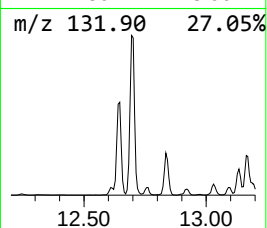
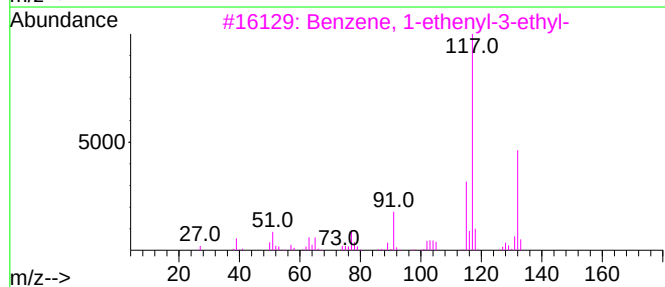
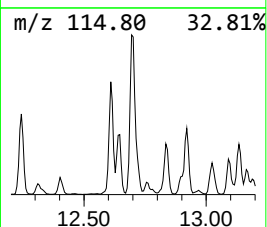
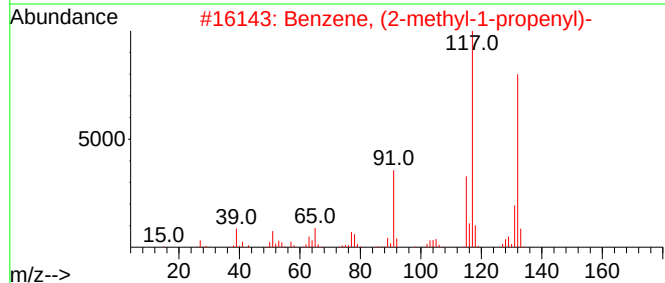
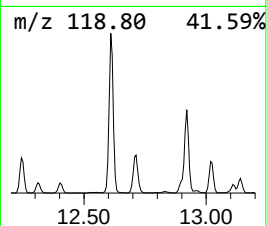
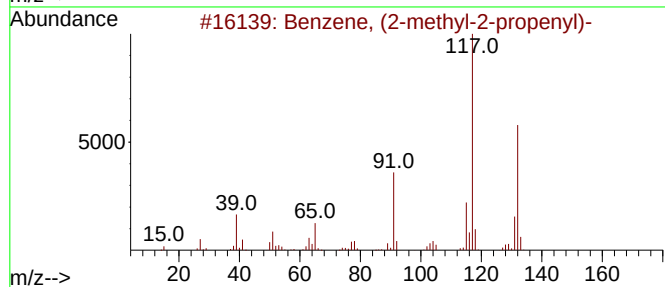
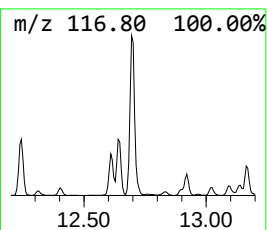
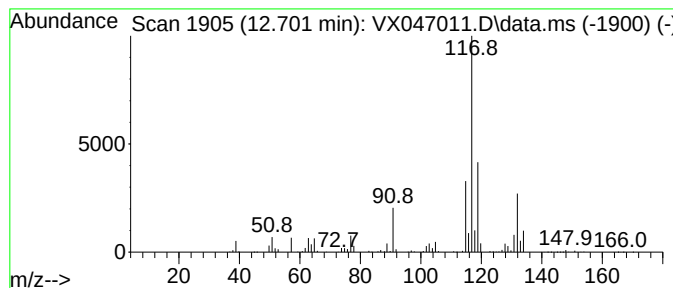
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Quant Title : SW846 8260

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

Peak Number 9 Benzene, (2-methyl-2-propen... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.701	105.07 ug/l	4049940	1,4-Dichlorobenzene-d4	12.024

Hit#	of 5	Tentative ID	MW	MolForm	CAS#	Qual
1		Benzene, (2-methyl-2-propenyl)-	132	C10H12	003290-53-7	70
2		Benzene, (2-methyl-1-propenyl)-	132	C10H12	000768-49-0	70
3		Benzene, 1-ethenyl-3-ethyl-	132	C10H12	007525-62-4	70
4		1-Methyl-2-phenylcyclopropane	132	C10H12	003145-76-4	64
5		Indan, 1-methyl-	132	C10H12	000767-58-8	64



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX047011.D
Acq On : 15 Jul 2025 18:31
Operator : JC/MD
Sample : Q2600-03
Misc : 5.68g/5mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 25 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
TRENCH

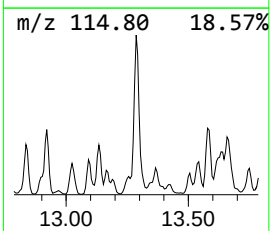
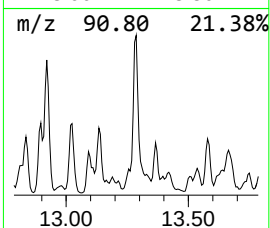
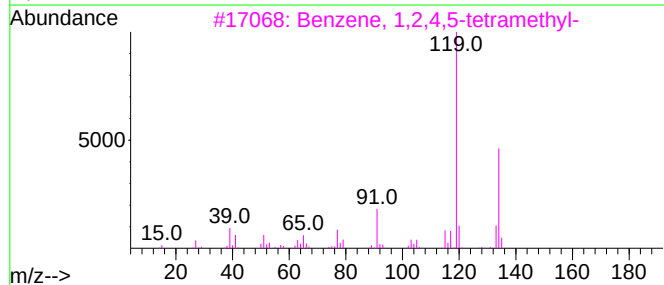
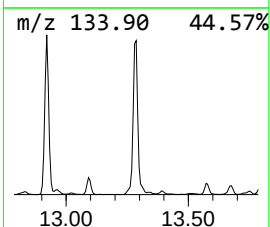
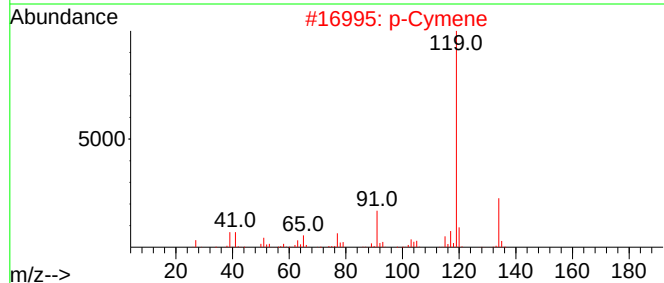
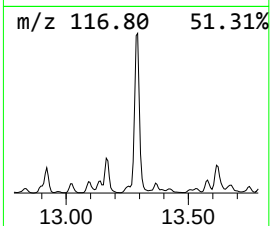
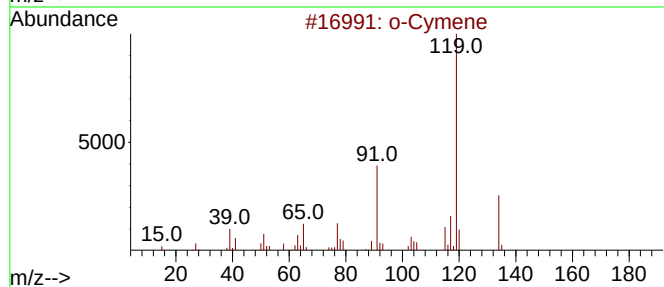
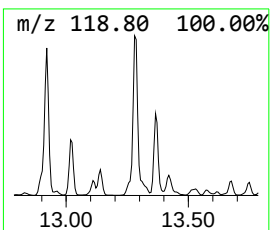
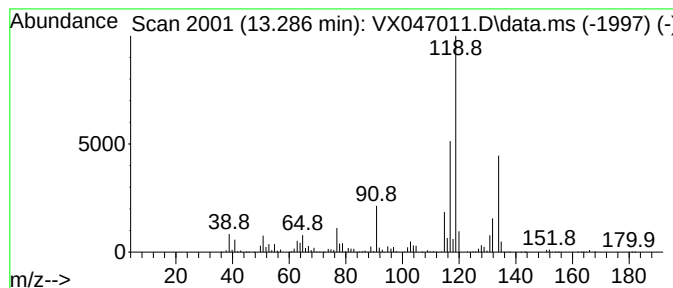
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Quant Title : SW846 8260

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

Peak Number 10 o-Cymene Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.286	113.56 ug/l	4377140	1,4-Dichlorobenzene-d4	12.024

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			o-Cymene	134	C10H14	000527-84-4	76
2			p-Cymene	134	C10H14	000099-87-6	70
3			Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	70
4			Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	70
5			Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	70



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX047011.D
Acq On : 15 Jul 2025 18:31
Operator : JC/MD
Sample : Q2600-03
Misc : 5.68g/5mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 25 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
TRENCH

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST0.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
Octane, 2,6-dim...	10.781	92.3	ug/l	2894970	3	10.055	1567790	50.0
Cyclohexane, (1...	10.854	142.7	ug/l	4474400	3	10.055	1567790	50.0
2-Octene, 2,6-d...	11.220	84.9	ug/l	3271040	4	12.024	1927230	50.0
Cyclohexane, 1,...	11.433	83.1	ug/l	3203410	4	12.024	1927230	50.0
unknown11.628	11.628	81.4	ug/l	3138870	4	12.024	1927230	50.0
Benzene, 1,2-di...	12.244	82.6	ug/l	3182290	4	12.024	1927230	50.0
Oxalic acid, cy...	12.414	112.0	ug/l	4316310	4	12.024	1927230	50.0
Benzene, 1-ethy...	12.610	129.0	ug/l	4970620	4	12.024	1927230	50.0
Benzene, (2-met...	12.701	105.1	ug/l	4049940	4	12.024	1927230	50.0
o-Cymene	13.286	113.6	ug/l	4377140	4	12.024	1927230	50.0

Report of Analysis

Client:	T&A Construction Inc		Date Collected:	07/14/25	
Project:	Kingsland Point Park Water Main		Date Received:	07/14/25	
Client Sample ID:	STOCK-PILE		SDG No.:	Q2600	
Lab Sample ID:	Q2600-07		Matrix:	SOIL	
Analytical Method:	8260D		% Solid:	83.7	
Sample Wt/Vol:	6.77	Units: g	Final Vol:	5000	uL
Soil Aliquot Vol:	100	uL	Test:	VOC-TCLVOA-10	
GC Column:	DB-624UI	ID : 0.18	Level :	MED	
Prep Method :					

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VX047012.D	1	07/15/25 18:52	VX071525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	50.3	U	50.3	220	ug/Kg
74-87-3	Chloromethane	50.3	U	50.3	220	ug/Kg
75-01-4	Vinyl Chloride	34.9	U	34.9	220	ug/Kg
74-83-9	Bromomethane	47.2	U	47.2	220	ug/Kg
75-00-3	Chloroethane	55.6	U	55.6	220	ug/Kg
75-69-4	Trichlorofluoromethane	53.4	U	53.4	220	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	46.8	U	46.8	220	ug/Kg
75-35-4	1,1-Dichloroethene	44.1	U	44.1	220	ug/Kg
67-64-1	Acetone	210	U	210	1100	ug/Kg
75-15-0	Carbon Disulfide	46.8	U	46.8	220	ug/Kg
1634-04-4	Methyl tert-butyl Ether	32.2	U	32.2	220	ug/Kg
79-20-9	Methyl Acetate	67.9	UQ	67.9	220	ug/Kg
75-09-2	Methylene Chloride	160	U	160	440	ug/Kg
156-60-5	trans-1,2-Dichloroethene	37.9	U	37.9	220	ug/Kg
75-34-3	1,1-Dichloroethane	35.3	U	35.3	220	ug/Kg
110-82-7	Cyclohexane	46.1	J	34.9	220	ug/Kg
78-93-3	2-Butanone	290	UQ	290	1100	ug/Kg
56-23-5	Carbon Tetrachloride	42.8	U	42.8	220	ug/Kg
156-59-2	cis-1,2-Dichloroethene	33.1	U	33.1	220	ug/Kg
74-97-5	Bromochloromethane	50.7	U	50.7	220	ug/Kg
67-66-3	Chloroform	37.1	U	37.1	220	ug/Kg
71-55-6	1,1,1-Trichloroethane	41.0	U	41.0	220	ug/Kg
108-87-2	Methylcyclohexane	530		40.1	220	ug/Kg
71-43-2	Benzene	34.9	U	34.9	220	ug/Kg
107-06-2	1,2-Dichloroethane	34.9	U	34.9	220	ug/Kg
79-01-6	Trichloroethene	35.7	U	35.7	220	ug/Kg
78-87-5	1,2-Dichloropropane	40.1	U	40.1	220	ug/Kg
75-27-4	Bromodichloromethane	34.4	U	34.4	220	ug/Kg
108-10-1	4-Methyl-2-Pentanone	160	UQ	160	1100	ug/Kg
108-88-3	Toluene	34.4	U	34.4	220	ug/Kg

Report of Analysis

Client:	T&A Construction Inc	Date Collected:	07/14/25
Project:	Kingsland Point Park Water Main	Date Received:	07/14/25
Client Sample ID:	STOCK-PILE	SDG No.:	Q2600
Lab Sample ID:	Q2600-07	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	83.7
Sample Wt/Vol:	6.77	Units:	g
Soil Aliquot Vol:	100		uL
GC Column:	DB-624UI	ID :	0.18
Prep Method :		Level :	MED

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VX047012.D	1	07/15/25 18:52	VX071525

[illegible]

Report of Analysis

Client:	T&A Construction Inc	Date Collected:	07/14/25
Project:	Kingsland Point Park Water Main	Date Received:	07/14/25
Client Sample ID:	STOCK-PILE	SDG No.:	Q2600
Lab Sample ID:	Q2600-07	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	83.7
Sample Wt/Vol:	6.77 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10
GC Column:	DB-624UI ID : 0.18	Level :	MED
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VX047012.D	1	07/15/25 18:52	VX071525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
004923-78-8	Cyclohexane, 1-ethyl-2-methyl-, tr	3000	J		10.6	ug/Kg
015869-94-0	Octane, 3,6-dimethyl-	4400	J		10.8	ug/Kg
000696-29-7	Cyclohexane, (1-methylethyl)-	6700	J		10.9	ug/Kg
004057-42-5	2-Octene, 2,6-dimethyl-	2900	J		11.2	ug/Kg
103-65-1	n-propylbenzene	400	J		11.3	ug/Kg
062338-08-3	3-Hexene, 3-ethyl-2,5-dimethyl-	3000	J		11.4	ug/Kg
135-98-8	sec-Butylbenzene	960	J		11.9	ug/Kg
000135-01-3	Benzene, 1,2-diethyl-	3000	J		12.2	ug/Kg
104-51-8	n-Butylbenzene	680	J		12.3	ug/Kg
1000309-68-2	Oxalic acid, butyl cyclohexylmethy	4300	J		12.4	ug/Kg
000933-98-2	Benzene, 1-ethyl-2,3-dimethyl-	4100	J		12.6	ug/Kg
000768-49-0	Benzene, (2-methyl-1-propenyl)-	3400	J		12.7	ug/Kg
000535-77-3	Benzene, 1-methyl-3-(1-methylethyl	3300	J		13.3	ug/Kg

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\VX071525\
 Data File : VX047012.D
 Acq On : 15 Jul 2025 18:52
 Operator : JC/MD
 Sample : Q2600-07
 Misc : 6.77g/5mL/100uL/5.00mL/MSVOA_X/MEOH
 ALS Vial : 26 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 STOCK-PILE

Manual Integrations
 APPROVED

Reviewed By :John
 Carlone

Quant Time: Jul 16 02:33:44 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 03 05:51:11 2025
 Response via : Initial Calibration

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

Internal Standards						07/16/2025
1) Pentafluorobenzene	5.556	168	340958	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.763	114	581697	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	519348	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	233909	50.000	ug/l	0.00
System Monitoring Compounds						07/16/2025
33) 1,2-Dichloroethane-d4	5.958	65	231356	51.362	ug/l	0.00
Spiked Amount	50.000	Range 78 - 117	Recovery	=	102.720%	
35) Dibromofluoromethane	5.397	113	183162	46.387	ug/l	0.00
Spiked Amount	50.000	Range 75 - 124	Recovery	=	92.780%	
50) Toluene-d8	8.647	98	665971	47.804	ug/l	0.00
Spiked Amount	50.000	Range 92 - 112	Recovery	=	95.600%	
62) 4-Bromofluorobenzene	11.079	95	272355	51.439	ug/l	0.00
Spiked Amount	50.000	Range 83 - 123	Recovery	=	102.880%	
Target Compounds						Qvalue
31) Cyclohexane	5.483	56	6720	1.044	ug/l	# 63
39) Methylcyclohexane	7.379	83	80418	12.067	ug/l	100
67) Ethyl Benzene	10.195	91	31472	1.637	ug/l	100
73) Isopropylbenzene	10.963	105	111348	6.772	ug/l	98
78) n-propylbenzene	11.305	91	180681	9.113	ug/l	97
85) sec-Butylbenzene	11.890	105	379263	21.798	ug/l	94
89) n-Butylbenzene	12.329	91	211970m	15.483	ug/l	

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

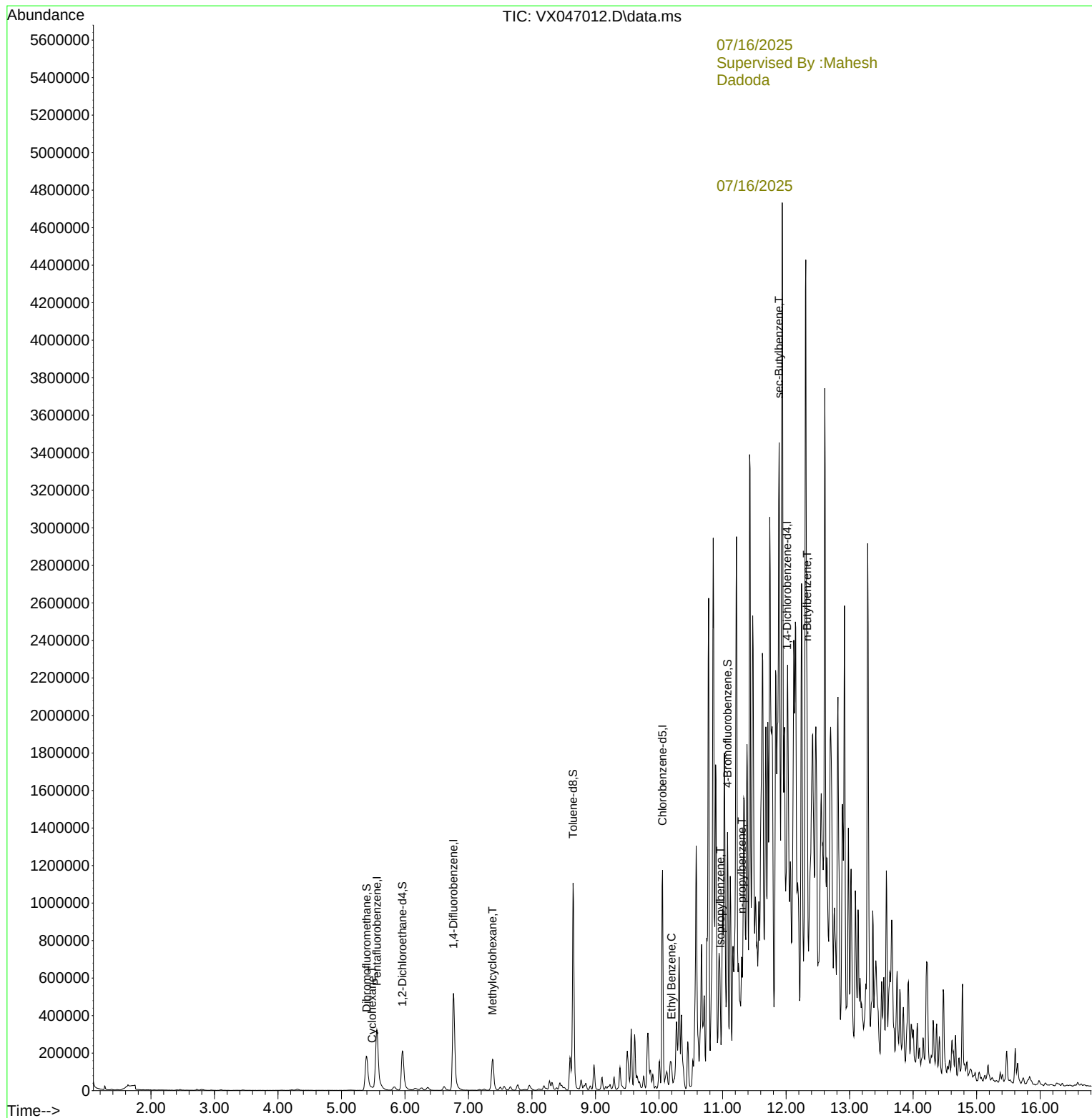
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Acq On : 15 Jul 2025 18:52
Operator : JC/MD
Sample : Q2600-07
Misc : 6.77g/5mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 26 Sample Multiplier: 1

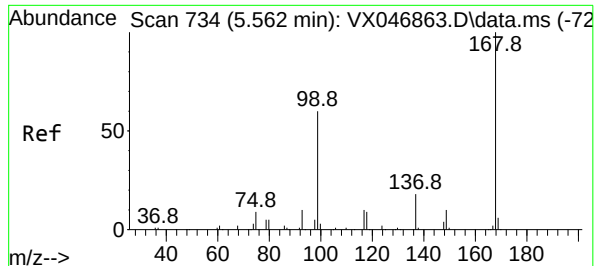
Instrument :
MSVOA_X
ClientSampleId :
STOCK-PILE

Manual Integrations
APPROVED

Reviewed By :John
Carlone

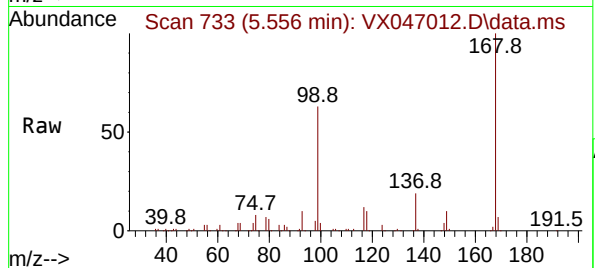
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Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 03 05:51:11 2025
Response via : Initial Calibration





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.556 min Scan# 713
Delta R.T. -0.006 min
Lab File: VX047012.D
Acq: 15 Jul 2025 18:52

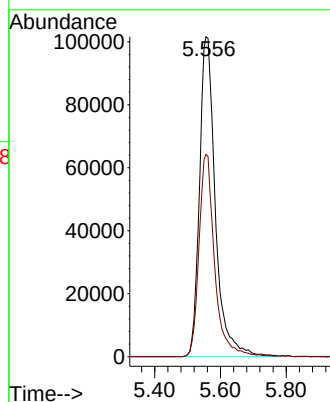
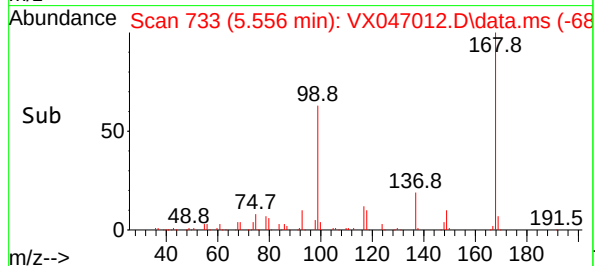
Instrument :
MSVOA_X
ClientSampleId :
STOCK-PILE



Tgt Ion:168 Resp: 340958
Ion Ratio Lower Upper
168 100
99 63.2 48.8 73.2

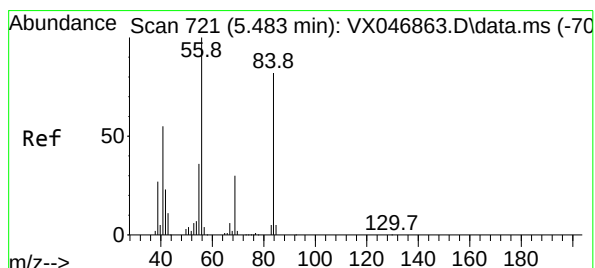
Manual Integrations
APPROVED

Reviewed By :John
Carlone



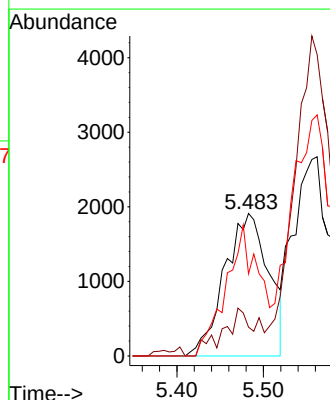
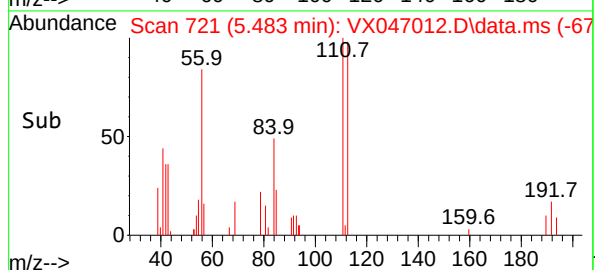
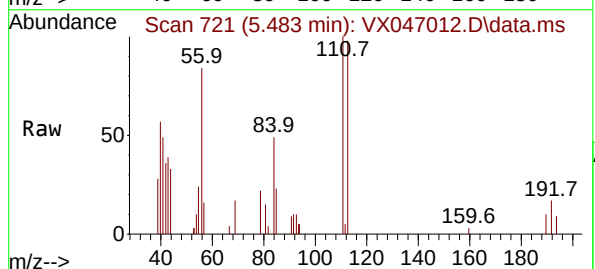
07/16/2025
Supervised By :Mahesh
Dadoda

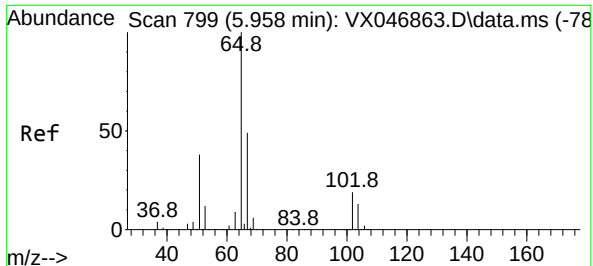
07/16/2025



#31
Cyclohexane
Concen: 1.044 ug/l
RT: 5.483 min Scan# 721
Delta R.T. -0.000 min
Lab File: VX047012.D
Acq: 15 Jul 2025 18:52

Tgt Ion: 56 Resp: 6720
Ion Ratio Lower Upper
56 100
69 11.7 24.0 36.0#
84 48.3 66.5 99.7#





#33

1,2-Dichloroethane-d4

Concen: 51.362 ug/l

RT: 5.958 min Scan# 799

Delta R.T. -0.000 min

Lab File: VX047012.D

Acq: 15 Jul 2025 18:52

Instrument :

MSVOA_X

ClientSampleId :

STOCK-PILE

Tgt Ion: 65 Resp: 231350

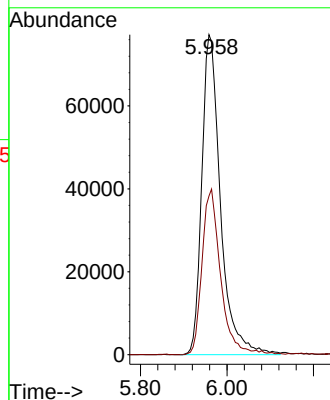
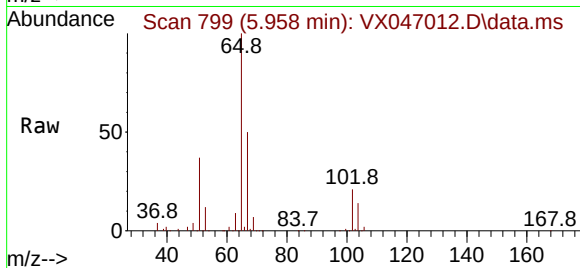
Ion Ratio Lower Upper

65 100

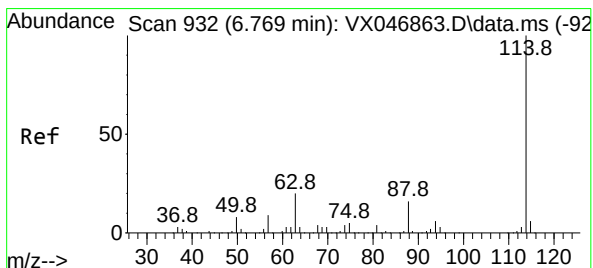
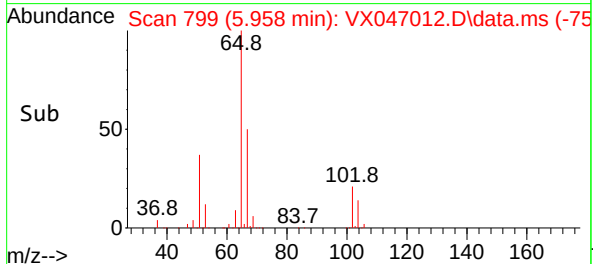
67 51.7 0.0 105.2

Manual Integrations

APPROVED

Reviewed By :John
Carlone07/16/2025
Supervised By :Mahesh
Dadoda

07/16/2025



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 6.763 min Scan# 931

Delta R.T. -0.006 min

Lab File: VX047012.D

Acq: 15 Jul 2025 18:52

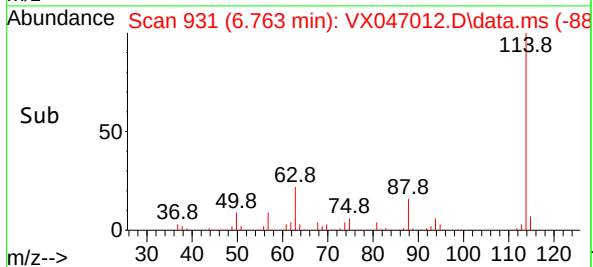
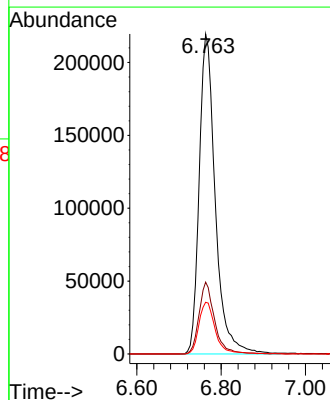
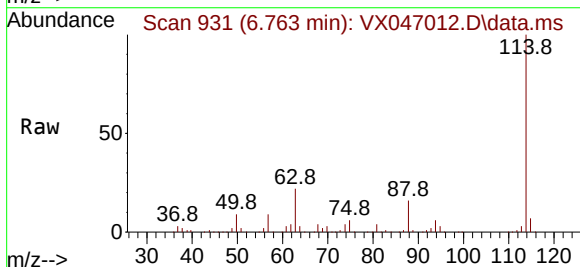
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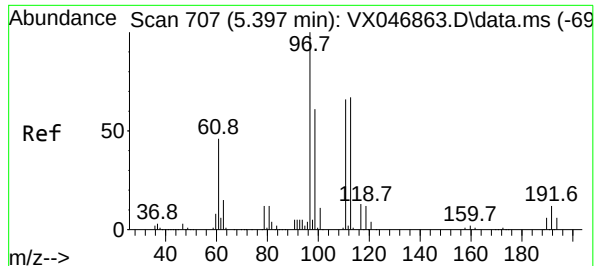
Ion Ratio Lower Upper

114 100

63 22.5 0.0 40.4

88 16.1 0.0 31.0





#35

Dibromofluoromethane

Concen: 46.387 ug/l

RT: 5.397 min Scan# 707

Delta R.T. -0.000 min

Lab File: VX047012.D

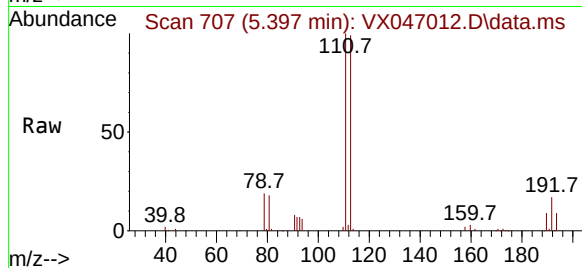
Acq: 15 Jul 2025 18:52

Instrument :

MSVOA_X

ClientSampleId :

STOCK-PILE



Tgt Ion: 113 Resp: 18316

Ion Ratio Lower Upper

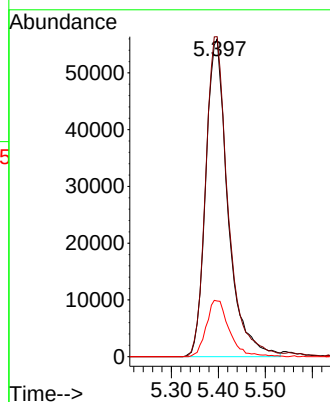
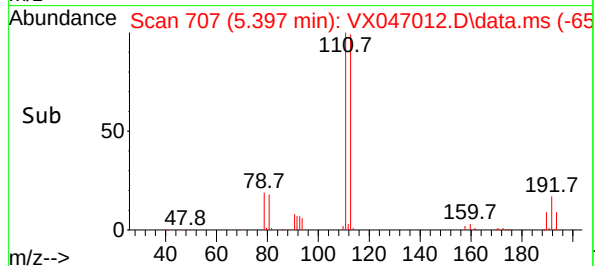
113 100

111 102.1 81.2 121.8

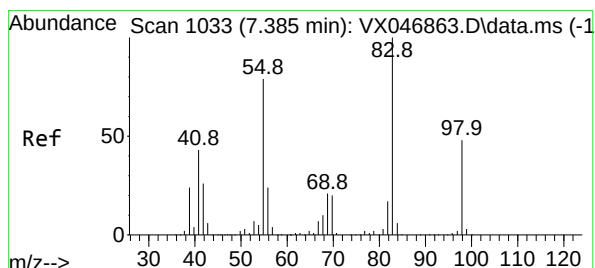
192 18.4 15.3 22.9

Manual Integrations

APPROVED

Reviewed By :John
Carlone07/16/2025
Supervised By :Mahesh
Dadoda

07/16/2025



#39

Methylcyclohexane

Concen: 12.067 ug/l

RT: 7.379 min Scan# 1032

Delta R.T. -0.006 min

Lab File: VX047012.D

Acq: 15 Jul 2025 18:52

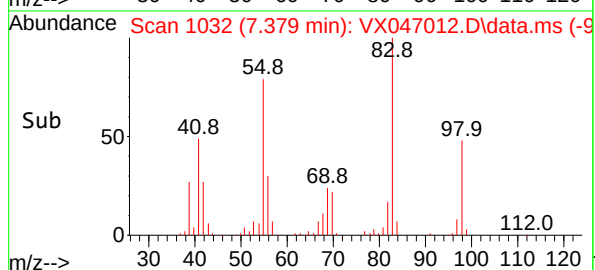
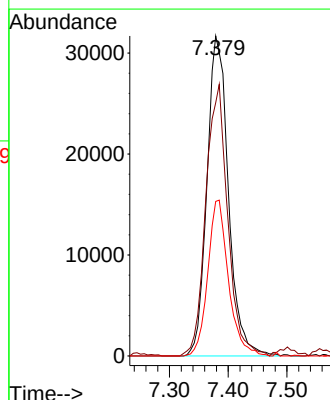
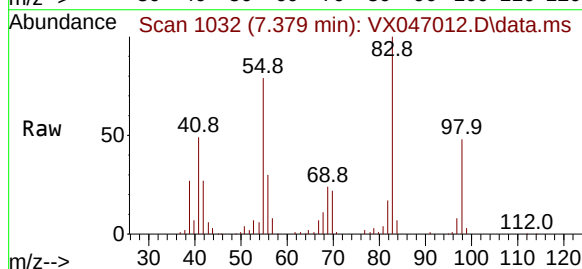
Tgt Ion: 83 Resp: 80418

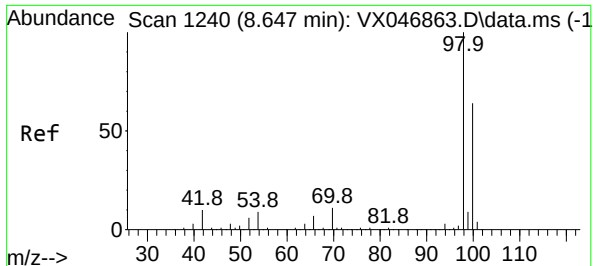
Ion Ratio Lower Upper

83 100

55 79.1 63.0 94.4

98 48.3 38.5 57.7





#50

Toluene-d8

Concen: 47.804 ug/l

RT: 8.647 min Scan# 11

Delta R.T. -0.000 min

Lab File: VX047012.D

Acq: 15 Jul 2025 18:52

Instrument :

MSVOA_X

ClientSampleId :

STOCK-PILE

Tgt Ion: 98 Resp: 66597

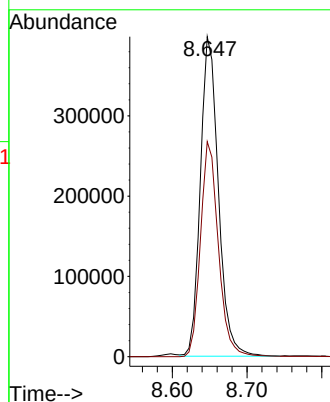
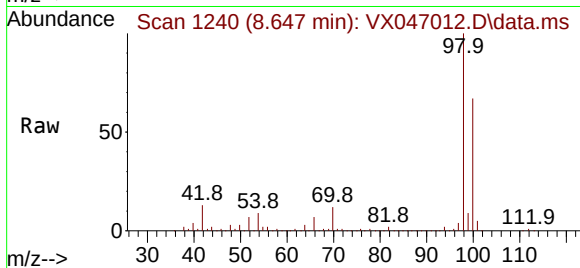
Ion Ratio Lower Upper

98 100

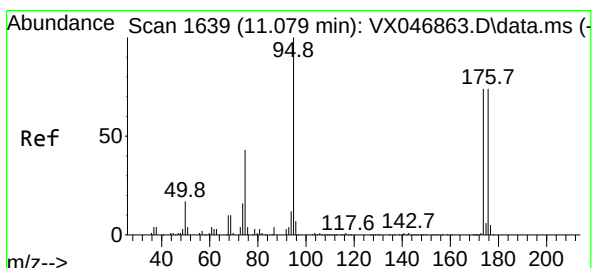
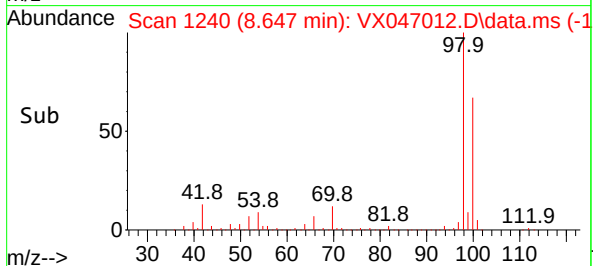
100 67.0 53.0 79.6

Manual Integrations

APPROVED

Reviewed By :John
Carlone07/16/2025
Supervised By :Mahesh
Dadoda

07/16/2025



#62

4-Bromofluorobenzene

Concen: 51.439 ug/l

RT: 11.079 min Scan# 1639

Delta R.T. -0.000 min

Lab File: VX047012.D

Acq: 15 Jul 2025 18:52

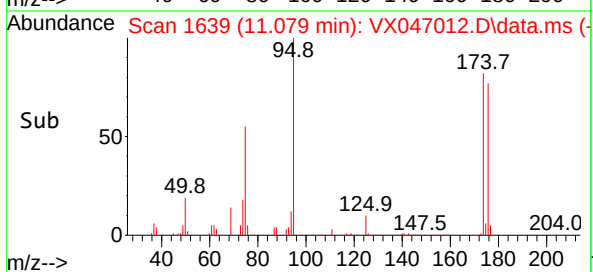
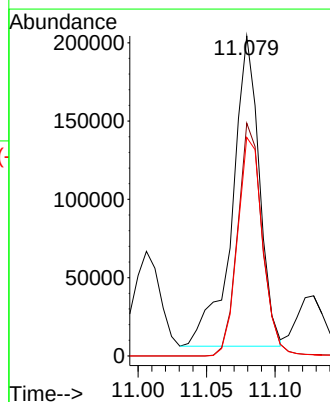
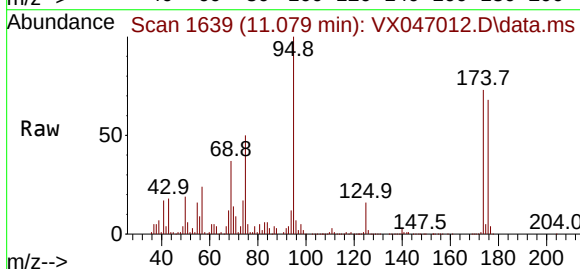
Tgt Ion: 95 Resp: 272355

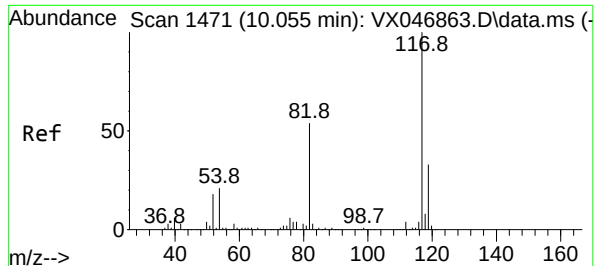
Ion Ratio Lower Upper

95 100

174 68.8 0.0 152.0

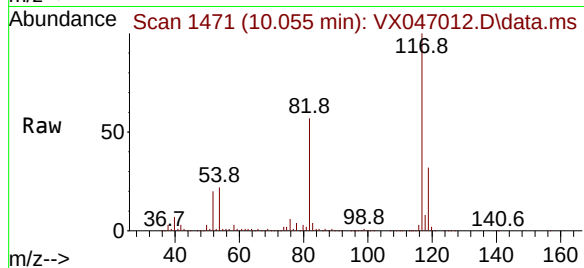
176 66.7 0.0 145.2





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.055 min Scan# 1471
Delta R.T. -0.000 min
Lab File: VX047012.D
Acq: 15 Jul 2025 18:52

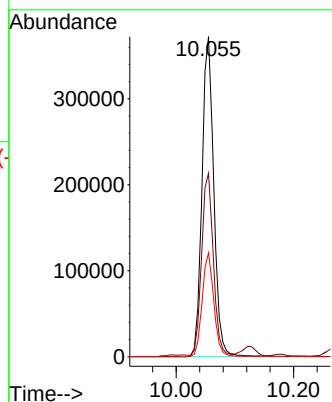
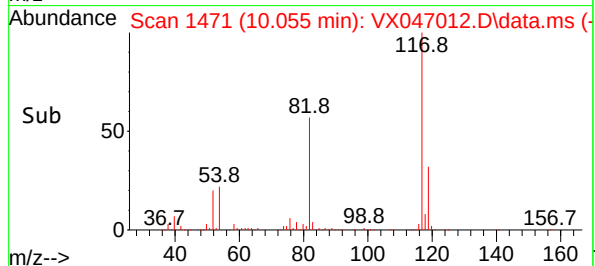
Instrument :
MSVOA_X
ClientSampleId :
STOCK-PILE



Tgt Ion:117 Resp: 51934
Ion Ratio Lower Upper
117 100
82 56.8 43.3 64.9
119 32.5 26.4 39.6

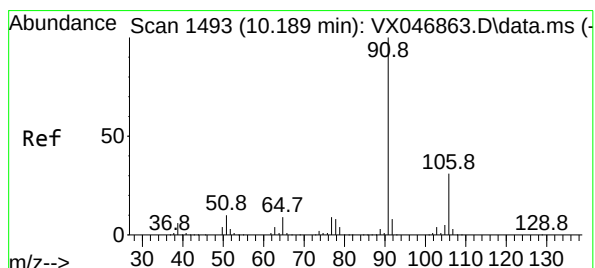
Manual Integrations
APPROVED

Reviewed By :John
Carlone



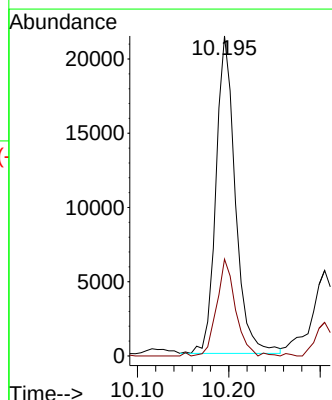
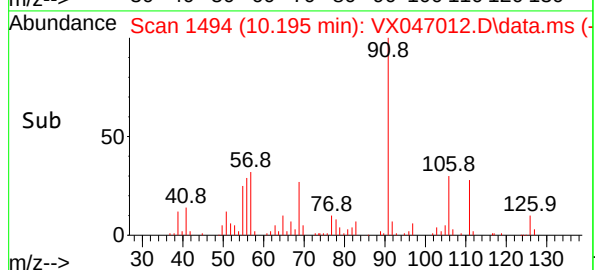
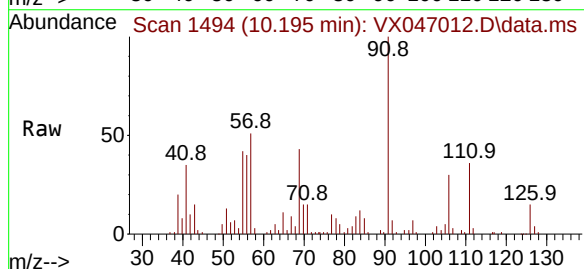
07/16/2025
Supervised By :Mahesh
Dadoda

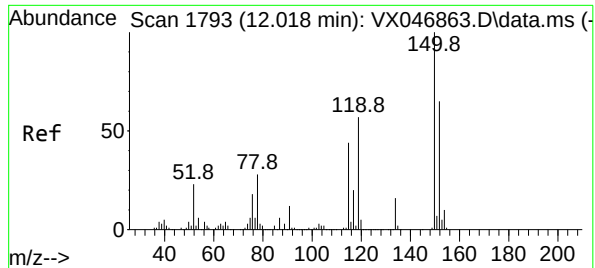
07/16/2025



#67
Ethyl Benzene
Concen: 1.637 ug/l
RT: 10.195 min Scan# 1494
Delta R.T. 0.006 min
Lab File: VX047012.D
Acq: 15 Jul 2025 18:52

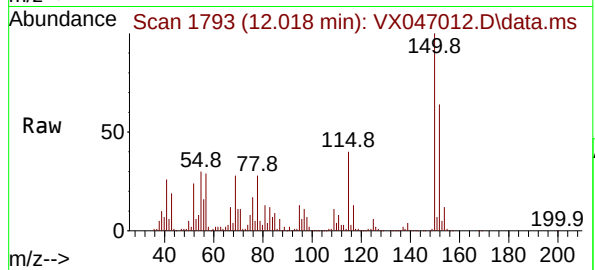
Tgt Ion: 91 Resp: 31472
Ion Ratio Lower Upper
91 100
106 30.6 24.4 36.6





#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.018 min Scan# 11
Delta R.T. -0.000 min
Lab File: VX047012.D
Acq: 15 Jul 2025 18:52

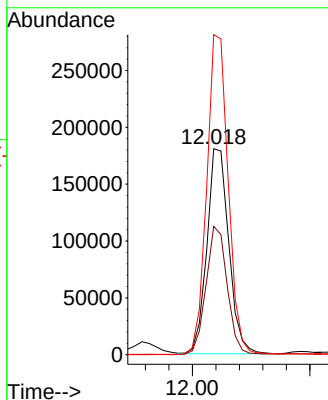
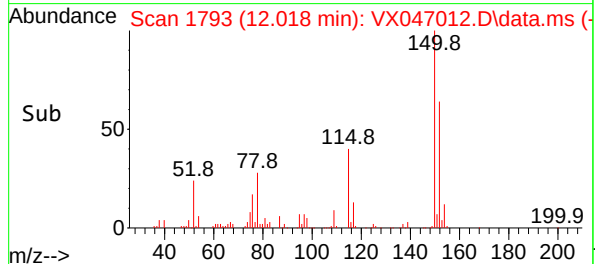
Instrument :
MSVOA_X
ClientSampleId :
STOCK-PILE



Tgt Ion:152 Resp: 233909
Ion Ratio Lower Upper
152 100
115 60.0 42.4 127.1
150 152.9 0.0 349.2

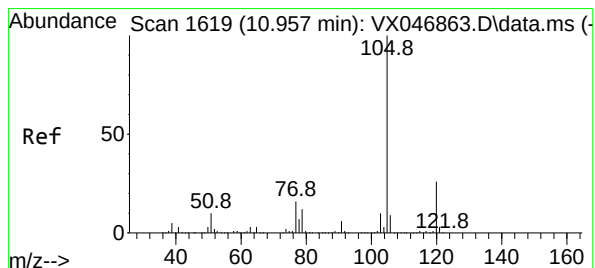
Manual Integrations
APPROVED

Reviewed By :John
Carlone

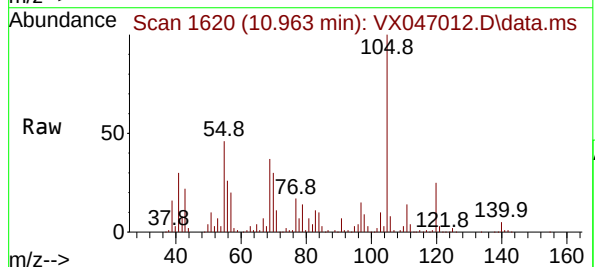


07/16/2025
Supervised By :Mahesh
Dadoda

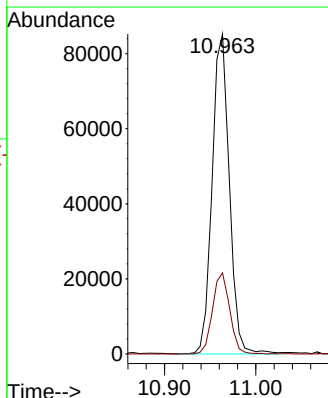
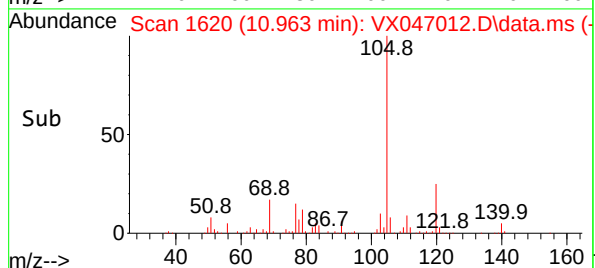
07/16/2025

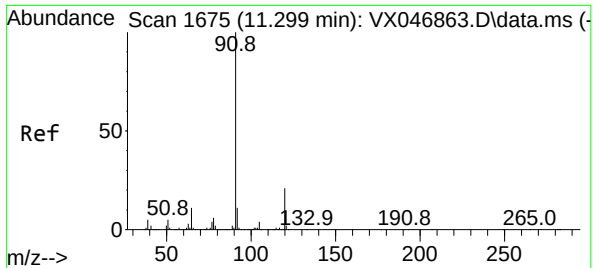


#73
Isopropylbenzene
Concen: 6.772 ug/l
RT: 10.963 min Scan# 1620
Delta R.T. 0.006 min
Lab File: VX047012.D
Acq: 15 Jul 2025 18:52



Tgt Ion:105 Resp: 111348
Ion Ratio Lower Upper
105 100
120 25.2 13.2 39.5





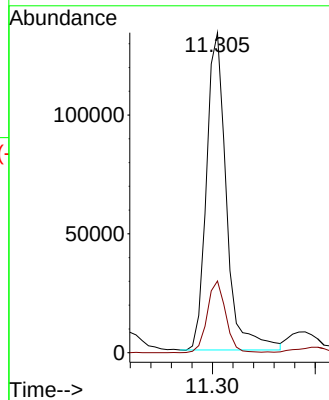
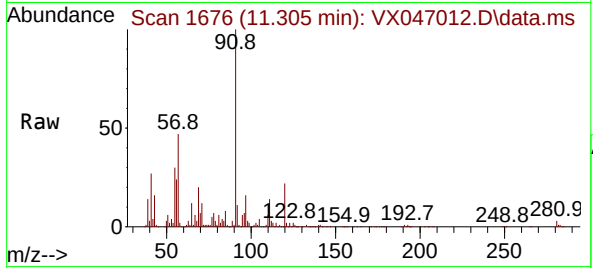
#78
n-propylbenzene
Concen: 9.113 ug/l
RT: 11.305 min Scan# 1675
Delta R.T. 0.006 min
Lab File: VX047012.D
Acq: 15 Jul 2025 18:52

Instrument :
MSVOA_X
ClientSampleId :
STOCK-PILE

Tgt Ion: 91 Resp: 18068
Ion Ratio Lower Upper
91 100
120 21.0 11.2 33.5

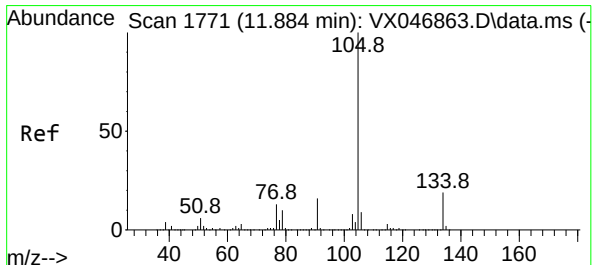
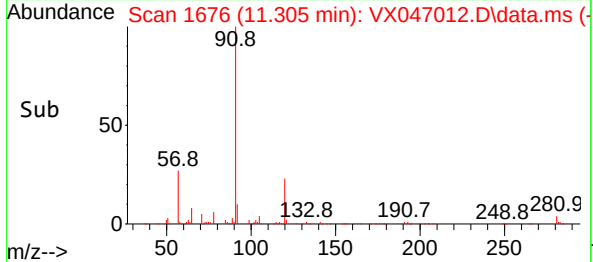
Manual Integrations
APPROVED

Reviewed By :John
Carlone



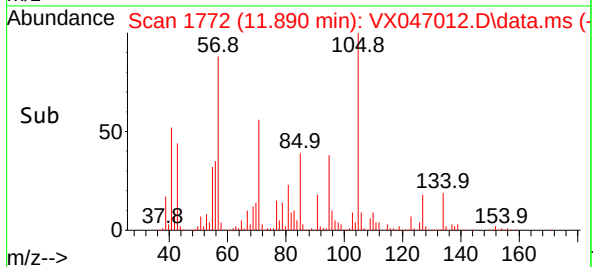
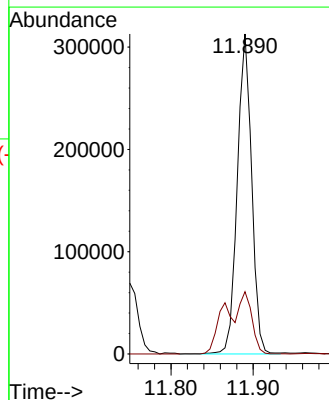
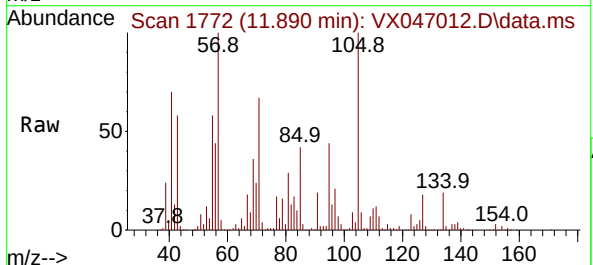
07/16/2025
Supervised By :Mahesh
Dadoda

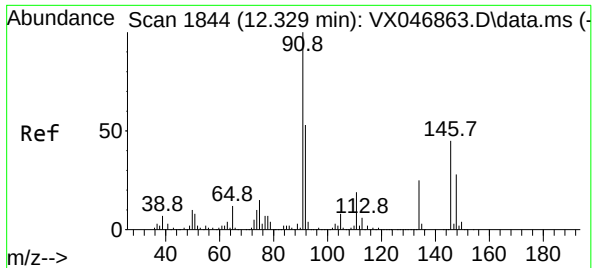
07/16/2025



#85
sec-Butylbenzene
Concen: 21.798 ug/l
RT: 11.890 min Scan# 1772
Delta R.T. 0.006 min
Lab File: VX047012.D
Acq: 15 Jul 2025 18:52

Tgt Ion:105 Resp: 379263
Ion Ratio Lower Upper
105 100
134 17.3 9.9 29.7





#89

n-Butylbenzene

Concen: 15.483 ug/l m

RT: 12.329 min Scan# 11

Delta R.T. -0.000 min

Lab File: VX047012.D

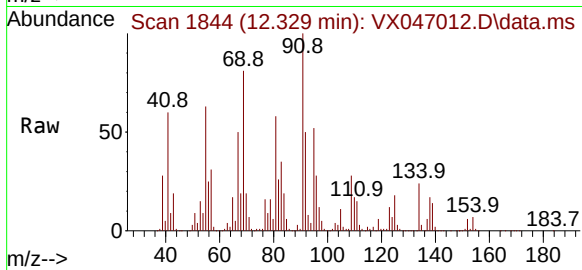
Acq: 15 Jul 2025 18:52

Instrument :

MSVOA_X

ClientSampleId :

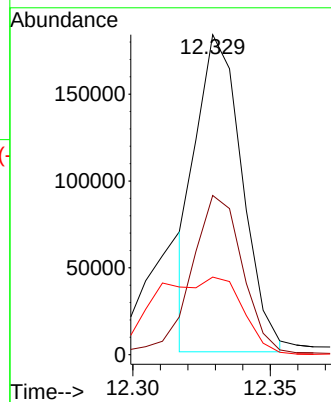
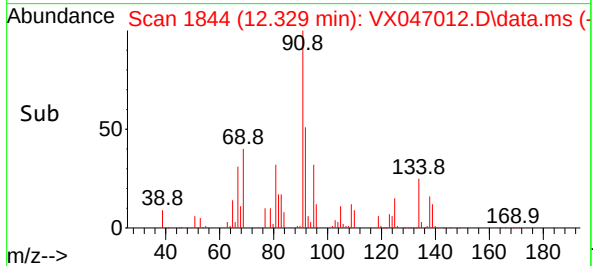
STOCK-PILE



Tgt Ion:	91	Resp:	211970
Ion	Ratio	Lower	Upper
91	100		
92	56.2	27.0	81.0
134	47.0	12.8	38.4

Manual Integrations

APPROVED

Reviewed By :John
Carlone07/16/2025
Supervised By :Mahesh
Dadoda

07/16/2025

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
 Data File : VX047012.D
 Acq On : 15 Jul 2025 18:52
 Operator : JC/MD
 Sample : Q2600-07
 Misc : 6.77g/5mL/100uL/5.00mL/MSVOA_X/MEOH
 ALS Vial : 26 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 STOCK-PILE

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\82X070225W.M
 Title : SW846 8260

Signal : TIC: VX047012.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.391	694	706	722	rBV2	182112	619633	8.03%	0.437%
2	5.556	724	733	759	rVB	320341	1074812	13.94%	0.757%
3	5.958	790	799	822	rBV	208709	623425	8.08%	0.439%
4	6.763	922	931	956	rVV	516437	1366153	17.71%	0.963%
5	7.379	1021	1032	1045	rBV2	164048	434033	5.63%	0.306%
6	8.598	1225	1232	1235	rBV	172957	309611	4.01%	0.218%
7	8.647	1235	1240	1255	rVB	1099609	1923177	24.94%	1.355%
8	8.976	1289	1294	1306	rVB	133567	235398	3.05%	0.166%
9	9.384	1352	1361	1371	rBV	115876	218794	2.84%	0.154%
10	9.500	1374	1380	1386	rBV3	200089	415849	5.39%	0.293%
11	9.561	1386	1390	1395	rVB	298036	411828	5.34%	0.290%
12	9.616	1395	1399	1404	rBV	268192	410958	5.33%	0.290%
13	9.823	1427	1433	1438	rVV3	293285	623062	8.08%	0.439%
14	10.006	1456	1463	1466	rBV2	144004	232861	3.02%	0.164%
15	10.055	1466	1471	1476	rBV	1135064	1540415	19.97%	1.086%
16	10.122	1476	1482	1486	rVB4	70352	147905	1.92%	0.104%
17	10.183	1486	1492	1498	rBV3	124249	295370	3.83%	0.208%
18	10.275	1498	1507	1510	rBV2	325371	605508	7.85%	0.427%
19	10.317	1510	1514	1517	rVV	534538	635071	8.23%	0.448%
20	10.354	1517	1520	1531	rVB2	392643	747451	9.69%	0.527%
21	10.451	1531	1536	1542	rBV	249803	388726	5.04%	0.274%
22	10.531	1545	1549	1551	rBV2	136698	186281	2.42%	0.131%
23	10.585	1551	1558	1565	rBV3	1175367	2079675	26.97%	1.466%
24	10.671	1565	1572	1575	rBV4	622412	1000200	12.97%	0.705%
25	10.713	1576	1579	1582	rVB2	349301	414848	5.38%	0.292%
26	10.750	1582	1585	1586	rBV	655574	688856	8.93%	0.485%
27	10.781	1586	1590	1594	rVB	2412575	3071354	39.82%	2.164%
28	10.854	1594	1602	1606	rBV	2733227	4665526	60.49%	3.288%
29	10.890	1606	1608	1613	rVB2	1483990	1941166	25.17%	1.368%
30	10.945	1613	1617	1622	rVB3	489252	864117	11.20%	0.609%
31	11.000	1622	1626	1628	rBV2	727207	1054845	13.68%	0.743%
32	11.031	1628	1631	1635	rVB2	1355457	1755549	22.76%	1.237%
33	11.079	1635	1639	1643	rVB2	1050072	1276420	16.55%	0.900%
34	11.122	1643	1646	1650	rVB2	876201	1072418	13.91%	0.756%
35	11.165	1650	1653	1655	rBV2	503490	691808	8.97%	0.488%
36	11.220	1655	1662	1666	rVV3	2322452	3307622	42.89%	2.331%

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX047012.D
Acq On : 15 Jul 2025 18:52
Operator : JC/MD
Sample : Q2600-07
Misc : 6.77g/5mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 26 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
STOCK-PILE

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\82X070225W.M
Title : SW846 8260

37	11.299	1673	1675	1677	rBV2	260123	286564	3.72%	0.202%
38	11.335	1677	1681	1686	rVV4	1027682	1758473	22.80%	1.239%
39	11.384	1686	1689	1693	rVB3	1143049	1505487	19.52%	1.061%
40	11.427	1693	1696	1700	rBV	2642052	3453947	44.78%	2.434%
41	11.476	1700	1704	1709	rVB4	1695831	2498978	32.40%	1.761%
42	11.518	1709	1711	1717	rVB4	369686	526085	6.82%	0.371%
43	11.573	1717	1720	1722	rBV	345270	393915	5.11%	0.278%
44	11.628	1722	1729	1734	rBV7	1531850	3182230	41.26%	2.243%
45	11.683	1734	1738	1741	rBV2	1133197	1450934	18.81%	1.022%
46	11.713	1741	1743	1745	rBV2	943218	912175	11.83%	0.643%
47	11.744	1745	1748	1752	rBV2	1733654	2377777	30.83%	1.676%
48	11.835	1759	1763	1766	rBV2	1795267	2900957	37.61%	2.044%
49	11.890	1769	1772	1776	rVV3	2889895	4628874	60.02%	3.262%
50	11.939	1776	1780	1784	rVV2	4082413	6630072	85.97%	4.672%
51	11.975	1784	1786	1789	rVV3	1209018	1459003	18.92%	1.028%
52	12.024	1790	1794	1799	rVV2	1447165	2525889	32.75%	1.780%
53	12.067	1799	1801	1804	rVB3	432451	476482	6.18%	0.336%
54	12.122	1804	1810	1812	rBV3	1612617	2538568	32.92%	1.789%
55	12.146	1812	1814	1818	rVB2	1445893	1868659	24.23%	1.317%
56	12.244	1825	1830	1835	rBV3	2224361	3415398	44.28%	2.407%
57	12.311	1835	1841	1848	rVV4	3952792	7712337	100.00%	5.435%
58	12.421	1848	1859	1863	rVV5	1426424	4926501	63.88%	3.472%
59	12.469	1863	1867	1872	rVV4	1470768	3036026	39.37%	2.140%
60	12.555	1875	1881	1886	rVV5	1118470	3188138	41.34%	2.247%
61	12.609	1886	1890	1894	rVV	3280679	4703670	60.99%	3.315%
62	12.640	1894	1895	1900	rVV2	778972	1219997	15.82%	0.860%
63	12.701	1900	1905	1912	rVV5	1478852	3927901	50.93%	2.768%
64	12.762	1912	1915	1920	rVV5	517875	1004022	13.02%	0.708%
65	12.817	1920	1924	1931	rVB3	1719706	3089336	40.06%	2.177%
66	12.890	1931	1936	1938	rBV3	1148611	1909346	24.76%	1.346%
67	12.920	1938	1941	1945	rVB	2145876	2604344	33.77%	1.835%
68	12.981	1947	1951	1954	rBV2	954448	1071567	13.89%	0.755%
69	13.024	1954	1958	1965	rVB2	891374	1473684	19.11%	1.039%
70	13.091	1965	1969	1974	rBV2	775897	1200916	15.57%	0.846%
71	13.134	1974	1976	1979	rVV2	521852	538312	6.98%	0.379%
72	13.256	1993	1996	1997	rBV2	178571	185722	2.41%	0.131%
73	13.286	1997	2001	2008	rVB2	2576283	3757048	48.71%	2.648%
74	13.365	2011	2014	2017	rVV	585217	649387	8.42%	0.458%
75	13.414	2017	2022	2033	rVB10	493816	1517561	19.68%	1.069%
76	13.506	2033	2037	2040	rBV4	382571	582158	7.55%	0.410%

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX047012.D
Acq On : 15 Jul 2025 18:52
Operator : JC/MD
Sample : Q2600-07
Misc : 6.77g/5mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 26 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
STOCK-PILE

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\82X070225W.M
Title : SW846 8260

77	13.542	2040	2043	2046	rVB	280355	323871	4.20%	0.228%
78	13.579	2046	2049	2053	rBV2	850465	1062465	13.78%	0.749%
79	13.634	2053	2058	2060	rVV4	296511	560639	7.27%	0.395%
80	13.664	2060	2063	2071	rVB3	701063	1381940	17.92%	0.974%
81	13.750	2071	2077	2081	rBV2	427235	654990	8.49%	0.462%
82	13.792	2081	2084	2088	rVB2	318051	396187	5.14%	0.279%
83	13.847	2089	2093	2098	rVB3	288567	448766	5.82%	0.316%
84	13.926	2098	2106	2110	rBV4	423215	875873	11.36%	0.617%
85	13.969	2110	2113	2116	rBV2	158064	236487	3.07%	0.167%
86	14.067	2125	2129	2132	rBV2	208829	283932	3.68%	0.200%
87	14.158	2138	2144	2148	rBV2	145371	230541	2.99%	0.162%
88	14.213	2148	2153	2162	rVB3	540714	1161390	15.06%	0.818%
89	14.317	2167	2170	2175	rVV	247146	343264	4.45%	0.242%
90	14.371	2175	2179	2182	rVV	232269	291496	3.78%	0.205%
91	14.414	2182	2186	2192	rVB3	196251	288429	3.74%	0.203%
92	14.475	2192	2196	2205	rBV3	445870	731212	9.48%	0.515%
93	14.615	2215	2219	2221	rVV2	166222	241542	3.13%	0.170%
94	14.670	2225	2228	2232	rVB	215209	257519	3.34%	0.181%
95	14.725	2232	2237	2240	rBV2	94733	146267	1.90%	0.103%
96	14.780	2241	2246	2250	rVV2	482463	694693	9.01%	0.490%
97	15.182	2307	2312	2319	rVB3	80525	151101	1.96%	0.106%
98	15.475	2353	2360	2366	rBV	163395	264436	3.43%	0.186%
99	15.609	2377	2382	2385	rBV	184620	271477	3.52%	0.191%
100	15.646	2385	2388	2397	rVB	108568	185079	2.40%	0.130%

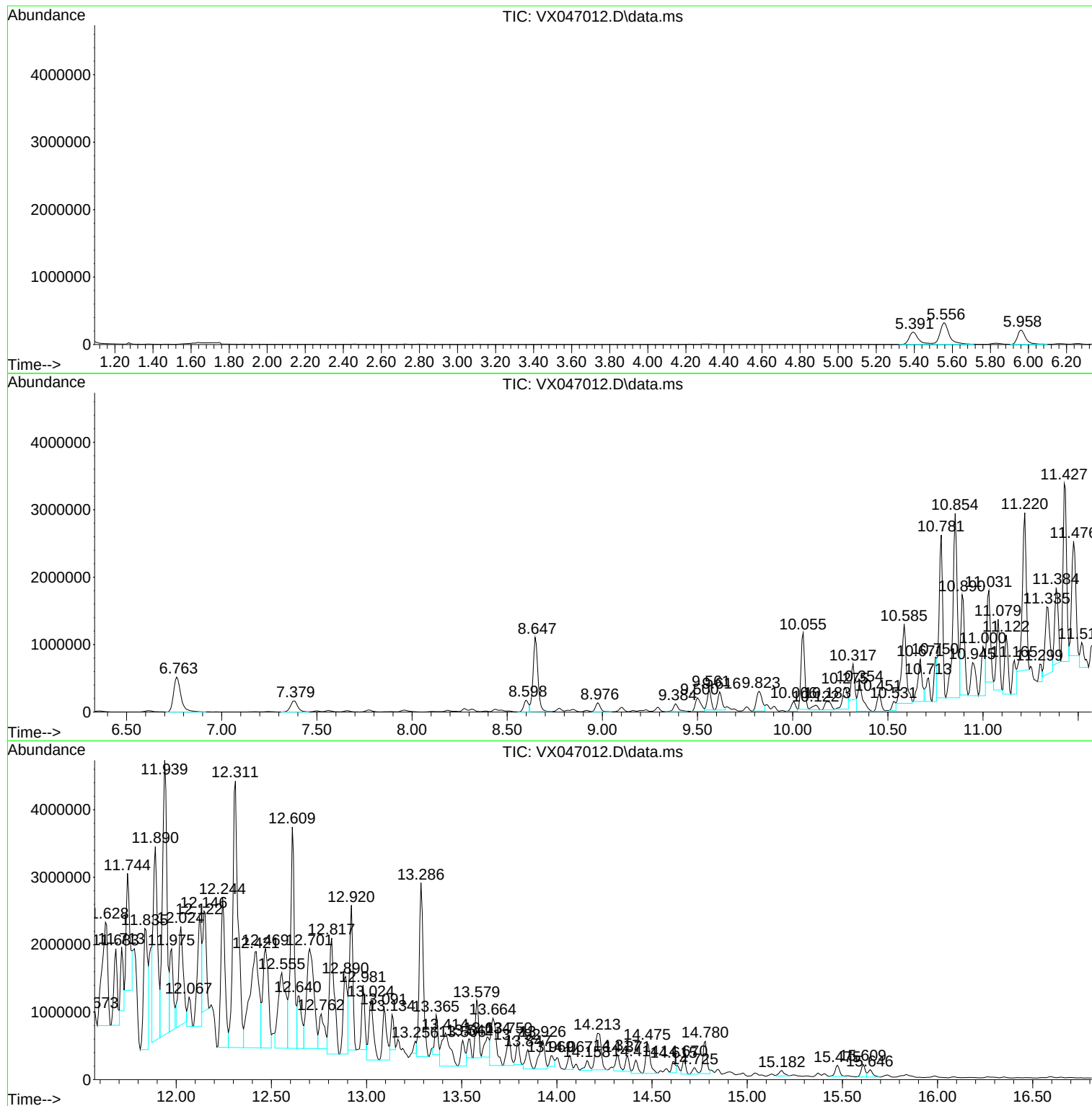
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Data File : VX047012.D
Acq On : 15 Jul 2025 18:52
Operator : JC/MD
Sample : Q2600-07
Misc : 6.77g/5mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 26 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
STOCK-PILE

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX047012.D
Acq On : 15 Jul 2025 18:52
Operator : JC/MD
Sample : Q2600-07
Misc : 6.77g/5mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 26 Sample Multiplier: 1

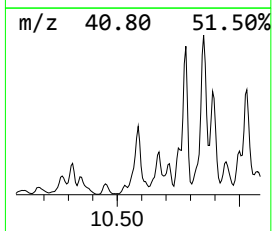
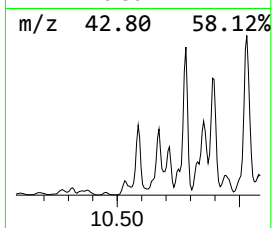
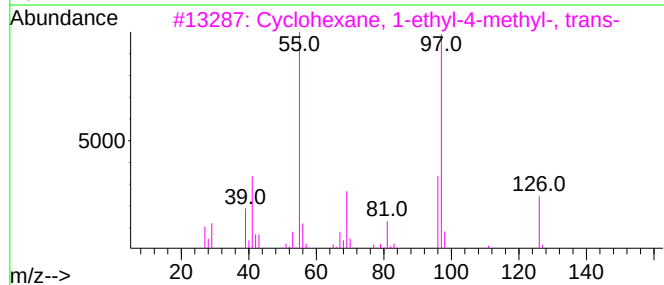
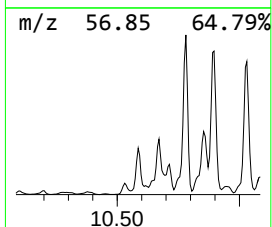
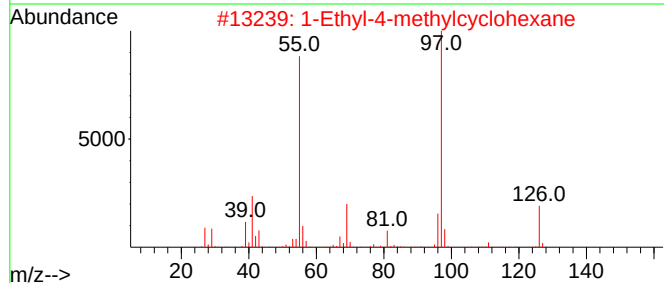
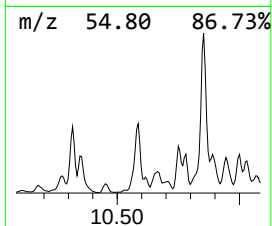
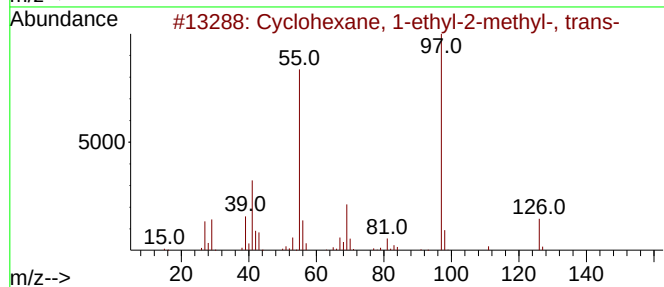
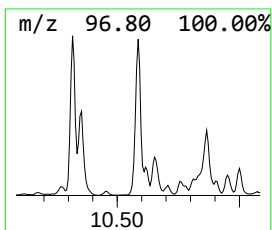
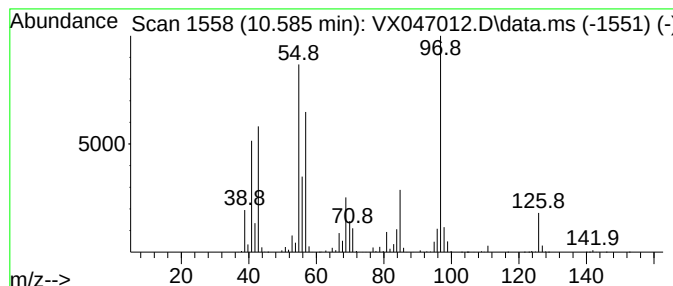
Instrument :
MSVOA_X
ClientSampleId :
STOCK-PILE

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260

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

Peak Number 1 Cyclohexane, 1-ethyl-2-meth... Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.	
10.586	67.50 ug/l	2079680	Chlorobenzene-d5	10.055	
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1-ethyl-2-methyl-, ...	126	C9H18	004923-78-8	70
2	1-Ethyl-4-methylcyclohexane	126	C9H18	003728-56-1	70
3	Cyclohexane, 1-ethyl-4-methyl-, ...	126	C9H18	006236-88-0	64
4	1-Ethyl-3-methylcyclohexane (c,t)	126	C9H18	003728-55-0	64
5	4-Octen-3-one	126	C8H14O	014129-48-7	52



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX047012.D
Acq On : 15 Jul 2025 18:52
Operator : JC/MD
Sample : Q2600-07
Misc : 6.77g/5mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 26 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
STOCK-PILE

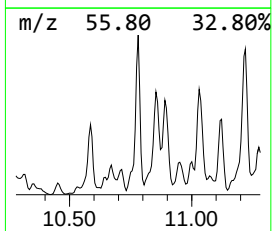
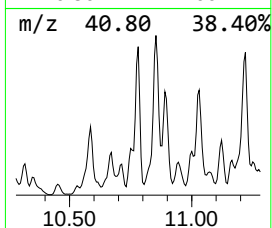
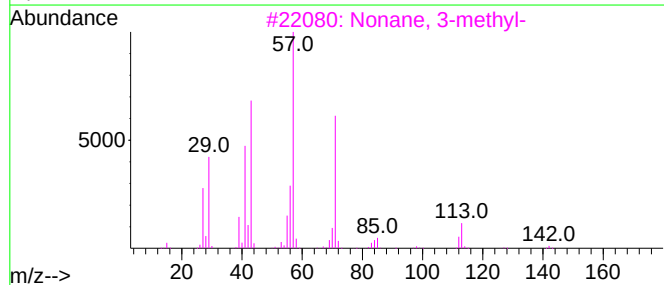
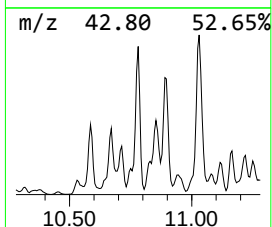
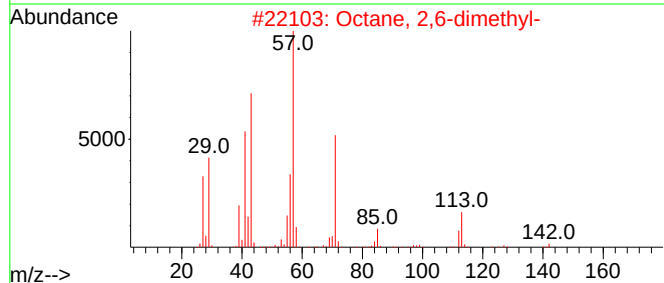
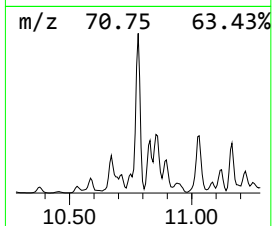
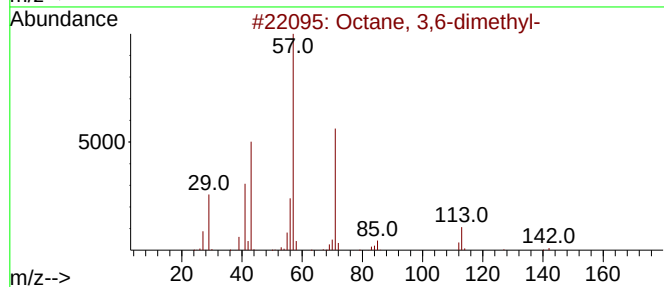
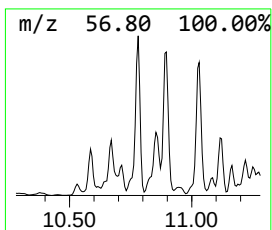
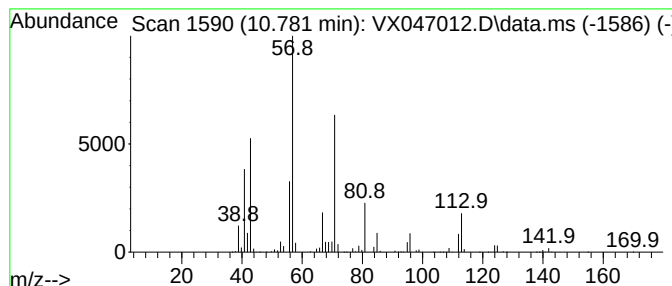
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260

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

Peak Number 2 Octane, 3,6-dimethyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.781	99.69 ug/l	3071350	Chlorobenzene-d5	10.055

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Octane, 3,6-dimethyl-	142	C10H22	015869-94-0	90
2			Octane, 2,6-dimethyl-	142	C10H22	002051-30-1	90
3			Nonane, 3-methyl-	142	C10H22	005911-04-6	86
4			Undecane, 6,6-dimethyl-	184	C13H28	017312-76-4	64
5			3-Hexanone, 2,2-dimethyl-	128	C8H16O	005405-79-8	47



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX047012.D
Acq On : 15 Jul 2025 18:52
Operator : JC/MD
Sample : Q2600-07
Misc : 6.77g/5mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 26 Sample Multiplier: 1

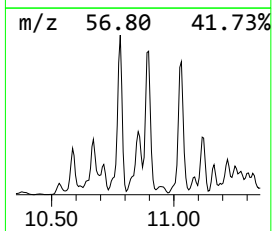
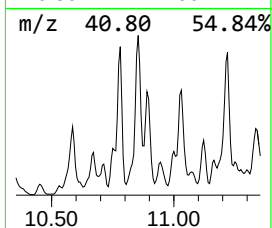
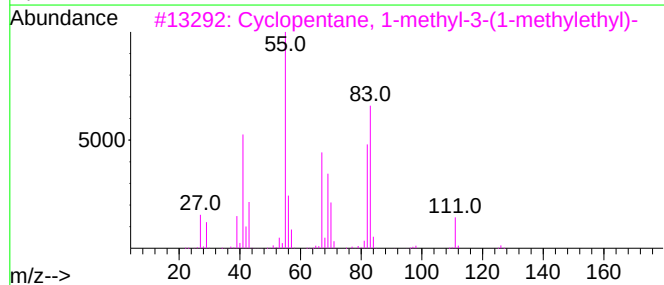
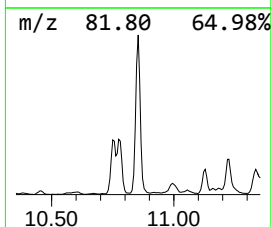
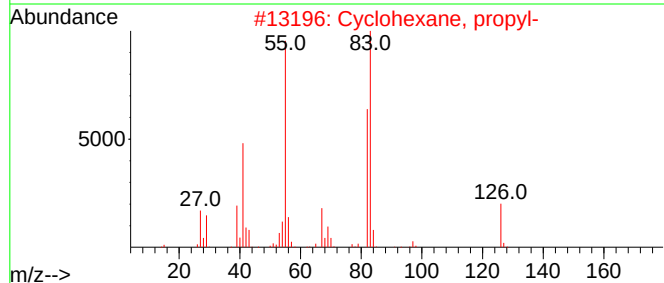
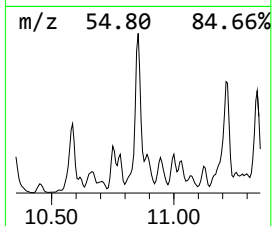
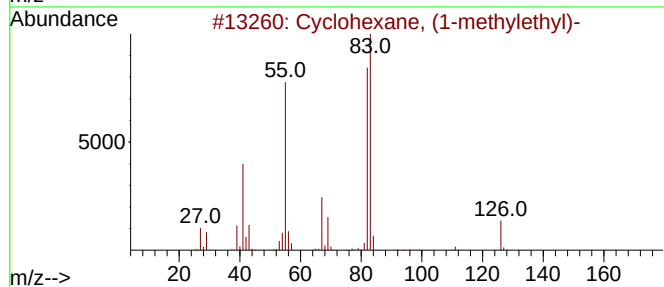
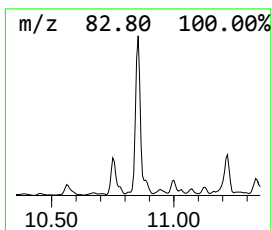
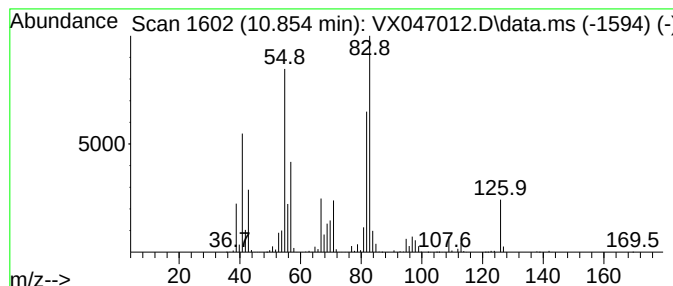
Instrument :
MSVOA_X
ClientSampleId :
STOCK-PILE

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260

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

Peak Number 3 Cyclohexane, (1-methylethyl)- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.	
10.854	151.44 ug/l	4665530	Chlorobenzene-d5	10.055	
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, (1-methylethyl)-	126	C9H18	000696-29-7	81
2	Cyclohexane, propyl-	126	C9H18	001678-92-8	81
3	Cyclopentane, 1-methyl-3-(1-meth...	126	C9H18	053771-88-3	53
4	Cyclohexane, 2-propenyl-	124	C9H16	002114-42-3	53
5	Cyclohexane, ethyl-	112	C8H16	001678-91-7	53



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX047012.D
Acq On : 15 Jul 2025 18:52
Operator : JC/MD
Sample : Q2600-07
Misc : 6.77g/5mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 26 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
STOCK-PILE

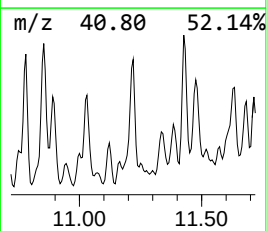
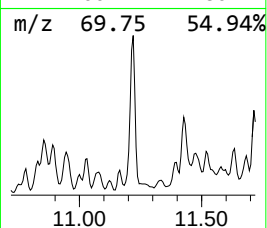
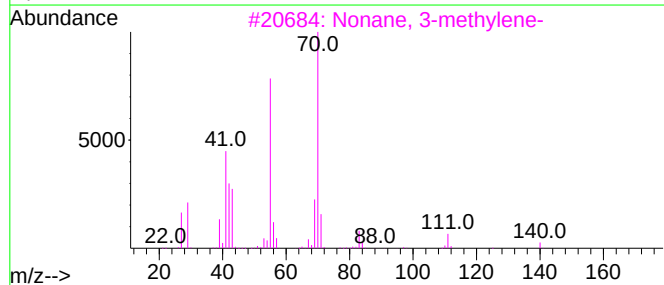
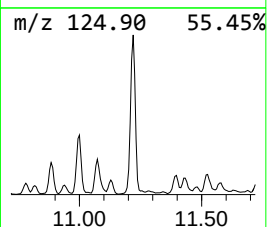
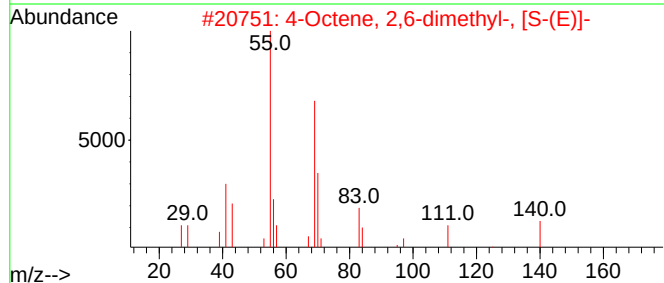
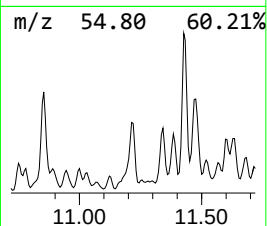
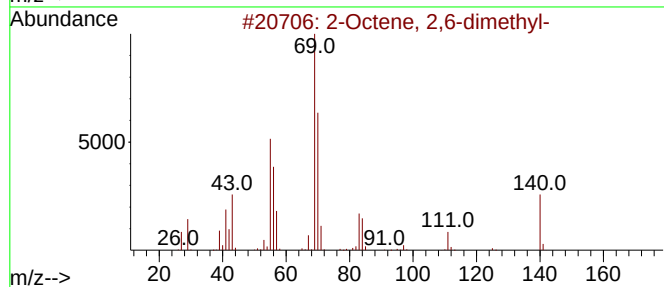
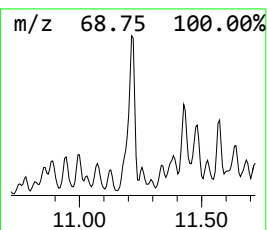
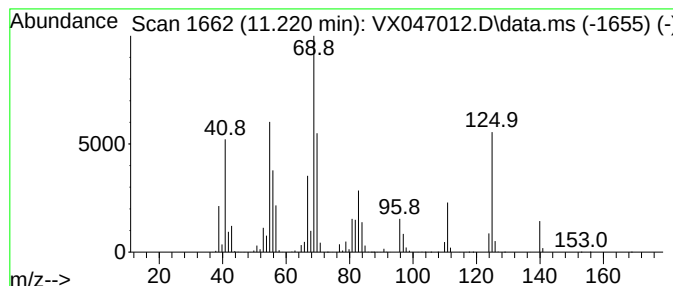
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Quant Title : SW846 8260

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

Peak Number 4 2-Octene, 2,6-dimethyl- Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.220	65.47 ug/l	3307620	1,4-Dichlorobenzene-d4	12.018

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			2-Octene, 2,6-dimethyl-	140	C10H20	004057-42-5	64
2			4-Octene, 2,6-dimethyl-, [S-(E)]-	140	C10H20	062960-76-3	58
3			Nonane, 3-methylene-	140	C10H20	051655-64-2	49
4			2-Nonene, 2-methyl-	140	C10H20	002129-95-5	45
5			3-Ethyl-4-octene	140	C10H20	019781-32-9	43



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX047012.D
Acq On : 15 Jul 2025 18:52
Operator : JC/MD
Sample : Q2600-07
Misc : 6.77g/5mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 26 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
STOCK-PILE

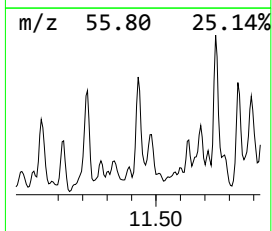
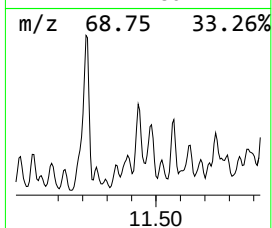
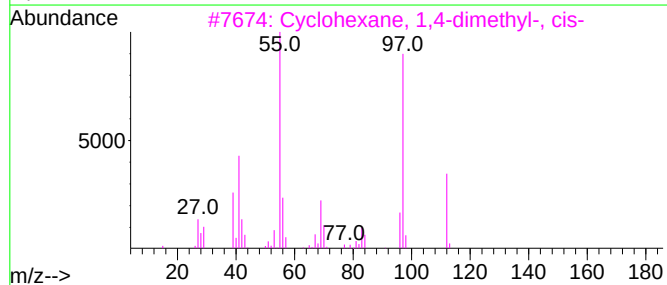
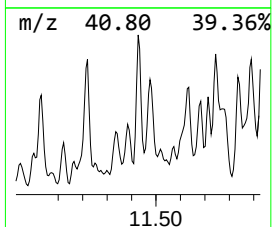
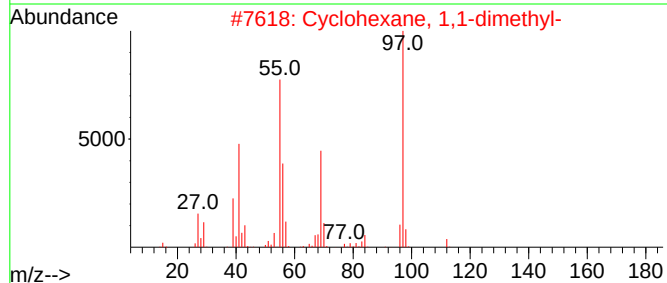
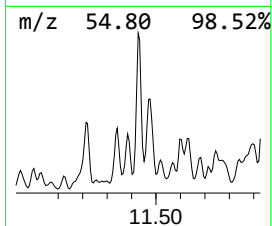
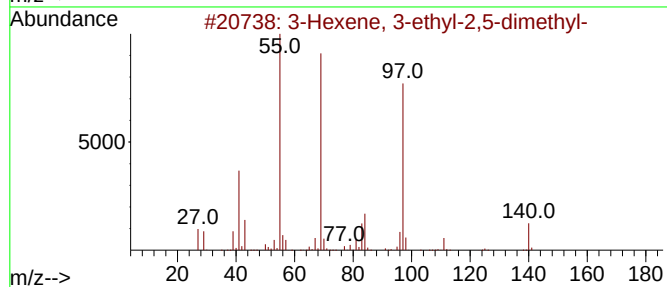
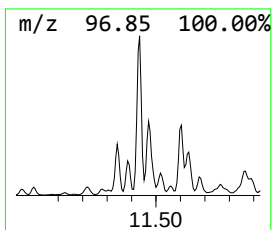
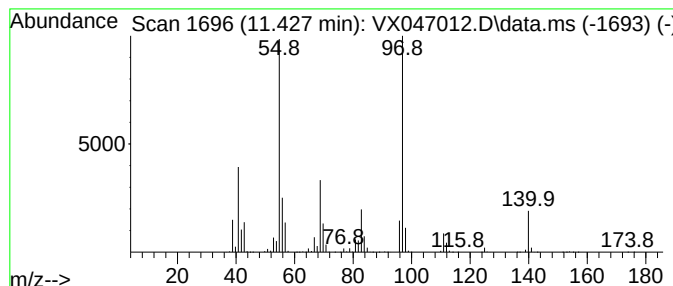
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260

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

Peak Number 5 3-Hexene, 3-ethyl-2,5-dimet... Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.427	68.37 ug/l	3453950	1,4-Dichlorobenzene-d4	12.018

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			3-Hexene, 3-ethyl-2,5-dimethyl-	140	C10H20	062338-08-3	68
2			Cyclohexane, 1,1-dimethyl-	112	C8H16	000590-66-9	64
3			Cyclohexane, 1,4-dimethyl-, cis-	112	C8H16	000624-29-3	59
4			Cyclohexane, 1-ethyl-2-methyl-, ...	126	C9H18	004923-77-7	53
5			Sulfurous acid, di(cyclohexylmet...	274	C14H26O3S	1010309-22-7	50



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX047012.D
Acq On : 15 Jul 2025 18:52
Operator : JC/MD
Sample : Q2600-07
Misc : 6.77g/5mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 26 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
STOCK-PILE

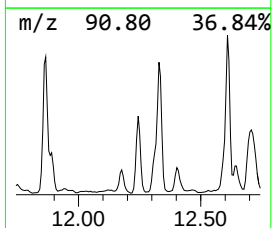
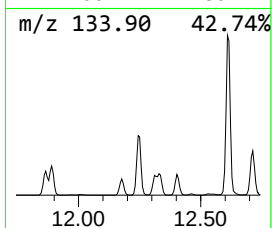
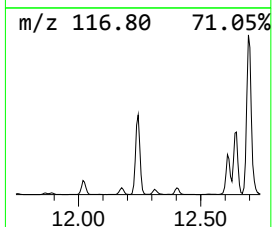
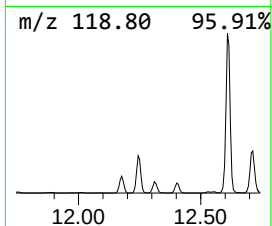
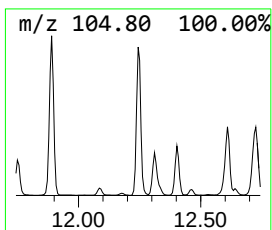
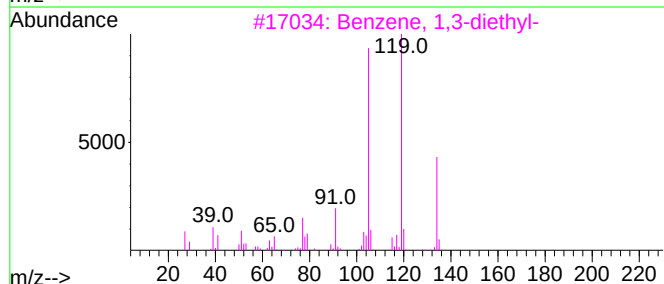
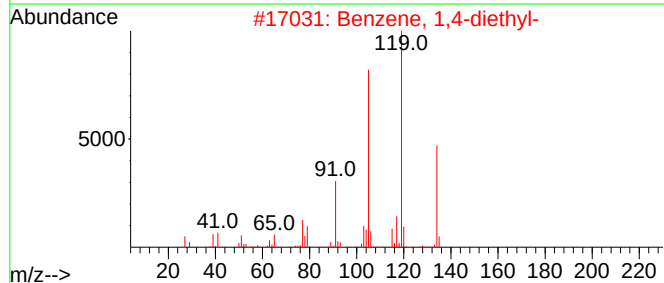
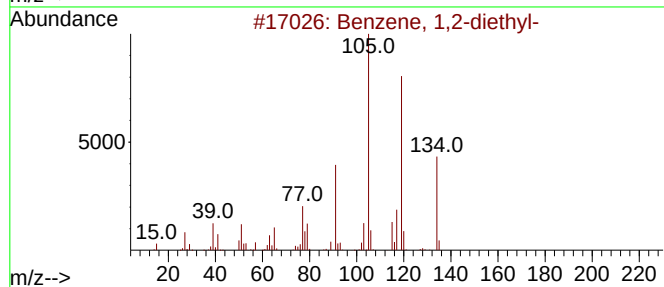
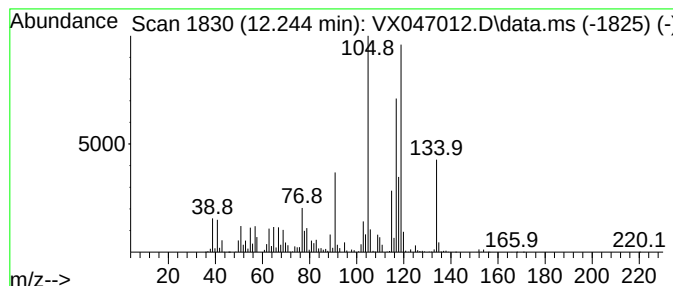
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Quant Title : SW846 8260

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

Peak Number 6 Benzene, 1,2-diethyl- Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.244	67.61 ug/l	3415400	1,4-Dichlorobenzene-d4	12.018

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Benzene, 1,2-diethyl-	134	C10H14	000135-01-3	94
2			Benzene, 1,4-diethyl-	134	C10H14	000105-05-5	76
3			Benzene, 1,3-diethyl-	134	C10H14	000141-93-5	76
4			Benzene, 1-ethyl-3,5-dimethyl-	134	C10H14	000934-74-7	53
5			Ethanone, 1-(4-methylphenyl)-	134	C9H10O	000122-00-9	50



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX047012.D
Acq On : 15 Jul 2025 18:52
Operator : JC/MD
Sample : Q2600-07
Misc : 6.77g/5mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 26 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
STOCK-PILE

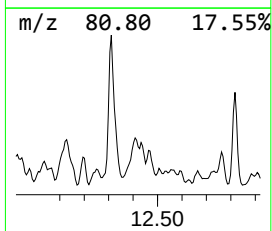
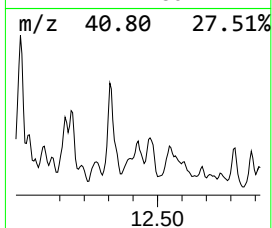
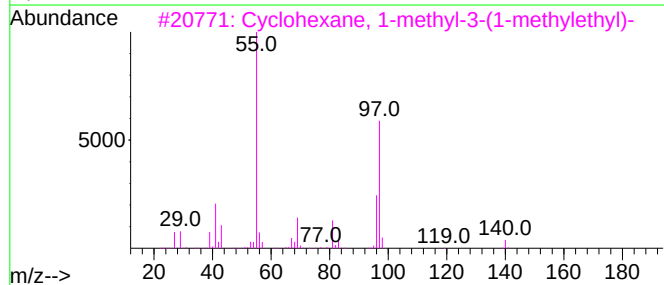
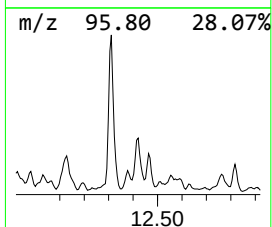
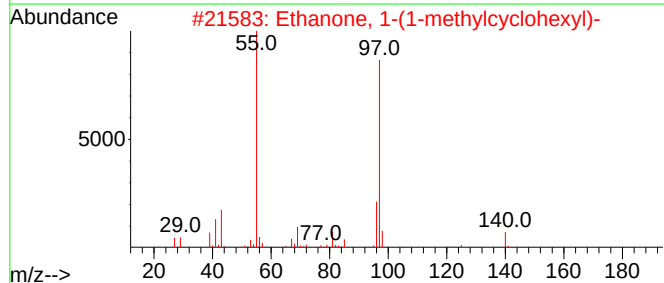
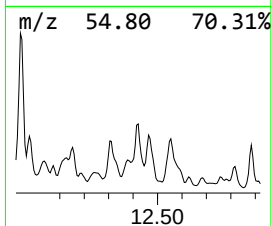
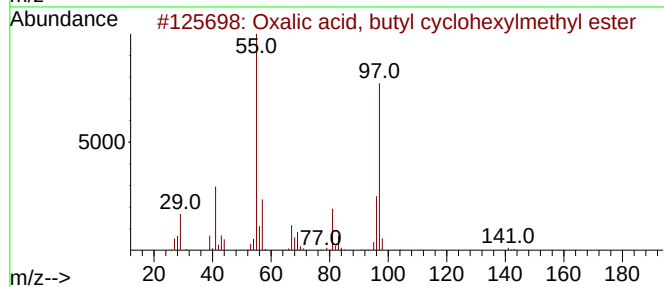
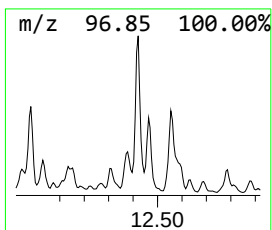
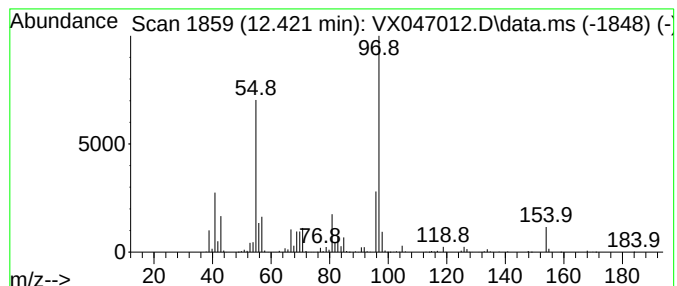
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Quant Title : SW846 8260

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

Peak Number 7 Oxalic acid, butyl cyclohex... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.421	97.52 ug/l	4926500	1,4-Dichlorobenzene-d4	12.018

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Oxalic acid, butyl cyclohexylmet...	242	C13H22O4	1000309-68-2	64
2			Ethanone, 1-(1-methylcyclohexyl)-	140	C9H16O	002890-62-2	64
3			Cyclohexane, 1-methyl-3-(1-methy...	140	C10H20	016580-24-8	59
4			Cyclohexane, 1-ethyl-1-methyl-	126	C9H18	004926-90-3	59
5			1-Ethyl-3-methylcyclohexane (c,t)	126	C9H18	003728-55-0	59



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX047012.D
Acq On : 15 Jul 2025 18:52
Operator : JC/MD
Sample : Q2600-07
Misc : 6.77g/5mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 26 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
STOCK-PILE

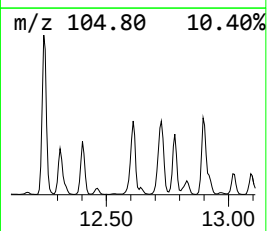
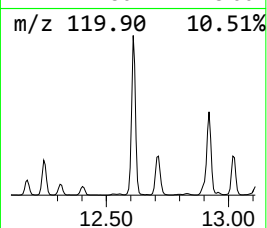
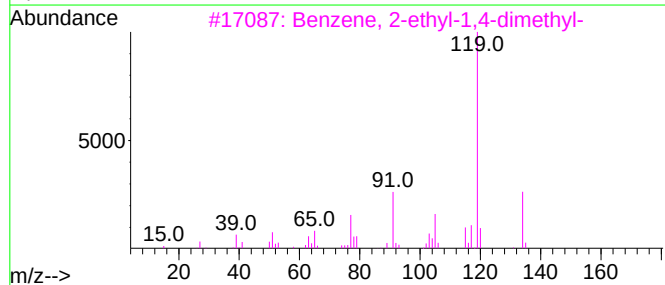
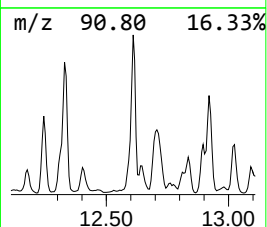
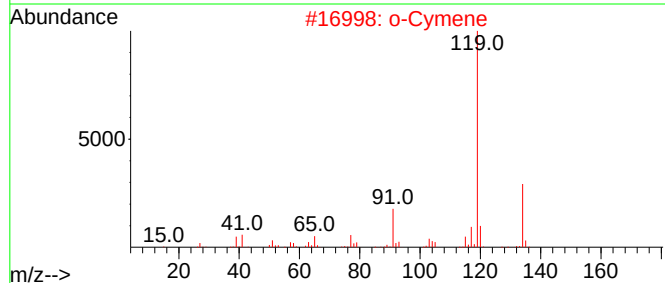
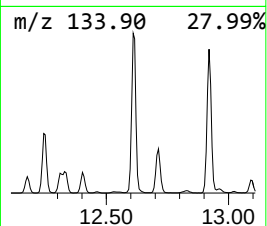
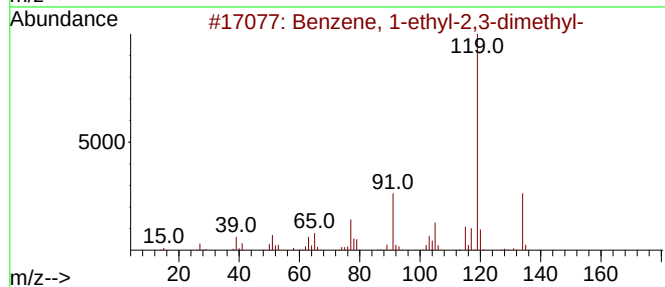
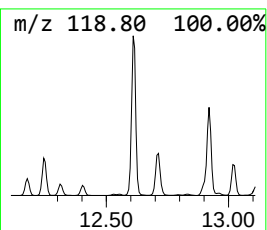
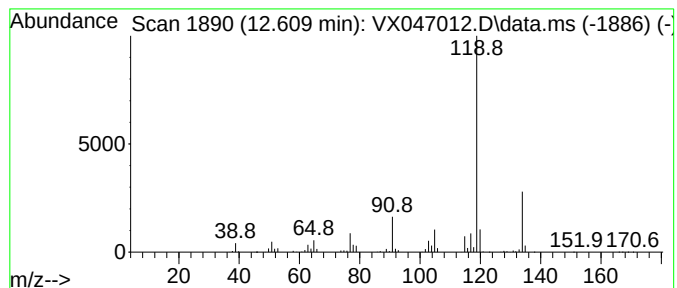
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Quant Title : SW846 8260

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

Peak Number 8 Benzene, 1-ethyl-2,3-dimethyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.610	93.11 ug/l	4703670	1,4-Dichlorobenzene-d4	12.018

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Benzene, 1-ethyl-2,3-dimethyl-	134	C10H14	000933-98-2	95
2			o-Cymene	134	C10H14	000527-84-4	95
3			Benzene, 2-ethyl-1,4-dimethyl-	134	C10H14	001758-88-9	95
4			Benzene, 2-ethyl-1,3-dimethyl-	134	C10H14	002870-04-4	94
5			Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	94



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX047012.D
Acq On : 15 Jul 2025 18:52
Operator : JC/MD
Sample : Q2600-07
Misc : 6.77g/5mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 26 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
STOCK-PILE

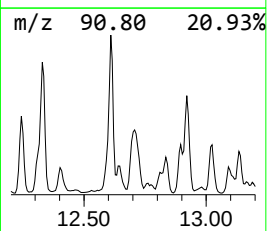
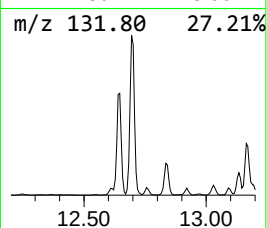
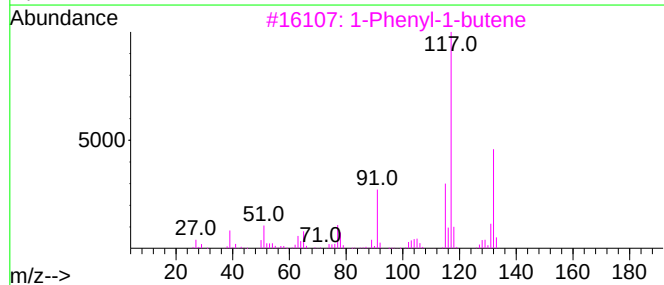
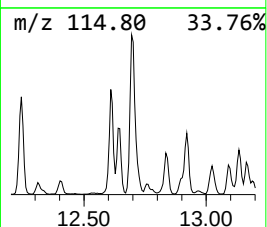
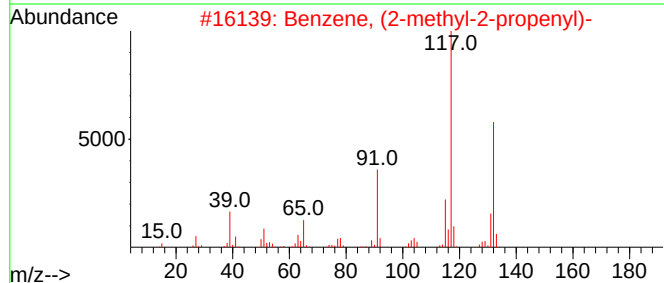
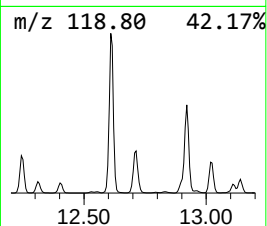
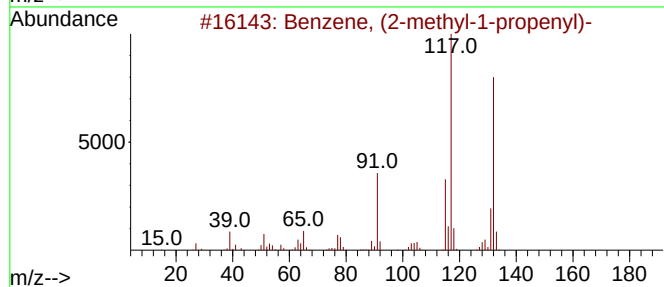
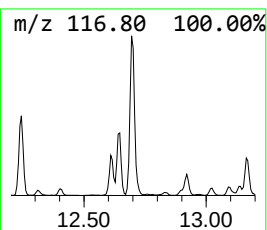
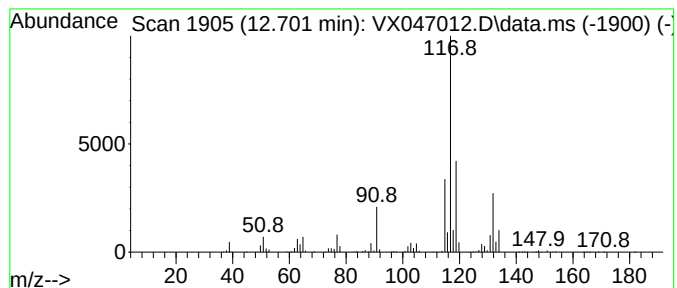
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260

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

Peak Number 9 Benzene, (2-methyl-1-propen... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.701	77.75 ug/l	3927900	1,4-Dichlorobenzene-d4	12.018

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Benzene, (2-methyl-1-propenyl)-	132	C10H12	000768-49-0	76
2			Benzene, (2-methyl-2-propenyl)-	132	C10H12	003290-53-7	76
3			1-Phenyl-1-butene	132	C10H12	000824-90-8	70
4			Benzene, 1-ethenyl-3-ethyl-	132	C10H12	007525-62-4	70
5			Indan, 1-methyl-	132	C10H12	000767-58-8	70



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX047012.D
Acq On : 15 Jul 2025 18:52
Operator : JC/MD
Sample : Q2600-07
Misc : 6.77g/5mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 26 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
STOCK-PILE

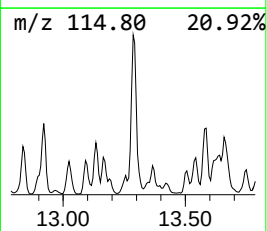
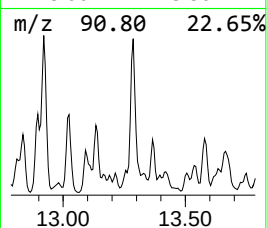
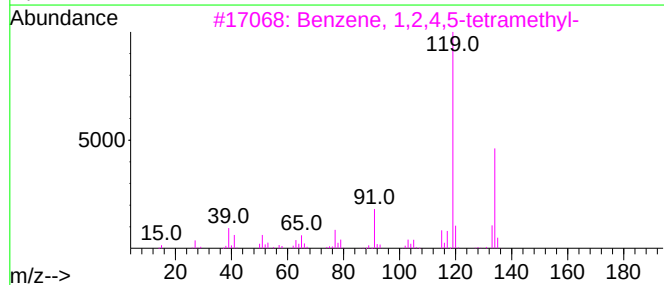
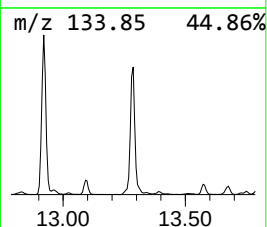
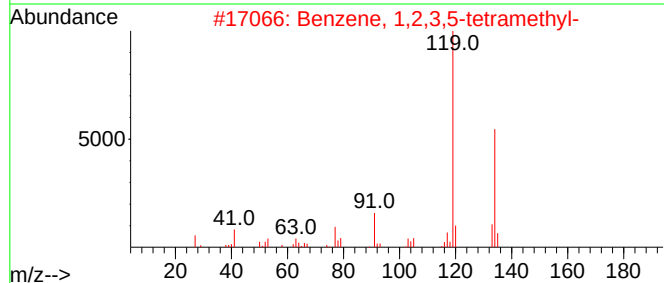
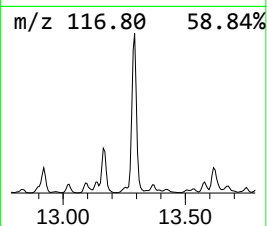
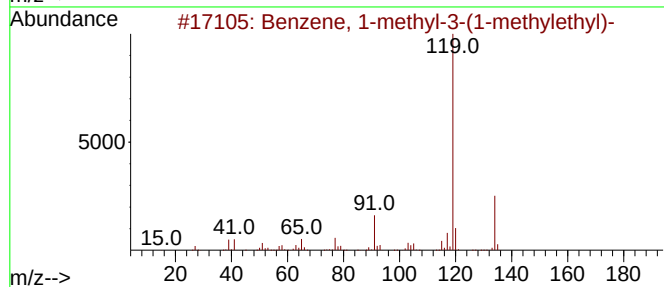
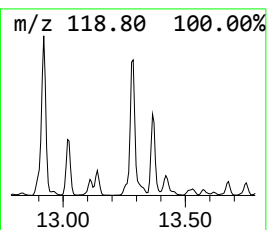
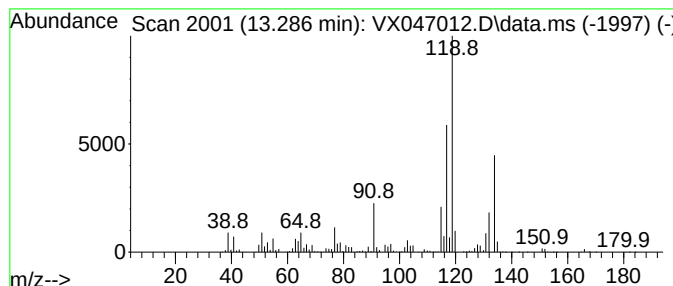
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260

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

Peak Number 10 Benzene, 1-methyl-3-(1-meth... Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.286	74.37 ug/l	3757050	1,4-Dichlorobenzene-d4	12.018

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	64
2			Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	64
3			Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	64
4			o-Cymene	134	C10H14	000527-84-4	64
5			p-Cymene	134	C10H14	000099-87-6	64



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX047012.D
Acq On : 15 Jul 2025 18:52
Operator : JC/MD
Sample : Q2600-07
Misc : 6.77g/5mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 26 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
STOCK-PILE

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST0.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
Cyclohexane, 1-...	10.586	67.5	ug/l	2079680	3	10.055	1540420	50.0
Octane, 3,6-dim...	10.781	99.7	ug/l	3071350	3	10.055	1540420	50.0
Cyclohexane, (1...	10.854	151.4	ug/l	4665530	3	10.055	1540420	50.0
2-Octene, 2,6-d...	11.220	65.5	ug/l	3307620	4	12.018	2525890	50.0
3-Hexene, 3-eth...	11.427	68.4	ug/l	3453950	4	12.018	2525890	50.0
Benzene, 1,2-di...	12.244	67.6	ug/l	3415400	4	12.018	2525890	50.0
Oxalic acid, bu...	12.421	97.5	ug/l	4926500	4	12.018	2525890	50.0
Benzene, 1-ethy...	12.610	93.1	ug/l	4703670	4	12.018	2525890	50.0
Benzene, (2-met...	12.701	77.8	ug/l	3927900	4	12.018	2525890	50.0
Benzene, 1-meth...	13.286	74.4	ug/l	3757050	4	12.018	2525890	50.0

Report of Analysis

Client:	T&A Construction Inc		Date Collected:	07/14/25	
Project:	Kingsland Point Park Water Main		Date Received:	07/14/25	
Client Sample ID:	END-OF-TRENCH		SDG No.:	Q2600	
Lab Sample ID:	Q2600-11		Matrix:	SOIL	
Analytical Method:	8260D		% Solid:	84.8	
Sample Wt/Vol:	5.06	Units: g	Final Vol:	5000	uL
Soil Aliquot Vol:	100	uL	Test:	VOC-TCLVOA-10	
GC Column:	DB-624UI	ID : 0.18	Level :	MED	
Prep Method :					

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VX047013.D	1	07/15/25 19:13	VX071525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	66.4	U	66.4	290	ug/Kg
74-87-3	Chloromethane	66.4	U	66.4	290	ug/Kg
75-01-4	Vinyl Chloride	46.0	U	46.0	290	ug/Kg
74-83-9	Bromomethane	62.3	U	62.3	290	ug/Kg
75-00-3	Chloroethane	73.4	U	73.4	290	ug/Kg
75-69-4	Trichlorofluoromethane	70.5	U	70.5	290	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	61.8	U	61.8	290	ug/Kg
75-35-4	1,1-Dichloroethene	58.3	U	58.3	290	ug/Kg
67-64-1	Acetone	280	U	280	1500	ug/Kg
75-15-0	Carbon Disulfide	61.8	U	61.8	290	ug/Kg
1634-04-4	Methyl tert-butyl Ether	42.5	U	42.5	290	ug/Kg
79-20-9	Methyl Acetate	89.7	UQ	89.7	290	ug/Kg
75-09-2	Methylene Chloride	210	U	210	580	ug/Kg
156-60-5	trans-1,2-Dichloroethene	50.1	U	50.1	290	ug/Kg
75-34-3	1,1-Dichloroethane	46.6	U	46.6	290	ug/Kg
110-82-7	Cyclohexane	3800		46.0	290	ug/Kg
78-93-3	2-Butanone	380	UQ	380	1500	ug/Kg
56-23-5	Carbon Tetrachloride	56.5	U	56.5	290	ug/Kg
156-59-2	cis-1,2-Dichloroethene	43.7	U	43.7	290	ug/Kg
74-97-5	Bromochloromethane	67.0	U	67.0	290	ug/Kg
67-66-3	Chloroform	48.9	U	48.9	290	ug/Kg
71-55-6	1,1,1-Trichloroethane	54.2	U	54.2	290	ug/Kg
108-87-2	Methylcyclohexane	51500	E	53.0	290	ug/Kg
71-43-2	Benzene	46.0	U	46.0	290	ug/Kg
107-06-2	1,2-Dichloroethane	46.0	U	46.0	290	ug/Kg
79-01-6	Trichloroethene	47.2	U	47.2	290	ug/Kg
78-87-5	1,2-Dichloropropane	53.0	U	53.0	290	ug/Kg
75-27-4	Bromodichloromethane	45.4	U	45.4	290	ug/Kg
108-10-1	4-Methyl-2-Pentanone	210	UQ	210	1500	ug/Kg
108-88-3	Toluene	93.9	J	45.4	290	ug/Kg

Report of Analysis

Client:	T&A Construction Inc			Date Collected:	07/14/25
Project:	Kingsland Point Park Water Main			Date Received:	07/14/25
Client Sample ID:	END-OF-TRENCH			SDG No.:	Q2600
Lab Sample ID:	Q2600-11			Matrix:	SOIL
Analytical Method:	8260D			% Solid:	84.8
Sample Wt/Vol:	5.06	Units:	g	Final Vol:	5000 uL
Soil Aliquot Vol:	100		uL	Test:	VOC-TCLVOA-10
GC Column:	DB-624UI	ID :	0.18	Level :	MED
Prep Method :					

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VX047013.D	1	07/15/25 19:13	VX071525

[illegible]

Report of Analysis

Client:	T&A Construction Inc	Date Collected:	07/14/25
Project:	Kingsland Point Park Water Main	Date Received:	07/14/25
Client Sample ID:	END-OF-TRENCH	SDG No.:	Q2600
Lab Sample ID:	Q2600-11	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	84.8
Sample Wt/Vol:	5.06 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10
GC Column:	DB-624UI ID : 0.18	Level :	MED
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VX047013.D	1	07/15/25 19:13	VX071525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
000589-81-1	Heptane, 3-methyl-	16300	J		8.44	ug/Kg
003221-61-2	Octane, 2-methyl-	16800	J		9.38	ug/Kg
002216-30-0	Heptane, 2,5-dimethyl-	17300	J		9.50	ug/Kg
001678-91-7	Cyclohexane, ethyl-	19100	J		9.56	ug/Kg
003073-66-3	Cyclohexane, 1,1,3-trimethyl-	16200	J		9.62	ug/Kg
007094-26-0	unknown9.823	19400	J		9.82	ug/Kg
002216-34-4	Octane, 4-methyl-	20100	J		9.90	ug/Kg
000932-40-1	trans-1,2-Diethyl cyclopentane	19400	J		10.6	ug/Kg
002051-30-1	Octane, 2,6-dimethyl-	28400	J		10.8	ug/Kg
001678-92-8	Cyclohexane, propyl-	33200	J		10.9	ug/Kg
103-65-1	n-propylbenzene	35200	J		11.3	ug/Kg
95-63-6	1,2,4-Trimethylbenzene	25900	J		11.8	ug/Kg
135-98-8	sec-Butylbenzene	6300	J		11.9	ug/Kg
99-87-6	p-Isopropyltoluene	1100	J		12.0	ug/Kg
104-51-8	n-Butylbenzene	8200	J		12.3	ug/Kg

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\VX071525\
 Data File : VX047013.D
 Acq On : 15 Jul 2025 19:13
 Operator : JC/MD
 Sample : Q2600-11
 Misc : 5.06g/5mL/100uL/5.00mL/MSVOA_X/MEOH
 ALS Vial : 27 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 END-OF-TRENCH

Manual Integrations
APPROVED

Reviewed By : John Carlone 07/16/2025
 Supervised By : Mahesh Dadoda 07/16/2025

Quant Time: Jul 16 02:34:15 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 03 05:51:11 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	5.556	168	300812	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.763	114	484192	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	369331	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.024	152	180753	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.958	65	197659	49.738	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery =	99.480%		
35) Dibromofluoromethane	5.391	113	160240	48.754	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	97.500%		
50) Toluene-d8	8.647	98	542010	46.740	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery =	93.480%		
62) 4-Bromofluorobenzene	11.079	95	256542	58.209	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery =	116.420%		
Target Compounds						
					Qvalue	
16) Acetone	2.410	43	2693	2.182	ug/l #	83
31) Cyclohexane	5.483	56	370911	65.295	ug/l	89
39) Methylcyclohexane	7.385	83	4904182	884.098	ug/l	96
52) Toluene	8.720	92	13386	1.611	ug/l	93
67) Ethyl Benzene	10.195	91	2297804	168.033	ug/l	99
68) m/p-Xylenes	10.305	106	82667	16.043	ug/l	93
73) Isopropylbenzene	10.963	105	1813824	142.749	ug/l	99
78) n-propylbenzene	11.305	91	9255670	604.100	ug/l	97
84) 1,2,4-Trimethylbenzene	11.756	105	4645743	445.179	ug/l	98
85) sec-Butylbenzene	11.890	105	1464013	108.891	ug/l	98
86) p-Isopropyltoluene	12.012	119	219440	19.490	ug/l	97
89) n-Butylbenzene	12.335	91	1484029m	140.281	ug/l	

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

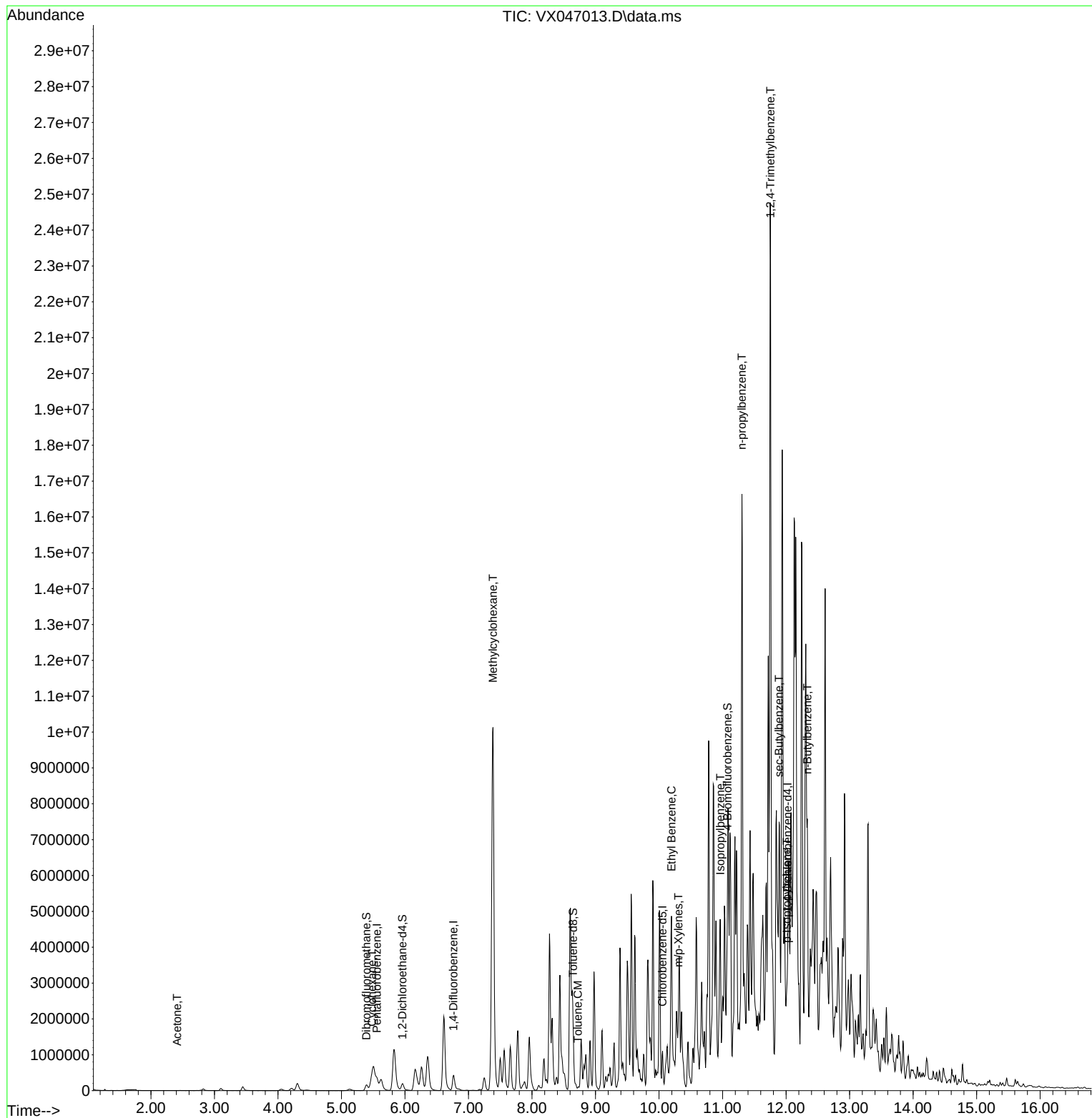
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Data File : VX047013.D
Acq On : 15 Jul 2025 19:13
Operator : JC/MD
Sample : Q2600-11
Misc : 5.06g/5mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 27 Sample Multiplier: 1

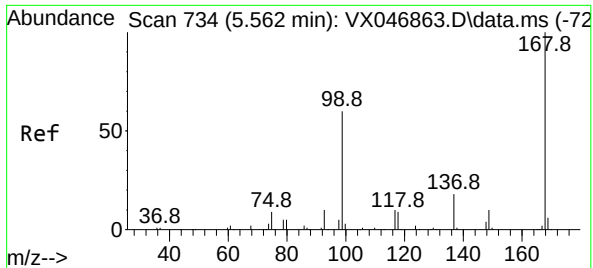
Instrument :
MSVOA_X
ClientSampleId :
END-OF-TRENCH

Quant Time: Jul 16 02:34:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 03 05:51:11 2025
Response via : Initial Calibration

Manual Integrations
APPROVED

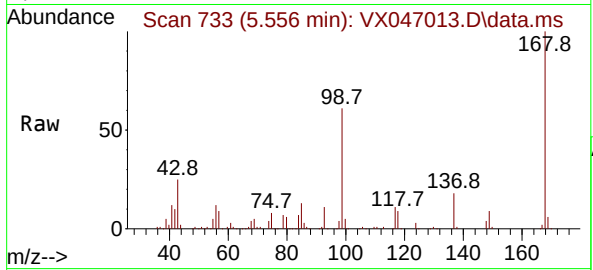
Reviewed By : John Carlone 07/16/2025
Supervised By : Mahesh Dadoda 07/16/2025





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.556 min Scan# 71
Delta R.T. -0.006 min
Lab File: VX047013.D
Acq: 15 Jul 2025 19:13

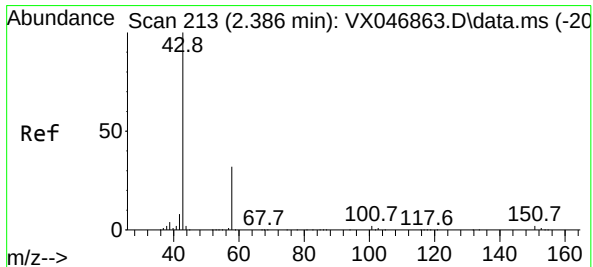
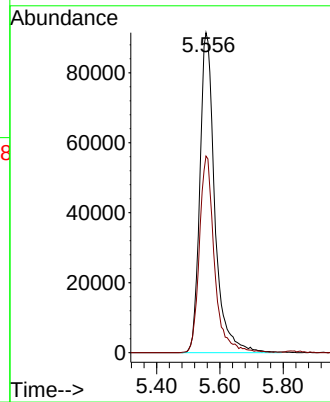
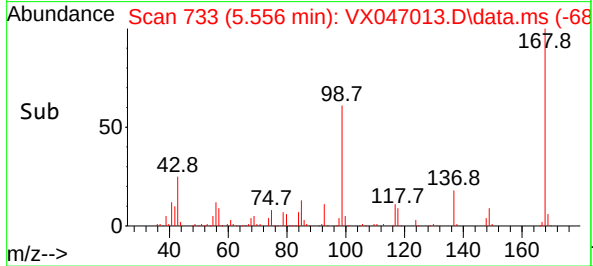
Instrument :
MSVOA_X
ClientSampleId :
END-OF-TRENCH



Tgt Ion:168 Resp: 30081
Ion Ratio Lower Upper
168 100
99 61.4 48.8 73.2

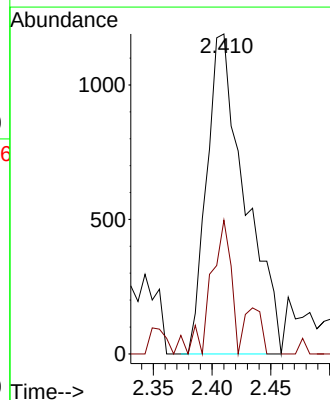
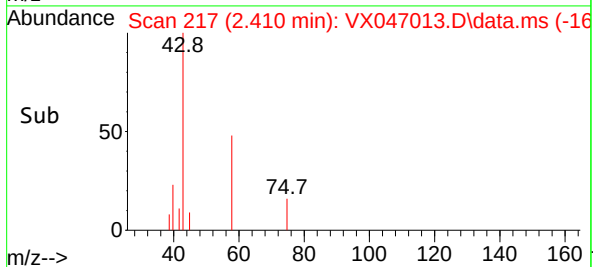
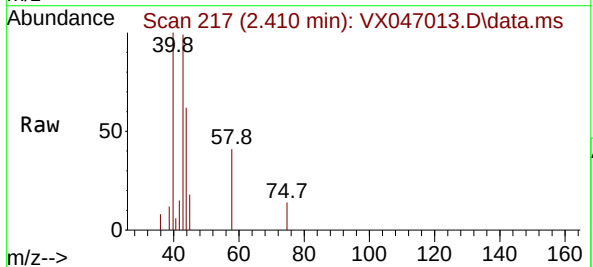
Manual Integrations
APPROVED

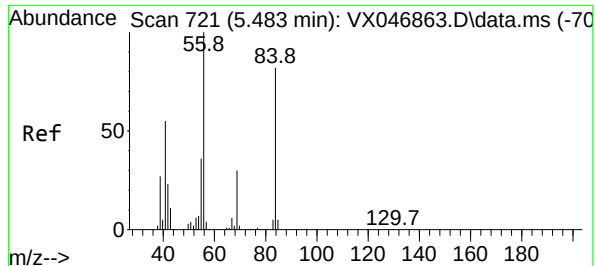
Reviewed By :John Carlone 07/16/2025
Supervised By :Mahesh Dadoda 07/16/2025



#16
Acetone
Concen: 2.182 ug/l
RT: 2.410 min Scan# 217
Delta R.T. 0.024 min
Lab File: VX047013.D
Acq: 15 Jul 2025 19:13

Tgt Ion: 43 Resp: 2693
Ion Ratio Lower Upper
43 100
58 41.8 25.8 38.6#





#31

Cyclohexane

Concen: 65.295 ug/l

RT: 5.483 min Scan# 721

Delta R.T. -0.000 min

Lab File: VX047013.D

Acq: 15 Jul 2025 19:13

Instrument :

MSVOA_X

ClientSampleId :

END-OF-TRENCH

Tgt Ion: 56 Resp: 37091

Ion Ratio Lower Upper

56 100

69 25.4 24.0 36.0

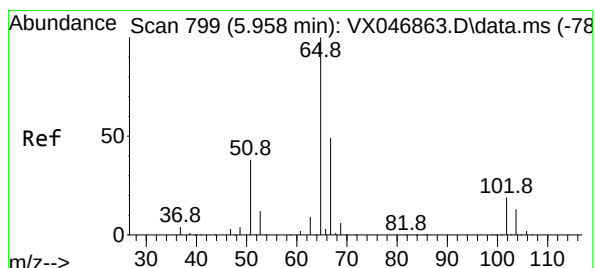
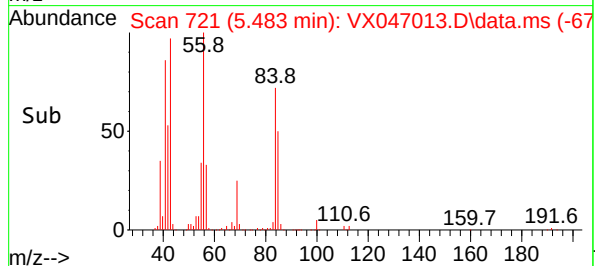
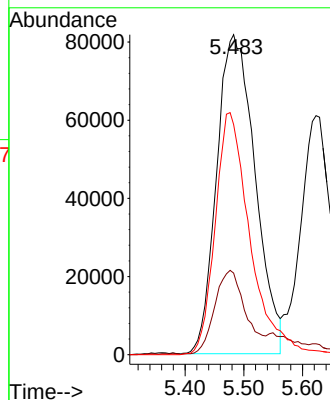
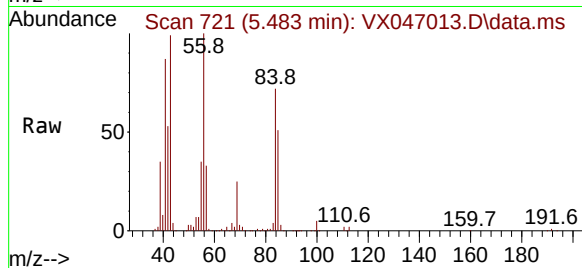
84 72.1 66.5 99.7

Manual Integrations

APPROVED

Reviewed By :John Carlone 07/16/2025

Supervised By :Mahesh Dadoda 07/16/2025



#33

1,2-Dichloroethane-d4

Concen: 49.738 ug/l

RT: 5.958 min Scan# 799

Delta R.T. -0.000 min

Lab File: VX047013.D

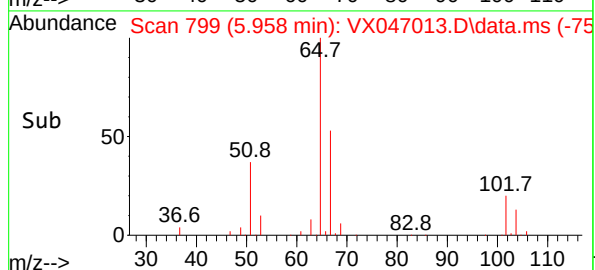
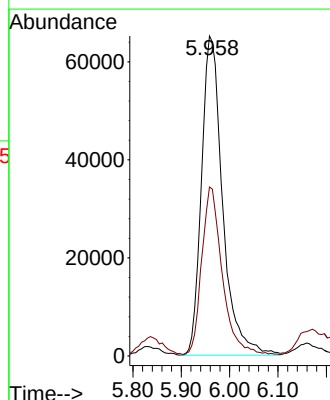
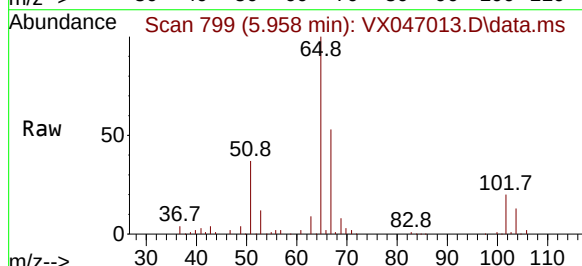
Acq: 15 Jul 2025 19:13

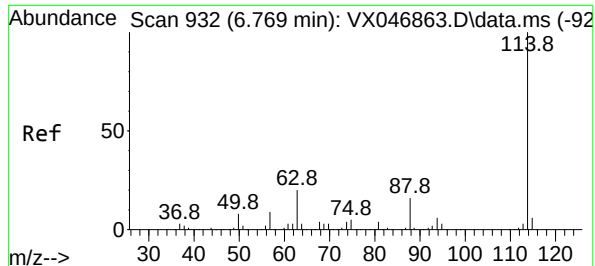
Tgt Ion: 65 Resp: 197659

Ion Ratio Lower Upper

65 100

67 50.9 0.0 105.2





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 6.763 min Scan# 91

Delta R.T. -0.006 min

Lab File: VX047013.D

Acq: 15 Jul 2025 19:13

Instrument :

MSVOA_X

ClientSampleId :

END-OF-TRENCH

Tgt Ion:114 Resp: 484192

Ion Ratio Lower Upper

114 100

63 21.0 0.0 40.4

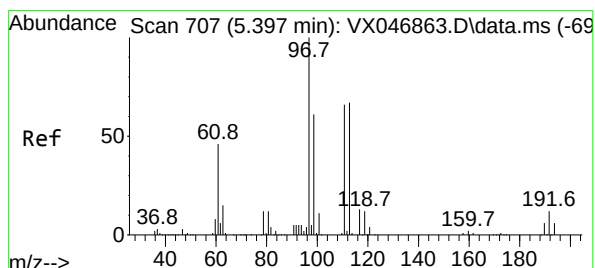
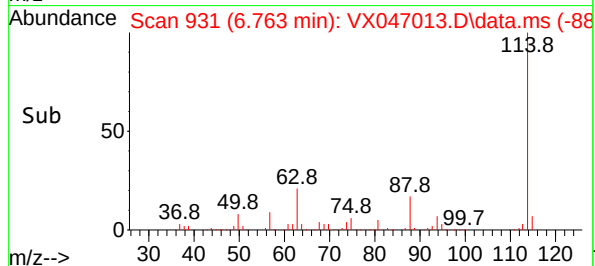
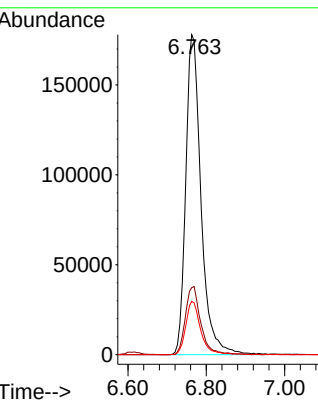
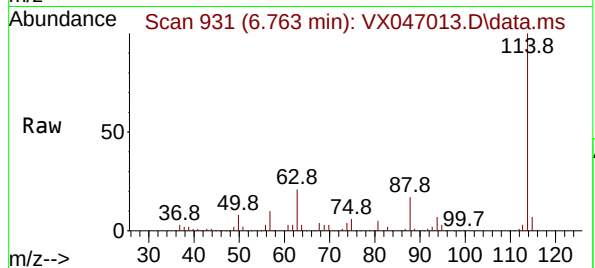
88 16.7 0.0 31.0

Manual Integrations

APPROVED

Reviewed By :John Carlone 07/16/2025

Supervised By :Mahesh Dadoda 07/16/2025



#35

Dibromofluoromethane

Concen: 48.754 ug/l

RT: 5.391 min Scan# 706

Delta R.T. -0.006 min

Lab File: VX047013.D

Acq: 15 Jul 2025 19:13

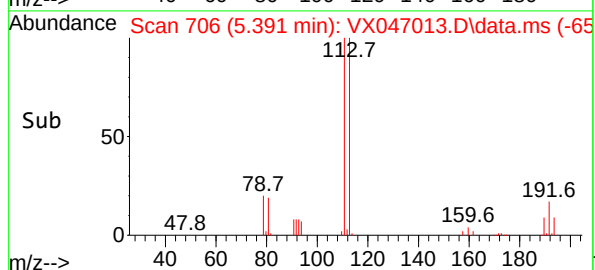
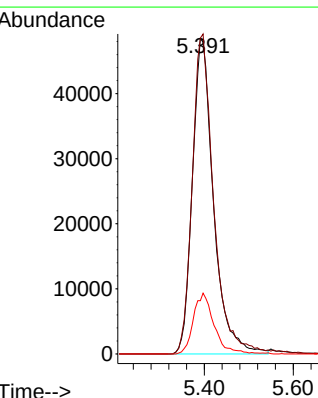
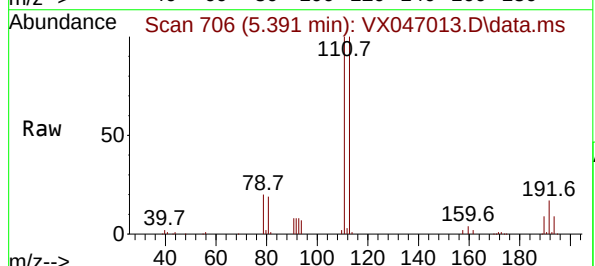
Tgt Ion:113 Resp: 160240

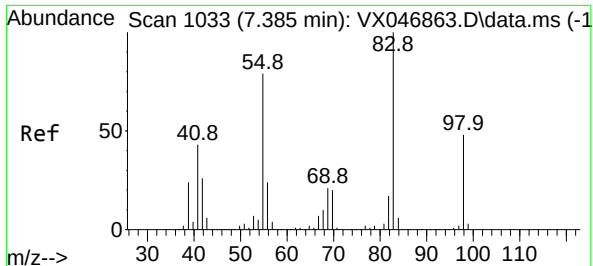
Ion Ratio Lower Upper

113 100

111 103.2 81.2 121.8

192 18.9 15.3 22.9





#39

Methylcyclohexane

Concen: 884.098 ug/l

RT: 7.385 min Scan# 1033

Delta R.T. -0.000 min

Lab File: VX047013.D

Acq: 15 Jul 2025 19:13

Instrument :

MSVOA_X

ClientSampleId :

END-OF-TRENCH

Tgt Ion: 83 Resp: 490418

Ion Ratio Lower Upper

83 100

55 83.4 63.0 94.4

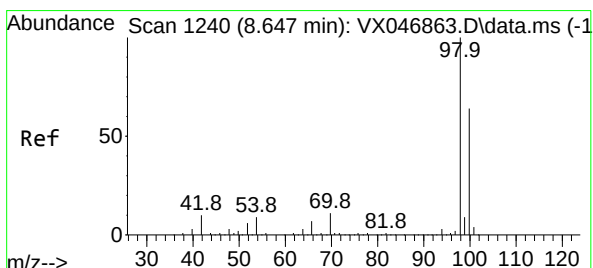
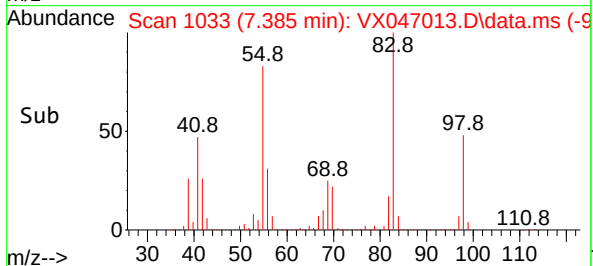
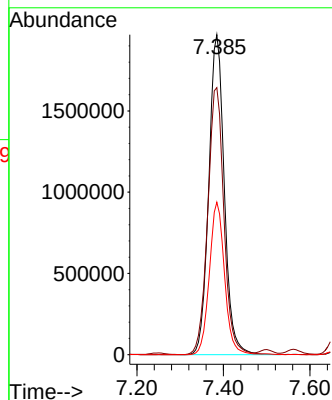
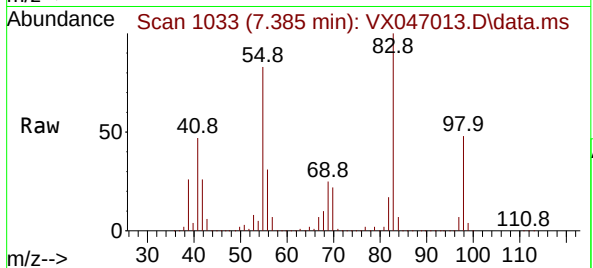
98 47.6 38.5 57.7

Manual Integrations

APPROVED

Reviewed By :John Carlone 07/16/2025

Supervised By :Mahesh Dadoda 07/16/2025



#50

Toluene-d8

Concen: 46.740 ug/l

RT: 8.647 min Scan# 1240

Delta R.T. -0.000 min

Lab File: VX047013.D

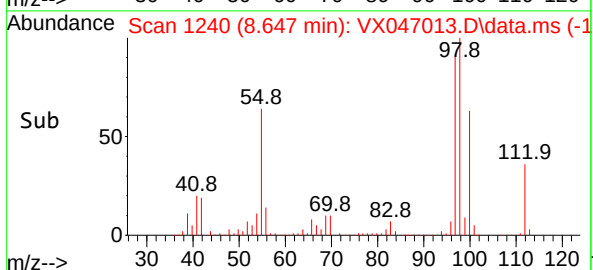
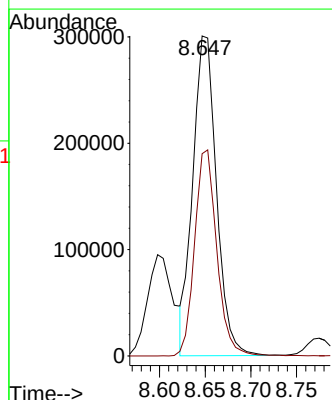
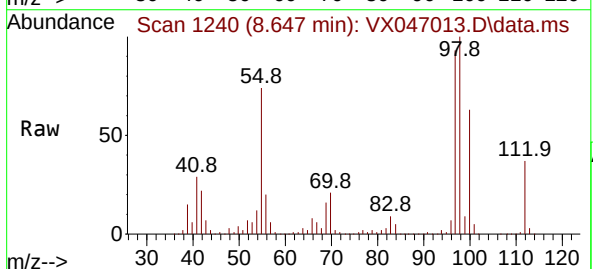
Acq: 15 Jul 2025 19:13

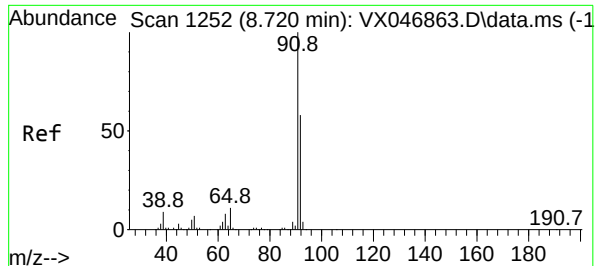
Tgt Ion: 98 Resp: 542010

Ion Ratio Lower Upper

98 100

100 60.6 53.0 79.6





#52

Toluene

Concen: 1.611 ug/l

RT: 8.720 min Scan# 1252

Delta R.T. -0.000 min

Lab File: VX047013.D

Acq: 15 Jul 2025 19:13

Instrument :

MSVOA_X

ClientSampleId :

END-OF-TRENCH

Tgt Ion: 92 Resp: 13380

Ion Ratio Lower Upper

92 100

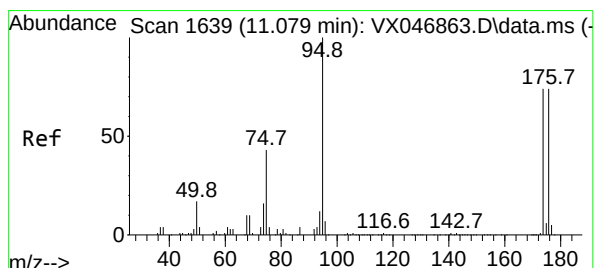
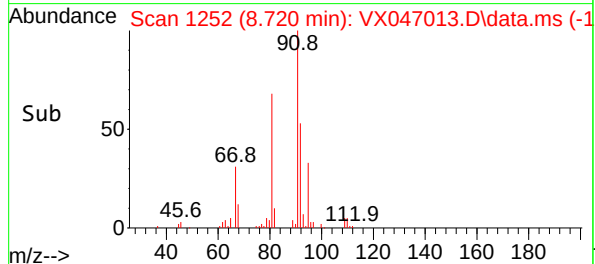
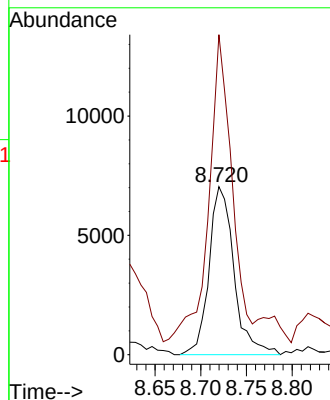
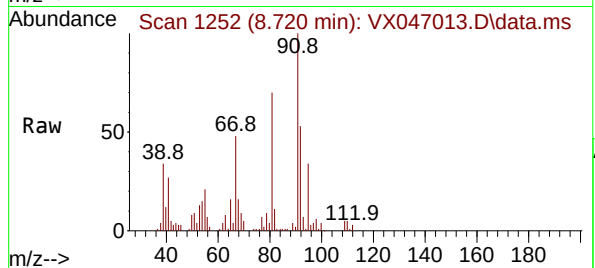
91 162.8 137.9 206.9

Manual Integrations

APPROVED

Reviewed By :John Carlone 07/16/2025

Supervised By :Mahesh Dadoda 07/16/2025



#62

4-Bromofluorobenzene

Concen: 58.209 ug/l

RT: 11.079 min Scan# 1639

Delta R.T. -0.000 min

Lab File: VX047013.D

Acq: 15 Jul 2025 19:13

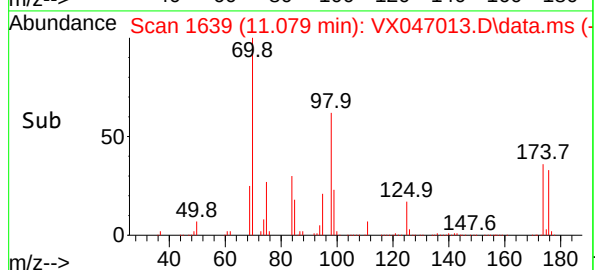
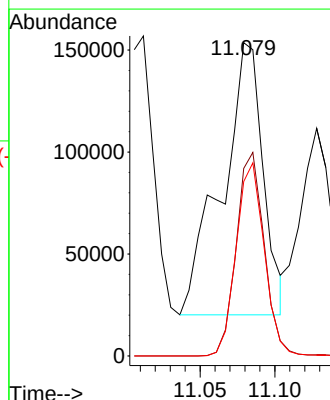
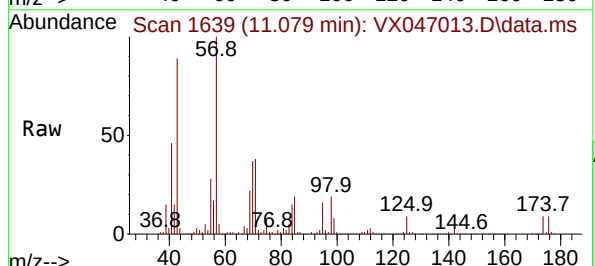
Tgt Ion: 95 Resp: 256542

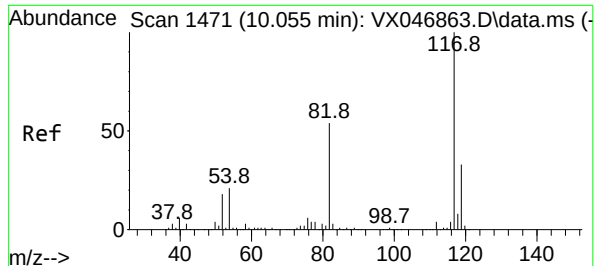
Ion Ratio Lower Upper

95 100

174 50.8 0.0 152.0

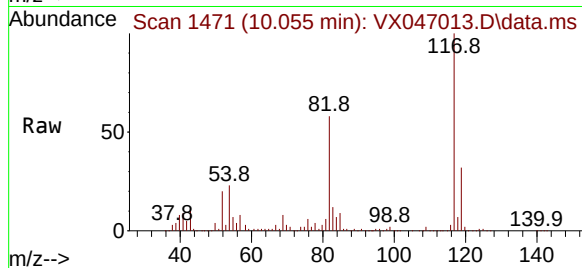
176 48.4 0.0 145.2





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.055 min Scan# 1471
Delta R.T. -0.000 min
Lab File: VX047013.D
Acq: 15 Jul 2025 19:13

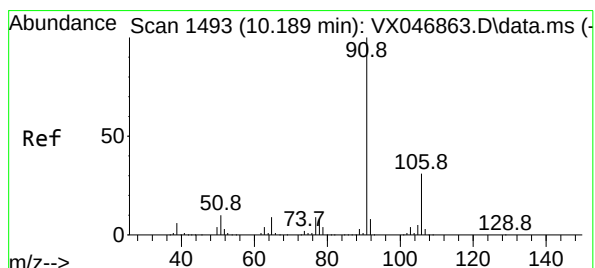
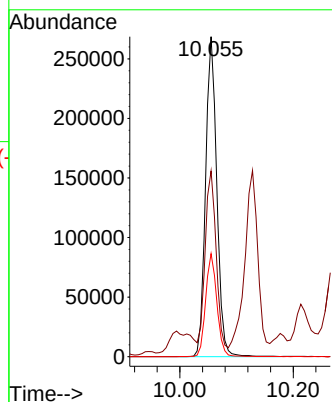
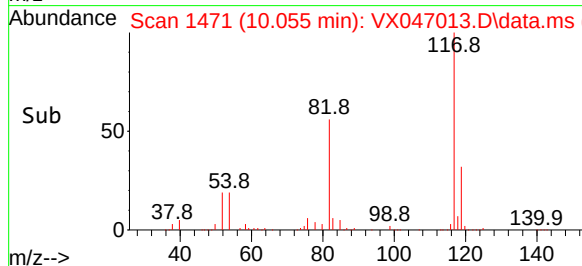
Instrument :
MSVOA_X
ClientSampleId :
END-OF-TRENCH



Tgt Ion:117 Resp: 36933
Ion Ratio Lower Upper
117 100
82 51.0 43.3 64.9
119 32.2 26.4 39.6

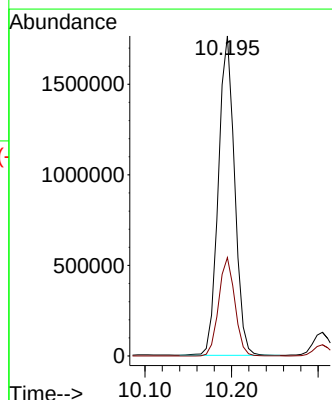
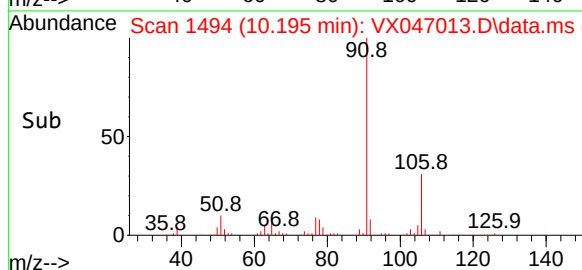
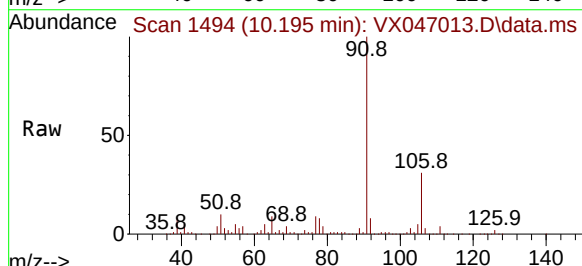
Manual Integrations
APPROVED

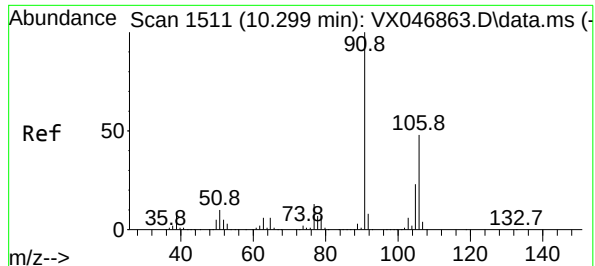
Reviewed By :John Carlone 07/16/2025
Supervised By :Mahesh Dadoda 07/16/2025



#67
Ethyl Benzene
Concen: 168.033 ug/l
RT: 10.195 min Scan# 1494
Delta R.T. 0.006 min
Lab File: VX047013.D
Acq: 15 Jul 2025 19:13

Tgt Ion: 91 Resp: 2297804
Ion Ratio Lower Upper
91 100
106 30.8 24.4 36.6





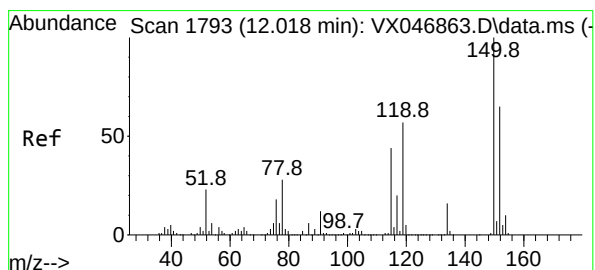
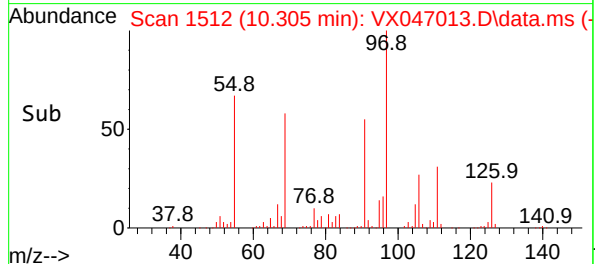
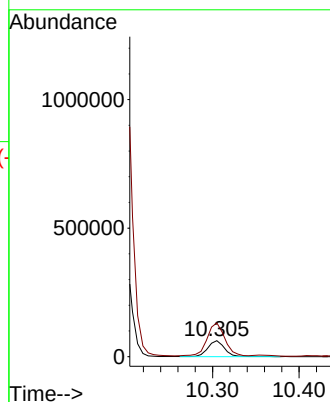
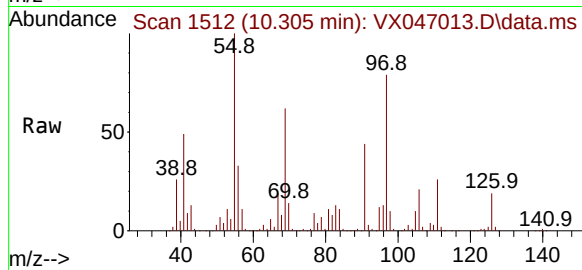
#68
m/p-Xylenes
Concen: 16.043 ug/l
RT: 10.305 min Scan# 11
Delta R.T. 0.006 min
Lab File: VX047013.D
Acq: 15 Jul 2025 19:13

Instrument :
MSVOA_X
ClientSampleId :
END-OF-TRENCH

Tgt Ion:106 Resp: 8266
Ion Ratio Lower Upper
106 100
91 216.0 164.6 246.8

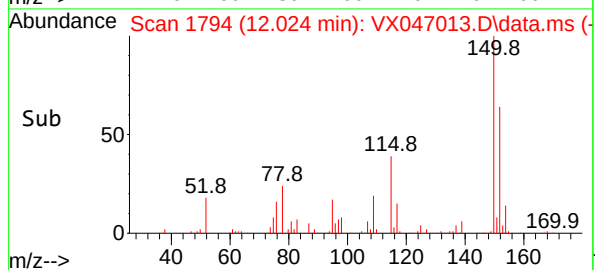
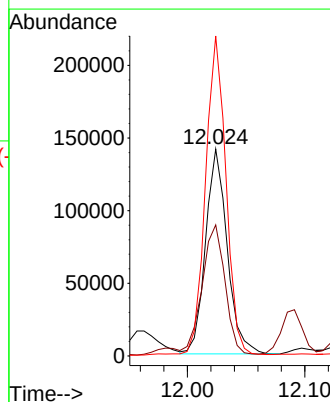
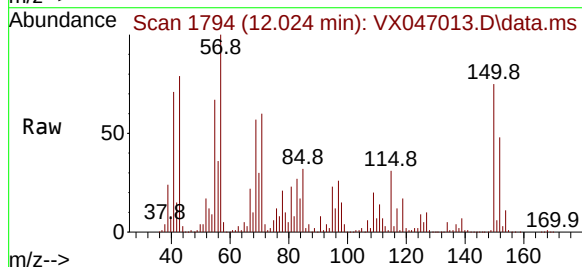
Manual Integrations
APPROVED

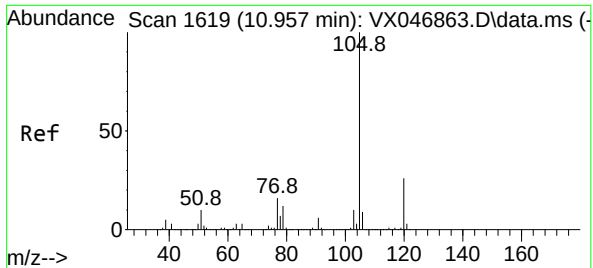
Reviewed By :John Carlone 07/16/2025
Supervised By :Mahesh Dadoda 07/16/2025



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.024 min Scan# 1794
Delta R.T. 0.006 min
Lab File: VX047013.D
Acq: 15 Jul 2025 19:13

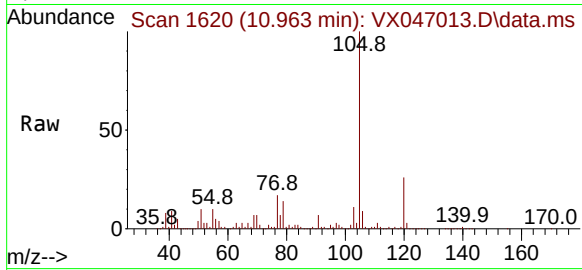
Tgt Ion:152 Resp: 180753
Ion Ratio Lower Upper
152 100
115 66.2 42.4 127.1
150 148.0 0.0 349.2





#73
Isopropylbenzene
Concen: 142.749 ug/l
RT: 10.963 min Scan# 1620
Delta R.T. 0.006 min
Lab File: VX047013.D
Acq: 15 Jul 2025 19:13

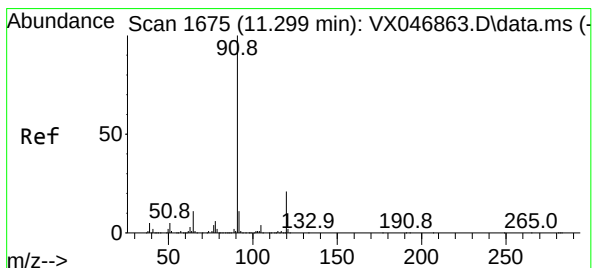
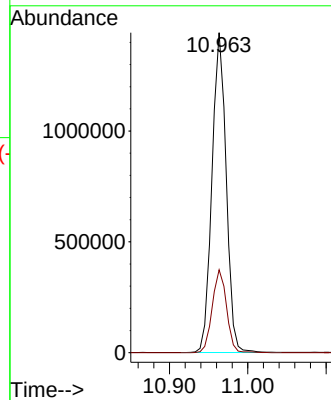
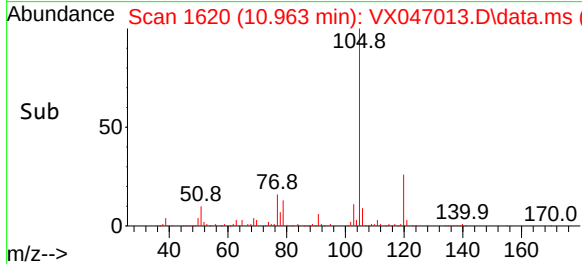
Instrument :
MSVOA_X
ClientSampleId :
END-OF-TRENCH



Tgt Ion:105 Resp: 1813824
Ion Ratio Lower Upper
105 100
120 26.0 13.2 39.5

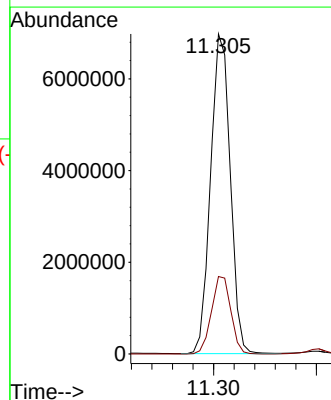
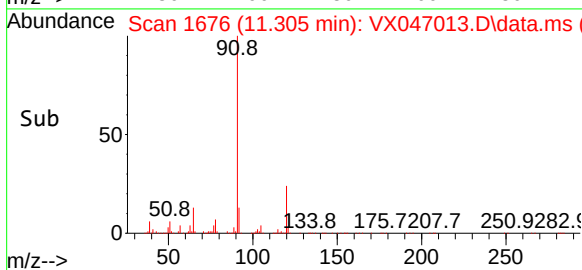
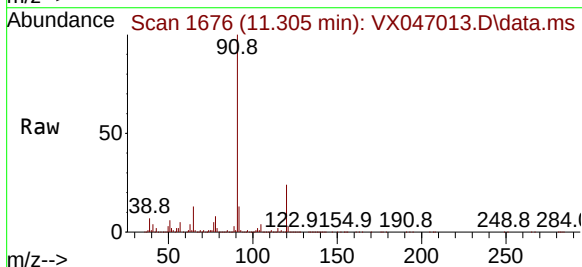
Manual Integrations
APPROVED

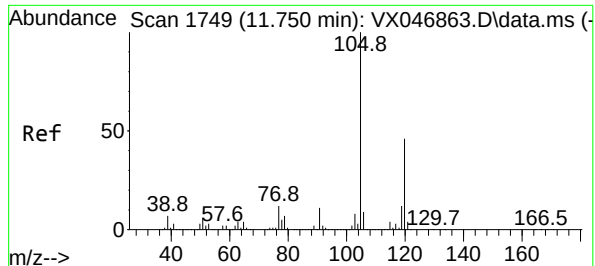
Reviewed By :John Carlone 07/16/2025
Supervised By :Mahesh Dadoda 07/16/2025



#78
n-propylbenzene
Concen: 604.100 ug/l
RT: 11.305 min Scan# 1676
Delta R.T. 0.006 min
Lab File: VX047013.D
Acq: 15 Jul 2025 19:13

Tgt Ion: 91 Resp: 9255670
Ion Ratio Lower Upper
91 100
120 23.8 11.2 33.5





#84

1,2,4-Trimethylbenzene

Concen: 445.179 ug/l

RT: 11.756 min Scan# 1750

Delta R.T. 0.006 min

Lab File: VX047013.D

Acq: 15 Jul 2025 19:13

Instrument :

MSVOA_X

ClientSampleId :

END-OF-TRENCH

Tgt Ion:105 Resp: 464574

Ion Ratio Lower Upper

105 100

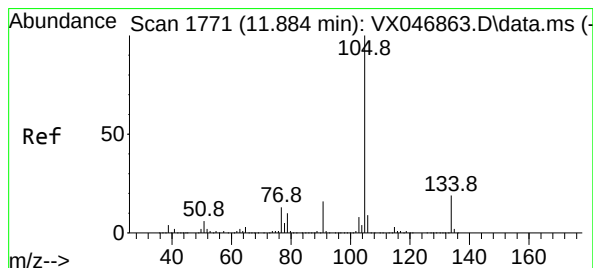
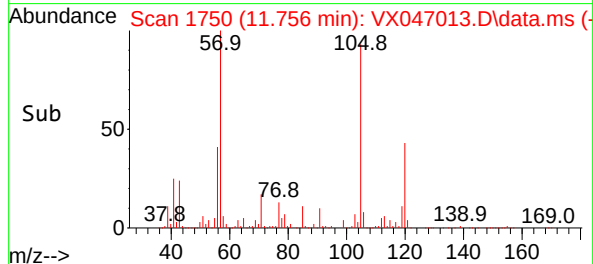
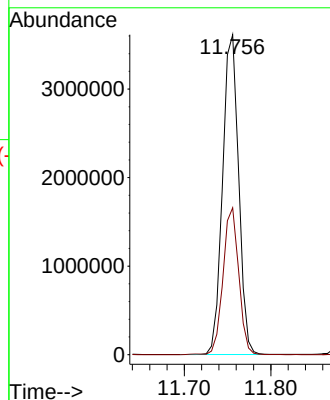
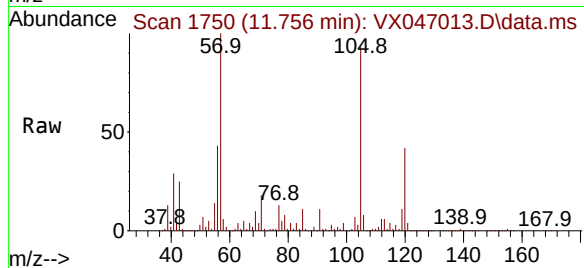
120 45.0 23.3 69.8

Manual Integrations

APPROVED

Reviewed By :John Carlone 07/16/2025

Supervised By :Mahesh Dadoda 07/16/2025



#85

sec-Butylbenzene

Concen: 108.891 ug/l

RT: 11.890 min Scan# 1772

Delta R.T. 0.006 min

Lab File: VX047013.D

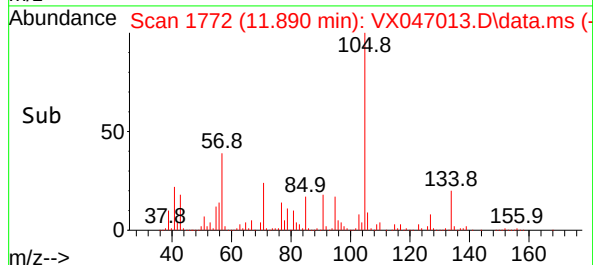
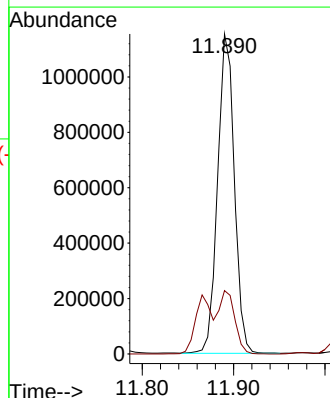
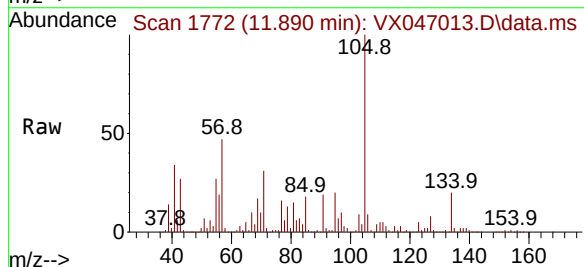
Acq: 15 Jul 2025 19:13

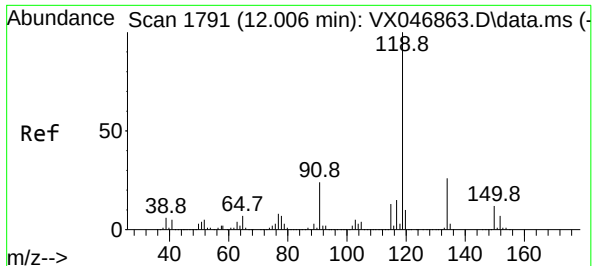
Tgt Ion:105 Resp: 1464013

Ion Ratio Lower Upper

105 100

134 18.9 9.9 29.7





#86

p-Isopropyltoluene

Concen: 19.490 ug/l

RT: 12.012 min Scan# 1791

Delta R.T. 0.006 min

Lab File: VX047013.D

Acq: 15 Jul 2025 19:13

Instrument :

MSVOA_X

ClientSampleId :

END-OF-TRENCH

Tgt Ion:119 Resp: 219440

Ion Ratio Lower Upper

119 100

134 26.3 13.0 39.0

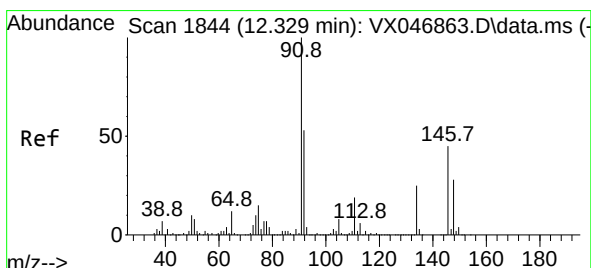
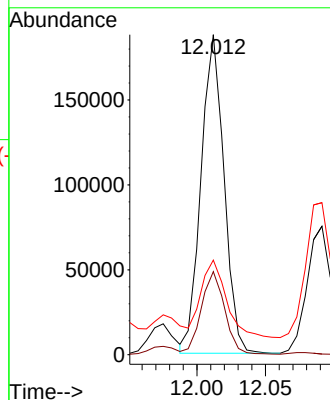
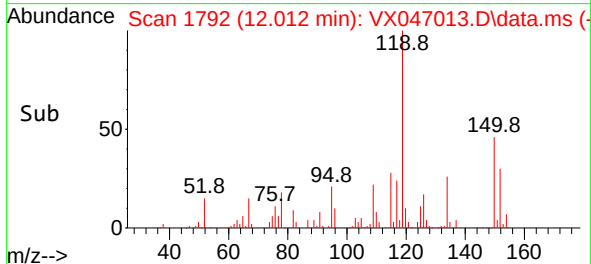
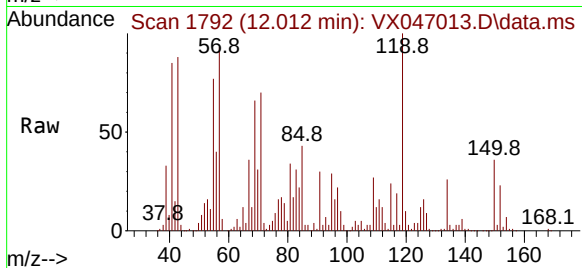
91 26.7 12.0 36.1

Manual Integrations

APPROVED

Reviewed By :John Carlone 07/16/2025

Supervised By :Mahesh Dadoda 07/16/2025



#89

n-Butylbenzene

Concen: 140.281 ug/l m

RT: 12.335 min Scan# 1845

Delta R.T. 0.006 min

Lab File: VX047013.D

Acq: 15 Jul 2025 19:13

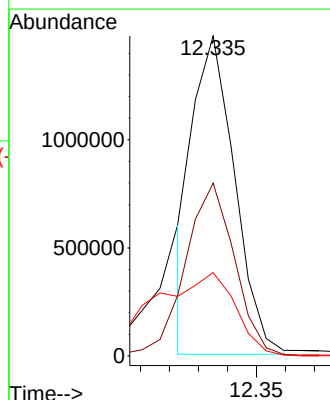
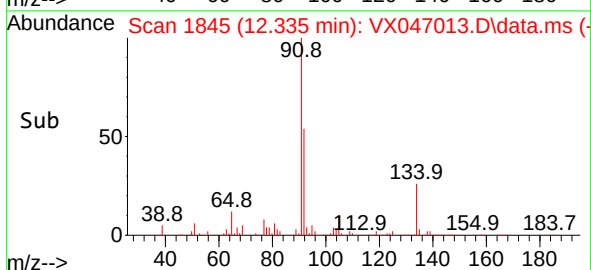
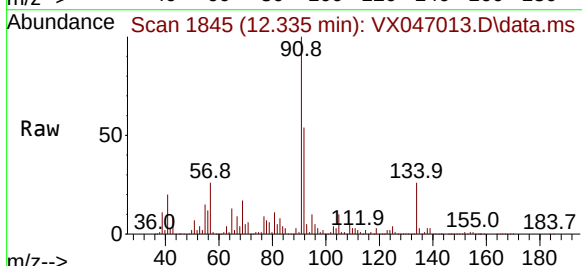
Tgt Ion: 91 Resp: 1484029

Ion Ratio Lower Upper

91 100

92 63.8 27.0 81.0

134 50.9 12.8 38.4#



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
 Data File : VX047013.D
 Acq On : 15 Jul 2025 19:13
 Operator : JC/MD
 Sample : Q2600-11
 Misc : 5.06g/5mL/100uL/5.00mL/MSVOA_X/MEOH
 ALS Vial : 27 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 END-OF-TRENCH

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\82X070225W.M
 Title : SW846 8260

Signal : TIC: VX047013.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.501	712	724	738	rVV5	671130	3708821	14.06%	0.592%
2	5.623	740	744	764	rVB2	305435	954696	3.62%	0.152%
3	5.824	765	777	792	rBV2	1135758	3911123	14.83%	0.624%
4	6.159	821	832	842	rBV3	590432	2171338	8.23%	0.346%
5	6.257	842	848	856	rVV	654197	1963200	7.44%	0.313%
6	6.354	856	864	893	rVB	944633	3065655	11.62%	0.489%
7	6.610	893	906	924	rBV	2061523	5593577	21.20%	0.892%
8	6.763	924	931	958	rVB	422801	1284872	4.87%	0.205%
9	7.385	1020	1033	1046	rBV	10110788	26379260	100.00%	4.208%
10	7.501	1046	1052	1057	rVV	811563	1641045	6.22%	0.262%
11	7.562	1057	1062	1071	rVB	1037345	2205359	8.36%	0.352%
12	7.659	1071	1078	1088	rVB	1199026	2502364	9.49%	0.399%
13	7.775	1088	1097	1106	rBV2	1644409	3626583	13.75%	0.579%
14	7.958	1120	1127	1143	rVB2	1484987	3543719	13.43%	0.565%
15	8.189	1158	1165	1169	rBV	809212	1558968	5.91%	0.249%
16	8.275	1174	1179	1183	rBV	4168053	7130280	27.03%	1.138%
17	8.317	1183	1186	1193	rVB2	1850618	3049123	11.56%	0.486%
18	8.439	1200	1206	1216	rBV	3022283	6299954	23.88%	1.005%
19	8.604	1226	1233	1236	rBV2	5061210	9914078	37.58%	1.582%
20	8.775	1255	1261	1265	rBV	1345252	2213119	8.39%	0.353%
21	8.848	1270	1273	1279	rVB	933197	1480514	5.61%	0.236%
22	8.915	1279	1284	1289	rBV	1318917	2042912	7.74%	0.326%
23	8.976	1289	1294	1306	rVB2	3281347	5699002	21.60%	0.909%
24	9.104	1306	1315	1320	rBV	1644748	2882152	10.93%	0.460%
25	9.293	1339	1346	1352	rVB	1242865	1987623	7.53%	0.317%
26	9.384	1352	1361	1366	rBV	3891212	6469227	24.52%	1.032%
27	9.500	1375	1380	1386	rBV3	3339570	6681916	25.33%	1.066%
28	9.561	1386	1390	1395	rVB	5083103	7389938	28.01%	1.179%
29	9.616	1395	1399	1404	rBV	3933571	6264855	23.75%	0.999%
30	9.756	1418	1422	1427	rVB	850747	1329120	5.04%	0.212%
31	9.823	1427	1433	1438	rBV3	3490286	7500283	28.43%	1.197%
32	9.903	1442	1446	1451	rVB	5517390	7759055	29.41%	1.238%
33	10.006	1459	1463	1468	rVB	4687386	6475332	24.55%	1.033%
34	10.055	1468	1471	1475	rVB	911169	1124859	4.26%	0.179%
35	10.128	1475	1483	1487	rBV4	1045328	2436707	9.24%	0.389%
36	10.195	1487	1494	1500	rBV	4373021	7035481	26.67%	1.122%

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
 Data File : VX047013.D
 Acq On : 15 Jul 2025 19:13
 Operator : JC/MD
 Sample : Q2600-11
 Misc : 5.06g/5mL/100uL/5.00mL/MSVOA_X/MEOH
 ALS Vial : 27 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 END-OF-TRENCH

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\82X070225W.M
 Title : SW846 8260

37	10.274	1503	1507	1510	rBV2	1503025	2391981	9.07%	0.382%
38	10.317	1510	1514	1517	rVV2	2810554	3778222	14.32%	0.603%
39	10.354	1517	1520	1531	rVB2	2091480	3978278	15.08%	0.635%
40	10.457	1531	1537	1545	rBV	1254072	2284691	8.66%	0.364%
41	10.537	1545	1550	1552	rBV3	979095	1494831	5.67%	0.238%
42	10.585	1552	1558	1566	rVB3	4239706	7494066	28.41%	1.196%
43	10.671	1566	1572	1577	rBV2	2431485	4477799	16.97%	0.714%
44	10.713	1577	1579	1582	rVB2	1017093	1061727	4.02%	0.169%
45	10.756	1582	1586	1587	rBV	2025849	2623949	9.95%	0.419%
46	10.780	1587	1590	1594	rVB	8763866	10971270	41.59%	1.750%
47	10.854	1594	1602	1606	rBV2	7553197	12823687	48.61%	2.046%
48	10.896	1606	1609	1614	rVB	3786425	5099869	19.33%	0.814%
49	10.963	1614	1620	1623	rBV2	3827308	5806816	22.01%	0.926%
50	11.000	1623	1626	1628	rBV2	1297450	1647010	6.24%	0.263%
51	11.030	1628	1631	1635	rVB	3054351	3535811	13.40%	0.564%
52	11.085	1635	1640	1643	rBV3	5762104	9018061	34.19%	1.439%
53	11.116	1643	1645	1651	rVB3	6233155	9383590	35.57%	1.497%
54	11.195	1651	1658	1660	rBV	6120624	9382744	35.57%	1.497%
55	11.219	1660	1662	1666	rVB3	4984725	5688937	21.57%	0.908%
56	11.305	1670	1676	1680	rBV	14920774	19902563	75.45%	3.175%
57	11.390	1686	1690	1694	rBV3	2760039	4089519	15.50%	0.652%
58	11.433	1694	1697	1701	rVV	5122791	6198576	23.50%	0.989%
59	11.482	1701	1705	1714	rVB3	4269045	7781358	29.50%	1.241%
60	11.634	1722	1730	1734	rBV6	3011725	6849041	25.96%	1.093%
61	11.689	1734	1739	1741	rBV2	3839513	5365994	20.34%	0.856%
62	11.719	1741	1744	1746	rBV	8808686	9824683	37.24%	1.567%
63	11.750	1746	1749	1754	rVB	20819818	26039320	98.71%	4.154%
64	11.847	1760	1765	1770	rBV2	6792237	14279334	54.13%	2.278%
65	11.890	1770	1772	1776	rVV	5658498	7587152	28.76%	1.210%
66	11.939	1776	1780	1784	rVV2	15507282	22645340	85.85%	3.613%
67	11.975	1784	1786	1790	rVB3	2471590	2628886	9.97%	0.419%
68	12.042	1790	1797	1800	rBV4	4041346	6886547	26.11%	1.099%
69	12.079	1800	1803	1806	rBV2	3953419	5110024	19.37%	0.815%
70	12.128	1806	1811	1813	rVV	11448577	15869358	60.16%	2.532%
71	12.152	1813	1815	1826	rVB	14139544	23150083	87.76%	3.693%
72	12.244	1826	1830	1836	rBV2	14001470	21115924	80.05%	3.369%
73	12.311	1836	1841	1844	rBV3	10299678	18319320	69.45%	2.923%
74	12.384	1849	1853	1855	rVV	2934925	5105516	19.35%	0.815%
75	12.426	1857	1860	1864	rVV2	4589024	8738074	33.12%	1.394%
76	12.475	1864	1868	1874	rVV5	4524050	10346021	39.22%	1.651%

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
 Data File : VX047013.D
 Acq On : 15 Jul 2025 19:13
 Operator : JC/MD
 Sample : Q2600-11
 Misc : 5.06g/5mL/100uL/5.00mL/MSVOA_X/MEOH
 ALS Vial : 27 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 END-OF-TRENCH

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\82X070225W.M
 Title : SW846 8260

77	12.542	1874	1879	1880	rVV2	2519340	4342887	16.46%	0.693%
78	12.585	1883	1886	1887	rVV2	3149191	4231466	16.04%	0.675%
79	12.615	1887	1891	1894	rVV	12973270	17646069	66.89%	2.815%
80	12.646	1894	1896	1900	rVV2	3236745	5089956	19.30%	0.812%
81	12.701	1900	1905	1913	rVV5	5484029	12726615	48.24%	2.030%
82	12.780	1913	1918	1921	rVV4	1317026	3222501	12.22%	0.514%
83	12.817	1921	1924	1931	rVV4	2961711	5678988	21.53%	0.906%
84	12.890	1931	1936	1938	rVV2	3217680	4965289	18.82%	0.792%
85	12.920	1938	1941	1946	rVV	7259882	10247529	38.85%	1.635%
86	12.981	1946	1951	1954	rVV3	2061329	3935693	14.92%	0.628%
87	13.024	1954	1958	1966	rVB4	2324723	5375854	20.38%	0.858%
88	13.091	1966	1969	1974	rBV2	1027669	1789496	6.78%	0.285%
89	13.140	1974	1977	1979	rVV2	1084874	1384177	5.25%	0.221%
90	13.170	1979	1982	1985	rVV	2203713	2570806	9.75%	0.410%
91	13.256	1992	1996	1998	rBV2	759041	1066570	4.04%	0.170%
92	13.292	1998	2002	2009	rVV2	6402017	9662803	36.63%	1.542%
93	13.371	2012	2015	2020	rVV2	1223154	2343639	8.88%	0.374%
94	13.420	2020	2023	2033	rVB6	1461906	3023981	11.46%	0.482%
95	13.506	2033	2037	2040	rBV2	753764	1150378	4.36%	0.184%
96	13.579	2046	2049	2053	rVB3	1561737	1991344	7.55%	0.318%
97	13.664	2060	2063	2071	rVB3	1038260	2198351	8.33%	0.351%
98	13.841	2088	2092	2098	rVB3	1053737	1691498	6.41%	0.270%
99	13.926	2098	2106	2110	rBV5	629729	1308848	4.96%	0.209%
100	14.213	2149	2153	2161	rVB3	587261	1121575	4.25%	0.179%

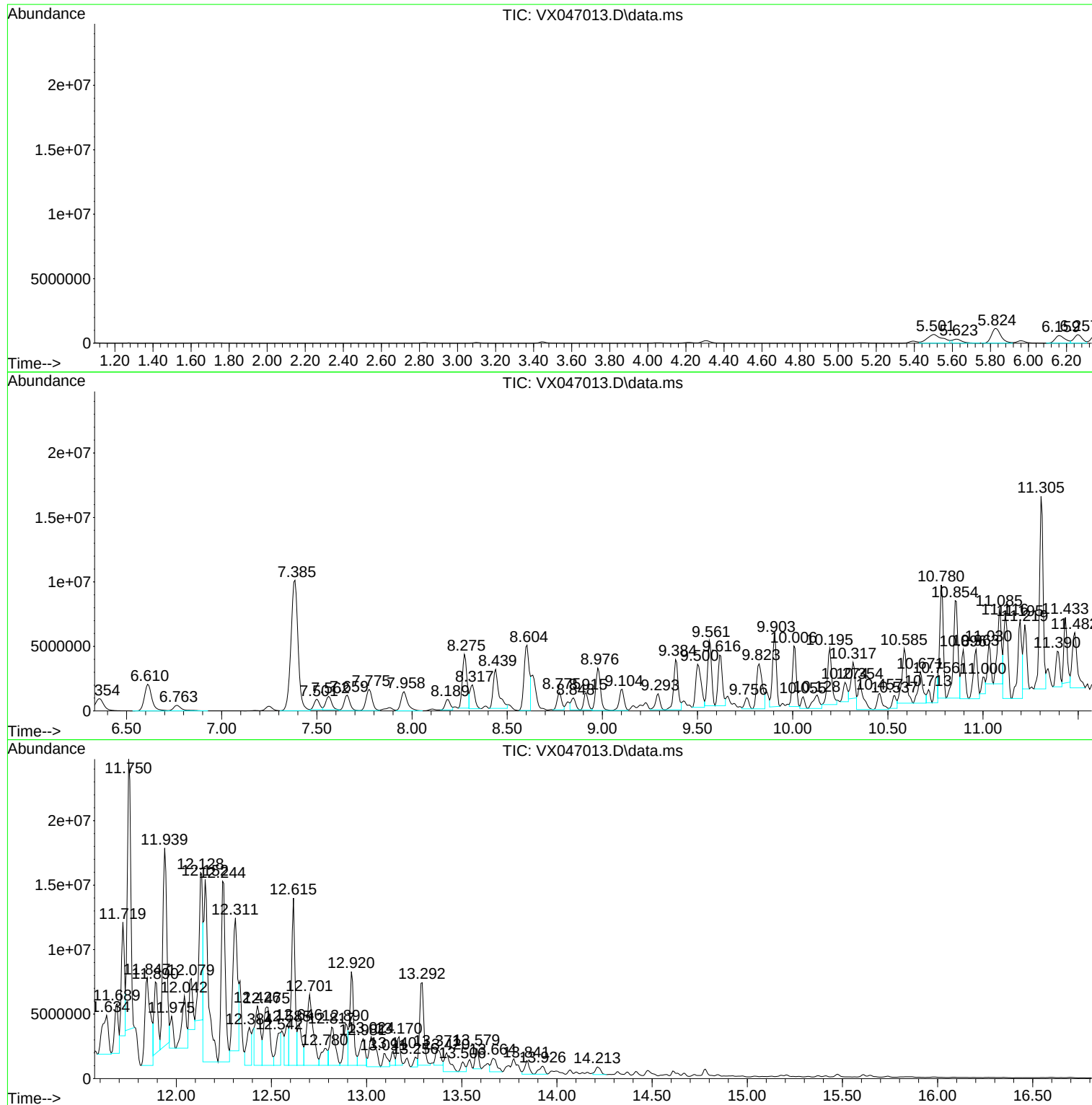
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Data File : VX047013.D
Acq On : 15 Jul 2025 19:13
Operator : JC/MD
Sample : Q2600-11
Misc : 5.06g/5mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 27 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
END-OF-TRENCH

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX047013.D
Acq On : 15 Jul 2025 19:13
Operator : JC/MD
Sample : Q2600-11
Misc : 5.06g/5mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 27 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
END-OF-TRENCH

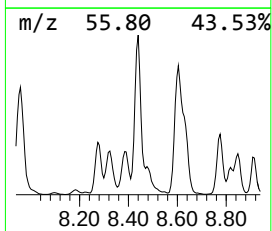
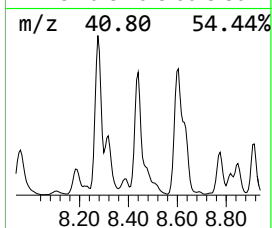
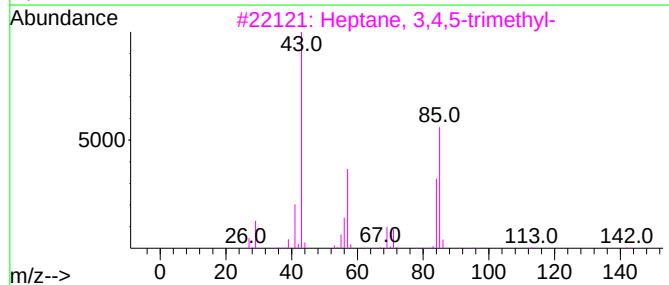
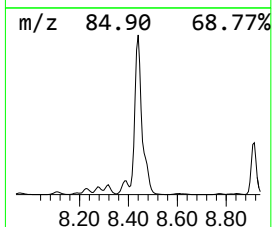
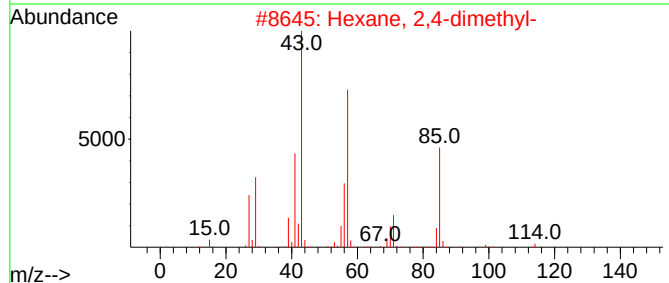
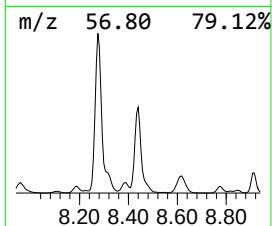
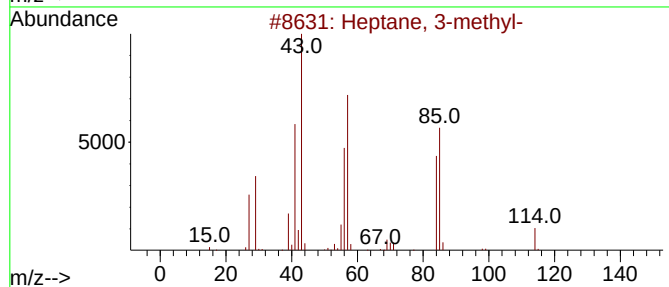
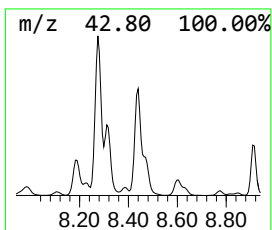
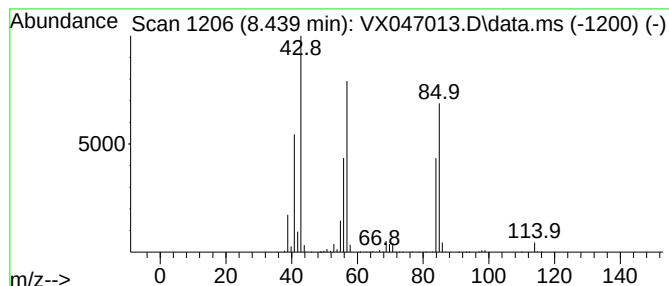
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Quant Title : SW846 8260

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

Peak Number 1 Heptane, 3-methyl- Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.439	280.03 ug/l	6299950	Chlorobenzene-d5	10.055

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Heptane, 3-methyl-	114	C8H18	000589-81-1	94
2			Hexane, 2,4-dimethyl-	114	C8H18	000589-43-5	59
3			Heptane, 3,4,5-trimethyl-	142	C10H22	020278-89-1	59
4			Hexane, 1-(hexyloxy)-2-methyl-	200	C13H28O	074421-17-3	59
5			Butane, 2,2,3-trimethyl-	100	C7H16	000464-06-2	50



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX047013.D
Acq On : 15 Jul 2025 19:13
Operator : JC/MD
Sample : Q2600-11
Misc : 5.06g/5mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 27 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
END-OF-TRENCH

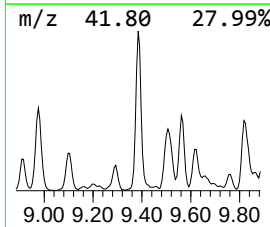
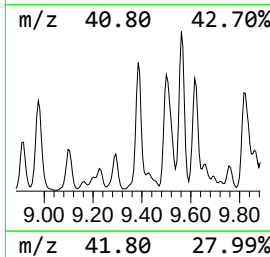
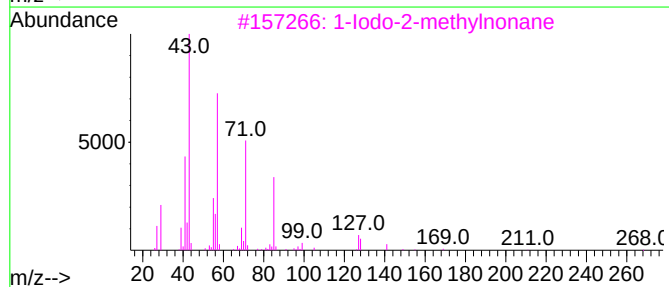
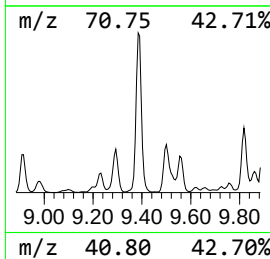
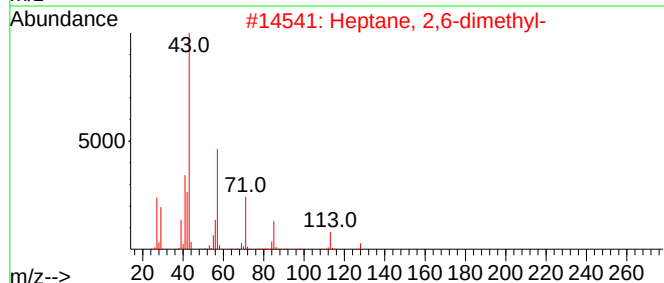
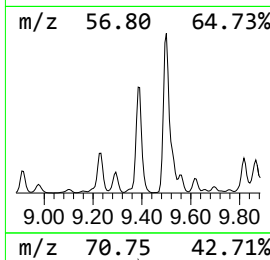
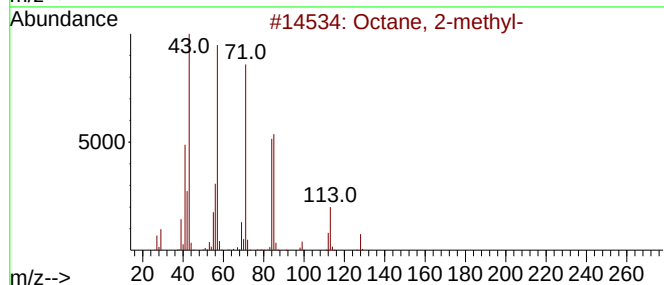
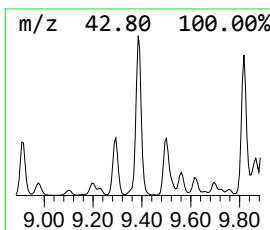
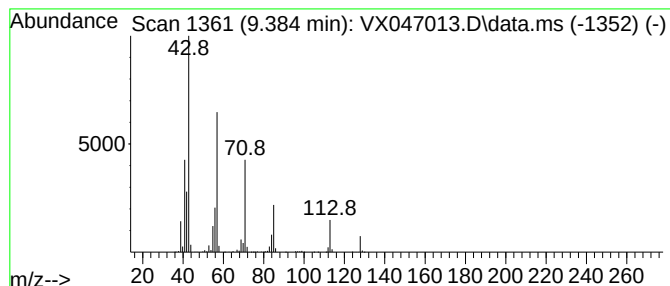
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Quant Title : SW846 8260

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

Peak Number 2 Octane, 2-methyl- Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.384	287.56 ug/l	6469230	Chlorobenzene-d5	10.055

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Octane, 2-methyl-	128	C9H20	003221-61-2	91
2			Heptane, 2,6-dimethyl-	128	C9H20	001072-05-5	70
3			1-Iodo-2-methylnonane	268	C10H21I	1000101-47-9	64
4			Carbonic acid, nonyl vinyl ester	214	C12H22O3	1000383-25-6	64
5			Nonane	128	C9H20	000111-84-2	52



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX047013.D
Acq On : 15 Jul 2025 19:13
Operator : JC/MD
Sample : Q2600-11
Misc : 5.06g/5mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 27 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
END-OF-TRENCH

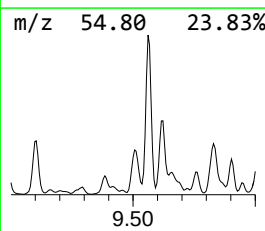
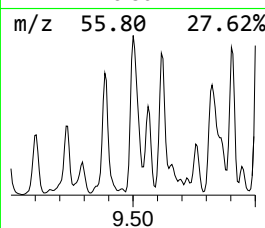
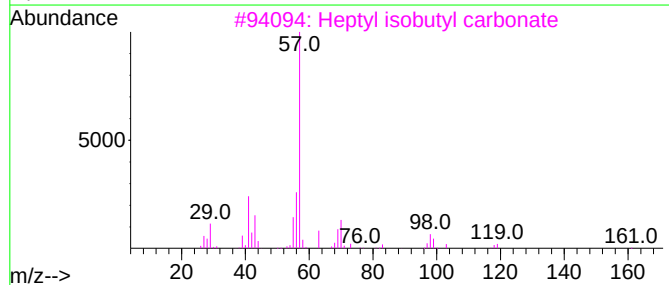
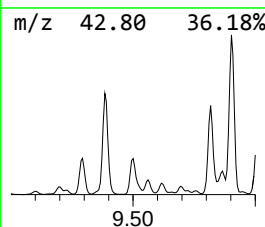
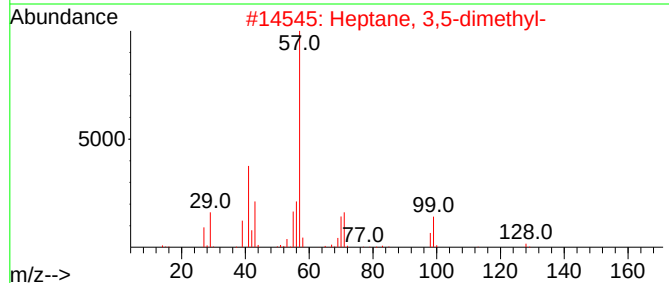
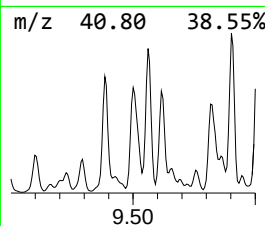
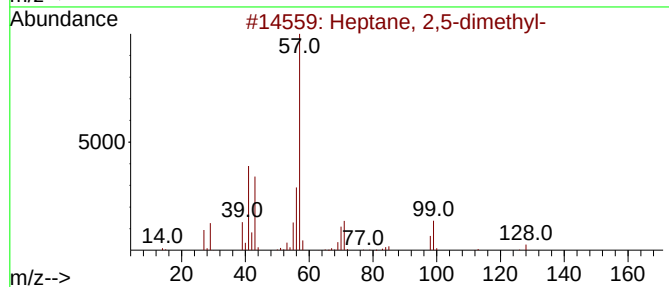
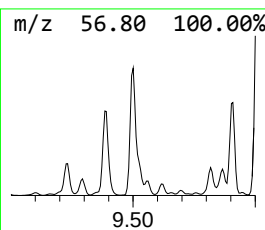
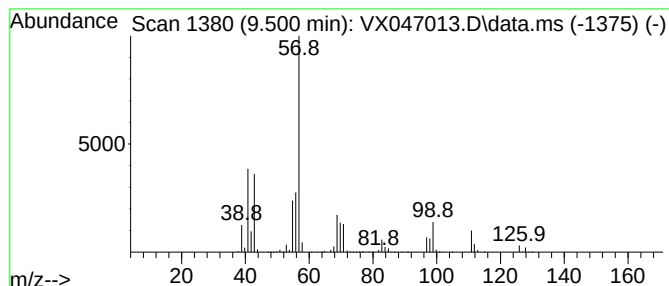
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Quant Title : SW846 8260

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

Peak Number 3 Heptane, 2,5-dimethyl- Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.500	297.01 ug/l	6681920	Chlorobenzene-d5	10.055

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Heptane, 2,5-dimethyl-	128	C9H20	002216-30-0	70
2			Heptane, 3,5-dimethyl-	128	C9H20	000926-82-9	58
3			Heptyl isobutyl carbonate	216	C12H24O3	959068-08-7	53
4			Octane, 3-methyl-	128	C9H20	002216-33-3	52
5			Carbonic acid, butyl heptyl ester	216	C12H24O3	1000314-63-4	50



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX047013.D
Acq On : 15 Jul 2025 19:13
Operator : JC/MD
Sample : Q2600-11
Misc : 5.06g/5mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 27 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
END-OF-TRENCH

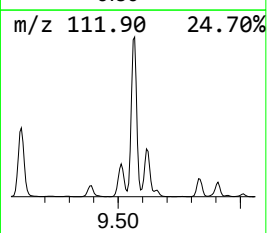
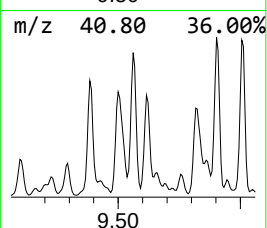
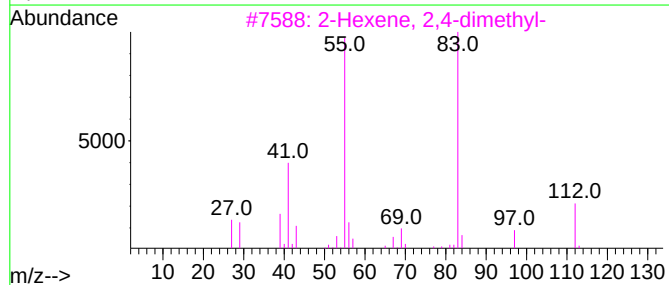
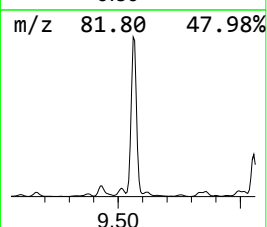
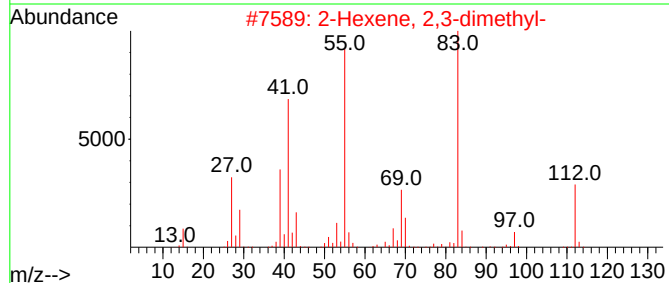
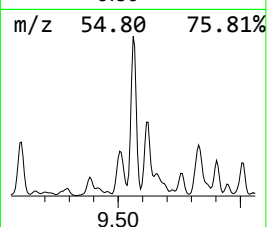
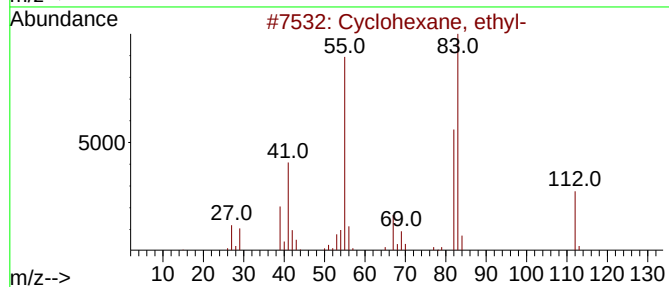
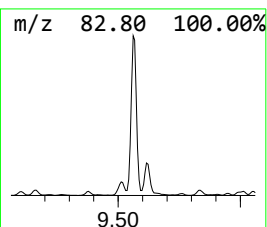
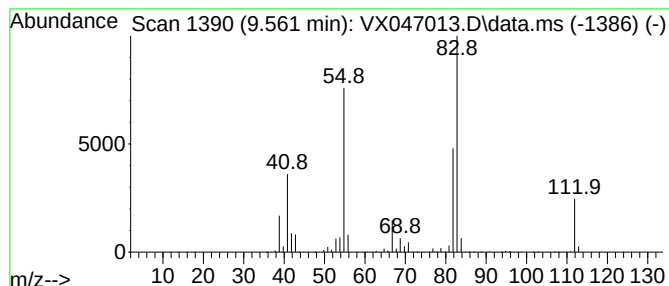
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Quant Title : SW846 8260

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

Peak Number 4 Cyclohexane, ethyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.561	328.48 ug/l	7389940	Chlorobenzene-d5	10.055

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Cyclohexane, ethyl-	112	C8H16	001678-91-7	97
2			2-Hexene, 2,3-dimethyl-	112	C8H16	007145-20-2	64
3			2-Hexene, 2,4-dimethyl-	112	C8H16	014255-23-3	59
4			Oxalic acid, cyclohexyl decyl ester	312	C18H32O4	1000309-31-2	58
5			trans-3,4-Dimethyl-2-hexene	112	C8H16	019550-82-4	53



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX047013.D
Acq On : 15 Jul 2025 19:13
Operator : JC/MD
Sample : Q2600-11
Misc : 5.06g/5mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 27 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
END-OF-TRENCH

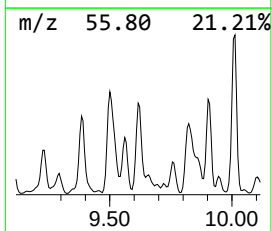
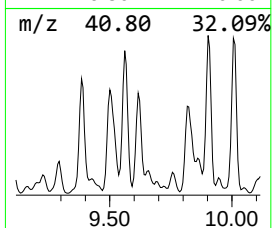
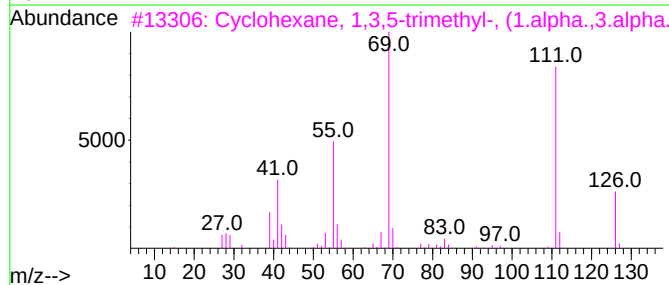
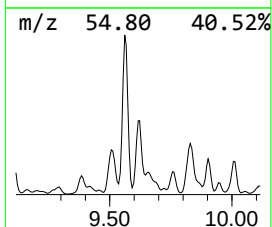
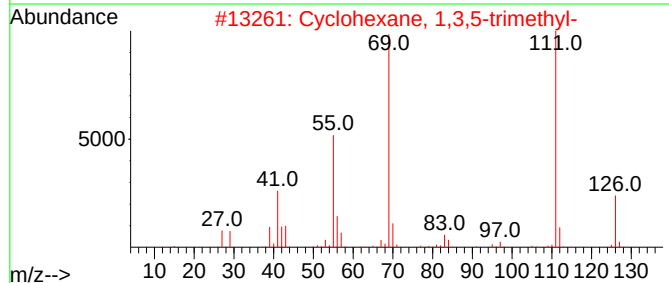
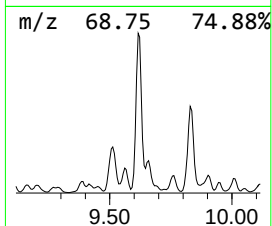
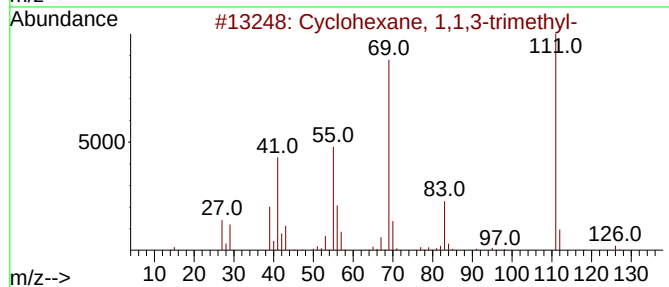
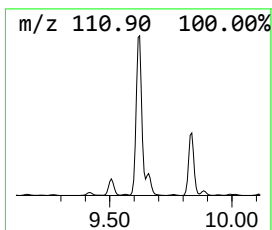
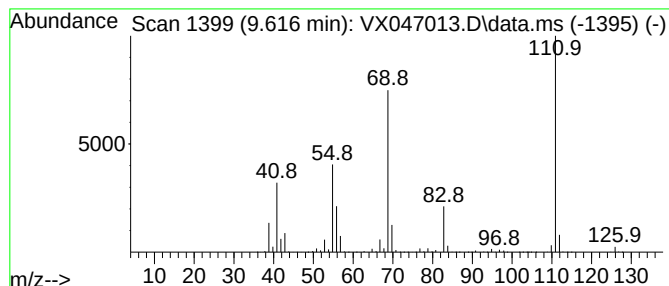
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Quant Title : SW846 8260

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

Peak Number 5 Cyclohexane, 1,1,3-trimethyl- Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.616	278.47 ug/l	6264860	Chlorobenzene-d5	10.055

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Cyclohexane, 1,1,3-trimethyl-	126	C9H18	003073-66-3	97
2			Cyclohexane, 1,3,5-trimethyl-	126	C9H18	001839-63-0	72
3			Cyclohexane, 1,3,5-trimethyl-, (...	126	C9H18	001795-27-3	64
4			Cyclopentane, 1,1,3-trimethyl-3-...	166	C12H22	074421-09-3	59
5			Cyclohexane, 1,3,5-trimethyl-, (...	126	C9H18	001795-26-2	56



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX047013.D
Acq On : 15 Jul 2025 19:13
Operator : JC/MD
Sample : Q2600-11
Misc : 5.06g/5mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 27 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
END-OF-TRENCH

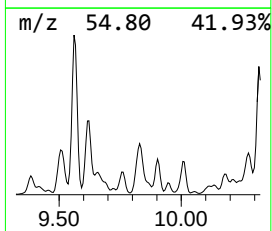
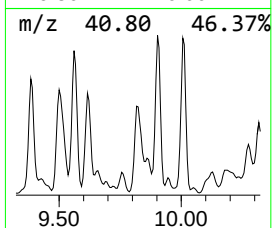
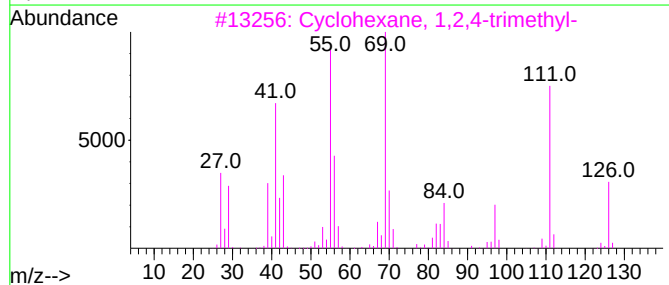
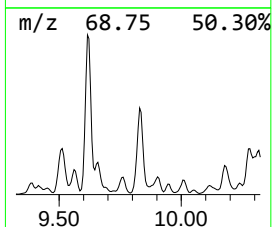
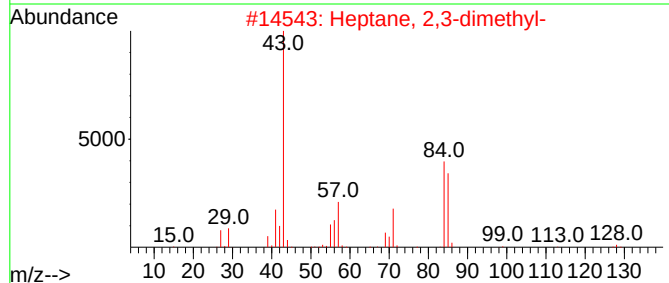
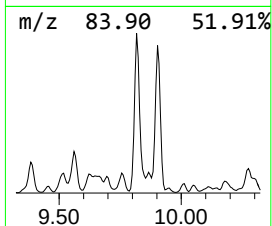
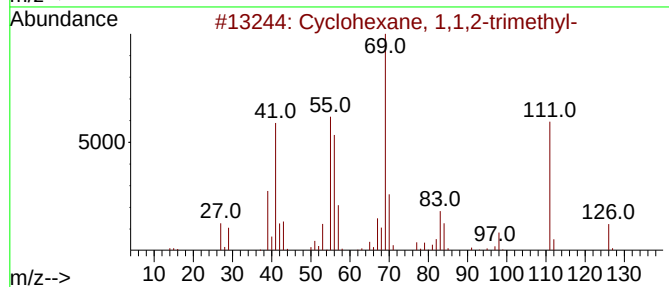
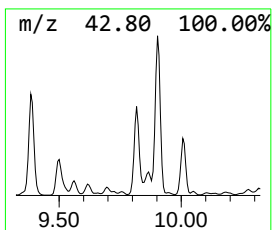
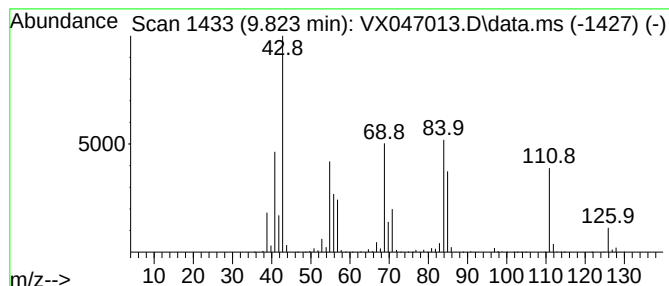
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Quant Title : SW846 8260

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

Peak Number 6 unknown9.823 Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.823	333.39 ug/l	7500280	Chlorobenzene-d5	10.055

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Cyclohexane, 1,1,2-trimethyl-	126	C9H18	007094-26-0	49
2			Heptane, 2,3-dimethyl-	128	C9H20	003074-71-3	46
3			Cyclohexane, 1,2,4-trimethyl-	126	C9H18	002234-75-5	46
4			Heptane, 2-methyl-3-methylene-	126	C9H18	062187-11-5	43
5			Trichloroacetic acid, 4-methylpe...	246	C8H13Cl3O2	1000282-35-2	43



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX047013.D
Acq On : 15 Jul 2025 19:13
Operator : JC/MD
Sample : Q2600-11
Misc : 5.06g/5mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 27 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
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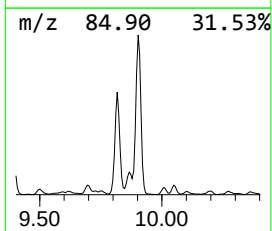
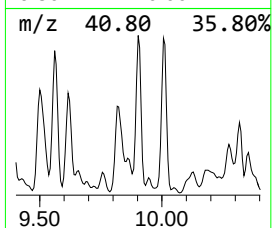
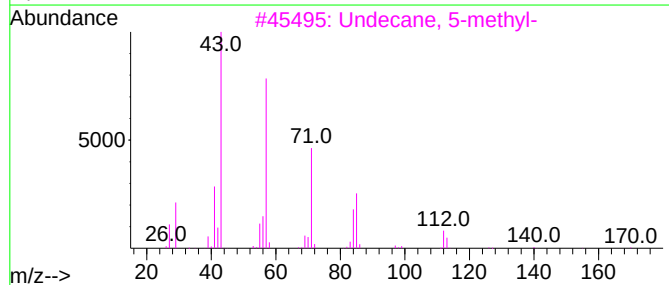
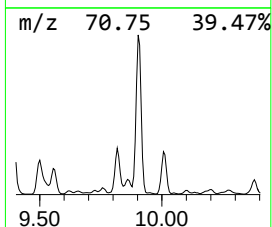
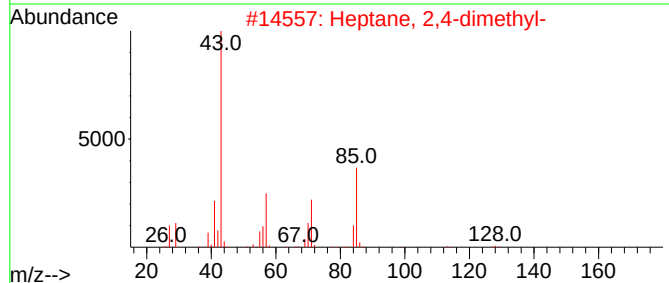
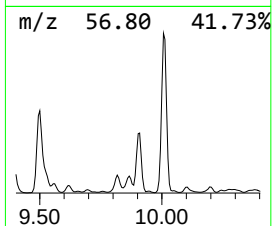
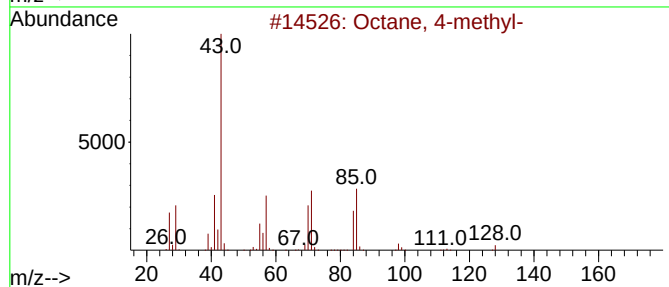
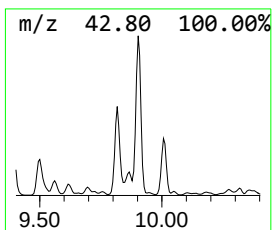
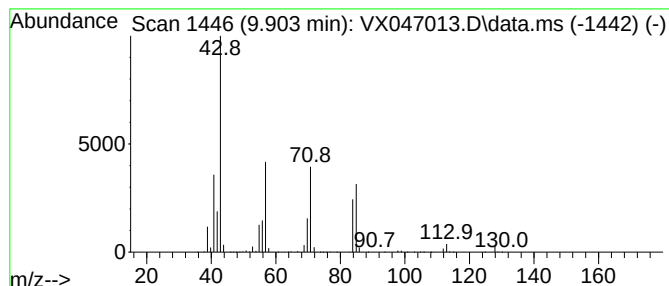
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Quant Title : SW846 8260

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

Peak Number 7 Octane, 4-methyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.903	344.89 ug/l	7759060	Chlorobenzene-d5	10.055

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Octane, 4-methyl-	128	C9H20	002216-34-4	80
2			Heptane, 2,4-dimethyl-	128	C9H20	002213-23-2	72
3			Undecane, 5-methyl-	170	C12H26	001632-70-8	64
4			Hexane, 2,3,4-trimethyl-	128	C9H20	000921-47-1	59
5			Hexane, 3,3-dimethyl-	114	C8H18	000563-16-6	59



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX047013.D
Acq On : 15 Jul 2025 19:13
Operator : JC/MD
Sample : Q2600-11
Misc : 5.06g/5mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 27 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
END-OF-TRENCH

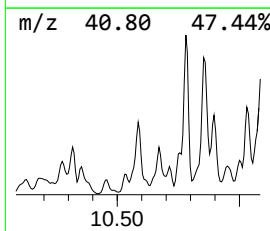
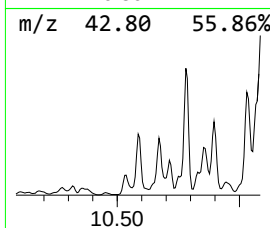
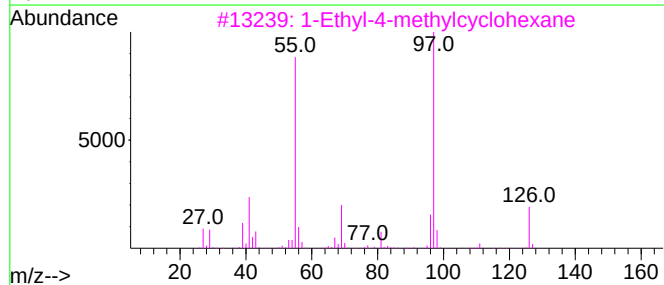
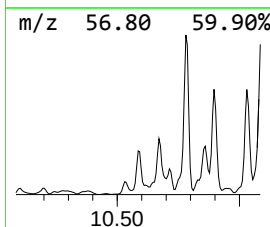
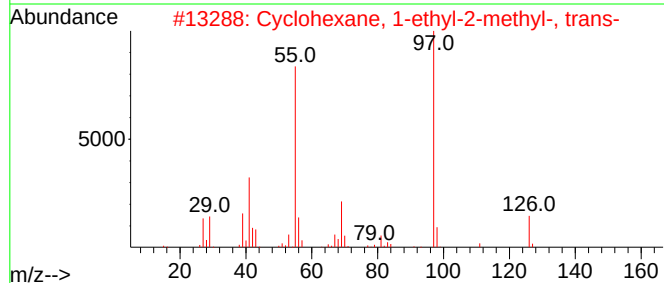
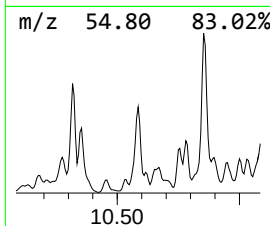
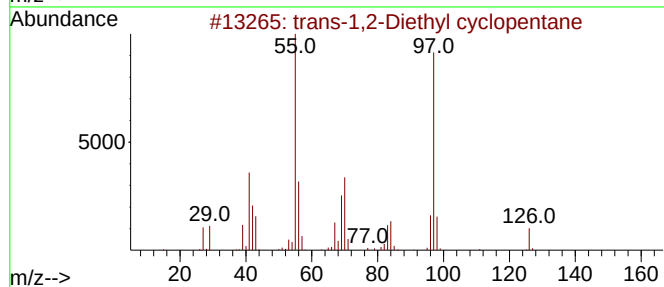
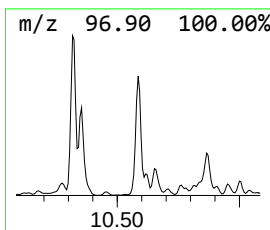
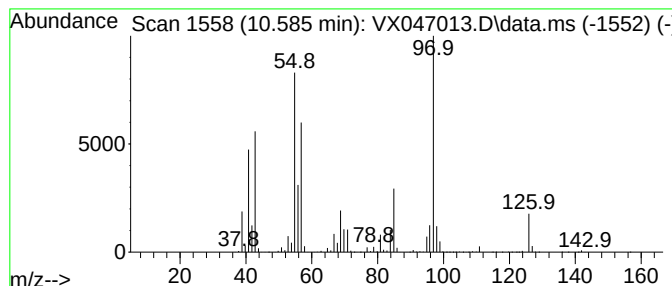
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Quant Title : SW846 8260

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

Peak Number 8 trans-1,2-Diethyl cyclopentane Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.585	333.11 ug/l	7494070	Chlorobenzene-d5	10.055

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			trans-1,2-Diethyl cyclopentane	126	C9H18	000932-40-1	72
2			Cyclohexane, 1-ethyl-2-methyl-, ...	126	C9H18	004923-78-8	70
3			1-Ethyl-4-methylcyclohexane	126	C9H18	003728-56-1	70
4			Cyclohexane, 1-ethyl-2-methyl-	126	C9H18	003728-54-9	62
5			Cyclohexane, 1,4-dimethyl-, trans-	112	C8H16	002207-04-7	59



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX047013.D
Acq On : 15 Jul 2025 19:13
Operator : JC/MD
Sample : Q2600-11
Misc : 5.06g/5mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 27 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
END-OF-TRENCH

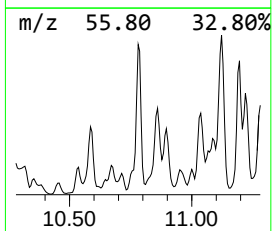
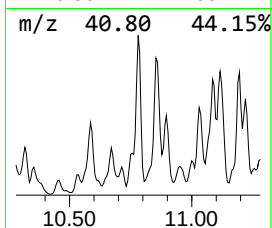
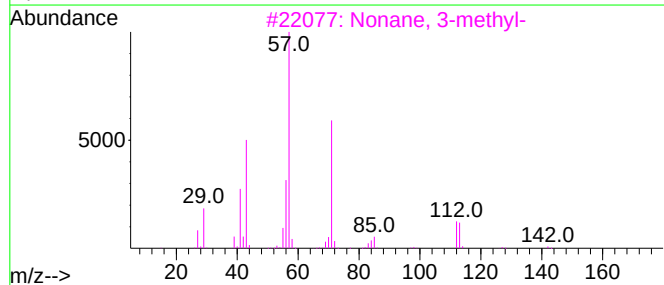
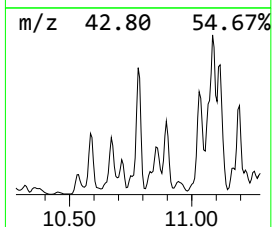
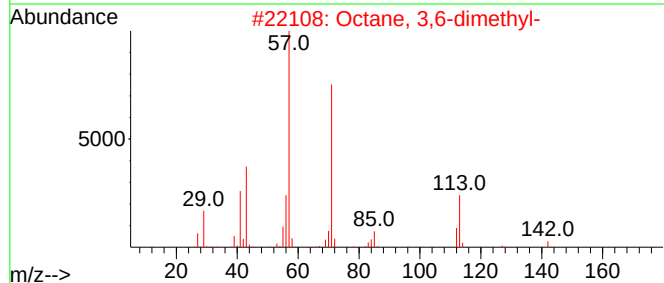
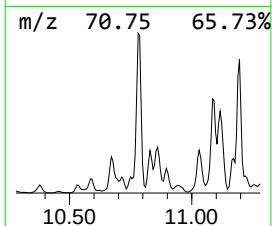
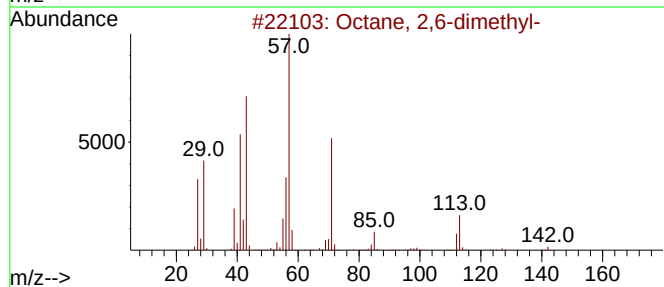
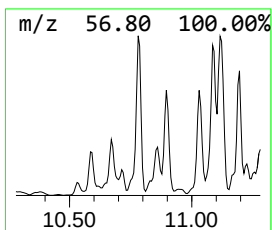
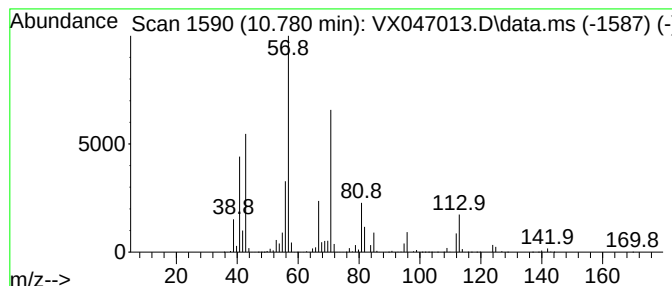
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Quant Title : SW846 8260

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

Peak Number 9 Octane, 2,6-dimethyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.780	487.67 ug/l	10971300	Chlorobenzene-d5	10.055

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Octane, 2,6-dimethyl-	142	C10H22	002051-30-1	76
2			Octane, 3,6-dimethyl-	142	C10H22	015869-94-0	76
3			Nonane, 3-methyl-	142	C10H22	005911-04-6	70
4			Undecane, 6,6-dimethyl-	184	C13H28	017312-76-4	50
5			Butane, 2,2-dimethyl-	86	C6H14	000075-83-2	43



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX047013.D
Acq On : 15 Jul 2025 19:13
Operator : JC/MD
Sample : Q2600-11
Misc : 5.06g/5mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 27 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
END-OF-TRENCH

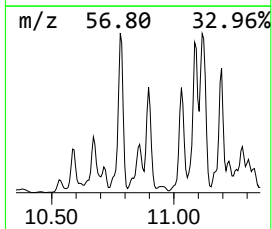
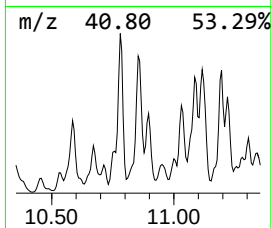
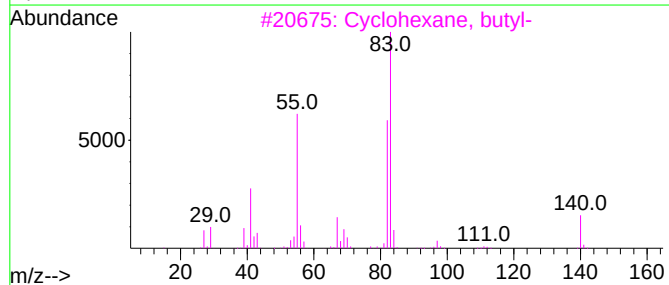
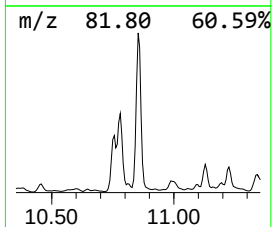
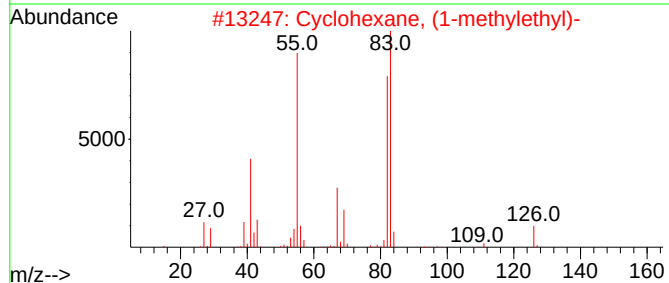
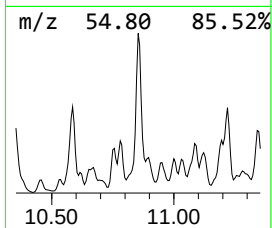
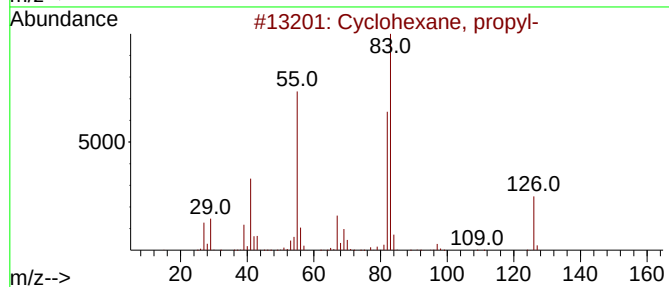
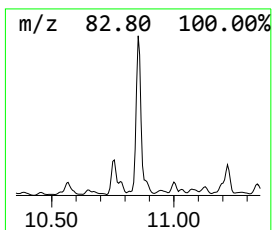
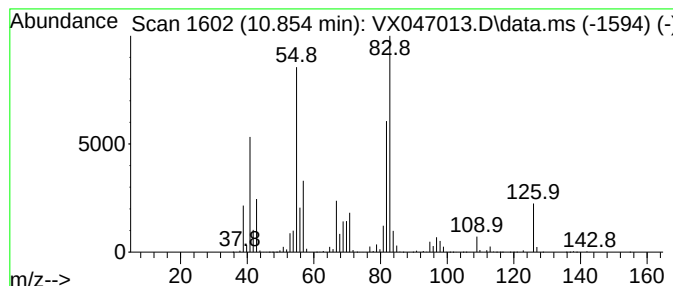
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260

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

Peak Number 10 Cyclohexane, propyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.854	570.01 ug/l	12823700	Chlorobenzene-d5	10.055

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Cyclohexane, propyl-	126	C9H18	001678-92-8	90
2			Cyclohexane, (1-methylethyl)-	126	C9H18	000696-29-7	87
3			Cyclohexane, butyl-	140	C10H20	001678-93-9	72
4			Cyclohexane, ethyl-	112	C8H16	001678-91-7	59
5			3-Hexen-1-ol, 5-methyl-, formate...	142	C8H14O2	1000132-12-4	53



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX047013.D
Acq On : 15 Jul 2025 19:13
Operator : JC/MD
Sample : Q2600-11
Misc : 5.06g/5mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 27 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
END-OF-TRENCH

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST0.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
Heptane, 3-methyl-	8.439	280.0	ug/l	6299950	3	10.055	1124860	50.0
Octane, 2-methyl-	9.384	287.6	ug/l	6469230	3	10.055	1124860	50.0
Heptane, 2,5-di...	9.500	297.0	ug/l	6681920	3	10.055	1124860	50.0
Cyclohexane, et...	9.561	328.5	ug/l	7389940	3	10.055	1124860	50.0
Cyclohexane, 1,...	9.616	278.5	ug/l	6264860	3	10.055	1124860	50.0
unknown9.823	9.823	333.4	ug/l	7500280	3	10.055	1124860	50.0
Octane, 4-methyl-	9.903	344.9	ug/l	7759060	3	10.055	1124860	50.0
trans-1,2-Dieth...	10.585	333.1	ug/l	7494070	3	10.055	1124860	50.0
Octane, 2,6-dim...	10.780	487.7	ug/l	10971300	3	10.055	1124860	50.0
Cyclohexane, pr...	10.854	570.0	ug/l	12823700	3	10.055	1124860	50.0

Report of Analysis

Client:	T&A Construction Inc		Date Collected:	07/14/25	
Project:	Kingsland Point Park Water Main		Date Received:	07/14/25	
Client Sample ID:	END-OF-TRENCHDL		SDG No.:	Q2600	
Lab Sample ID:	Q2600-11DL		Matrix:	SOIL	
Analytical Method:	8260D		% Solid:	84.8	
Sample Wt/Vol:	5.06	Units: g	Final Vol:	5000	uL
Soil Aliquot Vol:	100	uL	Test:	VOC-TCLVOA-10	
GC Column:	DB-624UI	ID : 0.18	Level :	MED	
Prep Method :					

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VX047021.D	20	07/16/25 11:50	VX071625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	1300	UD	1300	5800	ug/Kg
74-87-3	Chloromethane	1300	UD	1300	5800	ug/Kg
75-01-4	Vinyl Chloride	920	UD	920	5800	ug/Kg
74-83-9	Bromomethane	1200	UD	1200	5800	ug/Kg
75-00-3	Chloroethane	1500	UD	1500	5800	ug/Kg
75-69-4	Trichlorofluoromethane	1400	UD	1400	5800	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	1200	UD	1200	5800	ug/Kg
75-35-4	1,1-Dichloroethene	1200	UD	1200	5800	ug/Kg
67-64-1	Acetone	5500	UD	5500	29100	ug/Kg
75-15-0	Carbon Disulfide	1200	UD	1200	5800	ug/Kg
1634-04-4	Methyl tert-butyl Ether	850	UD	850	5800	ug/Kg
79-20-9	Methyl Acetate	1800	UDQ	1800	5800	ug/Kg
75-09-2	Methylene Chloride	4100	UD	4100	11700	ug/Kg
156-60-5	trans-1,2-Dichloroethene	1000	UD	1000	5800	ug/Kg
75-34-3	1,1-Dichloroethane	930	UD	930	5800	ug/Kg
110-82-7	Cyclohexane	3400	JD	920	5800	ug/Kg
78-93-3	2-Butanone	7600	UDQ	7600	29100	ug/Kg
56-23-5	Carbon Tetrachloride	1100	UD	1100	5800	ug/Kg
156-59-2	cis-1,2-Dichloroethene	870	UD	870	5800	ug/Kg
74-97-5	Bromochloromethane	1300	UD	1300	5800	ug/Kg
67-66-3	Chloroform	980	UD	980	5800	ug/Kg
71-55-6	1,1,1-Trichloroethane	1100	UD	1100	5800	ug/Kg
108-87-2	Methylcyclohexane	53000	D	1100	5800	ug/Kg
71-43-2	Benzene	920	UD	920	5800	ug/Kg
107-06-2	1,2-Dichloroethane	920	UD	920	5800	ug/Kg
79-01-6	Trichloroethene	940	UD	940	5800	ug/Kg
78-87-5	1,2-Dichloropropane	1100	UD	1100	5800	ug/Kg
75-27-4	Bromodichloromethane	910	UD	910	5800	ug/Kg
108-10-1	4-Methyl-2-Pentanone	4200	UD	4200	29100	ug/Kg
108-88-3	Toluene	910	UD	910	5800	ug/Kg

Report of Analysis

Client:	T&A Construction Inc	Date Collected:	07/14/25
Project:	Kingsland Point Park Water Main	Date Received:	07/14/25
Client Sample ID:	END-OF-TRENCHDL	SDG No.:	Q2600
Lab Sample ID:	Q2600-11DL	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	84.8
Sample Wt/Vol:	5.06 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10
GC Column:	DB-624UI ID : 0.18	Level :	MED
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VX047021.D	20	07/16/25 11:50	VX071625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	760	UD	760	5800	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	720	UD	720	5800	ug/Kg
79-00-5	1,1,2-Trichloroethane	1100	UD	1100	5800	ug/Kg
591-78-6	2-Hexanone	4300	UDQ	4300	29100	ug/Kg
124-48-1	Dibromochloromethane	1000	UD	1000	5800	ug/Kg
106-93-4	1,2-Dibromoethane	1000	UD	1000	5800	ug/Kg
127-18-4	Tetrachloroethene	1200	UD	1200	5800	ug/Kg
108-90-7	Chlorobenzene	1100	UD	1100	5800	ug/Kg
100-41-4	Ethyl Benzene	9800	D	780	5800	ug/Kg
179601-23-1	m/p-Xylenes	1400	UD	1400	11700	ug/Kg
95-47-6	o-Xylene	960	UD	960	5800	ug/Kg
100-42-5	Styrene	830	UD	830	5800	ug/Kg
75-25-2	Bromoform	1000	UD	1000	5800	ug/Kg
98-82-8	Isopropylbenzene	8800	D	910	5800	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	1400	UD	1400	5800	ug/Kg
541-73-1	1,3-Dichlorobenzene	2000	UD	2000	5800	ug/Kg
106-46-7	1,4-Dichlorobenzene	1800	UD	1800	5800	ug/Kg
95-50-1	1,2-Dichlorobenzene	1700	UD	1700	5800	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	2100	UD	2100	5800	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	3500	UD	3500	5800	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	3700	UD	3700	5800	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	52.9		63 - 155	106%	SPK: 50
1868-53-7	Dibromofluoromethane	49.6		70 - 134	99%	SPK: 50
2037-26-5	Toluene-d8	47.6		74 - 123	95%	SPK: 50
460-00-4	4-Bromofluorobenzene	52.6		17 - 146	105%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	321000	5.562			
540-36-3	1,4-Difluorobenzene	537000	6.769			
3114-55-4	Chlorobenzene-d5	482000	10.055			
3855-82-1	1,4-Dichlorobenzene-d4	237000	12.018			



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

Report of Analysis

Client:	T&A Construction Inc		Date Collected:	07/14/25	
Project:	Kingsland Point Park Water Main		Date Received:	07/14/25	
Client Sample ID:	END-OF-TRENCHDL		SDG No.:	Q2600	
Lab Sample ID:	Q2600-11DL		Matrix:	SOIL	
Analytical Method:	8260D		% Solid:	84.8	
Sample Wt/Vol:	5.06	Units: g	Final Vol:	5000	uL
Soil Aliquot Vol:	100	uL	Test:	VOC-TCLVOA-10	
GC Column:	DB-624UI	ID : 0.18	Level :	MED	
Prep Method :					

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VX047021.D	20	07/16/25 11:50	VX071625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071625\
 Data File : VX047021.D
 Acq On : 16 Jul 2025 11:50
 Operator : JC/MD
 Sample : Q2600-11DL 20X
 Misc : 5.06g/5mL/100uL/5.00mL/MSVOA_X/MEOH
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 END-OF-TRENCHDL

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 07/17/2025
 Supervised By :Semsettin Yesilyurt 07/17/2025

Quant Time: Jul 17 03:30:06 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 03 05:51:11 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	5.562	168	320742	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.769	114	537318	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	482473	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	236691	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.964	65	224247	52.922	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 105.840%			
35) Dibromofluoromethane	5.397	113	180734	49.552	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 99.100%			
50) Toluene-d8	8.652	98	612735	47.615	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery = 95.220%			
62) 4-Bromofluorobenzene	11.079	95	257413	52.632	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery = 105.260%			
Target Compounds					Qvalue	
31) Cyclohexane	5.495	56	17666m	2.917	ug/l	
39) Methylcyclohexane	7.384	83	279952	45.478	ug/l	96
67) Ethyl Benzene	10.195	91	150008	8.397	ug/l	98
73) Isopropylbenzene	10.963	105	125115	7.520	ug/l	100
78) n-propylbenzene	11.304	91	739135	36.841	ug/l	99
84) 1,2,4-Trimethylbenzene	11.749	105	357502	26.161	ug/l	97
85) sec-Butylbenzene	11.890	105	110589	6.281	ug/l	95
86) p-Isopropyltoluene	12.006	119	17558	1.191	ug/l	90
89) n-Butylbenzene	12.329	91	118297m	8.540	ug/l	

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

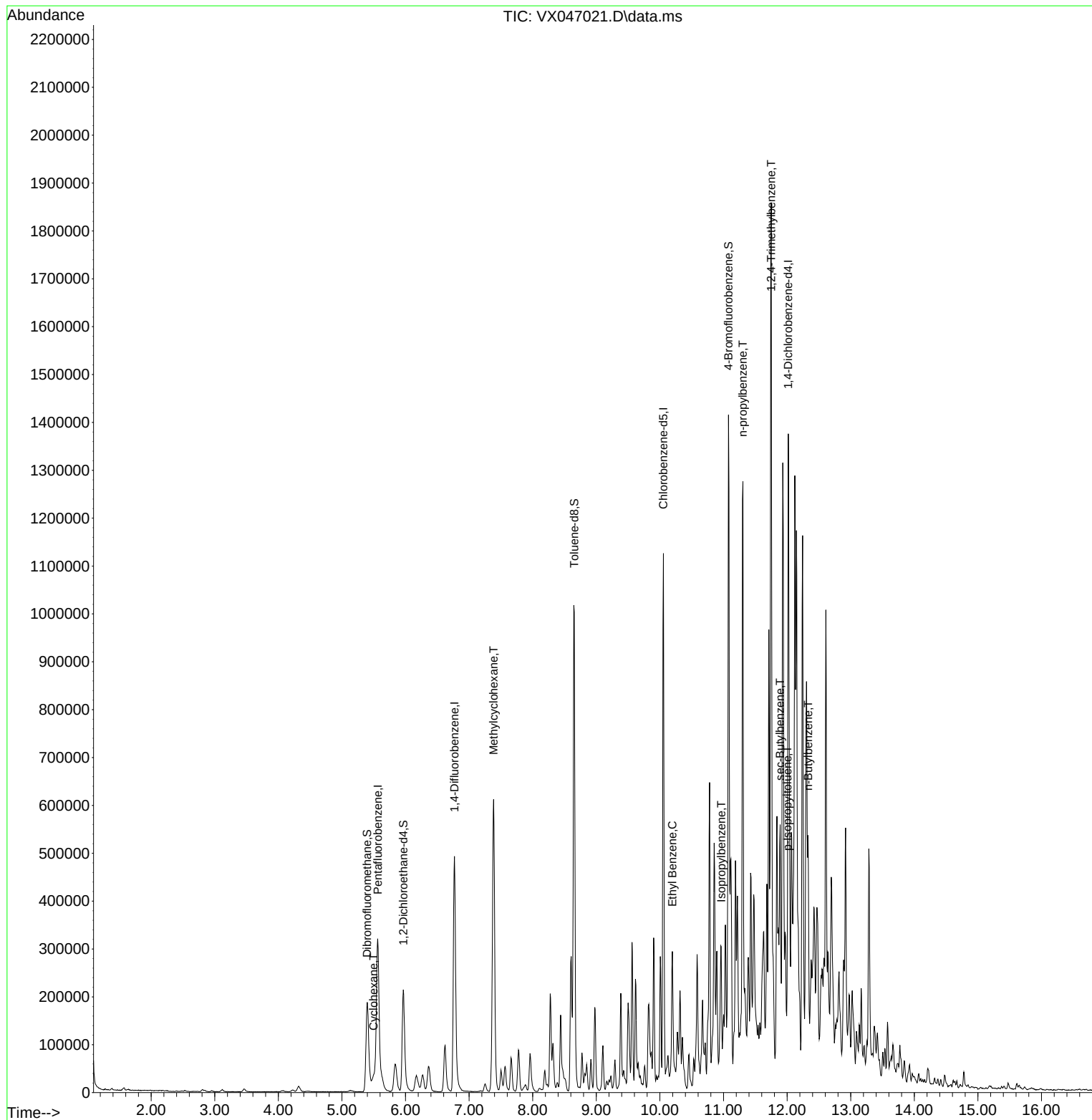
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071625\
Data File : VX047021.D
Acq On : 16 Jul 2025 11:50
Operator : JC/MD
Sample : Q2600-11DL 20X
Misc : 5.06g/5mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 7 Sample Multiplier: 1

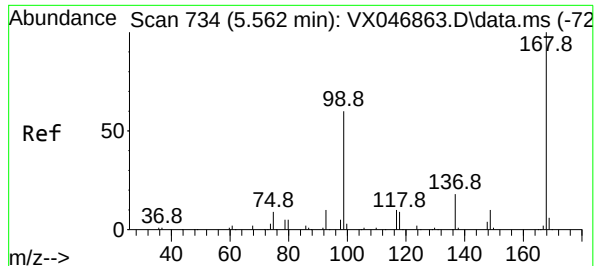
Instrument :
MSVOA_X
ClientSampleId :
END-OF-TRENCHDL

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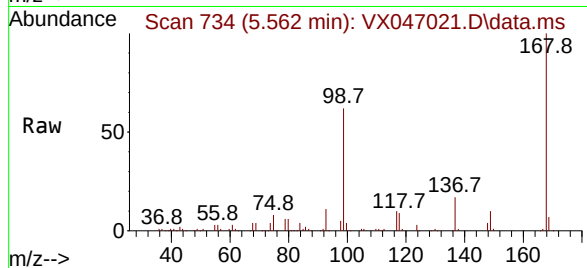
Quant Time: Jul 17 03:30:06 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 03 05:51:11 2025
Response via : Initial Calibration





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.562 min Scan# 714
Delta R.T. -0.000 min
Lab File: VX047021.D
Acq: 16 Jul 2025 11:50

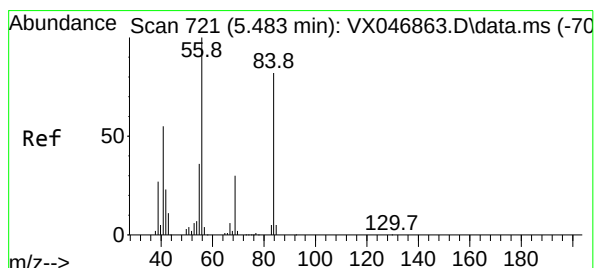
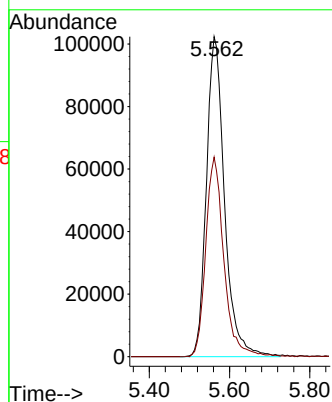
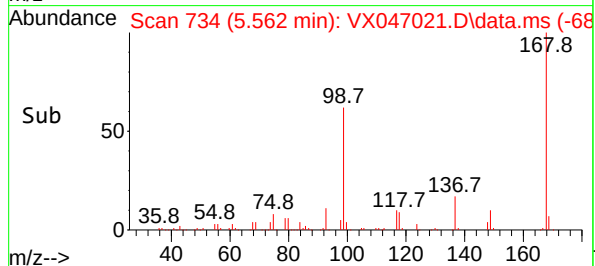
Instrument :
MSVOA_X
ClientSampleId :
END-OF-TRENCHDL



Tgt Ion:168 Resp: 32074
Ion Ratio Lower Upper
168 100
99 62.4 48.8 73.2

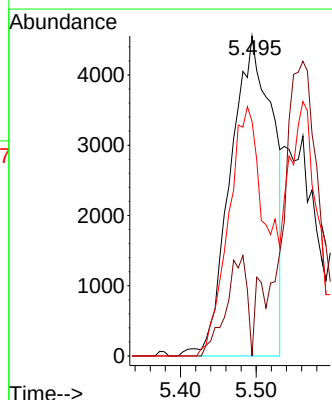
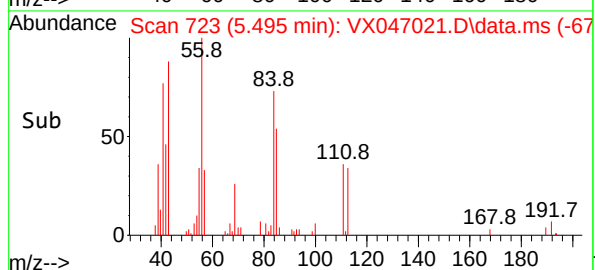
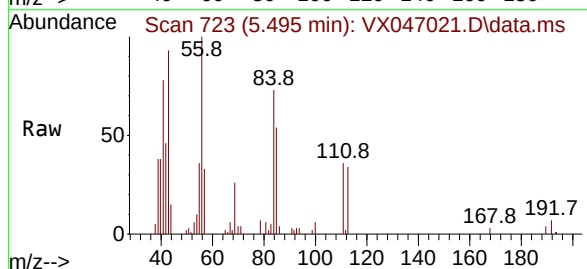
Manual Integrations
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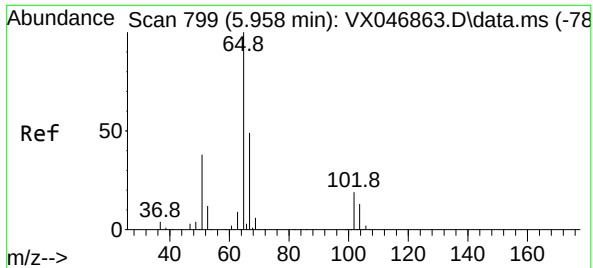
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025



#31
Cyclohexane
Concen: 2.917 ug/l m
RT: 5.495 min Scan# 723
Delta R.T. 0.012 min
Lab File: VX047021.D
Acq: 16 Jul 2025 11:50

Tgt Ion: 56 Resp: 17666
Ion Ratio Lower Upper
56 100
69 0.0 24.0 36.0#
84 73.3 66.5 99.7





#33

1,2-Dichloroethane-d4

Concen: 52.922 ug/l

RT: 5.964 min Scan# 800

Delta R.T. 0.006 min

Lab File: VX047021.D

Acq: 16 Jul 2025 11:50

Instrument :

MSVOA_X

ClientSampleId :

END-OF-TRENCHDL

Tgt Ion: 65 Resp: 22424

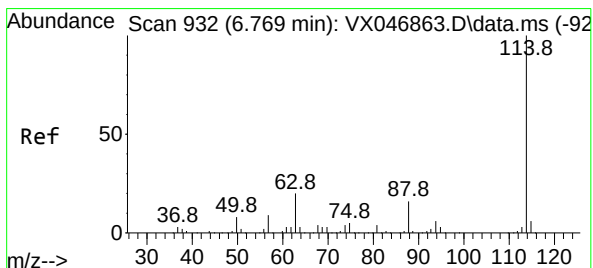
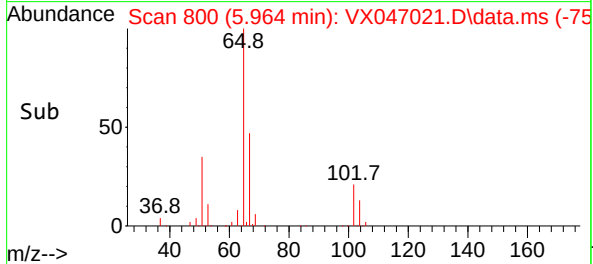
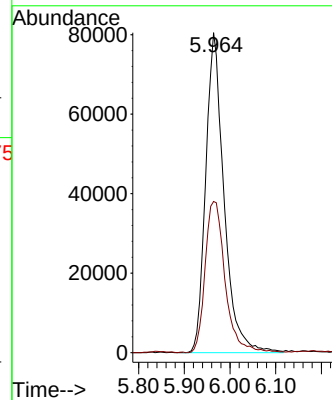
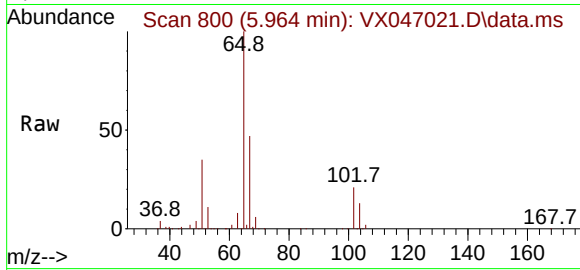
Ion Ratio Lower Upper

65 100

67 51.8 0.0 105.2

Manual Integrations

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#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 6.769 min Scan# 932

Delta R.T. -0.000 min

Lab File: VX047021.D

Acq: 16 Jul 2025 11:50

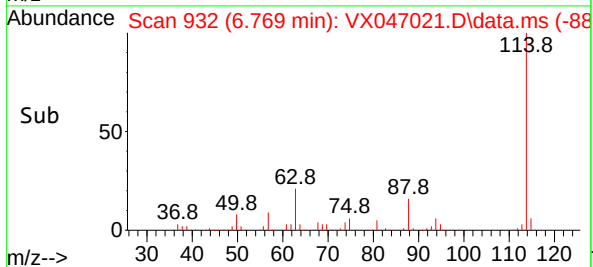
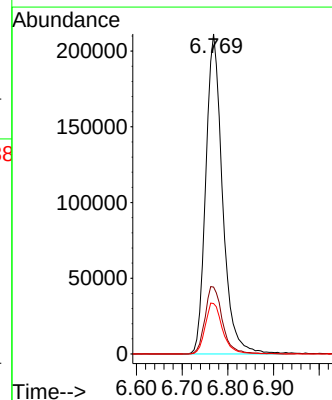
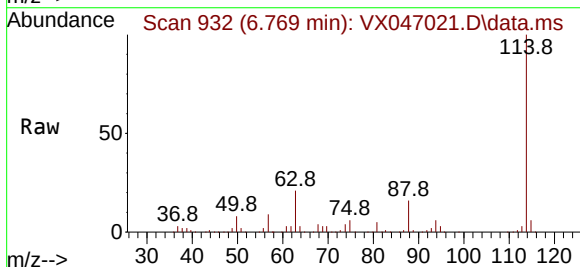
Tgt Ion:114 Resp: 537318

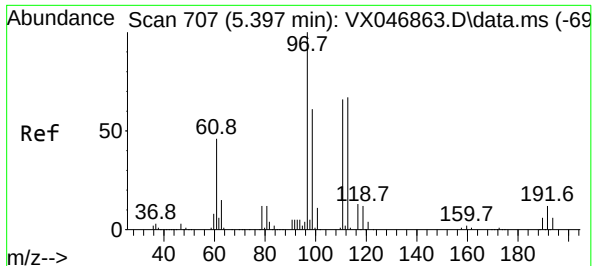
Ion Ratio Lower Upper

114 100

63 20.9 0.0 40.4

88 15.7 0.0 31.0





#35

Dibromofluoromethane

Concen: 49.552 ug/l

RT: 5.397 min Scan# 707

Delta R.T. -0.000 min

Lab File: VX047021.D

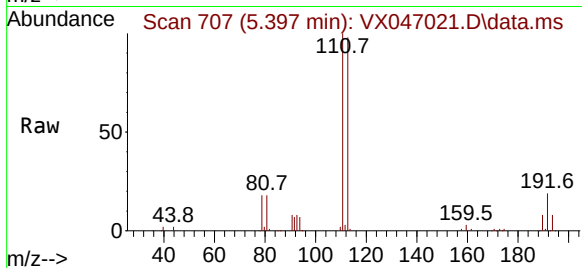
Acq: 16 Jul 2025 11:50

Instrument :

MSVOA_X

ClientSampleId :

END-OF-TRENCHDL



Tgt Ion:113 Resp: 180734

Ion Ratio Lower Upper

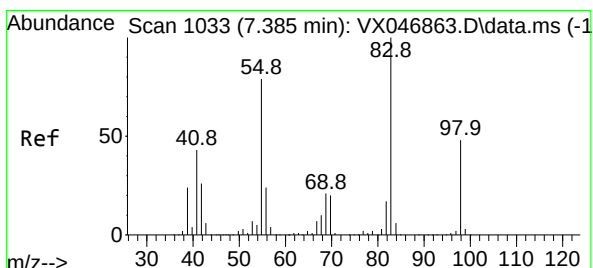
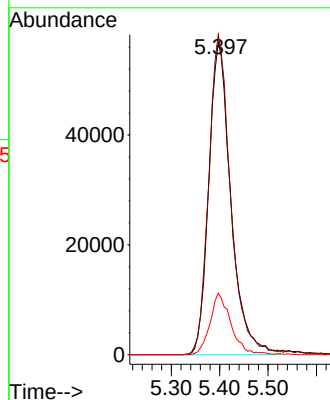
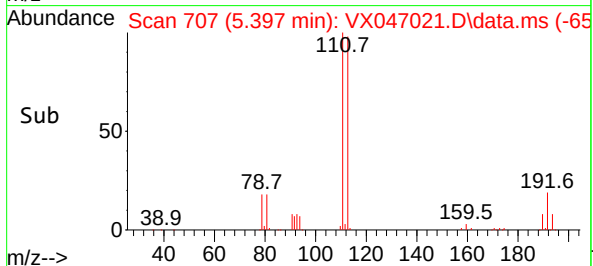
113 100

111 101.8 81.2 121.8

192 18.6 15.3 22.9

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Supervised By :Semsettin Yesilyurt 07/17/2025

#39

Methylcyclohexane

Concen: 45.478 ug/l

RT: 7.384 min Scan# 1033

Delta R.T. -0.000 min

Lab File: VX047021.D

Acq: 16 Jul 2025 11:50

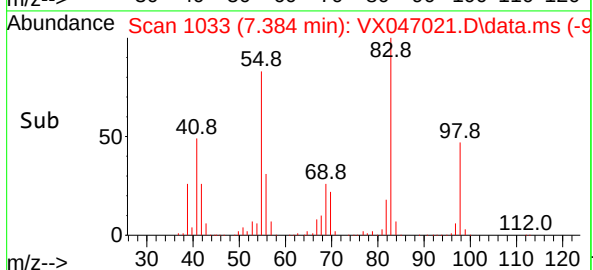
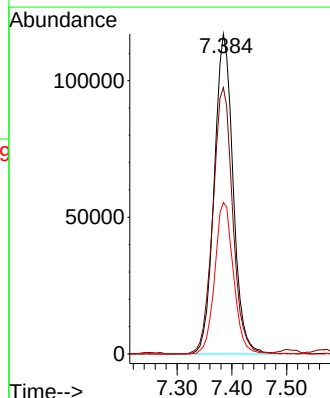
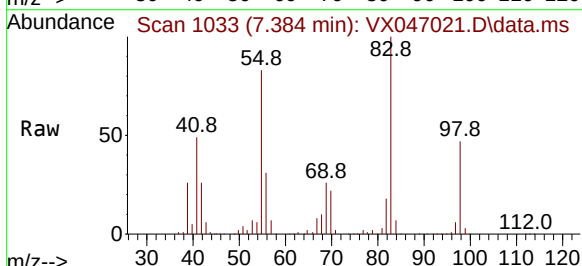
Tgt Ion: 83 Resp: 279952

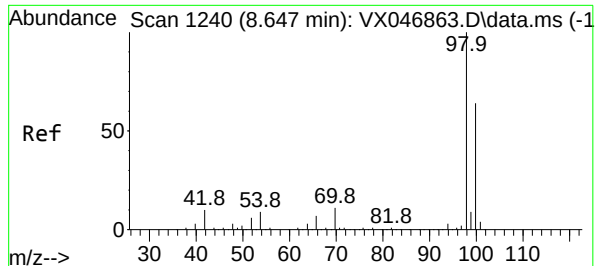
Ion Ratio Lower Upper

83 100

55 83.1 63.0 94.4

98 47.3 38.5 57.7





#50

Toluene-d8

Concen: 47.615 ug/l

RT: 8.652 min Scan# 1241

Delta R.T. 0.006 min

Lab File: VX047021.D

Acq: 16 Jul 2025 11:50

Instrument :

MSVOA_X

ClientSampleId :

END-OF-TRENCHDL

Tgt Ion: 98 Resp: 61273

Ion Ratio Lower Upper

98 100

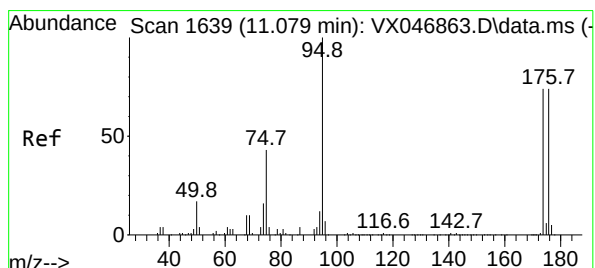
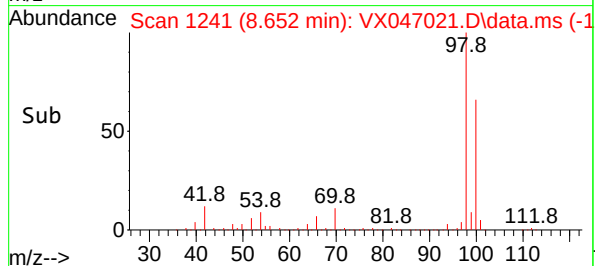
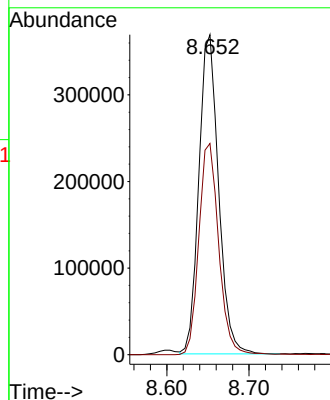
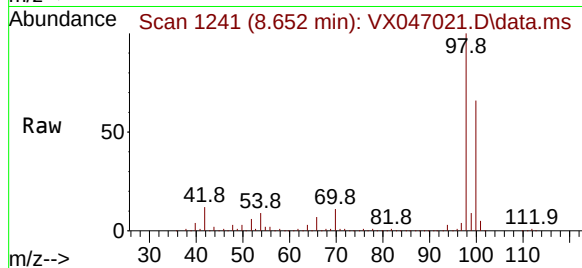
100 66.9 53.0 79.6

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Reviewed By :Mahesh Dadoda 07/17/2025

Supervised By :Semsettin Yesilyurt 07/17/2025



#62

4-Bromofluorobenzene

Concen: 52.632 ug/l

RT: 11.079 min Scan# 1639

Delta R.T. -0.000 min

Lab File: VX047021.D

Acq: 16 Jul 2025 11:50

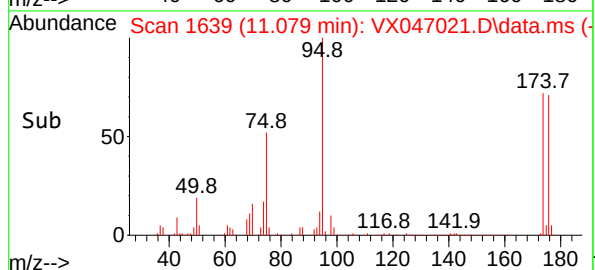
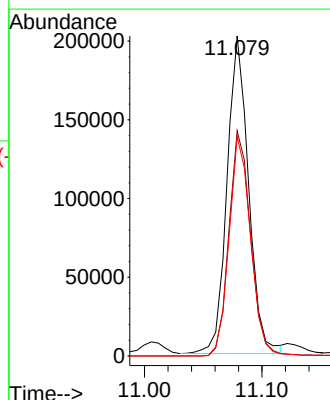
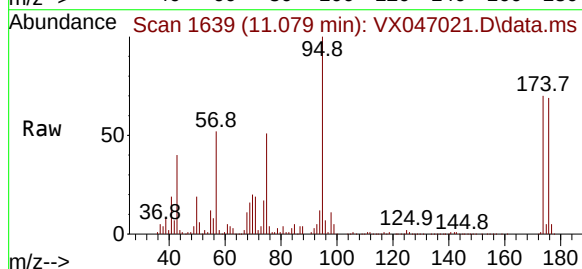
Tgt Ion: 95 Resp: 257413

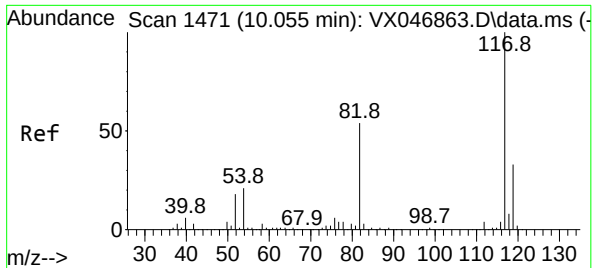
Ion Ratio Lower Upper

95 100

174 71.3 0.0 152.0

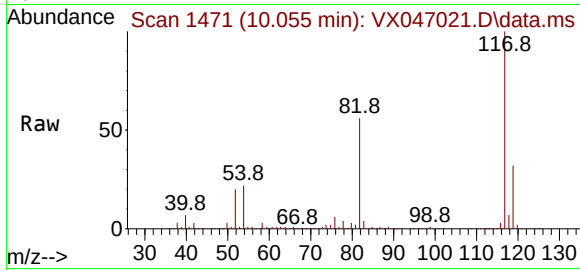
176 69.1 0.0 145.2





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.055 min Scan# 1471
Delta R.T. -0.000 min
Lab File: VX047021.D
Acq: 16 Jul 2025 11:50

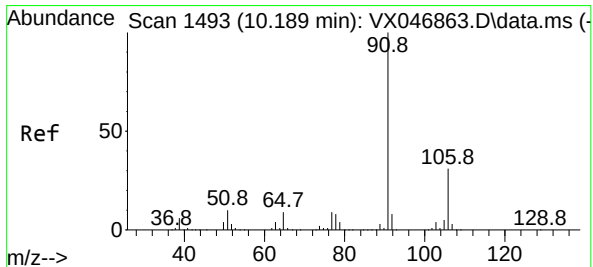
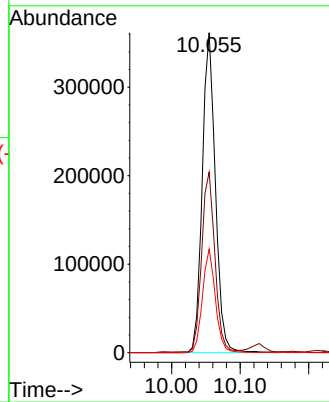
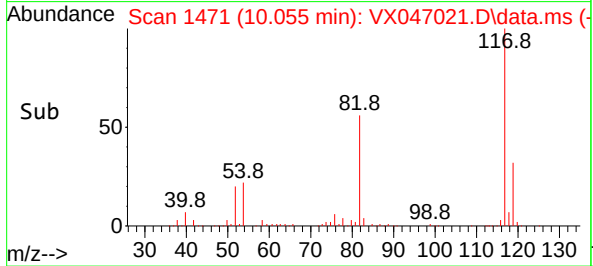
Instrument :
MSVOA_X
ClientSampleId :
END-OF-TRENCHDL



Tgt Ion:117 Resp: 48247
Ion Ratio Lower Upper
117 100
82 56.2 43.3 64.9
119 32.4 26.4 39.6

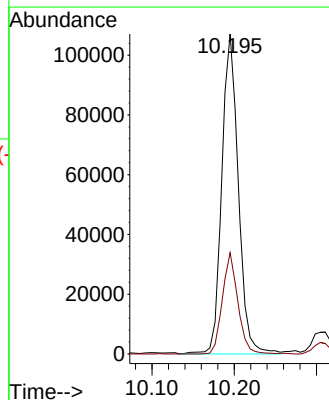
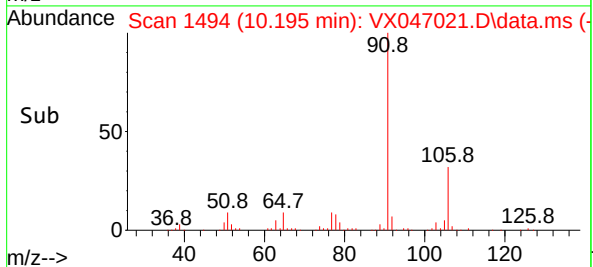
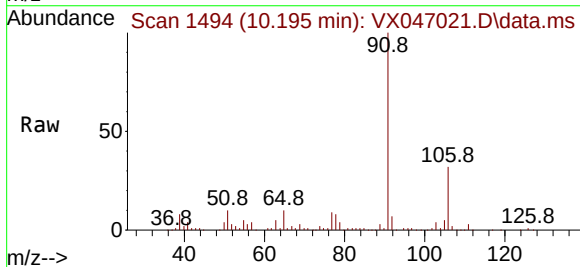
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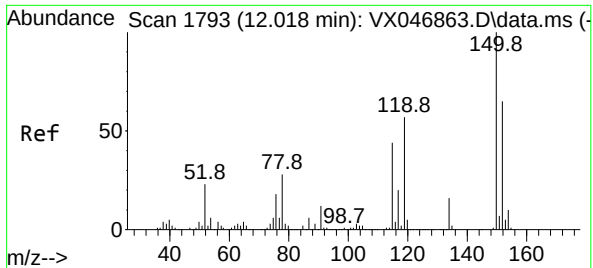
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025



#67
Ethyl Benzene
Concen: 8.397 ug/l
RT: 10.195 min Scan# 1494
Delta R.T. 0.006 min
Lab File: VX047021.D
Acq: 16 Jul 2025 11:50

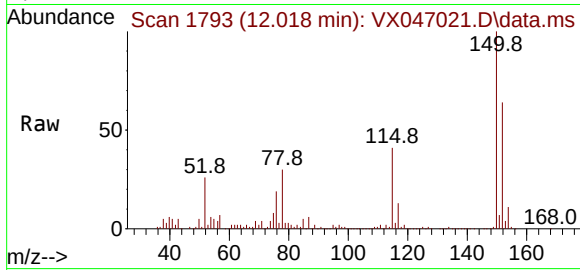
Tgt Ion: 91 Resp: 150008
Ion Ratio Lower Upper
91 100
106 31.6 24.4 36.6





#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.018 min Scan# 11
Delta R.T. -0.000 min
Lab File: VX047021.D
Acq: 16 Jul 2025 11:50

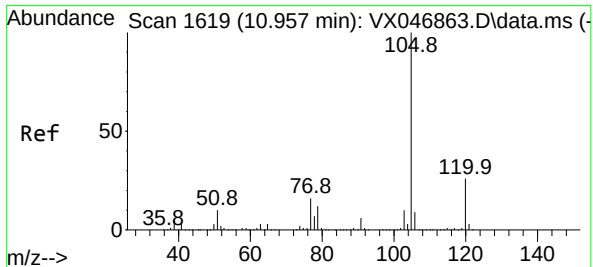
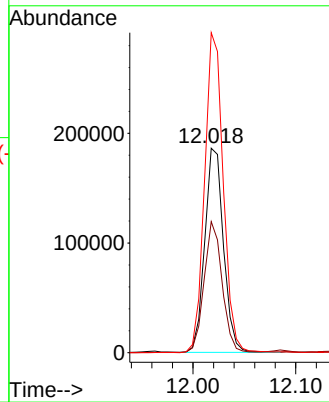
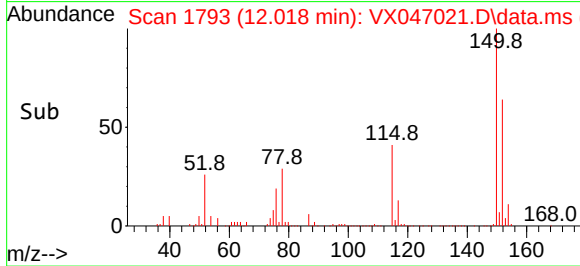
Instrument :
MSVOA_X
ClientSampleId :
END-OF-TRENCHDL



Tgt Ion:152 Resp: 23669
Ion Ratio Lower Upper
152 100
115 62.1 42.4 127.1
150 155.4 0.0 349.2

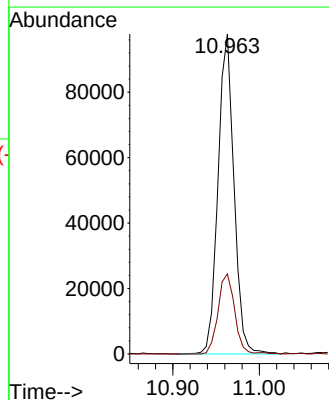
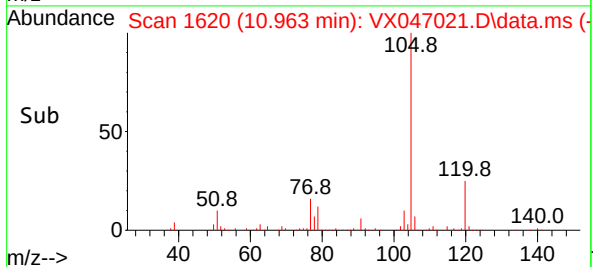
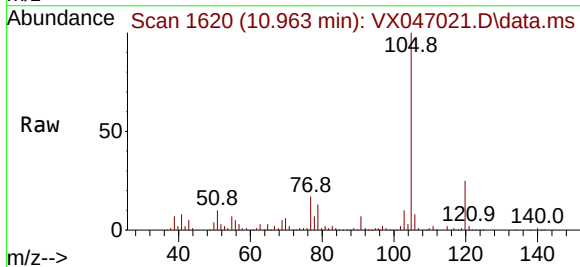
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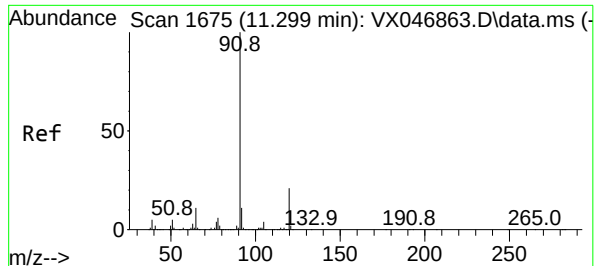
Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025



#73
Isopropylbenzene
Concen: 7.520 ug/l
RT: 10.963 min Scan# 1620
Delta R.T. 0.006 min
Lab File: VX047021.D
Acq: 16 Jul 2025 11:50

Tgt Ion:105 Resp: 125115
Ion Ratio Lower Upper
105 100
120 26.1 13.2 39.5





#78

n-propylbenzene

Concen: 36.841 ug/l

RT: 11.304 min Scan# 1675

Delta R.T. 0.006 min

Lab File: VX047021.D

Acq: 16 Jul 2025 11:50

Instrument :

MSVOA_X

ClientSampleId :

END-OF-TRENCHDL

Tgt Ion: 91 Resp: 73913

Ion Ratio Lower Upper

91 100

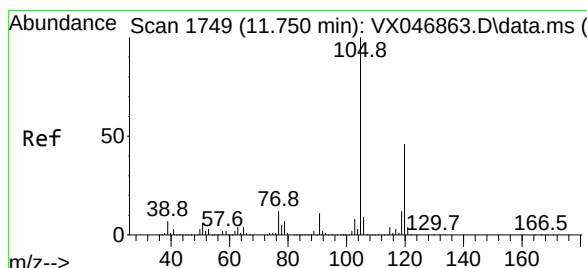
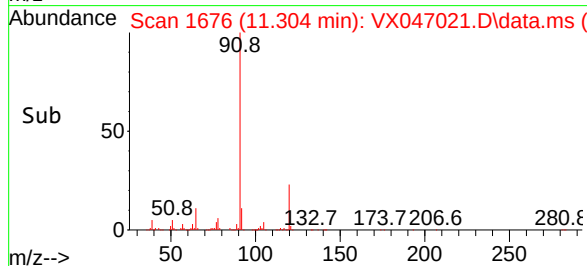
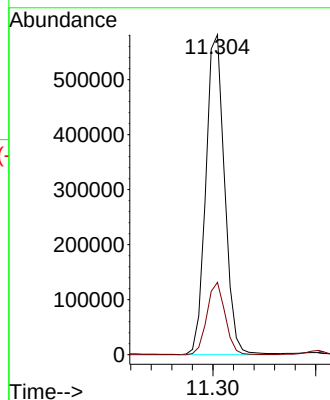
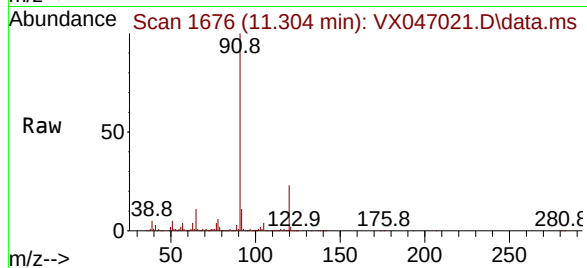
120 22.0 11.2 33.5

Manual Integrations

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Supervised By :Semsettin Yesilyurt 07/17/2025



#84

1,2,4-Trimethylbenzene

Concen: 26.161 ug/l

RT: 11.749 min Scan# 1749

Delta R.T. -0.000 min

Lab File: VX047021.D

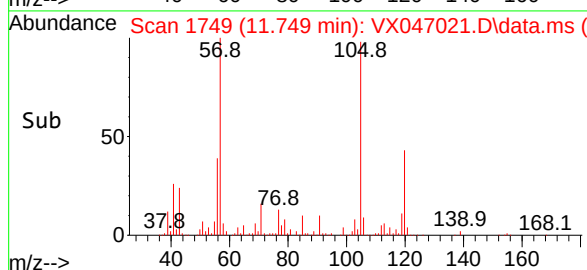
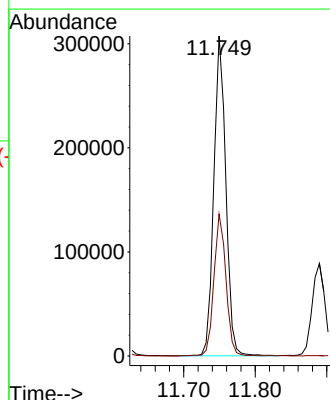
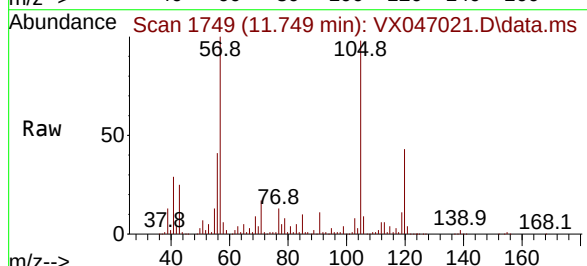
Acq: 16 Jul 2025 11:50

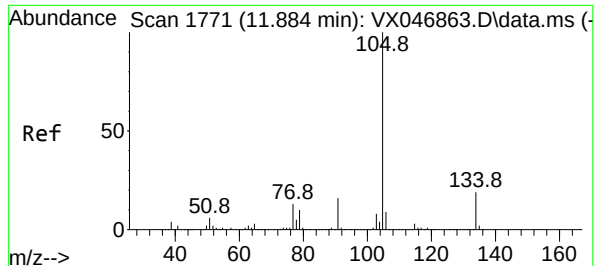
Tgt Ion:105 Resp: 357502

Ion Ratio Lower Upper

105 100

120 44.6 23.3 69.8





#85

sec-Butylbenzene

Concen: 6.281 ug/l

RT: 11.890 min Scan# 110589

Delta R.T. 0.006 min

Lab File: VX047021.D

Acq: 16 Jul 2025 11:50

Instrument :

MSVOA_X

ClientSampleId :

END-OF-TRENCHDL

Tgt Ion:105 Resp: 110589

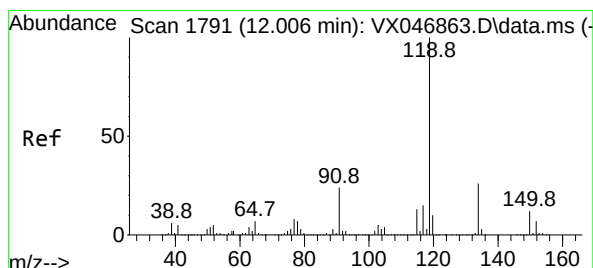
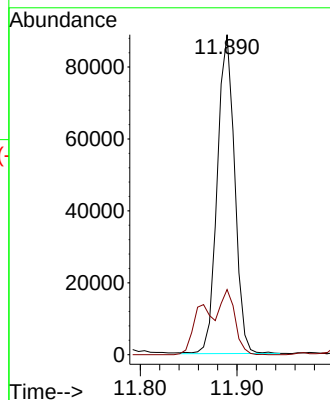
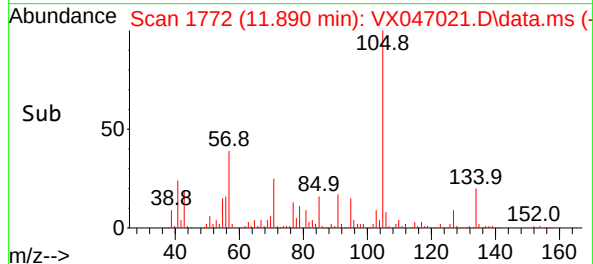
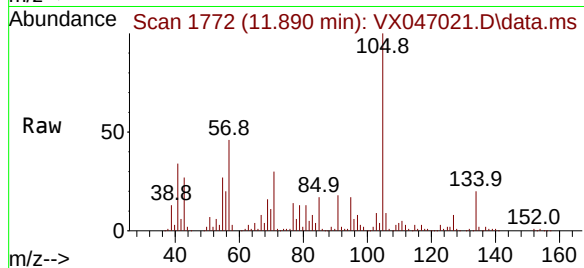
Ion Ratio Lower Upper

105 100

134 17.4 9.9 29.7

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

#86

p-Isopropyltoluene

Concen: 1.191 ug/l

RT: 12.006 min Scan# 1791

Delta R.T. -0.000 min

Lab File: VX047021.D

Acq: 16 Jul 2025 11:50

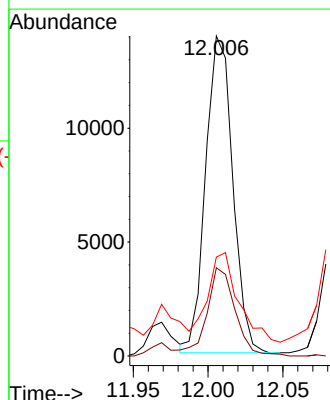
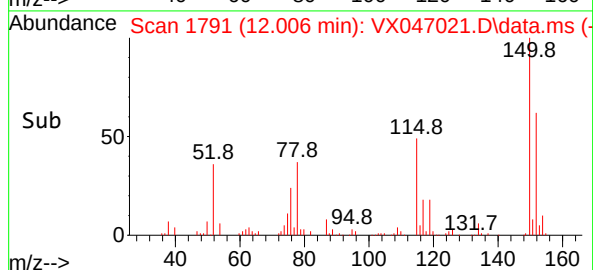
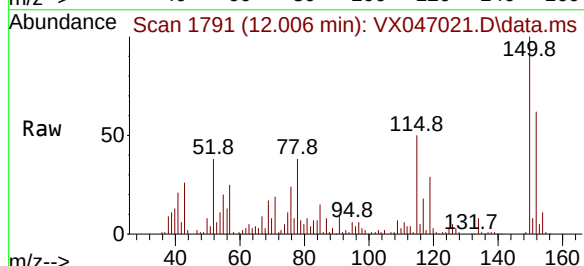
Tgt Ion:119 Resp: 17558

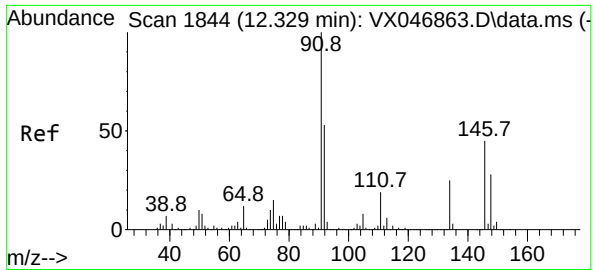
Ion Ratio Lower Upper

119 100

134 28.7 13.0 39.0

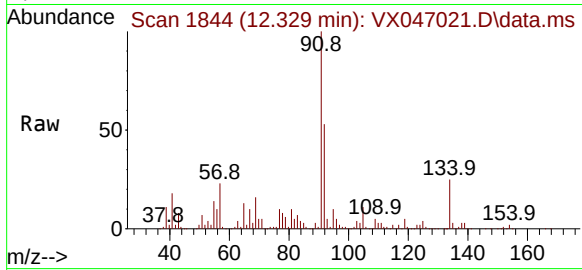
91 31.9 12.0 36.1





#89
n-Butylbenzene
Concen: 8.540 ug/l m
RT: 12.329 min Scan# 11
Delta R.T. -0.000 min
Lab File: VX047021.D
Acq: 16 Jul 2025 11:50

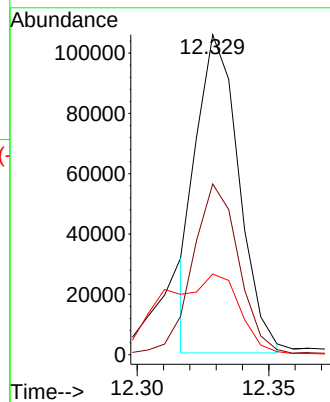
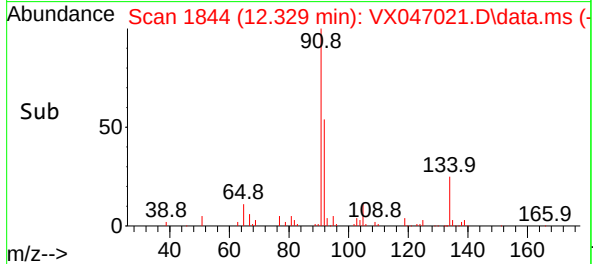
Instrument :
MSVOA_X
ClientSampleId :
END-OF-TRENCHDL



Tgt Ion: 91 Resp: 11829
Ion Ratio Lower Upper
91 100
92 59.1 27.0 81.0
134 45.6 12.8 38.4

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025





CALIBRATION SUMMARY



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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alliance Contract: TAC001
 Lab Code: ACE SDG No.: Q2600
 Instrument ID: MSVOA_X Calibration Date(s): 07/02/2025 07/02/2025
 Heated Purge: (Y/N) N Calibration Time(s): 12:11 14:31
 GC Column: DB-624UI ID: 0.18 (mm)

LAB FILE ID:	RRF001 = VX046860.D			RRF005 = VX046861.D		RRF020 = VX046862.D		
	RRF050 = VX046863.D			RRF100 = VX046864.D		RRF150 = VX046865.D		
COMPOUND	RRF001	RRF005	RRF020	RRF050	RRF100	RRF150	RRF	% RSD
Dichlorodifluoromethane	0.445	0.433	0.512	0.487	0.503	0.490	0.478	6.7
Chloromethane	0.505	0.507	0.541	0.508	0.543	0.530	0.522	3.4
Vinyl Chloride	0.568	0.549	0.591	0.550	0.589	0.566	0.569	3.2
Bromomethane		0.402	0.402	0.360	0.369	0.295	0.366	12
Chloroethane	0.443	0.365	0.383	0.347	0.362	0.354	0.376	9.4
Trichlorofluoromethane	0.847	0.874	0.921	0.857	0.893	0.885	0.880	3
1,1,2-Trichlorotrifluoroethane	0.527	0.571	0.583	0.548	0.572	0.562	0.561	3.6
1,1-Dichloroethene	0.543	0.555	0.546	0.524	0.546	0.540	0.542	1.9
Acetone	0.236	0.210	0.195	0.193	0.197	0.200	0.205	7.9
Carbon Disulfide	1.585	1.425	1.405	1.342	1.398	1.376	1.422	6
Methyl tert-butyl Ether	1.447	1.470	1.540	1.528	1.587	1.615	1.531	4.2
Methyl Acetate	0.488	0.474	0.560	0.553	0.570	0.599	0.541	9.1
Methylene Chloride	0.623	0.625	0.624	0.585	0.596	0.588	0.607	3.1
trans-1,2-Dichloroethene	0.552	0.564	0.575	0.541	0.551	0.545	0.555	2.3
1,1-Dichloroethane	1.080	1.084	1.074	1.039	1.055	1.050	1.064	1.7
Cyclohexane		0.973	0.977	0.918	0.926	0.927	0.944	3
2-Butanone	0.260	0.270	0.275	0.275	0.276	0.286	0.274	3.1
Carbon Tetrachloride	0.471	0.505	0.495	0.476	0.480	0.478	0.484	2.7
cis-1,2-Dichloroethene	0.711	0.669	0.688	0.660	0.670	0.666	0.677	2.8
Bromochloromethane	0.529	0.543	0.524	0.528	0.516	0.508	0.525	2.3
Chloroform	1.150	1.106	1.112	1.048	1.052	1.050	1.087	3.9
1,1,1-Trichloroethane	0.944	0.897	0.908	0.886	0.901	0.910	0.908	2.2
Methylcyclohexane	0.539	0.588	0.589	0.567	0.578	0.576	0.573	3.2
Benzene	1.391	1.445	1.452	1.356	1.342	1.324	1.385	3.9
1,2-Dichloroethane	0.499	0.477	0.487	0.460	0.453	0.446	0.470	4.4
Trichloroethene	0.386	0.377	0.365	0.344	0.347	0.344	0.361	5
1,2-Dichloropropane	0.364	0.340	0.362	0.346	0.345	0.342	0.350	3
Bromodichloromethane	0.538	0.508	0.535	0.510	0.508	0.507	0.518	2.9
4-Methyl-2-Pentanone	0.330	0.340	0.368	0.366	0.353	0.357	0.353	4.3
Toluene	0.855	0.894	0.906	0.841	0.831	0.823	0.858	3.9

* 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.



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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alliance Contract: TAC001
 Lab Code: ACE SDG No.: Q2600
 Instrument ID: MSVOA_X Calibration Date(s): 07/02/2025 07/02/2025
 Heated Purge: (Y/N) N Calibration Time(s): 12:11 14:31
 GC Column: DB-624UI ID: 0.18 (mm)

LAB FILE ID:		RRF001 = VX046860.D		RRF005 = VX046861.D		RRF020 = VX046862.D			
		RRF050 = VX046863.D		RRF100 = VX046864.D		RRF150 = VX046865.D			
COMPOUND	RRF001	RRF005	RRF020	RRF050	RRF100	RRF150	RRF	% RSD	
t-1,3-Dichloropropene	0.408	0.431	0.467	0.472	0.490	0.504	0.462	7.8	
cis-1,3-Dichloropropene	0.496	0.499	0.532	0.533	0.549	0.554	0.527	4.7	
1,1,2-Trichloroethane	0.325	0.329	0.328	0.318	0.310	0.308	0.320	2.8	
2-Hexanone	0.205	0.227	0.245	0.247	0.238	0.242	0.234	6.8	
Dibromochloromethane	0.383	0.390	0.393	0.377	0.376	0.377	0.383	1.9	
1,2-Dibromoethane	0.323	0.317	0.332	0.320	0.317	0.317	0.321	1.8	
Tetrachloroethene	0.353	0.346	0.345	0.315	0.320	0.318	0.333	5.1	
Chlorobenzene	1.111	1.117	1.113	1.049	1.051	1.045	1.081	3.3	
Ethyl Benzene	1.810	1.868	1.929	1.830	1.846	1.824	1.851	2.3	
m/p-Xylenes	0.702	0.710	0.731	0.688	0.683	0.672	0.698	3.1	
o-Xylene	0.676	0.677	0.703	0.665	0.663	0.660	0.674	2.4	
Styrene	1.070	1.152	1.228	1.175	1.157	1.134	1.153	4.5	
Bromoform	0.269	0.261	0.273	0.269	0.275	0.275	0.270	1.9	
Isopropylbenzene	3.267	3.428	3.611	3.601	3.592	3.590	3.515	4	
1,1,2,2-Tetrachloroethane	1.000	0.948	0.981	0.963	0.939	0.968	0.966	2.3	
1,3-Dichlorobenzene	1.615	1.664	1.673	1.627	1.625	1.619	1.637	1.5	
1,4-Dichlorobenzene	1.852	1.776	1.711	1.632	1.622	1.632	1.704	5.5	
1,2-Dichlorobenzene	1.626	1.592	1.625	1.568	1.560	1.550	1.587	2.1	
1,2-Dibromo-3-Chloropropane	0.158	0.151	0.164	0.171	0.178	0.192	0.169	8.7	
1,2,4-Trichlorobenzene	1.016	1.020	1.078	1.087	1.121	1.145	1.078	4.9	
1,2,3-Trichlorobenzene	0.900	0.965	1.033	1.045	1.069	1.099	1.019	7.2	
1,2-Dichloroethane-d4		0.722	0.652	0.647	0.641	0.640	0.661	5.3	
Dibromofluoromethane		0.355	0.346	0.339	0.332	0.325	0.339	3.5	
Toluene-d8		1.278	1.220	1.195	1.160	1.135	1.197	4.6	
4-Bromofluorobenzene		0.493	0.469	0.455	0.433	0.426	0.455	6	

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

Method Path : Z:\voasrv\HPCHEM1\MSVOA_X\Method\
 Method File : 82X070225W.M
 Title : SW846 8260
 Last Update : Thu Jul 03 05:51:11 2025
 Response Via : Initial Calibration

Calibration Files

1 =VX046860.D 5 =VX046861.D 20 =VX046862.D 50 =VX046863.D 100 =VX046864.D 150 =VX046865.D

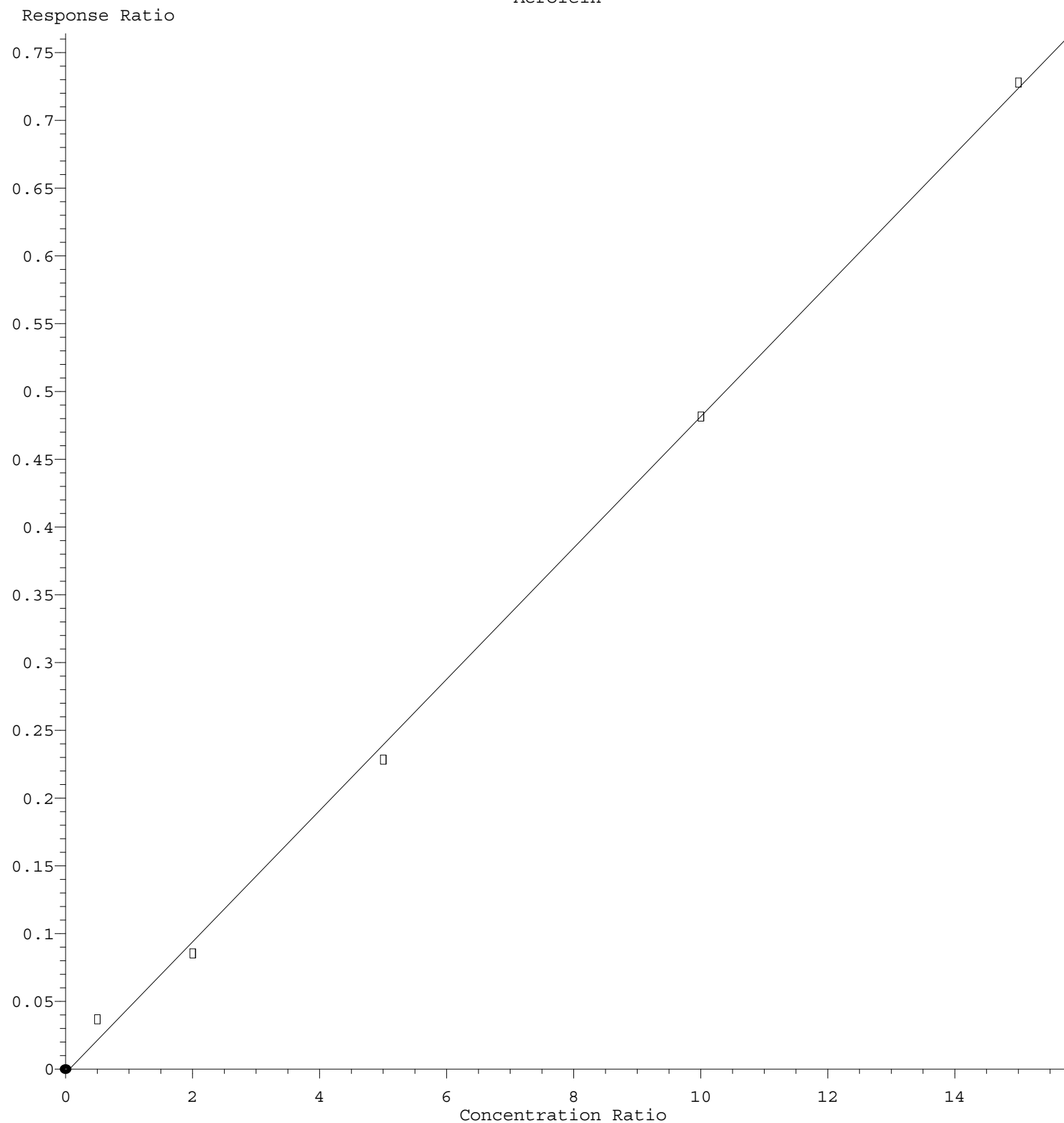
	Compound	1	5	20	50	100	150	Avg	%RSD
1) I	Pentafluorobenzene	-----ISTD-----							
2) T	Dichlorodifluo...	0.445	0.433	0.512	0.487	0.503	0.490	0.478	6.67
3) P	Chloromethane	0.505	0.507	0.541	0.508	0.543	0.530	0.522	3.38
4) C	Vinyl Chloride	0.568	0.549	0.591	0.550	0.589	0.566	0.569	3.19#
5) T	Bromomethane		0.402	0.402	0.360	0.369	0.295	0.366	12.04
6) T	Chloroethane	0.443	0.365	0.383	0.347	0.362	0.354	0.376	9.38
7) T	Trichlorofluor...	0.847	0.874	0.921	0.857	0.893	0.885	0.880	3.02
8) T	Diethyl Ether	0.315	0.308	0.316	0.304	0.317	0.317	0.313	1.78
9) T	1,1,2-Trichlor...	0.527	0.571	0.583	0.548	0.572	0.562	0.561	3.58
10) T	Methyl Iodide		0.465	0.581	0.631	0.681	0.696	0.611	15.27
11) T	Tert butyl alc...		0.044	0.042	0.042	0.043	0.045	0.043	3.54
12) CM	1,1-Dichloroet...	0.543	0.555	0.546	0.524	0.546	0.540	0.542	1.85#
13) T	Acrolein		0.074	0.043	0.046	0.048	0.049	0.052	24.05
14) T	Allyl chloride	0.975	0.939	0.963	0.943	0.988	0.983	0.965	2.12
15) T	Acrylonitrile	0.266	0.238	0.249	0.246	0.250	0.254	0.250	3.81
16) T	Acetone	0.236	0.210	0.195	0.193	0.197	0.200	0.205	7.90
17) T	Carbon Disulfide	1.585	1.425	1.405	1.342	1.398	1.376	1.422	5.98
18) T	Methyl Acetate	0.488	0.474	0.560	0.553	0.570	0.599	0.541	9.08
19) T	Methyl tert-bu...	1.447	1.470	1.540	1.528	1.587	1.615	1.531	4.25
20) T	Methylene Chlo...	0.623	0.625	0.624	0.585	0.596	0.588	0.607	3.14
21) T	trans-1,2-Dich...	0.552	0.564	0.575	0.541	0.551	0.545	0.555	2.31
22) T	Diisopropyl ether	1.666	1.831	1.967	1.905	1.927	1.893	1.865	5.75
23) T	Vinyl Acetate	1.255	1.341	1.423	1.423	1.465	1.475	1.397	6.02
24) P	1,1-Dichloroet...	1.080	1.084	1.074	1.039	1.055	1.050	1.064	1.71
25) T	2-Butanone	0.260	0.270	0.275	0.275	0.276	0.286	0.274	3.07
26) T	2,2-Dichloropr...	0.832	0.746	0.782	0.761	0.802	0.826	0.792	4.38
27) T	cis-1,2-Dichlo...	0.711	0.669	0.688	0.660	0.670	0.666	0.677	2.78
28) T	Bromochloromet...	0.529	0.543	0.524	0.528	0.516	0.508	0.525	2.29
29) T	Tetrahydrofuran	0.175	0.162	0.174	0.175	0.178	0.183	0.175	4.02
30) C	Chloroform	1.150	1.106	1.112	1.048	1.052	1.050	1.087	3.93#
31) T	Cyclohexane		0.973	0.977	0.918	0.926	0.927	0.944	3.00
32) T	1,1,1-Trichlor...	0.944	0.897	0.908	0.886	0.901	0.910	0.908	2.17
33) S	1,2-Dichloroet...		0.722	0.652	0.647	0.641	0.640	0.661	5.29
34) I	1,4-Difluorobenzene	-----ISTD-----							
35) S	Dibromofluorom...		0.355	0.346	0.339	0.332	0.325	0.339	3.47
36) T	1,1-Dichloropr...	0.499	0.477	0.461	0.439	0.434	0.437	0.458	5.71
37) T	Ethyl Acetate	0.506	0.376	0.371	0.360	0.355	0.373	0.390	14.73
38) T	Carbon Tetrach...	0.471	0.505	0.495	0.476	0.480	0.478	0.484	2.73
39) T	Methylcyclohexane	0.539	0.588	0.589	0.567	0.578	0.576	0.573	3.20
40) TM	Benzene	1.391	1.445	1.452	1.356	1.342	1.324	1.385	3.88
41) T	Methacrylonitrile	0.175	0.196	0.222	0.213	0.221	0.222	0.208	9.12
42) TM	1,2-Dichloroet...	0.499	0.477	0.487	0.460	0.453	0.446	0.470	4.39
43) T	Isopropyl Acetate	0.508	0.562	0.613	0.618	0.630	0.652	0.597	8.82
44) TM	Trichloroethene	0.386	0.377	0.365	0.344	0.347	0.344	0.361	5.02
45) C	1,2-Dichloropr...	0.364	0.340	0.362	0.346	0.345	0.342	0.350	3.03#
46) T	Dibromomethane	0.247	0.246	0.250	0.240	0.236	0.237	0.242	2.35
47) T	Bromodichlorom...	0.538	0.508	0.535	0.510	0.508	0.507	0.518	2.87
48) T	Methyl methacr...	0.257	0.294	0.307	0.322	0.329	0.343	0.308	9.89
49) T	1,4-Dioxane	0.003	0.004	0.004	0.004	0.004	0.004	0.004	2.38
50) S	Toluene-d8		1.278	1.220	1.195	1.160	1.135	1.197	4.60
51) T	4-Methyl-2-Pen...	0.330	0.340	0.368	0.366	0.353	0.357	0.353	4.26
52) CM	Toluene	0.855	0.894	0.906	0.841	0.831	0.823	0.858	3.95#
53) T	t-1,3-Dichloro...	0.408	0.431	0.467	0.472	0.490	0.504	0.462	7.81
54) T	cis-1,3-Dichlo...	0.496	0.499	0.532	0.533	0.549	0.554	0.527	4.71
55) T	1,1,2-Trichlor...	0.325	0.329	0.328	0.318	0.310	0.308	0.320	2.82
56) T	Ethyl methacry...	0.390	0.409	0.447	0.459	0.468	0.482	0.442	8.13

Method Path : Z:\voasrv\HPCHEM1\MSVOA_X\Method\
 Method File : 82X070225W.M

57)	T	1,3-Dichloropr...	0.567	0.567	0.572	0.541	0.528	0.527	0.550	3.76
58)	T	2-Chloroethyl ...	0.217	0.235	0.258	0.267	0.260	0.259	0.249	7.69
59)	T	2-Hexanone	0.205	0.227	0.245	0.247	0.238	0.242	0.234	6.83
60)	T	Dibromochlorom...	0.383	0.390	0.393	0.377	0.376	0.377	0.383	1.94
61)	T	1,2-Dibromoethane	0.323	0.317	0.332	0.320	0.317	0.317	0.321	1.82
62)	S	4-Bromofluorob...		0.493	0.469	0.455	0.433	0.426	0.455	5.97
63)	I	Chlorobenzene-d5	-----ISTD-----							
64)	T	Tetrachloroethene	0.353	0.346	0.345	0.315	0.320	0.318	0.333	5.13
65)	PM	Chlorobenzene	1.111	1.117	1.113	1.049	1.051	1.045	1.081	3.32
66)	T	1,1,1,2-Tetrac...	0.366	0.347	0.377	0.359	0.366	0.367	0.363	2.75
67)	C	Ethyl Benzene	1.810	1.868	1.929	1.830	1.846	1.824	1.851	2.32#
68)	T	m/p-Xylenes	0.702	0.710	0.731	0.688	0.683	0.672	0.698	3.05
69)	T	o-Xylene	0.676	0.677	0.703	0.665	0.663	0.660	0.674	2.36
70)	T	Styrene	1.070	1.152	1.228	1.175	1.157	1.134	1.153	4.50
71)	P	Bromoform	0.269	0.261	0.273	0.269	0.275	0.275	0.270	1.94
72)	I	1,4-Dichlorobenzen...	-----ISTD-----							
73)	T	Isopropylbenzene	3.267	3.428	3.611	3.601	3.592	3.590	3.515	3.97
74)	T	N-amyl acetate	0.953	1.079	1.194	1.270	1.303	1.367	1.194	12.93
75)	P	1,1,2,2-Tetrac...	1.000	0.948	0.981	0.963	0.939	0.968	0.966	2.26
76)	T	1,2,3-Trichlor...	0.781	0.720	0.770	0.787	0.791	0.787	0.773	3.46
77)	T	Bromobenzene	0.868	0.890	0.876	0.876	0.870	0.872	0.875	0.89
78)	T	n-propylbenzene	4.048	4.223	4.362	4.293	4.271	4.233	4.238	2.50
79)	T	2-Chlorotoluene	2.441	2.523	2.596	2.482	2.498	2.474	2.503	2.13
80)	T	1,3,5-Trimethy...	2.574	2.780	3.014	2.924	2.947	2.896	2.856	5.54
81)	T	trans-1,4-Dich...		0.236	0.267	0.292	0.312	0.333	0.288	13.09
82)	T	4-Chlorotoluene	2.755	2.916	2.982	2.915	2.899	2.859	2.888	2.64
83)	T	tert-Butylbenzene	2.733	2.876	3.036	3.020	3.031	3.002	2.950	4.13
84)	T	1,2,4-Trimethy...	2.615	2.872	3.017	2.949	2.930	2.937	2.887	4.88
85)	T	sec-Butylbenzene	3.475	3.721	3.852	3.782	3.766	3.719	3.719	3.47
86)	T	p-Isopropyltol...	2.948	3.159	3.181	3.162	3.160	3.077	3.114	2.87
87)	T	1,3-Dichlorobe...	1.615	1.664	1.673	1.627	1.625	1.619	1.637	1.50
88)	T	1,4-Dichlorobe...	1.852	1.776	1.711	1.632	1.622	1.632	1.704	5.52
89)	T	n-Butylbenzene	2.747	2.891	3.036	2.987	2.983	2.914	2.926	3.51
90)	T	Hexachloroethane	0.530	0.523	0.537	0.554	0.581	0.589	0.552	4.95
91)	T	1,2-Dichlorobe...	1.626	1.592	1.625	1.568	1.560	1.550	1.587	2.07
92)	T	1,2-Dibromo-3-...	0.158	0.151	0.164	0.171	0.178	0.192	0.169	8.69
93)	T	1,2,4-Trichlor...	1.016	1.020	1.078	1.087	1.121	1.145	1.078	4.86
94)	T	Hexachlorobuta...	0.393	0.397	0.421	0.409	0.408	0.411	0.407	2.52
95)	T	Naphthalene	2.210	2.537	2.893	3.034	3.096	3.273	2.840	13.92
96)	T	1,2,3-Trichlor...	0.900	0.965	1.033	1.045	1.069	1.099	1.019	7.20

(#) = Out of Range

Acrolein



$\text{Response} = 4.842\text{e-}002 * \text{Amt} - 2.745\text{e-}003$
 Coef of Det (r^2) = 0.998662 Curve Fit: Linear
 Method Name: Z:\voasrv\HPCHEM1\MSVOA X\Method\82X070225W.M
 Calibration Table Last Updated: Thu Jul 03 05:51:11 2025

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX070225\
 Data File : VX046860.D
 Acq On : 02 Jul 2025 12:11
 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 07/03/2025
 Supervised By : Mahesh Dadoda 07/03/2025

Quant Time: Jul 03 05:29:02 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 03 05:21:52 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	5.556	168	372069	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.763	114	622566	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.049	117	571866	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	290571	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	1.185	85	3309	0.930	ug/l	89
3) Chloromethane	1.307	50	3761	0.967	ug/l	89
4) Vinyl Chloride	1.386	62	4227	0.998	ug/l	99
6) Chloroethane	1.703	64	3296	1.179	ug/l	94
7) Trichlorofluoromethane	1.910	101	6304	0.963	ug/l	88
8) Diethyl Ether	2.148	74	2346	1.007	ug/l	94
9) 1,1,2-Trichlorotrifluo...	2.349	101	3923	0.940	ug/l	93
12) 1,1-Dichloroethene	2.337	96	4037	1.001	ug/l	90
14) Allyl chloride	2.678	41	7259	1.011	ug/l	96
15) Acrylonitrile	3.081	53	9914m	5.298	ug/l	
16) Acetone	2.386	43	8778	5.749	ug/l	89
17) Carbon Disulfide	2.532	76	11797	1.115	ug/l #	88
18) Methyl Acetate	2.715	43	3632	0.903	ug/l	99
19) Methyl tert-butyl Ether	3.123	73	10768	0.945	ug/l	96
20) Methylene Chloride	2.800	84	4636	1.027	ug/l #	91
21) trans-1,2-Dichloroethene	3.111	96	4109	0.995	ug/l	92
22) Diisopropyl ether	3.776	45	12396	0.893	ug/l #	56
23) Vinyl Acetate	3.739	43	46702	4.492	ug/l	97
24) 1,1-Dichloroethane	3.623	63	8033	1.015	ug/l	98
25) 2-Butanone	4.599	43	9681m	4.752	ug/l	
26) 2,2-Dichloropropane	4.483	77	6192	1.051	ug/l	93
27) cis-1,2-Dichloroethene	4.501	96	5289	1.049	ug/l	98
28) Bromochloromethane	4.910	49	3938	1.008	ug/l #	95
29) Tetrahydrofuran	5.025	42	6512	5.015	ug/l #	62
30) Chloroform	5.111	83	8561	1.059	ug/l #	80
32) 1,1,1-Trichloroethane	5.391	97	7025	1.040	ug/l #	49
36) 1,1-Dichloropropene	5.702	75	6211	1.089	ug/l	91
37) Ethyl Acetate	4.763	43	6302m	1.298	ug/l	
38) Carbon Tetrachloride	5.690	117	5859m	0.959	ug/l	
39) Methylcyclohexane	7.385	83	6714	0.941	ug/l	86
40) Benzene	6.050	78	17315	1.004	ug/l #	87
41) Methacrylonitrile	4.958	41	2181m	0.842	ug/l	
42) 1,2-Dichloroethane	6.104	62	6218	1.062	ug/l	88
43) Isopropyl Acetate	6.354	43	6331	0.851	ug/l #	79
44) Trichloroethene	7.135	130	4807	1.071	ug/l	94
45) 1,2-Dichloropropane	7.446	63	4536	1.041	ug/l #	77

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX070225\
 Data File : VX046860.D
 Acq On : 02 Jul 2025 12:11
 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 07/03/2025
 Supervised By : Mahesh Dadoda 07/03/2025

Quant Time: Jul 03 05:29:02 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 03 05:21:52 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) Dibromomethane	7.592	93	3072	1.018	ug/l	96
47) Bromodichloromethane	7.830	83	6705	1.040	ug/l	91
48) Methyl methacrylate	7.714	41	3198	0.833	ug/l #	54
49) 1,4-Dioxane	7.683	88	860m	19.325	ug/l	
51) 4-Methyl-2-Pentanone	8.580	43	20561	4.684	ug/l	97
52) Toluene	8.726	92	10648	0.996	ug/l	96
53) t-1,3-Dichloropropene	8.994	75	5080	0.883	ug/l	97
54) cis-1,3-Dichloropropene	8.372	75	6171	0.940	ug/l #	47
55) 1,1,2-Trichloroethane	9.159	97	4046	1.016	ug/l #	84
56) Ethyl methacrylate	9.122	69	4850	0.880	ug/l	95
57) 1,3-Dichloropropane	9.311	76	7057	1.030	ug/l	94
58) 2-Chloroethyl Vinyl ether	8.250	63	13509	4.352	ug/l	100
59) 2-Hexanone	9.439	43	12742	4.376	ug/l	94
60) Dibromochloromethane	9.519	129	4772	1.002	ug/l	95
61) 1,2-Dibromoethane	9.610	107	4026	1.007	ug/l	100
64) Tetrachloroethene	9.275	164	4039	1.061	ug/l #	86
65) Chlorobenzene	10.079	112	12712	1.028	ug/l	99
66) 1,1,1,2-Tetrachloroethane	10.165	131	4188	1.008	ug/l #	65
67) Ethyl Benzene	10.195	91	20707	0.978	ug/l	96
68) m/p-Xylenes	10.305	106	16047	2.011	ug/l	91
69) o-Xylene	10.640	106	7726	1.002	ug/l	95
70) Styrene	10.659	104	12236	0.928	ug/l	98
71) Bromoform	10.805	173	3071	0.994	ug/l #	97
73) Isopropylbenzene	10.963	105	18985	0.929	ug/l	100
74) N-amyl acetate	10.848	43	5537	0.798	ug/l #	91
75) 1,1,2,2-Tetrachloroethane	11.213	83	5809	1.034	ug/l	94
76) 1,2,3-Trichloropropane	11.238	75	4536m	1.010	ug/l	
77) Bromobenzene	11.201	156	5045	0.992	ug/l	96
78) n-propylbenzene	11.305	91	23522	0.955	ug/l	98
79) 2-Chlorotoluene	11.366	91	14185	0.975	ug/l	99
80) 1,3,5-Trimethylbenzene	11.451	105	14958	0.901	ug/l	100
82) 4-Chlorotoluene	11.457	91	16012	0.954	ug/l	97
83) tert-Butylbenzene	11.713	119	15883	0.927	ug/l	99
84) 1,2,4-Trimethylbenzene	11.750	105	15197	0.906	ug/l	96
85) sec-Butylbenzene	11.890	105	20193	0.934	ug/l	99
86) p-Isopropyltoluene	12.006	119	17131	0.946	ug/l	93
87) 1,3-Dichlorobenzene	11.969	146	9388	0.987	ug/l	97
88) 1,4-Dichlorobenzene	12.036	146	10764m	1.087	ug/l	
89) n-Butylbenzene	12.335	91	15963	0.939	ug/l	99
90) Hexachloroethane	12.536	117	3079	0.960	ug/l	91
91) 1,2-Dichlorobenzene	12.335	146	9448	1.025	ug/l	97
92) 1,2-Dibromo-3-Chloropr...	12.945	75	920	0.937	ug/l	95
93) 1,2,4-Trichlorobenzene	13.591	180	5904	0.942	ug/l	98
94) Hexachlorobutadiene	13.725	225	2281	0.966	ug/l	87
95) Naphthalene	13.780	128	12846	0.778	ug/l	98
96) 1,2,3-Trichlorobenzene	13.963	180	5231	0.884	ug/l	95

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

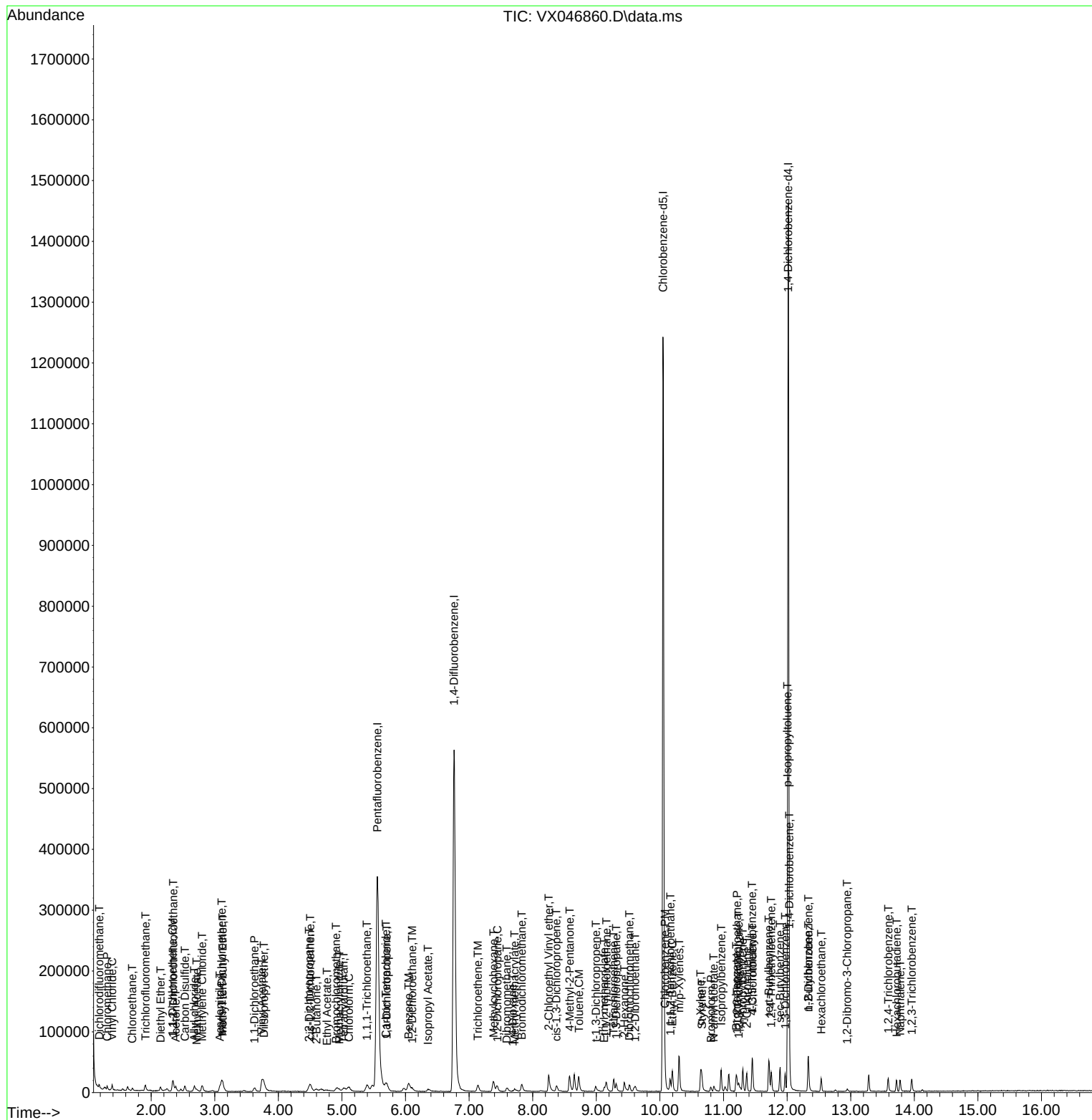
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX070225\
Data File : VX046860.D
Acq On : 02 Jul 2025 12:11
Operator : JC/MD
Sample : VSTDIC001
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDIC001

Manual Integrations
APPROVED

Reviewed By :John Carlone 07/03/2025
Supervised By :Mahesh Dadoda 07/03/2025

Quant Time: Jul 03 05:29:02 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 03 05:21:52 2025
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX070225\
 Data File : VX046861.D
 Acq On : 02 Jul 2025 12:37
 Operator : JC/MD
 Sample : VSTDIC005
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VSTDIC005

Manual Integrations
 APPROVED

Reviewed By : John Carlone 07/03/2025
 Supervised By : Mahesh Dadoda 07/03/2025

Quant Time: Jul 03 05:30:01 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 03 05:21:52 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	5.556	168	396691	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.763	114	652365	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.049	117	592225	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	309407	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.964	65	28658	5.468	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery =	10.940%#		
35) Dibromofluoromethane	5.397	113	23179	5.234	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	10.460%#		
50) Toluene-d8	8.647	98	83349	5.335	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery =	10.660%#		
62) 4-Bromofluorobenzene	11.079	95	32156	5.415	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery =	10.840%#		
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.178	85	17184	4.530	ug/l	99
3) Chloromethane	1.306	50	20130	4.857	ug/l	95
4) Vinyl Chloride	1.386	62	21789	4.827	ug/l	99
5) Bromomethane	1.623	94	15966	5.505	ug/l	93
6) Chloroethane	1.703	64	14497	4.864	ug/l	97
7) Trichlorofluoromethane	1.904	101	34689	4.970	ug/l	98
8) Diethyl Ether	2.148	74	12204	4.914	ug/l	98
9) 1,1,2-Trichlorotrifluo...	2.343	101	22655	5.094	ug/l	98
10) Methyl Iodide	2.465	142	18441	3.806	ug/l	95
11) Tert butyl alcohol	2.952	59	8771	25.519	ug/l	100
12) 1,1-Dichloroethene	2.337	96	22008	5.116	ug/l	100
13) Acrolein	2.245	56	14598	40.835	ug/l	98
14) Allyl chloride	2.678	41	37266	4.866	ug/l	95
15) Acrylonitrile	3.074	53	47130	23.621	ug/l	100
16) Acetone	2.385	43	41693	25.612	ug/l	94
17) Carbon Disulfide	2.526	76	56543	5.012	ug/l	98
18) Methyl Acetate	2.715	43	18796	4.381	ug/l	92
19) Methyl tert-butyl Ether	3.123	73	58304	4.800	ug/l	96
20) Methylene Chloride	2.800	84	24790	5.150	ug/l	92
21) trans-1,2-Dichloroethene	3.105	96	22385	5.086	ug/l	98
22) Diisopropyl ether	3.763	45	72646	4.910	ug/l #	74
23) Vinyl Acetate	3.733	43	265941	23.992	ug/l	97
24) 1,1-Dichloroethane	3.617	63	42994	5.095	ug/l	97
25) 2-Butanone	4.568	43	53597	24.678	ug/l	99
26) 2,2-Dichloropropane	4.483	77	29599	4.713	ug/l	79
27) cis-1,2-Dichloroethene	4.501	96	26549	4.940	ug/l	96
28) Bromochloromethane	4.915	49	21555	5.176	ug/l	94
29) Tetrahydrofuran	5.019	42	32120	23.200	ug/l	98
30) Chloroform	5.098	83	43886	5.091	ug/l	99
31) Cyclohexane	5.482	56	38601	5.153	ug/l	96
32) 1,1,1-Trichloroethane	5.391	97	35598	4.943	ug/l	95
36) 1,1-Dichloropropene	5.702	75	31138	5.212	ug/l	98
37) Ethyl Acetate	4.733	43	24519	4.818	ug/l #	92
38) Carbon Tetrachloride	5.690	117	32963	5.151	ug/l	93
39) Methylcyclohexane	7.385	83	38332	5.129	ug/l	99
40) Benzene	6.043	78	94260	5.216	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX070225\
 Data File : VX046861.D
 Acq On : 02 Jul 2025 12:37
 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 07/03/2025
 Supervised By : Mahesh Dadoda 07/03/2025

Quant Time: Jul 03 05:30:01 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 03 05:21:52 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	4.934	41	12777	4.707	ug/l #	94
42) 1,2-Dichloroethane	6.092	62	31102	5.068	ug/l	98
43) Isopropyl Acetate	6.348	43	36681	4.706	ug/l	98
44) Trichloroethene	7.128	130	24587	5.227	ug/l	98
45) 1,2-Dichloropropane	7.433	63	22205	4.863	ug/l	91
46) Dibromomethane	7.586	93	16018	5.063	ug/l	99
47) Bromodichloromethane	7.824	83	33143	4.907	ug/l	99
48) Methyl methacrylate	7.702	41	19166	4.762	ug/l	98
49) 1,4-Dioxane	7.671	88	4647	99.650	ug/l #	90
51) 4-Methyl-2-Pentanone	8.573	43	110844	24.096	ug/l	100
52) Toluene	8.720	92	58295	5.206	ug/l	99
53) t-1,3-Dichloropropene	8.982	75	28142	4.668	ug/l	99
54) cis-1,3-Dichloropropene	8.366	75	32562	4.732	ug/l	92
55) 1,1,2-Trichloroethane	9.153	97	21431	5.138	ug/l	96
56) Ethyl methacrylate	9.122	69	26665	4.619	ug/l	97
57) 1,3-Dichloropropane	9.311	76	37000	5.152	ug/l	99
58) 2-Chloroethyl Vinyl ether	8.244	63	76711	23.583	ug/l	99
59) 2-Hexanone	9.433	43	73995	24.251	ug/l	94
60) Dibromochloromethane	9.518	129	25465	5.101	ug/l	96
61) 1,2-Dibromoethane	9.610	107	20695	4.940	ug/l	98
64) Tetrachloroethene	9.274	164	20514	5.203	ug/l	97
65) Chlorobenzene	10.079	112	66148	5.166	ug/l	98
66) 1,1,1,2-Tetrachloroethane	10.158	131	20533	4.770	ug/l	94
67) Ethyl Benzene	10.195	91	110637	5.046	ug/l	97
68) m/p-Xylenes	10.299	106	84083	10.176	ug/l	100
69) o-Xylene	10.640	106	40078	5.021	ug/l	99
70) Styrene	10.652	104	68250	4.998	ug/l	99
71) Bromoform	10.799	173	15461	4.831	ug/l #	99
73) Isopropylbenzene	10.963	105	106065	4.876	ug/l	98
74) N-amyl acetate	10.841	43	33387	4.517	ug/l	98
75) 1,1,2,2-Tetrachloroethane	11.207	83	29333	4.905	ug/l	100
76) 1,2,3-Trichloropropane	11.238	75	22279m	4.660	ug/l	
77) Bromobenzene	11.195	156	27534	5.082	ug/l	95
78) n-propylbenzene	11.298	91	130658	4.982	ug/l	97
79) 2-Chlorotoluene	11.359	91	78075	5.042	ug/l	99
80) 1,3,5-Trimethylbenzene	11.451	105	86020	4.867	ug/l	100
81) trans-1,4-Dichloro-2-b...	11.018	75	7304	4.100	ug/l #	81
82) 4-Chlorotoluene	11.451	91	90236	5.049	ug/l	100
83) tert-Butylbenzene	11.713	119	88998	4.876	ug/l	98
84) 1,2,4-Trimethylbenzene	11.750	105	88868	4.975	ug/l	95
85) sec-Butylbenzene	11.890	105	115141	5.003	ug/l	100
86) p-Isopropyltoluene	12.006	119	97742	5.072	ug/l	99
87) 1,3-Dichlorobenzene	11.969	146	51500	5.083	ug/l	98
88) 1,4-Dichlorobenzene	12.036	146	54943	5.210	ug/l	95
89) n-Butylbenzene	12.329	91	89435	4.939	ug/l	97
90) Hexachloroethane	12.536	117	16170	4.733	ug/l	94
91) 1,2-Dichlorobenzene	12.335	146	49253	5.016	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	12.938	75	4675	4.469	ug/l	90
93) 1,2,4-Trichlorobenzene	13.585	180	31558	4.731	ug/l	100
94) Hexachlorobutadiene	13.719	225	12292	4.886	ug/l	97
95) Naphthalene	13.774	128	78483	4.465	ug/l	99
96) 1,2,3-Trichlorobenzene	13.957	180	29854	4.737	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX070225\
Data File : VX046861.D
Acq On : 02 Jul 2025 12:37
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 07/03/2025
Supervised By :Mahesh Dadoda 07/03/2025

Quant Time: Jul 03 05:30:01 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 03 05:21:52 2025
Response via : Initial Calibration

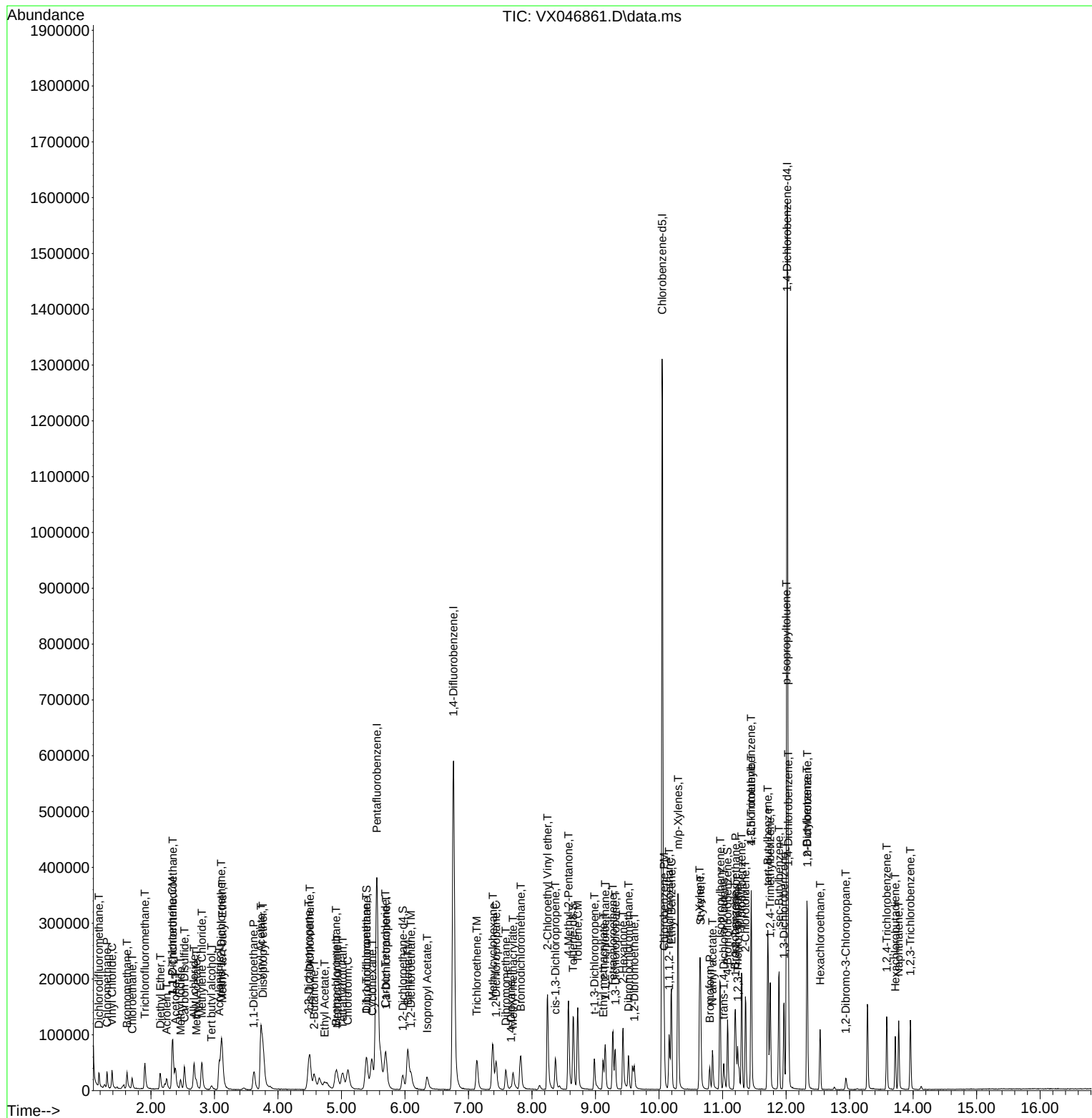
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations

Reviewed By :John Carlone 07/03/2025
Supervised By :Mahesh Dadoda 07/03/2025



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX070225\
 Data File : VX046862.D
 Acq On : 02 Jul 2025 13:18
 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 07/03/2025
 Supervised By : Mahesh Dadoda 07/03/2025

Quant Time: Jul 03 05:31:05 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 03 05:21:52 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	5.556	168	399111	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.763	114	642908	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.049	117	576289	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	296482	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.958	65	104091	19.742	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery =	39.480%#		
35) Dibromofluoromethane	5.391	113	88863	20.362	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	40.720%#		
50) Toluene-d8	8.647	98	313624	20.369	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery =	40.740%#		
62) 4-Bromofluorobenzene	11.079	95	120554	20.601	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery =	41.200%#		
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	1.184	85	81688	21.402	ug/l	99
3) Chloromethane	1.306	50	86312	20.697	ug/l	97
4) Vinyl Chloride	1.386	62	94339	20.773	ug/l	100
5) Bromomethane	1.629	94	64159	21.988	ug/l	97
6) Chloroethane	1.703	64	61209	20.412	ug/l	100
7) Trichlorofluoromethane	1.904	101	147045	20.941	ug/l	98
8) Diethyl Ether	2.142	74	50485	20.203	ug/l	99
9) 1,1,2-Trichlorotrifluo...	2.343	101	93041	20.794	ug/l	98
10) Methyl Iodide	2.465	142	92753	19.028	ug/l	100
11) Tert butyl alcohol	2.952	59	33170	95.921	ug/l	99
12) 1,1-Dichloroethene	2.337	96	87106	20.127	ug/l	99
13) Acrolein	2.245	56	34095	91.049	ug/l	97
14) Allyl chloride	2.678	41	153719	19.950	ug/l	99
15) Acrylonitrile	3.068	53	198794	99.028	ug/l	99
16) Acetone	2.379	43	155869	95.170	ug/l	98
17) Carbon Disulfide	2.526	76	224317	19.764	ug/l	98
18) Methyl Acetate	2.709	43	89471	20.726	ug/l	100
19) Methyl tert-butyl Ether	3.117	73	245776	20.110	ug/l	100
20) Methylene Chloride	2.800	84	99547	20.555	ug/l	97
21) trans-1,2-Dichloroethene	3.105	96	91856	20.742	ug/l	94
22) Diisopropyl ether	3.763	45	314003	21.094	ug/l	94
23) Vinyl Acetate	3.727	43	1136064	101.868	ug/l	100
24) 1,1-Dichloroethane	3.617	63	171529	20.204	ug/l	100
25) 2-Butanone	4.556	43	219759	100.571	ug/l	99
26) 2,2-Dichloropropane	4.483	77	124894	19.767	ug/l	99
27) cis-1,2-Dichloroethene	4.495	96	109844	20.316	ug/l	99
28) Bromochloromethane	4.903	49	83733	19.985	ug/l	97
29) Tetrahydrofuran	5.001	42	138587	99.493	ug/l	99
30) Chloroform	5.098	83	177543	20.470	ug/l	97
31) Cyclohexane	5.470	56	155952	20.692	ug/l	93
32) 1,1,1-Trichloroethane	5.391	97	144962	20.005	ug/l	98
36) 1,1-Dichloropropene	5.702	75	118611	20.144	ug/l	97
37) Ethyl Acetate	4.720	43	95352	19.013	ug/l	99
38) Carbon Tetrachloride	5.684	117	127307	20.188	ug/l	97
39) Methylcyclohexane	7.378	83	151595	20.582	ug/l	96
40) Benzene	6.043	78	373429	20.968	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX070225\
 Data File : VX046862.D
 Acq On : 02 Jul 2025 13:18
 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 07/03/2025
 Supervised By : Mahesh Dadoda 07/03/2025

Quant Time: Jul 03 05:31:05 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 03 05:21:52 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	4.922	41	57138	21.358	ug/l	95
42) 1,2-Dichloroethane	6.086	62	125114	20.689	ug/l	99
43) Isopropyl Acetate	6.336	43	157613	20.519	ug/l	100
44) Trichloroethene	7.128	130	93746	20.221	ug/l	100
45) 1,2-Dichloropropane	7.427	63	93205	20.714	ug/l	99
46) Dibromomethane	7.580	93	64260	20.612	ug/l	100
47) Bromodichloromethane	7.817	83	137600	20.670	ug/l	98
48) Methyl methacrylate	7.695	41	78897	19.892	ug/l	97
49) 1,4-Dioxane	7.659	88	18907	411.405	ug/l	97
51) 4-Methyl-2-Pentanone	8.567	43	473773	104.508	ug/l	99
52) Toluene	8.714	92	232882	21.102	ug/l	98
53) t-1,3-Dichloropropene	8.976	75	120040	20.206	ug/l	100
54) cis-1,3-Dichloropropene	8.366	75	136889	20.187	ug/l	98
55) 1,1,2-Trichloroethane	9.146	97	84451	20.545	ug/l	97
56) Ethyl methacrylate	9.116	69	114929	20.200	ug/l	99
57) 1,3-Dichloropropane	9.305	76	147193	20.795	ug/l	100
58) 2-Chloroethyl Vinyl ether	8.238	63	331143	103.298	ug/l	100
59) 2-Hexanone	9.427	43	314535	104.602	ug/l	99
60) Dibromochloromethane	9.518	129	100960	20.523	ug/l	100
61) 1,2-Dibromoethane	9.610	107	85342	20.672	ug/l	100
64) Tetrachloroethene	9.268	164	79577	20.740	ug/l	96
65) Chlorobenzene	10.073	112	256491	20.586	ug/l	99
66) 1,1,1,2-Tetrachloroethane	10.158	131	86804	20.724	ug/l	99
67) Ethyl Benzene	10.189	91	444690	20.841	ug/l	99
68) m/p-Xylenes	10.299	106	337082	41.924	ug/l	98
69) o-Xylene	10.640	106	162094	20.870	ug/l	99
70) Styrene	10.652	104	283121	21.307	ug/l	100
71) Bromoform	10.799	173	62957	20.215	ug/l #	98
73) Isopropylbenzene	10.957	105	428283	20.549	ug/l	100
74) N-amyl acetate	10.841	43	141581	19.991	ug/l	99
75) 1,1,2,2-Tetrachloroethane	11.207	83	116329	20.298	ug/l	99
76) 1,2,3-Trichloropropane	11.238	75	91349m	19.941	ug/l	
77) Bromobenzene	11.195	156	103902	20.014	ug/l	96
78) n-propylbenzene	11.298	91	517332	20.585	ug/l	100
79) 2-Chlorotoluene	11.359	91	307886	20.748	ug/l	100
80) 1,3,5-Trimethylbenzene	11.451	105	357455	21.108	ug/l	99
81) trans-1,4-Dichloro-2-b...	11.018	75	31721	18.582	ug/l	94
82) 4-Chlorotoluene	11.451	91	353678	20.654	ug/l	99
83) tert-Butylbenzene	11.713	119	360024	20.583	ug/l	99
84) 1,2,4-Trimethylbenzene	11.750	105	357753	20.900	ug/l	95
85) sec-Butylbenzene	11.890	105	456837	20.715	ug/l	100
86) p-Isopropyltoluene	12.006	119	377192	20.425	ug/l	100
87) 1,3-Dichlorobenzene	11.963	146	198351	20.429	ug/l	99
88) 1,4-Dichlorobenzene	12.036	146	202881	20.078	ug/l	99
89) n-Butylbenzene	12.329	91	360061	20.750	ug/l	99
90) Hexachloroethane	12.536	117	63705	19.459	ug/l	99
91) 1,2-Dichlorobenzene	12.329	146	192682	20.479	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	12.938	75	19455	19.409	ug/l	97
93) 1,2,4-Trichlorobenzene	13.585	180	127830	19.999	ug/l	99
94) Hexachlorobutadiene	13.725	225	49928	20.713	ug/l	99
95) Naphthalene	13.774	128	343123	20.372	ug/l	99
96) 1,2,3-Trichlorobenzene	13.957	180	122506	20.284	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX070225\
Data File : VX046862.D
Acq On : 02 Jul 2025 13:18
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 07/03/2025
Supervised By :Mahesh Dadoda 07/03/2025

Quant Time: Jul 03 05:31:05 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 03 05:21:52 2025
Response via : Initial Calibration

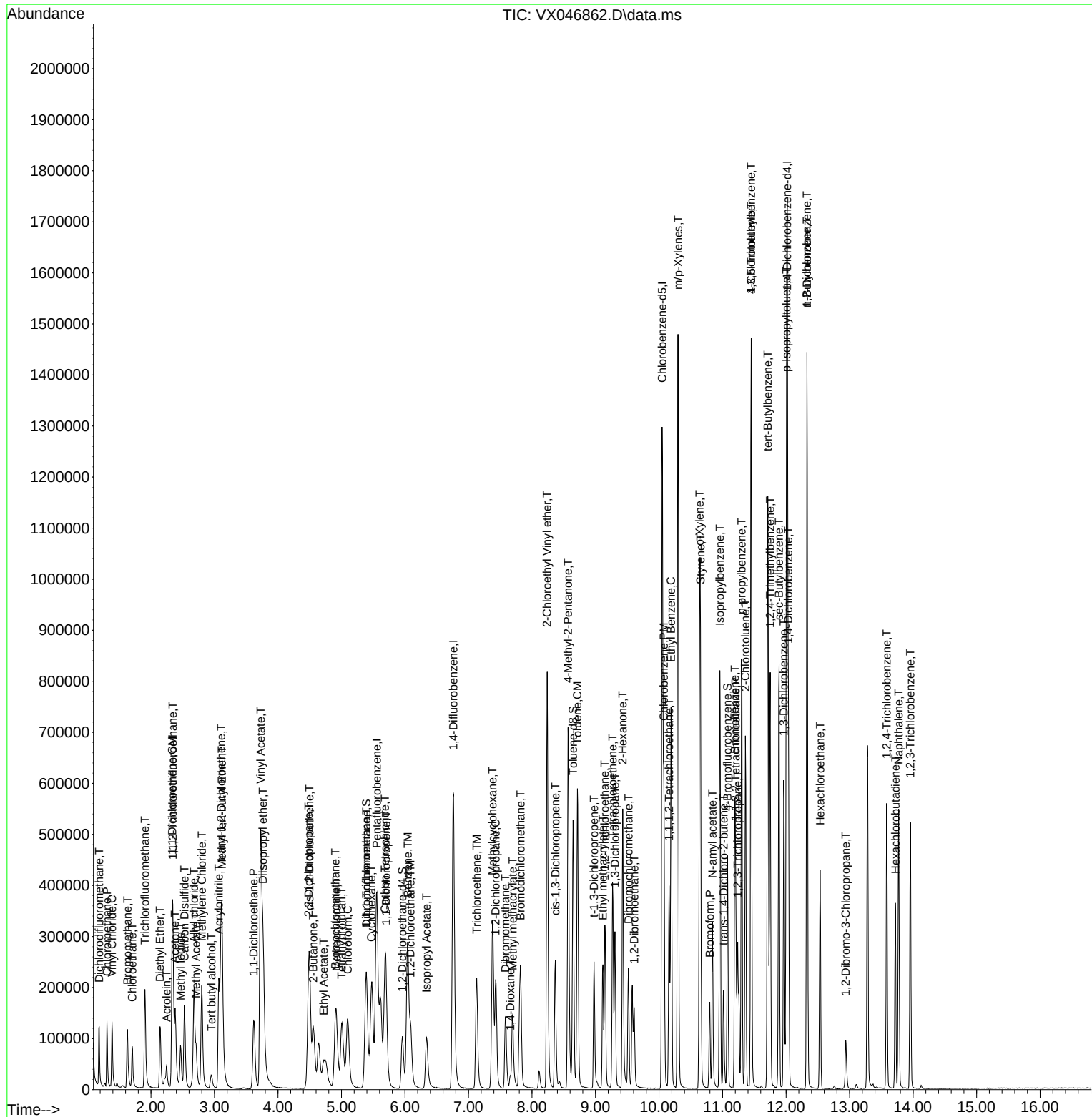
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations

Reviewed By :John Carlone 07/03/2025
Supervised By :Mahesh Dadoda 07/03/2025



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX070225\
 Data File : VX046863.D
 Acq On : 02 Jul 2025 13:39
 Operator : JC/MD
 Sample : VSTDICCC050
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VSTDICCC050

Manual Integrations
 APPROVED

Reviewed By : John Carlone 07/03/2025
 Supervised By : Mahesh Dadoda 07/03/2025

Quant Time: Jul 03 05:32:05 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 03 05:21:52 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	5.562	168	368182	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.769	114	601240	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	539902	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	266829	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.958	65	238206	48.973	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery =	97.940%		
35) Dibromofluoromethane	5.397	113	203814	49.939	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	99.880%		
50) Toluene-d8	8.647	98	718232	49.879	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery =	99.760%		
62) 4-Bromofluorobenzene	11.079	95	273366	49.952	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery =	99.900%		
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.179	85	179160	50.881	ug/l	100
3) Chloromethane	1.307	50	186908	48.585	ug/l	100
4) Vinyl Chloride	1.386	62	202462	48.327	ug/l	100
5) Bromomethane	1.624	94	132366	49.174	ug/l	100
6) Chloroethane	1.703	64	127577	46.118	ug/l	100
7) Trichlorofluoromethane	1.904	101	315495	48.704	ug/l	100
8) Diethyl Ether	2.148	74	112089	48.624	ug/l	100
9) 1,1,2-Trichlorotrifluo...	2.349	101	201760	48.880	ug/l	100
10) Methyl Iodide	2.471	142	232179	51.631	ug/l	100
11) Tert butyl alcohol	2.953	59	77545	243.081	ug/l	100
12) 1,1-Dichloroethene	2.337	96	193069	48.359	ug/l	100
13) Acrolein	2.246	56	84088	238.671	ug/l	100
14) Allyl chloride	2.678	41	347253	48.854	ug/l	100
15) Acrylonitrile	3.075	53	453047	244.641	ug/l	100
16) Acetone	2.386	43	355803	235.495	ug/l	100
17) Carbon Disulfide	2.532	76	494153	47.196	ug/l	100
18) Methyl Acetate	2.715	43	203643	51.137	ug/l	100
19) Methyl tert-butyl Ether	3.123	73	562569	49.898	ug/l	100
20) Methylene Chloride	2.800	84	215411	48.215	ug/l	100
21) trans-1,2-Dichloroethene	3.105	96	199150	48.748	ug/l	100
22) Diisopropyl ether	3.770	45	701332	51.071	ug/l	100
23) Vinyl Acetate	3.733	43	2620249	254.689	ug/l	100
24) 1,1-Dichloroethane	3.623	63	382510	48.841	ug/l	100
25) 2-Butanone	4.562	43	506469	251.252	ug/l	100
26) 2,2-Dichloropropane	4.489	77	280159	48.066	ug/l	100
27) cis-1,2-Dichloroethene	4.501	96	243080	48.734	ug/l	100
28) Bromochloromethane	4.910	49	194431	50.303	ug/l	100
29) Tetrahydrofuran	5.007	42	322800	251.209	ug/l	100
30) Chloroform	5.105	83	386035	48.247	ug/l	100
31) Cyclohexane	5.483	56	337894	48.598	ug/l	100
32) 1,1,1-Trichloroethane	5.397	97	326288	48.811	ug/l	100
36) 1,1-Dichloropropene	5.702	75	264243	47.988	ug/l	100
37) Ethyl Acetate	4.721	43	216259	46.111	ug/l	100
38) Carbon Tetrachloride	5.690	117	286310	48.549	ug/l	100
39) Methylcyclohexane	7.385	83	341159	49.529	ug/l	100
40) Benzene	6.050	78	815341	48.954	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX070225\
 Data File : VX046863.D
 Acq On : 02 Jul 2025 13:39
 Operator : JC/MD
 Sample : VSTDICCC050
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VSTDICCC050

Manual Integrations
 APPROVED

Reviewed By : John Carlone 07/03/2025
 Supervised By : Mahesh Dadoda 07/03/2025

Quant Time: Jul 03 05:32:05 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 03 05:21:52 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	4.922	41	127915	51.128	ug/l	100
42) 1,2-Dichloroethane	6.092	62	276628	48.913	ug/l	100
43) Isopropyl Acetate	6.342	43	371859	51.765	ug/l	100
44) Trichloroethene	7.129	130	206841	47.708	ug/l	100
45) 1,2-Dichloropropane	7.434	63	207864	49.398	ug/l	100
46) Dibromomethane	7.586	93	144114	49.430	ug/l	100
47) Bromodichloromethane	7.824	83	306696	49.265	ug/l	100
48) Methyl methacrylate	7.696	41	193493	52.165	ug/l	100
49) 1,4-Dioxane	7.659	88	43664	1015.947	ug/l	100
51) 4-Methyl-2-Pentanone	8.574	43	1101634	259.847	ug/l	100
52) Toluene	8.720	92	505397	48.969	ug/l	100
53) t-1,3-Dichloropropene	8.976	75	284038	51.124	ug/l	100
54) cis-1,3-Dichloropropene	8.366	75	320678	50.567	ug/l	100
55) 1,1,2-Trichloroethane	9.153	97	191073	49.704	ug/l	100
56) Ethyl methacrylate	9.116	69	276170	51.905	ug/l	100
57) 1,3-Dichloropropane	9.305	76	325345	49.150	ug/l	100
58) 2-Chloroethyl Vinyl ether	8.244	63	802354	267.636	ug/l	100
59) 2-Hexanone	9.427	43	742855	264.164	ug/l	100
60) Dibromochloromethane	9.519	129	226427	49.218	ug/l	100
61) 1,2-Dibromoethane	9.610	107	192320	49.814	ug/l	100
64) Tetrachloroethene	9.275	164	170176	47.341	ug/l	100
65) Chlorobenzene	10.079	112	566582	48.538	ug/l	100
66) 1,1,1,2-Tetrachloroethane	10.159	131	193638	49.347	ug/l	100
67) Ethyl Benzene	10.189	91	987806	49.415	ug/l	100
68) m/p-Xylenes	10.299	106	743275	98.674	ug/l	100
69) o-Xylene	10.640	106	358798	49.311	ug/l	100
70) Styrene	10.653	104	634597	50.976	ug/l	100
71) Bromoform	10.799	173	145282	49.794	ug/l #	100
73) Isopropylbenzene	10.957	105	960979	51.232	ug/l	100
74) N-amyl acetate	10.842	43	338897	53.169	ug/l	100
75) 1,1,2,2-Tetrachloroethane	11.207	83	256928	49.814	ug/l	100
76) 1,2,3-Trichloropropane	11.238	75	210006m	50.937	ug/l	
77) Bromobenzene	11.195	156	233851	50.052	ug/l	100
78) n-propylbenzene	11.299	91	1145518	50.647	ug/l	100
79) 2-Chlorotoluene	11.360	91	662335	49.595	ug/l	100
80) 1,3,5-Trimethylbenzene	11.451	105	780315	51.198	ug/l	100
81) trans-1,4-Dichloro-2-b...	11.018	75	77831	50.659	ug/l	100
82) 4-Chlorotoluene	11.451	91	777681	50.461	ug/l	100
83) tert-Butylbenzene	11.713	119	805925	51.197	ug/l	100
84) 1,2,4-Trimethylbenzene	11.750	105	786934	51.082	ug/l	100
85) sec-Butylbenzene	11.884	105	1009027	50.840	ug/l	100
86) p-Isopropyltoluene	12.006	119	843813	50.770	ug/l	100
87) 1,3-Dichlorobenzene	11.963	146	434168	49.687	ug/l	100
88) 1,4-Dichlorobenzene	12.036	146	435439	47.882	ug/l	100
89) n-Butylbenzene	12.329	91	797119	51.042	ug/l	100
90) Hexachloroethane	12.536	117	147768	50.152	ug/l	100
91) 1,2-Dichlorobenzene	12.329	146	418287	49.398	ug/l	100
92) 1,2-Dibromo-3-Chloropr...	12.939	75	45584	50.530	ug/l	100
93) 1,2,4-Trichlorobenzene	13.585	180	290148	50.438	ug/l	100
94) Hexachlorobutadiene	13.719	225	109236	50.352	ug/l	100
95) Naphthalene	13.774	128	809540	53.405	ug/l	100
96) 1,2,3-Trichlorobenzene	13.957	180	278713	51.278	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX070225\
Data File : VX046863.D
Acq On : 02 Jul 2025 13:39
Operator : JC/MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

Reviewed By :John Carlone 07/03/2025
Supervised By :Mahesh Dadoda 07/03/2025

Quant Time: Jul 03 05:32:05 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 03 05:21:52 2025
Response via : Initial Calibration

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

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

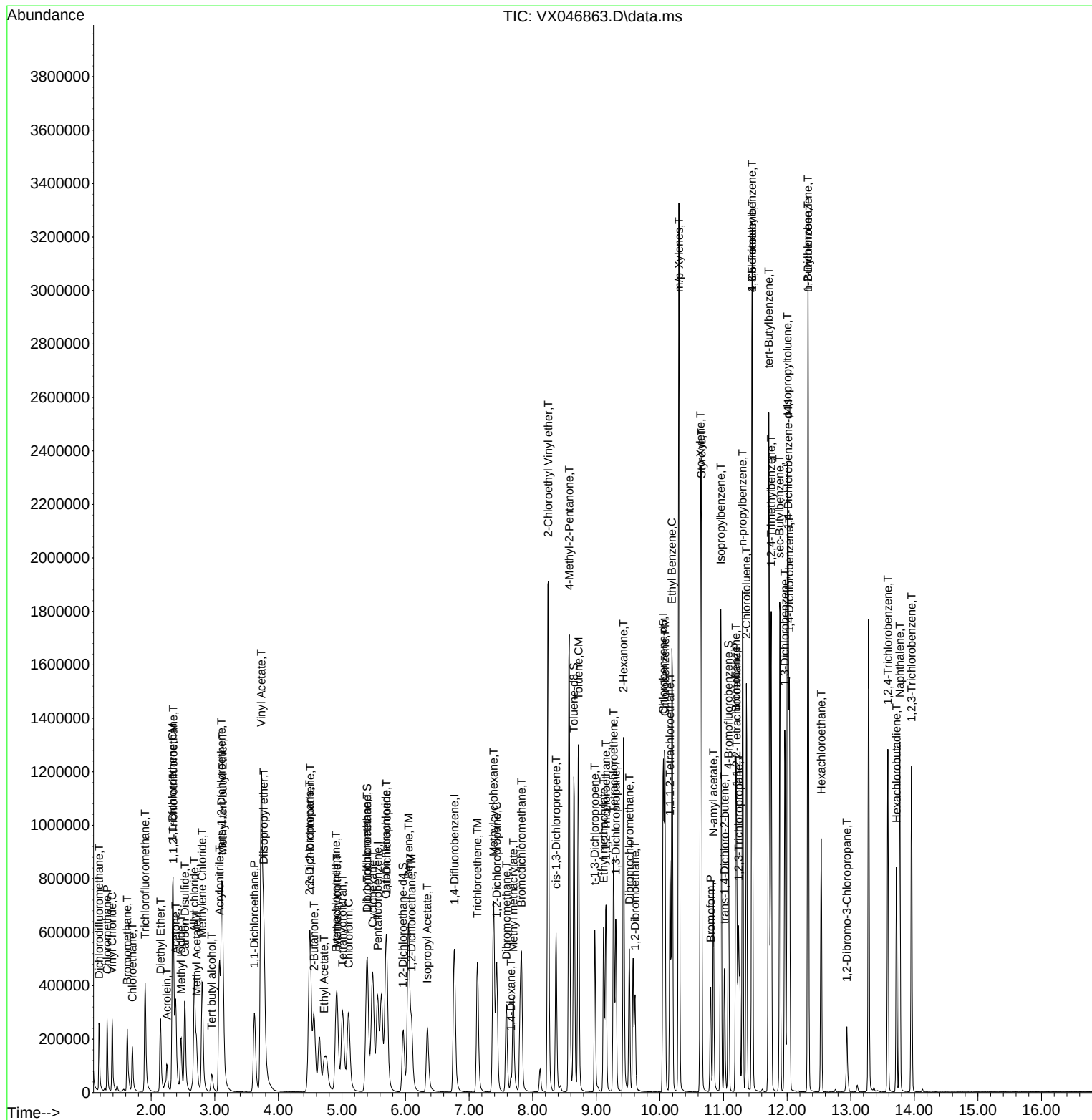
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX070225\
 Data File : VX046863.D
 Acq On : 02 Jul 2025 13:39
 Operator : JC/MD
 Sample : VSTDICCC050
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VSTDICCC050

Quant Time: Jul 03 05:32:05 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 03 05:21:52 2025
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By :John Carlone 07/03/2025
 Supervised By :Mahesh Dadoda 07/03/2025



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX070225\
 Data File : VX046864.D
 Acq On : 02 Jul 2025 14:10
 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 07/03/2025
 Supervised By : Mahesh Dadoda 07/03/2025

Quant Time: Jul 03 05:33:07 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 03 05:21:52 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	5.550	168	360099	50.000	ug/l	-0.01
34) 1,4-Difluorobenzene	6.763	114	591959	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.049	117	521464	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	253960	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.958	65	461552	97.021	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 194.040%#			
35) Dibromofluoromethane	5.385	113	393465	97.920	ug/l	-0.01
Spiked Amount 50.000	Range 75 - 124		Recovery = 195.840%#			
50) Toluene-d8	8.647	98	1373545	96.884	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery = 193.760%#			
62) 4-Bromofluorobenzene	11.079	95	513224	95.251	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery = 190.500%#			
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	1.179	85	361969	105.107	ug/l	99
3) Chloromethane	1.307	50	391364	104.014	ug/l	98
4) Vinyl Chloride	1.386	62	424193	103.527	ug/l	100
5) Bromomethane	1.618	94	265849	100.979	ug/l	100
6) Chloroethane	1.697	64	260651	96.337	ug/l	99
7) Trichlorofluoromethane	1.904	101	643202	101.523	ug/l	98
8) Diethyl Ether	2.142	74	228526	101.358	ug/l	100
9) 1,1,2-Trichlorotrifluo...	2.343	101	412204	102.105	ug/l	99
10) Methyl Iodide	2.465	142	490208	111.457	ug/l	99
11) Tert butyl alcohol	2.953	59	156192	500.607	ug/l	99
12) 1,1-Dichloroethene	2.331	96	393053	100.660	ug/l	97
13) Acrolein	2.245	56	173378	500.012	ug/l	100
14) Allyl chloride	2.672	41	711428	102.334	ug/l	99
15) Acrylonitrile	3.068	53	898537	496.093	ug/l	100
16) Acetone	2.380	43	707647	478.882	ug/l	98
17) Carbon Disulfide	2.526	76	1006664	98.304	ug/l	99
18) Methyl Acetate	2.709	43	410853	105.486	ug/l	99
19) Methyl tert-butyl Ether	3.117	73	1142805	103.638	ug/l	98
20) Methylene Chloride	2.800	84	428892	98.153	ug/l	97
21) trans-1,2-Dichloroethene	3.105	96	396705	99.285	ug/l	97
22) Diisopropyl ether	3.764	45	1387980	103.342	ug/l	97
23) Vinyl Acetate	3.727	43	5276627	524.403	ug/l	100
24) 1,1-Dichloroethane	3.617	63	759957	99.213	ug/l	100
25) 2-Butanone	4.550	43	992659	503.497	ug/l	99
26) 2,2-Dichloropropane	4.483	77	577382	101.283	ug/l	100
27) cis-1,2-Dichloroethene	4.495	96	482620	98.931	ug/l	100
28) Bromochloromethane	4.904	49	371458	98.260	ug/l	100
29) Tetrahydrofuran	5.001	42	640795	509.872	ug/l	99
30) Chloroform	5.099	83	757773	96.834	ug/l	100
31) Cyclohexane	5.477	56	667229	98.120	ug/l	100
32) 1,1,1-Trichloroethane	5.391	97	649123	99.286	ug/l	99
36) 1,1-Dichloropropene	5.696	75	514002	94.809	ug/l	99
37) Ethyl Acetate	4.715	43	420101	90.979	ug/l	98
38) Carbon Tetrachloride	5.684	117	567706	97.774	ug/l	98
39) Methylcyclohexane	7.379	83	683852	100.837	ug/l	99
40) Benzene	6.044	78	1589318	96.921	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX070225\
 Data File : VX046864.D
 Acq On : 02 Jul 2025 14:10
 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 07/03/2025
 Supervised By : Mahesh Dadoda 07/03/2025

Quant Time: Jul 03 05:33:07 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 03 05:21:52 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	4.922	41	261090	105.996	ug/l	99
42) 1,2-Dichloroethane	6.086	62	536004	96.261	ug/l	100
43) Isopropyl Acetate	6.336	43	746174	105.501	ug/l	100
44) Trichloroethene	7.123	130	411222	96.336	ug/l	98
45) 1,2-Dichloropropane	7.427	63	408244	98.538	ug/l	100
46) Dibromomethane	7.580	93	279372	97.324	ug/l	99
47) Bromodichloromethane	7.818	83	601292	98.101	ug/l	98
48) Methyl methacrylate	7.690	41	389200	106.573	ug/l	100
49) 1,4-Dioxane	7.659	88	82890	1958.872	ug/l	97
51) 4-Methyl-2-Pentanone	8.568	43	2089507	500.587	ug/l	99
52) Toluene	8.714	92	984220	96.858	ug/l	98
53) t-1,3-Dichloropropene	8.976	75	580117	106.052	ug/l	99
54) cis-1,3-Dichloropropene	8.366	75	650539	104.190	ug/l	99
55) 1,1,2-Trichloroethane	9.147	97	367441	97.082	ug/l	98
56) Ethyl methacrylate	9.116	69	554620	105.873	ug/l	99
57) 1,3-Dichloropropane	9.305	76	625220	95.933	ug/l	100
58) 2-Chloroethyl Vinyl ether	8.238	63	1541497	522.248	ug/l	100
59) 2-Hexanone	9.427	43	1406681	508.068	ug/l	100
60) Dibromochloromethane	9.519	129	445393	98.331	ug/l	99
61) 1,2-Dibromoethane	9.604	107	375661	98.827	ug/l	99
64) Tetrachloroethene	9.269	164	333229	95.978	ug/l	95
65) Chlorobenzene	10.073	112	1095855	97.200	ug/l	98
66) 1,1,1,2-Tetrachloroethane	10.159	131	381396	100.632	ug/l	99
67) Ethyl Benzene	10.189	91	1925349	99.720	ug/l	99
68) m/p-Xylenes	10.299	106	1424898	195.851	ug/l	99
69) o-Xylene	10.640	106	691874	98.448	ug/l	99
70) Styrene	10.653	104	1206962	100.381	ug/l	99
71) Bromoform	10.799	173	286378	101.623	ug/l	100
73) Isopropylbenzene	10.957	105	1824241	102.183	ug/l	100
74) N-amyl acetate	10.842	43	661864	109.100	ug/l	99
75) 1,1,2,2-Tetrachloroethane	11.207	83	477117	97.192	ug/l	99
76) 1,2,3-Trichloropropane	11.238	75	401735m	102.378	ug/l	
77) Bromobenzene	11.195	156	441962	99.388	ug/l	98
78) n-propylbenzene	11.299	91	2169188	100.767	ug/l	99
79) 2-Chlorotoluene	11.360	91	1268825	99.822	ug/l	100
80) 1,3,5-Trimethylbenzene	11.451	105	1497082	103.204	ug/l	100
81) trans-1,4-Dichloro-2-b...	11.018	75	158326	108.273	ug/l	98
82) 4-Chlorotoluene	11.451	91	1472712	100.402	ug/l	100
83) tert-Butylbenzene	11.713	119	1539450	102.751	ug/l	100
84) 1,2,4-Trimethylbenzene	11.750	105	1488102	101.492	ug/l	97
85) sec-Butylbenzene	11.890	105	1912633	101.251	ug/l	99
86) p-Isopropyltoluene	12.006	119	1605082	101.466	ug/l	100
87) 1,3-Dichlorobenzene	11.963	146	825505	99.260	ug/l	99
88) 1,4-Dichlorobenzene	12.036	146	823926	95.192	ug/l	100
89) n-Butylbenzene	12.329	91	1515258	101.944	ug/l	100
90) Hexachloroethane	12.536	117	294961	105.182	ug/l	98
91) 1,2-Dichlorobenzene	12.335	146	792536	98.339	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	12.939	75	90270	105.136	ug/l	99
93) 1,2,4-Trichlorobenzene	13.585	180	569410	104.000	ug/l	100
94) Hexachlorobutadiene	13.725	225	207095	100.298	ug/l	99
95) Naphthalene	13.774	128	1572381	108.986	ug/l	100
96) 1,2,3-Trichlorobenzene	13.957	180	543127	104.988	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX070225\
Data File : VX046864.D
Acq On : 02 Jul 2025 14:10
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 07/03/2025
Supervised By :Mahesh Dadoda 07/03/2025

Quant Time: Jul 03 05:33:07 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 03 05:21:52 2025
Response via : Initial Calibration

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

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

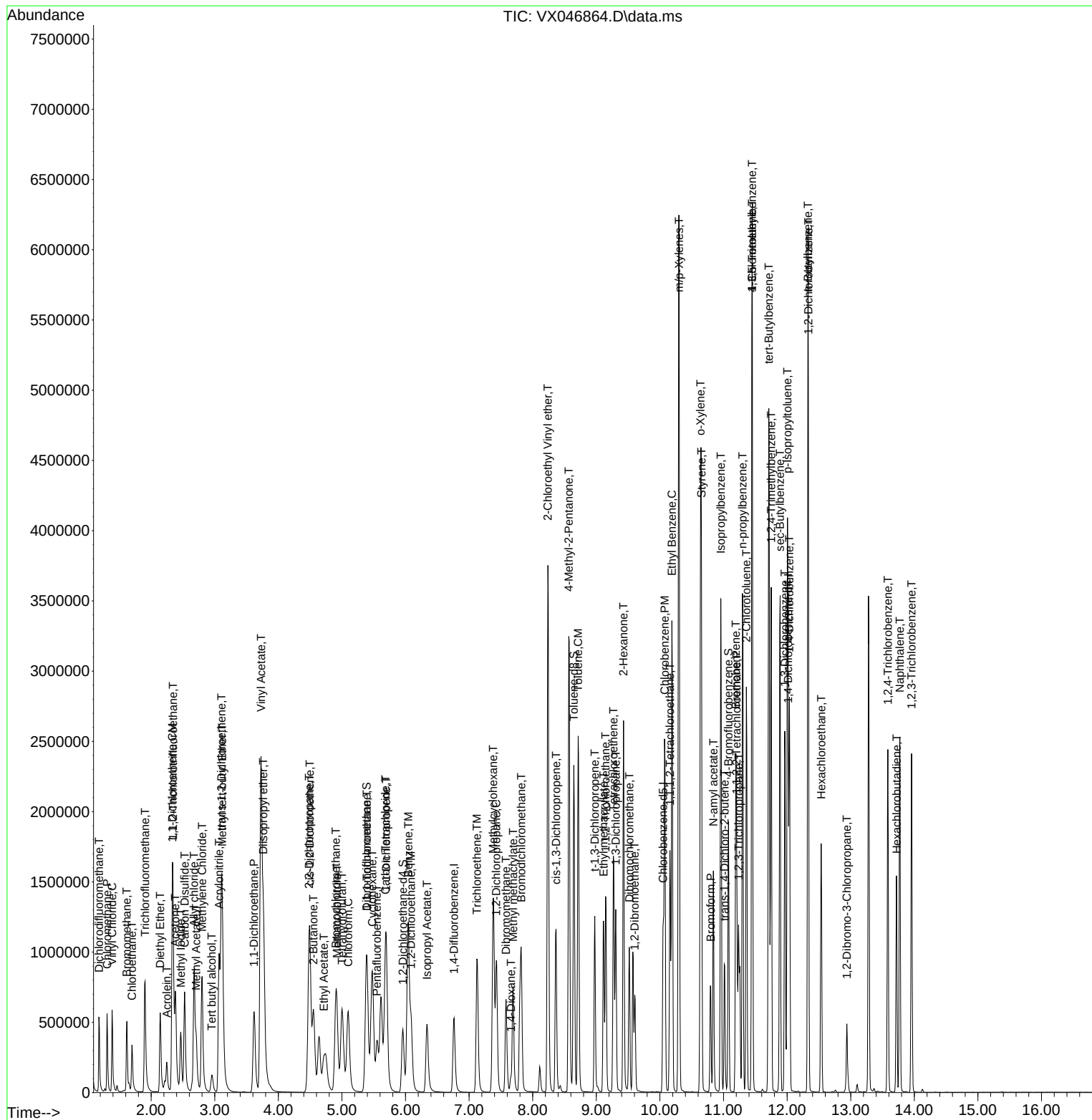

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Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX070225\  
Data File : VX046864.D  
Acq On    : 02 Jul 2025   14:10  
Operator  : JC/MD  
Sample    : VSTDICC100  
Misc      : 5.0mL/MSVOA_X/WATER  
ALS Vial  : 6      Sample Multiplier: 1
```

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :John Carlone 07/03/2025
Supervised By :Mahesh Dadoda 07/03/2025

Quant Time: Jul 03 05:33:07 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 03 05:21:52 2025
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX070225\
 Data File : VX046865.D
 Acq On : 02 Jul 2025 14:31
 Operator : JC/MD
 Sample : VSTDICC150
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VSTDICC150

Quant Time: Jul 03 05:34:07 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 03 05:21:52 2025
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By : John Carlone 07/03/2025
 Supervised By : Mahesh Dadoda 07/03/2025

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

Internal Standards						
1) Pentafluorobenzene	5.562	168	337940	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.769	114	564585	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	498758	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	240348	50.000	ug/l	# 0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	5.964	65	649303	145.436	ug/l	0.00
Spiked Amount	50.000	Range	78 - 117	Recovery	= 290.880%#	
35) Dibromofluoromethane	5.391	113	550160	143.554	ug/l	0.00
Spiked Amount	50.000	Range	75 - 124	Recovery	= 287.100%#	
50) Toluene-d8	8.653	98	1923179	142.230	ug/l	0.00
Spiked Amount	50.000	Range	92 - 112	Recovery	= 284.460%#	
62) 4-Bromofluorobenzene	11.079	95	721016	140.303	ug/l	0.00
Spiked Amount	50.000	Range	83 - 123	Recovery	= 280.600%#	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.179	85	497096	153.809	ug/l	99
3) Chloromethane	1.307	50	537388	152.188	ug/l	98
4) Vinyl Chloride	1.386	62	574277	149.346	ug/l	99
5) Bromomethane	1.611	94	298828	120.949	ug/l	100
6) Chloroethane	1.697	64	358739	141.285	ug/l	99
7) Trichlorofluoromethane	1.904	101	897728	150.988	ug/l	99
8) Diethyl Ether	2.148	74	321838	152.105	ug/l	99
9) 1,1,2-Trichlorotrifluo...	2.343	101	569627	150.352	ug/l	99
10) Methyl Iodide	2.465	142	705949	171.034	ug/l	98
11) Tert butyl alcohol	2.965	59	229819	784.885	ug/l	99
12) 1,1-Dichloroethene	2.337	96	547474	149.400	ug/l	97
13) Acrolein	2.245	56	245973	754.434	ug/l	98
14) Allyl chloride	2.678	41	996540	152.745	ug/l	99
15) Acrylonitrile	3.075	53	1288046	757.776	ug/l	99
16) Acetone	2.386	43	1013283	730.677	ug/l	99
17) Carbon Disulfide	2.526	76	1394541	145.111	ug/l	99
18) Methyl Acetate	2.709	43	607185	166.116	ug/l	99
19) Methyl tert-butyl Ether	3.123	73	1637759	158.264	ug/l	98
20) Methylene Chloride	2.800	84	596413	145.441	ug/l	98
21) trans-1,2-Dichloroethene	3.105	96	552703	147.398	ug/l	97
22) Diisopropyl ether	3.770	45	1919430	152.282	ug/l	99
23) Vinyl Acetate	3.733	43	7476523	791.755	ug/l	100
24) 1,1-Dichloroethane	3.623	63	1064068	148.024	ug/l	100
25) 2-Butanone	4.562	43	1449681	783.522	ug/l	100
26) 2,2-Dichloropropane	4.489	77	837466	156.539	ug/l	100
27) cis-1,2-Dichloroethene	4.501	96	674986	147.435	ug/l	100
28) Bromochloromethane	4.910	49	515523	145.311	ug/l	99
29) Tetrahydrofuran	5.007	42	928390	787.145	ug/l	100
30) Chloroform	5.105	83	1064448	144.942	ug/l	100
31) Cyclohexane	5.483	56	939695	147.249	ug/l	100
32) 1,1,1-Trichloroethane	5.391	97	922378	150.332	ug/l	98
36) 1,1-Dichloropropene	5.702	75	739394	142.995	ug/l	99
37) Ethyl Acetate	4.721	43	631521	143.396	ug/l	98
38) Carbon Tetrachloride	5.684	117	809906	146.250	ug/l	98
39) Methylcyclohexane	7.385	83	974901	150.724	ug/l	99
40) Benzene	6.043	78	2243029	143.418	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX070225\
 Data File : VX046865.D
 Acq On : 02 Jul 2025 14:31
 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 07/03/2025
 Supervised By : Mahesh Dadoda 07/03/2025

Quant Time: Jul 03 05:34:07 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 03 05:21:52 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	4.928	41	375761	159.945	ug/l	99
42) 1,2-Dichloroethane	6.092	62	756183	142.387	ug/l	100
43) Isopropyl Acetate	6.342	43	1104335	163.711	ug/l	100
44) Trichloroethene	7.129	130	583397	143.298	ug/l	97
45) 1,2-Dichloropropane	7.433	63	579224	146.587	ug/l	99
46) Dibromomethane	7.586	93	401338	146.592	ug/l	99
47) Bromodichloromethane	7.824	83	858188	146.803	ug/l	99
48) Methyl methacrylate	7.696	41	580607	166.693	ug/l	99
49) 1,4-Dioxane	7.665	88	122695	3040.136	ug/l	98
51) 4-Methyl-2-Pentanone	8.574	43	3026947	760.332	ug/l	98
52) Toluene	8.720	92	1394797	143.918	ug/l	98
53) t-1,3-Dichloropropene	8.976	75	853017	163.503	ug/l	99
54) cis-1,3-Dichloropropene	8.366	75	939003	157.682	ug/l	97
55) 1,1,2-Trichloroethane	9.153	97	521889	144.574	ug/l	98
56) Ethyl methacrylate	9.116	69	816206	163.362	ug/l	100
57) 1,3-Dichloropropane	9.305	76	893213	143.699	ug/l	100
58) 2-Chloroethyl Vinyl ether	8.244	63	2192288	778.743	ug/l	100
59) 2-Hexanone	9.427	43	2051712	776.972	ug/l	100
60) Dibromochloromethane	9.518	129	637739	147.623	ug/l	99
61) 1,2-Dibromoethane	9.610	107	536592	148.009	ug/l	100
64) Tetrachloroethene	9.275	164	475745	143.265	ug/l	96
65) Chlorobenzene	10.079	112	1563433	144.986	ug/l	98
66) 1,1,1,2-Tetrachloroethane	10.159	131	548552	151.325	ug/l	100
67) Ethyl Benzene	10.195	91	2729559	147.809	ug/l	98
68) m/p-Xylenes	10.299	106	2009645	288.799	ug/l	99
69) o-Xylene	10.640	106	987134	146.856	ug/l	99
70) Styrene	10.652	104	1697064	147.567	ug/l	98
71) Bromoform	10.799	173	411264	152.584	ug/l	97
73) Isopropylbenzene	10.963	105	2588441	153.200	ug/l	100
74) N-amyl acetate	10.841	43	986018	171.738	ug/l	99
75) 1,1,2,2-Tetrachloroethane	11.213	83	698105	150.263	ug/l	100
76) 1,2,3-Trichloropropane	11.238	75	567147m	152.717	ug/l	
77) Bromobenzene	11.195	156	628974	149.454	ug/l	99
78) n-propylbenzene	11.305	91	3052066	149.810	ug/l	99
79) 2-Chlorotoluene	11.360	91	1784161	148.315	ug/l	100
80) 1,3,5-Trimethylbenzene	11.451	105	2088013	152.092	ug/l	100
81) trans-1,4-Dichloro-2-b...	11.018	75	239775	173.259	ug/l	95
82) 4-Chlorotoluene	11.451	91	2061746	148.519	ug/l	99
83) tert-Butylbenzene	11.713	119	2164507	152.653	ug/l	99
84) 1,2,4-Trimethylbenzene	11.750	105	2118023	152.635	ug/l	97
85) sec-Butylbenzene	11.890	105	2681731	150.005	ug/l	99
86) p-Isopropyltoluene	12.006	119	2218491	148.186	ug/l	99
87) 1,3-Dichlorobenzene	11.969	146	1167669	148.354	ug/l	98
88) 1,4-Dichlorobenzene	12.036	146	1176579	143.634	ug/l	99
89) n-Butylbenzene	12.329	91	2101194	149.371	ug/l	99
90) Hexachloroethane	12.536	117	424369	159.899	ug/l	99
91) 1,2-Dichlorobenzene	12.335	146	1117598	146.526	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	12.939	75	138617	170.588	ug/l	99
93) 1,2,4-Trichlorobenzene	13.585	180	825907	159.391	ug/l	99
94) Hexachlorobutadiene	13.725	225	296507	151.734	ug/l	99
95) Naphthalene	13.774	128	2359854	172.832	ug/l	100
96) 1,2,3-Trichlorobenzene	13.957	180	792593	161.887	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX070225\
Data File : VX046865.D
Acq On : 02 Jul 2025 14:31
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 07/03/2025
Supervised By :Mahesh Dadoda 07/03/2025

Quant Time: Jul 03 05:34:07 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 03 05:21:52 2025
Response via : Initial Calibration

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

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

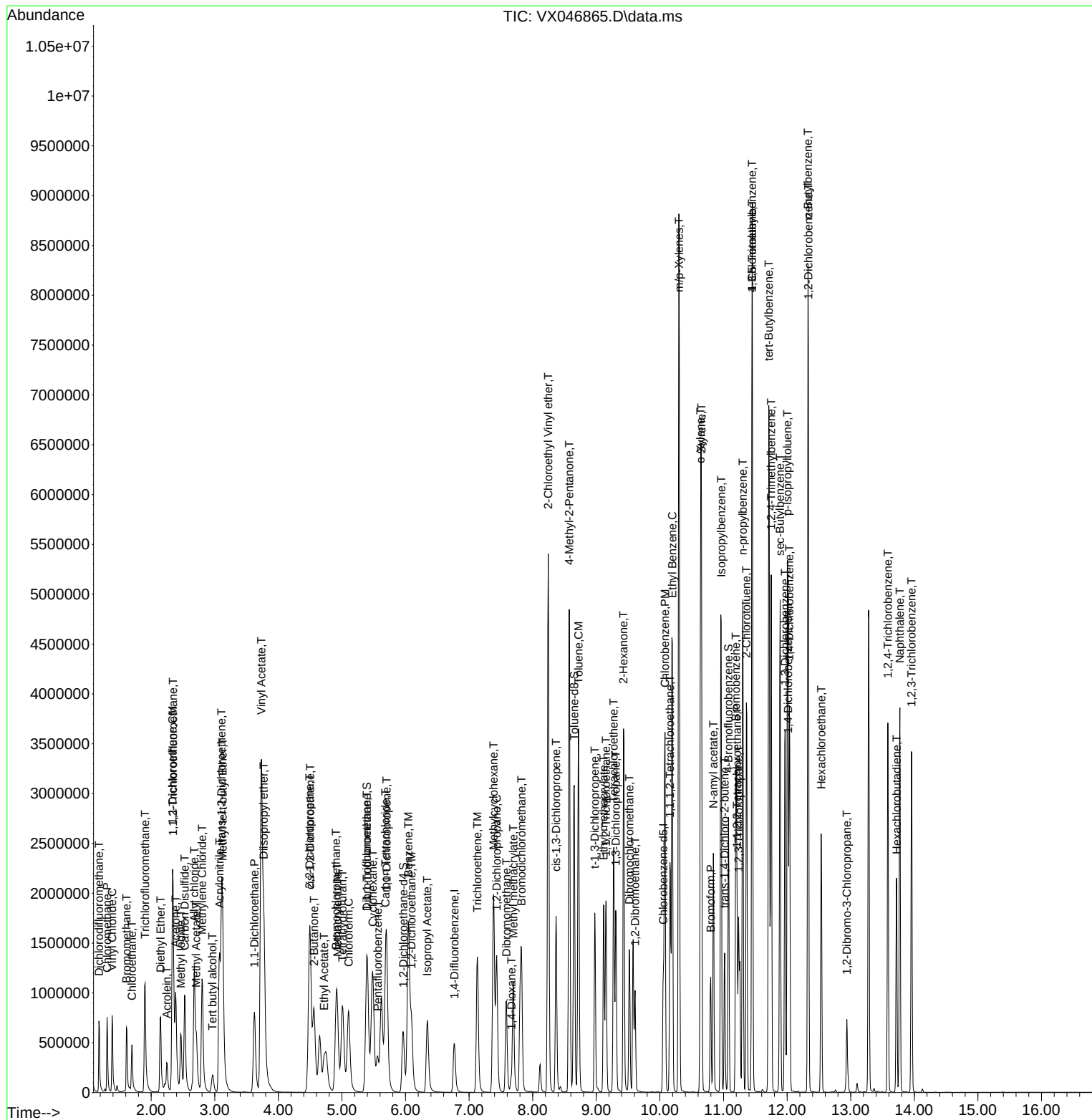
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Data File : VX046865.D
Acq On : 02 Jul 2025 14:31
Operator : JC/MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :John Carlone 07/03/2025
Supervised By :Mahesh Dadoda 07/03/2025

Quant Time: Jul 03 05:34:07 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 03 05:21:52 2025
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX070225\
 Data File : VX046867.D
 Acq On : 02 Jul 2025 15:14
 Operator : JC/MD
 Sample : VSTDICV050
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 ICVVX070225

Manual Integrations
 APPROVED

Reviewed By : John Carlone 07/03/2025
 Supervised By : Mahesh Dadoda 07/03/2025

Quant Time: Jul 03 05:55:49 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 03 05:51:11 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	5.562	168	376229	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.769	114	610660	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	549326	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	275295	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.964	65	242648	48.819	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery =	97.640%		
35) Dibromofluoromethane	5.397	113	208822	50.377	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	100.760%		
50) Toluene-d8	8.647	98	731941	50.047	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery =	100.100%		
62) 4-Bromofluorobenzene	11.079	95	282463	50.818	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery =	101.640%		
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	1.179	85	178684	49.661	ug/l	98
3) Chloromethane	1.307	50	192497	48.967	ug/l	100
4) Vinyl Chloride	1.386	62	208626	48.733	ug/l	99
5) Bromomethane	1.624	94	141065	51.285	ug/l	97
6) Chloroethane	1.703	64	132155	46.751	ug/l	100
7) Trichlorofluoromethane	1.904	101	326501	49.325	ug/l	98
8) Diethyl Ether	2.148	74	117004	49.670	ug/l	99
9) 1,1,2-Trichlorotrifluo...	2.349	101	208780	49.499	ug/l	100
10) Methyl Iodide	2.471	142	229855	50.021	ug/l	97
11) Tert butyl alcohol	2.953	59	86884	266.531	ug/l	100
12) 1,1-Dichloroethene	2.337	96	197950	48.521	ug/l	99
13) Acrolein	2.252	56	87230	242.250	ug/l	98
14) Allyl chloride	2.678	41	359895	49.549	ug/l	99
15) Acrylonitrile	3.075	53	482124	255.809	ug/l	99
16) Acetone	2.386	43	376127	243.622	ug/l	97
17) Carbon Disulfide	2.532	76	501161	46.842	ug/l	100
18) Methyl Acetate	2.715	43	217113	53.354	ug/l	99
19) Methyl tert-butyl Ether	3.123	73	601377	52.199	ug/l	99
20) Methylene Chloride	2.800	84	224143	49.097	ug/l	97
21) trans-1,2-Dichloroethene	3.105	96	205950	49.334	ug/l	99
22) Diisopropyl ether	3.770	45	723627	51.568	ug/l	97
23) Vinyl Acetate	3.733	43	2777219	264.173	ug/l	99
24) 1,1-Dichloroethane	3.623	63	395739	49.449	ug/l	99
25) 2-Butanone	4.562	43	538755	261.552	ug/l	98
26) 2,2-Dichloropropane	4.489	77	293933	49.351	ug/l	100
27) cis-1,2-Dichloroethene	4.501	96	247860	48.630	ug/l	99
28) Bromochloromethane	4.910	49	198401	50.232	ug/l	98
29) Tetrahydrofuran	5.013	42	350947	267.272	ug/l	99
30) Chloroform	5.105	83	395292	48.348	ug/l	100
31) Cyclohexane	5.483	56	350463	49.328	ug/l	97
32) 1,1,1-Trichloroethane	5.397	97	335397	49.101	ug/l	99
36) 1,1-Dichloropropene	5.702	75	275506	49.261	ug/l	100
37) Ethyl Acetate	4.721	43	229364	48.151	ug/l	100
38) Carbon Tetrachloride	5.690	117	291659	49.327	ug/l	99
39) Methylcyclohexane	7.385	83	355028	50.747	ug/l	98
40) Benzene	6.050	78	835235	49.375	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX070225\
 Data File : VX046867.D
 Acq On : 02 Jul 2025 15:14
 Operator : JC/MD
 Sample : VSTDICV050
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 ICVVX070225

Quant Time: Jul 03 05:55:49 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 03 05:51:11 2025
 Response via : Initial Calibration

Manual Integrations
 APPROVED

Reviewed By : John Carlone 07/03/2025
 Supervised By : Mahesh Dadoda 07/03/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	4.928	41	137841	54.246	ug/l	98
42) 1,2-Dichloroethane	6.092	62	282094	49.110	ug/l	100
43) Isopropyl Acetate	6.342	43	390969	53.586	ug/l	99
44) Trichloroethene	7.129	130	212780	48.321	ug/l	100
45) 1,2-Dichloropropane	7.434	63	213351	49.920	ug/l	98
46) Dibromomethane	7.586	93	146563	49.494	ug/l	100
47) Bromodichloromethane	7.824	83	313088	49.516	ug/l	97
48) Methyl methacrylate	7.696	41	206773	54.886	ug/l	99
49) 1,4-Dioxane	7.659	88	47208	1081.463	ug/l	98
51) 4-Methyl-2-Pentanone	8.574	43	1163206	270.137	ug/l	100
52) Toluene	8.720	92	524414	50.028	ug/l	98
53) t-1,3-Dichloropropene	8.976	75	298344	52.871	ug/l	100
54) cis-1,3-Dichloropropene	8.366	75	334998	52.010	ug/l	99
55) 1,1,2-Trichloroethane	9.153	97	194738	49.876	ug/l	98
56) Ethyl methacrylate	9.116	69	294579	54.511	ug/l	99
57) 1,3-Dichloropropane	9.305	76	334325	49.728	ug/l	100
58) 2-Chloroethyl Vinyl ether	8.245	63	817519	268.488	ug/l	100
59) 2-Hexanone	9.427	43	792449	277.453	ug/l	100
60) Dibromochloromethane	9.519	129	234044	50.089	ug/l	99
61) 1,2-Dibromoethane	9.610	107	200842	51.219	ug/l	100
64) Tetrachloroethene	9.275	164	174726	47.773	ug/l	93
65) Chlorobenzene	10.080	112	584424	49.208	ug/l	99
66) 1,1,1,2-Tetrachloroethane	10.159	131	199525	49.975	ug/l	99
67) Ethyl Benzene	10.189	91	1013473	49.829	ug/l	99
68) m/p-Xylenes	10.299	106	760571	99.238	ug/l	100
69) o-Xylene	10.640	106	368751	49.809	ug/l	99
70) Styrene	10.653	104	644744	50.903	ug/l	100
71) Bromoform	10.799	173	147395	49.651	ug/l #	99
73) Isopropylbenzene	10.957	105	981991	50.742	ug/l	100
74) N-amyl acetate	10.842	43	359547	54.674	ug/l	100
75) 1,1,2,2-Tetrachloroethane	11.207	83	269327	50.612	ug/l	100
76) 1,2,3-Trichloropropane	11.238	75	218733m	51.422	ug/l	
77) Bromobenzene	11.195	156	237950	49.363	ug/l	99
78) n-propylbenzene	11.299	91	1172148	50.231	ug/l	100
79) 2-Chlorotoluene	11.360	91	678845	49.268	ug/l	99
80) 1,3,5-Trimethylbenzene	11.451	105	808534	51.418	ug/l	99
81) trans-1,4-Dichloro-2-b...	11.018	75	82807	52.240	ug/l	99
82) 4-Chlorotoluene	11.451	91	802710	50.483	ug/l	100
83) tert-Butylbenzene	11.713	119	826920	50.916	ug/l	100
84) 1,2,4-Trimethylbenzene	11.750	105	801503	50.428	ug/l	100
85) sec-Butylbenzene	11.890	105	1032626	50.429	ug/l	100
86) p-Isopropyltoluene	12.006	119	867283	50.577	ug/l	100
87) 1,3-Dichlorobenzene	11.969	146	446776	49.558	ug/l	99
88) 1,4-Dichlorobenzene	12.037	146	448682	47.821	ug/l	99
89) n-Butylbenzene	12.329	91	817746	50.753	ug/l	99
90) Hexachloroethane	12.536	117	151888	49.965	ug/l	99
91) 1,2-Dichlorobenzene	12.335	146	424172	48.553	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	12.939	75	48557	52.171	ug/l	98
93) 1,2,4-Trichlorobenzene	13.585	180	301081	50.729	ug/l	99
94) Hexachlorobutadiene	13.719	225	117882	52.667	ug/l	99
95) Naphthalene	13.774	128	844747	54.014	ug/l	100
96) 1,2,3-Trichlorobenzene	13.957	180	285334	50.881	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX070225\
Data File : VX046867.D
Acq On : 02 Jul 2025 15:14
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX070225

Manual Integrations
APPROVED

Reviewed By :John Carlone 07/03/2025
Supervised By :Mahesh Dadoda 07/03/2025

Quant Time: Jul 03 05:55:49 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 03 05:51:11 2025
Response via : Initial Calibration

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

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

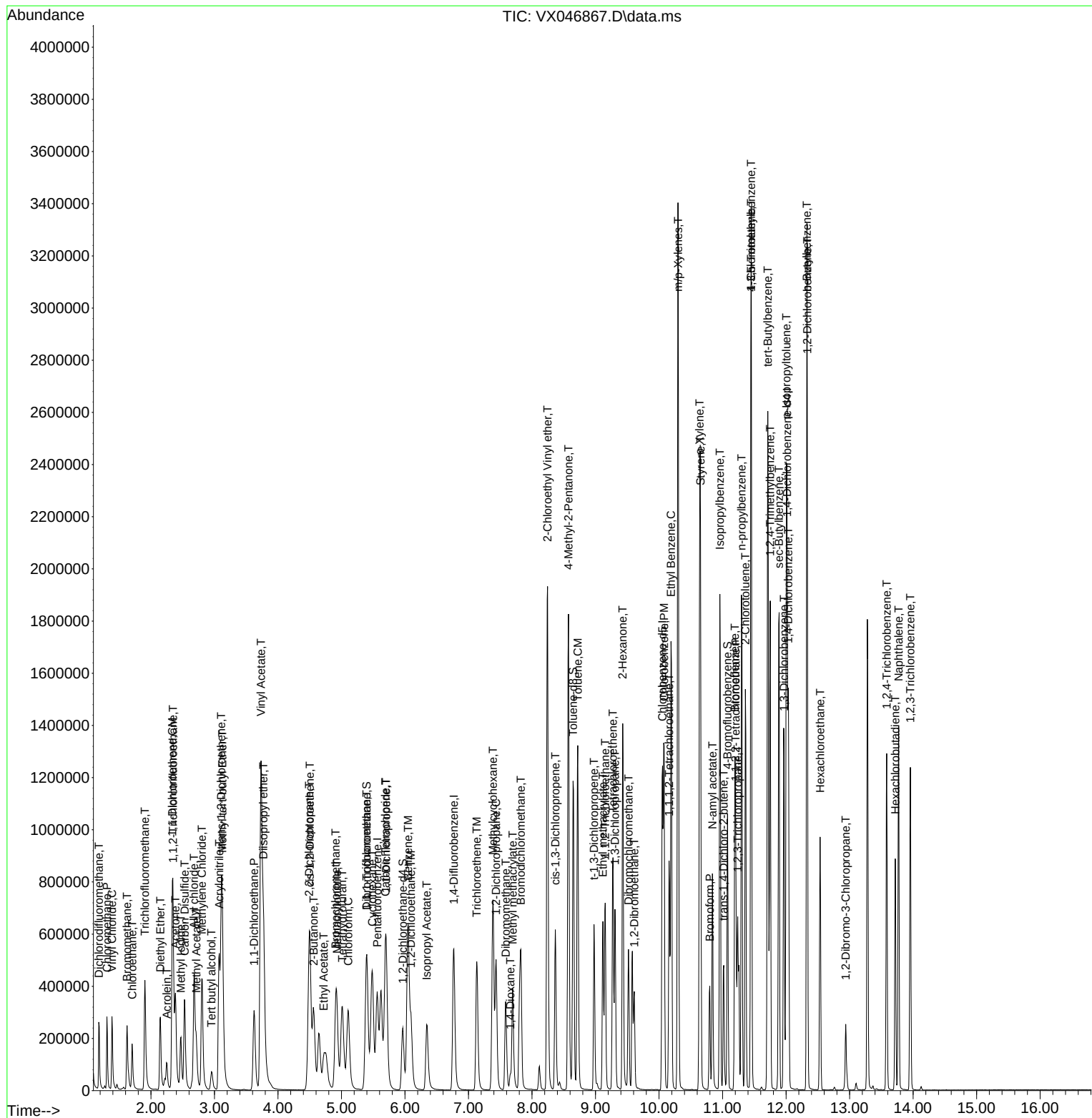
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX070225\
 Data File : VX046867.D
 Acq On : 02 Jul 2025 15:14
 Operator : JC/MD
 Sample : VSTDICV050
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 ICVVX070225

Manual Integrations APPROVED

Reviewed By :John Carlone 07/03/2025
 Supervised By :Mahesh Dadoda 07/03/2025

Quant Time: Jul 03 05:55:49 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 03 05:51:11 2025
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Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX070225\
 Data File : VX046867.D
 Acq On : 02 Jul 2025 15:14
 Operator : JC/MD
 Sample : VSTDICV050
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 ICVVX070225

Quant Time: Jul 03 05:55:49 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 03 05:51:11 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	102	0.00
2 T	Dichlorodifluoromethane	0.478	0.475	0.6	100	0.00
3 P	Chloromethane	0.522	0.512	1.9	103	0.00
4 C	Vinyl Chloride	0.569	0.555	2.5#	103	0.00
5 T	Bromomethane	0.366	0.375	-2.5	107	0.00
6 T	Chloroethane	0.376	0.351	6.6	104	0.00
7 T	Trichlorofluoromethane	0.880	0.868	1.4	103	0.00
8 T	Diethyl Ether	0.313	0.311	0.6	104	0.00
9 T	1,1,2-Trichlorotrifluoroeth	0.561	0.555	1.1	103	0.00
10 T	Methyl Iodide	0.611	0.611	0.0	99	0.00
11 T	Tert butyl alcohol	0.043	0.046	-7.0	112	0.00
12 CM	1,1-Dichloroethene	0.542	0.526	3.0#	103	0.00
13 T	Acrolein	0.052	0.046	11.5	104	0.00
14 T	Allyl chloride	0.965	0.957	0.8	104	0.00
15 T	Acrylonitrile	0.250	0.256	-2.4	106	0.00
16 T	Acetone	0.205	0.200	2.4	106	0.00
17 T	Carbon Disulfide	1.422	1.332	6.3	101	0.00
18 T	Methyl Acetate	0.541	0.577	-6.7	107	0.00
19 T	Methyl tert-butyl Ether	1.531	1.598	-4.4	107	0.00
20 T	Methylene Chloride	0.607	0.596	1.8	104	0.00
21 T	trans-1,2-Dichloroethene	0.555	0.547	1.4	103	0.00
22 T	Diisopropyl ether	1.865	1.923	-3.1	103	0.00
23 T	Vinyl Acetate	1.397	1.476	-5.7	106	0.00
24 P	1,1-Dichloroethane	1.064	1.052	1.1	103	0.00
25 T	2-Butanone	0.274	0.286	-4.4	106	0.00
26 T	2,2-Dichloropropane	0.792	0.781	1.4	105	0.00
27 T	cis-1,2-Dichloroethene	0.677	0.659	2.7	102	0.00
28 T	Bromochloromethane	0.525	0.527	-0.4	102	0.00
29 T	Tetrahydrofuran	0.175	0.187	-6.9	109	0.00
30 C	Chloroform	1.087	1.051	3.3#	102	0.00
31 T	Cyclohexane	0.944	0.932	1.3	104	0.00
32 T	1,1,1-Trichloroethane	0.908	0.891	1.9	103	0.00
33 S	1,2-Dichloroethane-d4	0.661	0.645	2.4	102	0.00
34 I	1,4-Difluorobenzene	1.000	1.000	0.0	102	0.00
35 S	Dibromofluoromethane	0.339	0.342	-0.9	102	0.00
36 T	1,1-Dichloropropene	0.458	0.451	1.5	104	0.00
37 T	Ethyl Acetate	0.390	0.376	3.6	106	0.00
38 T	Carbon Tetrachloride	0.484	0.478	1.2	102	0.00
39 T	Methylcyclohexane	0.573	0.581	-1.4	104	0.00
40 TM	Benzene	1.385	1.368	1.2	102	0.00
41 T	Methacrylonitrile	0.208	0.226	-8.7	108	0.00
42 TM	1,2-Dichloroethane	0.470	0.462	1.7	102	0.00
43 T	Isopropyl Acetate	0.597	0.640	-7.2	105	0.00
44 TM	Trichloroethene	0.361	0.348	3.6	103	0.00
45 C	1,2-Dichloropropane	0.350	0.349	0.3#	103	0.00
46 T	Dibromomethane	0.242	0.240	0.8	102	0.00
47 T	Bromodichloromethane	0.518	0.513	1.0	102	0.00
48 T	Methyl methacrylate	0.308	0.339	-10.1	107	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX070225\
 Data File : VX046867.D
 Acq On : 02 Jul 2025 15:14
 Operator : JC/MD
 Sample : VSTDICV050
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 ICVVX070225

Quant Time: Jul 03 05:55:49 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 03 05:51:11 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	0.004	0.004	0.0	108	0.00
50 S	Toluene-d8	1.197	1.199	-0.2	102	0.00
51 T	4-Methyl-2-Pentanone	0.353	0.381	-7.9	106	0.00
52 CM	Toluene	0.858	0.859	-0.1#	104	0.00
53 T	t-1,3-Dichloropropene	0.462	0.489	-5.8	105	0.00
54 T	cis-1,3-Dichloropropene	0.527	0.549	-4.2	104	0.00
55 T	1,1,2-Trichloroethane	0.320	0.319	0.3	102	0.00
56 T	Ethyl methacrylate	0.442	0.482	-9.0	107	0.00
57 T	1,3-Dichloropropane	0.550	0.547	0.5	103	0.00
58 T	2-Chloroethyl Vinyl ether	0.249	0.268	-7.6	102	0.00
59 T	2-Hexanone	0.234	0.260	-11.1	107	0.00
60 T	Dibromochloromethane	0.383	0.383	0.0	103	0.00
61 T	1,2-Dibromoethane	0.321	0.329	-2.5	104	0.00
62 S	4-Bromofluorobenzene	0.455	0.463	-1.8	103	0.00
63 I	Chlorobenzene-d5	1.000	1.000	0.0	102	0.00
64 T	Tetrachloroethene	0.333	0.318	4.5	103	0.00
65 PM	Chlorobenzene	1.081	1.064	1.6	103	0.00
66 T	1,1,1,2-Tetrachloroethane	0.363	0.363	0.0	103	0.00
67 C	Ethyl Benzene	1.851	1.845	0.3#	103	0.00
68 T	m/p-Xylenes	0.698	0.692	0.9	102	0.00
69 T	o-Xylene	0.674	0.671	0.4	103	0.00
70 T	Styrene	1.153	1.174	-1.8	102	0.00
71 P	Bromoform	0.270	0.268	0.7	101	0.00
72 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	103	0.00
73 T	Isopropylbenzene	3.515	3.567	-1.5	102	0.00
74 T	N-amyl acetate	1.194	1.306	-9.4	106	0.00
75 P	1,1,2,2-Tetrachloroethane	0.966	0.978	-1.2	105	0.00
76 T	1,2,3-Trichloropropane	0.773	0.795	-2.8	104	0.00
77 T	Bromobenzene	0.875	0.864	1.3	102	0.00
78 T	n-propylbenzene	4.238	4.258	-0.5	102	0.00
79 T	2-Chlorotoluene	2.503	2.466	1.5	102	0.00
80 T	1,3,5-Trimethylbenzene	2.856	2.937	-2.8	104	0.00
81 T	trans-1,4-Dichloro-2-butene	0.288	0.301	-4.5	106	0.00
82 T	4-Chlorotoluene	2.888	2.916	-1.0	103	0.00
83 T	tert-Butylbenzene	2.950	3.004	-1.8	103	0.00
84 T	1,2,4-Trimethylbenzene	2.887	2.911	-0.8	102	0.00
85 T	sec-Butylbenzene	3.719	3.751	-0.9	102	0.00
86 T	p-Isopropyltoluene	3.114	3.150	-1.2	103	0.00
87 T	1,3-Dichlorobenzene	1.637	1.623	0.9	103	0.00
88 T	1,4-Dichlorobenzene	1.704	1.630	4.3	103	0.00
89 T	n-Butylbenzene	2.926	2.970	-1.5	103	0.00
90 T	Hexachloroethane	0.552	0.552	0.0	103	0.00
91 T	1,2-Dichlorobenzene	1.587	1.541	2.9	101	0.00
92 T	1,2-Dibromo-3-Chloropropane	0.169	0.176	-4.1	107	0.00
93 T	1,2,4-Trichlorobenzene	1.078	1.094	-1.5	104	0.00
94 T	Hexachlorobutadiene	0.407	0.428	-5.2	108	0.00
95 T	Naphthalene	2.840	3.069	-8.1	104	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX070225\
Data File : VX046867.D
Acq On : 02 Jul 2025 15:14
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX070225

Quant Time: Jul 03 05:55:49 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 03 05:51:11 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	1.019	1.036	-1.7	102	0.00

(#) = Out of Range

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX070225\
 Data File : VX046867.D
 Acq On : 02 Jul 2025 15:14
 Operator : JC/MD
 Sample : VSTDICV050
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 ICVVX070225

Quant Time: Jul 03 05:55:49 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 03 05:51:11 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	102	0.00
2 T	Dichlorodifluoromethane	50.000	49.661	0.7	100	0.00
3 P	Chloromethane	50.000	48.967	2.1	103	0.00
4 C	Vinyl Chloride	50.000	48.733	2.5#	103	0.00
5 T	Bromomethane	50.000	51.285	-2.6	107	0.00
6 T	Chloroethane	50.000	46.751	6.5	104	0.00
7 T	Trichlorofluoromethane	50.000	49.325	1.3	103	0.00
8 T	Diethyl Ether	50.000	49.670	0.7	104	0.00
9 T	1,1,2-Trichlorotrifluoroeth	50.000	49.499	1.0	103	0.00
10 T	Methyl Iodide	50.000	50.021	-0.0	99	0.00
11 T	Tert butyl alcohol	250.000	266.531	-6.6	112	0.00
12 CM	1,1-Dichloroethene	50.000	48.521	3.0#	103	0.00
13 T	Acrolein	250.000	242.250	3.1	104	0.00
14 T	Allyl chloride	50.000	49.549	0.9	104	0.00
15 T	Acrylonitrile	250.000	255.809	-2.3	106	0.00
16 T	Acetone	250.000	243.622	2.6	106	0.00
17 T	Carbon Disulfide	50.000	46.842	6.3	101	0.00
18 T	Methyl Acetate	50.000	53.354	-6.7	107	0.00
19 T	Methyl tert-butyl Ether	50.000	52.199	-4.4	107	0.00
20 T	Methylene Chloride	50.000	49.097	1.8	104	0.00
21 T	trans-1,2-Dichloroethene	50.000	49.334	1.3	103	0.00
22 T	Diisopropyl ether	50.000	51.568	-3.1	103	0.00
23 T	Vinyl Acetate	250.000	264.173	-5.7	106	0.00
24 P	1,1-Dichloroethane	50.000	49.449	1.1	103	0.00
25 T	2-Butanone	250.000	261.552	-4.6	106	0.00
26 T	2,2-Dichloropropane	50.000	49.351	1.3	105	0.00
27 T	cis-1,2-Dichloroethene	50.000	48.630	2.7	102	0.00
28 T	Bromochloromethane	50.000	50.232	-0.5	102	0.00
29 T	Tetrahydrofuran	250.000	267.272	-6.9	109	0.00
30 C	Chloroform	50.000	48.348	3.3#	102	0.00
31 T	Cyclohexane	50.000	49.328	1.3	104	0.00
32 T	1,1,1-Trichloroethane	50.000	49.101	1.8	103	0.00
33 S	1,2-Dichloroethane-d4	50.000	48.819	2.4	102	0.00
34 I	1,4-Difluorobenzene	50.000	50.000	0.0	102	0.00
35 S	Dibromofluoromethane	50.000	50.377	-0.8	102	0.00
36 T	1,1-Dichloropropene	50.000	49.261	1.5	104	0.00
37 T	Ethyl Acetate	50.000	48.151	3.7	106	0.00
38 T	Carbon Tetrachloride	50.000	49.327	1.3	102	0.00
39 T	Methylcyclohexane	50.000	50.747	-1.5	104	0.00
40 TM	Benzene	50.000	49.375	1.3	102	0.00
41 T	Methacrylonitrile	50.000	54.246	-8.5	108	0.00
42 TM	1,2-Dichloroethane	50.000	49.110	1.8	102	0.00
43 T	Isopropyl Acetate	50.000	53.586	-7.2	105	0.00
44 TM	Trichloroethene	50.000	48.321	3.4	103	0.00
45 C	1,2-Dichloropropane	50.000	49.920	0.2#	103	0.00
46 T	Dibromomethane	50.000	49.494	1.0	102	0.00
47 T	Bromodichloromethane	50.000	49.516	1.0	102	0.00
48 T	Methyl methacrylate	50.000	54.886	-9.8	107	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX070225\
 Data File : VX046867.D
 Acq On : 02 Jul 2025 15:14
 Operator : JC/MD
 Sample : VSTDICV050
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 ICVVX070225

Quant Time: Jul 03 05:55:49 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 03 05:51:11 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	1081.463	-8.1	108	0.00
50 S	Toluene-d8	50.000	50.047	-0.1	102	0.00
51 T	4-Methyl-2-Pentanone	250.000	270.137	-8.1	106	0.00
52 CM	Toluene	50.000	50.028	-0.1#	104	0.00
53 T	t-1,3-Dichloropropene	50.000	52.871	-5.7	105	0.00
54 T	cis-1,3-Dichloropropene	50.000	52.010	-4.0	104	0.00
55 T	1,1,2-Trichloroethane	50.000	49.876	0.2	102	0.00
56 T	Ethyl methacrylate	50.000	54.511	-9.0	107	0.00
57 T	1,3-Dichloropropane	50.000	49.728	0.5	103	0.00
58 T	2-Chloroethyl Vinyl ether	250.000	268.488	-7.4	102	0.00
59 T	2-Hexanone	250.000	277.453	-11.0	107	0.00
60 T	Dibromochloromethane	50.000	50.089	-0.2	103	0.00
61 T	1,2-Dibromoethane	50.000	51.219	-2.4	104	0.00
62 S	4-Bromofluorobenzene	50.000	50.818	-1.6	103	0.00
63 I	Chlorobenzene-d5	50.000	50.000	0.0	102	0.00
64 T	Tetrachloroethene	50.000	47.773	4.5	103	0.00
65 PM	Chlorobenzene	50.000	49.208	1.6	103	0.00
66 T	1,1,1,2-Tetrachloroethane	50.000	49.975	0.0	103	0.00
67 C	Ethyl Benzene	50.000	49.829	0.3#	103	0.00
68 T	m/p-Xylenes	100.000	99.238	0.8	102	0.00
69 T	o-Xylene	50.000	49.809	0.4	103	0.00
70 T	Styrene	50.000	50.903	-1.8	102	0.00
71 P	Bromoform	50.000	49.651	0.7	101	0.00
72 I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	103	0.00
73 T	Isopropylbenzene	50.000	50.742	-1.5	102	0.00
74 T	N-ethyl acetate	50.000	54.674	-9.3	106	0.00
75 P	1,1,2,2-Tetrachloroethane	50.000	50.612	-1.2	105	0.00
76 T	1,2,3-Trichloropropane	50.000	51.422	-2.8	104	0.00
77 T	Bromobenzene	50.000	49.363	1.3	102	0.00
78 T	n-propylbenzene	50.000	50.231	-0.5	102	0.00
79 T	2-Chlorotoluene	50.000	49.268	1.5	102	0.00
80 T	1,3,5-Trimethylbenzene	50.000	51.418	-2.8	104	0.00
81 T	trans-1,4-Dichloro-2-butene	50.000	52.240	-4.5	106	0.00
82 T	4-Chlorotoluene	50.000	50.483	-1.0	103	0.00
83 T	tert-Butylbenzene	50.000	50.916	-1.8	103	0.00
84 T	1,2,4-Trimethylbenzene	50.000	50.428	-0.9	102	0.00
85 T	sec-Butylbenzene	50.000	50.429	-0.9	102	0.00
86 T	p-Isopropyltoluene	50.000	50.577	-1.2	103	0.00
87 T	1,3-Dichlorobenzene	50.000	49.558	0.9	103	0.00
88 T	1,4-Dichlorobenzene	50.000	47.821	4.4	103	0.00
89 T	n-Butylbenzene	50.000	50.753	-1.5	103	0.00
90 T	Hexachloroethane	50.000	49.965	0.1	103	0.00
91 T	1,2-Dichlorobenzene	50.000	48.553	2.9	101	0.00
92 T	1,2-Dibromo-3-Chloropropane	50.000	52.171	-4.3	107	0.00
93 T	1,2,4-Trichlorobenzene	50.000	50.729	-1.5	104	0.00
94 T	Hexachlorobutadiene	50.000	52.667	-5.3	108	0.00
95 T	Naphthalene	50.000	54.014	-8.0	104	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX070225\
Data File : VX046867.D
Acq On : 02 Jul 2025 15:14
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX070225

Quant Time: Jul 03 05:55:49 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 03 05:51:11 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	50.881	-1.8	102	0.00

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



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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name:	<u>Alliance</u>	Contract:	<u>TACO01</u>
Lab Code:	<u>ACE</u>	SDG No.:	<u>Q2600</u>
Instrument ID:	<u>MSVOA_X</u>	Calibration Date/Time:	<u>07/15/2025 10:18</u>
Lab File ID:	<u>VX046988.D</u>	Init. Calib. Date(s):	<u>07/02/2025 07/02/2025</u>
Heated Purge: (Y/N)	<u>N</u>	Init. Calib. Time(s):	<u>12:11 14:31</u>
GC Column:	<u>DB-624UI</u>	ID:	<u>0.18</u> (mm)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Dichlorodifluoromethane	0.478	0.457		-4.39	20
Chloromethane	0.522	0.484	0.1	-7.28	20
Vinyl Chloride	0.569	0.540		-5.1	20
Bromomethane	0.366	0.346		-5.46	20
Chloroethane	0.376	0.358		-4.79	20
Trichlorofluoromethane	0.880	0.905		2.84	20
1,1,2-Trichlorotrifluoroethane	0.561	0.585		4.28	20
1,1-Dichloroethene	0.542	0.545		0.55	20
Acetone	0.205	0.242		18.05	20
Carbon Disulfide	1.422	1.192		-16.17	20
Methyl tert-butyl Ether	1.531	1.922		25.54	20
Methyl Acetate	0.541	0.836		54.53	20
Methylene Chloride	0.607	0.637		4.94	20
trans-1,2-Dichloroethene	0.555	0.563		1.44	20
1,1-Dichloroethane	1.064	1.145	0.1	7.61	20
Cyclohexane	0.944	0.923		-2.22	20
2-Butanone	0.274	0.372		35.77	20
Carbon Tetrachloride	0.484	0.508		4.96	20
cis-1,2-Dichloroethene	0.677	0.722		6.65	20
Bromochloromethane	0.525	0.546		4	20
Chloroform	1.087	1.183		8.83	20
1,1,1-Trichloroethane	0.908	0.989		8.92	20
Methylcyclohexane	0.573	0.552		-3.66	20
Benzene	1.385	1.417		2.31	20
1,2-Dichloroethane	0.470	0.511		8.72	20
Trichloroethene	0.361	0.358		-0.83	20
1,2-Dichloropropane	0.350	0.374		6.86	20
Bromodichloromethane	0.518	0.557		7.53	20
4-Methyl-2-Pentanone	0.353	0.470		33.14	20
Toluene	0.858	0.884		3.03	20
t-1,3-Dichloropropene	0.462	0.537		16.23	20
cis-1,3-Dichloropropene	0.527	0.596		13.09	20
1,1,2-Trichloroethane	0.320	0.355		10.94	20
2-Hexanone	0.234	0.325		38.89	20
Dibromochloromethane	0.383	0.420		9.66	20
1,2-Dibromoethane	0.321	0.356		10.9	20
Tetrachloroethene	0.333	0.318		-4.51	20
Chlorobenzene	1.081	1.126	0.3	4.16	20

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



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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name:	<u>Alliance</u>	Contract:	<u>TACO01</u>
Lab Code:	<u>ACE</u>	SDG No.:	<u>Q2600</u>
Instrument ID:	<u>MSVOA_X</u>	Calibration Date/Time:	<u>07/15/2025 10:18</u>
Lab File ID:	<u>VX046988.D</u>	Init. Calib. Date(s):	<u>07/02/2025 07/02/2025</u>
Heated Purge: (Y/N)	<u>N</u>	Init. Calib. Time(s):	<u>12:11 14:31</u>
GC Column:	<u>DB-624UI</u>	ID:	<u>0.18</u> (mm)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Ethyl Benzene	1.851	1.966		6.21	20
m/p-Xylenes	0.698	0.733		5.01	20
o-Xylene	0.674	0.717		6.38	20
Styrene	1.153	1.250		8.41	20
Bromoform	0.270	0.304	0.1	12.59	20
Isopropylbenzene	3.515	3.870		10.1	20
1,1,2,2-Tetrachloroethane	0.966	1.147	0.3	18.74	20
1,3-Dichlorobenzene	1.637	1.748		6.78	20
1,4-Dichlorobenzene	1.704	1.748		2.58	20
1,2-Dichlorobenzene	1.587	1.685		6.18	20
1,2-Dibromo-3-Chloropropane	0.169	0.226		33.73	20
1,2,4-Trichlorobenzene	1.078	1.174		8.9	20
1,2,3-Trichlorobenzene	1.019	1.128		10.7	20
1,2-Dichloroethane-d4	0.661	0.719		8.77	20
Dibromofluoromethane	0.339	0.359		5.9	20
Toluene-d8	1.197	1.212		1.25	20
4-Bromofluorobenzene	0.455	0.485		6.59	20

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
 Data File : VX046988.D
 Acq On : 15 Jul 2025 10:18
 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 07/16/2025
 Supervised By : Mahesh Dadoda 07/16/2025

Quant Time: Jul 16 02:20:20 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 03 05:51:11 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	5.556	168	298555	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.763	114	499158	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	443564	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	217822	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.958	65	214513	54.387	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 108.780%			
35) Dibromofluoromethane	5.391	113	178999	52.829	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 105.660%			
50) Toluene-d8	8.647	98	605167	50.622	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery = 101.240%			
62) 4-Bromofluorobenzene	11.079	95	242088	53.283	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery = 106.560%			
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	1.185	85	136314	47.742	ug/l	98
3) Chloromethane	1.306	50	144424	46.297	ug/l	100
4) Vinyl Chloride	1.386	62	161197	47.451	ug/l	98
5) Bromomethane	1.617	94	103355	47.351	ug/l	99
6) Chloroethane	1.703	64	107013	47.706	ug/l	98
7) Trichlorofluoromethane	1.904	101	270152	51.431	ug/l	99
8) Diethyl Ether	2.148	74	102078	54.608	ug/l	97
9) 1,1,2-Trichlorotrifluo...	2.343	101	174645	52.178	ug/l	99
10) Methyl Iodide	2.465	142	172384	47.274	ug/l	96
11) Tert butyl alcohol	2.959	59	105764	408.859	ug/l	99
12) 1,1-Dichloroethene	2.337	96	162804	50.288	ug/l	97
13) Acrolein	2.251	56	81952	286.283	ug/l	98
14) Allyl chloride	2.678	41	315442	54.728	ug/l	99
15) Acrylonitrile	3.068	53	467316	312.460	ug/l	99
16) Acetone	2.386	43	361327	294.924	ug/l	100
17) Carbon Disulfide	2.526	76	355879	41.917	ug/l	100
18) Methyl Acetate	2.715	43	249699	77.325	ug/l	98
19) Methyl tert-butyl Ether	3.123	73	573793	62.763	ug/l	98
20) Methylene Chloride	2.800	84	190145	52.485	ug/l	98
21) trans-1,2-Dichloroethene	3.105	96	167974	50.706	ug/l	98
22) Diisopropyl ether	3.769	45	649158	58.297	ug/l	96
23) Vinyl Acetate	3.727	43	2500248	299.702	ug/l	99
24) 1,1-Dichloroethane	3.623	63	341985	53.850	ug/l	99
25) 2-Butanone	4.556	43	555541	339.868	ug/l	99
26) 2,2-Dichloropropane	4.483	77	269784	57.081	ug/l	100
27) cis-1,2-Dichloroethene	4.495	96	215597	53.305	ug/l	98
28) Bromochloromethane	4.903	49	162990	52.003	ug/l	96
29) Tetrahydrofuran	5.007	42	357784	343.369	ug/l	98
30) Chloroform	5.098	83	353090	54.421	ug/l	98
31) Cyclohexane	5.476	56	275627	48.888	ug/l	98
32) 1,1,1-Trichloroethane	5.391	97	295296	54.477	ug/l	99
36) 1,1-Dichloropropene	5.702	75	228659	50.018	ug/l	100
37) Ethyl Acetate	4.714	43	229448	58.928	ug/l	100
38) Carbon Tetrachloride	5.684	117	253764	52.505	ug/l	99
39) Methylcyclohexane	7.385	83	275451	48.168	ug/l	99
40) Benzene	6.043	78	707337	51.155	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
 Data File : VX046988.D
 Acq On : 15 Jul 2025 10:18
 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 07/16/2025
 Supervised By : Mahesh Dadoda 07/16/2025

Quant Time: Jul 16 02:20:20 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 03 05:51:11 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	4.922	41	136262	65.603	ug/l	98
42) 1,2-Dichloroethane	6.086	62	255117	54.334	ug/l	98
43) Isopropyl Acetate	6.342	43	389961	65.387	ug/l	100
44) Trichloroethene	7.129	130	178562	49.609	ug/l	99
45) 1,2-Dichloropropane	7.433	63	186702	53.443	ug/l	100
46) Dibromomethane	7.580	93	129355	53.441	ug/l	99
47) Bromodichloromethane	7.824	83	278048	53.798	ug/l	97
48) Methyl methacrylate	7.696	41	204045	66.260	ug/l	97
49) 1,4-Dioxane	7.659	88	50379	1411.910	ug/l	97
51) 4-Methyl-2-Pentanone	8.573	43	1173684	333.458	ug/l	99
52) Toluene	8.720	92	441353	51.509	ug/l	99
53) t-1,3-Dichloropropene	8.976	75	268222	58.150	ug/l	99
54) cis-1,3-Dichloropropene	8.366	75	297348	56.477	ug/l	97
55) 1,1,2-Trichloroethane	9.153	97	176972	55.451	ug/l	98
56) Ethyl methacrylate	9.116	69	281832	63.802	ug/l	98
57) 1,3-Dichloropropane	9.305	76	300488	54.679	ug/l	100
58) 2-Chloroethyl Vinyl ether	8.238	63	781053	313.811	ug/l	100
59) 2-Hexanone	9.427	43	810255	347.058	ug/l	99
60) Dibromochloromethane	9.518	129	209424	54.831	ug/l	98
61) 1,2-Dibromoethane	9.610	107	177904	55.503	ug/l	99
64) Tetrachloroethene	9.275	164	141010	47.747	ug/l	98
65) Chlorobenzene	10.079	112	499325	52.067	ug/l	98
66) 1,1,1,2-Tetrachloroethane	10.159	131	176346	54.701	ug/l	99
67) Ethyl Benzene	10.189	91	871908	53.090	ug/l	99
68) m/p-Xylenes	10.299	106	650006	105.033	ug/l	99
69) o-Xylene	10.640	106	317971	53.191	ug/l	99
70) Styrene	10.652	104	554502	54.216	ug/l	98
71) Bromoform	10.799	173	134923	56.287	ug/l	100
73) Isopropylbenzene	10.957	105	842977	55.052	ug/l	100
74) N-amyl acetate	10.841	43	351295	67.514	ug/l	99
75) 1,1,2,2-Tetrachloroethane	11.207	83	249784	59.324	ug/l	99
76) 1,2,3-Trichloropropane	11.238	75	209071m	62.119	ug/l	
77) Bromobenzene	11.195	156	206399	54.115	ug/l	97
78) n-propylbenzene	11.299	91	998163	54.061	ug/l	100
79) 2-Chlorotoluene	11.360	91	587745	53.911	ug/l	100
80) 1,3,5-Trimethylbenzene	11.451	105	691213	55.555	ug/l	99
81) trans-1,4-Dichloro-2-b...	11.018	75	78932	62.934	ug/l	99
82) 4-Chlorotoluene	11.451	91	690973	54.922	ug/l	100
83) tert-Butylbenzene	11.713	119	712515	55.447	ug/l	99
84) 1,2,4-Trimethylbenzene	11.750	105	690267	54.888	ug/l	95
85) sec-Butylbenzene	11.890	105	882170	54.448	ug/l	100
86) p-Isopropyltoluene	12.006	119	734892	54.164	ug/l	99
87) 1,3-Dichlorobenzene	11.963	146	380859	53.393	ug/l	99
88) 1,4-Dichlorobenzene	12.036	146	380835	51.299	ug/l	99
89) n-Butylbenzene	12.329	91	683574	53.620	ug/l	100
90) Hexachloroethane	12.536	117	128960	53.616	ug/l	97
91) 1,2-Dichlorobenzene	12.335	146	367044	53.099	ug/l	98
92) 1,2-Dibromo-3-Chloropr...	12.939	75	49161	66.756	ug/l	96
93) 1,2,4-Trichlorobenzene	13.585	180	255734	54.458	ug/l	100
94) Hexachlorobutadiene	13.719	225	91363	51.589	ug/l	99
95) Naphthalene	13.774	128	778201	62.888	ug/l	99
96) 1,2,3-Trichlorobenzene	13.957	180	245654	55.364	ug/l	97

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX046988.D
Acq On : 15 Jul 2025 10:18
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 07/16/2025
Supervised By : Mahesh Dadoda 07/16/2025

Quant Time: Jul 16 02:20:20 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 03 05:51:11 2025
Response via : Initial Calibration

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

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

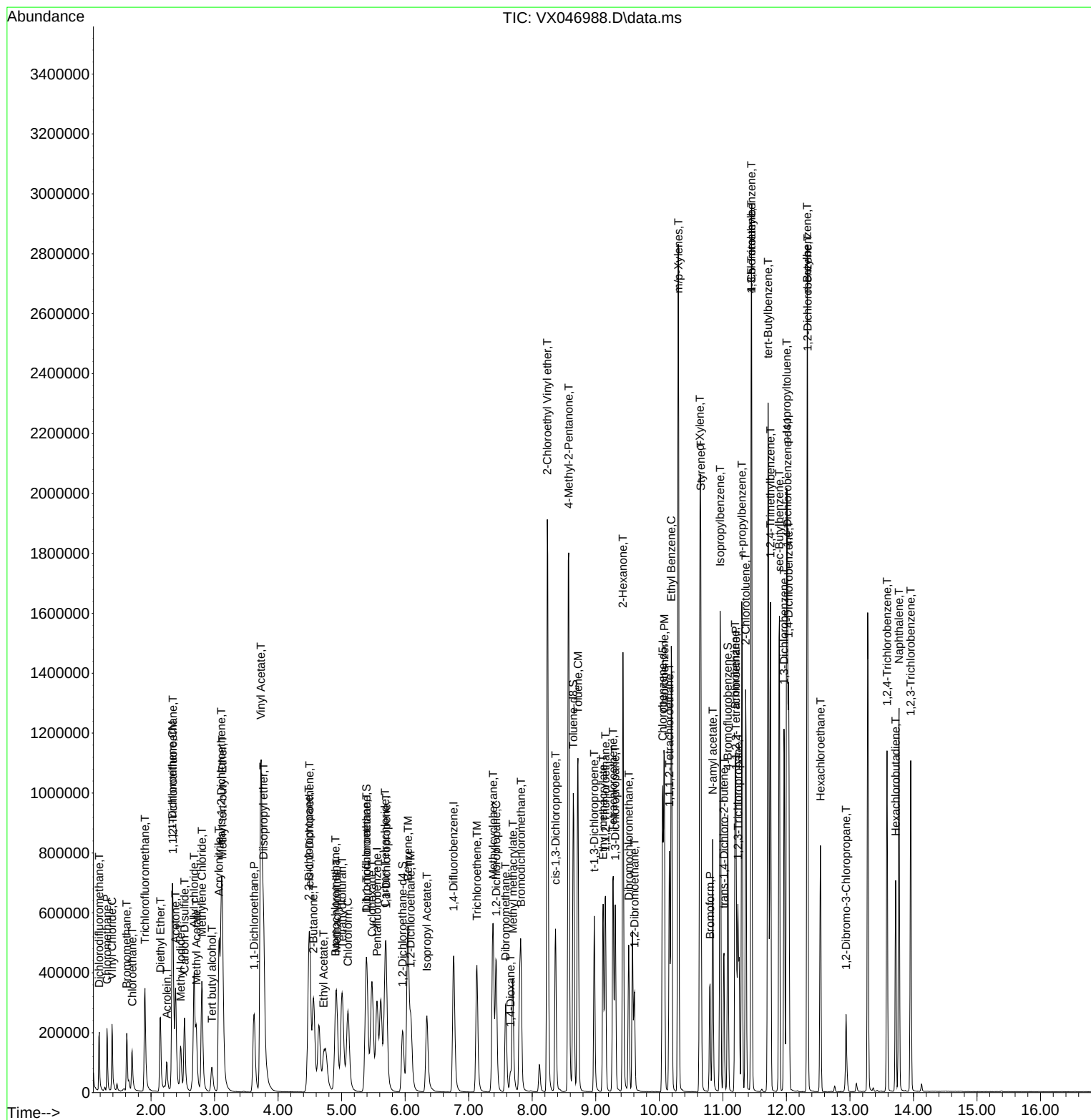
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX046988.D
Acq On : 15 Jul 2025 10:18
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 07/16/2025
Supervised By :Mahesh Dadoda 07/16/2025

Quant Time: Jul 16 02:20:20 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 03 05:51:11 2025
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Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
 Data File : VX046988.D
 Acq On : 15 Jul 2025 10:18
 Operator : JC/MD
 Sample : VSTDCCC050
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 MSVOA_X
 LabSampleId :
 VSTDCCC050

Quant Time: Jul 16 02:20:20 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 03 05:51:11 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	81	0.00
2 T	Dichlorodifluoromethane	0.478	0.457	4.4	76	0.00
3 P	Chloromethane	0.522	0.484	7.3	77	0.00
4 C	Vinyl Chloride	0.569	0.540	5.1#	80	0.00
5 T	Bromomethane	0.366	0.346	5.5	78	0.00
6 T	Chloroethane	0.376	0.358	4.8	84	0.00
7 T	Trichlorofluoromethane	0.880	0.905	-2.8	86	0.00
8 T	Diethyl Ether	0.313	0.342	-9.3	91	0.00
9 T	1,1,2-Trichlorotrifluoroeth	0.561	0.585	-4.3	87	0.00
10 T	Methyl Iodide	0.611	0.577	5.6	74	0.00
11 T	Tert butyl alcohol	0.043	0.071	-65.1#	136	0.00
12 CM	1,1-Dichloroethene	0.542	0.545	-0.6#	84	0.00
13 T	Acrolein	0.052	0.055	-5.8	97	0.00
14 T	Allyl chloride	0.965	1.057	-9.5	91	0.00
15 T	Acrylonitrile	0.250	0.313	-25.2#	103	0.00
16 T	Acetone	0.205	0.242	-18.0	102	0.00
17 T	Carbon Disulfide	1.422	1.192	16.2	72	0.00
18 T	Methyl Acetate	0.541	0.836	-54.5#	123	0.00
19 T	Methyl tert-butyl Ether	1.531	1.922	-25.5#	102	0.00
20 T	Methylene Chloride	0.607	0.637	-4.9	88	0.00
21 T	trans-1,2-Dichloroethene	0.555	0.563	-1.4	84	0.00
22 T	Diisopropyl ether	1.865	2.174	-16.6	93	0.00
23 T	Vinyl Acetate	1.397	1.675	-19.9	95	0.00
24 P	1,1-Dichloroethane	1.064	1.145	-7.6	89	0.00
25 T	2-Butanone	0.274	0.372	-35.8#	110	0.00
26 T	2,2-Dichloropropane	0.792	0.904	-14.1	96	0.00
27 T	cis-1,2-Dichloroethene	0.677	0.722	-6.6	89	0.00
28 T	Bromochloromethane	0.525	0.546	-4.0	84	0.00
29 T	Tetrahydrofuran	0.175	0.240	-37.1#	111	0.00
30 C	Chloroform	1.087	1.183	-8.8#	91	0.00
31 T	Cyclohexane	0.944	0.923	2.2	82	0.00
32 T	1,1,1-Trichloroethane	0.908	0.989	-8.9	91	0.00
33 S	1,2-Dichloroethane-d4	0.661	0.719	-8.8	90	0.00
34 I	1,4-Difluorobenzene	1.000	1.000	0.0	83	0.00
35 S	Dibromofluoromethane	0.339	0.359	-5.9	88	0.00
36 T	1,1-Dichloropropene	0.458	0.458	0.0	87	0.00
37 T	Ethyl Acetate	0.390	0.460	-17.9	106	0.00
38 T	Carbon Tetrachloride	0.484	0.508	-5.0	89	0.00
39 T	Methylcyclohexane	0.573	0.552	3.7	81	0.00
40 TM	Benzene	1.385	1.417	-2.3	87	0.00
41 T	Methacrylonitrile	0.208	0.273	-31.3#	107	0.00
42 TM	1,2-Dichloroethane	0.470	0.511	-8.7	92	0.00
43 T	Isopropyl Acetate	0.597	0.781	-30.8#	105	0.00
44 TM	Trichloroethene	0.361	0.358	0.8	86	0.00
45 C	1,2-Dichloropropane	0.350	0.374	-6.9#	90	0.00
46 T	Dibromomethane	0.242	0.259	-7.0	90	0.00
47 T	Bromodichloromethane	0.518	0.557	-7.5	91	0.00
48 T	Methyl methacrylate	0.308	0.409	-32.8#	105	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
 Data File : VX046988.D
 Acq On : 15 Jul 2025 10:18
 Operator : JC/MD
 Sample : VSTDCCC050
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 MSVOA_X
 LabSampleId :
 VSTDCCC050

Quant Time: Jul 16 02:20:20 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 03 05:51:11 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	0.004	0.005	-25.0	115	0.00
50 S	Toluene-d8	1.197	1.212	-1.3	84	0.00
51 T	4-Methyl-2-Pentanone	0.353	0.470	-33.1#	107	0.00
52 CM	Toluene	0.858	0.884	-3.0#	87	0.00
53 T	t-1,3-Dichloropropene	0.462	0.537	-16.2	94	0.00
54 T	cis-1,3-Dichloropropene	0.527	0.596	-13.1	93	0.00
55 T	1,1,2-Trichloroethane	0.320	0.355	-10.9	93	0.00
56 T	Ethyl methacrylate	0.442	0.565	-27.8#	102	0.00
57 T	1,3-Dichloropropane	0.550	0.602	-9.5	92	0.00
58 T	2-Chloroethyl Vinyl ether	0.249	0.313	-25.7#	97	0.00
59 T	2-Hexanone	0.234	0.325	-38.9#	109	0.00
60 T	Dibromochloromethane	0.383	0.420	-9.7	92	0.00
61 T	1,2-Dibromoethane	0.321	0.356	-10.9	93	0.00
62 S	4-Bromofluorobenzene	0.455	0.485	-6.6	89	0.00
63 I	Chlorobenzene-d5	1.000	1.000	0.0	82	0.00
64 T	Tetrachloroethene	0.333	0.318	4.5	83	0.00
65 PM	Chlorobenzene	1.081	1.126	-4.2	88	0.00
66 T	1,1,1,2-Tetrachloroethane	0.363	0.398	-9.6	91	0.00
67 C	Ethyl Benzene	1.851	1.966	-6.2#	88	0.00
68 T	m/p-Xylenes	0.698	0.733	-5.0	87	0.00
69 T	o-Xylene	0.674	0.717	-6.4	89	0.00
70 T	Styrene	1.153	1.250	-8.4	87	0.00
71 P	Bromoform	0.270	0.304	-12.6	93	0.00
72 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	82	0.00
73 T	Isopropylbenzene	3.515	3.870	-10.1	88	0.00
74 T	N-amyl acetate	1.194	1.613	-35.1#	104	0.00
75 P	1,1,2,2-Tetrachloroethane	0.966	1.147	-18.7	97	0.00
76 T	1,2,3-Trichloropropane	0.773	0.960	-24.2	100	0.00
77 T	Bromobenzene	0.875	0.948	-8.3	88	0.00
78 T	n-propylbenzene	4.238	4.582	-8.1	87	0.00
79 T	2-Chlorotoluene	2.503	2.698	-7.8	89	0.00
80 T	1,3,5-Trimethylbenzene	2.856	3.173	-11.1	89	0.00
81 T	trans-1,4-Dichloro-2-butene	0.288	0.362	-25.7#	101	0.00
82 T	4-Chlorotoluene	2.888	3.172	-9.8	89	0.00
83 T	tert-Butylbenzene	2.950	3.271	-10.9	88	0.00
84 T	1,2,4-Trimethylbenzene	2.887	3.169	-9.8	88	0.00
85 T	sec-Butylbenzene	3.719	4.050	-8.9	87	0.00
86 T	p-Isopropyltoluene	3.114	3.374	-8.3	87	0.00
87 T	1,3-Dichlorobenzene	1.637	1.748	-6.8	88	0.00
88 T	1,4-Dichlorobenzene	1.704	1.748	-2.6	87	0.00
89 T	n-Butylbenzene	2.926	3.138	-7.2	86	0.00
90 T	Hexachloroethane	0.552	0.592	-7.2	87	0.00
91 T	1,2-Dichlorobenzene	1.587	1.685	-6.2	88	0.00
92 T	1,2-Dibromo-3-Chloropropane	0.169	0.226	-33.7#	108	0.00
93 T	1,2,4-Trichlorobenzene	1.078	1.174	-8.9	88	0.00
94 T	Hexachlorobutadiene	0.407	0.419	-2.9	84	0.00
95 T	Naphthalene	2.840	3.573	-25.8#	96	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX046988.D
Acq On : 15 Jul 2025 10:18
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Jul 16 02:20:20 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 03 05:51:11 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	1.019	1.128	-10.7	88	0.00

(#) = Out of Range

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
 Data File : VX046988.D
 Acq On : 15 Jul 2025 10:18
 Operator : JC/MD
 Sample : VSTDCCC050
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 MSVOA_X
 LabSampleId :
 VSTDCCC050

Quant Time: Jul 16 02:20:20 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 03 05:51:11 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	81	0.00
2 T	Dichlorodifluoromethane	50.000	47.742	4.5	76	0.00
3 P	Chloromethane	50.000	46.297	7.4	77	0.00
4 C	Vinyl Chloride	50.000	47.451	5.1#	80	0.00
5 T	Bromomethane	50.000	47.351	5.3	78	0.00
6 T	Chloroethane	50.000	47.706	4.6	84	0.00
7 T	Trichlorofluoromethane	50.000	51.431	-2.9	86	0.00
8 T	Diethyl Ether	50.000	54.608	-9.2	91	0.00
9 T	1,1,2-Trichlorotrifluoroeth	50.000	52.178	-4.4	87	0.00
10 T	Methyl Iodide	50.000	47.274	5.5	74	0.00
11 T	Tert butyl alcohol	250.000	408.859	-63.5#	136	0.00
12 CM	1,1-Dichloroethene	50.000	50.288	-0.6#	84	0.00
13 T	Acrolein	250.000	286.283	-14.5	97	0.00
14 T	Allyl chloride	50.000	54.728	-9.5	91	0.00
15 T	Acrylonitrile	250.000	312.460	-25.0	103	0.00
16 T	Acetone	250.000	294.924	-18.0	102	0.00
17 T	Carbon Disulfide	50.000	41.917	16.2	72	0.00
18 T	Methyl Acetate	50.000	77.325	-54.7#	123	0.00
19 T	Methyl tert-butyl Ether	50.000	62.763	-25.5#	102	0.00
20 T	Methylene Chloride	50.000	52.485	-5.0	88	0.00
21 T	trans-1,2-Dichloroethene	50.000	50.706	-1.4	84	0.00
22 T	Diisopropyl ether	50.000	58.297	-16.6	93	0.00
23 T	Vinyl Acetate	250.000	299.702	-19.9	95	0.00
24 P	1,1-Dichloroethane	50.000	53.850	-7.7	89	0.00
25 T	2-Butanone	250.000	339.868	-35.9#	110	0.00
26 T	2,2-Dichloropropane	50.000	57.081	-14.2	96	0.00
27 T	cis-1,2-Dichloroethene	50.000	53.305	-6.6	89	0.00
28 T	Bromochloromethane	50.000	52.003	-4.0	84	0.00
29 T	Tetrahydrofuran	250.000	343.369	-37.3#	111	0.00
30 C	Chloroform	50.000	54.421	-8.8#	91	0.00
31 T	Cyclohexane	50.000	48.888	2.2	82	0.00
32 T	1,1,1-Trichloroethane	50.000	54.477	-9.0	91	0.00
33 S	1,2-Dichloroethane-d4	50.000	54.387	-8.8	90	0.00
34 I	1,4-Difluorobenzene	50.000	50.000	0.0	83	0.00
35 S	Dibromofluoromethane	50.000	52.829	-5.7	88	0.00
36 T	1,1-Dichloropropene	50.000	50.018	-0.0	87	0.00
37 T	Ethyl Acetate	50.000	58.928	-17.9	106	0.00
38 T	Carbon Tetrachloride	50.000	52.505	-5.0	89	0.00
39 T	Methylcyclohexane	50.000	48.168	3.7	81	0.00
40 TM	Benzene	50.000	51.155	-2.3	87	0.00
41 T	Methacrylonitrile	50.000	65.603	-31.2#	107	0.00
42 TM	1,2-Dichloroethane	50.000	54.334	-8.7	92	0.00
43 T	Isopropyl Acetate	50.000	65.387	-30.8#	105	0.00
44 TM	Trichloroethene	50.000	49.609	0.8	86	0.00
45 C	1,2-Dichloropropane	50.000	53.443	-6.9#	90	0.00
46 T	Dibromomethane	50.000	53.441	-6.9	90	0.00
47 T	Bromodichloromethane	50.000	53.798	-7.6	91	0.00
48 T	Methyl methacrylate	50.000	66.260	-32.5#	105	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
 Data File : VX046988.D
 Acq On : 15 Jul 2025 10:18
 Operator : JC/MD
 Sample : VSTDCCC050
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 MSVOA_X
 LabSampleId :
 VSTDCCC050

Quant Time: Jul 16 02:20:20 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 03 05:51:11 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	1411.910	-41.2#	115	0.00
50 S	Toluene-d8	50.000	50.622	-1.2	84	0.00
51 T	4-Methyl-2-Pentanone	250.000	333.458	-33.4#	107	0.00
52 CM	Toluene	50.000	51.509	-3.0#	87	0.00
53 T	t-1,3-Dichloropropene	50.000	58.150	-16.3	94	0.00
54 T	cis-1,3-Dichloropropene	50.000	56.477	-13.0	93	0.00
55 T	1,1,2-Trichloroethane	50.000	55.451	-10.9	93	0.00
56 T	Ethyl methacrylate	50.000	63.802	-27.6#	102	0.00
57 T	1,3-Dichloropropane	50.000	54.679	-9.4	92	0.00
58 T	2-Chloroethyl Vinyl ether	250.000	313.811	-25.5#	97	0.00
59 T	2-Hexanone	250.000	347.058	-38.8#	109	0.00
60 T	Dibromochloromethane	50.000	54.831	-9.7	92	0.00
61 T	1,2-Dibromoethane	50.000	55.503	-11.0	93	0.00
62 S	4-Bromofluorobenzene	50.000	53.283	-6.6	89	0.00
63 I	Chlorobenzene-d5	50.000	50.000	0.0	82	0.00
64 T	Tetrachloroethene	50.000	47.747	4.5	83	0.00
65 PM	Chlorobenzene	50.000	52.067	-4.1	88	0.00
66 T	1,1,1,2-Tetrachloroethane	50.000	54.701	-9.4	91	0.00
67 C	Ethyl Benzene	50.000	53.090	-6.2#	88	0.00
68 T	m/p-Xylenes	100.000	105.033	-5.0	87	0.00
69 T	o-Xylene	50.000	53.191	-6.4	89	0.00
70 T	Styrene	50.000	54.216	-8.4	87	0.00
71 P	Bromoform	50.000	56.287	-12.6	93	0.00
72 I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	82	0.00
73 T	Isopropylbenzene	50.000	55.052	-10.1	88	0.00
74 T	N-amyl acetate	50.000	67.514	-35.0#	104	0.00
75 P	1,1,2,2-Tetrachloroethane	50.000	59.324	-18.6	97	0.00
76 T	1,2,3-Trichloropropane	50.000	62.119	-24.2	100	0.00
77 T	Bromobenzene	50.000	54.115	-8.2	88	0.00
78 T	n-propylbenzene	50.000	54.061	-8.1	87	0.00
79 T	2-Chlorotoluene	50.000	53.911	-7.8	89	0.00
80 T	1,3,5-Trimethylbenzene	50.000	55.555	-11.1	89	0.00
81 T	trans-1,4-Dichloro-2-butene	50.000	62.934	-25.9#	101	0.00
82 T	4-Chlorotoluene	50.000	54.922	-9.8	89	0.00
83 T	tert-Butylbenzene	50.000	55.447	-10.9	88	0.00
84 T	1,2,4-Trimethylbenzene	50.000	54.888	-9.8	88	0.00
85 T	sec-Butylbenzene	50.000	54.448	-8.9	87	0.00
86 T	p-Isopropyltoluene	50.000	54.164	-8.3	87	0.00
87 T	1,3-Dichlorobenzene	50.000	53.393	-6.8	88	0.00
88 T	1,4-Dichlorobenzene	50.000	51.299	-2.6	87	0.00
89 T	n-Butylbenzene	50.000	53.620	-7.2	86	0.00
90 T	Hexachloroethane	50.000	53.616	-7.2	87	0.00
91 T	1,2-Dichlorobenzene	50.000	53.099	-6.2	88	0.00
92 T	1,2-Dibromo-3-Chloropropane	50.000	66.756	-33.5#	108	0.00
93 T	1,2,4-Trichlorobenzene	50.000	54.458	-8.9	88	0.00
94 T	Hexachlorobutadiene	50.000	51.589	-3.2	84	0.00
95 T	Naphthalene	50.000	62.888	-25.8#	96	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX046988.D
Acq On : 15 Jul 2025 10:18
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Jul 16 02:20:20 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 03 05:51:11 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	55.364	-10.7	88	0.00

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



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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name:	<u>Alliance</u>	Contract:	<u>TACO01</u>
Lab Code:	<u>ACE</u>	SDG No.:	<u>Q2600</u>
Instrument ID:	<u>MSVOA_X</u>	Calibration Date/Time:	<u>07/16/2025 09:26</u>
Lab File ID:	<u>VX047016.D</u>	Init. Calib. Date(s):	<u>07/02/2025 07/02/2025</u>
Heated Purge: (Y/N)	<u>N</u>	Init. Calib. Time(s):	<u>12:11 14:31</u>
GC Column:	<u>DB-624UI</u>	ID:	<u>0.18</u> (mm)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Dichlorodifluoromethane	0.478	0.458		-4.18	20
Chloromethane	0.522	0.489	0.1	-6.32	20
Vinyl Chloride	0.569	0.550		-3.34	20
Bromomethane	0.366	0.330		-9.84	20
Chloroethane	0.376	0.364		-3.19	20
Trichlorofluoromethane	0.880	0.897		1.93	20
1,1,2-Trichlorotrifluoroethane	0.561	0.576		2.67	20
1,1-Dichloroethene	0.542	0.535		-1.29	20
Acetone	0.205	0.250		21.95	20
Carbon Disulfide	1.422	1.105		-22.29	20
Methyl tert-butyl Ether	1.531	1.842		20.31	20
Methyl Acetate	0.541	0.809		49.54	20
Methylene Chloride	0.607	0.617		1.65	20
trans-1,2-Dichloroethene	0.555	0.538		-3.06	20
1,1-Dichloroethane	1.064	1.115	0.1	4.79	20
Cyclohexane	0.944	0.885		-6.25	20
2-Butanone	0.274	0.363		32.48	20
Carbon Tetrachloride	0.484	0.468		-3.31	20
cis-1,2-Dichloroethene	0.677	0.693		2.36	20
Bromochloromethane	0.525	0.559		6.48	20
Chloroform	1.087	1.131		4.05	20
1,1,1-Trichloroethane	0.908	0.954		5.07	20
Methylcyclohexane	0.573	0.508		-11.34	20
Benzene	1.385	1.335		-3.61	20
1,2-Dichloroethane	0.470	0.485		3.19	20
Trichloroethene	0.361	0.334		-7.48	20
1,2-Dichloropropane	0.350	0.352		0.57	20
Bromodichloromethane	0.518	0.518		0	20
4-Methyl-2-Pentanone	0.353	0.446		26.35	20
Toluene	0.858	0.816		-4.89	20
t-1,3-Dichloropropene	0.462	0.490		6.06	20
cis-1,3-Dichloropropene	0.527	0.543		3.04	20
1,1,2-Trichloroethane	0.320	0.330		3.13	20
2-Hexanone	0.234	0.306		30.77	20
Dibromochloromethane	0.383	0.382		-0.26	20
1,2-Dibromoethane	0.321	0.325		1.25	20
Tetrachloroethene	0.333	0.298		-10.51	20
Chlorobenzene	1.081	1.054	0.3	-2.5	20

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



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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name:	<u>Alliance</u>	Contract:	<u>TACO01</u>
Lab Code:	<u>ACE</u>	SDG No.:	<u>Q2600</u>
Instrument ID:	<u>MSVOA_X</u>	Calibration Date/Time:	<u>07/16/2025 09:26</u>
Lab File ID:	<u>VX047016.D</u>	Init. Calib. Date(s):	<u>07/02/2025 07/02/2025</u>
Heated Purge: (Y/N)	<u>N</u>	Init. Calib. Time(s):	<u>12:11 14:31</u>
GC Column:	<u>DB-624UI</u>	ID:	<u>0.18</u> (mm)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Ethyl Benzene	1.851	1.825		-1.4	20
m/p-Xylenes	0.698	0.674		-3.44	20
o-Xylene	0.674	0.667		-1.04	20
Styrene	1.153	1.171		1.56	20
Bromoform	0.270	0.281	0.1	4.07	20
Isopropylbenzene	3.515	3.616		2.87	20
1,1,2,2-Tetrachloroethane	0.966	1.082	0.3	12.01	20
1,3-Dichlorobenzene	1.637	1.608		-1.77	20
1,4-Dichlorobenzene	1.704	1.626		-4.58	20
1,2-Dichlorobenzene	1.587	1.566		-1.32	20
1,2-Dibromo-3-Chloropropane	0.169	0.210		24.26	20
1,2,4-Trichlorobenzene	1.078	1.066		-1.11	20
1,2,3-Trichlorobenzene	1.019	1.017		-0.2	20
1,2-Dichloroethane-d4	0.661	0.692		4.69	20
Dibromofluoromethane	0.339	0.335		-1.18	20
Toluene-d8	1.197	1.120		-6.43	20
4-Bromofluorobenzene	0.455	0.448		-1.54	20

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071625\
 Data File : VX047016.D
 Acq On : 16 Jul 2025 09:26
 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 :Mahesh Dadoda 07/17/2025
 Supervised By :Semsettin Yesilyurt 07/17/2025

Quant Time: Jul 17 03:26:37 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 03 05:51:11 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	5.556	168	329194	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.763	114	557691	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	489553	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	242580	50.000	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	5.958	65	227784	52.377	ug/l	0.00
Spiked Amount	50.000	Range	78 - 117	Recovery	=	104.760%
35) Dibromofluoromethane	5.391	113	186872	49.364	ug/l	0.00
Spiked Amount	50.000	Range	75 - 124	Recovery	=	98.720%
50) Toluene-d8	8.647	98	624373	46.747	ug/l	0.00
Spiked Amount	50.000	Range	92 - 112	Recovery	=	93.500%
62) 4-Bromofluorobenzene	11.079	95	249828	49.215	ug/l	0.00
Spiked Amount	50.000	Range	83 - 123	Recovery	=	98.440%

Target Compounds

						Qvalue

2) Dichlorodifluoromethane	1.179	85	150869	47.921	ug/l	98
3) Chloromethane	1.307	50	160931	46.787	ug/l	97
4) Vinyl Chloride	1.386	62	181170	48.367	ug/l	98
5) Bromomethane	1.618	94	108692	45.161	ug/l	98
6) Chloroethane	1.697	64	119884	48.469	ug/l	97
7) Trichlorofluoromethane	1.904	101	295330	50.991	ug/l	99
8) Diethyl Ether	2.148	74	112682	54.670	ug/l	98
9) 1,1,2-Trichlorotrifluo...	2.343	101	189580	51.369	ug/l	100
10) Methyl Iodide	2.465	142	172862	42.993	ug/l	95
11) Tert butyl alcohol	2.959	59	110234	386.477	ug/l	99
12) 1,1-Dichloroethene	2.331	96	176000	49.305	ug/l	95
13) Acrolein	2.245	56	84732	268.622	ug/l	98
14) Allyl chloride	2.678	41	336939	53.017	ug/l	99
15) Acrylonitrile	3.068	53	505824	306.730	ug/l	100
16) Acetone	2.386	43	412201	305.134	ug/l	95
17) Carbon Disulfide	2.526	76	363615	38.842	ug/l	98
18) Methyl Acetate	2.715	43	266331	74.800	ug/l	97
19) Methyl tert-butyl Ether	3.123	73	606375	60.153	ug/l	95
20) Methylene Chloride	2.800	84	203157	50.858	ug/l	99
21) trans-1,2-Dichloroethene	3.105	96	177141	48.496	ug/l	98
22) Diisopropyl ether	3.770	45	700243	57.031	ug/l	98
23) Vinyl Acetate	3.727	43	2623382	285.194	ug/l	99
24) 1,1-Dichloroethane	3.617	63	367114	52.427	ug/l	99
25) 2-Butanone	4.556	43	596838	331.149	ug/l	98
26) 2,2-Dichloropropane	4.483	77	276849	53.124	ug/l	99
27) cis-1,2-Dichloroethene	4.495	96	228023	51.130	ug/l	97
28) Bromochloromethane	4.904	49	184178	53.294	ug/l	97
29) Tetrahydrofuran	5.007	42	374504	325.963	ug/l	99
30) Chloroform	5.099	83	372241	52.033	ug/l	99
31) Cyclohexane	5.483	56	291459	46.885	ug/l	100
32) 1,1,1-Trichloroethane	5.391	97	313916	52.522	ug/l	99
36) 1,1-Dichloropropene	5.696	75	239871	46.963	ug/l	99
37) Ethyl Acetate	4.721	43	240378	55.256	ug/l	100
38) Carbon Tetrachloride	5.678	117	261207	48.373	ug/l	97
39) Methylcyclohexane	7.385	83	283537	44.378	ug/l	99
40) Benzene	6.044	78	744412	48.186	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071625\
 Data File : VX047016.D
 Acq On : 16 Jul 2025 09:26
 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 :Mahesh Dadoda 07/17/2025
 Supervised By :Semsettin Yesilyurt 07/17/2025

Quant Time: Jul 17 03:26:37 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 03 05:51:11 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	4.922	41	146638	63.189	ug/l	96
42) 1,2-Dichloroethane	6.092	62	270721	51.606	ug/l	100
43) Isopropyl Acetate	6.342	43	411807	61.803	ug/l	99
44) Trichloroethene	7.129	130	186538	46.385	ug/l	100
45) 1,2-Dichloropropane	7.434	63	196465	50.335	ug/l	99
46) Dibromomethane	7.580	93	137353	50.790	ug/l	98
47) Bromodichloromethane	7.824	83	288758	50.006	ug/l	100
48) Methyl methacrylate	7.690	41	211715	61.535	ug/l	98
49) 1,4-Dioxane	7.659	88	53387	1339.175	ug/l	98
51) 4-Methyl-2-Pentanone	8.574	43	1245013	316.598	ug/l	99
52) Toluene	8.720	92	454929	47.521	ug/l	99
53) t-1,3-Dichloropropene	8.976	75	273466	53.065	ug/l	99
54) cis-1,3-Dichloropropene	8.366	75	302907	51.495	ug/l	99
55) 1,1,2-Trichloroethane	9.153	97	184006	51.604	ug/l	99
56) Ethyl methacrylate	9.116	69	291041	58.971	ug/l	97
57) 1,3-Dichloropropane	9.305	76	314115	51.159	ug/l	100
58) 2-Chloroethyl Vinyl ether	8.238	63	794246	285.619	ug/l	99
59) 2-Hexanone	9.427	43	851908	326.601	ug/l	99
60) Dibromochloromethane	9.519	129	212976	49.909	ug/l	98
61) 1,2-Dibromoethane	9.610	107	181210	50.601	ug/l	99
64) Tetrachloroethene	9.275	164	145870	44.753	ug/l	97
65) Chlorobenzene	10.079	112	516158	48.766	ug/l	100
66) 1,1,1,2-Tetrachloroethane	10.159	131	178154	50.070	ug/l	99
67) Ethyl Benzene	10.189	91	893535	49.296	ug/l	99
68) m/p-Xylenes	10.299	106	659982	96.627	ug/l	97
69) o-Xylene	10.640	106	326625	49.506	ug/l	100
70) Styrene	10.653	104	573036	50.765	ug/l	98
71) Bromoform	10.799	173	137554	51.994	ug/l #	99
73) Isopropylbenzene	10.957	105	877270	51.445	ug/l	99
74) N-amyl acetate	10.841	43	362904	62.627	ug/l	98
75) 1,1,2,2-Tetrachloroethane	11.207	83	262516	55.985	ug/l	100
76) 1,2,3-Trichloropropane	11.238	75	214158m	57.136	ug/l	
77) Bromobenzene	11.195	156	209727	49.376	ug/l	95
78) n-propylbenzene	11.299	91	1031313	50.156	ug/l	100
79) 2-Chlorotoluene	11.360	91	618288	50.925	ug/l	98
80) 1,3,5-Trimethylbenzene	11.451	105	709704	51.220	ug/l	99
81) trans-1,4-Dichloro-2-b...	11.018	75	79380	56.831	ug/l	98
82) 4-Chlorotoluene	11.451	91	716382	51.130	ug/l	99
83) tert-Butylbenzene	11.713	119	733272	51.238	ug/l	99
84) 1,2,4-Trimethylbenzene	11.750	105	710408	50.725	ug/l	95
85) sec-Butylbenzene	11.890	105	900054	49.882	ug/l	100
86) p-Isopropyltoluene	12.006	119	752885	49.827	ug/l	99
87) 1,3-Dichlorobenzene	11.969	146	390135	49.111	ug/l	98
88) 1,4-Dichlorobenzene	12.036	146	394339	47.697	ug/l	99
89) n-Butylbenzene	12.329	91	697969	49.161	ug/l	99
90) Hexachloroethane	12.536	117	129831	48.469	ug/l	96
91) 1,2-Dichlorobenzene	12.335	146	379822	49.340	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	12.939	75	50868	62.024	ug/l	93
93) 1,2,4-Trichlorobenzene	13.585	180	258543	49.437	ug/l	100
94) Hexachlorobutadiene	13.725	225	84355	42.770	ug/l	99
95) Naphthalene	13.774	128	793570	57.585	ug/l	100
96) 1,2,3-Trichlorobenzene	13.957	180	246683	49.921	ug/l	97

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071625\
Data File : VX047016.D
Acq On : 16 Jul 2025 09:26
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 :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

Quant Time: Jul 17 03:26:37 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 03 05:51:11 2025
Response via : Initial Calibration

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

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

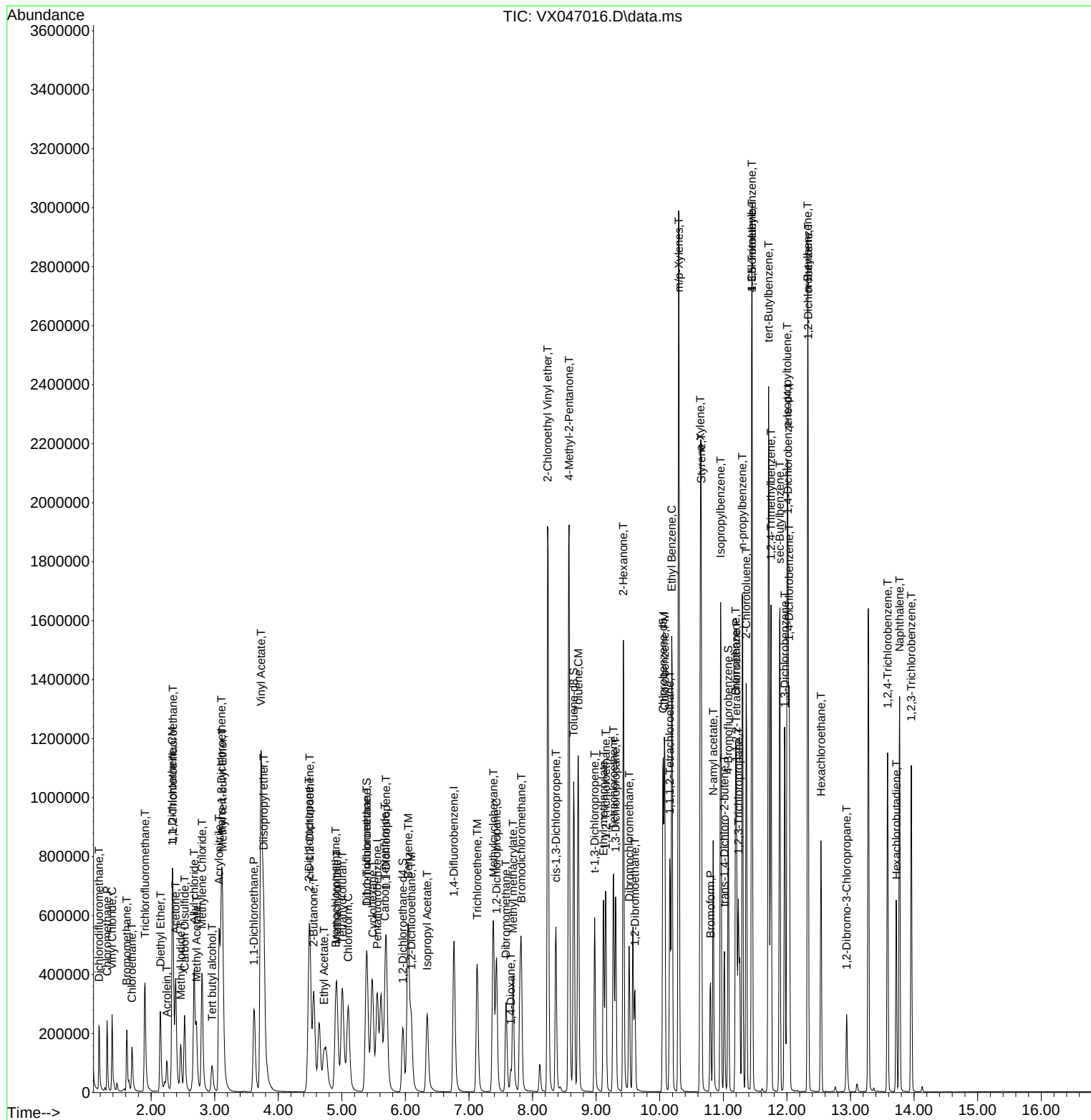
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071625\
Data File : VX047016.D
Acq On : 16 Jul 2025 09:26
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Pentafluorobenzene	1.000	1.000	0.0	89	0.00
2 T	Dichlorodifluoromethane	0.478	0.458	4.2	84	0.00
3 P	Chloromethane	0.522	0.489	6.3	86	0.00
4 C	Vinyl Chloride	0.569	0.550	3.3#	89	0.00
5 T	Bromomethane	0.366	0.330	9.8	82	0.00
6 T	Chloroethane	0.376	0.364	3.2	94	0.00
7 T	Trichlorofluoromethane	0.880	0.897	-1.9	94	0.00
8 T	Diethyl Ether	0.313	0.342	-9.3	101	0.00
9 T	1,1,2-Trichlorotrifluoroeth	0.561	0.576	-2.7	94	0.00
10 T	Methyl Iodide	0.611	0.525	14.1	74	0.00
11 T	Tert butyl alcohol	0.043	0.067	-55.8#	142	0.00
12 CM	1,1-Dichloroethene	0.542	0.535	1.3#	91	0.00
13 T	Acrolein	0.052	0.051	1.9	101	0.00
14 T	Allyl chloride	0.965	1.024	-6.1	97	0.00
15 T	Acrylonitrile	0.250	0.307	-22.8	112	0.00
16 T	Acetone	0.205	0.250	-22.0	116	0.00
17 T	Carbon Disulfide	1.422	1.105	22.3	74	0.00
18 T	Methyl Acetate	0.541	0.809	-49.5#	131	0.00
19 T	Methyl tert-butyl Ether	1.531	1.842	-20.3	108	0.00
20 T	Methylene Chloride	0.607	0.617	-1.6	94	0.00
21 T	trans-1,2-Dichloroethene	0.555	0.538	3.1	89	0.00
22 T	Diisopropyl ether	1.865	2.127	-14.0	100	0.00
23 T	Vinyl Acetate	1.397	1.594	-14.1	100	0.00
24 P	1,1-Dichloroethane	1.064	1.115	-4.8	96	0.00
25 T	2-Butanone	0.274	0.363	-32.5#	118	0.00
26 T	2,2-Dichloropropane	0.792	0.841	-6.2	99	0.00
27 T	cis-1,2-Dichloroethene	0.677	0.693	-2.4	94	0.00
28 T	Bromochloromethane	0.525	0.559	-6.5	95	0.00
29 T	Tetrahydrofuran	0.175	0.228	-30.3#	116	0.00
30 C	Chloroform	1.087	1.131	-4.0#	96	0.00
31 T	Cyclohexane	0.944	0.885	6.2	86	0.00
32 T	1,1,1-Trichloroethane	0.908	0.954	-5.1	96	0.00
33 S	1,2-Dichloroethane-d4	0.661	0.692	-4.7	96	0.00
34 I	1,4-Difluorobenzene	1.000	1.000	0.0	93	0.00
35 S	Dibromofluoromethane	0.339	0.335	1.2	92	0.00
36 T	1,1-Dichloropropene	0.458	0.430	6.1	91	0.00
37 T	Ethyl Acetate	0.390	0.431	-10.5	111	0.00
38 T	Carbon Tetrachloride	0.484	0.468	3.3	91	-0.01
39 T	Methylcyclohexane	0.573	0.508	11.3	83	0.00
40 TM	Benzene	1.385	1.335	3.6	91	0.00
41 T	Methacrylonitrile	0.208	0.263	-26.4#	115	0.00
42 TM	1,2-Dichloroethane	0.470	0.485	-3.2	98	0.00
43 T	Isopropyl Acetate	0.597	0.738	-23.6	111	0.00
44 TM	Trichloroethene	0.361	0.334	7.5	90	0.00
45 C	1,2-Dichloropropane	0.350	0.352	-0.6#	95	0.00
46 T	Dibromomethane	0.242	0.246	-1.7	95	0.00
47 T	Bromodichloromethane	0.518	0.518	0.0	94	0.00
48 T	Methyl methacrylate	0.308	0.380	-23.4	109	0.00

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49 T	1,4-Dioxane	0.004	0.005	-25.0	122	0.00
50 S	Toluene-d8	1.197	1.120	6.4	87	0.00
51 T	4-Methyl-2-Pentanone	0.353	0.446	-26.3#	113	0.00
52 CM	Toluene	0.858	0.816	4.9#	90	0.00
53 T	t-1,3-Dichloropropene	0.462	0.490	-6.1	96	0.00
54 T	cis-1,3-Dichloropropene	0.527	0.543	-3.0	94	0.00
55 T	1,1,2-Trichloroethane	0.320	0.330	-3.1	96	0.00
56 T	Ethyl methacrylate	0.442	0.522	-18.1	105	0.00
57 T	1,3-Dichloropropane	0.550	0.563	-2.4	97	0.00
58 T	2-Chloroethyl Vinyl ether	0.249	0.285	-14.5	99	0.00
59 T	2-Hexanone	0.234	0.306	-30.8#	115	0.00
60 T	Dibromochloromethane	0.383	0.382	0.3	94	0.00
61 T	1,2-Dibromoethane	0.321	0.325	-1.2	94	0.00
62 S	4-Bromofluorobenzene	0.455	0.448	1.5	91	0.00
63 I	Chlorobenzene-d5	1.000	1.000	0.0	91	0.00
64 T	Tetrachloroethene	0.333	0.298	10.5	86	0.00
65 PM	Chlorobenzene	1.081	1.054	2.5	91	0.00
66 T	1,1,1,2-Tetrachloroethane	0.363	0.364	-0.3	92	0.00
67 C	Ethyl Benzene	1.851	1.825	1.4#	90	0.00
68 T	m/p-Xylenes	0.698	0.674	3.4	89	0.00
69 T	o-Xylene	0.674	0.667	1.0	91	0.00
70 T	Styrene	1.153	1.171	-1.6	90	0.00
71 P	Bromoform	0.270	0.281	-4.1	95	0.00
72 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	91	0.00
73 T	Isopropylbenzene	3.515	3.616	-2.9	91	0.00
74 T	N-amyl acetate	1.194	1.496	-25.3#	107	0.00
75 P	1,1,2,2-Tetrachloroethane	0.966	1.082	-12.0	102	0.00
76 T	1,2,3-Trichloropropane	0.773	0.883	-14.2	102	0.00
77 T	Bromobenzene	0.875	0.865	1.1	90	0.00
78 T	n-propylbenzene	4.238	4.251	-0.3	90	0.00
79 T	2-Chlorotoluene	2.503	2.549	-1.8	93	0.00
80 T	1,3,5-Trimethylbenzene	2.856	2.926	-2.5	91	0.00
81 T	trans-1,4-Dichloro-2-butene	0.288	0.327	-13.5	102	0.00
82 T	4-Chlorotoluene	2.888	2.953	-2.3	92	0.00
83 T	tert-Butylbenzene	2.950	3.023	-2.5	91	0.00
84 T	1,2,4-Trimethylbenzene	2.887	2.929	-1.5	90	0.00
85 T	sec-Butylbenzene	3.719	3.710	0.2	89	0.00
86 T	p-Isopropyltoluene	3.114	3.104	0.3	89	0.00
87 T	1,3-Dichlorobenzene	1.637	1.608	1.8	90	0.00
88 T	1,4-Dichlorobenzene	1.704	1.626	4.6	91	0.00
89 T	n-Butylbenzene	2.926	2.877	1.7	88	0.00
90 T	Hexachloroethane	0.552	0.535	3.1	88	0.00
91 T	1,2-Dichlorobenzene	1.587	1.566	1.3	91	0.00
92 T	1,2-Dibromo-3-Chloropropane	0.169	0.210	-24.3	112	0.00
93 T	1,2,4-Trichlorobenzene	1.078	1.066	1.1	89	0.00
94 T	Hexachlorobutadiene	0.407	0.348	14.5	77	0.00
95 T	Naphthalene	2.840	3.271	-15.2	98	0.00

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	1.019	1.017	0.2	89	0.00

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

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	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 I	Pentafluorobenzene	50.000	50.000	0.0	89	0.00
2 T	Dichlorodifluoromethane	50.000	47.921	4.2	84	0.00
3 P	Chloromethane	50.000	46.787	6.4	86	0.00
4 C	Vinyl Chloride	50.000	48.367	3.3#	89	0.00
5 T	Bromomethane	50.000	45.161	9.7	82	0.00
6 T	Chloroethane	50.000	48.469	3.1	94	0.00
7 T	Trichlorofluoromethane	50.000	50.991	-2.0	94	0.00
8 T	Diethyl Ether	50.000	54.670	-9.3	101	0.00
9 T	1,1,2-Trichlorotrifluoroeth	50.000	51.369	-2.7	94	0.00
10 T	Methyl Iodide	50.000	42.993	14.0	74	0.00
11 T	Tert butyl alcohol	250.000	386.477	-54.6#	142	0.00
12 CM	1,1-Dichloroethene	50.000	49.305	1.4#	91	0.00
13 T	Acrolein	250.000	268.622	-7.4	101	0.00
14 T	Allyl chloride	50.000	53.017	-6.0	97	0.00
15 T	Acrylonitrile	250.000	306.730	-22.7	112	0.00
16 T	Acetone	250.000	305.134	-22.1	116	0.00
17 T	Carbon Disulfide	50.000	38.842	22.3	74	0.00
18 T	Methyl Acetate	50.000	74.800	-49.6#	131	0.00
19 T	Methyl tert-butyl Ether	50.000	60.153	-20.3	108	0.00
20 T	Methylene Chloride	50.000	50.858	-1.7	94	0.00
21 T	trans-1,2-Dichloroethene	50.000	48.496	3.0	89	0.00
22 T	Diisopropyl ether	50.000	57.031	-14.1	100	0.00
23 T	Vinyl Acetate	250.000	285.194	-14.1	100	0.00
24 P	1,1-Dichloroethane	50.000	52.427	-4.9	96	0.00
25 T	2-Butanone	250.000	331.149	-32.5#	118	0.00
26 T	2,2-Dichloropropane	50.000	53.124	-6.2	99	0.00
27 T	cis-1,2-Dichloroethene	50.000	51.130	-2.3	94	0.00
28 T	Bromochloromethane	50.000	53.294	-6.6	95	0.00
29 T	Tetrahydrofuran	250.000	325.963	-30.4#	116	0.00
30 C	Chloroform	50.000	52.033	-4.1#	96	0.00
31 T	Cyclohexane	50.000	46.885	6.2	86	0.00
32 T	1,1,1-Trichloroethane	50.000	52.522	-5.0	96	0.00
33 S	1,2-Dichloroethane-d4	50.000	52.377	-4.8	96	0.00
34 I	1,4-Difluorobenzene	50.000	50.000	0.0	93	0.00
35 S	Dibromofluoromethane	50.000	49.364	1.3	92	0.00
36 T	1,1-Dichloropropene	50.000	46.963	6.1	91	0.00
37 T	Ethyl Acetate	50.000	55.256	-10.5	111	0.00
38 T	Carbon Tetrachloride	50.000	48.373	3.3	91	-0.01
39 T	Methylcyclohexane	50.000	44.378	11.2	83	0.00
40 TM	Benzene	50.000	48.186	3.6	91	0.00
41 T	Methacrylonitrile	50.000	63.189	-26.4#	115	0.00
42 TM	1,2-Dichloroethane	50.000	51.606	-3.2	98	0.00
43 T	Isopropyl Acetate	50.000	61.803	-23.6	111	0.00
44 TM	Trichloroethene	50.000	46.385	7.2	90	0.00
45 C	1,2-Dichloropropane	50.000	50.335	-0.7#	95	0.00
46 T	Dibromomethane	50.000	50.790	-1.6	95	0.00
47 T	Bromodichloromethane	50.000	50.006	-0.0	94	0.00
48 T	Methyl methacrylate	50.000	61.535	-23.1	109	0.00

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
49 T	1,4-Dioxane	1000.000	1339.175	-33.9#	122	0.00
50 S	Toluene-d8	50.000	46.747	6.5	87	0.00
51 T	4-Methyl-2-Pentanone	250.000	316.598	-26.6#	113	0.00
52 CM	Toluene	50.000	47.521	5.0#	90	0.00
53 T	t-1,3-Dichloropropene	50.000	53.065	-6.1	96	0.00
54 T	cis-1,3-Dichloropropene	50.000	51.495	-3.0	94	0.00
55 T	1,1,2-Trichloroethane	50.000	51.604	-3.2	96	0.00
56 T	Ethyl methacrylate	50.000	58.971	-17.9	105	0.00
57 T	1,3-Dichloropropane	50.000	51.159	-2.3	97	0.00
58 T	2-Chloroethyl Vinyl ether	250.000	285.619	-14.2	99	0.00
59 T	2-Hexanone	250.000	326.601	-30.6#	115	0.00
60 T	Dibromochloromethane	50.000	49.909	0.2	94	0.00
61 T	1,2-Dibromoethane	50.000	50.601	-1.2	94	0.00
62 S	4-Bromofluorobenzene	50.000	49.215	1.6	91	0.00
63 I	Chlorobenzene-d5	50.000	50.000	0.0	91	0.00
64 T	Tetrachloroethene	50.000	44.753	10.5	86	0.00
65 PM	Chlorobenzene	50.000	48.766	2.5	91	0.00
66 T	1,1,1,2-Tetrachloroethane	50.000	50.070	-0.1	92	0.00
67 C	Ethyl Benzene	50.000	49.296	1.4#	90	0.00
68 T	m/p-Xylenes	100.000	96.627	3.4	89	0.00
69 T	o-Xylene	50.000	49.506	1.0	91	0.00
70 T	Styrene	50.000	50.765	-1.5	90	0.00
71 P	Bromoform	50.000	51.994	-4.0	95	0.00
72 I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	91	0.00
73 T	Isopropylbenzene	50.000	51.445	-2.9	91	0.00
74 T	N-amyl acetate	50.000	62.627	-25.3#	107	0.00
75 P	1,1,2,2-Tetrachloroethane	50.000	55.985	-12.0	102	0.00
76 T	1,2,3-Trichloropropane	50.000	57.136	-14.3	102	0.00
77 T	Bromobenzene	50.000	49.376	1.2	90	0.00
78 T	n-propylbenzene	50.000	50.156	-0.3	90	0.00
79 T	2-Chlorotoluene	50.000	50.925	-1.8	93	0.00
80 T	1,3,5-Trimethylbenzene	50.000	51.220	-2.4	91	0.00
81 T	trans-1,4-Dichloro-2-butene	50.000	56.831	-13.7	102	0.00
82 T	4-Chlorotoluene	50.000	51.130	-2.3	92	0.00
83 T	tert-Butylbenzene	50.000	51.238	-2.5	91	0.00
84 T	1,2,4-Trimethylbenzene	50.000	50.725	-1.5	90	0.00
85 T	sec-Butylbenzene	50.000	49.882	0.2	89	0.00
86 T	p-Isopropyltoluene	50.000	49.827	0.3	89	0.00
87 T	1,3-Dichlorobenzene	50.000	49.111	1.8	90	0.00
88 T	1,4-Dichlorobenzene	50.000	47.697	4.6	91	0.00
89 T	n-Butylbenzene	50.000	49.161	1.7	88	0.00
90 T	Hexachloroethane	50.000	48.469	3.1	88	0.00
91 T	1,2-Dichlorobenzene	50.000	49.340	1.3	91	0.00
92 T	1,2-Dibromo-3-Chloropropane	50.000	62.024	-24.0	112	0.00
93 T	1,2,4-Trichlorobenzene	50.000	49.437	1.1	89	0.00
94 T	Hexachlorobutadiene	50.000	42.770	14.5	77	0.00
95 T	Naphthalene	50.000	57.585	-15.2	98	0.00

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	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	50.000	49.921	0.2	89	0.00

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



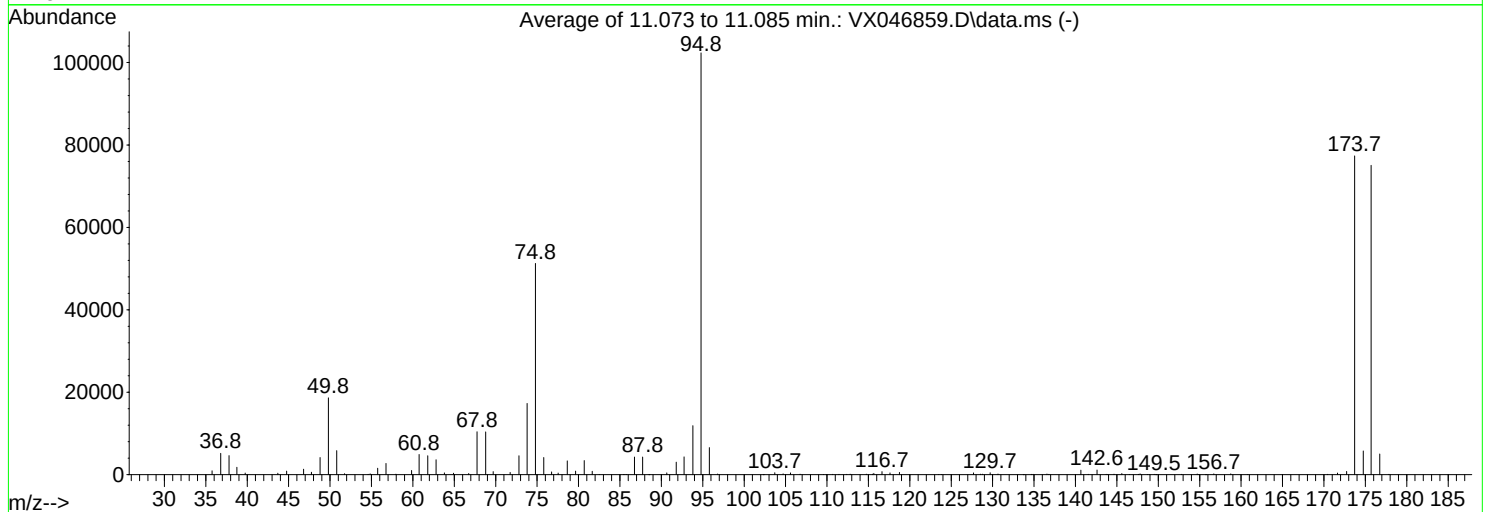
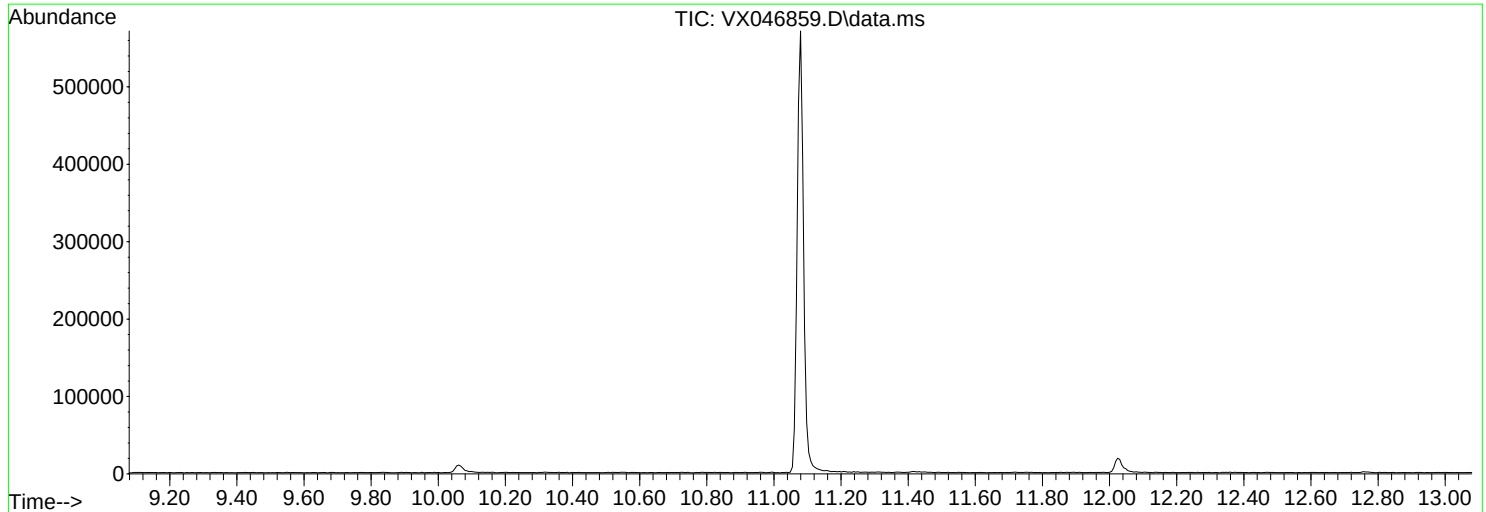
QC SAMPLE DATA

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX070225\
Data File : VX046859.D
Acq On : 02 Jul 2025 11:12
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\82X070225W.M
Title : SW846 8260
Last Update : Thu Jul 03 05:51:11 2025



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

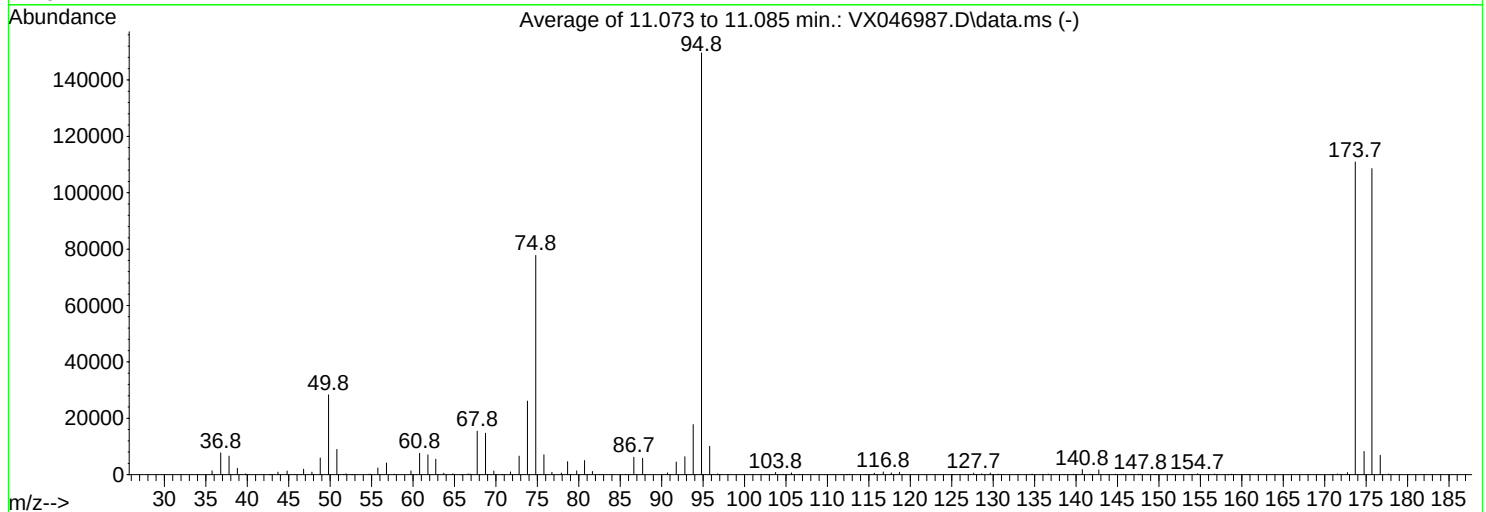
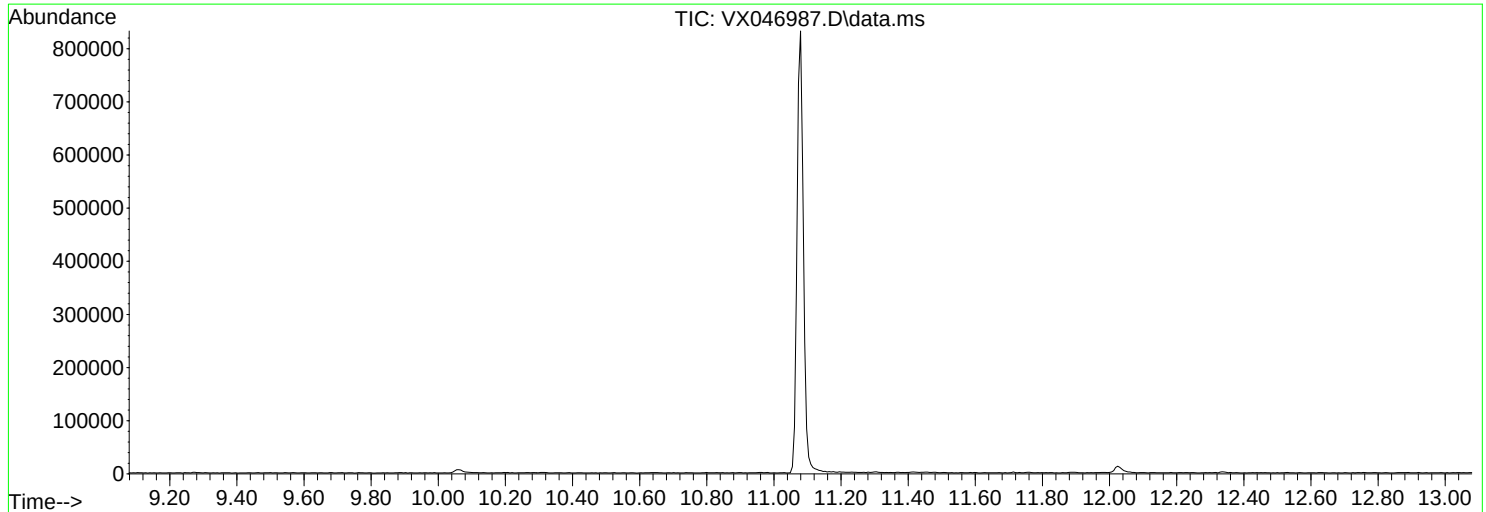
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.2	18657	PASS
75	95	30	60	50.1	51248	PASS
95	95	100	100	100.0	102357	PASS
96	95	5	9	6.4	6574	PASS
173	174	0.00	2	1.0	779	PASS
174	95	50	100	75.5	77328	PASS
175	174	5	9	7.4	5758	PASS
176	174	95	101	97.1	75051	PASS
177	176	5	9	6.7	5020	PASS

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX046987.D
Acq On : 15 Jul 2025 08:29
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\82X070225W.M
Title : SW846 8260
Last Update : Thu Jul 03 05:51:11 2025



AutoFind: Scans 1638, 1639, 1640; Background Corrected with Scan 1630

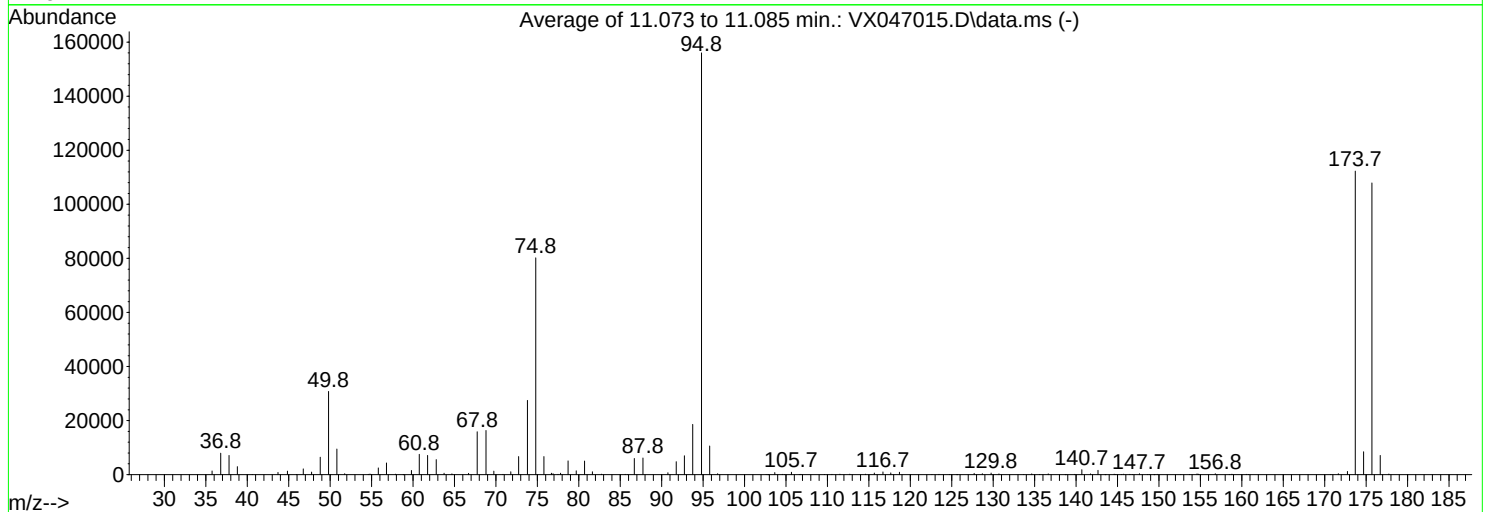
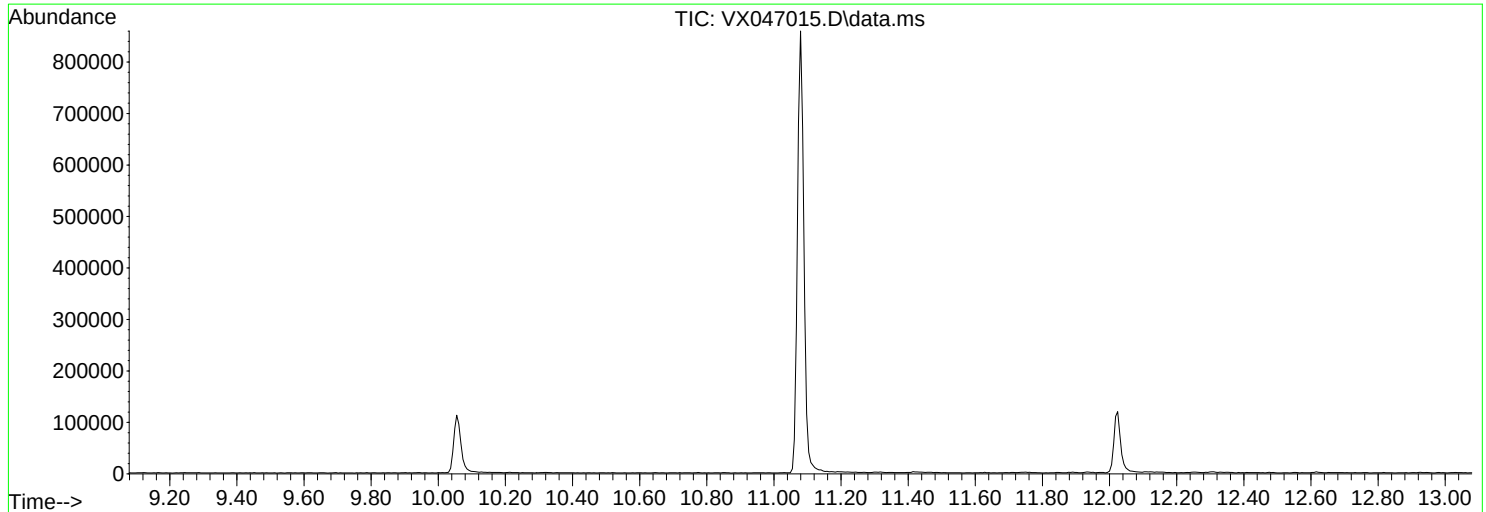
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.9	28349	PASS
75	95	30	60	52.0	77789	PASS
95	95	100	100	100.0	149629	PASS
96	95	5	9	6.7	10046	PASS
173	174	0.00	2	0.7	745	PASS
174	95	50	100	74.1	110883	PASS
175	174	5	9	7.4	8256	PASS
176	174	95	101	97.9	108573	PASS
177	176	5	9	6.4	6898	PASS

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071625\
Data File : VX047015.D
Acq On : 16 Jul 2025 08:58
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\82X070225W.M
Title : SW846 8260
Last Update : Thu Jul 03 05:51:11 2025



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

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.7	30773	PASS
75	95	30	60	51.4	80213	PASS
95	95	100	100	100.0	156032	PASS
96	95	5	9	6.8	10596	PASS
173	174	0.00	2	1.0	1178	PASS
174	95	50	100	72.0	112272	PASS
175	174	5	9	7.6	8478	PASS
176	174	95	101	96.1	107928	PASS
177	176	5	9	6.6	7133	PASS

Report of Analysis

Client:	T&A Construction Inc	Date Collected:	
Project:	Kingsland Point Park Water Main	Date Received:	
Client Sample ID:	VX0715MBL01	SDG No.:	Q2600
Lab Sample ID:	VX0715MBL01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10
GC Column:	DB-624UI ID : 0.18	Level :	MED
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VX046989.D	1	07/15/25 10:39	VX071525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	110	U	110	500	ug/Kg
74-87-3	Chloromethane	110	U	110	500	ug/Kg
75-01-4	Vinyl Chloride	79.0	U	79.0	500	ug/Kg
74-83-9	Bromomethane	110	U	110	500	ug/Kg
75-00-3	Chloroethane	130	U	130	500	ug/Kg
75-69-4	Trichlorofluoromethane	120	U	120	500	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	110	U	110	500	ug/Kg
75-35-4	1,1-Dichloroethene	100	U	100	500	ug/Kg
67-64-1	Acetone	470	U	470	2500	ug/Kg
75-15-0	Carbon Disulfide	110	U	110	500	ug/Kg
1634-04-4	Methyl tert-butyl Ether	73.0	U	73.0	500	ug/Kg
79-20-9	Methyl Acetate	150	U	150	500	ug/Kg
75-09-2	Methylene Chloride	350	U	350	1000	ug/Kg
156-60-5	trans-1,2-Dichloroethene	86.0	U	86.0	500	ug/Kg
75-34-3	1,1-Dichloroethane	80.0	U	80.0	500	ug/Kg
110-82-7	Cyclohexane	79.0	U	79.0	500	ug/Kg
78-93-3	2-Butanone	650	U	650	2500	ug/Kg
56-23-5	Carbon Tetrachloride	97.0	U	97.0	500	ug/Kg
156-59-2	cis-1,2-Dichloroethene	75.0	U	75.0	500	ug/Kg
74-97-5	Bromochloromethane	120	U	120	500	ug/Kg
67-66-3	Chloroform	84.0	U	84.0	500	ug/Kg
71-55-6	1,1,1-Trichloroethane	93.0	U	93.0	500	ug/Kg
108-87-2	Methylcyclohexane	91.0	U	91.0	500	ug/Kg
71-43-2	Benzene	79.0	U	79.0	500	ug/Kg
107-06-2	1,2-Dichloroethane	79.0	U	79.0	500	ug/Kg
79-01-6	Trichloroethene	81.0	U	81.0	500	ug/Kg
78-87-5	1,2-Dichloropropane	91.0	U	91.0	500	ug/Kg
75-27-4	Bromodichloromethane	78.0	U	78.0	500	ug/Kg
108-10-1	4-Methyl-2-Pentanone	360	U	360	2500	ug/Kg
108-88-3	Toluene	78.0	U	78.0	500	ug/Kg

Report of Analysis

Client:	T&A Construction Inc	Date Collected:	
Project:	Kingsland Point Park Water Main	Date Received:	
Client Sample ID:	VX0715MBL01	SDG No.:	Q2600
Lab Sample ID:	VX0715MBL01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10
GC Column:	DB-624UI ID : 0.18	Level :	MED
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VX046989.D	1	07/15/25 10:39	VX071525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	65.0	U	65.0	500	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	62.0	U	62.0	500	ug/Kg
79-00-5	1,1,2-Trichloroethane	92.0	U	92.0	500	ug/Kg
591-78-6	2-Hexanone	370	U	370	2500	ug/Kg
124-48-1	Dibromochloromethane	87.0	U	87.0	500	ug/Kg
106-93-4	1,2-Dibromoethane	88.0	U	88.0	500	ug/Kg
127-18-4	Tetrachloroethene	110	U	110	500	ug/Kg
108-90-7	Chlorobenzene	91.0	U	91.0	500	ug/Kg
100-41-4	Ethyl Benzene	67.0	U	67.0	500	ug/Kg
179601-23-1	m/p-Xylenes	120	U	120	1000	ug/Kg
95-47-6	o-Xylene	82.0	U	82.0	500	ug/Kg
100-42-5	Styrene	71.0	U	71.0	500	ug/Kg
75-25-2	Bromoform	86.0	U	86.0	500	ug/Kg
98-82-8	Isopropylbenzene	78.0	U	78.0	500	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	120	U	120	500	ug/Kg
541-73-1	1,3-Dichlorobenzene	170	U	170	500	ug/Kg
106-46-7	1,4-Dichlorobenzene	160	U	160	500	ug/Kg
95-50-1	1,2-Dichlorobenzene	150	U	150	500	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	180	U	180	500	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	300	U	300	500	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	320	U	320	500	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	52.4		63 - 155	105%	SPK: 50
1868-53-7	Dibromofluoromethane	48.5		70 - 134	97%	SPK: 50
2037-26-5	Toluene-d8	48.5		74 - 123	97%	SPK: 50
460-00-4	4-Bromofluorobenzene	52.2		17 - 146	104%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	343000	5.562			
540-36-3	1,4-Difluorobenzene	579000	6.769			
3114-55-4	Chlorobenzene-d5	530000	10.055			
3855-82-1	1,4-Dichlorobenzene-d4	275000	12.018			



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

Report of Analysis

Client:	T&A Construction Inc		Date Collected:	
Project:	Kingsland Point Park Water Main		Date Received:	
Client Sample ID:	VX0715MBL01		SDG No.:	Q2600
Lab Sample ID:	VX0715MBL01		Matrix:	SOIL
Analytical Method:	8260D		% Solid:	100
Sample Wt/Vol:	5	Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100	uL	Test:	VOC-TCLVOA-10
GC Column:	DB-624UI	ID : 0.18	Level :	MED
Prep Method :				

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VX046989.D	1	07/15/25 10:39	VX071525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
 Data File : VX046989.D
 Acq On : 15 Jul 2025 10:39
 Operator : JC/MD
 Sample : VX0715MBL01
 Misc : 5.00g/10mL/100uL/5.00mL/MSVOA_X/MEOH
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VX0715MBL01

Quant Time: Jul 16 02:21:18 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 03 05:51:11 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	5.562	168	342671	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.769	114	579223	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	530422	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	275487	50.000	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.964	65	237011	52.355	ug/l	0.00
Spiked Amount	50.000	Range	78 - 117	Recovery	=	104.700%
35) Dibromofluoromethane	5.403	113	190701	48.502	ug/l	0.00
Spiked Amount	50.000	Range	75 - 124	Recovery	=	97.000%
50) Toluene-d8	8.653	98	672365	48.469	ug/l	0.00
Spiked Amount	50.000	Range	92 - 112	Recovery	=	96.940%
62) 4-Bromofluorobenzene	11.079	95	275251	52.208	ug/l	0.00
Spiked Amount	50.000	Range	83 - 123	Recovery	=	104.420%

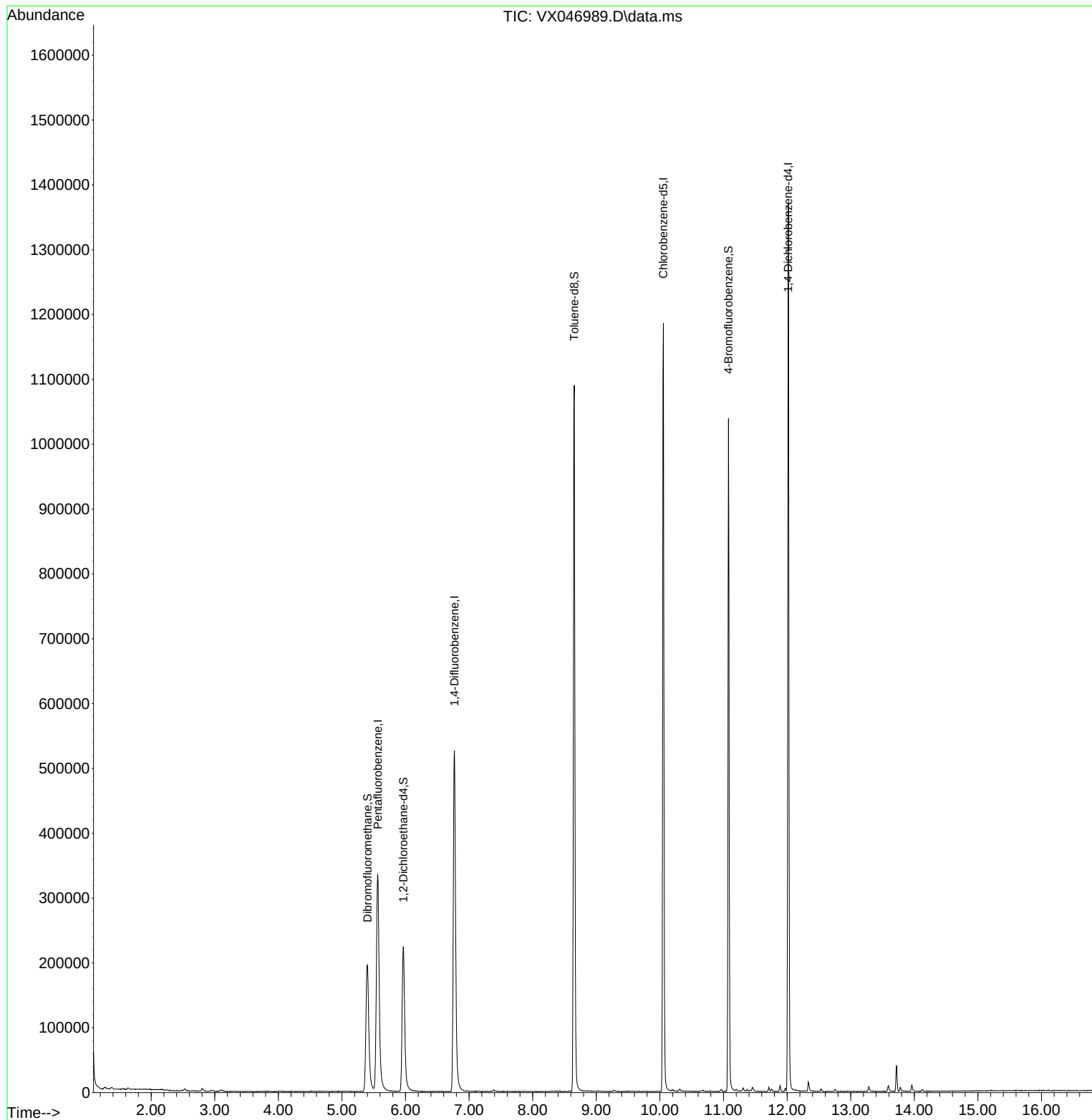
Target Compounds	Qvalue

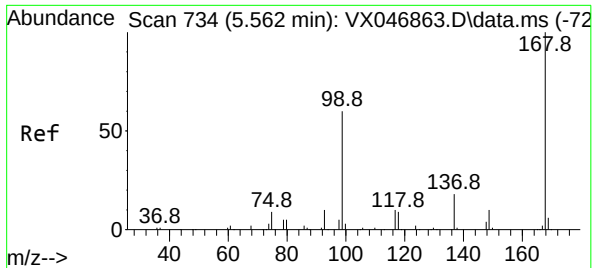
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX046989.D
Acq On : 15 Jul 2025 10:39
Operator : JC/MD
Sample : VX0715MBL01
Misc : 5.00g/10mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VX0715MBL01

Quant Time: Jul 16 02:21:18 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 03 05:51:11 2025
Response via : Initial Calibration

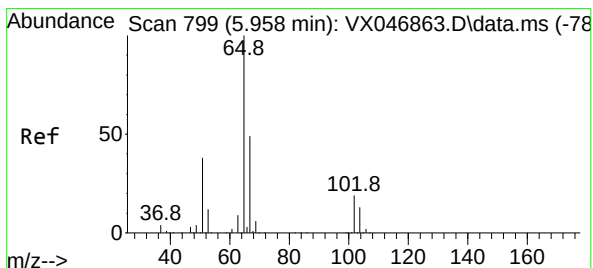
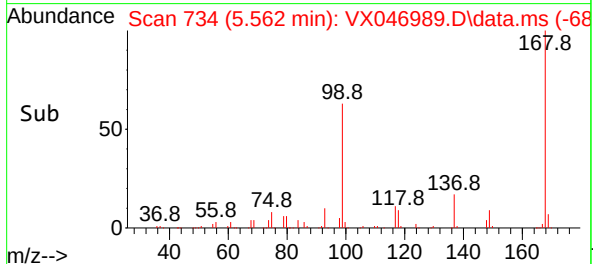
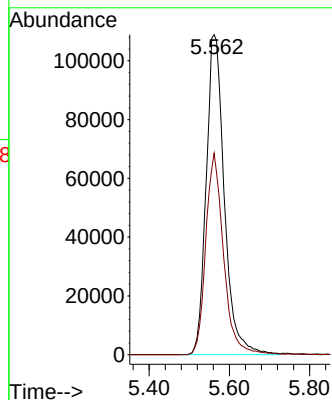
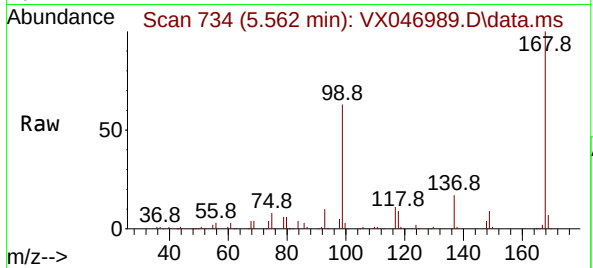




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.562 min Scan# 71
Delta R.T. -0.000 min
Lab File: VX046989.D
Acq: 15 Jul 2025 10:39

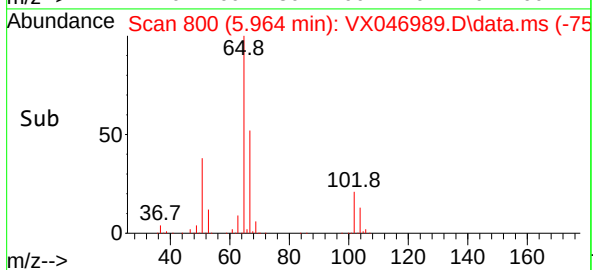
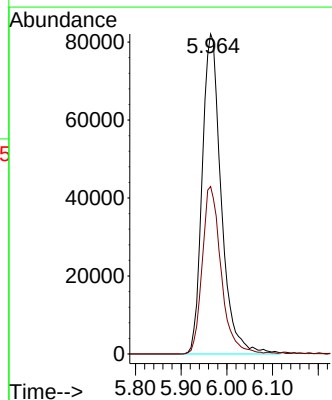
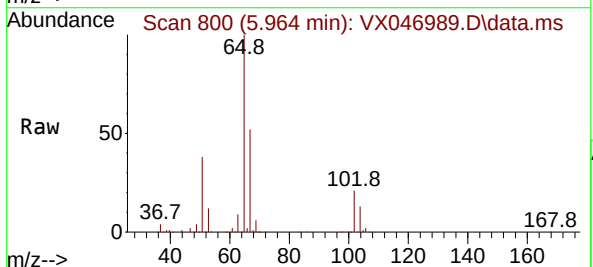
Instrument :
MSVOA_X
ClientSampleId :
VX0715MBL01

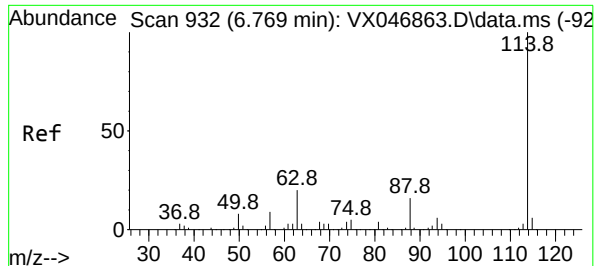
Tgt Ion:168 Resp: 342671
Ion Ratio Lower Upper
168 100
99 62.9 48.8 73.2



#33
1,2-Dichloroethane-d4
Concen: 52.355 ug/l
RT: 5.964 min Scan# 800
Delta R.T. 0.006 min
Lab File: VX046989.D
Acq: 15 Jul 2025 10:39

Tgt Ion: 65 Resp: 237011
Ion Ratio Lower Upper
65 100
67 51.8 0.0 105.2





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 6.769 min Scan# 91

Delta R.T. -0.000 min

Lab File: VX046989.D

Acq: 15 Jul 2025 10:39

Instrument :

MSVOA_X

ClientSampleId :

VX0715MBL01

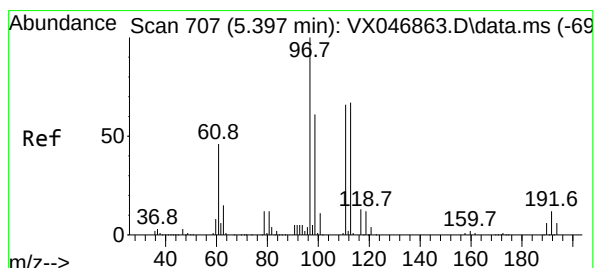
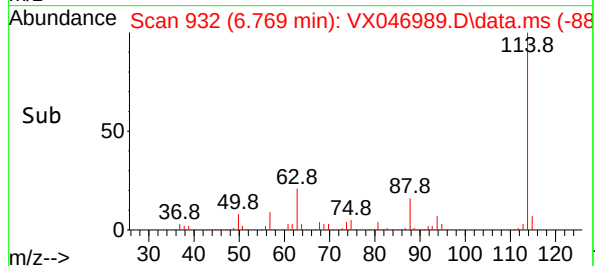
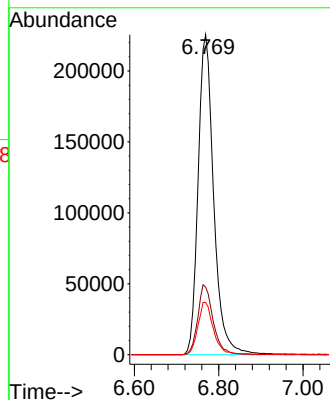
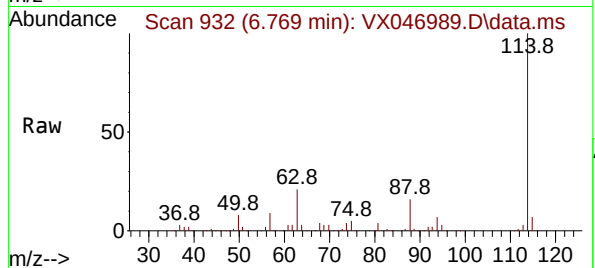
Tgt Ion:114 Resp: 579223

Ion Ratio Lower Upper

114 100

63 21.1 0.0 40.4

88 16.3 0.0 31.0



#35

Dibromofluoromethane

Concen: 48.502 ug/l

RT: 5.403 min Scan# 708

Delta R.T. 0.006 min

Lab File: VX046989.D

Acq: 15 Jul 2025 10:39

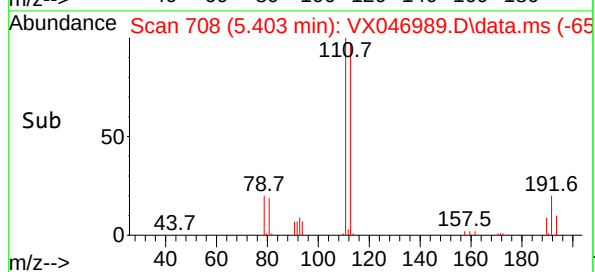
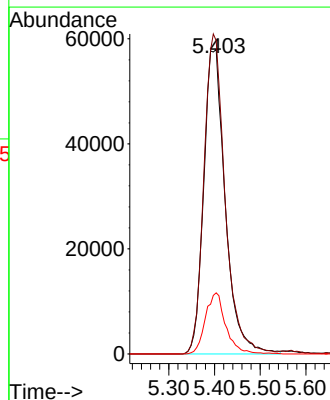
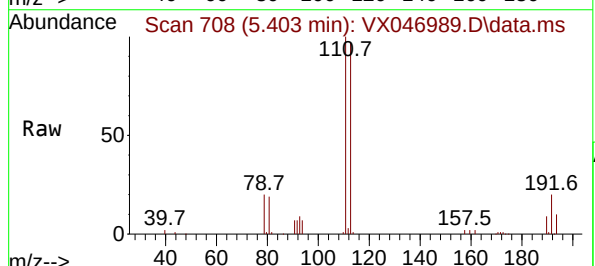
Tgt Ion:113 Resp: 190701

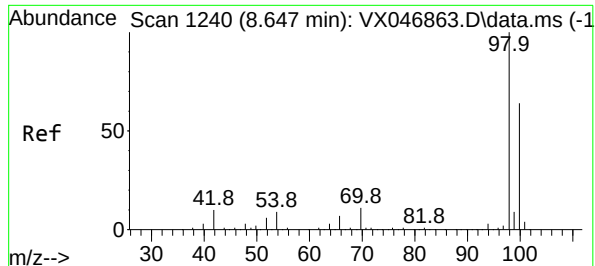
Ion Ratio Lower Upper

113 100

111 102.7 81.2 121.8

192 18.9 15.3 22.9





#50

Toluene-d8

Concen: 48.469 ug/l

RT: 8.653 min Scan# 11

Delta R.T. 0.006 min

Lab File: VX046989.D

Acq: 15 Jul 2025 10:39

Instrument :

MSVOA_X

ClientSampleId :

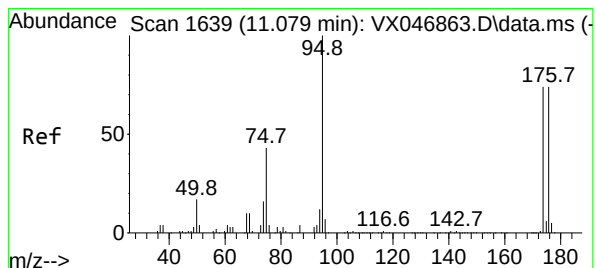
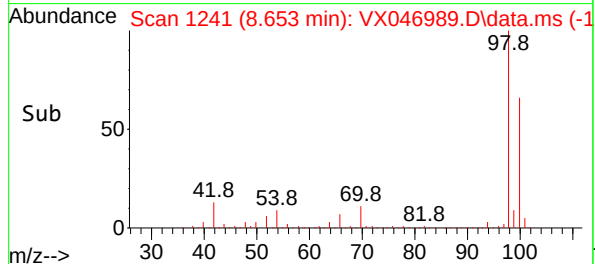
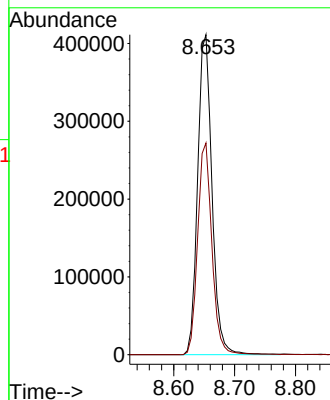
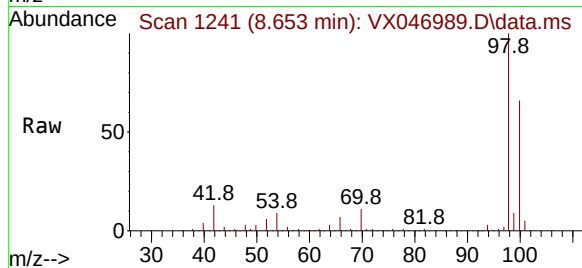
VX0715MBL01

Tgt Ion: 98 Resp: 672365

Ion Ratio Lower Upper

98 100

100 65.7 53.0 79.6



#62

4-Bromofluorobenzene

Concen: 52.208 ug/l

RT: 11.079 min Scan# 1639

Delta R.T. -0.000 min

Lab File: VX046989.D

Acq: 15 Jul 2025 10:39

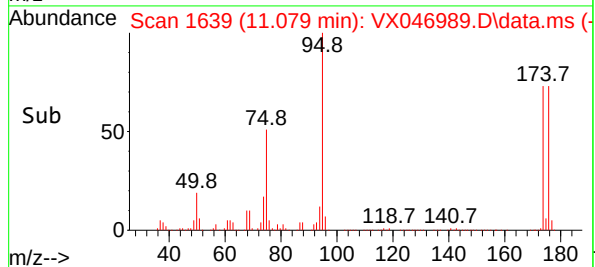
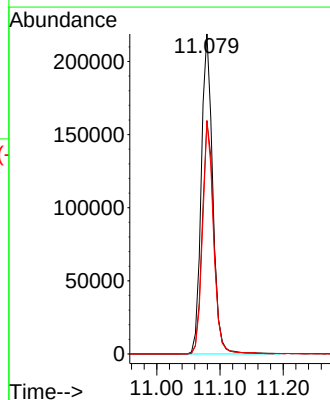
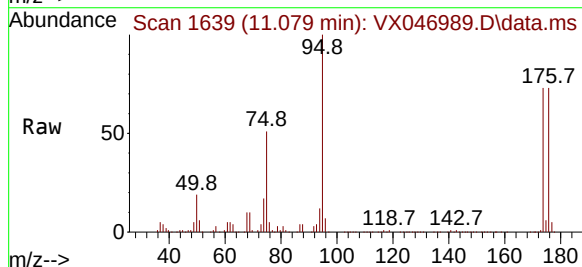
Tgt Ion: 95 Resp: 275251

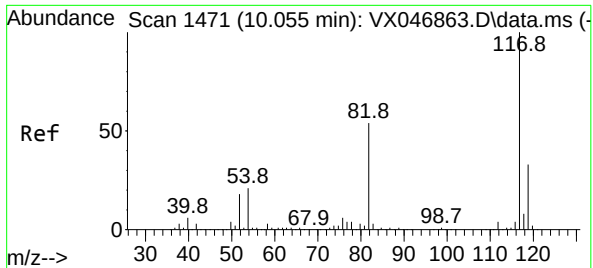
Ion Ratio Lower Upper

95 100

174 73.5 0.0 152.0

176 70.0 0.0 145.2

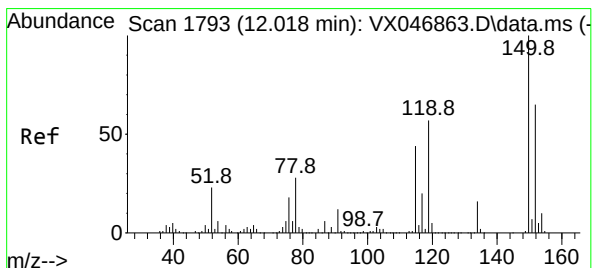
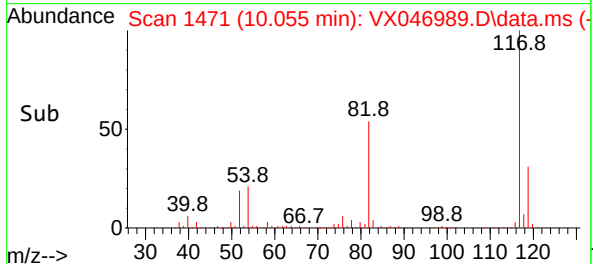
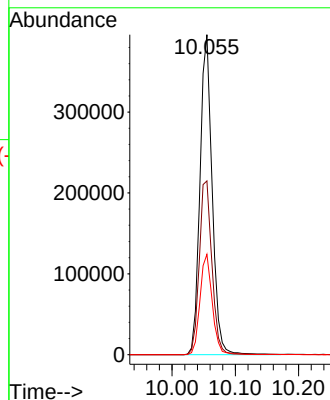
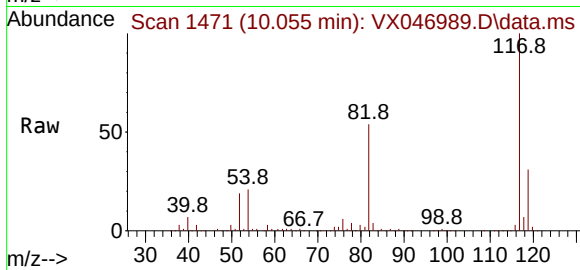




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.055 min Scan# 1471
Delta R.T. -0.000 min
Lab File: VX046989.D
Acq: 15 Jul 2025 10:39

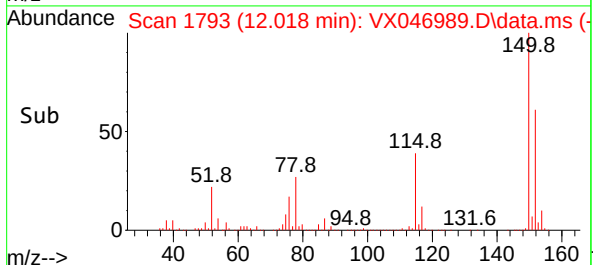
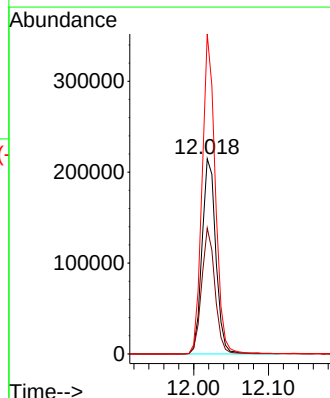
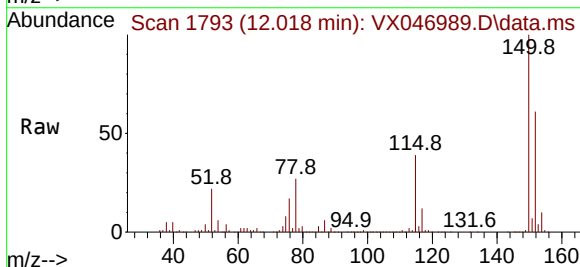
Instrument :
MSVOA_X
ClientSampleId :
VX0715MBL01

Tgt Ion:117 Resp: 530422
Ion Ratio Lower Upper
117 100
82 54.3 43.3 64.9
119 31.4 26.4 39.6



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.018 min Scan# 1793
Delta R.T. -0.000 min
Lab File: VX046989.D
Acq: 15 Jul 2025 10:39

Tgt Ion:152 Resp: 275487
Ion Ratio Lower Upper
152 100
115 62.1 42.4 127.1
150 156.5 0.0 349.2



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX046989.D
Acq On : 15 Jul 2025 10:39
Operator : JC/MD
Sample : VX0715MBL01
Misc : 5.00g/10mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VX0715MBL01

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Sampling : 1

Start Thrs: 0.2

Stop Thrs : 0

Filtering: 5

Min Area: 3 % of largest Peak

Max Peaks: 100

Peak Location: TOP

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

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M

Title : SW846 8260

Signal : TIC: VX046989.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.397	696	707	723	rBV2	194944	630896	34.97%	6.188%
2	5.562	724	734	757	rVB	333513	1034092	57.32%	10.143%
3	5.964	790	800	818	rBV	222994	640477	35.50%	6.282%
4	6.769	922	932	958	rBV	525420	1365657	75.70%	13.396%
5	8.653	1234	1241	1261	rBV	1088939	1803965	100.00%	17.695%
6	10.055	1465	1471	1484	rBV	1185356	1641981	91.02%	16.106%
7	11.079	1634	1639	1655	rBV	1037479	1298378	71.97%	12.736%
8	12.018	1788	1793	1805	rBV	1368985	1703901	94.45%	16.714%
9	12.335	1841	1845	1857	rVB2	14253	22657	1.26%	0.222%
10	13.719	2068	2072	2079	rBV2	39916	52673	2.92%	0.517%

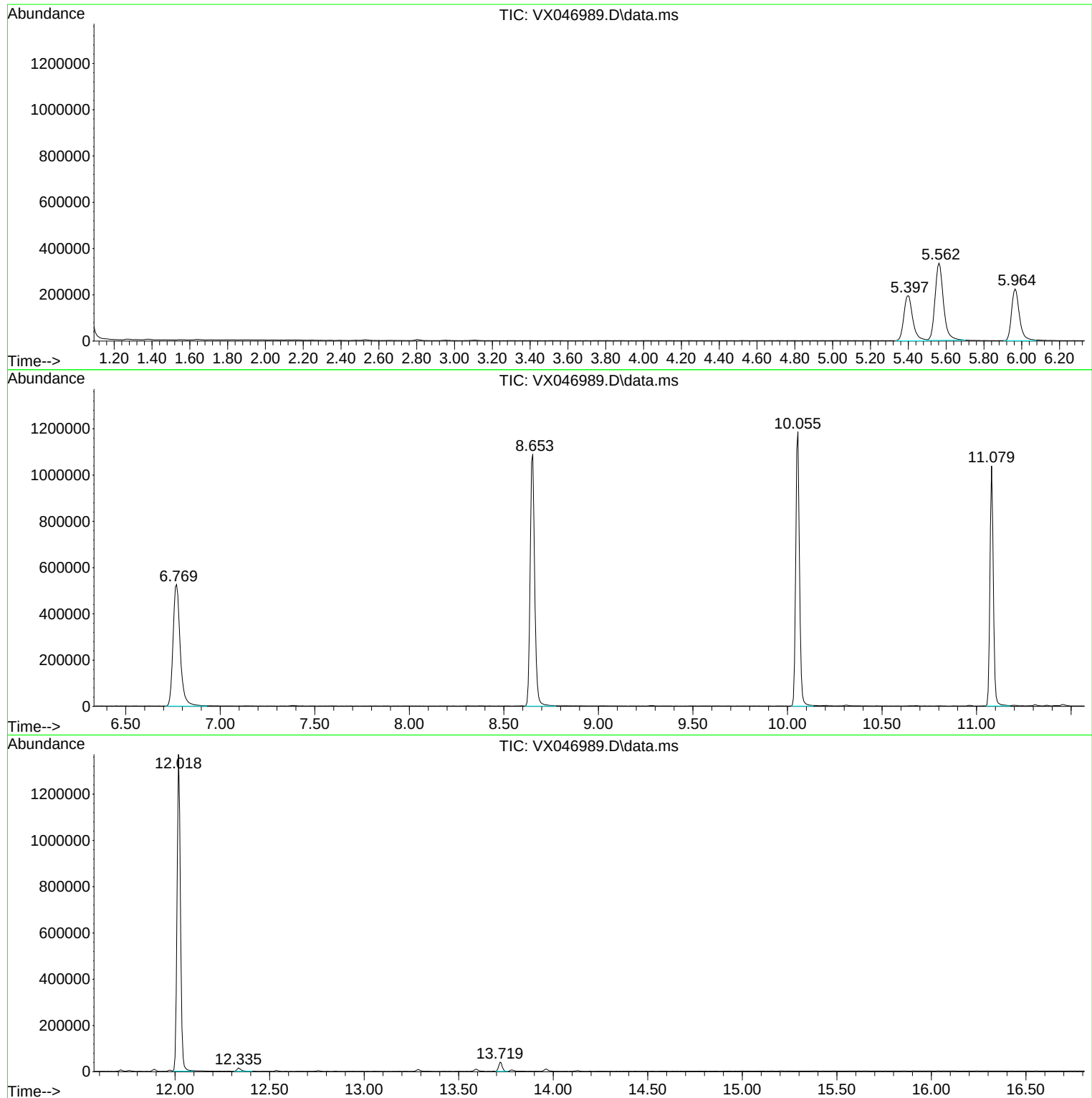
Sum of corrected areas: 10194677

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX046989.D
Acq On : 15 Jul 2025 10:39
Operator : JC/MD
Sample : VX0715MBL01
Misc : 5.00g/10mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VX0715MBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX046989.D
Acq On : 15 Jul 2025 10:39
Operator : JC/MD
Sample : VX0715MBL01
Misc : 5.00g/10mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VX0715MBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.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\VX071525\
Data File : VX046989.D
Acq On : 15 Jul 2025 10:39
Operator : JC/MD
Sample : VX0715MBL01
Misc : 5.00g/10mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VX0715MBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260

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

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

Report of Analysis

Client:	T&A Construction Inc	Date Collected:	
Project:	Kingsland Point Park Water Main	Date Received:	
Client Sample ID:	VX0716MBL01	SDG No.:	Q2600
Lab Sample ID:	VX0716MBL01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10
GC Column:	DB-624UI ID : 0.18	Level :	MED
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VX047017.D	1	07/16/25 10:13	VX071625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	110	U	110	500	ug/Kg
74-87-3	Chloromethane	110	U	110	500	ug/Kg
75-01-4	Vinyl Chloride	79.0	U	79.0	500	ug/Kg
74-83-9	Bromomethane	110	U	110	500	ug/Kg
75-00-3	Chloroethane	130	U	130	500	ug/Kg
75-69-4	Trichlorofluoromethane	120	U	120	500	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	110	U	110	500	ug/Kg
75-35-4	1,1-Dichloroethene	100	U	100	500	ug/Kg
67-64-1	Acetone	470	U	470	2500	ug/Kg
75-15-0	Carbon Disulfide	110	U	110	500	ug/Kg
1634-04-4	Methyl tert-butyl Ether	73.0	U	73.0	500	ug/Kg
79-20-9	Methyl Acetate	150	U	150	500	ug/Kg
75-09-2	Methylene Chloride	350	U	350	1000	ug/Kg
156-60-5	trans-1,2-Dichloroethene	86.0	U	86.0	500	ug/Kg
75-34-3	1,1-Dichloroethane	80.0	U	80.0	500	ug/Kg
110-82-7	Cyclohexane	79.0	U	79.0	500	ug/Kg
78-93-3	2-Butanone	650	U	650	2500	ug/Kg
56-23-5	Carbon Tetrachloride	97.0	U	97.0	500	ug/Kg
156-59-2	cis-1,2-Dichloroethene	75.0	U	75.0	500	ug/Kg
74-97-5	Bromochloromethane	120	U	120	500	ug/Kg
67-66-3	Chloroform	84.0	U	84.0	500	ug/Kg
71-55-6	1,1,1-Trichloroethane	93.0	U	93.0	500	ug/Kg
108-87-2	Methylcyclohexane	91.0	U	91.0	500	ug/Kg
71-43-2	Benzene	79.0	U	79.0	500	ug/Kg
107-06-2	1,2-Dichloroethane	79.0	U	79.0	500	ug/Kg
79-01-6	Trichloroethene	81.0	U	81.0	500	ug/Kg
78-87-5	1,2-Dichloropropane	91.0	U	91.0	500	ug/Kg
75-27-4	Bromodichloromethane	78.0	U	78.0	500	ug/Kg
108-10-1	4-Methyl-2-Pentanone	360	U	360	2500	ug/Kg
108-88-3	Toluene	78.0	U	78.0	500	ug/Kg

Report of Analysis

Client:	T&A Construction Inc	Date Collected:	
Project:	Kingsland Point Park Water Main	Date Received:	
Client Sample ID:	VX0716MBL01	SDG No.:	Q2600
Lab Sample ID:	VX0716MBL01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10
GC Column:	DB-624UI ID : 0.18	Level :	MED
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VX047017.D	1	07/16/25 10:13	VX071625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	65.0	U	65.0	500	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	62.0	U	62.0	500	ug/Kg
79-00-5	1,1,2-Trichloroethane	92.0	U	92.0	500	ug/Kg
591-78-6	2-Hexanone	370	U	370	2500	ug/Kg
124-48-1	Dibromochloromethane	87.0	U	87.0	500	ug/Kg
106-93-4	1,2-Dibromoethane	88.0	U	88.0	500	ug/Kg
127-18-4	Tetrachloroethene	110	U	110	500	ug/Kg
108-90-7	Chlorobenzene	91.0	U	91.0	500	ug/Kg
100-41-4	Ethyl Benzene	67.0	U	67.0	500	ug/Kg
179601-23-1	m/p-Xylenes	120	U	120	1000	ug/Kg
95-47-6	o-Xylene	82.0	U	82.0	500	ug/Kg
100-42-5	Styrene	71.0	U	71.0	500	ug/Kg
75-25-2	Bromoform	86.0	U	86.0	500	ug/Kg
98-82-8	Isopropylbenzene	78.0	U	78.0	500	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	120	U	120	500	ug/Kg
541-73-1	1,3-Dichlorobenzene	170	U	170	500	ug/Kg
106-46-7	1,4-Dichlorobenzene	160	U	160	500	ug/Kg
95-50-1	1,2-Dichlorobenzene	150	U	150	500	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	180	U	180	500	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	300	U	300	500	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	320	U	320	500	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	54.3		63 - 155	109%	SPK: 50
1868-53-7	Dibromofluoromethane	49.1		70 - 134	98%	SPK: 50
2037-26-5	Toluene-d8	48.9		74 - 123	98%	SPK: 50
460-00-4	4-Bromofluorobenzene	53.5		17 - 146	107%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	319000	5.562			
540-36-3	1,4-Difluorobenzene	563000	6.769			
3114-55-4	Chlorobenzene-d5	523000	10.055			
3855-82-1	1,4-Dichlorobenzene-d4	270000	12.018			



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

Report of Analysis

Client:	T&A Construction Inc		Date Collected:	
Project:	Kingsland Point Park Water Main		Date Received:	
Client Sample ID:	VX0716MBL01		SDG No.:	Q2600
Lab Sample ID:	VX0716MBL01		Matrix:	SOIL
Analytical Method:	8260D		% Solid:	100
Sample Wt/Vol:	5	Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100	uL	Test:	VOC-TCLVOA-10
GC Column:	DB-624UI	ID : 0.18	Level :	MED
Prep Method :				

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VX047017.D	1	07/16/25 10:13	VX071625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071625\
 Data File : VX047017.D
 Acq On : 16 Jul 2025 10:13
 Operator : JC/MD
 Sample : VX0716MBL01
 Misc : 5.00g/10mL/100uL/5.00mL/MSVOA_X/MEOH
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VX0716MBL01

Quant Time: Jul 17 03:27:32 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 03 05:51:11 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	5.562	168	319061	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.769	114	562969	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	523286	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	270042	50.000	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.964	65	228677	54.252	ug/l	0.00
Spiked Amount	50.000	Range	78 - 117	Recovery	=	108.500%
35) Dibromofluoromethane	5.397	113	187535	49.074	ug/l	0.00
Spiked Amount	50.000	Range	75 - 124	Recovery	=	98.140%
50) Toluene-d8	8.653	98	658889	48.869	ug/l	0.00
Spiked Amount	50.000	Range	92 - 112	Recovery	=	97.740%
62) 4-Bromofluorobenzene	11.079	95	274238	53.517	ug/l	0.00
Spiked Amount	50.000	Range	83 - 123	Recovery	=	107.040%

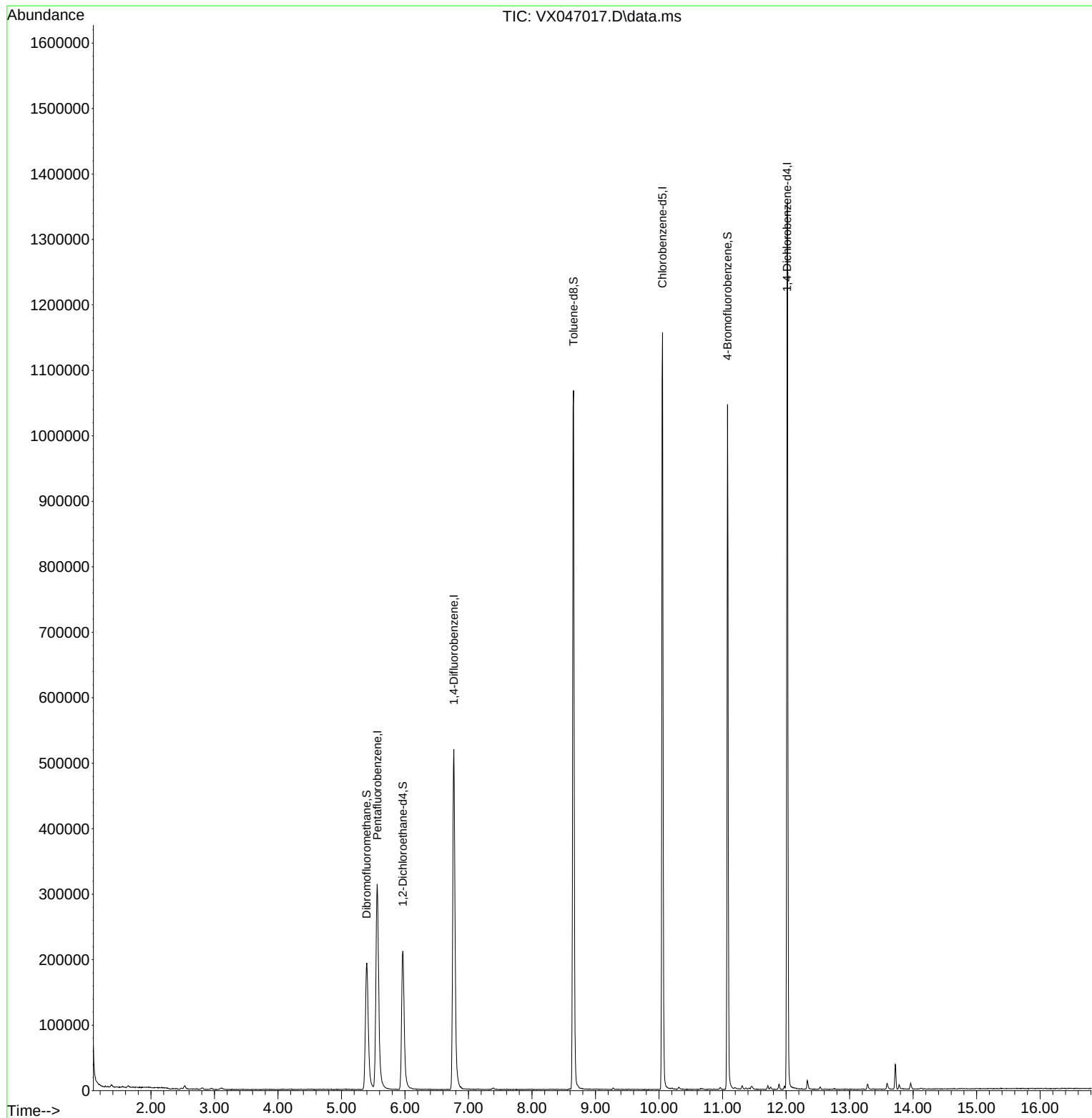
Target Compounds	Qvalue

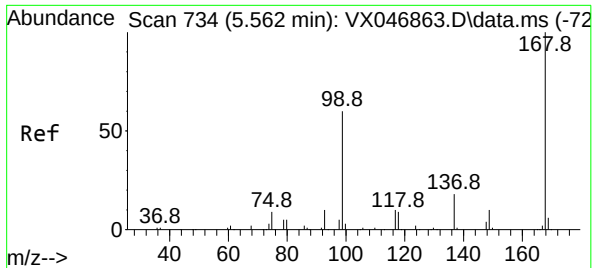
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071625\
Data File : VX047017.D
Acq On : 16 Jul 2025 10:13
Operator : JC/MD
Sample : VX0716MBL01
Misc : 5.00g/10mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VX0716MBL01

Quant Time: Jul 17 03:27:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 03 05:51:11 2025
Response via : Initial Calibration

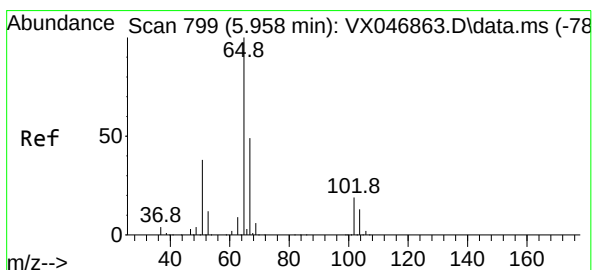
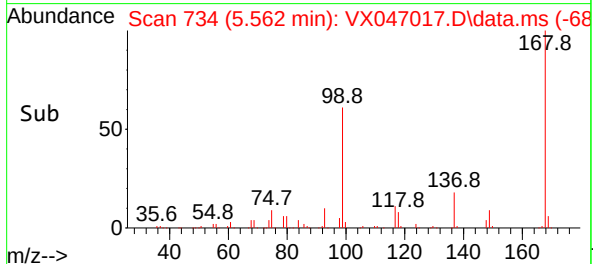
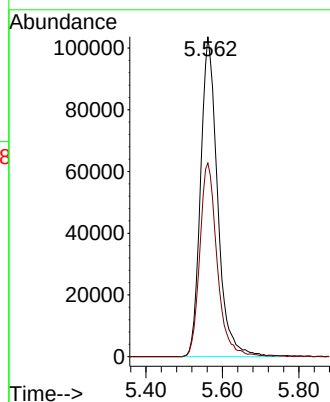
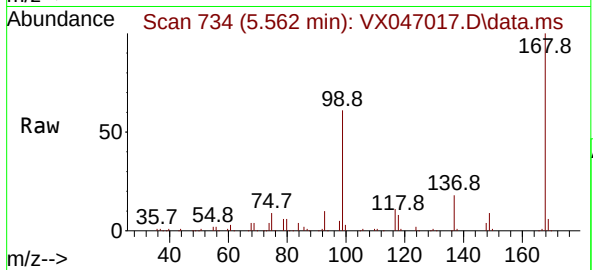




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.562 min Scan# 71
Delta R.T. -0.000 min
Lab File: VX047017.D
Acq: 16 Jul 2025 10:13

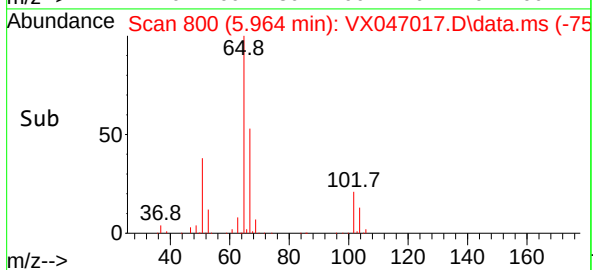
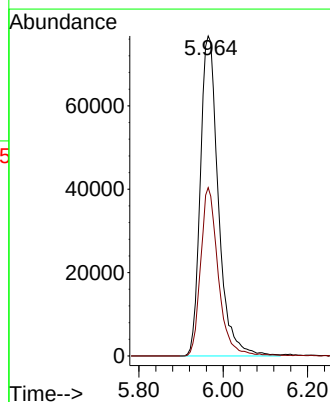
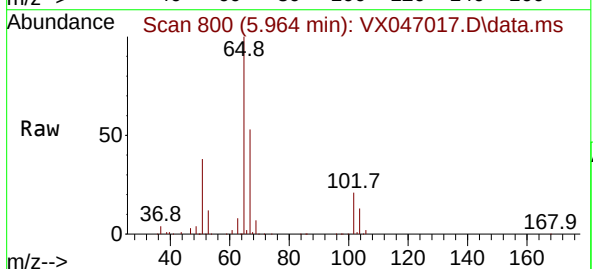
Instrument :
MSVOA_X
ClientSampleId :
VX0716MBL01

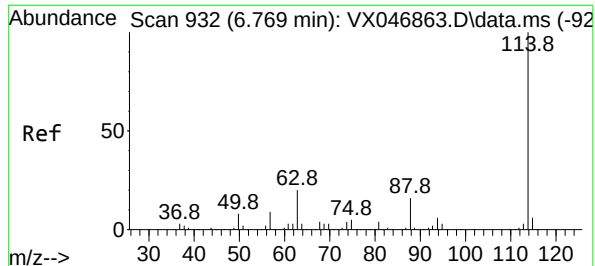
Tgt Ion:168 Resp: 319061
Ion Ratio Lower Upper
168 100
99 60.5 48.8 73.2



#33
1,2-Dichloroethane-d4
Concen: 54.252 ug/l
RT: 5.964 min Scan# 800
Delta R.T. 0.006 min
Lab File: VX047017.D
Acq: 16 Jul 2025 10:13

Tgt Ion: 65 Resp: 228677
Ion Ratio Lower Upper
65 100
67 51.5 0.0 105.2





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 6.769 min Scan# 91

Delta R.T. -0.000 min

Lab File: VX047017.D

Acq: 16 Jul 2025 10:13

Instrument :

MSVOA_X

ClientSampleId :

VX0716MBL01

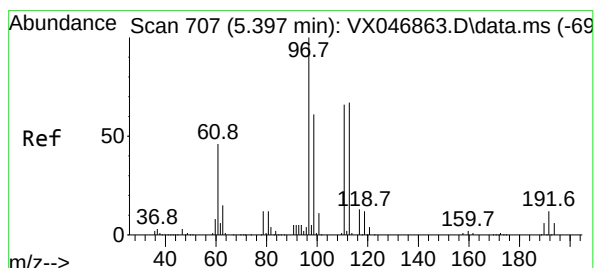
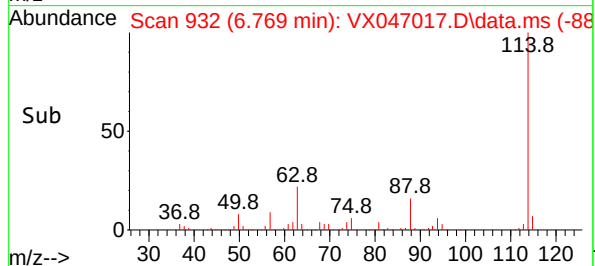
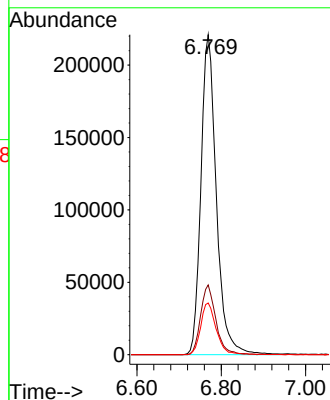
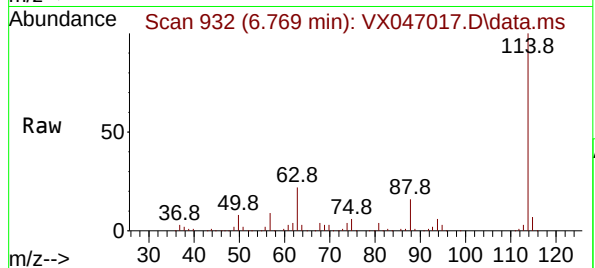
Tgt Ion:114 Resp: 562969

Ion Ratio Lower Upper

114 100

63 21.8 0.0 40.4

88 16.2 0.0 31.0



#35

Dibromofluoromethane

Concen: 49.074 ug/l

RT: 5.397 min Scan# 707

Delta R.T. -0.000 min

Lab File: VX047017.D

Acq: 16 Jul 2025 10:13

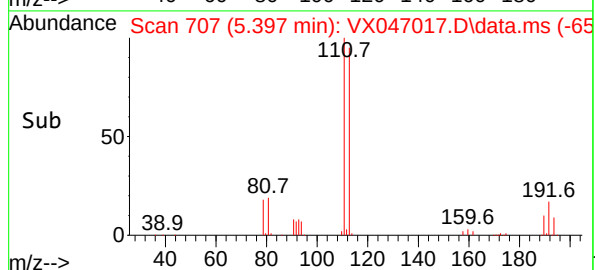
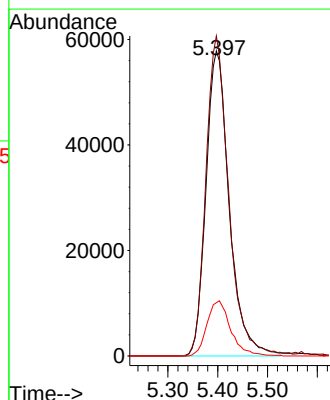
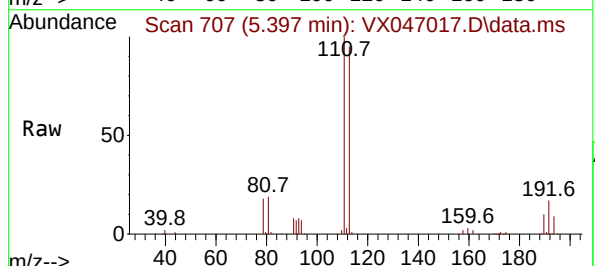
Tgt Ion:113 Resp: 187535

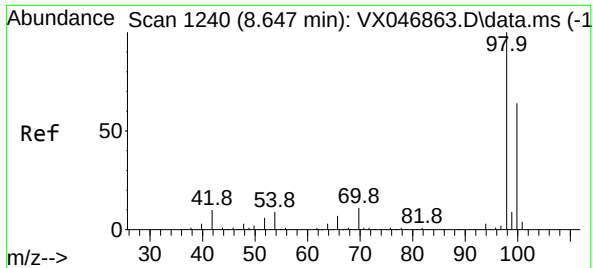
Ion Ratio Lower Upper

113 100

111 103.0 81.2 121.8

192 18.4 15.3 22.9





#50

Toluene-d8

Concen: 48.869 ug/l

RT: 8.653 min Scan# 11

Delta R.T. 0.006 min

Lab File: VX047017.D

Acq: 16 Jul 2025 10:13

Instrument :

MSVOA_X

ClientSampleId :

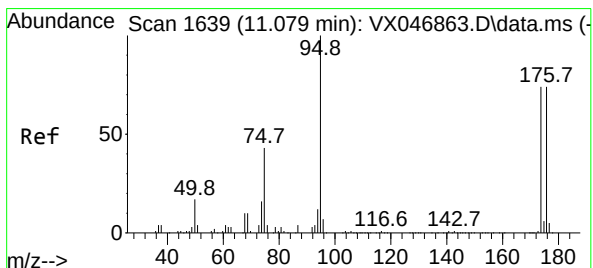
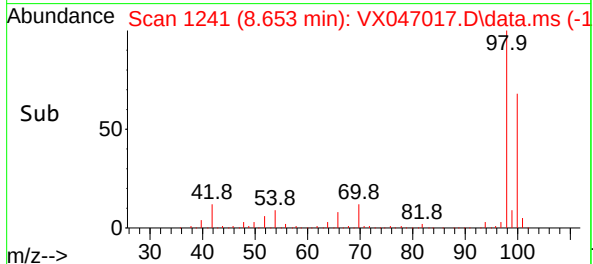
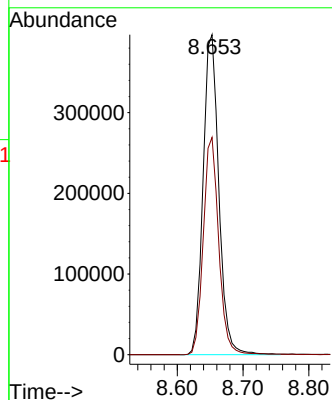
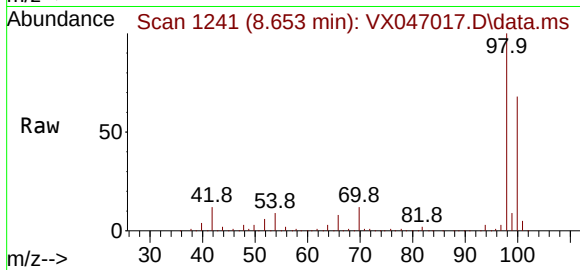
VX0716MBL01

Tgt Ion: 98 Resp: 658889

Ion Ratio Lower Upper

98 100

100 66.7 53.0 79.6



#62

4-Bromofluorobenzene

Concen: 53.517 ug/l

RT: 11.079 min Scan# 1639

Delta R.T. -0.000 min

Lab File: VX047017.D

Acq: 16 Jul 2025 10:13

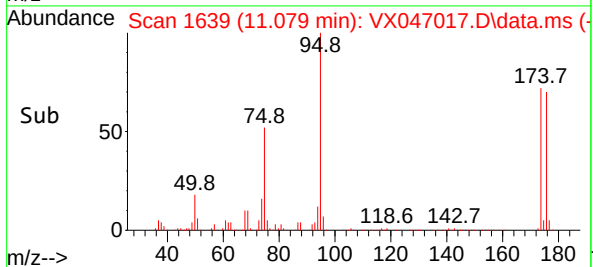
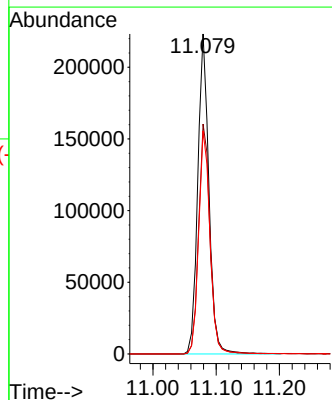
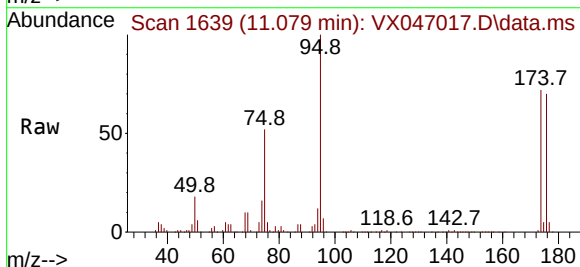
Tgt Ion: 95 Resp: 274238

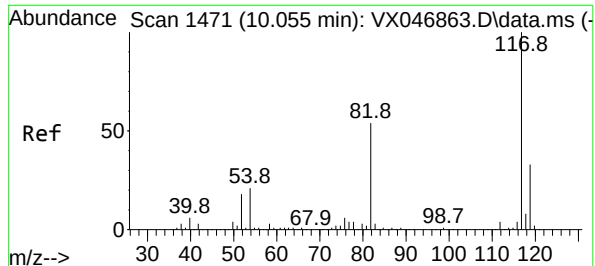
Ion Ratio Lower Upper

95 100

174 73.2 0.0 152.0

176 70.9 0.0 145.2





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.055 min Scan# 1471

Delta R.T. -0.000 min

Lab File: VX047017.D

Acq: 16 Jul 2025 10:13

Instrument :

MSVOA_X

ClientSampleId :

VX0716MBL01

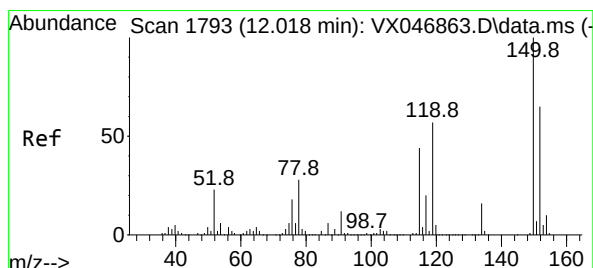
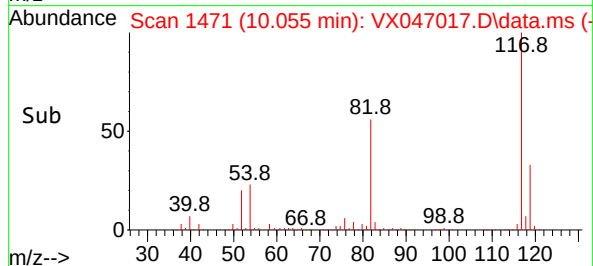
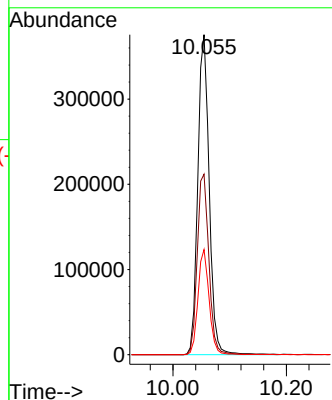
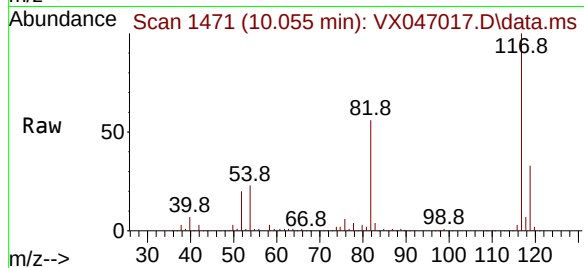
Tgt Ion:117 Resp: 523286

Ion Ratio Lower Upper

117 100

82 56.4 43.3 64.9

119 32.8 26.4 39.6



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.018 min Scan# 1793

Delta R.T. -0.000 min

Lab File: VX047017.D

Acq: 16 Jul 2025 10:13

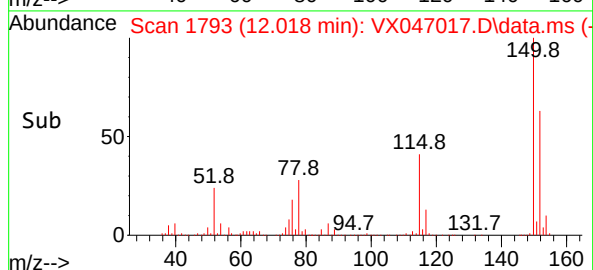
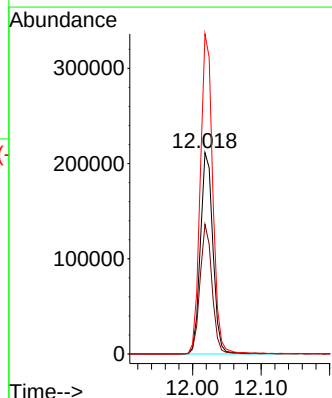
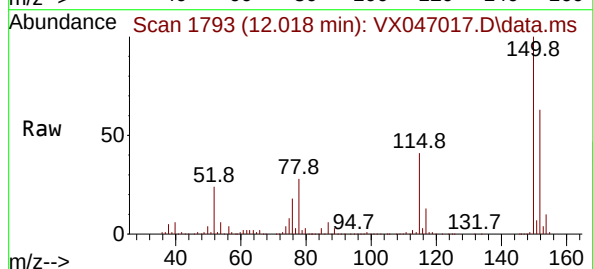
Tgt Ion:152 Resp: 270042

Ion Ratio Lower Upper

152 100

115 61.9 42.4 127.1

150 157.6 0.0 349.2



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071625\
Data File : VX047017.D
Acq On : 16 Jul 2025 10:13
Operator : JC/MD
Sample : VX0716MBL01
Misc : 5.00g/10mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VX0716MBL01

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Sampling : 1

Start Thrs: 0.2

Stop Thrs : 0

Filtering: 5

Min Area: 3 % of largest Peak

Max Peaks: 100

Peak Location: TOP

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

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M

Title : SW846 8260

Signal : TIC: VX047017.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.397	696	707	724	rBV3	193217	618216	34.81%	6.180%
2	5.562	724	734	761	rVB	312630	973153	54.80%	9.728%
3	5.964	790	800	819	rBV	211211	620786	34.96%	6.206%
4	6.769	921	932	953	rBV	520191	1331322	74.97%	13.309%
5	8.653	1234	1241	1259	rBV	1067016	1775762	100.00%	17.752%
6	10.055	1465	1471	1487	rBV	1156032	1634533	92.05%	16.340%
7	11.079	1634	1639	1654	rBV	1045609	1296451	73.01%	12.960%
8	12.018	1788	1793	1804	rBV	1352473	1683519	94.81%	16.830%
9	12.335	1841	1845	1852	rBV4	13000	18681	1.05%	0.187%
10	13.719	2067	2072	2079	rBV4	37754	50814	2.86%	0.508%

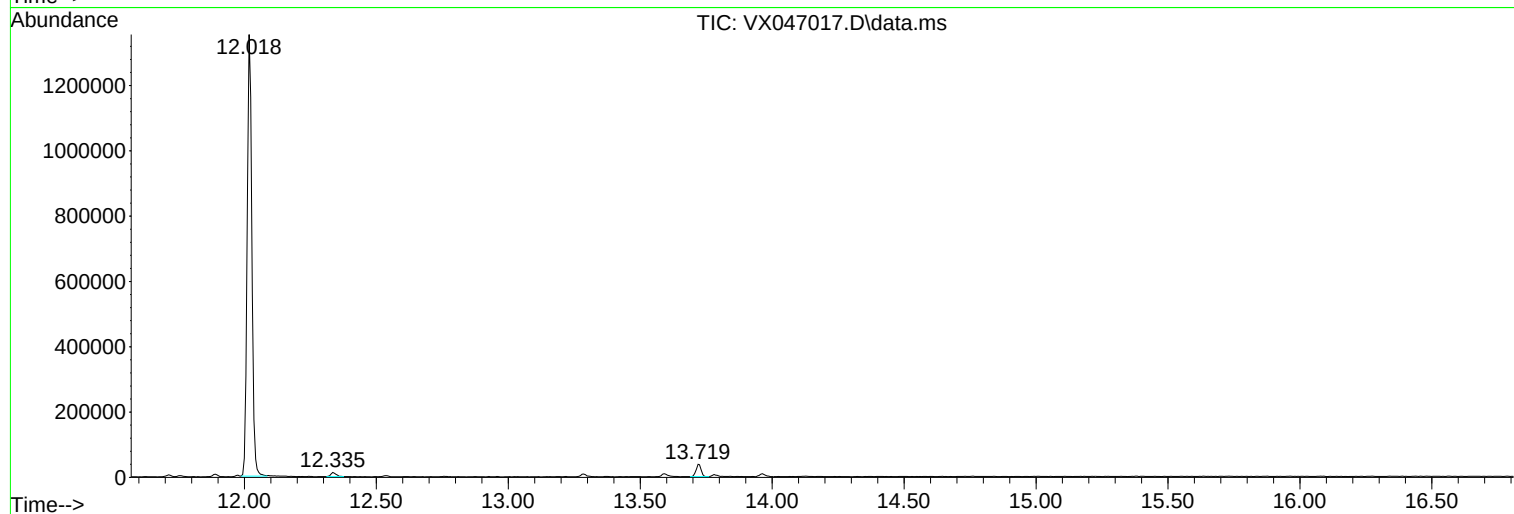
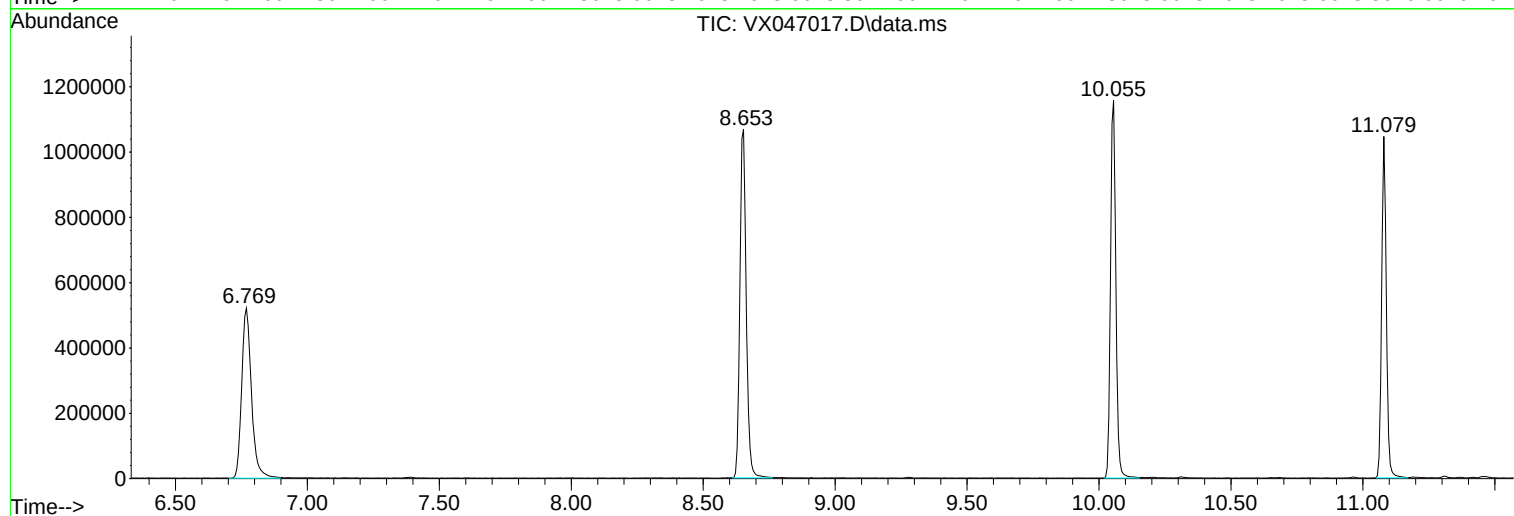
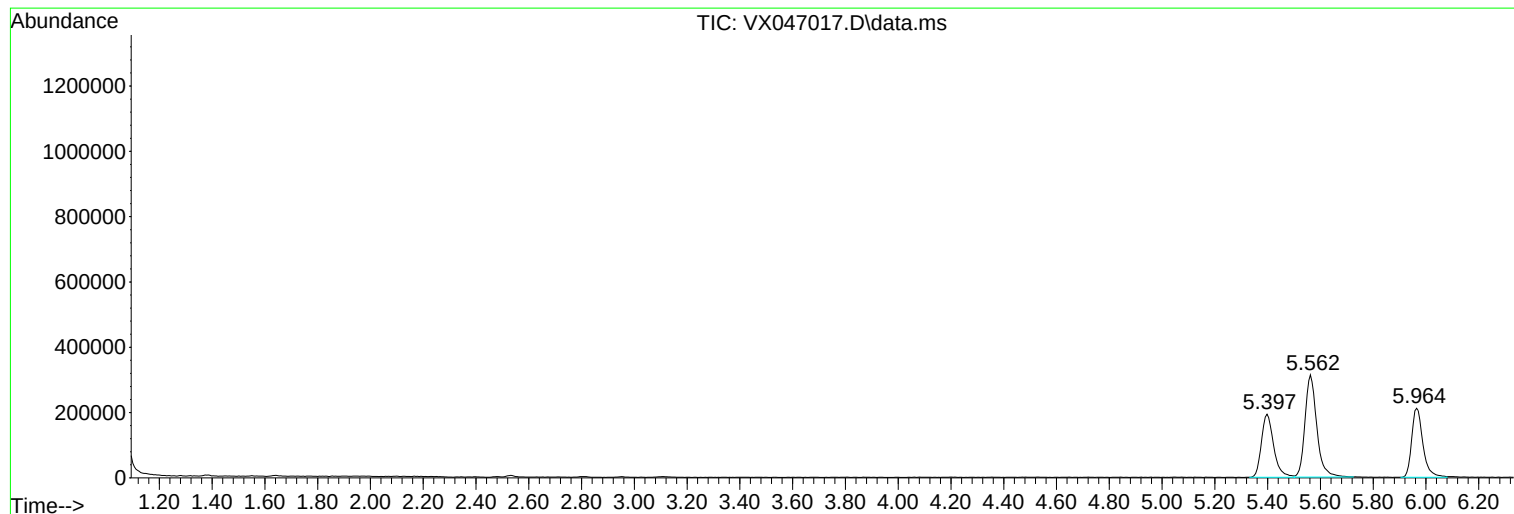
Sum of corrected areas: 10003237

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071625\
Data File : VX047017.D
Acq On : 16 Jul 2025 10:13
Operator : JC/MD
Sample : VX0716MBL01
Misc : 5.00g/10mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VX0716MBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071625\
Data File : VX047017.D
Acq On : 16 Jul 2025 10:13
Operator : JC/MD
Sample : VX0716MBL01
Misc : 5.00g/10mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VX0716MBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.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\VX071625\
Data File : VX047017.D
Acq On : 16 Jul 2025 10:13
Operator : JC/MD
Sample : VX0716MBL01
Misc : 5.00g/10mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VX0716MBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260

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

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

Report of Analysis

Client:	T&A Construction Inc	Date Collected:	
Project:	Kingsland Point Park Water Main	Date Received:	
Client Sample ID:	VX0715MBS01	SDG No.:	Q2600
Lab Sample ID:	VX0715MBS01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10
GC Column:	DB-624UI ID : 0.18	Level :	MED
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VX047007.D	1	07/15/25 17:06	VX071525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	1700		110	500	ug/Kg
74-87-3	Chloromethane	1700		110	500	ug/Kg
75-01-4	Vinyl Chloride	1800		79.0	500	ug/Kg
74-83-9	Bromomethane	1800		110	500	ug/Kg
75-00-3	Chloroethane	1900		130	500	ug/Kg
75-69-4	Trichlorofluoromethane	1900		120	500	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	1900		110	500	ug/Kg
75-35-4	1,1-Dichloroethene	1900		100	500	ug/Kg
67-64-1	Acetone	12400		470	2500	ug/Kg
75-15-0	Carbon Disulfide	1500		110	500	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2400		73.0	500	ug/Kg
79-20-9	Methyl Acetate	3100		150	500	ug/Kg
75-09-2	Methylene Chloride	2000		350	1000	ug/Kg
156-60-5	trans-1,2-Dichloroethene	1900		86.0	500	ug/Kg
75-34-3	1,1-Dichloroethane	2000		80.0	500	ug/Kg
110-82-7	Cyclohexane	1900		79.0	500	ug/Kg
78-93-3	2-Butanone	14000		650	2500	ug/Kg
56-23-5	Carbon Tetrachloride	1900		97.0	500	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2000		75.0	500	ug/Kg
74-97-5	Bromochloromethane	2200		120	500	ug/Kg
67-66-3	Chloroform	2100		84.0	500	ug/Kg
71-55-6	1,1,1-Trichloroethane	2100		93.0	500	ug/Kg
108-87-2	Methylcyclohexane	1700		91.0	500	ug/Kg
71-43-2	Benzene	1900		79.0	500	ug/Kg
107-06-2	1,2-Dichloroethane	2100		79.0	500	ug/Kg
79-01-6	Trichloroethene	1800		81.0	500	ug/Kg
78-87-5	1,2-Dichloropropane	2000		91.0	500	ug/Kg
75-27-4	Bromodichloromethane	2000		78.0	500	ug/Kg
108-10-1	4-Methyl-2-Pentanone	13900		360	2500	ug/Kg
108-88-3	Toluene	2000		78.0	500	ug/Kg

Report of Analysis

Client:	T&A Construction Inc	Date Collected:	
Project:	Kingsland Point Park Water Main	Date Received:	
Client Sample ID:	VX0715MBS01	SDG No.:	Q2600
Lab Sample ID:	VX0715MBS01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10
GC Column:	DB-624UI ID : 0.18	Level :	MED
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VX047007.D	1	07/15/25 17:06	VX071525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	2000		65.0	500	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	2000		62.0	500	ug/Kg
79-00-5	1,1,2-Trichloroethane	2100		92.0	500	ug/Kg
591-78-6	2-Hexanone	14500		370	2500	ug/Kg
124-48-1	Dibromochloromethane	2000		87.0	500	ug/Kg
106-93-4	1,2-Dibromoethane	2100		88.0	500	ug/Kg
127-18-4	Tetrachloroethene	1800		110	500	ug/Kg
108-90-7	Chlorobenzene	2000		91.0	500	ug/Kg
100-41-4	Ethyl Benzene	2000		67.0	500	ug/Kg
179601-23-1	m/p-Xylenes	3900		120	1000	ug/Kg
95-47-6	o-Xylene	2000		82.0	500	ug/Kg
100-42-5	Styrene	2000		71.0	500	ug/Kg
75-25-2	Bromoform	2100		86.0	500	ug/Kg
98-82-8	Isopropylbenzene	2000		78.0	500	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	2400		120	500	ug/Kg
541-73-1	1,3-Dichlorobenzene	2000		170	500	ug/Kg
106-46-7	1,4-Dichlorobenzene	1900		160	500	ug/Kg
95-50-1	1,2-Dichlorobenzene	2000		150	500	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	2600		180	500	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	1900		300	500	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	2000		320	500	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	53.9		63 - 155	108%	SPK: 50
1868-53-7	Dibromofluoromethane	50.2		70 - 134	100%	SPK: 50
2037-26-5	Toluene-d8	48.5		74 - 123	97%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.5		17 - 146	103%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	310000	5.568			
540-36-3	1,4-Difluorobenzene	528000	6.769			
3114-55-4	Chlorobenzene-d5	471000	10.055			
3855-82-1	1,4-Dichlorobenzene-d4	239000	12.018			

Report of Analysis

Client:	T&A Construction Inc	Date Collected:	
Project:	Kingsland Point Park Water Main	Date Received:	
Client Sample ID:	VX0715MBS01	SDG No.:	Q2600
Lab Sample ID:	VX0715MBS01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10
GC Column:	DB-624UI ID : 0.18	Level :	MED
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VX047007.D	1	07/15/25 17:06	VX071525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
 Data File : VX047007.D
 Acq On : 15 Jul 2025 17:06
 Operator : JC/MD
 Sample : VX0715MBS01
 Misc : 5.00g/10mL/100uL/5.00mL/MSVOA_X/MEOH
 ALS Vial : 21 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VX0715MBS01

Manual Integrations
 APPROVED

Reviewed By : John Carlone 07/16/2025
 Supervised By : Mahesh Dadoda 07/16/2025

Quant Time: Jul 16 02:30:13 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 03 05:51:11 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	5.568	168	310444	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.769	114	528338	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	471044	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	239011	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.964	65	221056	53.899	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 107.800%			
35) Dibromofluoromethane	5.397	113	180158	50.234	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 100.460%			
50) Toluene-d8	8.653	98	613762	48.505	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery = 97.020%			
62) 4-Bromofluorobenzene	11.079	95	247726	51.512	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery = 103.020%			
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	1.185	85	50624	17.051	ug/l	96
3) Chloromethane	1.307	50	55529	17.119	ug/l	100
4) Vinyl Chloride	1.386	62	62621	17.728	ug/l	95
5) Bromomethane	1.624	94	41941	18.479	ug/l	98
6) Chloroethane	1.703	64	43972	18.852	ug/l	96
7) Trichlorofluoromethane	1.904	101	103643	18.976	ug/l	92
8) Diethyl Ether	2.148	74	38968	20.048	ug/l	93
9) 1,1,2-Trichlorotrifluo...	2.349	101	65726	18.885	ug/l	98
10) Methyl Iodide	2.471	142	52612	13.876	ug/l	100
11) Tert butyl alcohol	2.965	59	46075	171.294	ug/l	100
12) 1,1-Dichloroethene	2.337	96	62880	18.679	ug/l	98
13) Acrolein	2.251	56	23837	82.123	ug/l	97
14) Allyl chloride	2.678	41	121840	20.329	ug/l	98
15) Acrylonitrile	3.074	53	195273	125.565	ug/l	99
16) Acetone	2.392	43	158267	124.234	ug/l	95
17) Carbon Disulfide	2.532	76	131949	14.946	ug/l	97
18) Methyl Acetate	2.715	43	105599	31.449	ug/l	98
19) Methyl tert-butyl Ether	3.129	73	226641	23.841	ug/l	99
20) Methylene Chloride	2.806	84	76230	20.236	ug/l	98
21) trans-1,2-Dichloroethene	3.111	96	66391	19.274	ug/l	96
22) Diisopropyl ether	3.769	45	259676	22.427	ug/l #	84
23) Vinyl Acetate	3.733	43	994586	114.654	ug/l	99
24) 1,1-Dichloroethane	3.623	63	133612	20.233	ug/l	98
25) 2-Butanone	4.568	43	237692	139.846	ug/l	97
26) 2,2-Dichloropropane	4.489	77	86252	17.550	ug/l	99
27) cis-1,2-Dichloroethene	4.507	96	85137	20.243	ug/l	100
28) Bromochloromethane	4.916	49	70239	21.552	ug/l	97
29) Tetrahydrofuran	5.019	42	152661	140.899	ug/l	99
30) Chloroform	5.111	83	140047	20.759	ug/l	96
31) Cyclohexane	5.483	56	109369	18.656	ug/l	95
32) 1,1,1-Trichloroethane	5.397	97	117504	20.847	ug/l	99
36) 1,1-Dichloropropene	5.702	75	90374	18.677	ug/l	99
37) Ethyl Acetate	4.727	43	94504	22.931	ug/l	98
38) Carbon Tetrachloride	5.690	117	97550	19.069	ug/l	98
39) Methylcyclohexane	7.385	83	100843	16.660	ug/l	95
40) Benzene	6.043	78	279584	19.103	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
 Data File : VX047007.D
 Acq On : 15 Jul 2025 17:06
 Operator : JC/MD
 Sample : VX0715MBS01
 Misc : 5.00g/10mL/100uL/5.00mL/MSVOA_X/MEOH
 ALS Vial : 21 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VX0715MBS01

Manual Integrations
 APPROVED

Reviewed By : John Carlone 07/16/2025
 Supervised By : Mahesh Dadoda 07/16/2025

Quant Time: Jul 16 02:30:13 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 03 05:51:11 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	4.934	41	54774	24.914	ug/l	98
42) 1,2-Dichloroethane	6.098	62	104810	21.089	ug/l	97
43) Isopropyl Acetate	6.348	43	162099	25.679	ug/l	99
44) Trichloroethene	7.135	130	68457	17.968	ug/l	93
45) 1,2-Dichloropropane	7.433	63	73300	19.823	ug/l	92
46) Dibromomethane	7.586	93	53191	20.761	ug/l	98
47) Bromodichloromethane	7.824	83	111412	20.366	ug/l	97
48) Methyl methacrylate	7.696	41	83091	25.492	ug/l	96
49) 1,4-Dioxane	7.665	88	21863	578.886	ug/l	95
51) 4-Methyl-2-Pentanone	8.573	43	516323	138.592	ug/l	99
52) Toluene	8.720	92	179542	19.797	ug/l	97
53) t-1,3-Dichloropropene	8.982	75	97384	19.947	ug/l	99
54) cis-1,3-Dichloropropene	8.372	75	109998	19.739	ug/l	98
55) 1,1,2-Trichloroethane	9.153	97	72450	21.447	ug/l	96
56) Ethyl methacrylate	9.116	69	112348	24.029	ug/l	98
57) 1,3-Dichloropropane	9.311	76	123372	21.210	ug/l	99
58) 2-Chloroethyl Vinyl ether	8.244	63	264524	100.410	ug/l	99
59) 2-Hexanone	9.433	43	357652	144.733	ug/l	98
60) Dibromochloromethane	9.518	129	81124	20.067	ug/l	100
61) 1,2-Dibromoethane	9.610	107	71104	20.958	ug/l	96
64) Tetrachloroethene	9.275	164	56757	18.097	ug/l	93
65) Chlorobenzene	10.079	112	199501	19.589	ug/l	99
66) 1,1,1,2-Tetrachloroethane	10.165	131	69339	20.253	ug/l	99
67) Ethyl Benzene	10.195	91	346071	19.843	ug/l	100
68) m/p-Xylenes	10.299	106	258759	39.373	ug/l	97
69) o-Xylene	10.640	106	126247	19.887	ug/l	98
70) Styrene	10.652	104	221785	20.420	ug/l	98
71) Bromoform	10.799	173	53510	21.021	ug/l #	98
73) Isopropylbenzene	10.963	105	338957	20.174	ug/l	100
74) N-amyl acetate	10.841	43	145837	25.543	ug/l	99
75) 1,1,2,2-Tetrachloroethane	11.213	83	108923	23.576	ug/l	99
76) 1,2,3-Trichloropropane	11.238	75	85192m	23.068	ug/l	
77) Bromobenzene	11.195	156	82862	19.799	ug/l	96
78) n-propylbenzene	11.305	91	403359	19.910	ug/l	99
79) 2-Chlorotoluene	11.366	91	243601	20.364	ug/l	99
80) 1,3,5-Trimethylbenzene	11.451	105	280552	20.550	ug/l	99
81) trans-1,4-Dichloro-2-b...	11.018	75	28681	20.841	ug/l	93
82) 4-Chlorotoluene	11.451	91	284304	20.595	ug/l	100
83) tert-Butylbenzene	11.713	119	285636	20.257	ug/l	97
84) 1,2,4-Trimethylbenzene	11.750	105	283980	20.580	ug/l	95
85) sec-Butylbenzene	11.890	105	357652	20.118	ug/l	99
86) p-Isopropyltoluene	12.006	119	291042	19.549	ug/l	98
87) 1,3-Dichlorobenzene	11.969	146	156922	20.049	ug/l	98
88) 1,4-Dichlorobenzene	12.042	146	156512	19.214	ug/l	98
89) n-Butylbenzene	12.329	91	267548	19.126	ug/l	99
90) Hexachloroethane	12.536	117	49305	18.682	ug/l	97
91) 1,2-Dichlorobenzene	12.335	146	150962	19.903	ug/l	98
92) 1,2-Dibromo-3-Chloropr...	12.939	75	20644	25.547	ug/l	94
93) 1,2,4-Trichlorobenzene	13.585	180	100068	19.420	ug/l	99
94) Hexachlorobutadiene	13.719	225	34692	17.853	ug/l	99
95) Naphthalene	13.774	128	318027	23.422	ug/l	100
96) 1,2,3-Trichlorobenzene	13.957	180	96852	19.893	ug/l	97

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX047007.D
Acq On : 15 Jul 2025 17:06
Operator : JC/MD
Sample : VX0715MBS01
Misc : 5.00g/10mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 21 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VX0715MBS01

Manual Integrations
APPROVED

Reviewed By :John Carlone 07/16/2025
Supervised By :Mahesh Dadoda 07/16/2025

Quant Time: Jul 16 02:30:13 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 03 05:51:11 2025
Response via : Initial Calibration

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

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

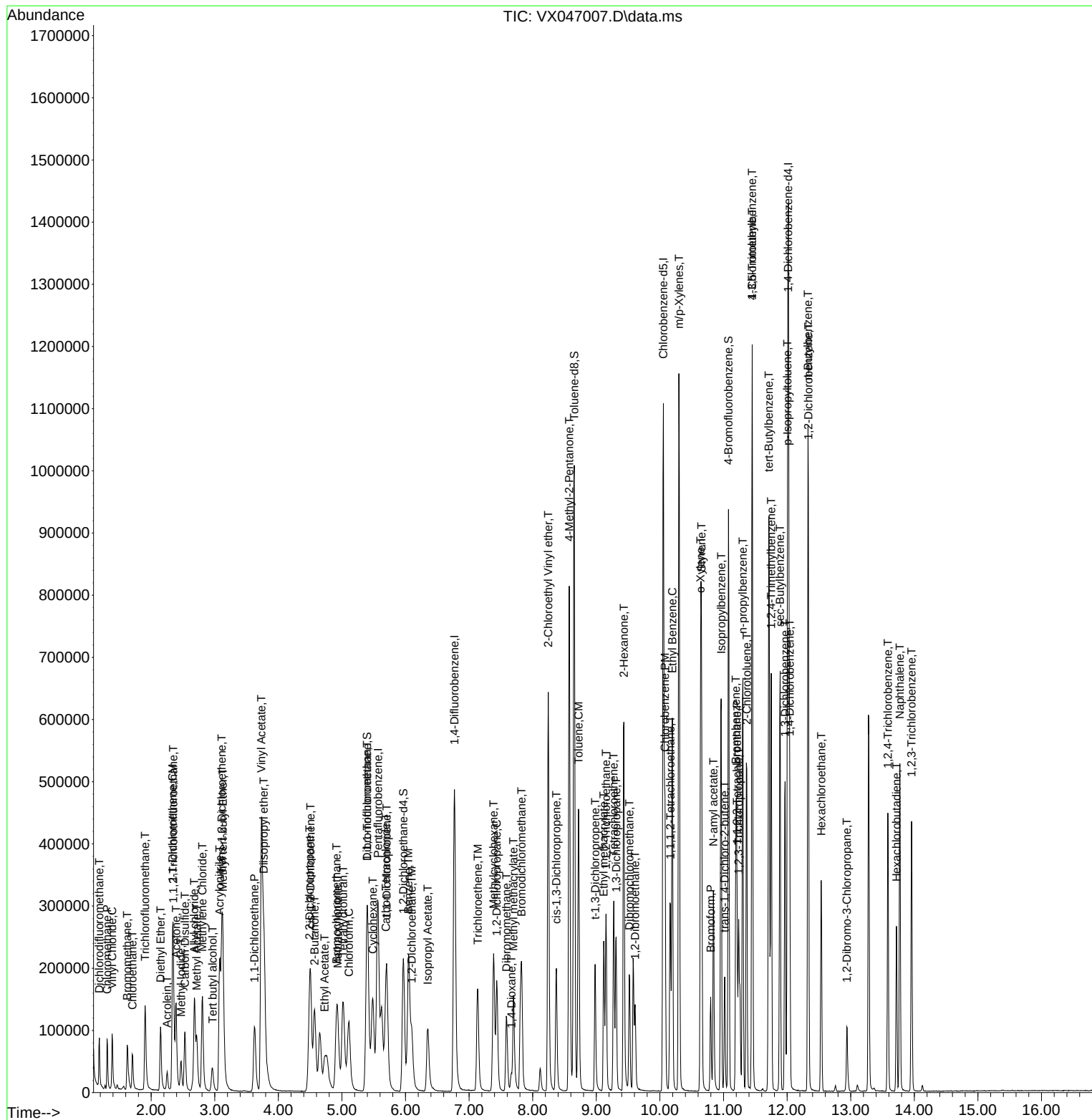
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Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\  
Data File : VX047007.D  
Acq On    : 15 Jul 2025 17:06  
Operator  : JC/MD  
Sample    : VX0715MBS01  
Misc      : 5.00g/10mL/100uL/5.00mL/MSVOA_X/MEOH  
ALS Vial  : 21 Sample Multiplier: 1
```

Instrument :
MSVOA_X
ClientSampleId :
VX0715MBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 07/16/2025
Supervised By :Mahesh Dadoda 07/16/2025

Quant Time: Jul 16 02:30:13 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 03 05:51:11 2025
Response via : Initial Calibration



Report of Analysis

Client:	T&A Construction Inc	Date Collected:	
Project:	Kingsland Point Park Water Main	Date Received:	
Client Sample ID:	VX0716MBS01	SDG No.:	Q2600
Lab Sample ID:	VX0716MBS01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10
GC Column:	DB-624UI ID : 0.18	Level :	MED
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VX047019.D	1	07/16/25 11:02	VX071625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	1700		110	500	ug/Kg
74-87-3	Chloromethane	1700		110	500	ug/Kg
75-01-4	Vinyl Chloride	1800		79.0	500	ug/Kg
74-83-9	Bromomethane	1800		110	500	ug/Kg
75-00-3	Chloroethane	1700		130	500	ug/Kg
75-69-4	Trichlorofluoromethane	1900		120	500	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	1900		110	500	ug/Kg
75-35-4	1,1-Dichloroethene	1900		100	500	ug/Kg
67-64-1	Acetone	11800		470	2500	ug/Kg
75-15-0	Carbon Disulfide	1400		110	500	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2300		73.0	500	ug/Kg
79-20-9	Methyl Acetate	3000		150	500	ug/Kg
75-09-2	Methylene Chloride	1900		350	1000	ug/Kg
156-60-5	trans-1,2-Dichloroethene	1800		86.0	500	ug/Kg
75-34-3	1,1-Dichloroethane	2000		80.0	500	ug/Kg
110-82-7	Cyclohexane	1900		79.0	500	ug/Kg
78-93-3	2-Butanone	13600		650	2500	ug/Kg
56-23-5	Carbon Tetrachloride	1900		97.0	500	ug/Kg
156-59-2	cis-1,2-Dichloroethene	1900		75.0	500	ug/Kg
74-97-5	Bromochloromethane	2300		120	500	ug/Kg
67-66-3	Chloroform	2000		84.0	500	ug/Kg
71-55-6	1,1,1-Trichloroethane	2000		93.0	500	ug/Kg
108-87-2	Methylcyclohexane	1800		91.0	500	ug/Kg
71-43-2	Benzene	1900		79.0	500	ug/Kg
107-06-2	1,2-Dichloroethane	2100		79.0	500	ug/Kg
79-01-6	Trichloroethene	1800		81.0	500	ug/Kg
78-87-5	1,2-Dichloropropane	2000		91.0	500	ug/Kg
75-27-4	Bromodichloromethane	2000		78.0	500	ug/Kg
108-10-1	4-Methyl-2-Pentanone	13500		360	2500	ug/Kg
108-88-3	Toluene	1900		78.0	500	ug/Kg

Report of Analysis

Client:	T&A Construction Inc	Date Collected:	
Project:	Kingsland Point Park Water Main	Date Received:	
Client Sample ID:	VX0716MBS01	SDG No.:	Q2600
Lab Sample ID:	VX0716MBS01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10
GC Column:	DB-624UI ID : 0.18	Level :	MED
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VX047019.D	1	07/16/25 11:02	VX071625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	2000		65.0	500	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	2000		62.0	500	ug/Kg
79-00-5	1,1,2-Trichloroethane	2100		92.0	500	ug/Kg
591-78-6	2-Hexanone	14200		370	2500	ug/Kg
124-48-1	Dibromochloromethane	2000		87.0	500	ug/Kg
106-93-4	1,2-Dibromoethane	2100		88.0	500	ug/Kg
127-18-4	Tetrachloroethene	1800		110	500	ug/Kg
108-90-7	Chlorobenzene	1900		91.0	500	ug/Kg
100-41-4	Ethyl Benzene	2000		67.0	500	ug/Kg
179601-23-1	m/p-Xylenes	3900		120	1000	ug/Kg
95-47-6	o-Xylene	2000		82.0	500	ug/Kg
100-42-5	Styrene	2000		71.0	500	ug/Kg
75-25-2	Bromoform	2000		86.0	500	ug/Kg
98-82-8	Isopropylbenzene	2000		78.0	500	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	2200		120	500	ug/Kg
541-73-1	1,3-Dichlorobenzene	2000		170	500	ug/Kg
106-46-7	1,4-Dichlorobenzene	1900		160	500	ug/Kg
95-50-1	1,2-Dichlorobenzene	2000		150	500	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	2500		180	500	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	1900		300	500	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	2000		320	500	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	50.9		63 - 155	102%	SPK: 50
1868-53-7	Dibromofluoromethane	48.6		70 - 134	97%	SPK: 50
2037-26-5	Toluene-d8	46.0		74 - 123	92%	SPK: 50
460-00-4	4-Bromofluorobenzene	49.8		17 - 146	100%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	329000	5.556			
540-36-3	1,4-Difluorobenzene	551000	6.763			
3114-55-4	Chlorobenzene-d5	494000	10.055			
3855-82-1	1,4-Dichlorobenzene-d4	253000	12.018			

Report of Analysis

Client:	T&A Construction Inc	Date Collected:	
Project:	Kingsland Point Park Water Main	Date Received:	
Client Sample ID:	VX0716MBS01	SDG No.:	Q2600
Lab Sample ID:	VX0716MBS01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10
GC Column:	DB-624UI ID : 0.18	Level :	MED
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VX047019.D	1	07/16/25 11:02	VX071625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071625\
 Data File : VX047019.D
 Acq On : 16 Jul 2025 11:02
 Operator : JC/MD
 Sample : VX0716MBS01
 Misc : 5.00g/10mL/100uL/5.00mL/MSVOA_X/MEOH
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VX0716MBS01

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 07/17/2025
 Supervised By :Semsettin Yesilyurt 07/17/2025

Quant Time: Jul 17 03:28:20 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 03 05:51:11 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	5.556	168	328600	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.763	114	550527	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	493708	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	253419	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.958	65	221112	50.934	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery =	101.860%		
35) Dibromofluoromethane	5.397	113	181553	48.583	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	97.160%		
50) Toluene-d8	8.647	98	607149	46.049	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery =	92.100%		
62) 4-Bromofluorobenzene	11.079	95	249709	49.832	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery =	99.660%		
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	1.185	85	53048	16.880	ug/l	100
3) Chloromethane	1.306	50	58534	17.048	ug/l	94
4) Vinyl Chloride	1.386	62	66590	17.810	ug/l	96
5) Bromomethane	1.623	94	43780	18.223	ug/l	100
6) Chloroethane	1.703	64	42053	17.033	ug/l	98
7) Trichlorofluoromethane	1.904	101	108030	18.686	ug/l	100
8) Diethyl Ether	2.148	74	40181	19.530	ug/l	94
9) 1,1,2-Trichlorotrifluo...	2.343	101	69059	18.746	ug/l	98
10) Methyl Iodide	2.465	142	60865	15.165	ug/l	98
11) Tert butyl alcohol	2.959	59	47511	166.873	ug/l	100
12) 1,1-Dichloroethene	2.337	96	66592	18.689	ug/l	98
13) Acrolein	2.251	56	27683	89.828	ug/l	98
14) Allyl chloride	2.678	41	125966	19.856	ug/l	98
15) Acrylonitrile	3.074	53	197364	119.897	ug/l	100
16) Acetone	2.386	43	159670	118.410	ug/l	97
17) Carbon Disulfide	2.526	76	134829	14.429	ug/l	99
18) Methyl Acetate	2.715	43	107631	30.283	ug/l	95
19) Methyl tert-butyl Ether	3.123	73	234934	23.348	ug/l	95
20) Methylene Chloride	2.800	84	77077	19.330	ug/l	98
21) trans-1,2-Dichloroethene	3.105	96	66221	18.162	ug/l	99
22) Diisopropyl ether	3.769	45	268211	21.884	ug/l	95
23) Vinyl Acetate	3.733	43	1011874	110.202	ug/l	97
24) 1,1-Dichloroethane	3.623	63	143019	20.461	ug/l	99
25) 2-Butanone	4.562	43	244704	136.017	ug/l	98
26) 2,2-Dichloropropane	4.489	77	106023	20.381	ug/l	100
27) cis-1,2-Dichloroethene	4.501	96	85474	19.201	ug/l	95
28) Bromochloromethane	4.903	49	78665	22.804	ug/l	96
29) Tetrahydrofuran	5.013	42	154605	134.809	ug/l	100
30) Chloroform	5.105	83	145314	20.349	ug/l	98
31) Cyclohexane	5.483	56	115079	18.545	ug/l	99
32) 1,1,1-Trichloroethane	5.391	97	120211	20.149	ug/l	98
36) 1,1-Dichloropropene	5.702	75	93875	18.619	ug/l	99
37) Ethyl Acetate	4.727	43	96040	22.364	ug/l	100
38) Carbon Tetrachloride	5.684	117	100210	18.799	ug/l	99
39) Methylcyclohexane	7.385	83	111269	17.642	ug/l	98
40) Benzene	6.043	78	289347	18.973	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071625\
 Data File : VX047019.D
 Acq On : 16 Jul 2025 11:02
 Operator : JC/MD
 Sample : VX0716MBS01
 Misc : 5.00g/10mL/100uL/5.00mL/MSVOA_X/MEOH
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VX0716MBS01

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 07/17/2025
 Supervised By :Semsettin Yesilyurt 07/17/2025

Quant Time: Jul 17 03:28:20 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 03 05:51:11 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	4.928	41	58112	25.367	ug/l	98
42) 1,2-Dichloroethane	6.092	62	107889	20.834	ug/l	98
43) Isopropyl Acetate	6.342	43	166909	25.375	ug/l	98
44) Trichloroethene	7.135	130	70912	17.863	ug/l	91
45) 1,2-Dichloropropane	7.433	63	75674	19.640	ug/l	96
46) Dibromomethane	7.586	93	52869	19.804	ug/l	100
47) Bromodichloromethane	7.824	83	113045	19.831	ug/l	98
48) Methyl methacrylate	7.702	41	83125	24.475	ug/l	97
49) 1,4-Dioxane	7.659	88	21536	547.245	ug/l	97
51) 4-Methyl-2-Pentanone	8.573	43	522674	134.642	ug/l	99
52) Toluene	8.720	92	182796	19.343	ug/l	99
53) t-1,3-Dichloropropene	8.982	75	104091	20.461	ug/l	97
54) cis-1,3-Dichloropropene	8.366	75	116591	20.079	ug/l	99
55) 1,1,2-Trichloroethane	9.153	97	73526	20.888	ug/l	96
56) Ethyl methacrylate	9.116	69	112023	22.994	ug/l	96
57) 1,3-Dichloropropane	9.311	76	127719	21.072	ug/l	99
58) 2-Chloroethyl Vinyl ether	8.244	63	270577	98.568	ug/l	100
59) 2-Hexanone	9.427	43	365317	141.876	ug/l	99
60) Dibromochloromethane	9.518	129	83987	19.938	ug/l	99
61) 1,2-Dibromoethane	9.610	107	75925	21.477	ug/l	96
64) Tetrachloroethene	9.275	164	58941	17.931	ug/l	96
65) Chlorobenzene	10.079	112	207243	19.415	ug/l	99
66) 1,1,1,2-Tetrachloroethane	10.159	131	71259	19.859	ug/l	98
67) Ethyl Benzene	10.195	91	358977	19.638	ug/l	99
68) m/p-Xylenes	10.299	106	268022	38.910	ug/l	98
69) o-Xylene	10.640	106	130175	19.564	ug/l	98
70) Styrene	10.652	104	228003	20.029	ug/l	99
71) Bromoform	10.799	173	52796	19.788	ug/l	97
73) Isopropylbenzene	10.963	105	356420	20.007	ug/l	99
74) N-amyl acetate	10.841	43	144616	23.889	ug/l	100
75) 1,1,2,2-Tetrachloroethane	11.207	83	109460	22.345	ug/l	99
76) 1,2,3-Trichloropropane	11.238	75	86942m	22.204	ug/l	
77) Bromobenzene	11.195	156	85554	19.280	ug/l	97
78) n-propylbenzene	11.305	91	418438	19.480	ug/l	100
79) 2-Chlorotoluene	11.360	91	252053	19.872	ug/l	98
80) 1,3,5-Trimethylbenzene	11.451	105	291330	20.126	ug/l	99
81) trans-1,4-Dichloro-2-b...	11.018	75	30304	20.768	ug/l	94
82) 4-Chlorotoluene	11.451	91	296813	20.278	ug/l	99
83) tert-Butylbenzene	11.713	119	301405	20.160	ug/l	99
84) 1,2,4-Trimethylbenzene	11.750	105	291592	19.930	ug/l	96
85) sec-Butylbenzene	11.890	105	372653	19.770	ug/l	100
86) p-Isopropyltoluene	12.006	119	308339	19.533	ug/l	98
87) 1,3-Dichlorobenzene	11.969	146	162415	19.571	ug/l	99
88) 1,4-Dichlorobenzene	12.036	146	163438	18.923	ug/l	98
89) n-Butylbenzene	12.329	91	289978	19.551	ug/l	99
90) Hexachloroethane	12.536	117	51276	18.324	ug/l	96
91) 1,2-Dichlorobenzene	12.335	146	158847	19.752	ug/l	98
92) 1,2-Dibromo-3-Chloropr...	12.939	75	21131	24.663	ug/l	92
93) 1,2,4-Trichlorobenzene	13.585	180	105827	19.370	ug/l	100
94) Hexachlorobutadiene	13.725	225	36617	17.772	ug/l	95
95) Naphthalene	13.774	128	324456	22.537	ug/l	100
96) 1,2,3-Trichlorobenzene	13.957	180	102894	19.932	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071625\
Data File : VX047019.D
Acq On : 16 Jul 2025 11:02
Operator : JC/MD
Sample : VX0716MBS01
Misc : 5.00g/10mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VX0716MBS01

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 07/17/2025
Supervised By :Semsettin Yesilyurt 07/17/2025

Quant Time: Jul 17 03:28:20 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 03 05:51:11 2025
Response via : Initial Calibration

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

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

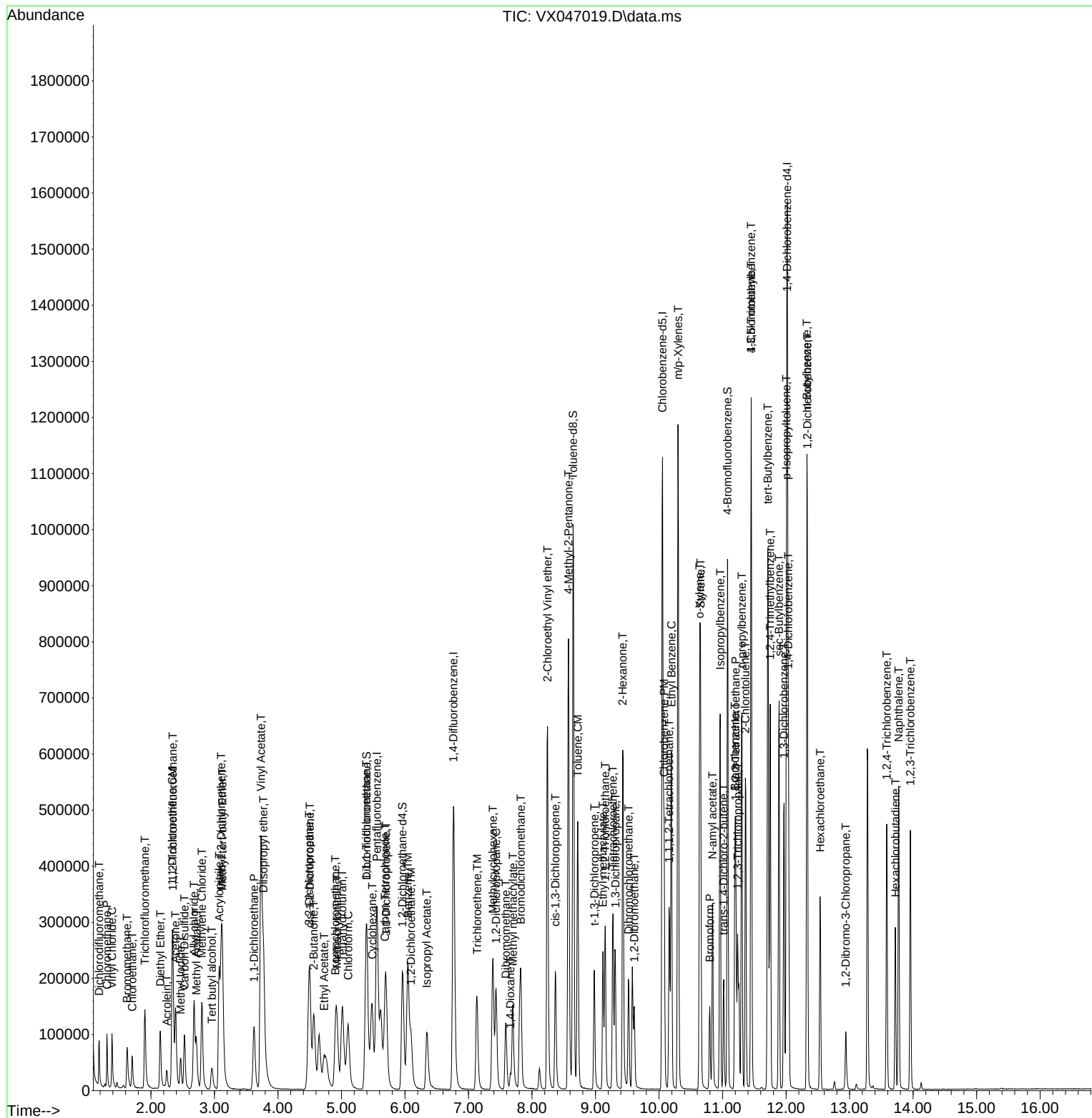
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071625\
 Data File : VX047019.D
 Acq On : 16 Jul 2025 11:02
 Operator : JC/MD
 Sample : VX0716MBS01
 Misc : 5.00g/10mL/100uL/5.00mL/MSVOA_X/MEOH
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VX0716MBS01

Manual Integrations APPROVED

Reviewed By : Mahesh Dadoda 07/17/2025
 Supervised By : Semsettin Yesilyurt 07/17/2025

Quant Time: Jul 17 03:28:20 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 03 05:51:11 2025
 Response via : Initial Calibration



Report of Analysis

Client:	T&A Construction Inc	Date Collected:	
Project:	Kingsland Point Park Water Main	Date Received:	
Client Sample ID:	VX0715MBSD01	SDG No.:	Q2600
Lab Sample ID:	VX0715MBSD01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10
GC Column:	DB-624UI ID : 0.18	Level :	MED
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VX047008.D	1	07/15/25 17:27	VX071525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	1700		110	500	ug/Kg
74-87-3	Chloromethane	1700		110	500	ug/Kg
75-01-4	Vinyl Chloride	1700		79.0	500	ug/Kg
74-83-9	Bromomethane	1800		110	500	ug/Kg
75-00-3	Chloroethane	1800		130	500	ug/Kg
75-69-4	Trichlorofluoromethane	1900		120	500	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	1800		110	500	ug/Kg
75-35-4	1,1-Dichloroethene	1800		100	500	ug/Kg
67-64-1	Acetone	12700		470	2500	ug/Kg
75-15-0	Carbon Disulfide	1500		110	500	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2500		73.0	500	ug/Kg
79-20-9	Methyl Acetate	3200		150	500	ug/Kg
75-09-2	Methylene Chloride	2000		350	1000	ug/Kg
156-60-5	trans-1,2-Dichloroethene	1900		86.0	500	ug/Kg
75-34-3	1,1-Dichloroethane	2100		80.0	500	ug/Kg
110-82-7	Cyclohexane	1900		79.0	500	ug/Kg
78-93-3	2-Butanone	14700		650	2500	ug/Kg
56-23-5	Carbon Tetrachloride	1900		97.0	500	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2100		75.0	500	ug/Kg
74-97-5	Bromochloromethane	2200		120	500	ug/Kg
67-66-3	Chloroform	2100		84.0	500	ug/Kg
71-55-6	1,1,1-Trichloroethane	2100		93.0	500	ug/Kg
108-87-2	Methylcyclohexane	1600		91.0	500	ug/Kg
71-43-2	Benzene	1900		79.0	500	ug/Kg
107-06-2	1,2-Dichloroethane	2100		79.0	500	ug/Kg
79-01-6	Trichloroethene	1800		81.0	500	ug/Kg
78-87-5	1,2-Dichloropropane	2000		91.0	500	ug/Kg
75-27-4	Bromodichloromethane	2000		78.0	500	ug/Kg
108-10-1	4-Methyl-2-Pentanone	14400		360	2500	ug/Kg
108-88-3	Toluene	2000		78.0	500	ug/Kg

Report of Analysis

Client:	T&A Construction Inc		Date Collected:	
Project:	Kingsland Point Park Water Main		Date Received:	
Client Sample ID:	VX0715MBSD01		SDG No.:	Q2600
Lab Sample ID:	VX0715MBSD01		Matrix:	SOIL
Analytical Method:	8260D		% Solid:	100
Sample Wt/Vol:	5	Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100	uL	Test:	VOC-TCLVOA-10
GC Column:	DB-624UI	ID : 0.18	Level :	MED
Prep Method :				

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VX047008.D	1	07/15/25 17:27	VX071525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	2000		65.0	500	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	2000		62.0	500	ug/Kg
79-00-5	1,1,2-Trichloroethane	2200		92.0	500	ug/Kg
591-78-6	2-Hexanone	15000		370	2500	ug/Kg
124-48-1	Dibromochloromethane	2100		87.0	500	ug/Kg
106-93-4	1,2-Dibromoethane	2200		88.0	500	ug/Kg
127-18-4	Tetrachloroethene	1800		110	500	ug/Kg
108-90-7	Chlorobenzene	2000		91.0	500	ug/Kg
100-41-4	Ethyl Benzene	2000		67.0	500	ug/Kg
179601-23-1	m/p-Xylenes	4000		120	1000	ug/Kg
95-47-6	o-Xylene	2100		82.0	500	ug/Kg
100-42-5	Styrene	2100		71.0	500	ug/Kg
75-25-2	Bromoform	2200		86.0	500	ug/Kg
98-82-8	Isopropylbenzene	2000		78.0	500	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	2400		120	500	ug/Kg
541-73-1	1,3-Dichlorobenzene	2000		170	500	ug/Kg
106-46-7	1,4-Dichlorobenzene	2000		160	500	ug/Kg
95-50-1	1,2-Dichlorobenzene	2000		150	500	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	2700		180	500	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2000		300	500	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	2100		320	500	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	55.3		63 - 155	111%	SPK: 50
1868-53-7	Dibromofluoromethane	50.8		70 - 134	102%	SPK: 50
2037-26-5	Toluene-d8	48.4		74 - 123	97%	SPK: 50
460-00-4	4-Bromofluorobenzene	52.7		17 - 146	105%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	286000	5.568			
540-36-3	1,4-Difluorobenzene	492000	6.769			
3114-55-4	Chlorobenzene-d5	437000	10.055			
3855-82-1	1,4-Dichlorobenzene-d4	225000	12.018			



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

Report of Analysis

Client:	T&A Construction Inc		Date Collected:	
Project:	Kingsland Point Park Water Main		Date Received:	
Client Sample ID:	VX0715MBSD01		SDG No.:	Q2600
Lab Sample ID:	VX0715MBSD01		Matrix:	SOIL
Analytical Method:	8260D		% Solid:	100
Sample Wt/Vol:	5	Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100	uL	Test:	VOC-TCLVOA-10
GC Column:	DB-624UI	ID : 0.18	Level :	MED
Prep Method :				

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VX047008.D	1	07/15/25 17:27	VX071525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
 Data File : VX047008.D
 Acq On : 15 Jul 2025 17:27
 Operator : JC/MD
 Sample : VX0715MBS01
 Misc : 5.00g/10mL/100uL/5.00mL/MSVOA_X/MEOH
 ALS Vial : 22 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VX0715MBS01

Manual Integrations
 APPROVED

Reviewed By : John Carlone 07/16/2025
 Supervised By : Mahesh Dadoda 07/16/2025

Quant Time: Jul 16 02:31:05 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 03 05:51:11 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	5.568	168	285726	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.769	114	492414	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	437242	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	224565	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.964	65	208635	55.272	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 110.540%			
35) Dibromofluoromethane	5.397	113	169814	50.804	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 101.600%			
50) Toluene-d8	8.653	98	570585	48.383	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery = 96.760%			
62) 4-Bromofluorobenzene	11.079	95	236047	52.665	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery = 105.320%			
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.185	85	45622	16.696	ug/l	98
3) Chloromethane	1.307	50	50707	16.984	ug/l	99
4) Vinyl Chloride	1.386	62	56788	17.467	ug/l	94
5) Bromomethane	1.624	94	36986	17.705	ug/l	90
6) Chloroethane	1.703	64	38769	18.059	ug/l	98
7) Trichlorofluoromethane	1.904	101	94285	18.756	ug/l	95
8) Diethyl Ether	2.148	74	37007	20.686	ug/l	91
9) 1,1,2-Trichlorotrifluo...	2.343	101	58955	18.405	ug/l	99
10) Methyl Iodide	2.465	142	52083	14.924	ug/l	96
11) Tert butyl alcohol	2.959	59	43944	177.505	ug/l	98
12) 1,1-Dichloroethene	2.337	96	57190	18.459	ug/l	97
13) Acrolein	2.251	56	22775	85.144	ug/l	99
14) Allyl chloride	2.678	41	110451	20.023	ug/l	97
15) Acrylonitrile	3.074	53	188801	131.906	ug/l	100
16) Acetone	2.386	43	148354	126.527	ug/l	97
17) Carbon Disulfide	2.532	76	120078	14.778	ug/l	99
18) Methyl Acetate	2.715	43	98174	31.767	ug/l	98
19) Methyl tert-butyl Ether	3.129	73	214440	24.509	ug/l	95
20) Methylene Chloride	2.806	84	70769	20.411	ug/l	96
21) trans-1,2-Dichloroethene	3.111	96	60517	19.088	ug/l	94
22) Diisopropyl ether	3.769	45	244989	22.989	ug/l	86
23) Vinyl Acetate	3.733	43	949249	118.894	ug/l	98
24) 1,1-Dichloroethane	3.623	63	124626	20.505	ug/l	98
25) 2-Butanone	4.568	43	229538	146.731	ug/l	99
26) 2,2-Dichloropropane	4.495	77	78684	17.395	ug/l	99
27) cis-1,2-Dichloroethene	4.507	96	79691	20.588	ug/l	97
28) Bromochloromethane	4.916	49	66634	22.215	ug/l	99
29) Tetrahydrofuran	5.019	42	145915	146.324	ug/l	100
30) Chloroform	5.105	83	132078	21.271	ug/l	97
31) Cyclohexane	5.476	56	101777	18.863	ug/l	91
32) 1,1,1-Trichloroethane	5.397	97	106398	20.510	ug/l	98
36) 1,1-Dichloropropene	5.708	75	82305	18.250	ug/l	99
37) Ethyl Acetate	4.733	43	94489	24.600	ug/l	100
38) Carbon Tetrachloride	5.690	117	91545	19.201	ug/l	100
39) Methylcyclohexane	7.385	83	92852	16.459	ug/l	95
40) Benzene	6.050	78	259677	19.037	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
 Data File : VX047008.D
 Acq On : 15 Jul 2025 17:27
 Operator : JC/MD
 Sample : VX0715MBS01
 Misc : 5.00g/10mL/100uL/5.00mL/MSVOA_X/MEOH
 ALS Vial : 22 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VX0715MBS01

Manual Integrations
 APPROVED

Reviewed By : John Carlone 07/16/2025
 Supervised By : Mahesh Dadoda 07/16/2025

Quant Time: Jul 16 02:31:05 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jul 03 05:51:11 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	4.934	41	52238	25.494	ug/l	97
42) 1,2-Dichloroethane	6.098	62	98578	21.282	ug/l	97
43) Isopropyl Acetate	6.348	43	153077	26.019	ug/l	99
44) Trichloroethene	7.135	130	63034	17.752	ug/l	90
45) 1,2-Dichloropropane	7.433	63	68703	19.935	ug/l	98
46) Dibromomethane	7.586	93	50323	21.075	ug/l	99
47) Bromodichloromethane	7.824	83	103025	20.207	ug/l	98
48) Methyl methacrylate	7.696	41	79981	26.328	ug/l	96
49) 1,4-Dioxane	7.665	88	21099	599.414	ug/l	95
51) 4-Methyl-2-Pentanone	8.573	43	499356	143.816	ug/l	99
52) Toluene	8.720	92	165291	19.555	ug/l	99
53) t-1,3-Dichloropropene	8.982	75	91071	20.015	ug/l	99
54) cis-1,3-Dichloropropene	8.372	75	104940	20.205	ug/l	98
55) 1,1,2-Trichloroethane	9.153	97	69352	22.028	ug/l	97
56) Ethyl methacrylate	9.116	69	106150	24.360	ug/l	94
57) 1,3-Dichloropropane	9.311	76	117075	21.595	ug/l	99
58) 2-Chloroethyl Vinyl ether	8.244	63	253989	103.445	ug/l	99
59) 2-Hexanone	9.427	43	346461	150.433	ug/l	98
60) Dibromochloromethane	9.525	129	77313	20.519	ug/l	99
61) 1,2-Dibromoethane	9.610	107	69174	21.877	ug/l	100
64) Tetrachloroethene	9.275	164	53700	18.446	ug/l	91
65) Chlorobenzene	10.079	112	187598	19.845	ug/l	99
66) 1,1,1,2-Tetrachloroethane	10.159	131	65320	20.555	ug/l	99
67) Ethyl Benzene	10.195	91	323232	19.966	ug/l	99
68) m/p-Xylenes	10.299	106	242507	39.753	ug/l	97
69) o-Xylene	10.640	106	120939	20.523	ug/l	98
70) Styrene	10.652	104	210170	20.846	ug/l	99
71) Bromoform	10.799	173	51088	21.621	ug/l #	100
73) Isopropylbenzene	10.963	105	319788	20.257	ug/l	99
74) N-amyl acetate	10.841	43	139275	25.963	ug/l	99
75) 1,1,2,2-Tetrachloroethane	11.207	83	104930	24.173	ug/l	99
76) 1,2,3-Trichloropropane	11.238	75	82718m	23.839	ug/l	
77) Bromobenzene	11.195	156	78387	19.935	ug/l	97
78) n-propylbenzene	11.305	91	376050	19.756	ug/l	100
79) 2-Chlorotoluene	11.366	91	224998	20.018	ug/l	100
80) 1,3,5-Trimethylbenzene	11.451	105	262881	20.494	ug/l	100
81) trans-1,4-Dichloro-2-b...	11.018	75	28051	21.694	ug/l	94
82) 4-Chlorotoluene	11.451	91	266427	20.541	ug/l	99
83) tert-Butylbenzene	11.713	119	270361	20.407	ug/l	98
84) 1,2,4-Trimethylbenzene	11.750	105	266157	20.529	ug/l	96
85) sec-Butylbenzene	11.890	105	335566	20.089	ug/l	99
86) p-Isopropyltoluene	12.006	119	278194	19.888	ug/l	98
87) 1,3-Dichlorobenzene	11.969	146	146844	19.968	ug/l	98
88) 1,4-Dichlorobenzene	12.036	146	149851	19.579	ug/l	98
89) n-Butylbenzene	12.329	91	254344	19.352	ug/l	99
90) Hexachloroethane	12.536	117	46041	18.567	ug/l	97
91) 1,2-Dichlorobenzene	12.335	146	143748	20.171	ug/l	98
92) 1,2-Dibromo-3-Chloropr...	12.939	75	20503	27.005	ug/l	92
93) 1,2,4-Trichlorobenzene	13.585	180	97474	20.134	ug/l	98
94) Hexachlorobutadiene	13.725	225	33211	18.190	ug/l	97
95) Naphthalene	13.774	128	311130	24.388	ug/l	100
96) 1,2,3-Trichlorobenzene	13.957	180	94198	20.592	ug/l	97

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX047008.D
Acq On : 15 Jul 2025 17:27
Operator : JC/MD
Sample : VX0715MBSD01
Misc : 5.00g/10mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial : 22 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VX0715MBSD01

Manual Integrations
APPROVED

Reviewed By :John Carlone 07/16/2025
Supervised By :Mahesh Dadoda 07/16/2025

Quant Time: Jul 16 02:31:05 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 03 05:51:11 2025
Response via : Initial Calibration

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

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

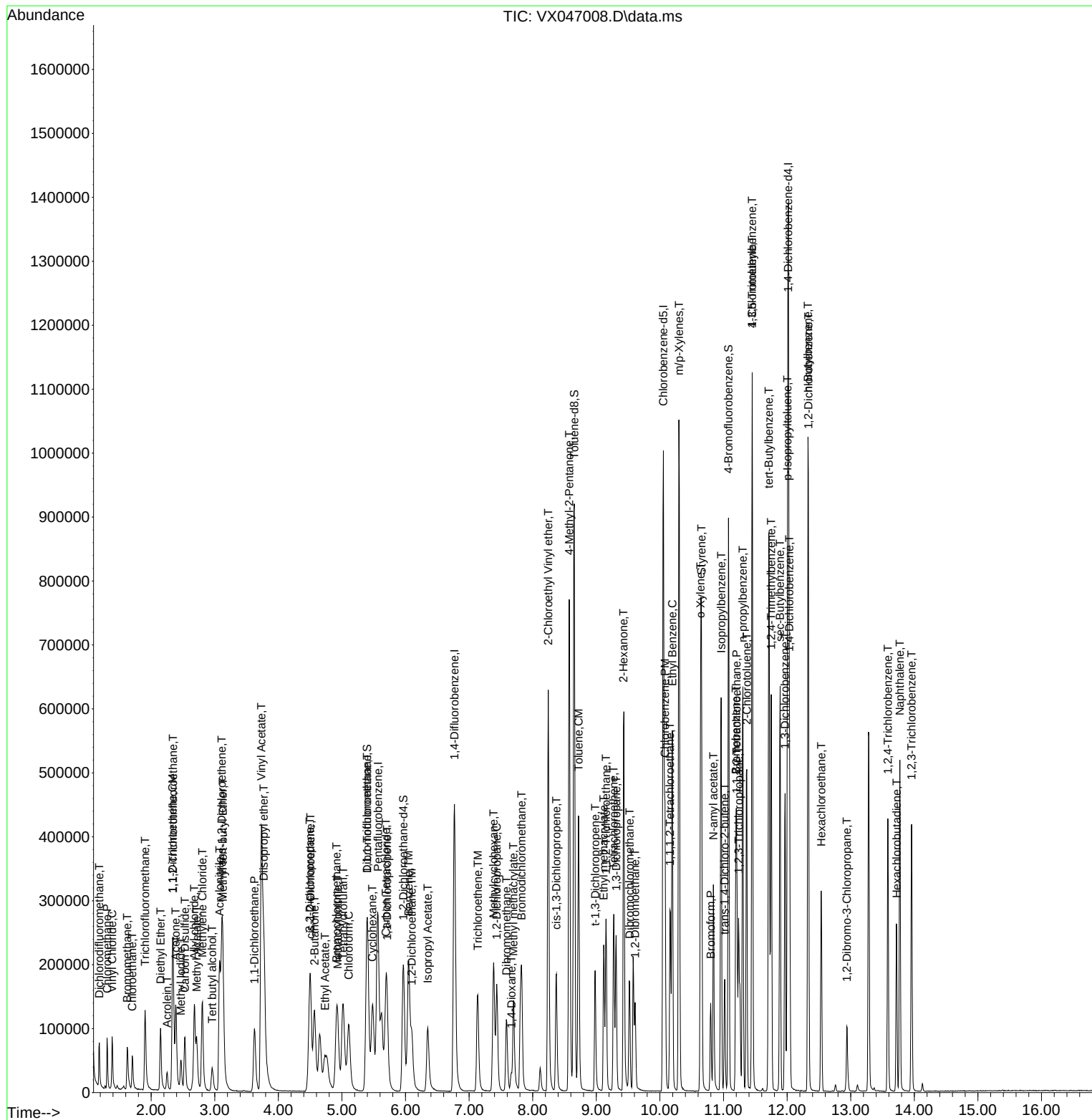

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Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071525\
Data File : VX047008.D
Acq On    : 15 Jul 2025  17:27
Operator  : JC/MD
Sample    : VX0715MBS01
Misc      : 5.00g/10mL/100uL/5.00mL/MSVOA_X/MEOH
ALS Vial  : 22   Sample Multiplier: 1
```

Instrument :
MSVOA_X
ClientSampleId :
VX0715MBSD01

Manual Integrations APPROVED

Reviewed By :John Carlone 07/16/2025
Supervised By :Mahesh Dadoda 07/16/2025

Quant Time: Jul 16 02:31:05 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X070225W.M
Quant Title : SW846 8260
QLast Update : Thu Jul 03 05:51:11 2025
Response via : Initial Calibration



Manual Integration Report

Sequence:	VX070225	Instrument	MSVOA_x

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC001	VX046860.D	1,2,3-Trichloropropane	JOHN	7/3/2025 8:43:52 AM	MMDadoda	7/3/2025 3:09:42 PM	Peak Integrated by Software
VSTDICC001	VX046860.D	1,4-Dichlorobenzene	JOHN	7/3/2025 8:43:52 AM	MMDadoda	7/3/2025 3:09:42 PM	Peak Integrated by Software
VSTDICC001	VX046860.D	1,4-Dioxane	JOHN	7/3/2025 8:43:52 AM	MMDadoda	7/3/2025 3:09:42 PM	Peak Integrated by Software
VSTDICC001	VX046860.D	2-Butanone	JOHN	7/3/2025 8:43:52 AM	MMDadoda	7/3/2025 3:09:42 PM	Peak Integrated by Software
VSTDICC001	VX046860.D	Acrylonitrile	JOHN	7/3/2025 8:43:52 AM	MMDadoda	7/3/2025 3:09:42 PM	Peak Integrated by Software
VSTDICC001	VX046860.D	Carbon Tetrachloride	JOHN	7/3/2025 8:43:52 AM	MMDadoda	7/3/2025 3:09:42 PM	Peak Integrated by Software
VSTDICC001	VX046860.D	Ethyl Acetate	JOHN	7/3/2025 8:43:52 AM	MMDadoda	7/3/2025 3:09:42 PM	Peak Integrated by Software
VSTDICC001	VX046860.D	Methacrylonitrile	JOHN	7/3/2025 8:43:52 AM	MMDadoda	7/3/2025 3:09:42 PM	Peak Integrated by Software
VSTDICC005	VX046861.D	1,2,3-Trichloropropane	JOHN	7/3/2025 8:43:57 AM	MMDadoda	7/3/2025 3:09:44 PM	Peak Integrated by Software
VSTDICC020	VX046862.D	1,2,3-Trichloropropane	JOHN	7/3/2025 8:44:01 AM	MMDadoda	7/3/2025 3:09:46 PM	Peak Integrated by Software
VSTDICCC050	VX046863.D	1,2,3-Trichloropropane	JOHN	7/3/2025 8:44:05 AM	MMDadoda	7/3/2025 3:09:47 PM	Peak Integrated by Software
VSTDICC100	VX046864.D	1,2,3-Trichloropropane	JOHN	7/3/2025 8:44:09 AM	MMDadoda	7/3/2025 3:09:49 PM	Peak Integrated by Software
VSTDICC150	VX046865.D	1,2,3-Trichloropropane	JOHN	7/3/2025 8:44:13 AM	MMDadoda	7/3/2025 3:09:51 PM	Peak Integrated by Software



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

Manual Integration Report

Sequence:	VX070225	Instrument	MSVOA_x

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICV050	VX046867.D	1,2,3-Trichloropropane	JOHN	7/3/2025 8:44:17 AM	MMDadoda	7/3/2025 3:09:53 PM	Peak Integrated by Software

Manual Integration Report

Sequence:

VX071525

Instrument

MSVOA_x

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC050	VX046988.D	1,2,3-Trichloropropane	JOHN	7/16/2025 8:45:14 AM	MMDadoda	7/16/2025 1:43:58 PM	Peak Integrated by Software
VX0715MBS01	VX047007.D	1,2,3-Trichloropropane	JOHN	7/16/2025 8:45:55 AM	MMDadoda	7/16/2025 1:44:32 PM	Peak Integrated by Software
VX0715MBSD01	VX047008.D	1,2,3-Trichloropropane	JOHN	7/16/2025 8:45:59 AM	MMDadoda	7/16/2025 1:44:33 PM	Peak Integrated by Software
Q2600-03	VX047011.D	n-Butylbenzene	JOHN	7/16/2025 8:46:17 AM	MMDadoda	7/16/2025 1:44:36 PM	Peak Integrated by Software
Q2600-07	VX047012.D	n-Butylbenzene	JOHN	7/16/2025 8:46:21 AM	MMDadoda	7/16/2025 1:44:37 PM	Peak Integrated by Software
Q2600-11	VX047013.D	n-Butylbenzene	JOHN	7/16/2025 8:46:26 AM	MMDadoda	7/16/2025 1:44:39 PM	Peak Integrated by Software
VSTDCCC050	VX047014.D	1,2,3-Trichloropropane	JOHN	7/16/2025 8:46:31 AM	MMDadoda	7/16/2025 1:44:41 PM	Peak Integrated by Software

Manual Integration Report

Sequence:

vx071625

Instrument

MSVOA_x

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC050	VX047016.D	1,2,3-Trichloropropane	MMDadoda	7/17/2025 8:20:31 AM	Sam	7/17/2025 8:23:21 AM	Peak Integrated by Software
VX0716MBS01	VX047019.D	1,2,3-Trichloropropane	MMDadoda	7/17/2025 8:20:33 AM	Sam	7/17/2025 8:23:25 AM	Peak Integrated by Software
Q2600-11DL	VX047021.D	Cyclohexane	MMDadoda	7/17/2025 8:20:37 AM	Sam	7/17/2025 8:23:34 AM	Peak Integrated by Software
Q2600-11DL	VX047021.D	n-Butylbenzene	MMDadoda	7/17/2025 8:20:37 AM	Sam	7/17/2025 8:23:34 AM	Peak Integrated by Software
VSTDCCC050	VX047036.D	1,2,3-Trichloropropane	MMDadoda	7/17/2025 8:20:56 AM	Sam	7/17/2025 8:24:03 AM	Peak Integrated by Software

Instrument ID: **MSVOA_X**

Daily Analysis Runlog For Sequence/QC Batch ID # VX070225

Review By	John Carlone	Review On	7/3/2025 8:44:30 AM
Supervise By	Maresh Dadoda	Supervise On	7/3/2025 3:09:59 PM
SubDirectory	VX070225	HP Acquire Method	HP Processing Method 82X070225W.M
STD. NAME	STD REF.#		
Tune/Reschk	VP134642		
Initial Calibration Stds	VP134633,VP134634,VP134635,VP134638,VP134639,VP134640		
CCC			
Internal Standard/PEM			
ICV/I.BLK	VP134641		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VX046859.D	02 Jul 2025 11:12	JC/MD	Ok
2	VSTDIC001	VX046860.D	02 Jul 2025 12:11	JC/MD	Ok,M
3	VSTDIC005	VX046861.D	02 Jul 2025 12:37	JC/MD	Ok,M
4	VSTDIC020	VX046862.D	02 Jul 2025 13:18	JC/MD	Ok,M
5	VSTDIC050	VX046863.D	02 Jul 2025 13:39	JC/MD	Ok,M
6	VSTDIC100	VX046864.D	02 Jul 2025 14:10	JC/MD	Ok,M
7	VSTDIC150	VX046865.D	02 Jul 2025 14:31	JC/MD	Ok,M
8	VIBLK	VX046866.D	02 Jul 2025 14:53	JC/MD	Ok
9	VSTDICV050	VX046867.D	02 Jul 2025 15:14	JC/MD	Ok,M

M : Manual Integration

Instrument ID: **MSVOA_X**

Daily Analysis Runlog For Sequence/QC Batch ID # VX071525

Review By	John Carlone	Review On	7/16/2025 8:51:22 AM
Supervise By	Maresh Dadoda	Supervise On	7/16/2025 1:45:00 PM
SubDirectory	VX071525	HP Acquire Method	HP Processing Method 82X070225W.M
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	VP134768		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP134769,VP134770		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VX046987.D	15 Jul 2025 08:29	JC/MD	Ok
2	VSTDCCC050	VX046988.D	15 Jul 2025 10:18	JC/MD	Ok,M
3	VX0715MBL01	VX046989.D	15 Jul 2025 10:39	JC/MD	Ok
4	VX0715WBL01	VX046990.D	15 Jul 2025 11:00	JC/MD	Ok
5	VX0715WBS01	VX046991.D	15 Jul 2025 11:21	JC/MD	Ok,M
6	VX0715WBSD01	VX046992.D	15 Jul 2025 11:47	JC/MD	Ok,M
7	Q2578-01RE	VX046993.D	15 Jul 2025 12:08	JC/MD	Confirms
8	Q2578-05RE	VX046994.D	15 Jul 2025 12:30	JC/MD	Confirms
9	Q2578-09RE	VX046995.D	15 Jul 2025 12:51	JC/MD	Confirms
10	Q2578-13RE	VX046996.D	15 Jul 2025 13:12	JC/MD	Confirms
11	Q2578-17RE	VX046997.D	15 Jul 2025 13:33	JC/MD	Confirms
12	Q2579-01RE	VX046998.D	15 Jul 2025 13:54	JC/MD	Confirms
13	Q2579-05RE	VX046999.D	15 Jul 2025 14:16	JC/MD	Confirms
14	Q2565-01	VX047000.D	15 Jul 2025 14:37	JC/MD	Ok
15	Q2602-01	VX047001.D	15 Jul 2025 14:58	JC/MD	Ok
16	Q2571-04	VX047002.D	15 Jul 2025 15:20	JC/MD	Ok,M
17	Q2571-08	VX047003.D	15 Jul 2025 15:41	JC/MD	Ok
18	Q2586-04	VX047004.D	15 Jul 2025 16:02	JC/MD	Ok,M
19	Q2561-07	VX047005.D	15 Jul 2025 16:24	JC/MD	Ok
20	PB168804TB	VX047006.D	15 Jul 2025 16:45	JC/MD	Ok,M
21	VX0715MBS01	VX047007.D	15 Jul 2025 17:06	JC/MD	Ok,M

Instrument ID: **MSVOA_X**

Daily Analysis Runlog For Sequence/QC Batch ID # VX071525

Review By	John Carlone	Review On	7/16/2025 8:51:22 AM
Supervise By	Maresh Dadoda	Supervise On	7/16/2025 1:45:00 PM
SubDirectory	VX071525	HP Acquire Method	HP Processing Method 82X070225W.M
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	VP134768		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP134769,VP134770		

22	VX0715MBSD01	VX047008.D	15 Jul 2025 17:27	JC/MD	Ok,M
23	Q2503-03ME	VX047009.D	15 Jul 2025 17:49	JC/MD	Ok
24	Q2503-04ME	VX047010.D	15 Jul 2025 18:10	JC/MD	Ok
25	Q2600-03	VX047011.D	15 Jul 2025 18:31	JC/MD	Ok,M
26	Q2600-07	VX047012.D	15 Jul 2025 18:52	JC/MD	Ok,M
27	Q2600-11	VX047013.D	15 Jul 2025 19:13	JC/MD	Dilution
28	VSTDCCC050	VX047014.D	15 Jul 2025 19:34	JC/MD	Ok,M

M : Manual Integration

Instrument ID: **MSVOA_X**

Daily Analysis Runlog For Sequence/QC Batch ID # VX071625

Review By	Maresh Dadoda	Review On	7/17/2025 8:21:30 AM
Supervise By	Semsettin Yesilyurt	Supervise On	7/17/2025 8:24:32 AM
SubDirectory	VX071625	HP Acquire Method	HP Processing Method 82X070225W.M
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	VP134774		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP134775,VP134777		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VX047015.D	16 Jul 2025 08:58	JC/MD	Ok
2	VSTDCCC050	VX047016.D	16 Jul 2025 09:26	JC/MD	Ok,M
3	VX0716MBL01	VX047017.D	16 Jul 2025 10:13	JC/MD	Ok
4	VX0716WBL01	VX047018.D	16 Jul 2025 10:34	JC/MD	Ok
5	VX0716MBS01	VX047019.D	16 Jul 2025 11:02	JC/MD	Ok,M
6	VX0716MBSD01	VX047020.D	16 Jul 2025 11:29	JC/MD	Ok,M
7	Q2600-11DL	VX047021.D	16 Jul 2025 11:50	JC/MD	Ok,M
8	VX0716WBS01	VX047022.D	16 Jul 2025 12:11	JC/MD	Ok,M
9	VX0716WBSD01	VX047023.D	16 Jul 2025 12:38	JC/MD	Ok,M
10	PB168848TB	VX047024.D	16 Jul 2025 12:59	JC/MD	Ok,M
11	Q2592-02	VX047025.D	16 Jul 2025 13:20	JC/MD	Ok
12	Q2600-04	VX047026.D	16 Jul 2025 13:42	JC/MD	Ok
13	Q2600-08	VX047027.D	16 Jul 2025 14:03	JC/MD	Ok,M
14	Q2600-12	VX047028.D	16 Jul 2025 14:24	JC/MD	Ok,M
15	Q2605-01	VX047029.D	16 Jul 2025 14:46	JC/MD	Ok,M
16	Q2605-02	VX047030.D	16 Jul 2025 15:07	JC/MD	Ok,M
17	Q2605-03	VX047031.D	16 Jul 2025 15:29	JC/MD	Ok,M
18	Q2605-04	VX047032.D	16 Jul 2025 15:51	JC/MD	Ok,M
19	Q2609-04	VX047033.D	16 Jul 2025 16:12	JC/MD	Dilution
20	Q2609-08	VX047034.D	16 Jul 2025 16:34	JC/MD	Ok,M
21	Q2614-06	VX047035.D	16 Jul 2025 16:55	JC/MD	Ok

Instrument ID: **MSVOA_X**

Daily Analysis Runlog For Sequence/QC Batch ID # VX071625

Review By	Mahesh Dadoda	Review On	7/17/2025 8:21:30 AM
Supervise By	Semsettin Yesilyurt	Supervise On	7/17/2025 8:24:32 AM
SubDirectory	VX071625	HP Acquire Method	HP Processing Method 82X070225W.M
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	VP134774		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP134775,VP134777		

22	VSTDCCC050	VX047036.D	16 Jul 2025 17:17	JC/MD	Ok,M

M : Manual Integration

Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QC Batch ID # VX070225

Review By	John Carlone	Review On	7/3/2025 8:44:30 AM
Supervise By	Maresh Dadoda	Supervise On	7/3/2025 3:09:59 PM
SubDirectory	VX070225	HP Acquire Method	HP Processing Method 82X070225W.M

STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP134642 VP134633,VP134634,VP134635,VP134638,VP134639,VP134640 VP134641

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VX046859.D	02 Jul 2025 11:12		JC/MD	Ok
2	VSTDICC001	VSTDICC001	VX046860.D	02 Jul 2025 12:11		JC/MD	Ok,M
3	VSTDICC005	VSTDICC005	VX046861.D	02 Jul 2025 12:37	%D Failed for com.#13 in 5 ppb	JC/MD	Ok,M
4	VSTDICC020	VSTDICC020	VX046862.D	02 Jul 2025 13:18		JC/MD	Ok,M
5	VSTDICCC050	VSTDICCC050	VX046863.D	02 Jul 2025 13:39	LR-13	JC/MD	Ok,M
6	VSTDICC100	VSTDICC100	VX046864.D	02 Jul 2025 14:10		JC/MD	Ok,M
7	VSTDICC150	VSTDICC150	VX046865.D	02 Jul 2025 14:31		JC/MD	Ok,M
8	VIBLK	VIBLK	VX046866.D	02 Jul 2025 14:53		JC/MD	Ok
9	VSTDICV050	ICVVX070225	VX046867.D	02 Jul 2025 15:14		JC/MD	Ok,M

M : Manual Integration

Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QC Batch ID # VX071525

Review By	John Carlone	Review On	7/16/2025 8:51:22 AM
Supervise By	Maresh Dadoda	Supervise On	7/16/2025 1:45:00 PM
SubDirectory	VX071525	HP Acquire Method	HP Processing Method 82X070225W.M

STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds	VP134768
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP134769,VP134770

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VX046987.D	15 Jul 2025 08:29		JC/MD	Ok
2	VSTDCCC050	VSTDCCC050	VX046988.D	15 Jul 2025 10:18	CCC fail High com. #25	JC/MD	Ok,M
3	VX0715MBL01	VX0715MBL01	VX046989.D	15 Jul 2025 10:39		JC/MD	Ok
4	VX0715WBL01	VX0715WBL01	VX046990.D	15 Jul 2025 11:00		JC/MD	Ok
5	VX0715WBS01	VX0715WBS01	VX046991.D	15 Jul 2025 11:21		JC/MD	Ok,M
6	VX0715WBSD01	VX0715WBSD01	VX046992.D	15 Jul 2025 11:47		JC/MD	Ok,M
7	Q2578-01RE	WC-A5-01-GRE	VX046993.D	15 Jul 2025 12:08	vial B pH#5.0 Surrogate Fail	JC/MD	Confirms
8	Q2578-05RE	WC-A2-09-GRE	VX046994.D	15 Jul 2025 12:30	vial B pH#5.0 Surrogate Fail	JC/MD	Confirms
9	Q2578-09RE	WC-A2-10-GRE	VX046995.D	15 Jul 2025 12:51	vial B pH#5.0 Surrogate Fail	JC/MD	Confirms
10	Q2578-13RE	WC-A2-11-GRE	VX046996.D	15 Jul 2025 13:12	vial B pH#5.0 Surrogate Fail	JC/MD	Confirms
11	Q2578-17RE	WC-A2-12-GRE	VX046997.D	15 Jul 2025 13:33	vial B pH#5.0 Surrogate Fail	JC/MD	Confirms
12	Q2579-01RE	WC-A2-13-GRE	VX046998.D	15 Jul 2025 13:54	vial B pH#5.0 Surrogate Fail	JC/MD	Confirms
13	Q2579-05RE	WC-A2-14-GRE	VX046999.D	15 Jul 2025 14:16	vial B pH#5.0 Surrogate Fail	JC/MD	Confirms
14	Q2565-01	MOO-25-0192-0193	VX047000.D	15 Jul 2025 14:37	vial A pH<2 foamy sample	JC/MD	Ok
15	Q2602-01	FRAC-TANK-266380	VX047001.D	15 Jul 2025 14:58	vial A pH<2	JC/MD	Ok
16	Q2571-04	TP-18	VX047002.D	15 Jul 2025 15:20	vial A pH#5.0	JC/MD	Ok,M
17	Q2571-08	TP-17	VX047003.D	15 Jul 2025 15:41	vial A pH#5.0	JC/MD	Ok
18	Q2586-04	TP-16	VX047004.D	15 Jul 2025 16:02	vial A pH#5.0	JC/MD	Ok,M

Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QC Batch ID # VX071525

Review By	John Carlone	Review On	7/16/2025 8:51:22 AM
Supervise By	Maresh Dadoda	Supervise On	7/16/2025 1:45:00 PM
SubDirectory	VX071525	HP Acquire Method	HP Processing Method 82X070225W.M
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	VP134768		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP134769,VP134770		

19	Q2561-07	AUD-25-0117	VX047005.D	15 Jul 2025 16:24	vial A pH#5.0	JC/MD	Ok
20	PB168804TB	PB168804TB	VX047006.D	15 Jul 2025 16:45		JC/MD	Ok,M
21	VX0715MBS01	VX0715MBS01	VX047007.D	15 Jul 2025 17:06		JC/MD	Ok,M
22	VX0715MBSD01	VX0715MBSD01	VX047008.D	15 Jul 2025 17:27		JC/MD	Ok,M
23	Q2503-03ME	GCAP2ME	VX047009.D	15 Jul 2025 17:49		JC/MD	Ok
24	Q2503-04ME	GCAP3ME	VX047010.D	15 Jul 2025 18:10		JC/MD	Ok
25	Q2600-03	TRENCH	VX047011.D	15 Jul 2025 18:31		JC/MD	Ok,M
26	Q2600-07	STOCK-PILE	VX047012.D	15 Jul 2025 18:52		JC/MD	Ok,M
27	Q2600-11	END-OF-TRENCH	VX047013.D	15 Jul 2025 19:13	Need 20X	JC/MD	Dilution
28	VSTDCCC050	VSTDCCC050EC	VX047014.D	15 Jul 2025 19:34		JC/MD	Ok,M

M : Manual Integration

Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QC Batch ID # VX071625

Review By	Maresh Dadoda	Review On	7/17/2025 8:21:30 AM
Supervise By	Semsettin Yesilyurt	Supervise On	7/17/2025 8:24:32 AM
SubDirectory	VX071625	HP Acquire Method	HP Processing Method 82X070225W.M
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	VP134774		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP134775,VP134777		

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VX047015.D	16 Jul 2025 08:58		JC/MD	Ok
2	VSTDCCC050	VSTDCCC050	VX047016.D	16 Jul 2025 09:26		JC/MD	Ok,M
3	VX0716MBL01	VX0716MBL01	VX047017.D	16 Jul 2025 10:13		JC/MD	Ok
4	VX0716WBL01	VX0716WBL01	VX047018.D	16 Jul 2025 10:34		JC/MD	Ok
5	VX0716MBS01	VX0716MBS01	VX047019.D	16 Jul 2025 11:02		JC/MD	Ok,M
6	VX0716MBSD01	VX0716MBSD01	VX047020.D	16 Jul 2025 11:29		JC/MD	Ok,M
7	Q2600-11DL	END-OF-TRENCHDL	VX047021.D	16 Jul 2025 11:50		JC/MD	Ok,M
8	VX0716WBS01	VX0716WBS01	VX047022.D	16 Jul 2025 12:11		JC/MD	Ok,M
9	VX0716WBSD01	VX0716WBSD01	VX047023.D	16 Jul 2025 12:38		JC/MD	Ok,M
10	PB168848TB	PB168848TB	VX047024.D	16 Jul 2025 12:59		JC/MD	Ok,M
11	Q2592-02	WC-SOIL-20250711	VX047025.D	16 Jul 2025 13:20	vial A pH#5.0	JC/MD	Ok
12	Q2600-04	TRENCH	VX047026.D	16 Jul 2025 13:42	vial A pH#5.0	JC/MD	Ok
13	Q2600-08	STOCK-PILE	VX047027.D	16 Jul 2025 14:03	vial A pH#5.0	JC/MD	Ok,M
14	Q2600-12	END-OF-TRENCH	VX047028.D	16 Jul 2025 14:24	vial A pH#5.0	JC/MD	Ok,M
15	Q2605-01	V908	VX047029.D	16 Jul 2025 14:46	vial A pH#5.0	JC/MD	Ok,M
16	Q2605-02	VB16135	VX047030.D	16 Jul 2025 15:07	vial A pH#5.0	JC/MD	Ok,M
17	Q2605-03	VB15061	VX047031.D	16 Jul 2025 15:29	vial A pH#5.0	JC/MD	Ok,M
18	Q2605-04	V897	VX047032.D	16 Jul 2025 15:51	vial A pH#5.0	JC/MD	Ok,M

Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QC Batch ID # VX071625

Review By	Mahesh Dadoda	Review On	7/17/2025 8:21:30 AM
Supervise By	Semsettin Yesilyurt	Supervise On	7/17/2025 8:24:32 AM
SubDirectory	VX071625	HP Acquire Method	HP Processing Method 82X070225W.M
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	VP134774		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP134775,VP134777		

19	Q2609-04	710-C	VX047033.D	16 Jul 2025 16:12	vial A pH#5.0 Need 5X	JC/MD	Dilution
20	Q2609-08	709-A	VX047034.D	16 Jul 2025 16:34	vial A pH#5.0	JC/MD	Ok,M
21	Q2614-06	HR-MCN-COMP-01	VX047035.D	16 Jul 2025 16:55	vial A pH#5.0	JC/MD	Ok
22	VSTDCCC050	VSTDCCC050EC	VX047036.D	16 Jul 2025 17:17		JC/MD	Ok,M

M : Manual Integration



PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 7/15/2025

OVENTEMP IN Celsius(°C): 108
Time IN: 17:25
In Date: 07/14/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 104
Time OUT: 08:25
Out Date: 07/15/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % solids-oven

QC:LB136466

Lab ID	Client SampleID	Dish #	Dish Wt(g) (A)	Sample Wt(g)	Dish + Sample Wt(g) (B)	Dish+Dry Sample Wt(g) (C)	% Solid	Comments
Q2595-01	CHRT-24849	1	1.14	10.85	11.99	6.00	44.8	GEL Matrix
Q2595-02	CHRT-24849-E2	2	1.18	10.69	11.87	3.99	26.3	GEL Matrix
Q2597-01	CHRT-26899	3	1.18	10.21	11.39	11.25	98.6	
Q2597-02	CHRT-26899-E2	4	1.19	10.48	11.67	11.55	98.9	
Q2598-01	OK-01-071425	5	1.14	10.30	11.44	11.11	96.8	
Q2598-02	OK-01-071425-E2	6	1.17	10.23	11.4	11.02	96.3	
Q2599-01	A1	7	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q2599-02	A2	8	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q2599-03	B1	9	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q2600-01	TRENCH	10	1.12	10.41	11.53	8.98	75.5	
Q2600-03	TRENCH	11	1.19	10.80	11.99	9.85	80.2	
Q2600-05	STOCK-PILE	12	1.13	10.53	11.66	9.78	82.1	
Q2600-07	STOCK-PILE	13	1.15	10.84	11.99	10.22	83.7	
Q2600-09	END-OF-TRENCH	14	1.15	10.49	11.64	10.09	85.2	
Q2600-11	END-OF-TRENCH	15	1.17	10.62	11.79	10.18	84.8	
Q2601-01	7-14-25-1	16	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q2601-02	7-14-25-2	17	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q2601-03	7-14-25-3	18	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q2601-04	7-14-25-4	19	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q2601-05	7-14-25-5	20	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q2601-06	7-14-25-6	21	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q2601-07	7-14-25-7	22	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q2601-08	7-14-25-8	23	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q2601-09	7-14-25-9	24	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q2601-10	7-14-25-10	25	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q2601-11	7-14-25-11	26	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q2601-12	7-14-25-12	27	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q2601-13	7-14-25-13	28	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE



PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 7/15/2025

OVENTEMP IN Celsius(°C): 108
Time IN: 17:25
In Date: 07/14/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 104
Time OUT: 08:25
Out Date: 07/15/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % solids-oven

QC:LB136466

Lab ID	Client SampleID	Dish #	Dish Wt (g) (A)	Sample Wt (g)	Dish + Sample Wt (g) (B)	Dish+Dry Sample Wt (g) (C)	% Solid	Comments
Q2601-14	7-14-25-14	29	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q2601-15	7-14-25-15	30	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE

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

WORKLIST(Hardcopy Internal Chain)

136466

WorkList Name : %1-071425 WorkList ID : 190685 Department : Wet-Chemistry Date : 07-14-2025 07:38:22

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2600-01	TRENCH	Solid	Percent Solids	Cool 4 deg C	TACO01	D41	07/14/2025	Chemtech -SO
Q2600-03	TRENCH	Solid	Percent Solids	Cool 4 deg C	TACO01	D41	07/14/2025	Chemtech -SO
Q2600-05	STOCK-PILE	Solid	Percent Solids	Cool 4 deg C	TACO01	D41	07/14/2025	Chemtech -SO
Q2600-07	STOCK-PILE	Solid	Percent Solids	Cool 4 deg C	TACO01	D41	07/14/2025	Chemtech -SO
Q2600-09	END-OF-TRENCH	Solid	Percent Solids	Cool 4 deg C	TACO01	D41	07/14/2025	Chemtech -SO
Q2600-11	END-OF-TRENCH	Solid	Percent Solids	Cool 4 deg C	TACO01	D41	07/14/2025	Chemtech -SO
Q2595-01	CHRT-24849	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	07/14/2025	Chemtech -SO
Q2595-02	CHRT-24849-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	07/14/2025	Chemtech -SO
Q2597-01	CHRT-26899	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	07/14/2025	Chemtech -SO
Q2597-02	CHRT-26899-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	07/14/2025	Chemtech -SO
Q2599-01	A1	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	07/14/2025	Chemtech -SO
Q2599-02	A2	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	07/14/2025	Chemtech -SO
Q2601-12	7-14-25-12	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	07/14/2025	Chemtech -SO
Q2601-13	7-14-25-13	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	07/14/2025	Chemtech -SO
Q2601-14	7-14-25-14	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	07/14/2025	Chemtech -SO
Q2601-15	7-14-25-15	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	07/14/2025	Chemtech -SO
Q2601-06	7-14-25-6	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	07/14/2025	Chemtech -SO
Q2601-07	7-14-25-7	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	07/14/2025	Chemtech -SO
Q2601-08	7-14-25-8	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	07/14/2025	Chemtech -SO
Q2601-09	7-14-25-9	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	07/14/2025	Chemtech -SO
Q2601-10	7-14-25-10	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	07/14/2025	Chemtech -SO

Date/Time 07/14/25 15:15
 Raw Sample Received by: CP
 Raw Sample Relinquished by: CP

Date/Time 07/14/25 15:30
 Raw Sample Received by: CP
 Raw Sample Relinquished by: CP

WORKLIST(Hardcopy Internal Chain)

W 136466

WorkList Name : %1-071425 WorkList ID : 190685 Department : Wet-Chemistry Date : 07-14-2025 07:38:22

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2601-11	7-14-25-11	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	07/14/2025	Chemtech -SO
Q2599-03	B1	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	07/14/2025	Chemtech -SO
Q2601-01	7-14-25-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	07/14/2025	Chemtech -SO
Q2601-02	7-14-25-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	07/14/2025	Chemtech -SO
Q2601-03	7-14-25-3	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	07/14/2025	Chemtech -SO
Q2601-04	7-14-25-4	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	07/14/2025	Chemtech -SO
Q2601-05	7-14-25-5	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	07/14/2025	Chemtech -SO
Q2598-01	OK-01-071425	Solid	Percent Solids	Cool 4 deg C	PSEG05	D41	07/14/2025	Chemtech -SO
Q2598-02	OK-01-071425-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	D41	07/14/2025	Chemtech -SO

Date/Time 07/14/25 15:15
 Raw Sample Received by: SP WPC
 Raw Sample Relinquished by: SP WPC

Date/Time 07/14/25 17:30
 Raw Sample Received by: SP WPC
 Raw Sample Relinquished by: SP WPC

Prep Standard - Chemical Standard Summary

Order ID : Q2600

Test : VOC-TCLVOA-10

Prepbatch ID :

Sequence ID/Qc Batch ID: VX071525,vx071625,

Standard ID :

VP133174,VP133935,VP133953,VP134142,VP134149,VP134431,VP134478,VP134768,VP134769,VP134770,VP134774,VP134775,VP134777,

Chemical ID :

V13391,V13706,V14290,V14438,V14440,V14505,V14506,V14527,V14528,V14613,V14626,V14636,V14637,V14638,V14639,V14668,V14671,V14673,V14675,V14708,V14712,V14713,V14748,V14752,V14808,V14822,V14843,V14921,V14929,V15028,V15029,V15030,W3112,

VOC STANDARD PREPARATION LOG

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

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

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

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

VOC STANDARD PREPARATION LOG

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

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

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

VOC STANDARD PREPARATION LOG

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

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
51	8260 Working STD (Acrolein) -first source, 800PPM	VP134431	06/20/2025	07/19/2025	Semsettin Yesilyurt	None	None	Maresh Dadoda
								07/15/2025

FROM 1.00000ml of V15030 + 1.50000ml of V15028 + 1.50000ml of V15029 + 21.00000ml of V14921 = Final Quantity: 25.000 ml

[illegible]

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
589	BFB TUNE CHECK	VP134768	07/15/2025	07/16/2025	John Carlone	None	None	Mahesh Dadoda 07/21/2025
<u>FROM</u> 39.98400ml of W3112 + 0.01600ml of VP133953 = Final Quantity: 40.000 ml								

VOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
620	50 PPB CCC, 8260-Water	VP134769	07/15/2025	07/16/2025	John Carlone	None	None	Mahesh Dadoda 07/21/2025
<u>FROM</u> 39.94450ml of W3112 + 0.00500ml of VP133174 + 0.00500ml of VP134142 + 0.00800ml of VP133935 + 0.01250ml of VP134149 + 0.01250ml of VP134431 + 0.01250ml of VP134478 = Final Quantity: 40.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
620	50 PPB CCC, 8260-Water	VP134770	07/15/2025	07/16/2025	John Carlone	None	None	Mahesh Dadoda 07/21/2025
<u>FROM</u> 39.94450ml of W3112 + 0.00500ml of VP133174 + 0.00500ml of VP134142 + 0.00800ml of VP133935 + 0.01250ml of VP134149 + 0.01250ml of VP134431 + 0.01250ml of VP134478 = Final Quantity: 40.000 ml								

VOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
589	BFB TUNE CHECK	VP134774	07/16/2025	07/17/2025	John Carlone	None	None	Maresh Dadoda
								07/21/2025

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

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
620	50 PPB CCC, 8260-Water	VP134775	07/16/2025	07/17/2025	John Carlone	None	None	Maresh Dadoda
								07/21/2025

FROM 39.94450ml of W3112 + 0.00500ml of VP133174 + 0.00500ml of VP134142 + 0.00800ml of VP133935 + 0.01250ml of VP134149 + 0.01250ml of VP134431 + 0.01250ml of VP134478 = Final Quantity: 40.000 ml

[illegible]

CHEMICAL RECEIPT LOG BOOK

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

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

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30489 / VOA Mix, 8260B Acetates Mix, P&TM, 1mL	A0209618	09/30/2025	06/23/2025 / SAM	08/15/2024 / SAM	V14438

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30489 / VOA Mix, 8260B Acetates Mix, P&TM, 1mL	A0209618	09/30/2025	06/23/2025 / SAM	08/15/2024 / SAM	V14440

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	12/23/2025	06/23/2025 / SAM	09/17/2024 / SAM	V14505

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95317 / Universal VOA Mega Mix (Min order = 5)	021624	12/23/2025	06/23/2025 / SAM	09/17/2024 / SAM	V14506

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	12/23/2025	06/23/2025 / SAM	09/18/2024 / SAM	V14527

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	12/23/2025	06/23/2025 / SAM	09/18/2024 / SAM	V14528

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

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

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

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	V14637

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

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

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

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

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

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	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	12/23/2025	06/23/2025 / SAM	12/17/2024 / SAM	V14708

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	12/23/2025	06/23/2025 / SAM	12/17/2024 / SAM	V14712

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	12/23/2025	06/23/2025 / SAM	12/17/2024 / SAM	V14713

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	12/23/2025	06/23/2025 / SAM	12/17/2024 / SAM	V14748

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	12/23/2025	06/23/2025 / SAM	12/17/2024 / SAM	V14752

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555408 / Custom Standard, Vinyl Acetate Standard w/ Grav [CS 5066-6] TWO SEPARATE	A0220471	12/23/2025	06/23/2025 / SAM	01/08/2025 / SAM	V14808

LOTS

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555408 / Custom Standard, Vinyl Acetate Standard w/ Grav [CS 5066-6] TWO SEPARATE	A0220471	12/23/2025	06/23/2025 / SAM	01/08/2025 / SAM	V14822

LOTS

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30470 / VOA Stock Solution, tert-butanol std, 1mL, P&TM	A0217535	11/12/2025	05/12/2025 / SAM	01/21/2025 / SAM	V14843

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

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	061925	07/19/2025	06/20/2025 / SAM	06/20/2025 / SAM	V15028

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)	061925	07/19/2025	06/20/2025 / SAM	06/20/2025 / SAM	V15029

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	061925	07/19/2025	06/20/2025 / SAM	06/20/2025 / SAM	V15030

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

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis



Material No.: 9077-02
Batch No.: 23I0762004
Manufactured Date: 2023-08-11
Expiration Date: 2026-08-10
Revision No.: 0

Certificate of Analysis

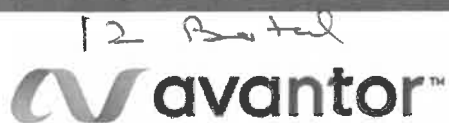
Test	Specification	Result
Assay (CH ₃ OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.5 ppm
Titration Acid (μeq/g)	≤ 0.3	0.2
Titration Base (μeq/g)	≤ 0.10	0.01
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis – Below EPA 8260B CRQL	Conforms	Conforms

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

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

Ken Koehnlein
Sr. Manager, Quality Assurance

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis



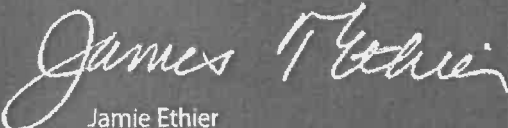
Material No.: 9077-02
Batch No.: 22L0562016
Manufactured Date: 2022-10-26
Expiration Date: 2025-10-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (CH ₃ OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.2 ppm
Titration Acid (μeq/g)	≤ 0.3	0.2
Titration Base (μeq/g)	≤ 0.10	0.03
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis – Below EPA 8260B CRQL	Conforms	Conforms

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

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


Jamie Ethier
Vice President Global Quality



Ree 03117/24

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#: BUTB

Solvent(s): Lot#
Methanol EG359-USQ12Weight(s) shown below were combined and diluted to (mL): 100.0 0.021 Balance Uncertainty
Flask Uncertainty

Formulated By:	Prashant Chauhan	021624
Reviewed By:	Pedro L. Renteria	021624
DATE		

Compound	(K049)	Lot	Dir.	Initial	Initial	Nominal	Purity	Purity	Uncertainty	Target	Actual	Expanded	SDS Information			
	Part Number	Number	Factor	Vol. (mL)	Conc. (µg/mL)	Conc. (µg/mL)	(%)	Uncertainty	Pipette (mL)	Weight(g)	Weight(g)	Actual Conc (µg/mL)	Uncertainty (±) (µg/mL)	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)	or-rat 2480mg/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)	or-rat 700mg/kg
3. Carbon disulfide	(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)	or-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	1478-11-5	N/A	N/A
5. trans-1,4-Dichloro-2-butene	(0486)	MKBP9041V	NA	NA	NA	2000	96.5	0.2	NA	0.20731	0.20746	2001.7	8.4	110-57-6	N/A	N/A
6. Diethyl ether	(0153)	IK18CAS000C	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	or-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)	or-rat 75mg/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)	or-rat 2480mg/kg
10. Methacrylonitrile	(0442)	00427ET	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20221	2001.4	8.2	128-98-7	1 ppm (3mg/m3/8H) (skin)	or-rat 127mg/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)	or-rat 277mg/kg
12. Methyl methacrylate	(0404)	MKGW6137V	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20041	2001.6	8.1	80-62-6	100 ppm (410mg/m3/8H)	or-rat 7872mg/kg
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)	or-rat 780mg/kg
14. 2-Nitropropane	(0461)	HG002JK	NA	NA	NA	2000	97.3	0.2	NA	0.20560	0.20577	2001.6	8.3	78-46-9	10 ppm (35mg/m3/8H)	or-rat 720mg/kg
15. Perchloroethane	(0460)	HGA01	NA	NA	NA	2000	98	0.2	NA	0.20413	0.20430	2001.6	8.3	78-01-7	N/A	N/A
16. 1,1,2-Trichlorotrifluoroethane	(0474)	18990	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20225	2001.8	8.2	78-13-1	1000 ppm (7600mg/m3/8H)	or-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	or-rat 915mg/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	or-rat 848mg/kg
19. cis-1,2-Dichloroethene	35171	101623	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.7	22.9	156-59-2	N/A	N/A
20. trans-1,2-Dichloroethene	35171	101623	0.05	5.00	40003.4	2000	NA	NA	0.017	NA	NA	1999.6	23.0	156-60-5	N/A	or-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	or-rat 820mg/kg
22. 1,1-Dichloroethane	32251	102023	0.10	10.00	20001.6	2000	NA	NA	0.042	NA	NA	1999.7	20.4	75-35-4	1 ppm (4mg/m3/8H)	or-rat 200mg/kg
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)	or-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)	or-rat 2350mg/kg
25. Chloroform	95321	020724	0.10	10.00	20004.0	2000	NA	NA	0.042	NA	NA	1999.8	20.5	67-68-3	60 ppm (240mg/m3) (CL)	or-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	or-rat 106mg/kg
27. 1,1-Dichloroethane	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
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	2019.8	20.8	127-18-4	25 ppm (170mg/m3/8H) (final)	or-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)	or-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	or-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)	or-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)	or-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)	or-rat 1847mg/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	or-rat 3600mg/kg
36. 1,1-Dichloropropene	35161	112322	0.05	5.00	40012.1	2000	NA	NA	0.017	NA	NA	2000.1	28.7	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)	or-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	830-20-6	N/A	or-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)	or-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)	or-rat 936mg/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)	or-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)	or-rat 149.8mg/kg
45. Benzene	35162	050823	0.05	5.00	40006.0	2000	NA	NA	0.017	NA	NA	1999.7	22.9	71-43-2	1 ppm	or-rat 4894mg/kg
46. Bromobenzene	35162	050823	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	104-51-8	N/A	or-rat 2699mg/kg
47. n-Butyl 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)	or-rat >2000mg/kg
48. Ethyl benzene	35162	050823	0.05	5.00	40004.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	99-87-6	N/A	or-rat 4750mg/kg
49. p-Isopropyl toluene	35162	050823	0.05	5.00	40005.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	91-20-3	10 ppm (50mg/m3/8H)	or-rat 490mg/kg
50. Naphthalene	35162	050823	0.05	5.00	40004.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	100-42-5	100 ppm	or-rat 5000mg/kg
51. Styrene	35162	050823	0.05	5.00	40004.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-98-3	200 ppm	or-rat 5000mg/kg
52. Toluene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.6	23.0	87-81-6	5 ppm (CL) (40mg/m3)	or-rat 756mg/kg
53. 1,2,3-Trichlorobenzene	35162	050823	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.8	22.9	95-63-6	N/A	or-rat 5g/kg
54. 1,2,4-Trichlorobenzene	35162	050823	0.05	5.00	40006.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	108-87-6	N/A	or-rat 5000mg/kg
55. 1,2,4-Trimethylbenzene	35162	050823	0.05	5.00	40001.6	2000	NA	NA	0.017	NA	NA	1999.8	22.9	87-81-6	N/A	or-rat 1390mg/kg
56. 1,3,5-Trimethylbenzene	35162	050823	0.05	5.00	40006.7	2000	NA	NA	0.017	NA	NA	1999.6	23.0	95-63-6	N/A	or-rat 5g/kg
57. m-Xylene	35162	050823	0.05	5.00	40005.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-87-8	N/A	or-rat 5000mg/kg
58. tert-Butyl benzene	35163	101923	0.05	5.00	40001.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-38-3	100 ppm (435mg/m3/8H)	or-rat 5g/kg
59. sec-Butyl benzene	35163	101923	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.8	22.9	98-06-6	N/A	N/A
60. Chlorobenzene	35163	101923	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.6	22.9	135-98-6	N/A	or-rat 2240mg/kg
61. 2-Chlorotoluene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.5	22.9	108-90-7	75 ppm (350mg/m3/8H)	or-rat 2290mg/kg
62. 4-Chlorotoluene	35163	101923	0.05	5.00	40003.3	2000	NA	NA	0.017	NA	NA	1999.7	22.9	95-49-8	50 ppm (250mg/m3/8H)	or-rat 3900mg/kg
63. 1,2-Dichlorobenzene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	106-43-4	N/A	or-rat 2100mg/kg
64. 1,3-Dichlorobenzene	35163	101923	0.05	5.00	40001.7	2000	NA	NA	0.017	NA	NA	1999.7	22.9	95-50-1	50 ppm (300mg/m3) (CL)	or-rat 500mg/kg
65. 1,4-Dichlorobenzene	35163	101923	0.05	5.00												

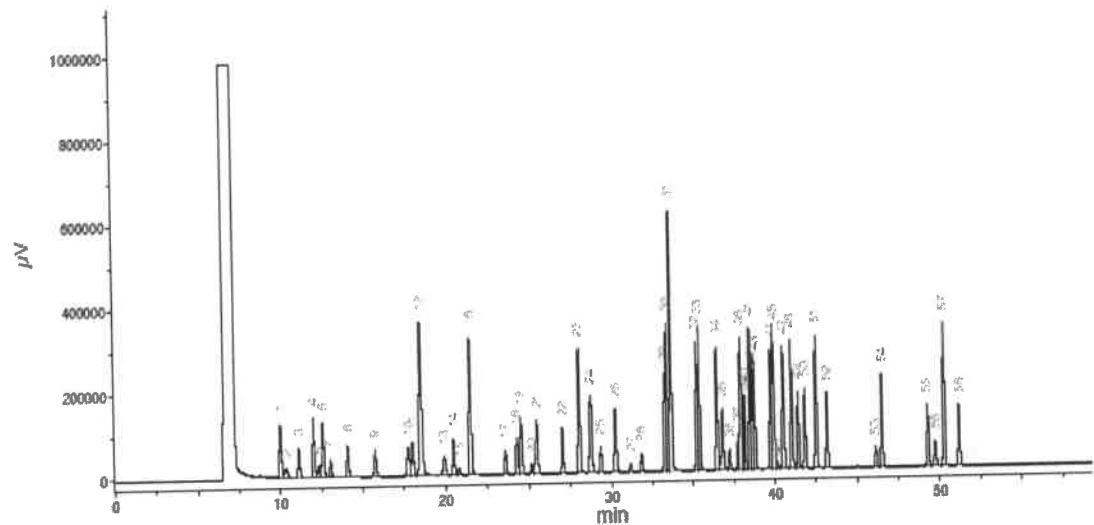


Run 16, "P95317 L021624 (2000µg/mL in MeOH)"

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

Comments

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



Peak #	Name	FID RT (min.)
1	Ether	9.97
2	1,1,2-Trichloro-1,2,2-trifluoroethane	10.53
3	1,1-Dichloroethane	11.10
4	Acetonitrile	12.60
5	Iodomethane	12.91
6	Aryl chloride	12.96
7	Carbon disulfide/Methylene chloride	13.04
8	trans-1,2-Dichloroethane	14.07
9	1,1-Dichloroethane	15.74
10	2,2-Dichloropropane	17.74
11	cis-1,2-Dichloroethane	18.00
12	Methoxyvinyltoluene/Methyl acrylate/Chloroform	18.49
13	Isobutanol/1,1,1-Trichloroethane	18.91
14	1,1-Dichloropropane	20.46
15	Carbon tetrachloride	20.79
16	Benzene/1,2-Dichloroethane	21.48
17	Trichloroethane	23.88
18	1,2-Dichloropropane	24.52
19	Methyl methacrylate	25.13
20	Bromochloropropane	25.46
21	Dibromomethane/2,2-Dichloropropane	27.07
22	cis-1,2-Dichloroethane	28.03
23	Toluene	28.73
24	Ethyl methacrylate/Trans-1,2-Dichloropropane	29.34
25	1,1,2-Trichloroethane	30.34
26	Tetrachloroethane/1,2-Dichloropropane	31.16
27	Dibromochloromethane	31.84
28	1,2-Dibromomethane	33.06
29	Chlorobenzene	33.40
30	Ethylbenzene/1,1,1,2-Tetrachloroethane	33.85
31	m-Xylene/p-Xylene	35.33
32	o-Xylene	35.70
33	Styrene	35.70
34	Isopropylbenzene/Bromofarm	36.48
35	cis-1,4-Dichloro-3-butene	36.80
36	1,1,2-Trichloropropane	37.23
37	n-Propylbenzene	37.77
38	trans-1,4-Dichloro-3-butene	37.92
39	Bromobenzene	38.05
40	1,3,5-Trimethylbenzene	38.14
41	2-Chlorobenzene	38.50
42	4-Chlorobenzene	38.63
43	tert-Butylbenzene	38.77
44	sec-Butylbenzene	39.76
45	1,2,4-Trimethylbenzene	40.17
46	1,2-Dichlorobenzene	40.52
47	p-Isopropyltoluene	41.02
48	1,3-Dichlorobenzene	41.42
49	1,4-Dichlorobenzene	41.83
50	n-Butylbenzene	42.52
51	1,2-Dichloropropane	42.18
52	1,2-Dichloro-3-chloropropane	46.12
53	Nitrobenzene	46.40
54	1,2,4-Trifluorobenzene	49.28
55	Hexachlorocyclopentadiene	49.72
56	Naphthalene	50.56
57	1,2,3-Trichlorobenzene	51.16

Safety Data Sheet (SDS)

GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY ANALYTICAL STANDARD DISSOLVED IN METHANOL

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

Section II - Hazards Identification

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

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



Signal Word: DANGER

Section III - Composition

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

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

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

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

Section V. FIREFIGHTING MEASURES

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

Section VI. ACCIDENTAL RELEASE MEASURES

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

Section VII. HANDLING AND STORAGE

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

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Section IX - Physical/Chemical Characteristics

Boiling Point	65°C	Specific Gravity (H ₂ O = 1)	0.79
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6
Solubility in Water	COMPLETE		
Appearance and Odor	CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.		

Section X. STABILITY AND REACTIVITY

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

Section XI. TOXICOLOGICAL INFORMATION

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

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

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

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
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.



Ree 03117/24

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#: BUTB

Solvent(s): Lot#
Methanol EG359-USQ12Weight(s) shown below were combined and diluted to (mL): 100.0 0.021 Balance Uncertainty
Flask Uncertainty

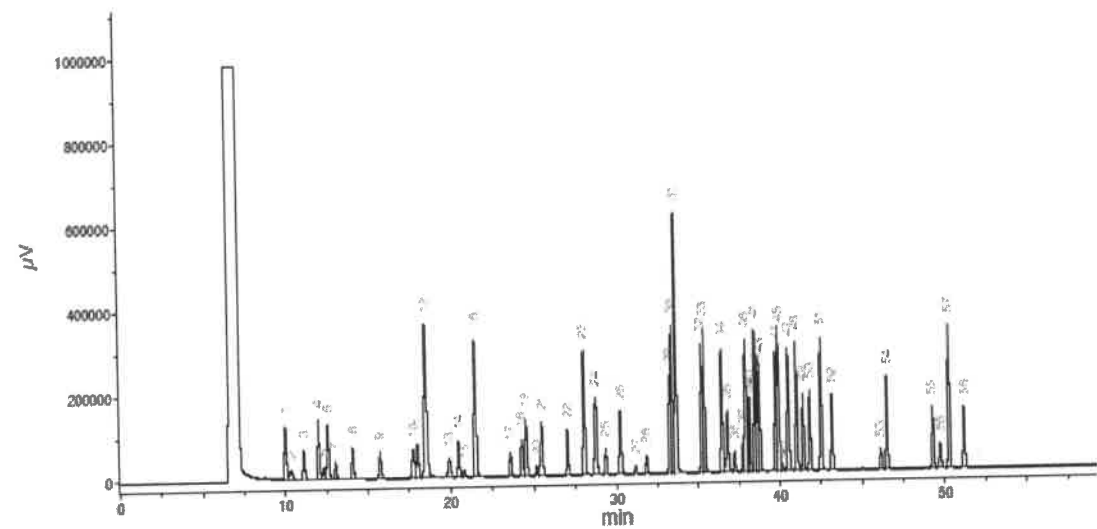
Formulated By:	Prashant Chauhan	021624
Reviewed By:	Pedro L. Renteria	021624
DATE		

Compound	(K049)	Lot	Dil.	Initial	Initial	Nominal	Purity	Purity	Uncertainty	Target	Actual	Actual	Expanded	SDS Information		
	Part Number	Number	Factor	Vol. (mL)	Conc. (µg/mL)	Conc. (µg/mL)	(%)	Uncertainty	Pipette (mL)	Weight(g)	Weight(g)	Conc (µg/mL)	Uncertainty	(Solvent Safety Info. On Attached pg.)	OSHA PEL (TWL)	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)	or-rat 2480mg/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)	or-rat 700mg/kg
3. Carbon disulfide	(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)	or-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	1478-11-5	N/A	N/A
5. trans-1,4-Dichloro-2-butene	(0486)	MKBP6041V	NA	NA	NA	2000	96.5	0.2	NA	0.20731	0.20746	2001.7	8.4	110-57-6	N/A	N/A
6. Diethyl ether	(0153)	IK18CAS000C	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	or-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)	or-rat 75mg/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)	or-rat 2480mg/kg
10. Methacrylonitrile	(0442)	00427ET	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20221	2001.4	8.2	128-98-7	1 ppm (3mg/m3/8H) (skin)	or-rat 127mg/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)	or-rat 277mg/kg
12. Methyl methacrylate	(0404)	MKGW6137V	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20041	2001.6	8.1	80-62-6	100 ppm (410mg/m3/8H)	or-rat 7872mg/kg
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)	or-rat 780mg/kg
14. 2-Nitropropane	(0461)	HG002JK	NA	NA	NA	2000	97.3	0.2	NA	0.20560	0.20577	2001.6	8.3	78-46-9	10 ppm (35mg/m3/8H)	or-rat 720mg/kg
15. Perchloroethane	(0460)	14A001	NA	NA	NA	2000	98	0.2	NA	0.20413	0.20430	2001.6	8.3	78-01-7	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	78-13-1	1000 ppm (7600mg/m3/8H)	or-rat 435g/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	or-rat 915mg/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	or-rat 848mg/kg
19. cis-1,2-Dichloroethene	35171	101623	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.7	22.9	156-59-2	N/A	N/A
20. trans-1,2-Dichloroethene	35171	101623	0.05	5.00	40003.2	2000	NA	NA	0.017	NA	NA	1999.6	23.0	156-60-5	N/A	or-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	or-rat 820mg/kg
22. 1,1-Dichloroethane	32261	102023	0.10	10.00	20001.6	2000	NA	NA	0.042	NA	NA	1999.8	20.5	75-35-4	1 ppm (4mg/m3/8H)	or-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)	or-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)	or-rat 2350mg/kg
25. Chloroform	95321	020724	0.10	10.00	20024.0	2000	NA	NA	0.042	NA	NA	2001.3	20.5	67-68-3	60 ppm (240mg/m3) (CL)	or-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	or-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	74-95-3	N/A	or-rat 108mg/kg
28. 2,2-Dichloropropane	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.5	75-34-3	100 ppm	or-rat 725mg/kg
29. Tetrachloroethene	95321	020724	0.10	10.00	20201.1	2000	NA	NA	0.042	NA	NA	1999.8	20.4	594-20-7	N/A	N/A
30. 1,1,1-Trichloroethane	95321	020724	0.10	10.00	20003.0	2000	NA	NA	0.042	NA	NA	2019.8	20.8	127-18-4	25 ppm (170mg/m3/8H) (final)	or-rat 2629mg/kg
31. 1,2-Dibromo-3-chloropropane	35161	112322	0.05	5.00	40018.5	2000	NA	NA	0.017	NA	NA	1999.8	20.5	71-55-6	350 ppm (1900mg/m3/8H)	or-rat 10300mg/kg
32. 1,2-Dibromoethane	35161	112322	0.05	5.00	40024.8	2000	NA	NA	0.017	NA	NA	2000.3	22.9	86-12-8	0.001 ppm	or-rat 170mg/kg
33. 1,2-Dichloroethane	35161	112322	0.05	5.00	40018.0	2000	NA	NA	0.017	NA	NA	2000.7	22.9	108-93-4	20 ppm (8H)	or-rat 108mg/kg
34. 1,2-Dichloropropane	35161	112322	0.05	5.00	40051.0	2000	NA	NA	0.017	NA	NA	2000.4	22.9	107-06-2	50 ppm (8H)	or-rat 670mg/kg
35. 1,3-Dichloropropane	35161	112322	0.05	5.00	40005.9	2000	NA	NA	0.017	NA	NA	2002.0	22.9	78-87-5	75 ppm (350mg/m3/8H)	or-rat 1947mg/kg
36. 1,1-Dichloropropene	35161	112322	0.05	5.00	40012.1	2000	NA	NA	0.017	NA	NA	1999.8	22.9	142-28-9	N/A	or-rat 3600mg/kg
37. cis-1,3-Dichloropropene	35161	112322	0.05	5.00	40012.1	2000	NA	NA	0.017	NA	NA	2000.0	28.7	563-58-6	N/A	N/A
38. trans-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
39. Hexachloro-1,3-butadiene	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
40. 1,1,1,2-Tetrachloroethane	35161	112322	0.05	5.00	40011.9	2000	NA	NA	0.017	NA	NA	2000.6	29.7	87-68-3	0.02 ppm (0.24mg/m3/8H)	or-rat 82mg/kg
41. 1,1,2,2-Tetrachloroethane	35161	112322	0.05	5.00	40007.5	2000	NA	NA	0.017	NA	NA	2000.1	22.9	830-20-6	N/A	or-rat 670mg/kg
42. 1,1,2-Trichloroethane	35161	112322	0.05	5.00	40007.5	2000	NA	NA	0.017	NA	NA	1999.9	22.9	79-34-5	5 ppm (35mg/m3/8H) (skin)	or-rat 800mg/kg
43. Trichloroethene	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)	or-rat 936mg/kg
44. 1,2,3-Trichloropropane	35161	112322	0.05	5.00	40029.0	2000	NA	NA	0.017	NA	NA	2000.9	22.9	79-01-6	50 ppm (270mg/m3/8H)	or-mus 2402mg/kg
45. Benzene	35162	050823	0.05	5.00	40006.0	2000	NA	NA	0.017	NA	NA	1999.9	22.9	96-18-4	10 ppm (60mg/m3/8H)	or-rat 149.8mg/kg
46. Bromobenzene	35162	050823	0.05	5.00	40006.9	2000	NA	NA	0.017	NA	NA	1999.7	22.9	71-43-2	1 ppm	or-rat 4894mg/kg
47. n-Butyl benzene	35162	050823	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-88-1	N/A	or-rat 2699mg/kg
48. Ethyl benzene	35162	050823	0.05	5.00	40004.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	104-51-8	N/A	N/A
49. p-Isopropyl toluene	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)	or-rat >2000mg/kg
50. Naphthalene	35162	050823	0.05	5.00	40005.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	99-87-6	N/A	or-rat 4750mg/kg
51. Styrene	35162	050823	0.05	5.00	40004.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	91-20-3	10 ppm (50mg/m3/8H)	or-rat 490mg/kg
52. Toluene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.7	22.9	100-42-5	100 ppm	or-rat 5000mg/kg
53. 1,2,3-Trichlorobenzene	35162	050823	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-88-3	200 ppm	or-rat 5000mg/kg
54. 1,2,4-Trichlorobenzene	35162	050823	0.05	5.00	40006.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	87-81-6	N/A	or-mus 1390mg/kg
55. 1,2,4-Trimethylbenzene	35162	050823	0.05	5.00	40001.6	2000	NA	NA	0.017	NA	NA	1999.8	22.9	120-82-1	5 ppm (CL) (40mg/m3)	or-rat 756mg/kg
56. 1,3,5-Trimethylbenzene	35162	050823	0.05	5.00	40006.7	2000	NA	NA	0.017	NA	NA	1999.8	23.0	95-63-6	N/A	or-rat 5g/kg
57. m-Xylene	35162	050823	0.05	5.00	40005.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-87-8	N/A	or-rat 5000mg/kg
58. tert-Butyl benzene	35163	101923	0.05	5.00	40001.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-38-3	100 ppm (435mg/m3/8H)	or-rat 5g/kg
59. sec-Butyl benzene	35163	101923	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.8	22.9	98-06-6	N/A	N/A
60. Chlorobenzene	35163	101923	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.8	22.9	135-98-8	N/A	or-rat 2240mg/kg
61. 2-Chlorotoluene	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)	or-rat 2290mg/kg
62. 4-Chlorotoluene	35163	101923	0.05	5.00	40003.3	2000	NA	NA	0.017	NA	NA	1999.5	22.9	95-49-8	50 ppm (250mg/m3/8H)	or-rat 3900mg/kg
63. 1,2-Dichlorobenzene	35163	101923	0.05	5.00	40003.3	2000	NA	NA	0.017	NA	NA	1999.7	22.9	106-43-4	N/A	or-rat 2100mg/kg
64. 1,3-Dichlorobenzene	35163	101923	0.05	5.00	40001.7	2000	NA	NA	0.017	NA	NA	1999.7	22.9	95-50-1	50 ppm (300mg/m3) (CL)	or-rat 500mg/kg
65. 1,4-Dichlorobenzene	35163	101923	0													

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

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

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



Peak #	Name	FID RT (min.)
1	Ether	9.97
2	1,1,2-Trichloro-1,2,2-trifluoroethane	10.53
3	1,1-Dichloroethane	11.10
4	Acetonitrile	12.60
5	Iodomethane	12.91
6	Allyl chloride	13.56
7	Carbon disulfide/Methylene chloride	13.94
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	Methoxyvinylene/Methyl acrylate/Chloroform	18.49
13	Isobutene/1,1,1-Trichloroethane	18.91
14	1,1-Dichloropropane	20.46
15	Carbon tetrachloride	20.79
16	Benzene/1,2-Dichloroethane	21.48
17	Trichloroethene	23.88
18	1,2-Dichloropropane	24.52
19	Methyl methacrylate	25.13
20	Bromochloropropane	25.46
21	Dibromomethane/2-Pentopropane	27.07
22	cis-1,2-Dichloroethene	28.03
23	Toluene	28.73
24	Ethyl methacrylate/Trans-1,2-Dichloropropane	29.34
25	1,1,2-Trichloroethane	30.34
26	Tetrachloroethane/1,2-Dichloropropane	31.16
27	Dibromochloromethane	32.84
28	1,2-Dibromomethane	33.26
29	Chlorobenzene	33.40
30	Ethylbenzene/1,1,1,2-Tetrachloroethane	33.85
31	m-Xylene/p-Xylene	35.33
32	o-Xylene	35.70
33	Styrene	35.70
34	Isopropylbenzene/Bromofarm	36.48
35	cis-1,4-Dichloro-3-butene	36.80
36	1,1,2-Trichloropropane	37.23
37	1,2,2-Trichloropropane	37.77
38	n-Propylbenzene	37.92
39	trans-1,4-Dichloro-3-butene	38.05
40	Bromobenzene	38.14
41	1,3,5-Trimethylbenzene	38.50
42	Chlorobenzene	38.63
43	4-Chlorobenzene	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-Isopropylbenzene	41.02
49	1,3-Trichlorobenzene	41.42
50	1,4-Dichlorobenzene	41.83
51	n-Butylbenzene	42.52
52	1,2-Dichlorobenzene	42.58
53	1,2-Dibromo-3-chloropropane	46.12
54	Nitrobenzene	46.40
55	1,2,4-Trifluorobenzene	49.28
56	Hexachlorocyclopentadiene	49.72
57	Naphthalene	50.56
58	1,2,3-Trichlorobenzene	51.16

Safety Data Sheet (SDS)

GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY ANALYTICAL STANDARD DISSOLVED IN METHANOL

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

Section II - Hazards Identification

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

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



Signal Word: DANGER

Section III - Composition

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

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

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

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

Section V. FIREFIGHTING MEASURES

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

Section VI. ACCIDENTAL RELEASE MEASURES

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

Section VII. HANDLING AND STORAGE

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

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Section IX - Physical/Chemical Characteristics

Boiling Point	65°C	Specific Gravity (H ₂ O = 1)	0.79
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6
Solubility in Water	COMPLETE		
Appearance and Odor	CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.		

Section X. STABILITY AND REACTIVITY

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

Section XI. TOXICOLOGICAL INFORMATION

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

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

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

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

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

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

Section XV. REGULATORY INFORMATION

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

Section XVI. Misc. INFORMATION

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



Certified Reference Material CRM



Dec 09/17/24

CERTIFIED WEIGHT REPORT

Part Number:

91980

Lot Number:

091424

Description:

Acrolein

Solvent(s):

Water

Lot#

072324Q

Expiration Date:

101424

Recommended Storage:

Refrigerate (4 °C)

Nominal Concentration (µg/mL):

5000

NIST Test ID#:

6UTB

5E-05 Balance Uncertainty

0.001 Flask Uncertainty

10.0

Weight(s) shown below were combined and diluted to (mL):

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	(Solvent Safety Info. On Attached pg.)	CAS#	OSHA PEL (TWA)	LD50

1. Acrolein	5	103755V10F	5000	97	0.5	0.05186	0.05175	5008.9	52.5	107-02-8	0.1 ppm	ori-rat 46mg/kg

Method: GC/MSD-1, Detector: Mass Selective Detector (Scan mode). Columns: Vocol (60m X 0.25mm ID X 1.5µm film thickness), Oven Profile: Temp. 1 = 35°C (Time 1 = 0min.), Temp. 2 = 200°C (Time 2 = 8.75 min.), Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. Analyst: Pedro Rentas, NOTE: Due to the instability of acrolein in solution, all solutions thereof, should be used immediately. Long term storage is not recommended. Please contact our technical department if further information is required.

TIC: [BSB2]79005.D

Scan 232 (8.927 min): [BSB2]79005.D

Abundance

27

250000

8.93

200000

50000

56

150000

40000

30000

20000

50000

10000

37

Time-->

10.00 15.00 20.00 25.00 30.00 35.00 40.00 45.00 50.00 55.00 60.00

m/z-->

0

20

30

40

50

60

70

80

85

119

158

169

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



Certified Reference Material CRM



Rec 09/17/24

CERTIFIED WEIGHT REPORT

Part Number:

91980

Lot Number:

091424

Description:

Acrolein

Solvent(s):

Water

Lot#

072324Q

Expiration Date:

101424

Recommended Storage:

Refrigerate (4 °C)

Nominal Concentration (µg/mL):

5000

NIST Test ID#:

6UTB

Weight(s) shown below were combined and diluted to (mL):

10.0

5E-05 Balance Uncertainty

0.001 Flask Uncertainty

Formulated By:	Justin Dippold	DATE	091424
Reviewed By:	Pedro L. Rentas	DATE	091424

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	(Solvent Safety Info. On Attached pg.)	OSHA PEL (TWA)	LD50

1. Acrolein	5	103755V10F	5000	97	0.5	0.05166	0.05175	5008.9	52.5	107-02-8	0.1 ppm	ori-rat 46mg/kg

Method: GC/MSD-1, Detector: Mass Selective Detector (Scan mode). Columns: Vocol (60m X 0.25mm ID X 1.5µm film thickness), Oven Profile: Temp. 1 = 35°C (Time 1 = 0min.), Temp. 2 = 200°C (Time 2 = 8.75 min.), Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. Analyst: Pedro Rentas, NOTE: Due to the instability of acrolein in solution, all solutions thereof, should be used immediately. Long term storage is not recommended. Please contact our technical department if further information is required.

TIC: [BSB2]79005.D

Scan 232 (8.927 min): [BSB2]79005.D

Abundance

27

250000

8.93

200000

C=CC=O

50000

56

150000

40000

30000

100000

20000

50000

10000

Time-->

0

10.00 15.00 20.00 25.00 30.00 35.00 40.00 45.00 50.00 55.00 60.00

m/z-->

0

20

30

40

50

60

70

80

85

119

158

169

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



Dec 12/16/24
20 vial

CERTIFIED WEIGHT REPORT

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

Solvent(s): Lot#
Methanol EJ143-US

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

✓ 14630 to
✓ 14649

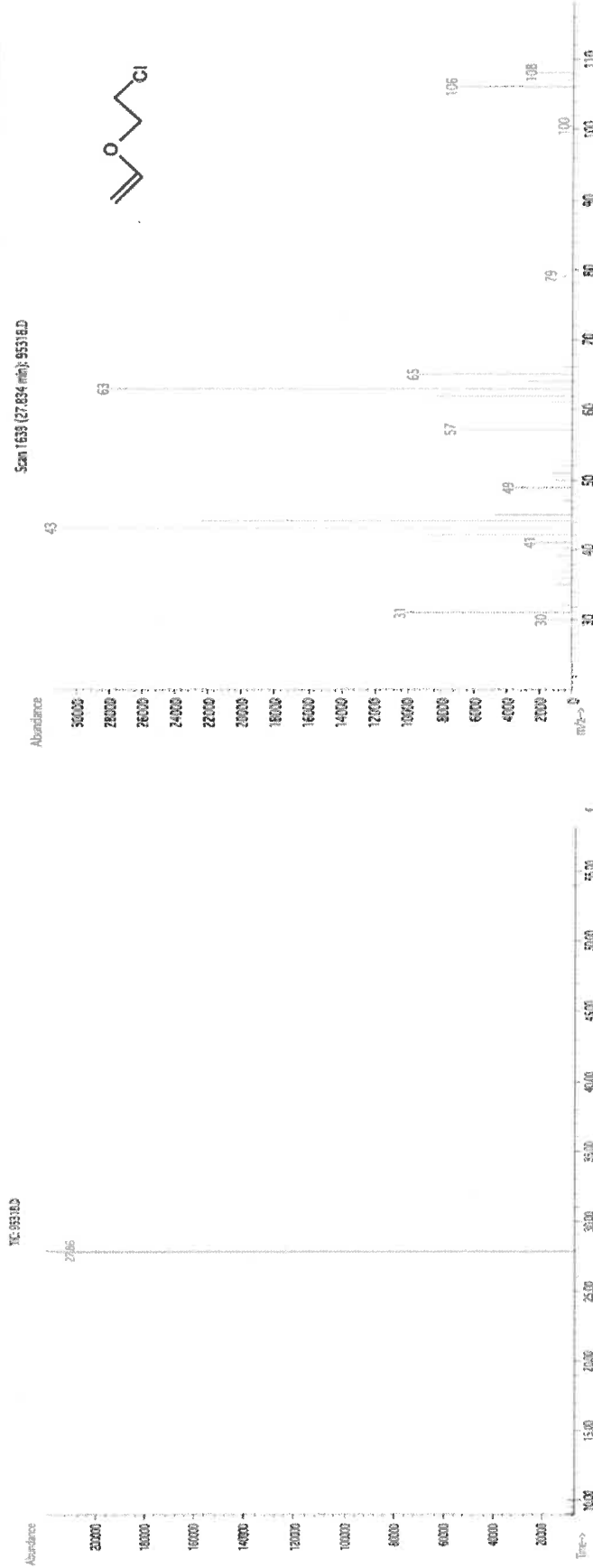
Weight(s) shown below were combined and diluted to (mL):

5E-05 Balance Uncertainty
0.001 Flask Uncertainty

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

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

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



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

GHS/OSHA Compliant

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 shield
P302, 332	If on skin, wash with soap and water	P305, 351, 338	If in eyes, remove contacts, rinse with water



Signal Word: DANGER

Section III - Composition

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

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

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

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

Section V. FIREFIGHTING MEASURES

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

Section VI. ACCIDENTAL RELEASE MEASURES

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

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. 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 (H ₂ O = 1)	0.79
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6
Solubility in Water	COMPLETE		
Appearance and Odor	CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.		

Section X. STABILITY AND REACTIVITY

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

Section XI. TOXICOLOGICAL INFORMATION

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

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

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

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

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

Section XV. REGULATORY INFORMATION

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

Section XVI. Misc. INFORMATION

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



See 1216124
20 vial

CERTIFIED WEIGHT REPORT

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

Solvent(s): Lot#
Methanol EJ143-US

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

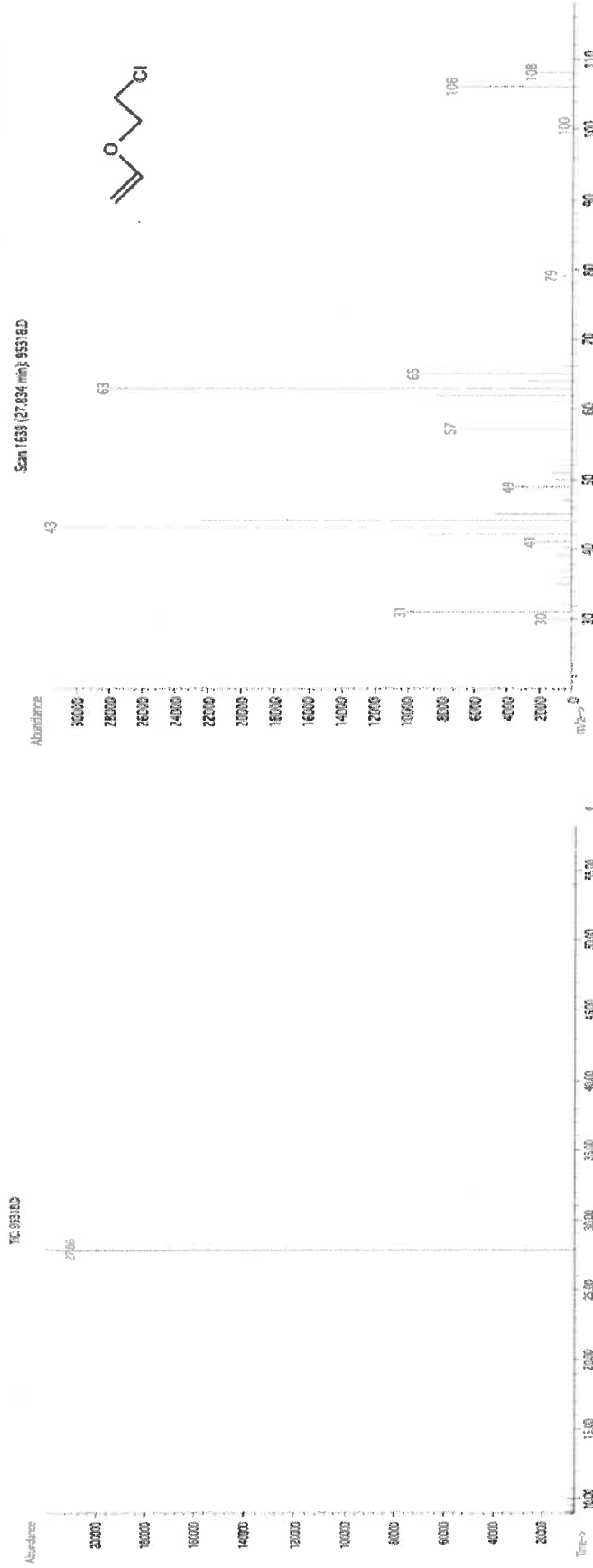
✓ 14630 to
✓ 14649

Weight(s) shown below were combined and diluted to (mL):

5E-05 Balance Uncertainty
0.001 Flask Uncertainty

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

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



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

Safety Data Sheet (SDS)

GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY ANALYTICAL STANDARD DISSOLVED IN METHANOL

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

Section II - Hazards Identification

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

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



Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))		% (optional)
Methanol	METHYL ALCOHOL	> 97

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

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

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

Section V. FIREFIGHTING MEASURES

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

Section VI. ACCIDENTAL RELEASE MEASURES

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

Section VII. HANDLING AND STORAGE

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

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Section IX - Physical/Chemical Characteristics

Boiling Point	65°C	Specific Gravity (H ₂ O = 1)	0.79
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6
Solubility in Water	COMPLETE		
Appearance and Odor	CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.		

Section X. STABILITY AND REACTIVITY

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

Section XI. TOXICOLOGICAL INFORMATION

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

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

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

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

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

Section XV. REGULATORY INFORMATION

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

Section XVI. Misc. INFORMATION

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



Dec 12/16/24
20 vial

CERTIFIED WEIGHT REPORT

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

Solvent(s): Lot#
Methanol EJ143-US

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

✓ 14630 to
✓ 14649

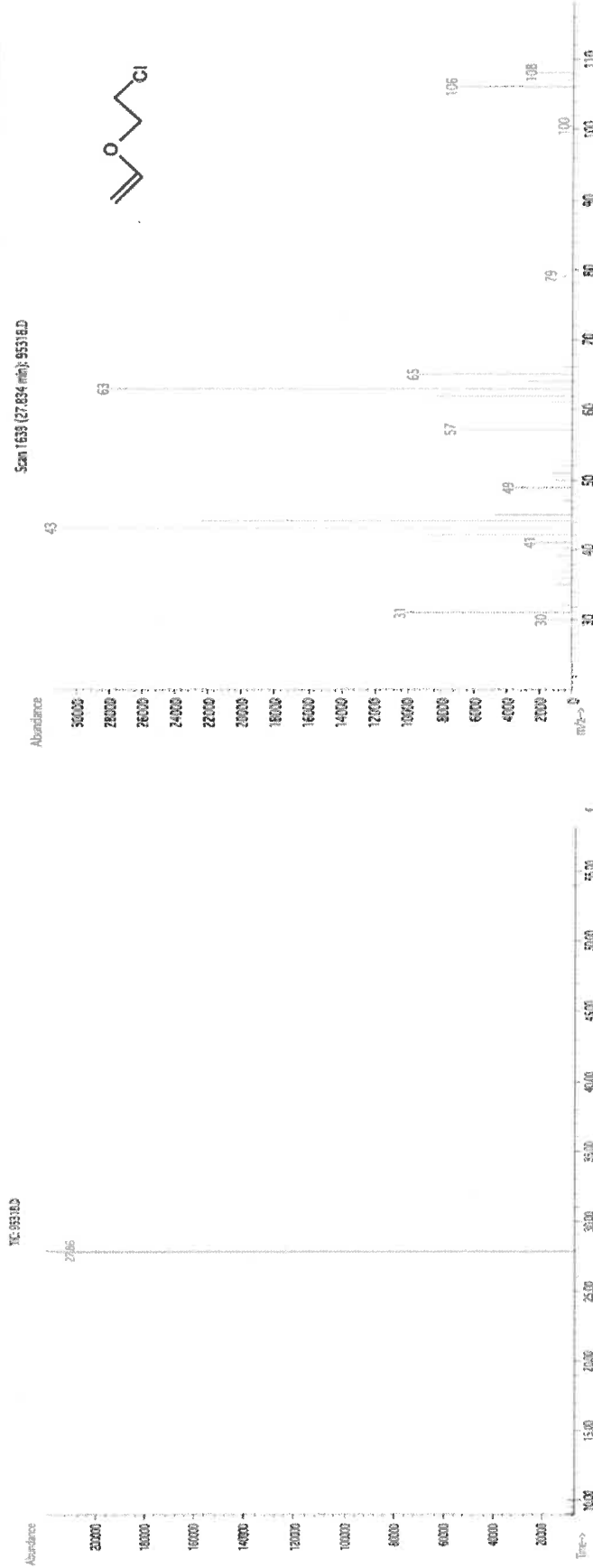
Weight(s) shown below were combined and diluted to (mL):

5E-05 Balance Uncertainty
0.001 Flask Uncertainty

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Purity Uncertainty	Target Weight (g)	Actual Weight (g)	Actual Conc (µg/mL)	Expanded Uncertainty (±) (µg/mL)	(Solvent Safety Info. On Attached pg.)	OSHA PEL (TWA)	LD50

1. 2-Chloroethyl vinyl ether	74	MKCD0033	10000	99	0.2	0.50536	0.50550	10002.9	40.5	110-75-8	N/A	or-rat 250mg/kg

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



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

Safety Data Sheet (SDS)

GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY ANALYTICAL STANDARD DISSOLVED IN METHANOL

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

Section II - Hazards Identification

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

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



Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))		% (optional)
Methanol	METHYL ALCOHOL	> 97

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

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

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

Section V. FIREFIGHTING MEASURES

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

Section VI. ACCIDENTAL RELEASE MEASURES

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

Section VII. HANDLING AND STORAGE

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

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Section IX - Physical/Chemical Characteristics

Boiling Point	65°C	Specific Gravity (H ₂ O = 1)	0.79
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6
Solubility in Water	COMPLETE		
Appearance and Odor	CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.		

Section X. STABILITY AND REACTIVITY

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

Section XI. TOXICOLOGICAL INFORMATION

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

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

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

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

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

Section XV. REGULATORY INFORMATION

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

Section XVI. Misc. INFORMATION

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



See 1216124
20 vial

CERTIFIED WEIGHT REPORT

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

Solvent(s): Lot#
Methanol EJ143-US

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

✓ 14630 to
✓ 14649

Weight(s) shown below were combined and diluted to (mL):

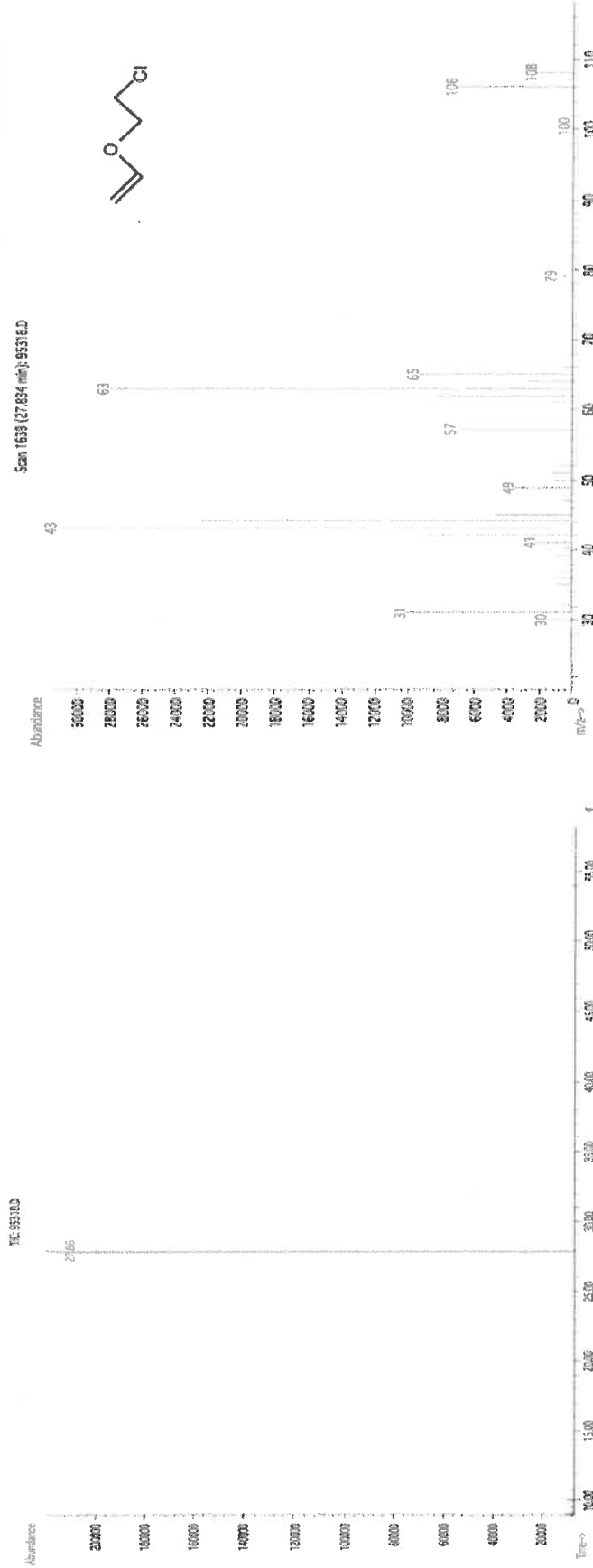
5E-05 Balance Uncertainty
0.001 Flask Uncertainty

Expanded
Uncertainty
(Solvent Safety Info. On Attached pg.)
CAS# OSHA PEL (TWA) LDSO

SDS Information

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)	CAS#	OSHA PEL (TWA)	LDSO
1. 2-Chloroethyl vinyl ether	74	MKCD0033	10000	99	0.2	0.50536	0.50550	10002.9	40.5	110-75-8	N/A	or-rat 250mg/kg

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



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GHS/OSHA Compliant

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Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))		% (optional)
Methanol	METHYL ALCOHOL	> 97

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

INTENDED USE: REFERENCE MATERIAL

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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

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

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EC100 10,000.00 mg/l - 24 h

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

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

Section XV. REGULATORY INFORMATION

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : 4-Bromofluorobenzene Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

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

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

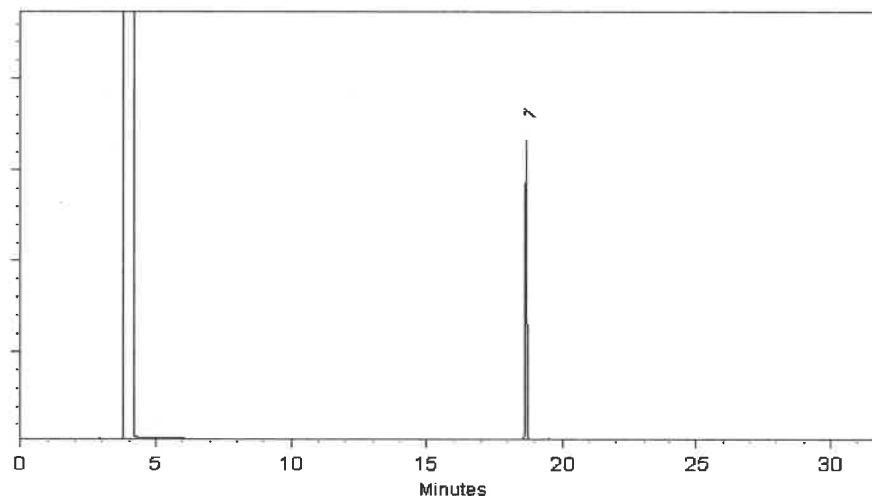
FID

Split Vent:

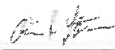
40 ml/min

Inj. Vol

1µl



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


Alicia Leathers - Operation Technician I

Date Mixed: 17-Nov-2022

Balance Serial # B251644995


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 21-Nov-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 555582 **Lot No.:** A0196865

Description : Custom 8260A/B Surrogate Mix
Custom 8260A/B Surrogate Mix 25,000µg/mL, P&T Methanol,
1mL/ampul

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

Expiration Date : April 30, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2-Dichloroethane-d4	17060-07-0	PR-32845	99%	25,036.0 µg/mL	+/- 1,417.9179
2	1-Bromo-4-fluorobenzene (BFB)	460-00-4	184975	99%	25,132.0 µg/mL	+/- 1,423.3549
3	Dibromofluoromethane	1868-53-7	022013	99%	25,040.0 µg/mL	+/- 1,418.1445
4	Toluene-d8	2037-26-5	PR-33397	99%	25,028.0 µg/mL	+/- 1,417.4648

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

Russ Bookhamer - Operations Technician I

Date Mixed: 11-Apr-2023

Balance: 1127510105

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Certificate of Analysis

chromatographic plus



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Catalog No. : 30489 **Lot No.:** A0209618

Description : 8260B Acetates Mix

8260B Acetates Mix 2,000 µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : September 30, 2025 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Methyl acetate	79-20-9	SHBP3100	99%	2,019.3 µg/mL	+/- 69.7974
2	Vinyl acetate	108-05-4	RP231030CTH	98%	2,016.8 µg/mL	+/- 69.7112
3	Ethyl acetate	141-78-6	SHBQ9682	99%	2,010.7 µg/mL	+/- 69.4979
4	Isopropyl acetate	108-21-4	BCCG7069	99%	2,016.0 µg/mL	+/- 69.6822
5	Propyl acetate	109-60-4	P8XLN	99%	2,008.0 µg/mL	+/- 69.4057
6	Butyl acetate	123-86-4	SHBP6314	99%	2,007.3 µg/mL	+/- 69.3826
7	Amyl acetate	628-63-7	41325/1	97%	2,004.7 µg/mL	+/- 69.2905

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

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

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this

reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

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

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

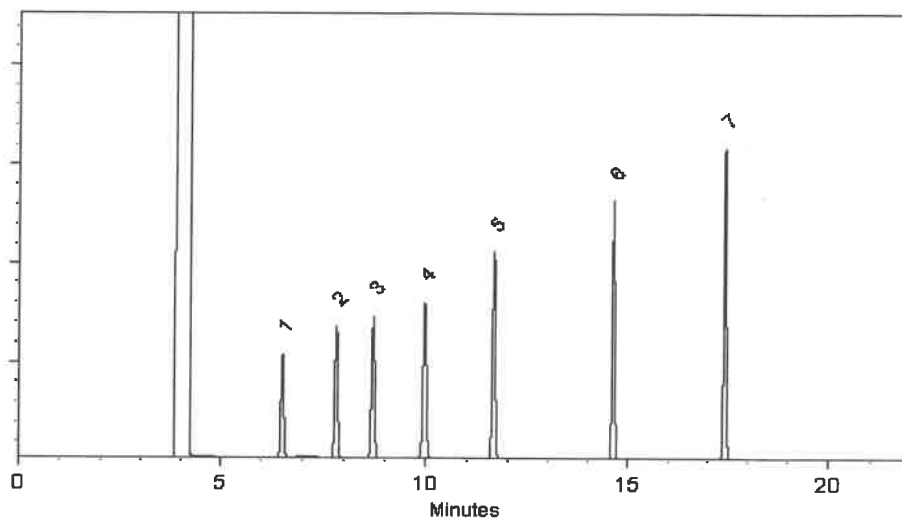
FID

Split Vent:

40 ml/min

Inj. Vol

1µl



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

Sam Moodler
Sam Moodler - Operations Tech I

Date Mixed: 28-Mar-2024

Balance Serial # B707717271

Dillon Murphy
Dillon Murphy - Operations Technician I

Date Passed: 01-Apr-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30489 **Lot No.:** A0209618

Description : 8260B Acetates Mix

8260B Acetates Mix 2,000 µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : September 30, 2025 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Methyl acetate	79-20-9	SHBP3100	99%	2,019.3 µg/mL	+/- 69.7974
2	Vinyl acetate	108-05-4	RP231030CTH	98%	2,016.8 µg/mL	+/- 69.7112
3	Ethyl acetate	141-78-6	SHBQ9682	99%	2,010.7 µg/mL	+/- 69.4979
4	Isopropyl acetate	108-21-4	BCCG7069	99%	2,016.0 µg/mL	+/- 69.6822
5	Propyl acetate	109-60-4	P8XLN	99%	2,008.0 µg/mL	+/- 69.4057
6	Butyl acetate	123-86-4	SHBP6314	99%	2,007.3 µg/mL	+/- 69.3826
7	Amyl acetate	628-63-7	41325/1	97%	2,004.7 µg/mL	+/- 69.2905

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

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

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this

reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

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

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

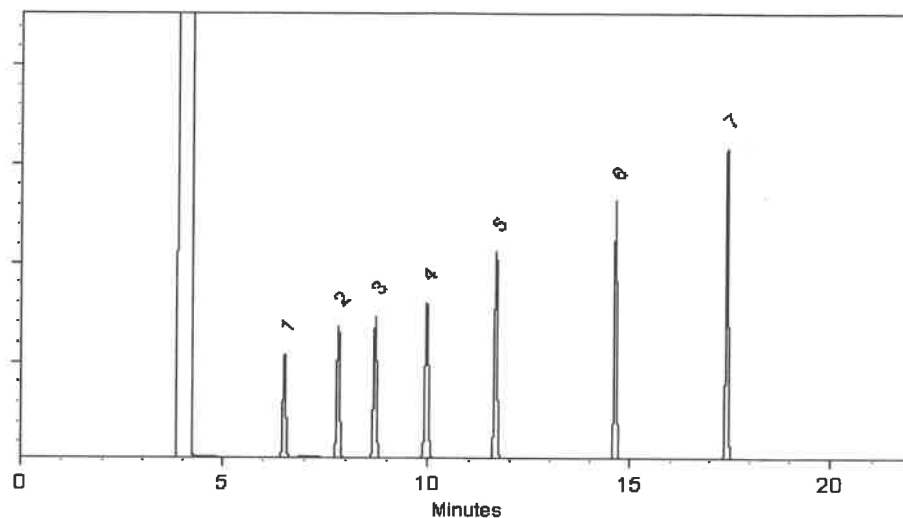
FID

Split Vent:

40 ml/min

Inj. Vol

1µl



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

Sam Moodler
Sam Moodler - Operations Tech I

Date Mixed: 28-Mar-2024

Balance Serial # B707717271

Dillon Murphy
Dillon Murphy - Operations Technician I

Date Passed: 01-Apr-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



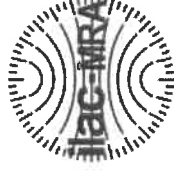
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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No.: 555581 Lot No.: A0210184

Description: Custom 8260 Internal Standard Mix

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

Container Size: 2 mL Pkg Amt: > 1 mL

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

Ship: Ambient

CERTIFIED VALUES

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

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

John Friedline - Operations Technician I

Date Mixed: 11-Apr-2024 Balance: 11275.10105



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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

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

Catalog No. : 30006 **Lot No.:** A0210618
Description : VOA Calibration Mix #1
VOA Calibration Mix #1 5,000µg/mL, P&T Methanol/Water(90:10), 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : July 31, 2027 **Storage:** 0°C or colder
Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Acetone	67-64-1	SHBQ8504	99%	5,014.8 µg/mL	+/- 173.2883
2	2-Butanone (MEK)	78-93-3	SHBQ4704	99%	5,012.4 µg/mL	+/- 173.2054
3	4-Methyl-2-pentanone (MIBK)	108-10-1	SHBP9200	99%	5,011.6 µg/mL	+/- 173.1777
4	2-Hexanone	591-78-6	MKCQ6663	99%	5,013.0 µg/mL	+/- 173.2261

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

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

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

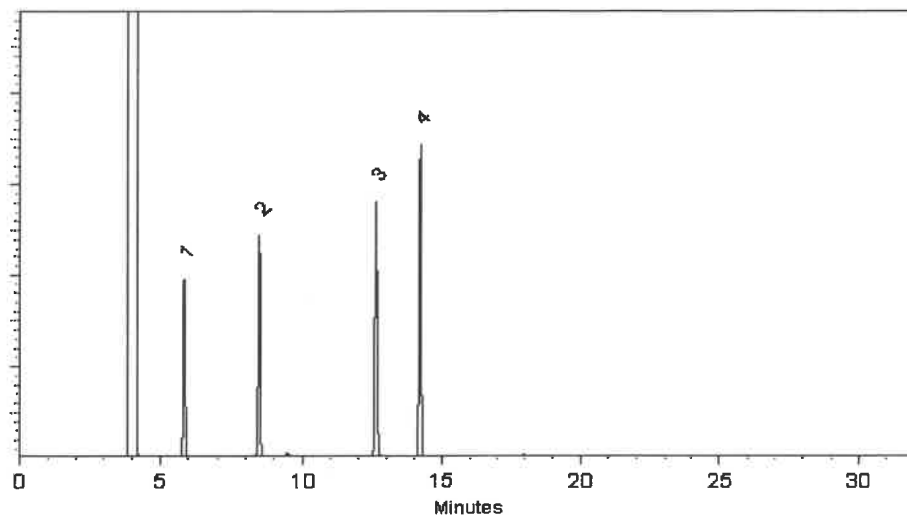
FID

Split Vent:

40 ml/min

Inj. Vol

1µl

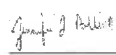


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Dakota Parson - Operations Technician I

Date Mixed: 22-Apr-2024

Balance Serial # B707717271


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 24-Apr-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30006 **Lot No.:** A0210618

Description : VOA Calibration Mix #1

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Acetone	67-64-1	SHBQ8504	99%	5,014.8 µg/mL	+/- 173.2883
2	2-Butanone (MEK)	78-93-3	SHBQ4704	99%	5,012.4 µg/mL	+/- 173.2054
3	4-Methyl-2-pentanone (MIBK)	108-10-1	SHBP9200	99%	5,011.6 µg/mL	+/- 173.1777
4	2-Hexanone	591-78-6	MKCQ6663	99%	5,013.0 µg/mL	+/- 173.2261

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

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

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

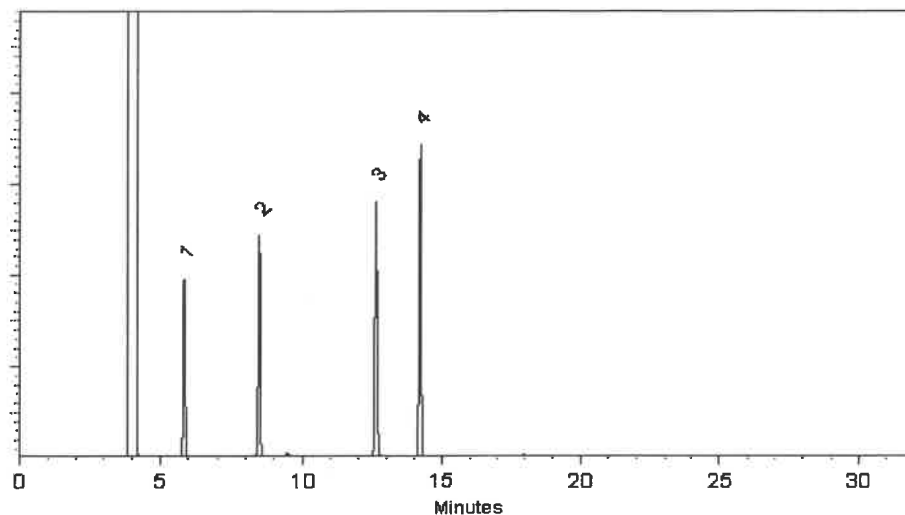
FID

Split Vent:

40 ml/min

Inj. Vol

1µl

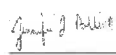


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Dakota Parson - Operations Technician I

Date Mixed: 22-Apr-2024

Balance Serial # B707717271


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 24-Apr-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30006 **Lot No.:** A0210618

Description : VOA Calibration Mix #1

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Acetone	67-64-1	SHBQ8504	99%	5,014.8 µg/mL	+/- 173.2883
2	2-Butanone (MEK)	78-93-3	SHBQ4704	99%	5,012.4 µg/mL	+/- 173.2054
3	4-Methyl-2-pentanone (MIBK)	108-10-1	SHBP9200	99%	5,011.6 µg/mL	+/- 173.1777
4	2-Hexanone	591-78-6	MKCQ6663	99%	5,013.0 µg/mL	+/- 173.2261

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

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

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

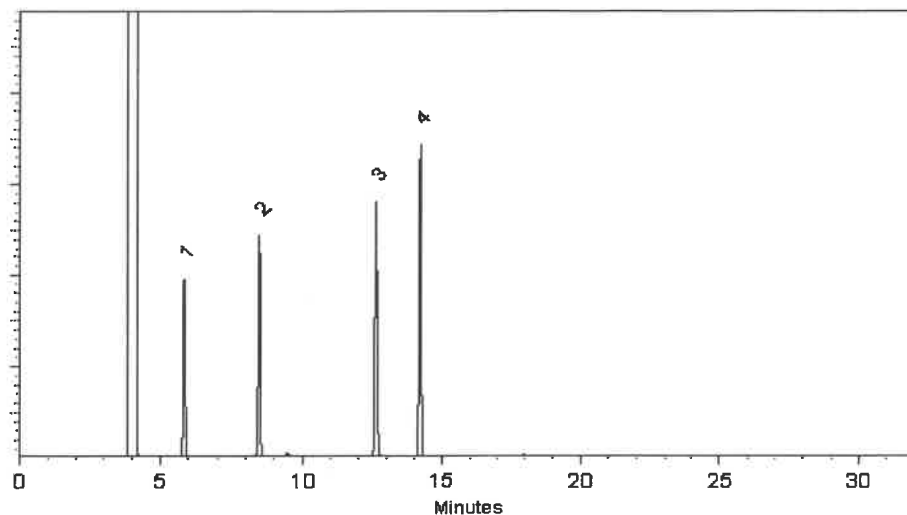
FID

Split Vent:

40 ml/min

Inj. Vol

1µl

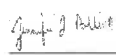


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Dakota Parson - Operations Technician I

Date Mixed: 22-Apr-2024

Balance Serial # B707717271


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 24-Apr-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- 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.
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Dec: 12/09/24

Certificate of Analysis

chromatographic plus

V14667-5

V14676



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30225 **Lot No.:** A0214960
Description : Bromochloromethane Standard
Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : August 31, 2029 **Storage:** 0°C or colder
Ship: Ambient

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

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

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

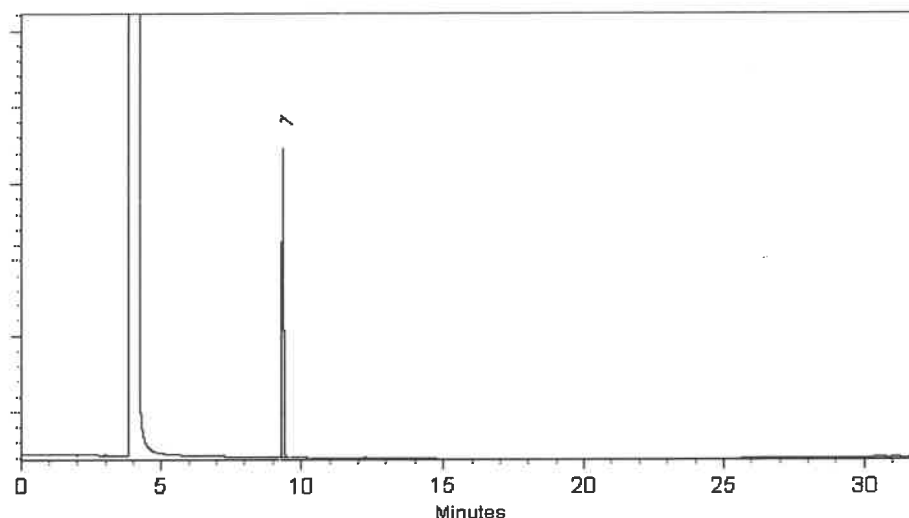
FID

Split Vent:

40 ml/min

Inj. Vol

1µl



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

Stacey Wanner - Operations Technician I

Date Mixed: 08-Aug-2024

Balance Serial # 1127510105

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Aug-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- 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.
Dec: 12/09/24
CERTIFIED REFERENCE MATERIAL

Certificate of Analysis
chromatographic plus

V14667-5
V14676



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30225 **Lot No.:** A0214960
Description : Bromochloromethane Standard
Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : August 31, 2029 **Storage:** 0°C or colder
Ship: Ambient

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

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

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

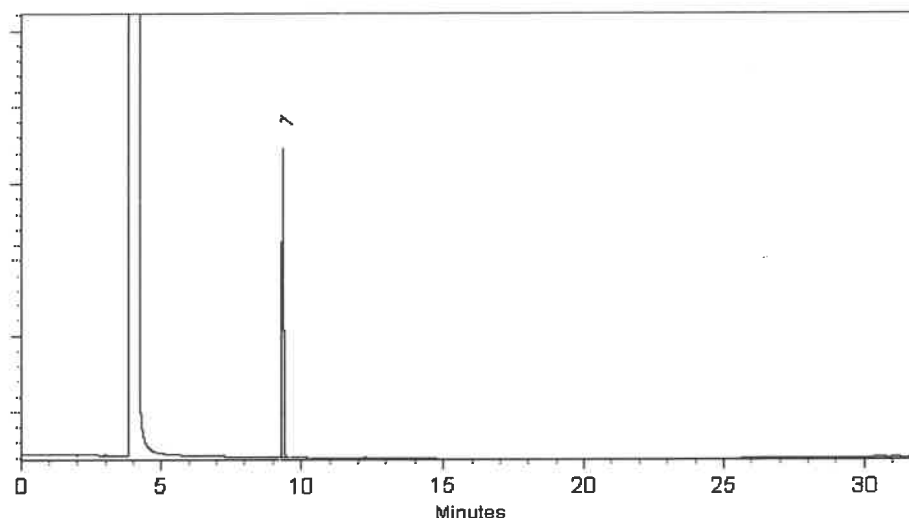
FID

Split Vent:

40 ml/min

Inj. Vol

1µl



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

Stacey Wanner - Operations Technician I

Date Mixed: 08-Aug-2024

Balance Serial # 1127510105

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Aug-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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Dec: 12/09/24

Certificate of Analysis

chromatographic plus

V14667-5

V14676



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30225 **Lot No.:** A0214960
Description : Bromochloromethane Standard
Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : August 31, 2029 **Storage:** 0°C or colder
Ship: Ambient

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

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

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

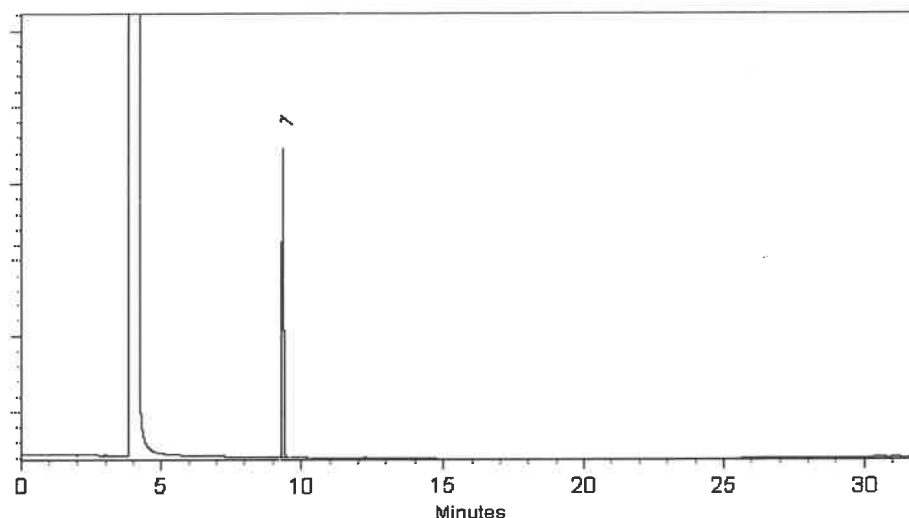
FID

Split Vent:

40 ml/min

Inj. Vol

1µl



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

Stacey Wanner - Operations Technician I

Date Mixed: 08-Aug-2024

Balance Serial # 1127510105

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Aug-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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Dec: 12/09/24
CERTIFIED REFERENCE MATERIAL

Certificate of Analysis
chromatographic plus
V14667
V14676



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30225 **Lot No.:** A0214960
Description : Bromochloromethane Standard
Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : August 31, 2029 **Storage:** 0°C or colder
Ship: Ambient

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

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

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

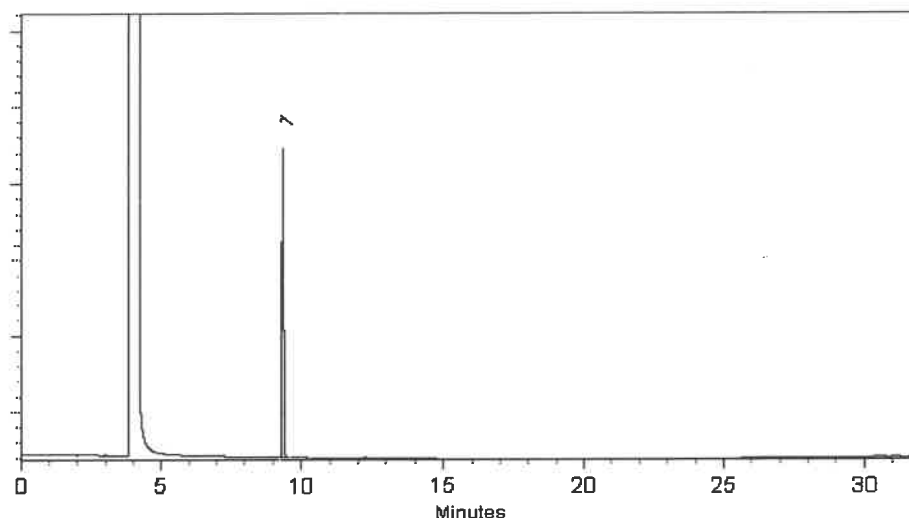
FID

Split Vent:

40 ml/min

Inj. Vol

1µl



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

Stacey Wanner - Operations Technician I

Date Mixed: 08-Aug-2024

Balance Serial # 1127510105

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Aug-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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Rec 12/17/24
CERTIFIED REFERENCE MATERIAL

30 ml
Certificate of Analysis
chromatographic plus

V14727 to
V14756



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30042 **Lot No.:** A0216826
Description : 502.2 Calibration Mix #1
502.2 Calibration Mix #1 2,000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : May 31, 2031 **Storage:** 0°C or colder
Ship: Ambient

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

helium-constant flow 2.0 mL/min.

Temp. Program:

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

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

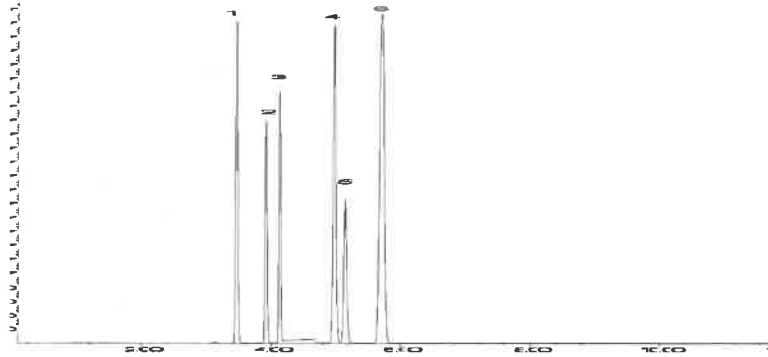
MSD

Split Vent:

Split ratio 10:1

Inj. Vol

1µl



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



Tom Suckal - Mix Technician

Date Mixed: 23-Sep-2024

Balance Serial # B707717271



Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 04-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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Rec 12/17/24
CERTIFIED REFERENCE MATERIAL

30 ml
Certificate of Analysis
chromatographic plus

V14727 to
V14756



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30042 **Lot No.:** A0216826
Description : 502.2 Calibration Mix #1
502.2 Calibration Mix #1 2,000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : May 31, 2031 **Storage:** 0°C or colder
Ship: Ambient

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

helium-constant flow 2.0 mL/min.

Temp. Program:

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

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

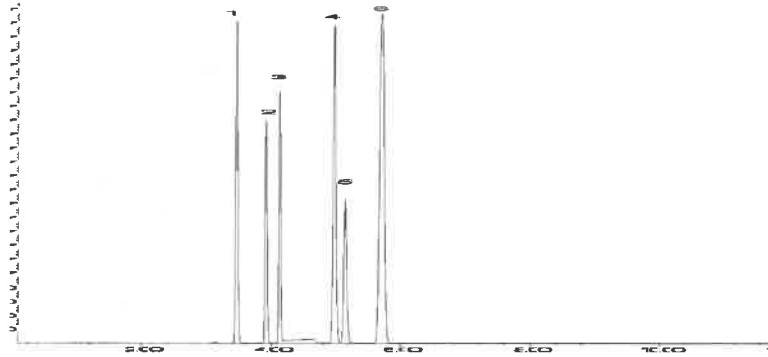
MSD

Split Vent:

Split ratio 10:1

Inj. Vol

1µl



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



Tom Suckal - Mix Technician

Date Mixed: 23-Sep-2024

Balance Serial # B707717271



Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 04-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

✓ 14842 to 14846



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30470 **Lot No.:** A0217535
Description : tert-Butanol Standard
tert-Butanol Std 50,000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : October 31, 2027 **Storage:** 0°C or colder
Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	tert-Butanol (TBA)	75-65-0	SHBQ8002-1	99%	50,007.5 µg/mL	+/- 717.6137

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

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

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

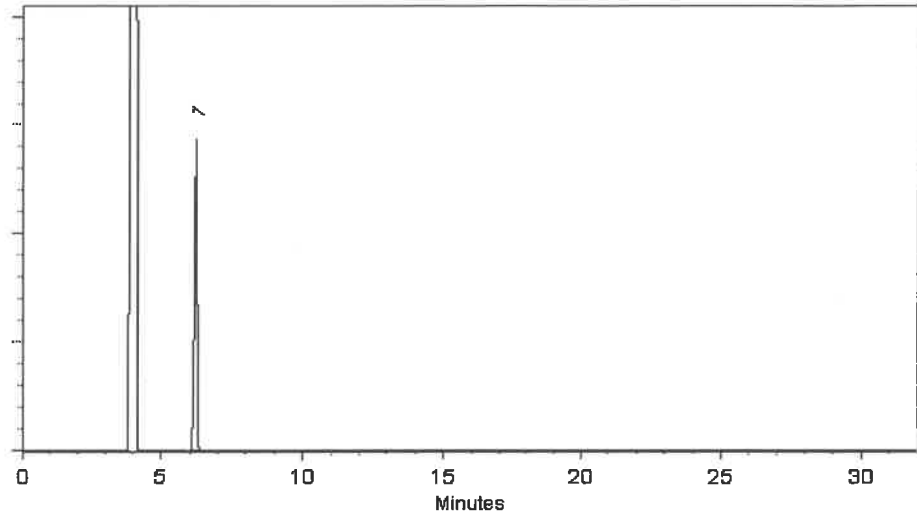
FID

Split Vent:

40 ml/min

Inj. Vol

1µl



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

A. O. E.
Aaron Enyart - Operations Tech I

Date Mixed: 07-Oct-2024

Balance Serial # B251644995

Brittany Federinko
Brittany Federinko - Operations Tech I

Date Passed: 09-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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2014 Dec 01/08/21
CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

V14803 - V14822



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 555408-SL **Lot No.:** A0220471
Description : Custom Vinyl Acetate Standard
Custom Vinyl Acetate Standard 8,000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : June 30, 2026 **Storage:** -20°C or colder
Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Vinyl acetate	108-05-4	RD240423RSR	99%	8,066.0 µg/mL	+/- 278.7979

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

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

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

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

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

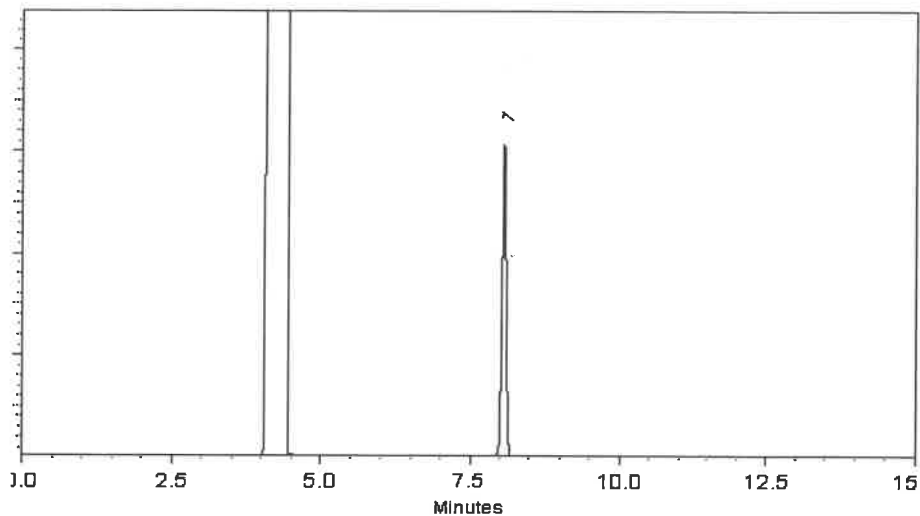
FID

Split Vent:

40 ml/min

Inj. Vol

1µl



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

Ethan Winiarski - Operations Tech I

Date Mixed: 24-Dec-2024

Balance Serial # 1127510105

Dillan Murphy - Operations Technician I

Date Passed: 02-Jan-2025

REVIEWED
By Jennifer Pollock at 7:12 am, Jan 05, 2025

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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2014 Dec 01/08/21
CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

V14803 - V14822



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 555408-SL **Lot No.:** A0220471
Description : Custom Vinyl Acetate Standard
Custom Vinyl Acetate Standard 8,000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : June 30, 2026 **Storage:** -20°C or colder
Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Vinyl acetate	108-05-4	RD240423RSR	99%	8,066.0 µg/mL	+/- 278.7979

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

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

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

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

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

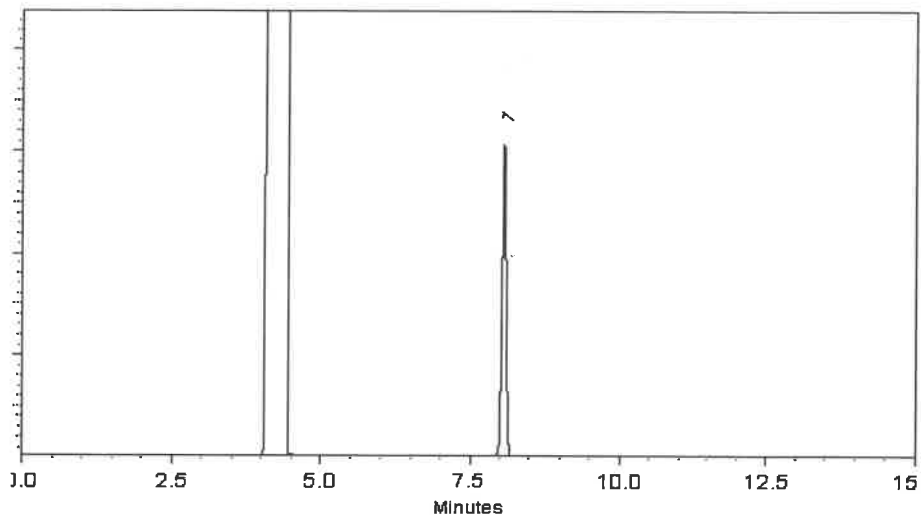
FID

Split Vent:

40 ml/min

Inj. Vol

1µl



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

Ethan Winiarski - Operations Tech I

Date Mixed: 24-Dec-2024

Balance Serial # 1127510105

Dillan Murphy - Operations Technician I

Date Passed: 02-Jan-2025

REVIEWED
By Jennifer Pollock at 7:12 am, Jan 05, 2025

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

General Certified Reference Material Notes

Expiration Notes:

- 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.
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Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis



V 14921 to
V 14938

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 ₃ OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.3 ppm
Titration Acid (μeq/g)	≤ 0.3	0.3
Titration Base (μeq/g)	≤ 0.10	0.03
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis - Below EPA 82608 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

Mark
Jamie Croak
Director Quality Operations, Bioscience Production

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

Rec 05/09/25
Avantor™



*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 ₃ OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.3 ppm
Titration Acid (μeq/g)	≤ 0.3	0.3
Titration Base (μeq/g)	≤ 0.10	0.03
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis - Below EPA 8260B CRQL	Conforms	Conforms

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

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

Mark
Jamie Croak
Director Quality Operations, Bioscience Production



Certified Reference Material CRM



See 06/20/25 5 vial

CERTIFIED WEIGHT REPORT

Part Number:
Lot Number:
Description:91880
061925
AcroleinSolvent(s):
WaterLot#
041725QExpiration Date:
Recommended Storage:
Nominal Concentration (µg/mL):
NIST Test ID#:071925
Refrigerate (4 °C)
5000
6UTB115028 to
1150325E-05 Balance Uncertainty
0.001 Flask Uncertainty

Weight(s) shown below were combined and diluted to (mL):

10.0

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	CAS#	OSHA PEL (TWA)	LDSO

1. Acrolein 5 103755V10F 5000 97 0.5 0.05168 0.05180 5013.7 52.6 107-02-8 0.1 ppm orl-rat 48mg/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 Renias. 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.

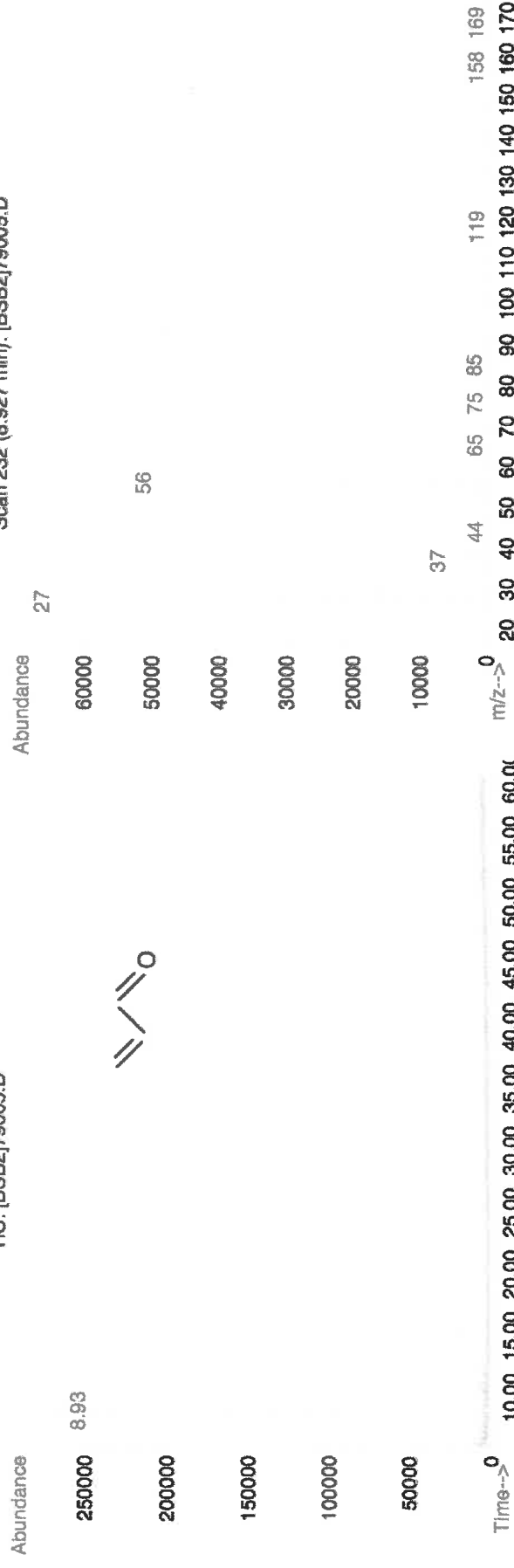
Expanded Uncertainty (Solvent Safety Info. On Attached pg.)
CAS# OSHA PEL (TWA) LDSO

SDS Information

Formulated By:	Prashant Chauhan	061925	DATE
Reviewed By:	Pedro L. Renias	061925	DATE

TIC: [BSB2]79005.D

Scan 232 (8.927 min): [BSB2]79005.D



- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated by an ISO 17025 certified organization with weights traceable through NIST to the SI kilogram (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).
- Rev 1.0, 2/25/2025



Certified Reference Material CRM



See 06/20/25 5 vial

CERTIFIED WEIGHT REPORT

Part Number:
Lot Number:
Description:91880
061925
AcroleinSolvent(s):
WaterLot#
041725QExpiration Date:
Recommended Storage:
Nominal Concentration (µg/mL):
NIST Test ID#:071925
Refrigerate (4 °C)
5000
6UTB115028 to
1150325E-05 Balance Uncertainty
0.001 Flask Uncertainty

Weight(s) shown below were combined and diluted to (mL):

10.0

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	CAS#	OSHA PEL (TWA)	LDSO

1. Acrolein	5	103755V10F	5000	97	0.5	0.05168	0.05180	5013.7	52.6	107-02-8	0.1 ppm	orl-rat 48mg/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 Renias. 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

Abundance

Abundance

27

250000 8.93

200000



56

150000

100000

50000

Time-->0

10.00 15.00 20.00 25.00 30.00 35.00 40.00 45.00 50.00 55.00 60.00

m/z-->0

10000 37

44

65 75 85

119

158 169

- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated by an ISO 17025 certified organization with weights traceable through NIST to the SI kilogram (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).
- Rev 1.0, 2/25/2025



Certified Reference Material CRM



see 06/20/25 5 vial

CERTIFIED WEIGHT REPORT

Part Number:
Lot Number:
Description:91880
061925
AcroleinSolvent(s):
WaterLot#
041725QExpiration Date:
Recommended Storage:
Nominal Concentration (µg/mL):
NIST Test ID#:071925
Refrigerate (4 °C)
5000
6UTB115028 to
1150325E-05 Balance Uncertainty
0.001 Flask Uncertainty

Weight(s) shown below were combined and diluted to (mL):

10.0

Nominal

Conc (µg/mL)

Lot

Number

RM#

5

103755V10F

5000

97

0.5

0.05168

0.05180

5013.7

52.6

107-02-8

0.1 ppm

ori-rat 48mg/kg

LDSO

OSHA PEL (TWA)

CAS#

Expanded

Uncertainty

(Solvent Safety Info. On Attached pg.)

SDS Information

Formulated By: Prashant Chauhan

DATE 061925

Reviewed By: Pedro L. Renteria

DATE 061925

Compound

1. Acrolein

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 Renteria. 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

Abundance

Abundance

27

250000 8.93

200000



56

150000

100000

50000

37

Time--> 0

m/z--> 0

10.00 15.00 20.00 25.00 30.00 35.00 40.00 45.00 50.00 55.00 60.00

44

65 75 85

119

158 169

- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated by an ISO 17025 certified organization with weights traceable through NIST to the SI kilogram (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).
- Rev 1.0, 2/25/2025



SHIPPING DOCUMENTS



CHEMTECH

Environmental Laboratory

www.chemtech.net | EMAIL: PM@chemtech.net

Project Name: Kingsland Point Tank

Water Main

Service Order #: _____

Work Order #: _____

Labor WBS #: _____

Facility/Site: _____

Site Address: Tenneytown Legat - Kingsland

Point Park, Sleepy Hollow NY 10591

Chemtech Order ID: _____

Sampler Name: George Negron

Client Project Coordinator & Phone: George Negron (842) 298-0150

Page #: 1 of 1

Date: 7-14-25

Arrive Time: 1230

Depart Time: 1335

Waste Stream (circle one): drum / roll-off / soil pile / in-situ / linear construction / frac-tank

Sample Matrices (circle all that apply): Water / Solid / NAPL / Concrete / Wipe

Collection Depths: _____

Temp (range): _____

°C

PID Readings (range): _____

PPM

Odor ☒ Y ☐ N

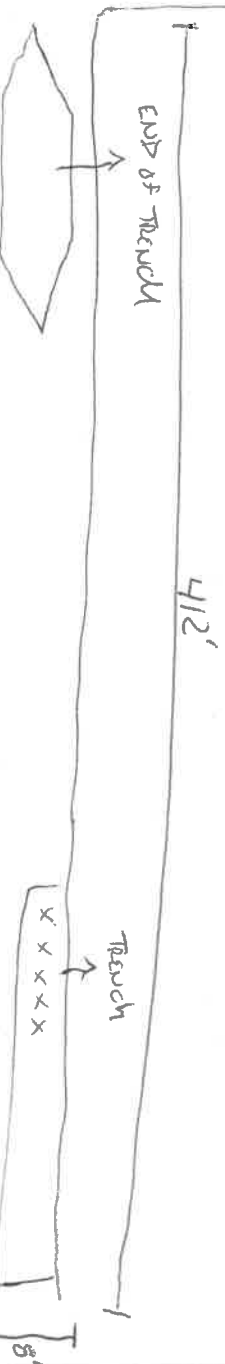
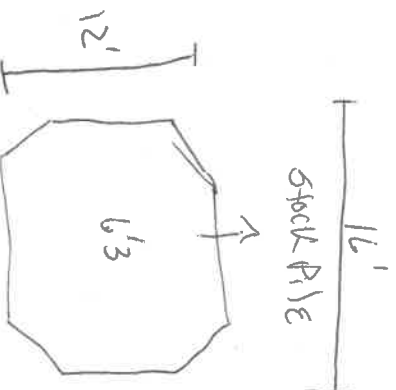
Color ☒ Y ☐ N

Sample Description: Black Oily Soil (rocks present) very strong smell

Field Observations: Sample Along the trench + Stock Pile

Grid/Area Composite Map:

QA Control # A3041134



Sampler Signature: _____

Client Signature: _____

Supervisor Review/Date: _____

Date/Time Arrived at Lab: _____

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488



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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q2600 TACO01
Client Name : T&A Construction Inc
Client Contact : Garrett Johnson
Invoice Name : T&A Construction Inc
Invoice Contact : Garrett Johnson

Order Date : 7/14/2025 2:21:01 PM
Project Name : Kingsland Point Park Water
Receive DateTime : 7/14/2025 12:00:00 AM *15:05 PM*
Purchase Order :

Project Mgr :
Report Type : Analytical Summary 1
EDD Type : Excel NY
Hard Copy Date :
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q2600-03	TRENCH	Solid	07/14/2025	13:05	VOC-TCLVOA-10		8260D		3 Bus. Days
Q2600-07	STOCK-PILE	Solid	07/14/2025	13:15	VOC-TCLVOA-10		8260D		3 Bus. Days
Q2600-11	END-OF-TRENCH	Solid	07/14/2025	13:25	VOC-TCLVOA-10		8260D		3 Bus. Days

Relinquished By : *[Signature]*

Date / Time : 7/14/25 1540

Received By : *[Signature]*

Date / Time : 7/14/25 1540

Storage Area : VOA Refridgerator Room