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

DATA REPORTING QUALIFIERS- ORGANIC

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

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

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

LAB CHRONICLE

OrderID:	P5021	**OrderDate:**	11/27/2024 10:41:00 AM
Client:	LiRo Engineers, Inc.	**Project:**	RFK Bridge
Contact:	Martin Wesolowski	**Location:**	L41,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P5021-01	**MW-06**	**Water**			**11/26/24**			**11/27/24**
			VOCMS Group1	8260-Low			12/02/24	
P5021-02	**MW-08**	**Water**			**11/26/24**			**11/27/24**
			VOCMS Group1	8260-Low			12/02/24	
P5021-03	**MW-10**	**Water**			**11/26/24**			**11/27/24**
			VOCMS Group1	8260-Low			12/02/24	
P5021-04	**MW-11**	**Water**			**11/26/24**			**11/27/24**
			VOCMS Group1	8260-Low			12/02/24	
P5021-05	**MW-13**	**Water**			**11/26/24**			**11/27/24**
			VOCMS Group1	8260-Low			12/02/24	
P5021-06	**MW-12**	**Water**			**11/26/24**			**11/27/24**
			VOCMS Group1	8260-Low			11/27/24	
P5021-06DL	**MW-12DL**	**Water**			**11/26/24**			**11/27/24**
			VOCMS Group1	8260-Low			12/02/24	

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

Hit Summary Sheet
SW-846

SDG No.: P5021

Client: LiRo Engineers, Inc.

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID:	**MW-06**							
P5021-01	MW-06	Water	Benzene	8.40		0.16	1.00	ug/L
P5021-01	MW-06	Water	Toluene	1.40		0.18	1.00	ug/L
P5021-01	MW-06	Water	Ethyl Benzene	2.00		0.16	1.00	ug/L
P5021-01	MW-06	Water	m/p-Xylenes	3.50		0.31	2.00	ug/L
P5021-01	MW-06	Water	o-Xylene	1.50		0.14	1.00	ug/L
P5021-01	MW-06	Water	Isopropylbenzene	20.5		0.13	1.00	ug/L
P5021-01	MW-06	Water	n-propylbenzene	48.7		0.14	1.00	ug/L
P5021-01	MW-06	Water	1,3,5-Trimethylbenzene	1.10		0.18	1.00	ug/L
P5021-01	MW-06	Water	tert-Butylbenzene	0.42	J	0.17	1.00	ug/L
P5021-01	MW-06	Water	1,2,4-Trimethylbenzene	2.10		0.18	1.00	ug/L
P5021-01	MW-06	Water	sec-Butylbenzene	3.40		0.17	1.00	ug/L
P5021-01	MW-06	Water	n-Butylbenzene	2.20		0.22	1.00	ug/L
P5021-01	MW-06	Water	Naphthalene	77.5		0.59	1.00	ug/L
			Total Voc :	173				
			Total Concentration:	173				
Client ID:	**MW-08**							
P5021-02	MW-08	Water	Methyl tert-butyl Ether	25.0		1.60	10.0	ug/L
P5021-02	MW-08	Water	Benzene	180		1.60	10.0	ug/L
P5021-02	MW-08	Water	Toluene	9.70	J	1.80	10.0	ug/L
P5021-02	MW-08	Water	Ethyl Benzene	270		1.60	10.0	ug/L
P5021-02	MW-08	Water	m/p-Xylenes	380		3.10	20.0	ug/L
P5021-02	MW-08	Water	o-Xylene	270		1.40	10.0	ug/L
P5021-02	MW-08	Water	Isopropylbenzene	58.1		1.30	10.0	ug/L
P5021-02	MW-08	Water	n-propylbenzene	130		1.40	10.0	ug/L
P5021-02	MW-08	Water	1,2,4-Trimethylbenzene	610		1.80	10.0	ug/L
P5021-02	MW-08	Water	n-Butylbenzene	13.9		2.20	10.0	ug/L
P5021-02	MW-08	Water	Naphthalene	400		5.90	10.0	ug/L
			Total Voc :	2350				
			Total Concentration:	2350				
Client ID:	**MW-10**							
P5021-03	MW-10	Water	n-propylbenzene	0.27	J	0.14	1.00	ug/L
P5021-03	MW-10	Water	1,3,5-Trimethylbenzene	0.33	J	0.18	1.00	ug/L
P5021-03	MW-10	Water	tert-Butylbenzene	0.34	J	0.17	1.00	ug/L
P5021-03	MW-10	Water	sec-Butylbenzene	0.33	J	0.17	1.00	ug/L
P5021-03	MW-10	Water	n-Butylbenzene	1.10		0.22	1.00	ug/L
P5021-03	MW-10	Water	Naphthalene	2.10		0.59	1.00	ug/L

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

Hit Summary Sheet
SW-846

SDG No.: P5021

Client: LiRo Engineers, Inc.

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
			Total Voc :	4.47				
			Total Concentration:	4.47				
Client ID:	**MW-13**							
P5021-05	MW-13	Water	Methyl tert-butyl Ether	2.20		0.16	1.00	ug/L
P5021-05	MW-13	Water	Benzene	15.3		0.16	1.00	ug/L
P5021-05	MW-13	Water	Toluene	0.68	J	0.18	1.00	ug/L
P5021-05	MW-13	Water	Ethyl Benzene	19.0		0.16	1.00	ug/L
P5021-05	MW-13	Water	m/p-Xylenes	3.60		0.31	2.00	ug/L
P5021-05	MW-13	Water	o-Xylene	4.40		0.14	1.00	ug/L
P5021-05	MW-13	Water	Isopropylbenzene	1.50		0.13	1.00	ug/L
P5021-05	MW-13	Water	n-propylbenzene	2.20		0.14	1.00	ug/L
P5021-05	MW-13	Water	1,3,5-Trimethylbenzene	0.35	J	0.18	1.00	ug/L
P5021-05	MW-13	Water	1,2,4-Trimethylbenzene	1.60		0.18	1.00	ug/L
P5021-05	MW-13	Water	n-Butylbenzene	0.52	J	0.22	1.00	ug/L
			Total Voc :	51.4				
			Total Concentration:	51.4				
Client ID:	**MW-12**							
P5021-06	MW-12	Water	Benzene	330	E	0.16	1.00	ug/L
P5021-06	MW-12	Water	Toluene	38.9		0.18	1.00	ug/L
P5021-06	MW-12	Water	Ethyl Benzene	760	E	0.16	1.00	ug/L
P5021-06	MW-12	Water	m/p-Xylenes	250		0.31	2.00	ug/L
P5021-06	MW-12	Water	o-Xylene	100		0.14	1.00	ug/L
P5021-06	MW-12	Water	Isopropylbenzene	23.1		0.13	1.00	ug/L
P5021-06	MW-12	Water	n-propylbenzene	51.9		0.14	1.00	ug/L
P5021-06	MW-12	Water	1,3,5-Trimethylbenzene	2.70		0.18	1.00	ug/L
P5021-06	MW-12	Water	1,2,4-Trimethylbenzene	450	E	0.18	1.00	ug/L
P5021-06	MW-12	Water	sec-Butylbenzene	2.90		0.17	1.00	ug/L
P5021-06	MW-12	Water	p-Isopropyltoluene	3.50		0.15	1.00	ug/L
P5021-06	MW-12	Water	n-Butylbenzene	4.80		0.22	1.00	ug/L
P5021-06	MW-12	Water	Naphthalene	250	EQ	0.59	1.00	ug/L
			Total Voc :	2270				
			Total Concentration:	2270				
Client ID:	**MW-12DL**							
P5021-06DL	MW-12DL	Water	Benzene	270	D	3.20	20.0	ug/L
P5021-06DL	MW-12DL	Water	Toluene	30.0	D	3.60	20.0	ug/L
P5021-06DL	MW-12DL	Water	Ethyl Benzene	580	D	3.20	20.0	ug/L
P5021-06DL	MW-12DL	Water	m/p-Xylenes	190	D	6.20	40.0	ug/L
P5021-06DL	MW-12DL	Water	o-Xylene	85.2	D	2.80	20.0	ug/L

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

Hit Summary Sheet
SW-846

SDG No.: P5021

Client: LiRo Engineers, Inc.

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
P5021-06DL	MW-12DL	Water	Isopropylbenzene	18.6	JD	2.60	20.0	ug/L
P5021-06DL	MW-12DL	Water	n-propylbenzene	36.6	D	2.80	20.0	ug/L
P5021-06DL	MW-12DL	Water	1,2,4-Trimethylbenzene	350	D	3.60	20.0	ug/L
P5021-06DL	MW-12DL	Water	Naphthalene	180	D	11.8	20.0	ug/L
			Total Voc :	1740				
			Total Concentration:	1740				

QC SUMMARY

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

Surrogate Summary

SDG No.: P5021

Client: LiRo Engineers, Inc.

Analytical Method: SW8260-Low

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits Low	Limits High
P5021-01	MW-06	1,2-Dichloroethane-d4	50	51.0	102	74	125
		Dibromofluoromethane	50	47.5	95	75	124
		Toluene-d8	50	48.9	98	86	113
		4-Bromofluorobenzene	50	52.0	104	77	121
P5021-02	MW-08	1,2-Dichloroethane-d4	50	48.9	98	74	125
		Dibromofluoromethane	50	48.0	96	75	124
		Toluene-d8	50	48.8	98	86	113
		4-Bromofluorobenzene	50	51.6	103	77	121
P5021-03	MW-10	1,2-Dichloroethane-d4	50	51.8	104	74	125
		Dibromofluoromethane	50	46.4	93	75	124
		Toluene-d8	50	49.3	99	86	113
		4-Bromofluorobenzene	50	50.0	100	77	121
P5021-04	MW-11	1,2-Dichloroethane-d4	50	51.9	104	74	125
		Dibromofluoromethane	50	47.0	94	75	124
		Toluene-d8	50	51.0	102	86	113
		4-Bromofluorobenzene	50	51.6	103	77	121
P5021-05	MW-13	1,2-Dichloroethane-d4	50	53.1	106	74	125
		Dibromofluoromethane	50	46.7	93	75	124
		Toluene-d8	50	50.2	100	86	113
		4-Bromofluorobenzene	50	51.1	102	77	121
P5021-06	MW-12	1,2-Dichloroethane-d4	50	53.2	106	74	125
		Dibromofluoromethane	50	46.4	93	75	124
		Toluene-d8	50	50.2	100	86	113
		4-Bromofluorobenzene	50	52.3	105	77	121
P5021-06DL	MW-12DL	1,2-Dichloroethane-d4	50	51.2	102	74	125
		Dibromofluoromethane	50	46.3	93	75	124
		Toluene-d8	50	49.4	99	86	113
		4-Bromofluorobenzene	50	51.1	102	77	121
VX1127WBL01	VX1127WBL01	1,2-Dichloroethane-d4	50	50.8	102	74	125
		Dibromofluoromethane	50	46.6	93	75	124
		Toluene-d8	50	48.9	98	86	113
		4-Bromofluorobenzene	50	47.2	94	77	121
VX1127WBS01	VX1127WBS01	1,2-Dichloroethane-d4	50	54.7	109	74	125
		Dibromofluoromethane	50	53.5	107	75	124
		Toluene-d8	50	53.1	106	86	113
		4-Bromofluorobenzene	50	53.6	107	77	121
VX1127WBSD0	VX1127WBSD01	1,2-Dichloroethane-d4	50	51.5	103	74	125
		Dibromofluoromethane	50	46.2	92	75	124
		Toluene-d8	50	47.1	94	86	113
		4-Bromofluorobenzene	50	48.5	97	77	121
VX1202WBL01	VX1202WBL01	1,2-Dichloroethane-d4	50	49.6	99	74	125
		Dibromofluoromethane	50	47.3	95	75	124
		Toluene-d8	50	48.6	97	86	113
		4-Bromofluorobenzene	50	46.5	93	77	121
VX1202WBS01	VX1202WBS01	1,2-Dichloroethane-d4	50	54.9	110	74	125
		Dibromofluoromethane	50	53.7	107	75	124
		Toluene-d8	50	50.8	102	86	113
		4-Bromofluorobenzene	50	52.8	105	77	121

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

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P5021

Client: LiRo Engineers, Inc.

Analytical Method: SW8260-Low **Datafile :** VX044028.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VX1127WBS01	Methyl tert-butyl Ether	20	21.6	ug/L	108			78	114	
	Benzene	20	20.9	ug/L	104			82	109	
	Toluene	20	21.2	ug/L	106			82	110	
	Ethyl Benzene	20	21.1	ug/L	106			83	109	
	m/p-Xylenes	40	42.2	ug/L	106			82	110	
	o-Xylene	20	21.0	ug/L	105			83	109	
	Isopropylbenzene	20	21.5	ug/L	108			83	112	
	N-propylbenzene	20	21.6	ug/L	108			83	112	
	1,3,5-Trimethylbenzene	20	21.9	ug/L	110			85	112	
	tert-Butylbenzene	20	21.5	ug/L	108			83	112	
	1,2,4-Trimethylbenzene	20	21.9	ug/L	110			85	111	
	Sec-butylbenzene	20	21.5	ug/L	108			81	114	
	p-Isopropyltoluene	20	22.4	ug/L	112			78	116	
	n-Butylbenzene	20	21.5	ug/L	108			75	115	
	Naphthalene	20	20.8	ug/L	104			78	119	

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

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P5021

Client: LiRo Engineers, Inc.

Analytical Method: SW8260-Low **Datafile :** VX044041.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual		Limits Low	Limits High	Limits RPD
VX1127WBSD01	Methyl tert-butyl Ether	20	19.8	ug/L	99	9			78	114	20
	Benzene	20	17.4	ug/L	87	18			82	109	20
	Toluene	20	18.4	ug/L	92	14			82	110	20
	Ethyl Benzene	20	18.5	ug/L	93	13			83	109	20
	m/p-Xylenes	40	36.1	ug/L	90	16			82	110	20
	o-Xylene	20	18.8	ug/L	94	11			83	109	20
	Isopropylbenzene	20	18.8	ug/L	94	14			83	112	20
	N-propylbenzene	20	18.9	ug/L	95	13			83	112	20
	1,3,5-Trimethylbenzene	20	19.1	ug/L	96	14			85	112	20
	tert-Butylbenzene	20	18.5	ug/L	93	15			83	112	20
	1,2,4-Trimethylbenzene	20	19.3	ug/L	97	13			85	111	20
	Sec-butylbenzene	20	18.5	ug/L	93	15			81	114	20
	p-Isopropyltoluene	20	19.0	ug/L	95	16			78	116	20
	n-Butylbenzene	20	18.5	ug/L	93	15			75	115	20
	Naphthalene	20	32.1	ug/L	160	42	*	*	78	119	20

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

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P5021

Client: LiRo Engineers, Inc.

Analytical Method: SW8260-Low **Datafile :** VX044055.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VX1202WBS01	Methyl tert-butyl Ether	20	20.3	ug/L	102			78	114	
	Benzene	20	19.4	ug/L	97			82	109	
	Toluene	20	19.4	ug/L	97			82	110	
	Ethyl Benzene	20	20.7	ug/L	104			83	109	
	m/p-Xylenes	40	41.5	ug/L	104			82	110	
	o-Xylene	20	21.3	ug/L	106			83	109	
	Isopropylbenzene	20	20.6	ug/L	103			83	112	
	N-propylbenzene	20	20.7	ug/L	104			83	112	
	1,3,5-Trimethylbenzene	20	21.3	ug/L	106			85	112	
	tert-Butylbenzene	20	21.3	ug/L	106			83	112	
	1,2,4-Trimethylbenzene	20	21.2	ug/L	106			85	111	
	Sec-butylbenzene	20	20.8	ug/L	104			81	114	
	p-Isopropyltoluene	20	21.5	ug/L	108			78	116	
	n-Butylbenzene	20	20.1	ug/L	101			75	115	
	Naphthalene	20	20.3	ug/L	102			78	119	

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

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VX1127WBL01

Lab Name: CHEMTECH Contract: LIRO01

Lab Code: CHEM Case No.: P5021 SAS No.: P5021 SDG NO.: P5021

Lab File ID: VX044026.D Lab Sample ID: VX1127WBL01

Date Analyzed: 11/27/2024 Time Analyzed: 09:38

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

Instrument ID: MSVOA_X

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VX1127WBS01	VX1127WBS01	VX044028.D	11/27/2024
VX1127WBSD01	VX1127WBSD01	VX044041.D	11/27/2024
MW-12	P5021-06	VX044049.D	11/27/2024

COMMENTS:

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

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VX1202WBL01

Lab Name: CHEMTECH Contract: LIRO01

Lab Code: CHEM Case No.: P5021 SAS No.: P5021 SDG NO.: P5021

Lab File ID: VX044054.D Lab Sample ID: VX1202WBL01

Date Analyzed: 12/02/2024 Time Analyzed: 10:37

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
VX1202WBS01	VX1202WBS01	VX044055.D	12/02/2024
MW-08	P5021-02	VX044057.D	12/02/2024
MW-12DL	P5021-06DL	VX044058.D	12/02/2024
MW-06	P5021-01	VX044059.D	12/02/2024
MW-10	P5021-03	VX044060.D	12/02/2024
MW-11	P5021-04	VX044061.D	12/02/2024
MW-13	P5021-05	VX044062.D	12/02/2024

COMMENTS:

Raw Data: **VX043924.D**

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

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: LIRO01

Lab Code: CHEM Case No.: P5021 SAS No.: P5021 SDG NO.: P5021

Lab File ID: VX043924.D BFB Injection Date: 11/21/2024

Instrument ID: MSVOA_X BFB Injection Time: 08:51

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	22.4
75	30.0 - 60.0% of mass 95	54.2
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.5 (0.7) 1
174	50.0 - 100.0% of mass 95	70.5
175	5.0 - 9.0% of mass 174	4.8 (6.8) 1
176	95.0 - 101.0% of mass 174	67.9 (96.4) 1
177	5.0 - 9.0% of mass 176	4.9 (7.3) 2

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

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDICC001	VSTDICC001	VX043925.D	11/21/2024	09:47
VSTDICC005	VSTDICC005	VX043926.D	11/21/2024	10:14
VSTDICC020	VSTDICC020	VX043927.D	11/21/2024	10:37
VSTDICCC050	VSTDICCC050	VX043928.D	11/21/2024	11:17
VSTDICC100	VSTDICC100	VX043929.D	11/21/2024	11:40
VSTDICC150	VSTDICC150	VX043930.D	11/21/2024	12:03

Raw Data: **VX044023.D**

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

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: LIRO01

Lab Code: CHEM Case No.: P5021 SAS No.: P5021 SDG NO.: P5021

Lab File ID: VX044023.D BFB Injection Date: 11/27/2024

Instrument ID: MSVOA_X BFB Injection Time: 07:52

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	22.5
75	30.0 - 60.0% of mass 95	56.3
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.3
173	Less than 2.0% of mass 174	0.8 (1.1) 1
174	50.0 - 100.0% of mass 95	76.1
175	5.0 - 9.0% of mass 174	5.6 (7.3) 1
176	95.0 - 101.0% of mass 174	73 (96) 1
177	5.0 - 9.0% of mass 176	4.8 (6.6) 2

1-Value is % mass 174

2-Value is % mass 176

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VX044024.D	11/27/2024	08:46
VX1127WBL01	VX1127WBL01	VX044026.D	11/27/2024	09:38
VX1127WBS01	VX1127WBS01	VX044028.D	11/27/2024	10:27
VX1127WBSD01	VX1127WBSD01	VX044041.D	11/27/2024	15:25
MW-12	P5021-06	VX044049.D	11/27/2024	18:29

Raw Data: **VX044051.D**

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

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: LIRO01

Lab Code: CHEM Case No.: P5021 SAS No.: P5021 SDG NO.: P5021

Lab File ID: VX044051.D BFB Injection Date: 12/02/2024

Instrument ID: MSVOA_X BFB Injection Time: 08:35

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.2
75	30.0 - 60.0% of mass 95	56.1
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.3
173	Less than 2.0% of mass 174	0.5 (0.6) 1
174	50.0 - 100.0% of mass 95	74.9
175	5.0 - 9.0% of mass 174	5.3 (7.1) 1
176	95.0 - 101.0% of mass 174	71.7 (95.7) 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:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VX044052.D	12/02/2024	09:45
VX1202WBL01	VX1202WBL01	VX044054.D	12/02/2024	10:37
VX1202WBS01	VX1202WBS01	VX044055.D	12/02/2024	11:00
MW-08	P5021-02	VX044057.D	12/02/2024	11:49
MW-12DL	P5021-06DL	VX044058.D	12/02/2024	12:12
MW-06	P5021-01	VX044059.D	12/02/2024	12:35
MW-10	P5021-03	VX044060.D	12/02/2024	12:58
MW-11	P5021-04	VX044061.D	12/02/2024	13:21
MW-13	P5021-05	VX044062.D	12/02/2024	13:44

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

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: LIRO01

Lab Code: CHEM Case No.: P5021 SAS No.: P5021 SDG NO.: P5021

Lab File ID: VX044024.D Date Analyzed: 11/27/2024

Instrument ID: MSVOA_X Time Analyzed: 08:46

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	130547	5.54	218884	6.75	184783	10.05
UPPER LIMIT	261094	6.037	437768	7.251	369566	10.549
LOWER LIMIT	65273.5	5.037	109442	6.251	92391.5	9.549
EPA SAMPLE NO.						
MW-12	112926	5.55	218400	6.76	192264	10.06
VX1127WBL01	125569	5.54	244455	6.75	212718	10.05
VX1127WBS01	106843	5.54	192894	6.76	162801	10.05
VX1127WBSD01	127369	5.54	240268	6.76	205658	10.05

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

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

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

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

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: LIRO01

Lab Code: CHEM Case No.: P5021 SAS No.: P5021 SDG NO.: P5021

Lab File ID: VX044024.D Date Analyzed: 11/27/2024

Instrument ID: MSVOA_X Time Analyzed: 08:46

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

	IS4 AREA #	RT #				
12 HOUR STD	86408	12.018				
UPPER LIMIT	172816	12.518				
LOWER LIMIT	43204	11.518				
EPA SAMPLE NO.						
MW-12	91181	12.02				
VX1127WBL01	92049	12.02				
VX1127WBS01	74629	12.02				
VX1127WBSD01	92085	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.

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

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: LIRO01

Lab Code: CHEM Case No.: P5021 SAS No.: P5021 SDG NO.: P5021

Lab File ID: VX044052.D Date Analyzed: 12/02/2024

Instrument ID: MSVOA_X Time Analyzed: 09:45

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	140021	5.54	242098	6.75	204952	10.05
UPPER LIMIT	280042	6.043	484196	7.25	409904	10.549
LOWER LIMIT	70010.5	5.043	121049	6.25	102476	9.549
EPA SAMPLE NO.						
MW-06	137934	5.54	259323	6.76	223099	10.06
MW-08	123344	5.54	229138	6.76	199363	10.05
MW-10	121483	5.54	237218	6.75	202018	10.06
MW-11	120070	5.54	229971	6.76	208817	10.05
MW-13	125796	5.54	244811	6.76	217402	10.05
MW-12DL	125735	5.54	244727	6.76	215420	10.06
VX1202WBL01	137622	5.54	262897	6.76	221008	10.05
VX1202WBS01	133564	5.55	236701	6.76	191057	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.

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

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: LIRO01

Lab Code: CHEM Case No.: P5021 SAS No.: P5021 SDG NO.: P5021

Lab File ID: VX044052.D Date Analyzed: 12/02/2024

Instrument ID: MSVOA_X Time Analyzed: 09:45

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

	IS4 AREA #	RT #				
12 HOUR STD	98861	12.018				
UPPER LIMIT	197722	12.518				
LOWER LIMIT	49430.5	11.518				
EPA SAMPLE NO.						
MW-06	102016	12.02				
MW-08	92150	12.02				
MW-10	89001	12.02				
MW-11	91525	12.02				
MW-13	94569	12.02				
MW-12DL	97904	12.02				
VX1202WBL01	93273	12.02				
VX1202WBS01	90073	12.02				

IS4 = 1,4-Dichlorobenzene-d4

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

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

SAMPLE DATA

Raw Data: **VX044059.D**

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

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	11/26/24
Project:	RFK Bridge	Date Received:	11/27/24
Client Sample ID:	MW-06	SDG No.:	P5021
Lab Sample ID:	P5021-01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044059.D	1		12/02/24 12:35	VX120224

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
1634-04-4	Methyl tert-butyl Ether	1.00	U	0.16	1.00	ug/L
71-43-2	Benzene	8.40		0.16	1.00	ug/L
108-88-3	Toluene	1.40		0.18	1.00	ug/L
100-41-4	Ethyl Benzene	2.00		0.16	1.00	ug/L
179601-23-1	m/p-Xylenes	3.50		0.31	2.00	ug/L
95-47-6	o-Xylene	1.50		0.14	1.00	ug/L
98-82-8	Isopropylbenzene	20.5		0.13	1.00	ug/L
103-65-1	n-propylbenzene	48.7		0.14	1.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	1.10		0.18	1.00	ug/L
98-06-6	tert-Butylbenzene	0.42	J	0.17	1.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	2.10		0.18	1.00	ug/L
135-98-8	sec-Butylbenzene	3.40		0.17	1.00	ug/L
99-87-6	p-Isopropyltoluene	1.00	U	0.15	1.00	ug/L
104-51-8	n-Butylbenzene	2.20		0.22	1.00	ug/L
91-20-3	Naphthalene	77.5		0.59	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	51.0		74 - 125	102%	SPK: 50
1868-53-7	Dibromofluoromethane	47.5		75 - 124	95%	SPK: 50
2037-26-5	Toluene-d8	48.9		86 - 113	98%	SPK: 50
460-00-4	4-Bromofluorobenzene	52.0		77 - 121	104%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	138000	5.543			
540-36-3	1,4-Difluorobenzene	259000	6.757			
3114-55-4	Chlorobenzene-d5	223000	10.055			
3855-82-1	1,4-Dichlorobenzene-d4	102000	12.024			

Raw Data: **VX044059.D**

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

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	11/26/24
Project:	RFK Bridge	Date Received:	11/27/24
Client Sample ID:	MW-06	SDG No.:	P5021
Lab Sample ID:	P5021-01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044059.D	1		12/02/24 12:35	VX120224

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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

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

Sample Results: **VX044059.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120224\
Data File : VX044059.D
Acq On : 02 Dec 2024 12:35
Operator : JC/MD
Sample : P5021-01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
MW-06

Manual Integrations APPROVED

Reviewed By :John Carlone 12/03/2024
Supervised By :Mahesh Dadoda 12/03/2024

Quant Time: Dec 03 00:17:24 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.543	168	137934	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.757	114	259323	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	223099	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.024	152	102016	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.946	65	120664	51.003	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 102.000%			
35) Dibromofluoromethane	5.385	113	87992	47.486	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 94.980%			
50) Toluene-d8	8.647	98	312094	48.860	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 97.720%			
62) 4-Bromofluorobenzene	11.079	95	112955	51.961	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 103.920%			
Target Compounds						Qvalue
3) Chloromethane	1.294	50	1101	0.599	ug/l #	70
16) Acetone	2.385	43	11520	10.602	ug/l	99
20) Methylene Chloride	2.788	84	1076	0.584	ug/l #	60
25) 2-Butanone	4.598	43	2407	1.717	ug/l	100
31) Cyclohexane	5.464	56	9063	3.437	ug/l #	87
39) Methylcyclohexane	7.378	83	15274	5.092	ug/l	93
40) Benzene	6.031	78	60252	8.377	ug/l	98
51) 4-Methyl-2-Pentanone	8.579	43	13000	4.670	ug/l	94
52) Toluene	8.720	92	5944	1.381	ug/l	92
67) Ethyl Benzene	10.195	91	16805	2.024	ug/l	97
68) m/p-Xylenes	10.299	106	10793	3.486	ug/l	94
69) o-Xylene	10.640	106	4394	1.453	ug/l	88
73) Isopropylbenzene	10.963	105	160755	20.500	ug/l	99
78) n-propylbenzene	11.299	91	426409	48.686	ug/l	98
80) 1,3,5-Trimethylbenzene	11.451	105	7363	1.141	ug/l	100
83) tert-Butylbenzene	11.713	119	2705	0.423	ug/l	83
84) 1,2,4-Trimethylbenzene	11.750	105	13524	2.106	ug/l	93
85) sec-Butylbenzene	11.890	105	26502	3.383	ug/l	94
89) n-Butylbenzene	12.329	91	12604m	2.246	ug/l	
95) Naphthalene	13.774	128	565313	77.471	ug/l	99

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

Sample Results: **VX044059.D**

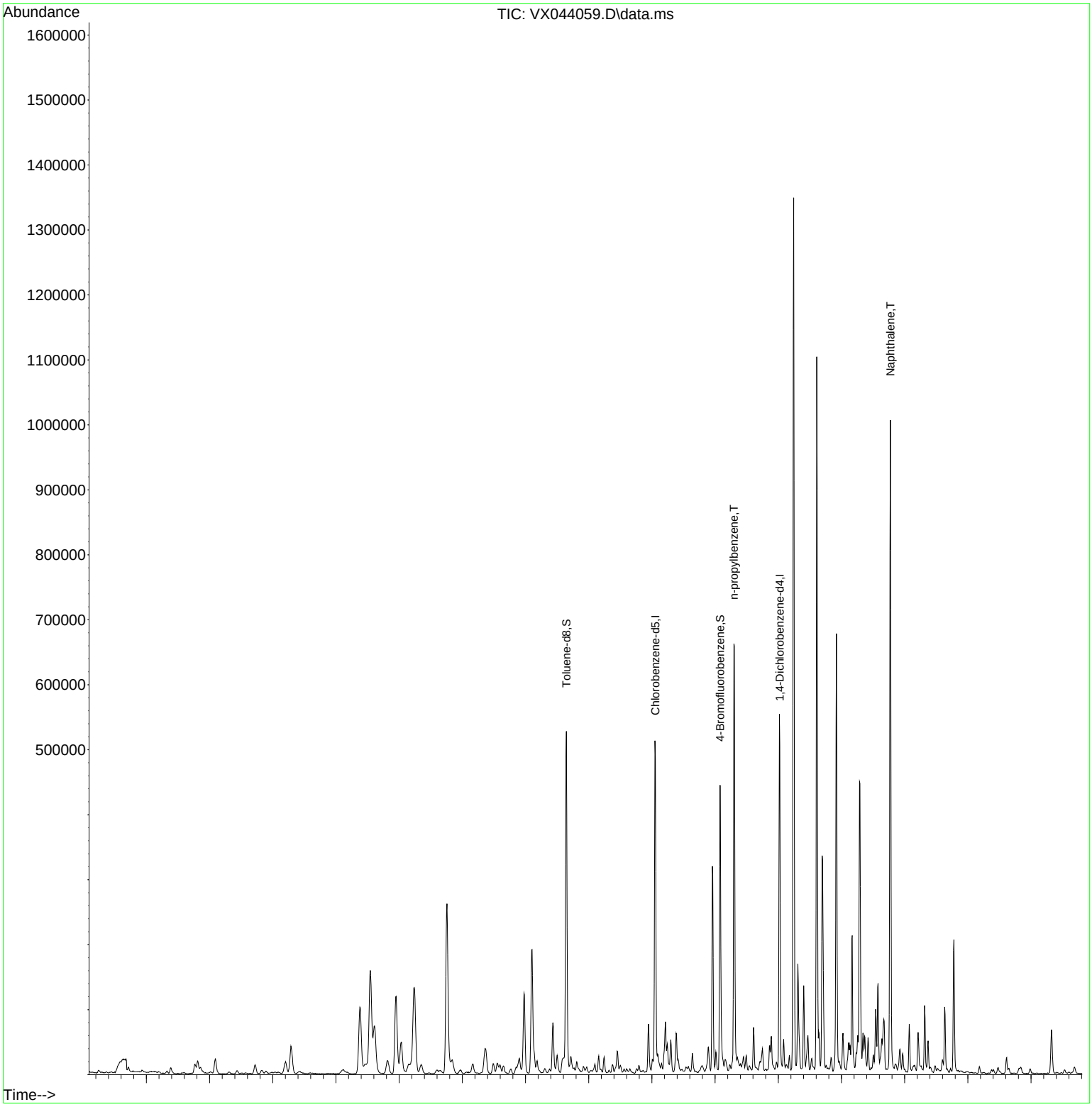
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120224\
Data File : VX044059.D
Acq On : 02 Dec 2024 12:35
Operator : JC/MD
Sample : P5021-01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 9 Sample Multiplier: 1

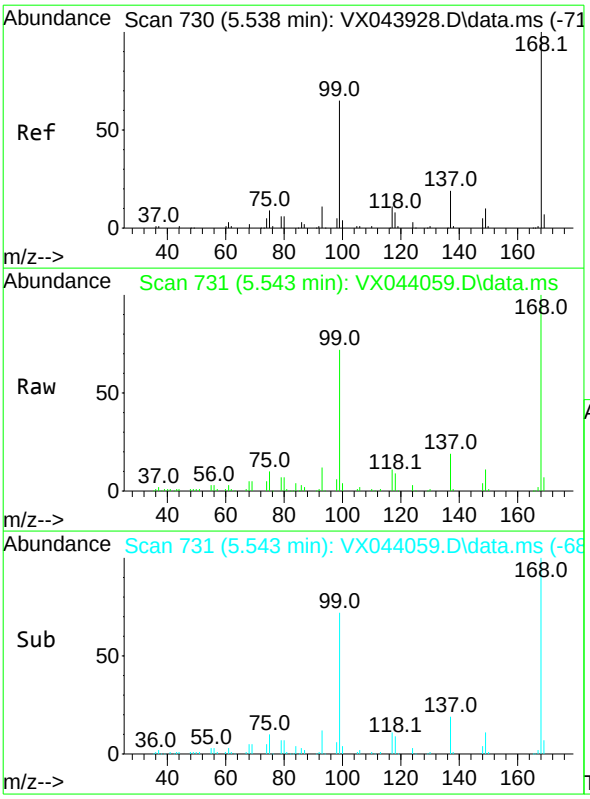
Quant Time: Dec 03 00:17:24 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
MW-06

Manual Integrations APPROVED

Reviewed By :John Carlone 12/03/2024
Supervised By :Mahesh Dadoda 12/03/2024

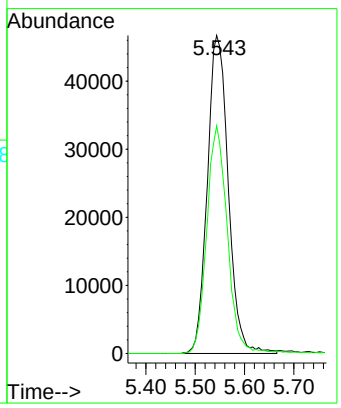




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.543 min Scan# 73
Delta R.T. 0.005 min
Lab File: VX044059.D
Acq: 02 Dec 2024 12:35

Tgt Ion:168 Resp: 137934

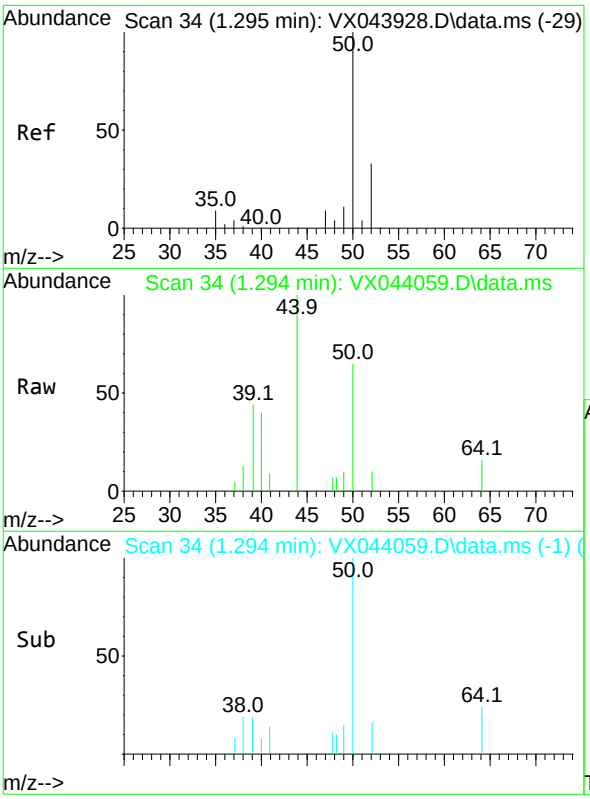
Ion	Ratio	Lower	Upper
168	100		
99	71.6	51.8	77.8



Instrument :
MSVOA_X
ClientSampleId :
MW-06

Manual Integrations
APPROVED

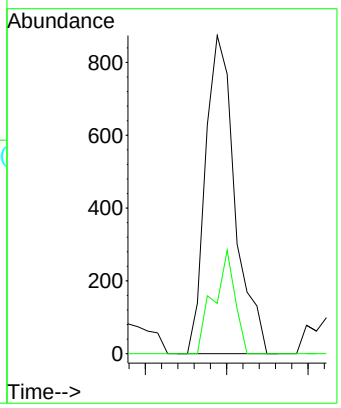
Reviewed By :John Carlone 12/03/2024
Supervised By :Mahesh Dadoda 12/03/2024

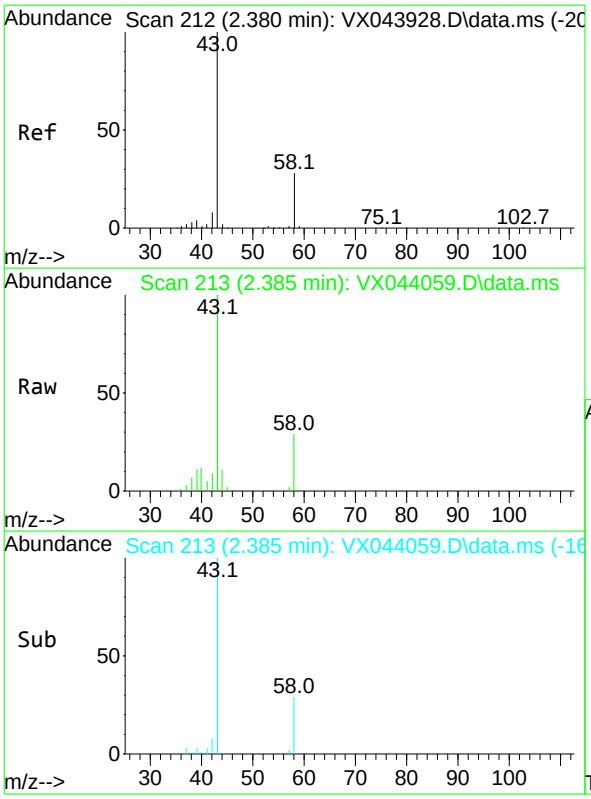


#3
Chloromethane
Concen: 0.599 ug/l
RT: 1.294 min Scan# 34
Delta R.T. -0.000 min
Lab File: VX044059.D
Acq: 02 Dec 2024 12:35

Tgt Ion: 50 Resp: 1101

Ion	Ratio	Lower	Upper
50	100		
52	15.8	26.1	39.1#

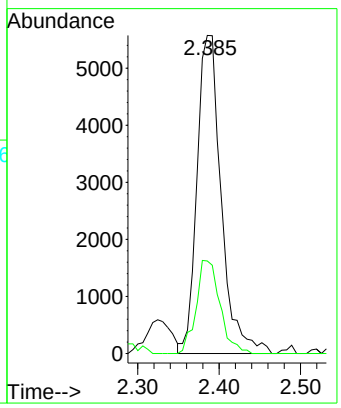




#16
Acetone
Concen: 10.602 ug/l
RT: 2.385 min Scan# 21
Delta R.T. 0.006 min
Lab File: VX044059.D
Acq: 02 Dec 2024 12:35

Tgt Ion: 43 Resp: 11520

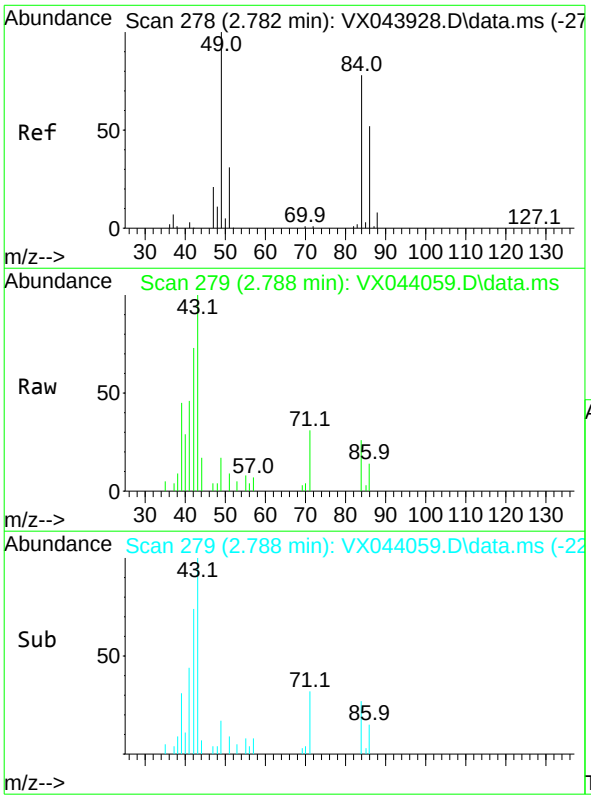
Ion	Ratio	Lower	Upper
43	100		
58	29.1	22.7	34.1



Instrument :
MSVOA_X
ClientSampleId :
MW-06

Manual Integrations
APPROVED

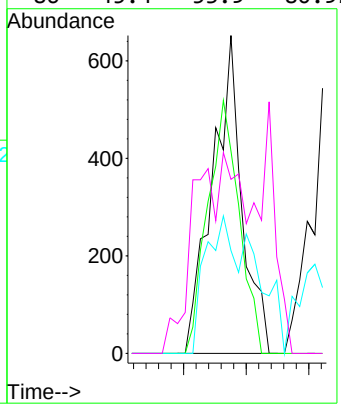
Reviewed By :John Carlone 12/03/2024
Supervised By :Mahesh Dadoda 12/03/2024

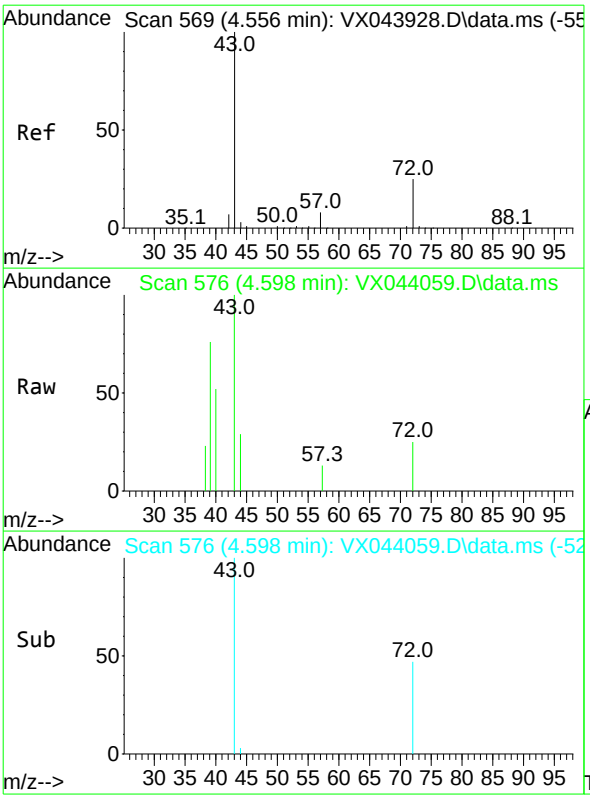


#20
Methylene Chloride
Concen: 0.584 ug/l
RT: 2.788 min Scan# 279
Delta R.T. 0.006 min
Lab File: VX044059.D
Acq: 02 Dec 2024 12:35

Tgt Ion: 84 Resp: 1076

Ion	Ratio	Lower	Upper
84	100		
49	63.7	102.7	154.1#
51	32.4	31.7	47.5
86	45.4	53.9	80.9#

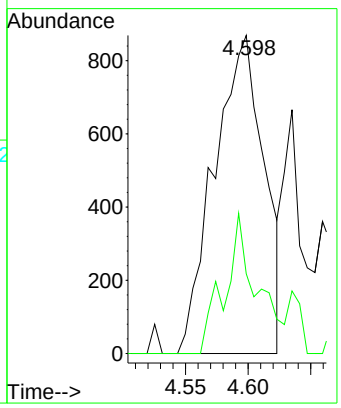




#25
2-Butanone
Concen: 1.717 ug/l
RT: 4.598 min Scan# 57
Delta R.T. 0.042 min
Lab File: VX044059.D
Acq: 02 Dec 2024 12:35

Tgt Ion: 43 Resp: 2407

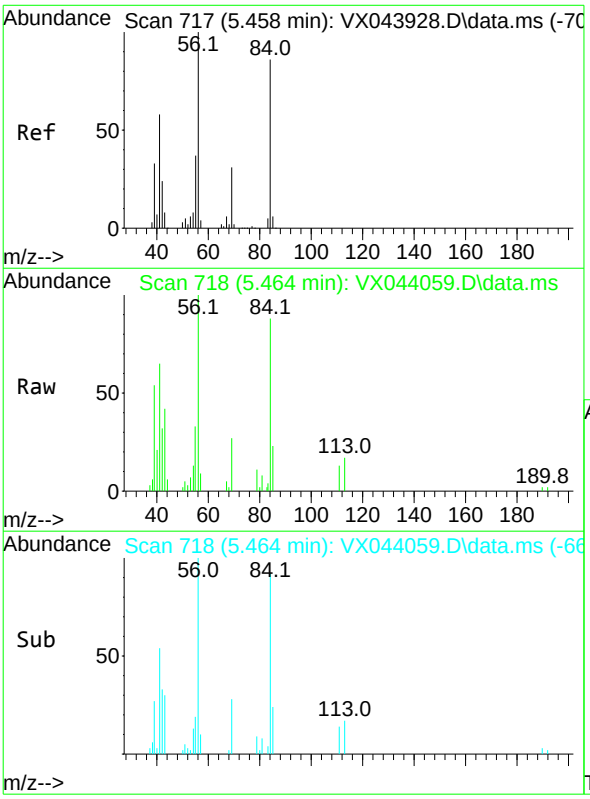
Ion	Ratio	Lower	Upper
43	100		
72	25.1	20.2	30.2



Instrument :
MSVOA_X
ClientSampleId :
MW-06

Manual Integrations
APPROVED

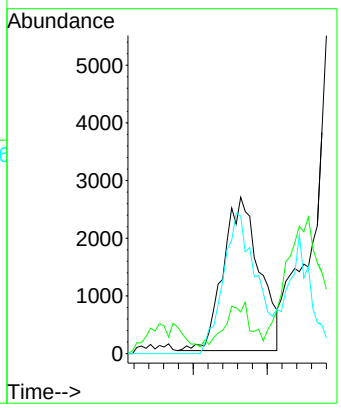
Reviewed By :John Carlone 12/03/2024
Supervised By :Mahesh Dadoda 12/03/2024

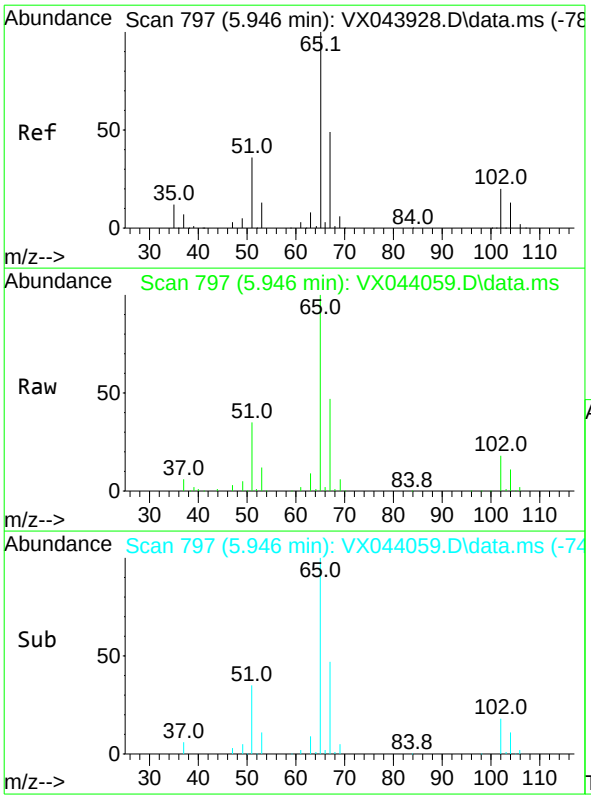


#31
Cyclohexane
Concen: 3.437 ug/l
RT: 5.464 min Scan# 718
Delta R.T. 0.006 min
Lab File: VX044059.D
Acq: 02 Dec 2024 12:35

Tgt Ion: 56 Resp: 9063

Ion	Ratio	Lower	Upper
56	100		
69	9.7	24.7	37.1#
84	89.7	68.7	103.1

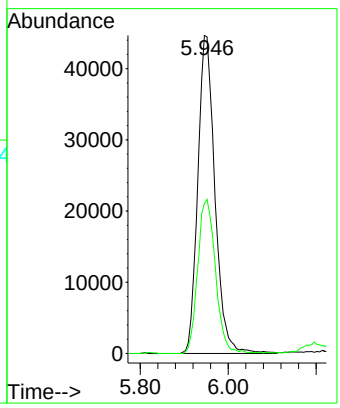




#33
1,2-Dichloroethane-d4
Concen: 51.003 ug/l
RT: 5.946 min Scan# 79
Delta R.T. -0.000 min
Lab File: VX044059.D
Acq: 02 Dec 2024 12:35

Tgt Ion: 65 Resp: 120664

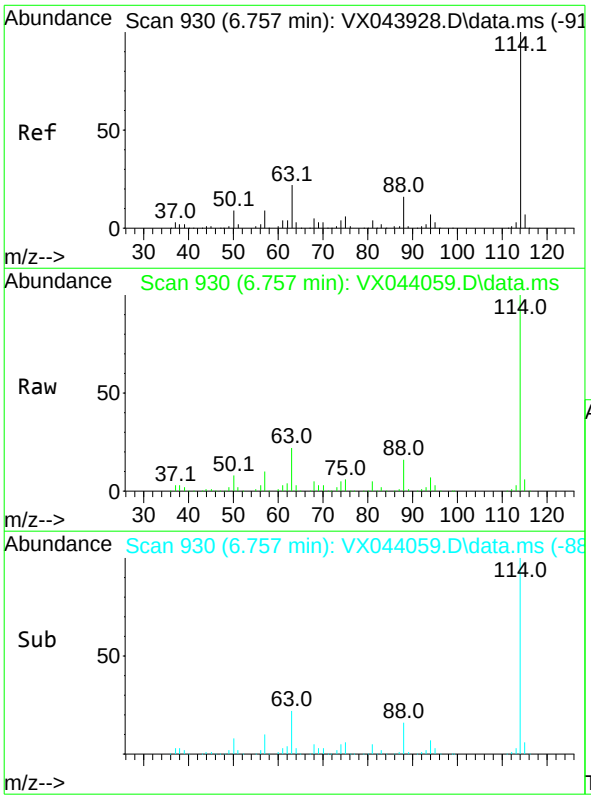
Ion	Ratio	Lower	Upper
65	100		
67	50.2	0.0	100.8



Instrument :
MSVOA_X
ClientSampleId :
MW-06

Manual Integrations
APPROVED

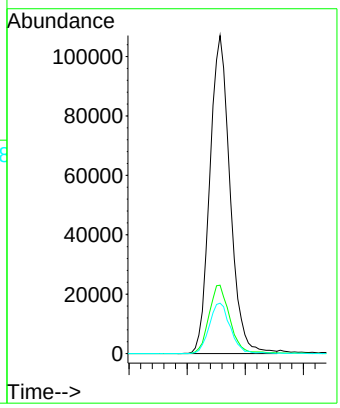
Reviewed By :John Carlone 12/03/2024
Supervised By :Mahesh Dadoda 12/03/2024

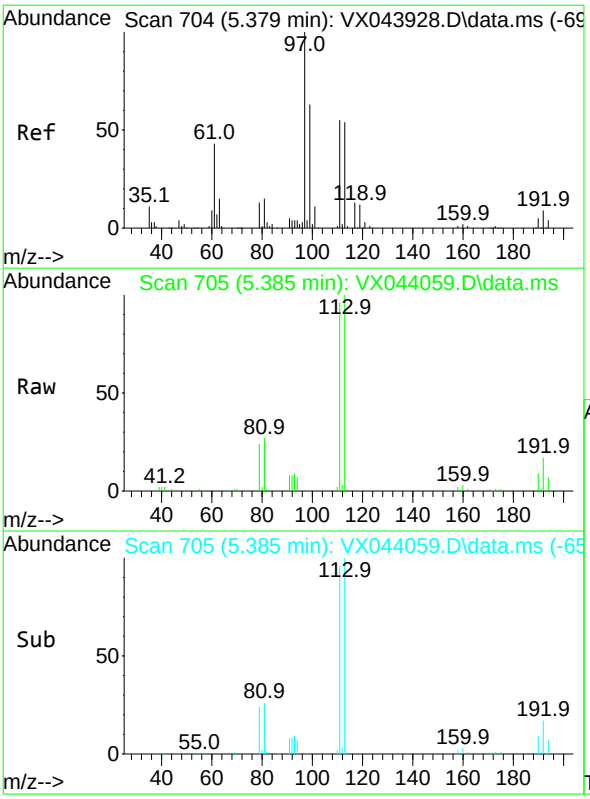


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.757 min Scan# 930
Delta R.T. -0.000 min
Lab File: VX044059.D
Acq: 02 Dec 2024 12:35

Tgt Ion:114 Resp: 259323

Ion	Ratio	Lower	Upper
114	100		
63	21.5	0.0	44.0
88	15.8	0.0	32.4

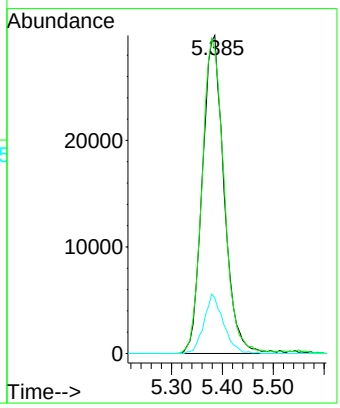




#35
Dibromofluoromethane
Concen: 47.486 ug/l
RT: 5.385 min Scan# 70
Delta R.T. 0.006 min
Lab File: VX044059.D
Acq: 02 Dec 2024 12:35

Tgt Ion:113 Resp: 87992

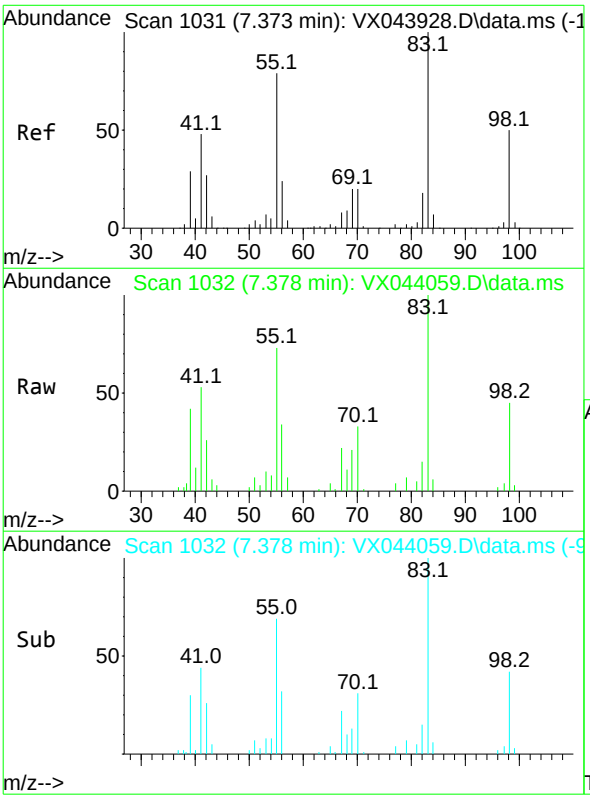
Ion	Ratio	Lower	Upper
113	100		
111	100.8	81.0	121.4
192	16.8	13.0	19.6



Instrument :
MSVOA_X
ClientSampleId :
MW-06

Manual Integrations
APPROVED

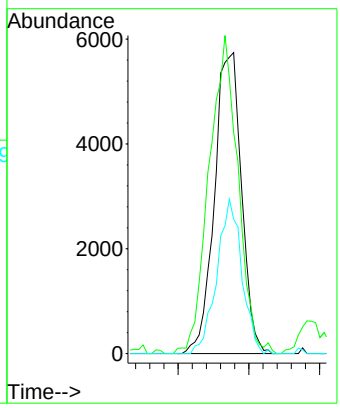
Reviewed By :John Carlone 12/03/2024
Supervised By :Mahesh Dadoda 12/03/2024

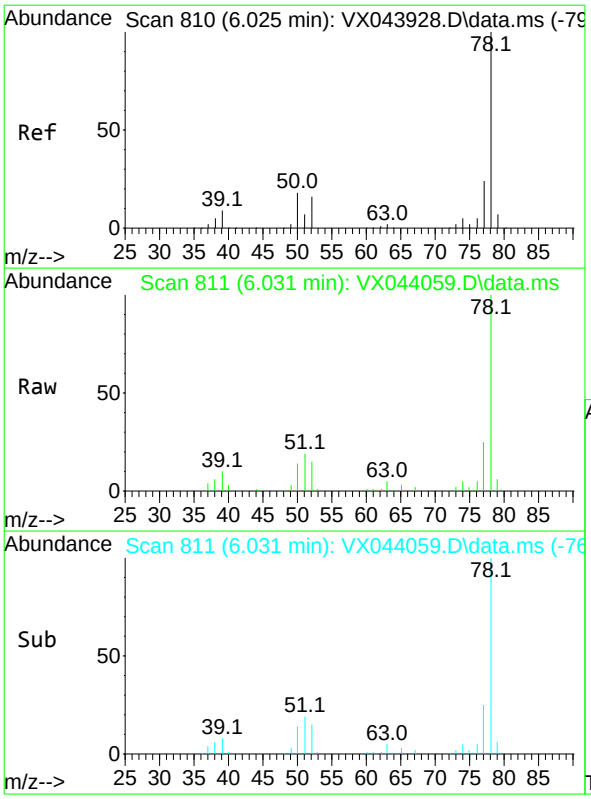


#39
Methylcyclohexane
Concen: 5.092 ug/l
RT: 7.378 min Scan# 1032
Delta R.T. 0.006 min
Lab File: VX044059.D
Acq: 02 Dec 2024 12:35

Tgt Ion: 83 Resp: 15274

Ion	Ratio	Lower	Upper
83	100		
55	73.5	63.1	94.7
98	44.6	40.0	60.0





#40
Benzene
Concen: 8.377 ug/l
RT: 6.031 min Scan# 81
Delta R.T. 0.006 min
Lab File: VX044059.D
Acq: 02 Dec 2024 12:35

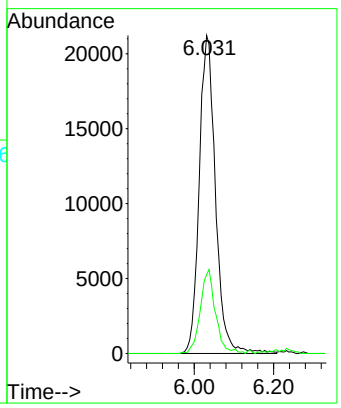
Tgt Ion: 78 Resp: 60252

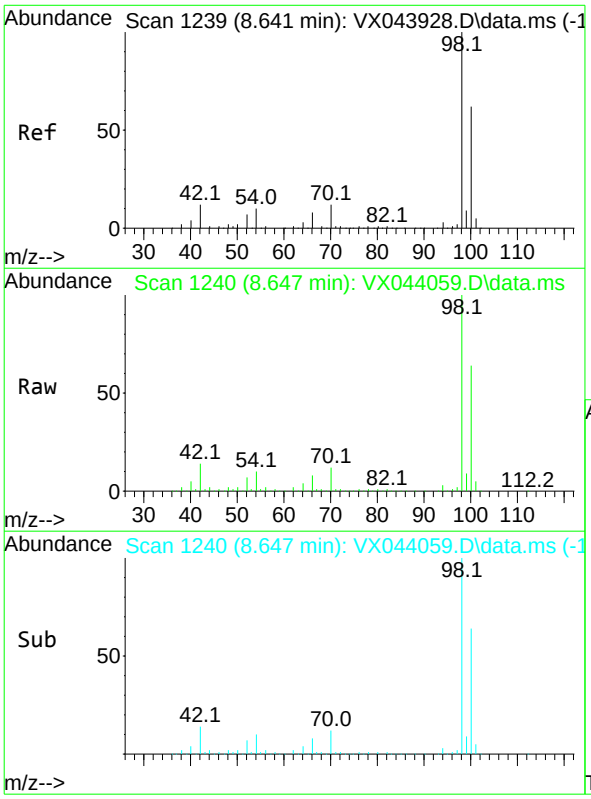
Ion	Ratio	Lower	Upper
78	100		
77	24.8	19.2	28.8

Instrument :
MSVOA_X
ClientSampleId :
MW-06

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/03/2024
Supervised By :Mahesh Dadoda 12/03/2024

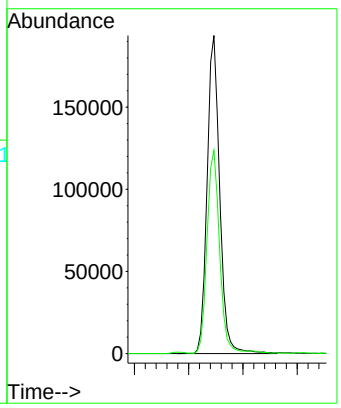


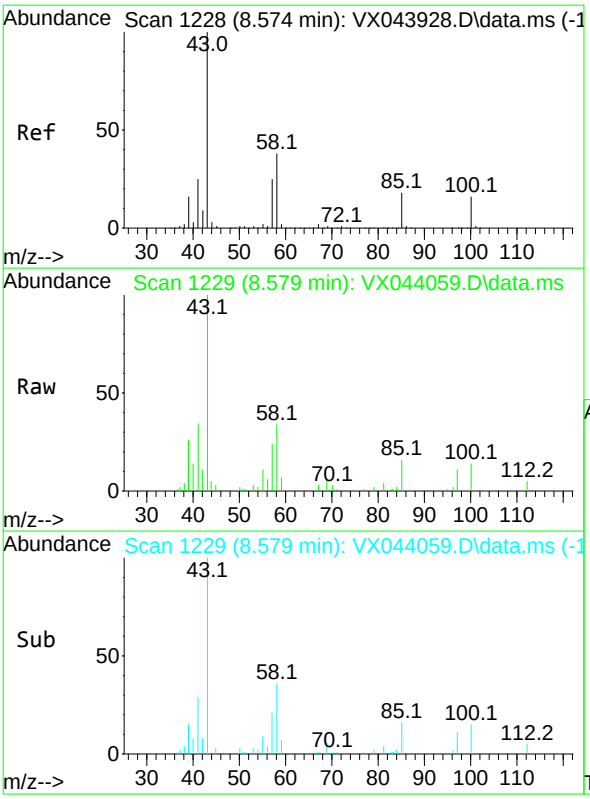


#50
Toluene-d8
Concen: 48.860 ug/l
RT: 8.647 min Scan# 1240
Delta R.T. 0.006 min
Lab File: VX044059.D
Acq: 02 Dec 2024 12:35

Tgt Ion: 98 Resp: 312094

Ion	Ratio	Lower	Upper
98	100		
100	63.9	52.6	79.0





#51
4-Methyl-2-Pentanone
Concen: 4.670 ug/l
RT: 8.579 min Scan# 12
Delta R.T. 0.006 min
Lab File: VX044059.D
Acq: 02 Dec 2024 12:35

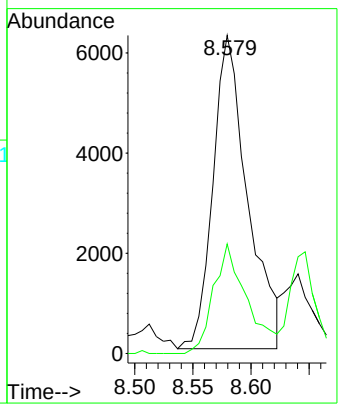
Tgt Ion: 43 Resp: 13000

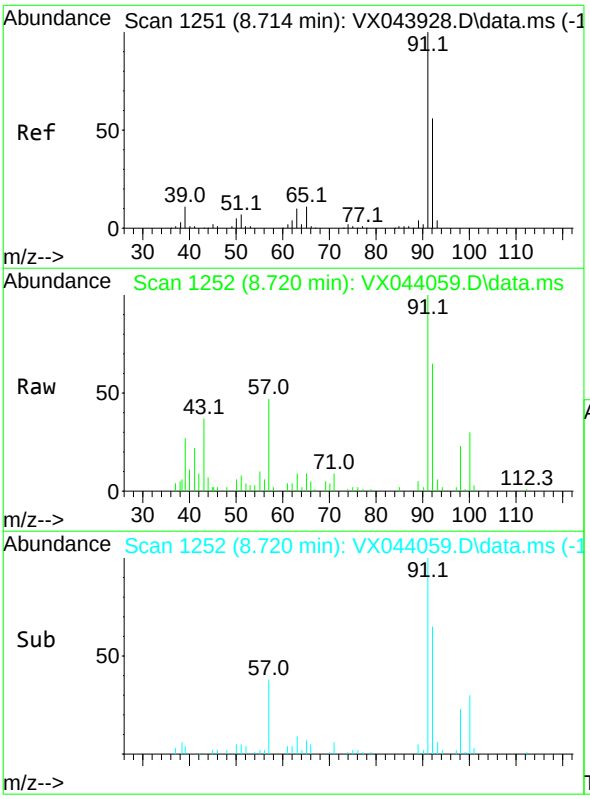
Ion	Ratio	Lower	Upper
43	100		
58	33.7	30.0	45.0

Instrument :
MSVOA_X
ClientSampleId :
MW-06

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/03/2024
Supervised By :Mahesh Dadoda 12/03/2024

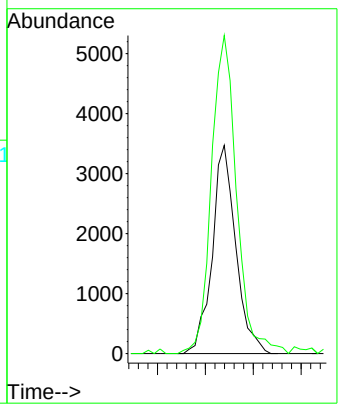


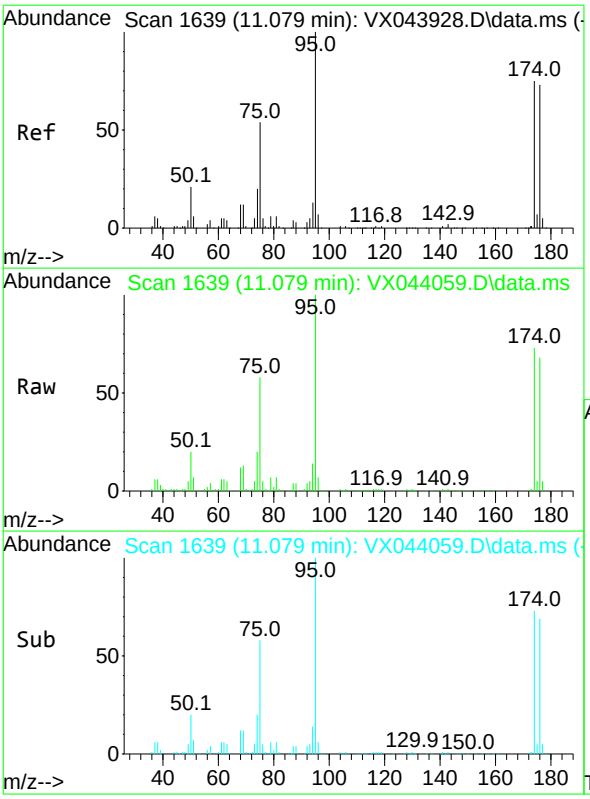


#52
Toluene
Concen: 1.381 ug/l
RT: 8.720 min Scan# 1252
Delta R.T. 0.006 min
Lab File: VX044059.D
Acq: 02 Dec 2024 12:35

Tgt Ion: 92 Resp: 5944

Ion	Ratio	Lower	Upper
92	100		
91	162.9	139.7	209.5

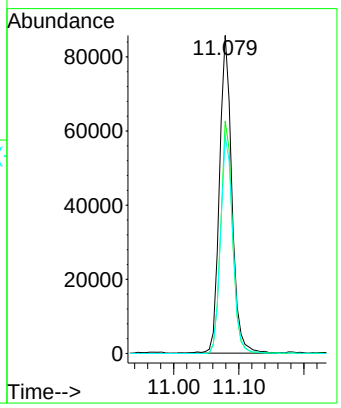




#62
4-Bromofluorobenzene
Concen: 51.961 ug/l
RT: 11.079 min Scan# 16
Delta R.T. -0.000 min
Lab File: VX044059.D
Acq: 02 Dec 2024 12:35

Tgt Ion: 95 Resp: 112955

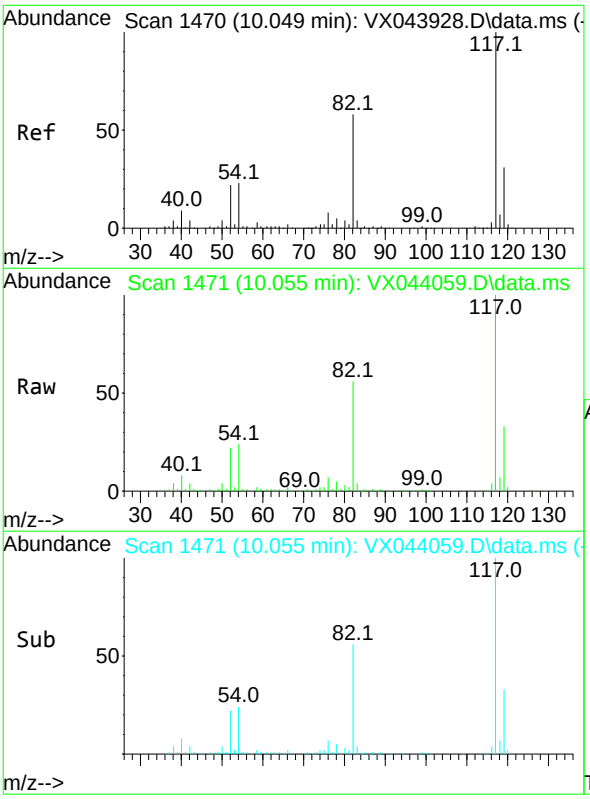
Ion	Ratio	Lower	Upper
95	100		
174	70.0	0.0	150.4
176	67.9	0.0	146.0



Instrument :
MSVOA_X
ClientSampleId :
MW-06

Manual Integrations
APPROVED

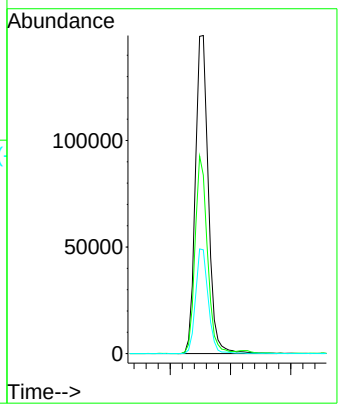
Reviewed By :John Carlone 12/03/2024
Supervised By :Mahesh Dadoda 12/03/2024

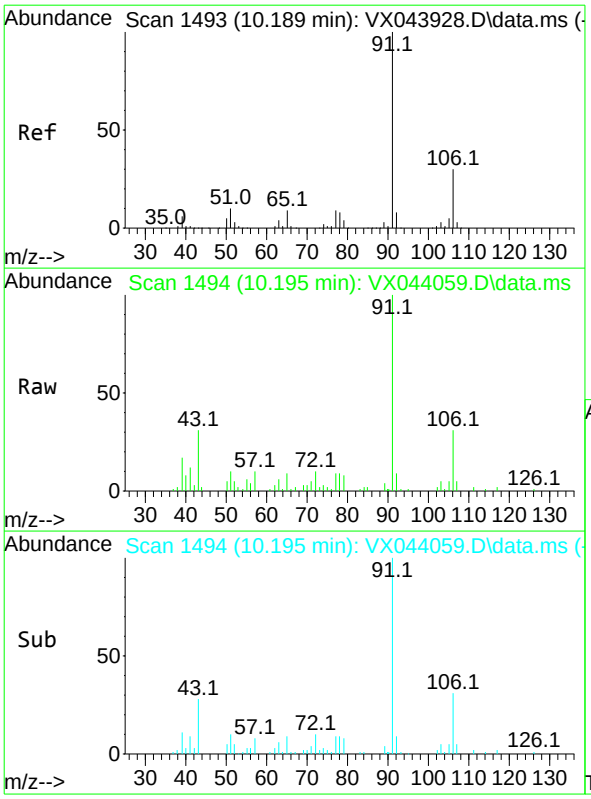


#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.055 min Scan# 1471
Delta R.T. 0.006 min
Lab File: VX044059.D
Acq: 02 Dec 2024 12:35

Tgt Ion:117 Resp: 223099

Ion	Ratio	Lower	Upper
117	100		
82	56.1	46.4	69.6
119	32.6	24.6	37.0

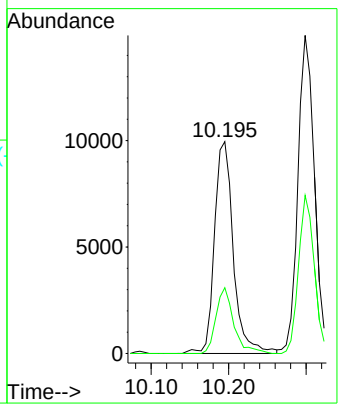




#67
Ethyl Benzene
Concen: 2.024 ug/l
RT: 10.195 min Scan# 14
Delta R.T. 0.006 min
Lab File: VX044059.D
Acq: 02 Dec 2024 12:35

Tgt Ion: 91 Resp: 16805

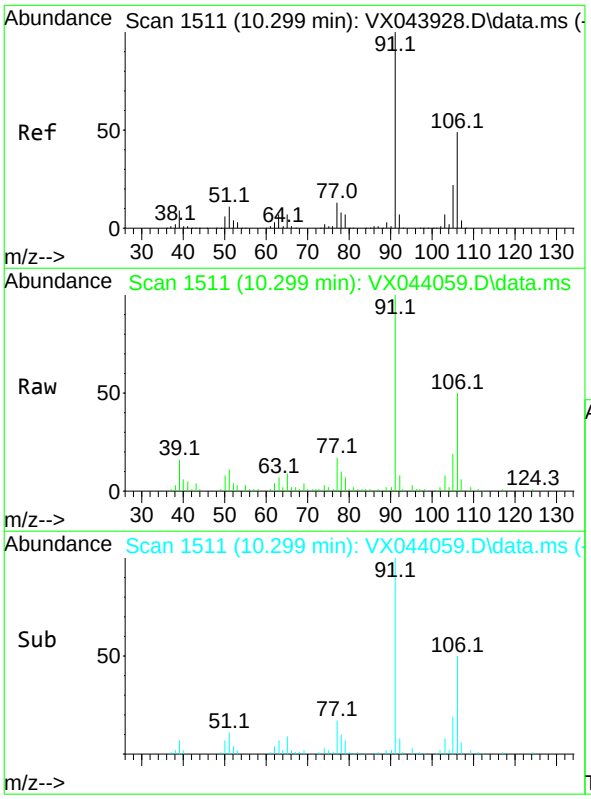
Ion	Ratio	Lower	Upper
91	100		
106	31.1	23.6	35.4



Instrument :
MSVOA_X
ClientSampleId :
MW-06

Manual Integrations
APPROVED

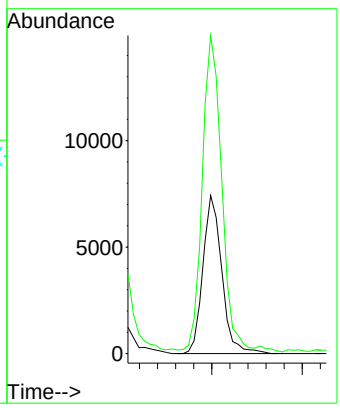
Reviewed By :John Carlone 12/03/2024
Supervised By :Mahesh Dadoda 12/03/2024

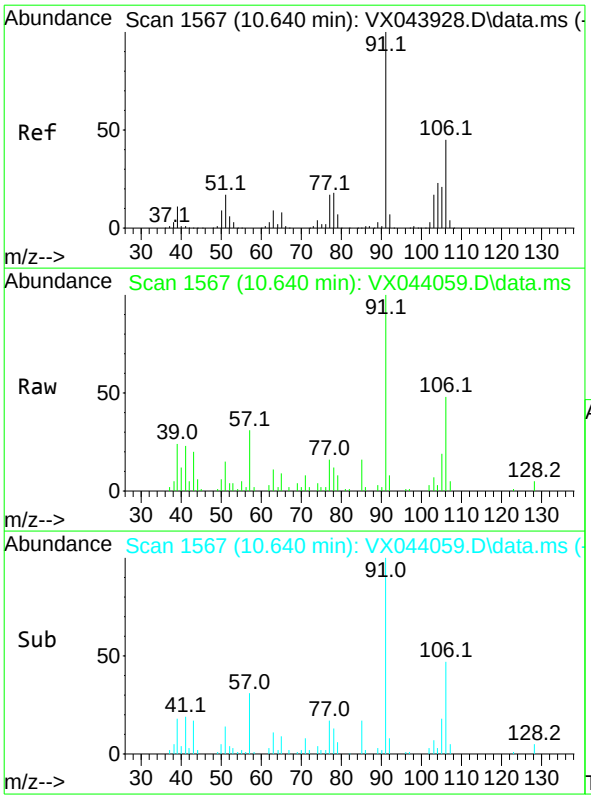


#68
m/p-Xylenes
Concen: 3.486 ug/l
RT: 10.299 min Scan# 1511
Delta R.T. -0.000 min
Lab File: VX044059.D
Acq: 02 Dec 2024 12:35

Tgt Ion:106 Resp: 10793

Ion	Ratio	Lower	Upper
106	100		
91	201.1	168.1	252.1

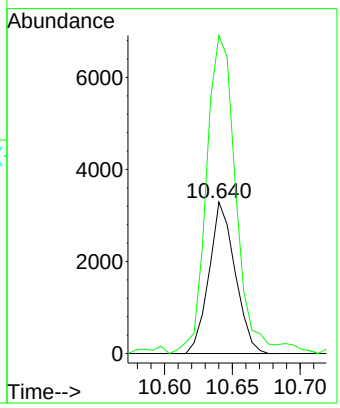




#69
o-Xylene
Concen: 1.453 ug/l
RT: 10.640 min Scan# 15
Delta R.T. -0.000 min
Lab File: VX044059.D
Acq: 02 Dec 2024 12:35

Tgt Ion:106 Resp: 4394

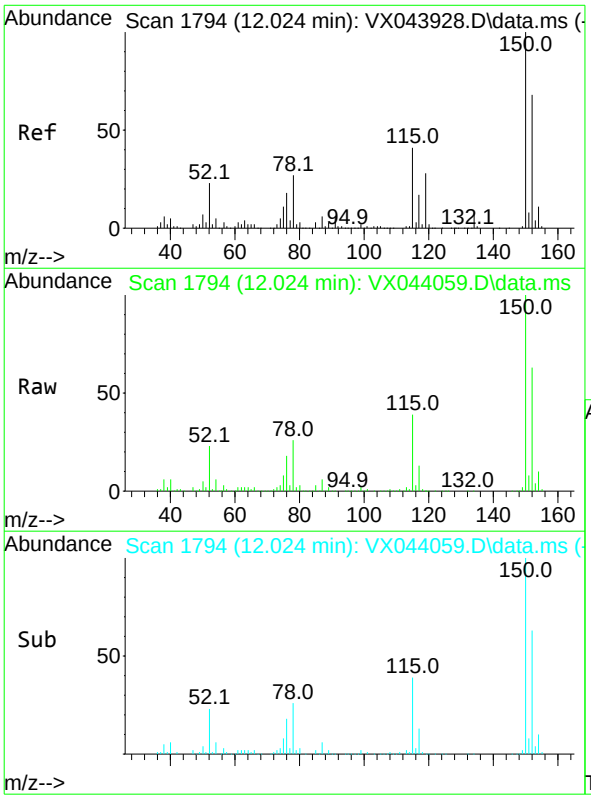
Ion	Ratio	Lower	Upper
106	100		
91	239.9	110.2	330.6



Instrument :
MSVOA_X
ClientSampleId :
MW-06

Manual Integrations
APPROVED

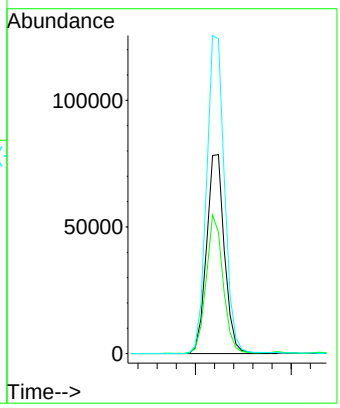
Reviewed By :John Carlone 12/03/2024
Supervised By :Mahesh Dadoda 12/03/2024

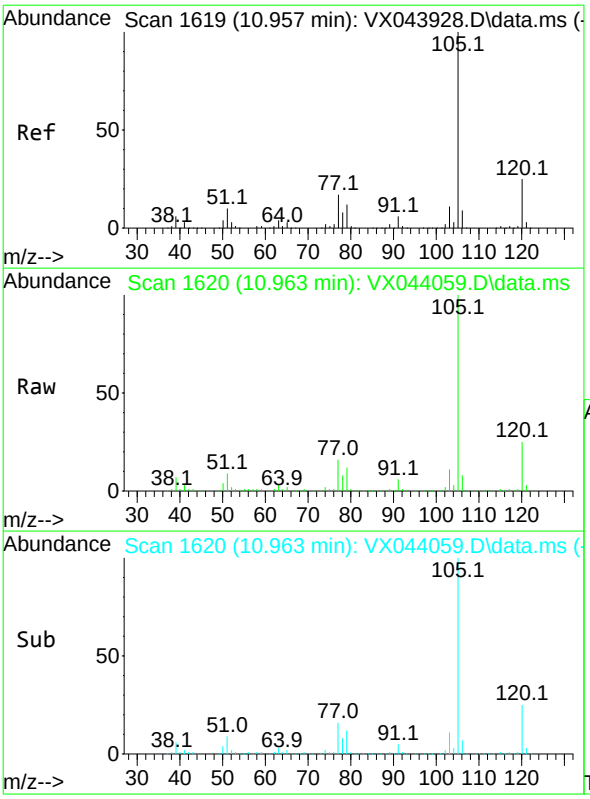


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.024 min Scan# 1794
Delta R.T. -0.000 min
Lab File: VX044059.D
Acq: 02 Dec 2024 12:35

Tgt Ion:152 Resp: 102016

Ion	Ratio	Lower	Upper
152	100		
115	66.0	45.4	136.2
150	160.4	0.0	353.0

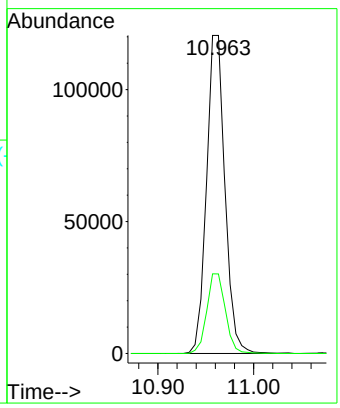




#73
Isopropylbenzene
Concen: 20.500 ug/l
RT: 10.963 min Scan# 16
Delta R.T. 0.006 min
Lab File: VX044059.D
Acq: 02 Dec 2024 12:35

Tgt Ion:105 Resp: 160755

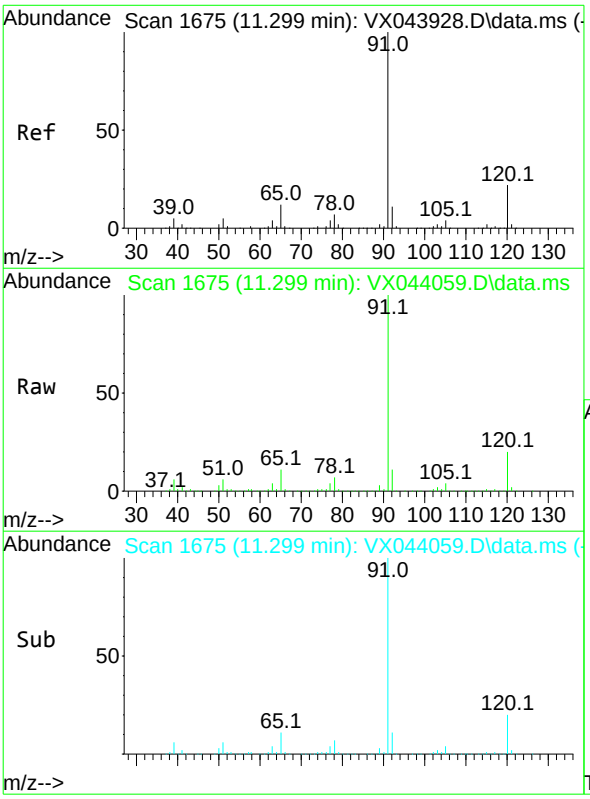
Ion	Ratio	Lower	Upper
105	100		
120	25.4	13.0	38.9



Instrument :
MSVOA_X
ClientSampleId :
MW-06

Manual Integrations
APPROVED

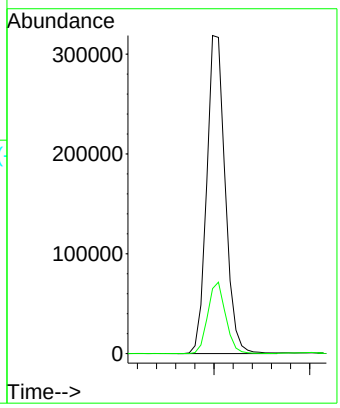
Reviewed By :John Carlone 12/03/2024
Supervised By :Mahesh Dadoda 12/03/2024

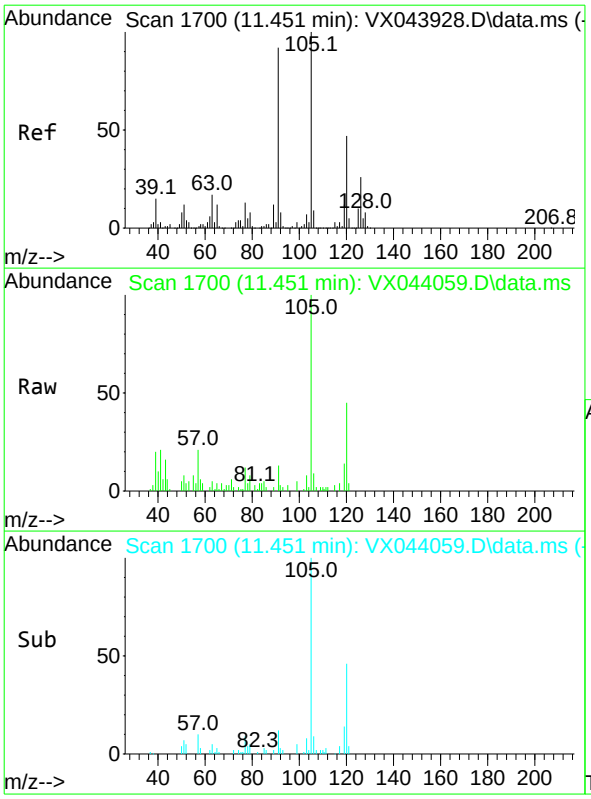


#78
n-propylbenzene
Concen: 48.686 ug/l
RT: 11.299 min Scan# 1675
Delta R.T. -0.000 min
Lab File: VX044059.D
Acq: 02 Dec 2024 12:35

Tgt Ion: 91 Resp: 426409

Ion	Ratio	Lower	Upper
91	100		
120	21.7	11.5	34.4





#80
1,3,5-Trimethylbenzene
Concen: 1.141 ug/l
RT: 11.451 min Scan# 17
Delta R.T. -0.000 min
Lab File: VX044059.D
Acq: 02 Dec 2024 12:35

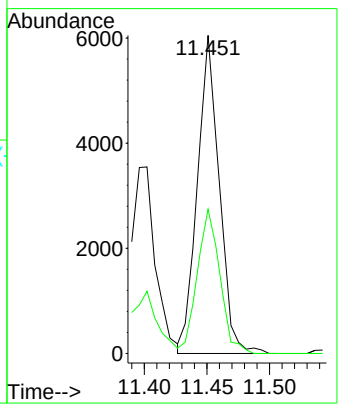
Tgt Ion:105 Resp: 7363

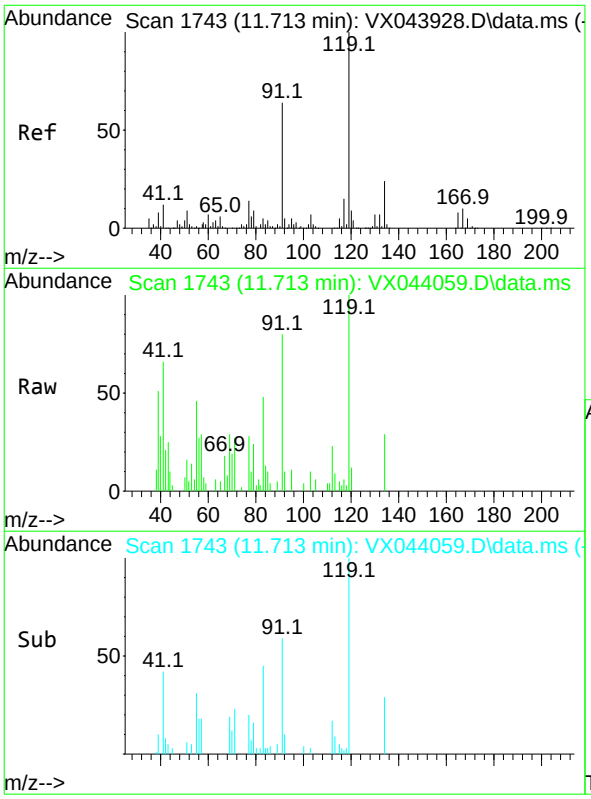
Ion	Ratio	Lower	Upper
105	100		
120	46.8	23.3	69.8

Instrument :
MSVOA_X
ClientSampleId :
MW-06

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/03/2024
Supervised By :Mahesh Dadoda 12/03/2024

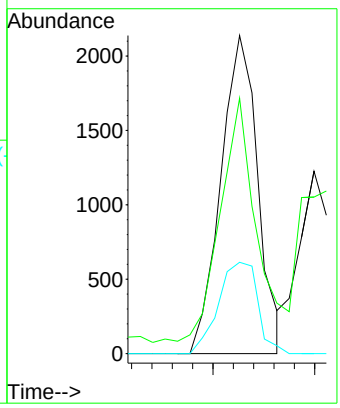


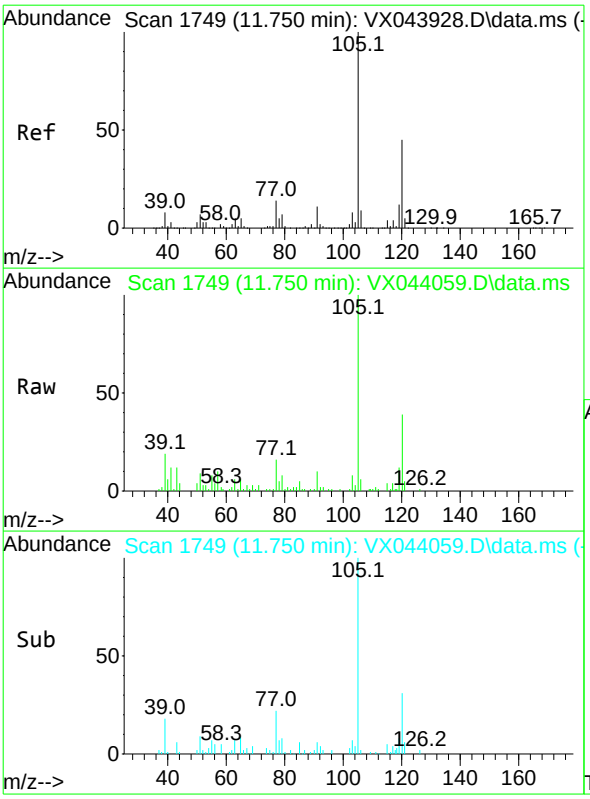


#83
tert-Butylbenzene
Concen: 0.423 ug/l
RT: 11.713 min Scan# 1743
Delta R.T. -0.000 min
Lab File: VX044059.D
Acq: 02 Dec 2024 12:35

Tgt Ion:119 Resp: 2705

Ion	Ratio	Lower	Upper
119	100		
91	75.5	31.0	93.0
134	30.4	11.6	34.8

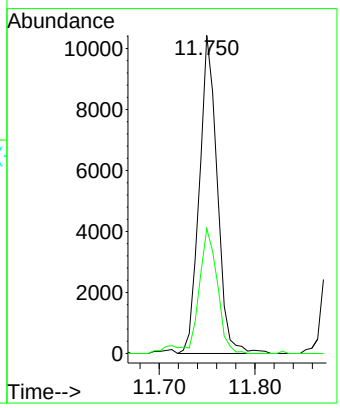




#84
1,2,4-Trimethylbenzene
Concen: 2.106 ug/l
RT: 11.750 min Scan# 17
Delta R.T. -0.000 min
Lab File: VX044059.D
Acq: 02 Dec 2024 12:35

Tgt Ion:105 Resp: 13524

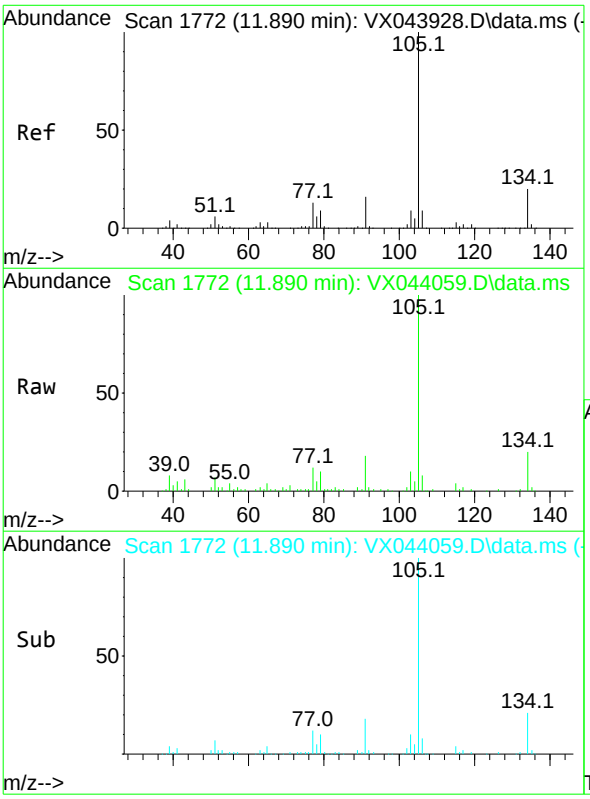
Ion	Ratio	Lower	Upper
105	100		
120	39.4	21.9	65.7



Instrument :
MSVOA_X
ClientSampleId :
MW-06

Manual Integrations
APPROVED

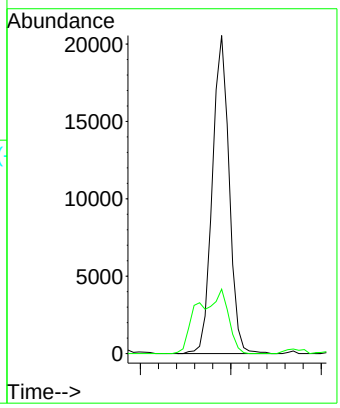
Reviewed By :John Carlone 12/03/2024
Supervised By :Mahesh Dadoda 12/03/2024

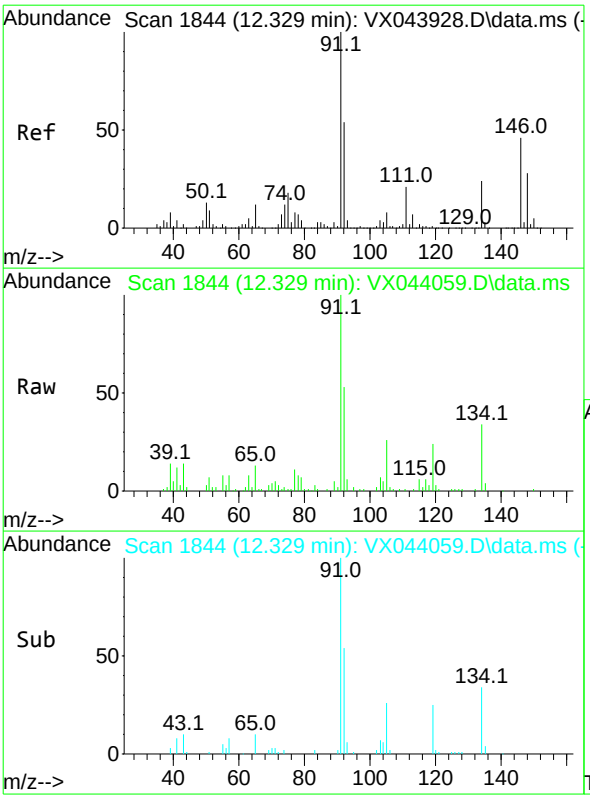


#85
sec-Butylbenzene
Concen: 3.383 ug/l
RT: 11.890 min Scan# 1772
Delta R.T. -0.000 min
Lab File: VX044059.D
Acq: 02 Dec 2024 12:35

Tgt Ion:105 Resp: 26502

Ion	Ratio	Lower	Upper
105	100		
134	16.7	9.7	29.1





#89
n-Butylbenzene
Concen: 2.246 ug/l m
RT: 12.329 min Scan# 18
Delta R.T. -0.000 min
Lab File: VX044059.D
Acq: 02 Dec 2024 12:35

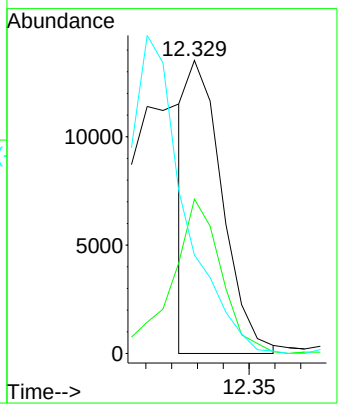
Tgt Ion: 91 Resp: 12604

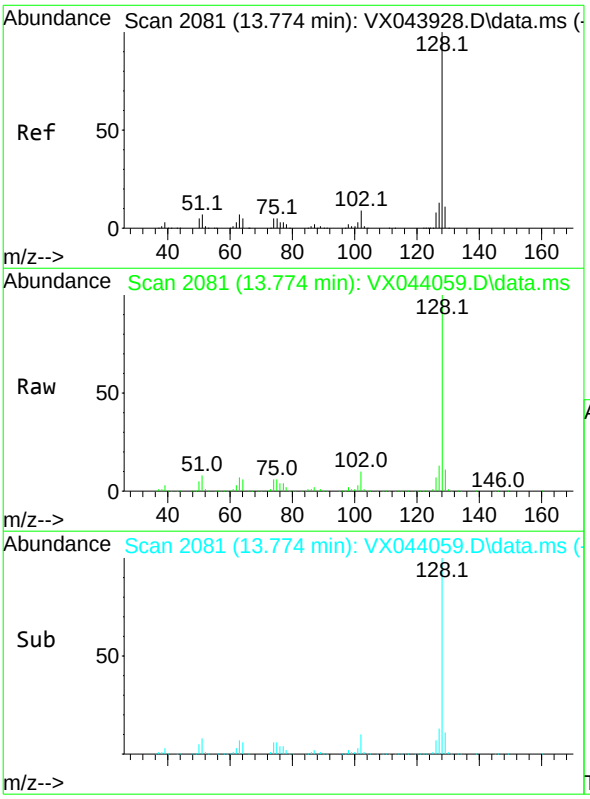
Ion	Ratio	Lower	Upper
91	100		
92	76.2	26.6	79.8
134	175.3	12.4	37.2#

Instrument :
MSVOA_X
ClientSampleId :
MW-06

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/03/2024
Supervised By :Mahesh Dadoda 12/03/2024

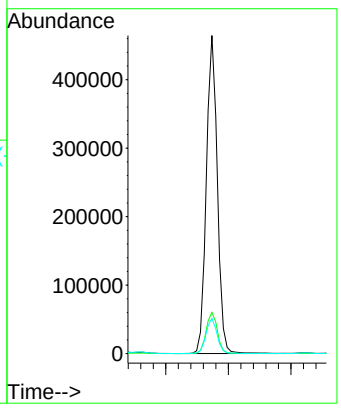




#95
Naphthalene
Concen: 77.471 ug/l
RT: 13.774 min Scan# 2081
Delta R.T. -0.000 min
Lab File: VX044059.D
Acq: 02 Dec 2024 12:35

Tgt Ion:128 Resp: 565313

Ion	Ratio	Lower	Upper
128	100		
127	13.2	10.2	15.2
129	11.3	8.6	12.8



Raw Data: **VX044057.D**

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

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	11/26/24
Project:	RFK Bridge	Date Received:	11/27/24
Client Sample ID:	MW-08	SDG No.:	P5021
Lab Sample ID:	P5021-02	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044057.D	10		12/02/24 11:49	VX120224

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
1634-04-4	Methyl tert-butyl Ether	25.0		1.60	10.0	ug/L
71-43-2	Benzene	180		1.60	10.0	ug/L
108-88-3	Toluene	9.70	J	1.80	10.0	ug/L
100-41-4	Ethyl Benzene	270		1.60	10.0	ug/L
179601-23-1	m/p-Xylenes	380		3.10	20.0	ug/L
95-47-6	o-Xylene	270		1.40	10.0	ug/L
98-82-8	Isopropylbenzene	58.1		1.30	10.0	ug/L
103-65-1	n-propylbenzene	130		1.40	10.0	ug/L
108-67-8	1,3,5-Trimethylbenzene	10.0	U	1.80	10.0	ug/L
98-06-6	tert-Butylbenzene	10.0	U	1.70	10.0	ug/L
95-63-6	1,2,4-Trimethylbenzene	610		1.80	10.0	ug/L
135-98-8	sec-Butylbenzene	10.0	U	1.70	10.0	ug/L
99-87-6	p-Isopropyltoluene	10.0	U	1.50	10.0	ug/L
104-51-8	n-Butylbenzene	13.9		2.20	10.0	ug/L
91-20-3	Naphthalene	400		5.90	10.0	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	48.9		74 - 125	98%	SPK: 50
1868-53-7	Dibromofluoromethane	48.0		75 - 124	96%	SPK: 50
2037-26-5	Toluene-d8	48.8		86 - 113	98%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.6		77 - 121	103%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	123000	5.544			
540-36-3	1,4-Difluorobenzene	229000	6.757			
3114-55-4	Chlorobenzene-d5	199000	10.049			
3855-82-1	1,4-Dichlorobenzene-d4	92200	12.018			

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

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	11/26/24
Project:	RFK Bridge	Date Received:	11/27/24
Client Sample ID:	MW-08	SDG No.:	P5021
Lab Sample ID:	P5021-02	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044057.D	10		12/02/24 11:49	VX120224

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\VX120224\
Data File : VX044057.D
Acq On : 02 Dec 2024 11:49
Operator : JC/MD
Sample : P5021-02 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
MW-08

Quant Time: Dec 03 00:16:14 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.544	168	123344	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.757	114	229138	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.049	117	199363	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	92150	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.952	65	103454	48.901	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 97.800%			
35) Dibromofluoromethane	5.385	113	78520	47.957	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 95.920%			
50) Toluene-d8	8.647	98	275436	48.802	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 97.600%			
62) 4-Bromofluorobenzene	11.079	95	99125	51.606	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 103.220%			
Target Compounds						Qvalue
16) Acetone	2.386	43	1286	1.324	ug/l #	85
19) Methyl tert-butyl Ether	3.111	73	12908	2.501	ug/l #	43
31) Cyclohexane	5.464	56	13515	5.732	ug/l	92
39) Methylcyclohexane	7.372	83	8295	3.130	ug/l	93
40) Benzene	6.031	78	117250	18.449	ug/l	99
52) Toluene	8.714	92	3695	0.971	ug/l	85
67) Ethyl Benzene	10.189	91	201719	27.188	ug/l	99
68) m/p-Xylenes	10.299	106	105899	38.274	ug/l	99
69) o-Xylene	10.640	106	73869	27.344	ug/l	94
73) Isopropylbenzene	10.963	105	41146	5.809	ug/l	97
78) n-propylbenzene	11.305	91	104791	13.246	ug/l	97
84) 1,2,4-Trimethylbenzene	11.750	105	355336	61.244	ug/l	100
89) n-Butylbenzene	12.335	91	7040	1.389	ug/l #	55
95) Naphthalene	13.774	128	266488	40.430	ug/l	99

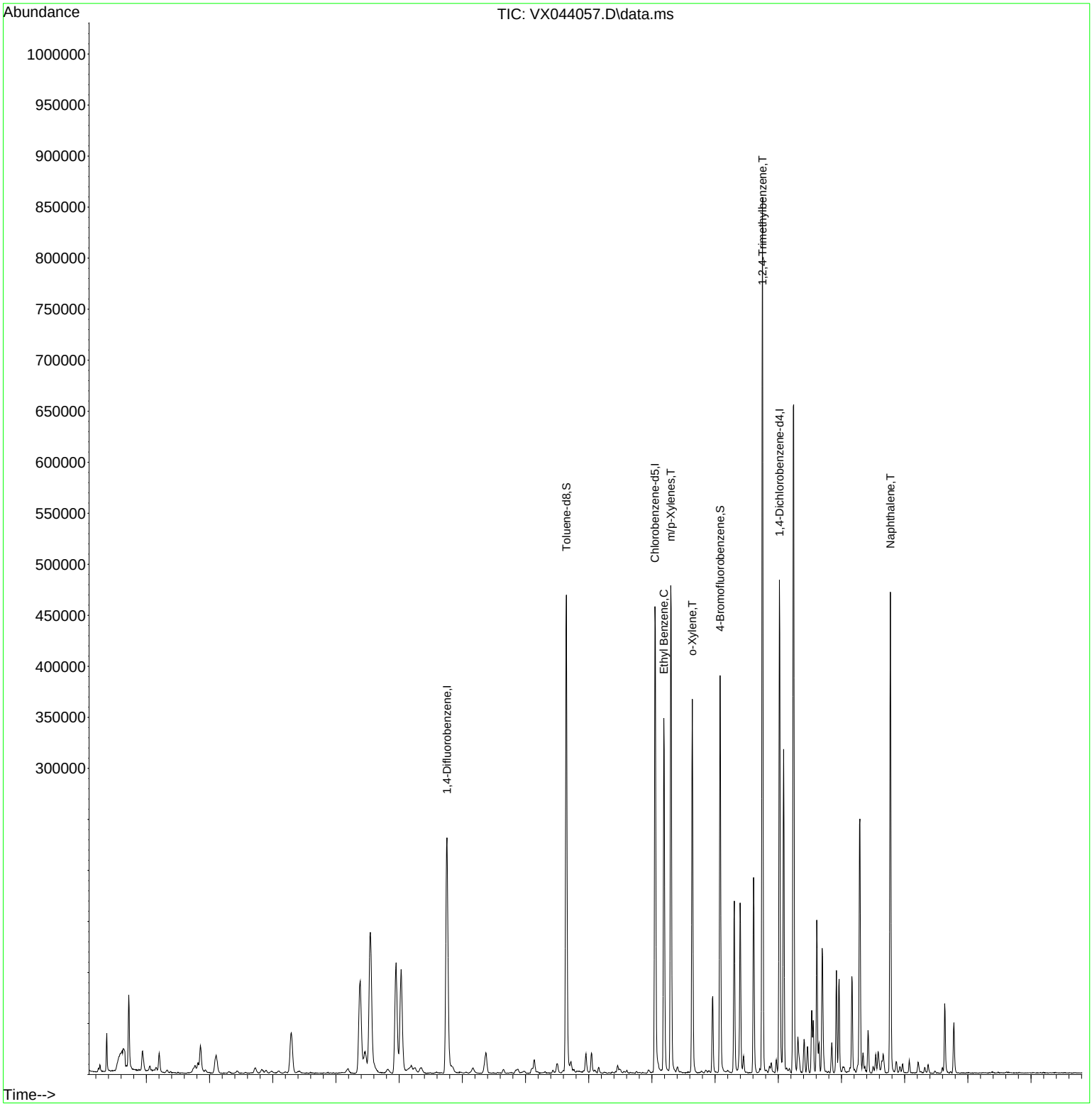
(#) = qualifier out of range (m) = manual integration (+) = signals summed

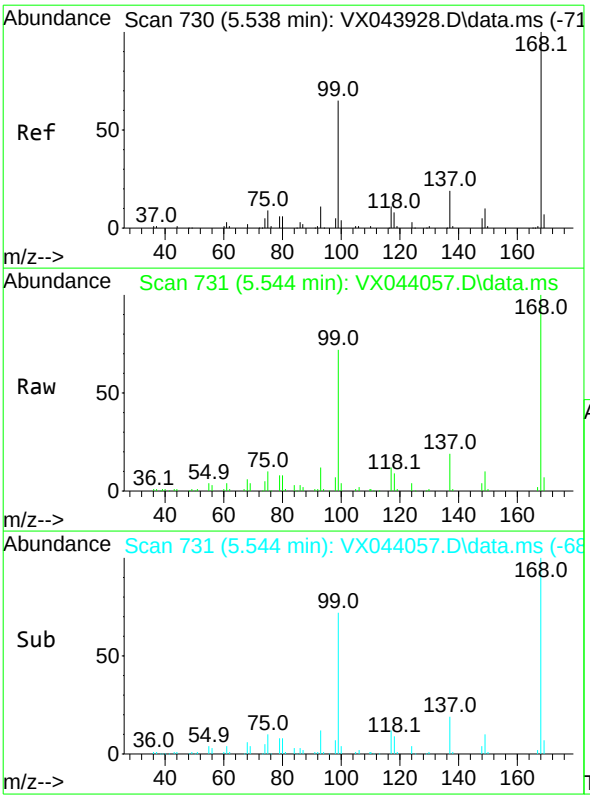
Sample Results: **VX044057.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120224\
Data File : VX044057.D
Acq On : 02 Dec 2024 11:49
Operator : JC/MD
Sample : P5021-02 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
MW-08

Quant Time: Dec 03 00:16:14 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration



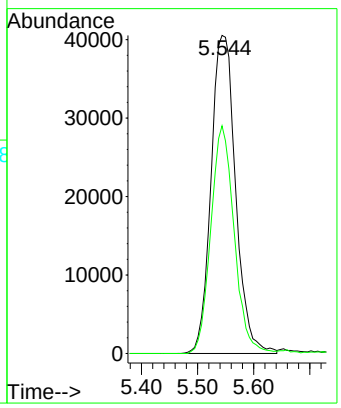


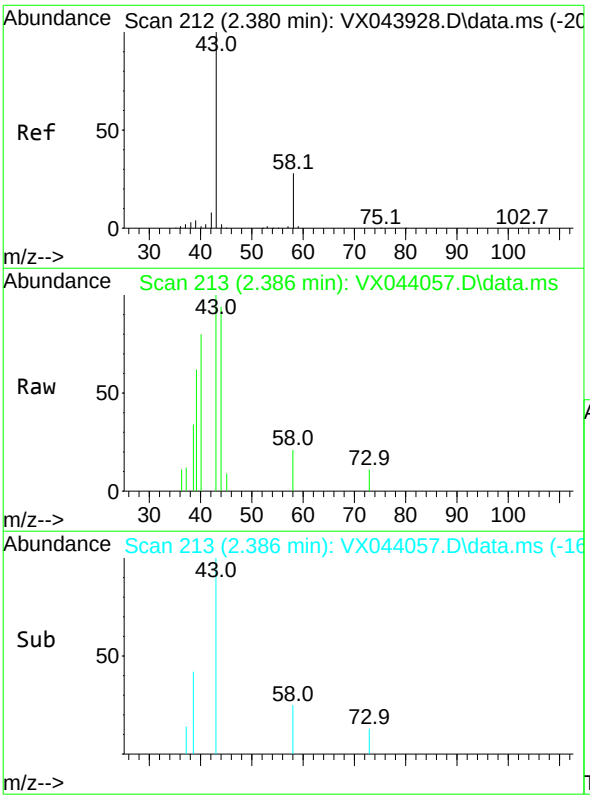
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.544 min Scan# 73
Delta R.T. 0.006 min
Lab File: VX044057.D
Acq: 02 Dec 2024 11:49

Instrument :
MSVOA_X
ClientSampleId :
MW-08

Tgt Ion:168 Resp: 123344

Ion	Ratio	Lower	Upper
168	100		
99	71.6	51.8	77.8

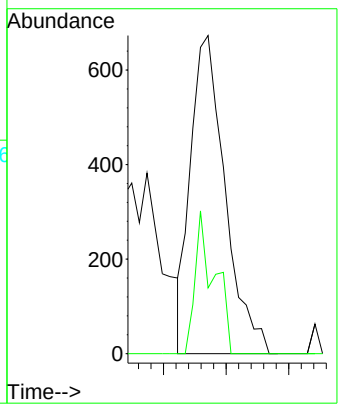


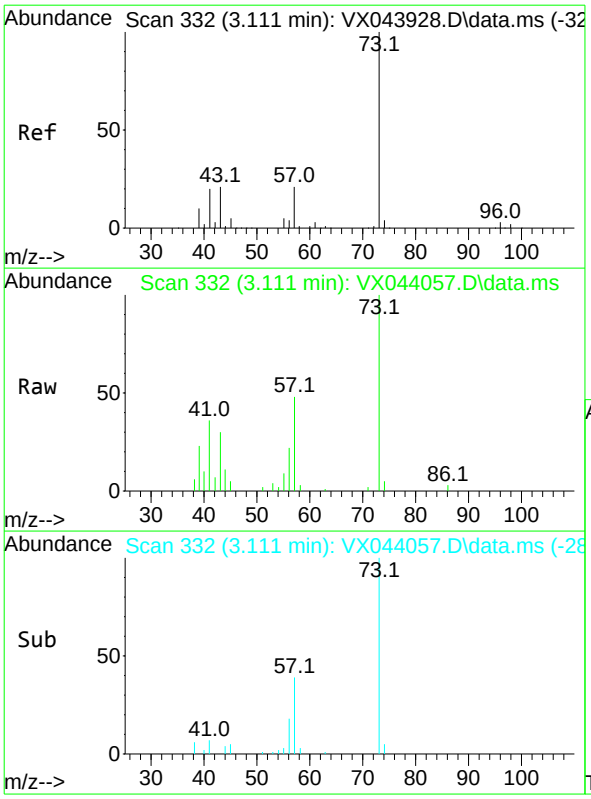


#16
Acetone
Concen: 1.324 ug/l
RT: 2.386 min Scan# 213
Delta R.T. 0.006 min
Lab File: VX044057.D
Acq: 02 Dec 2024 11:49

Tgt Ion: 43 Resp: 1286

Ion	Ratio	Lower	Upper
43	100		
58	20.7	22.7	34.1#



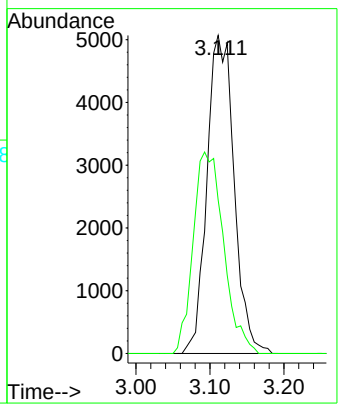


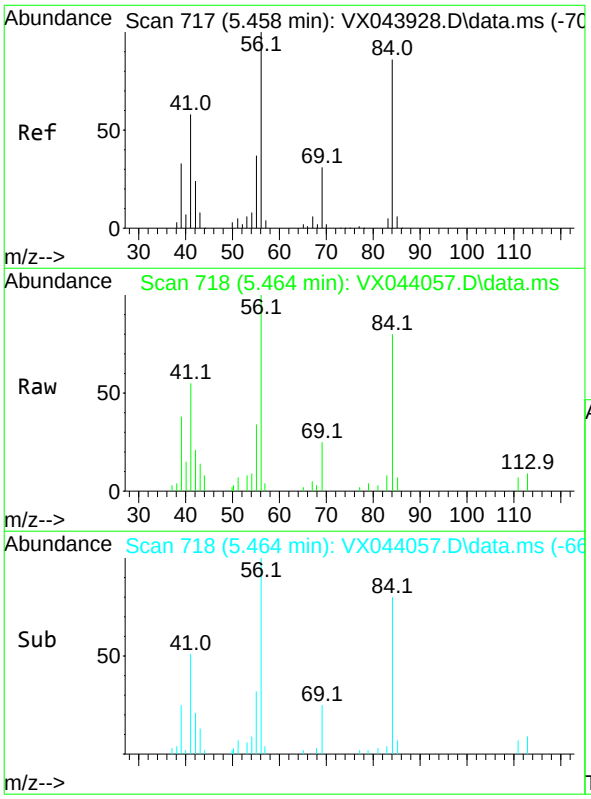
#19
Methyl tert-butyl Ether
Concen: 2.501 ug/l
RT: 3.111 min Scan# 33
Delta R.T. -0.000 min
Lab File: VX044057.D
Acq: 02 Dec 2024 11:49

Instrument :
MSVOA_X
ClientSampleId :
MW-08

Tgt Ion: 73 Resp: 12908

Ion	Ratio	Lower	Upper
73	100		
57	48.3	17.0	25.6#

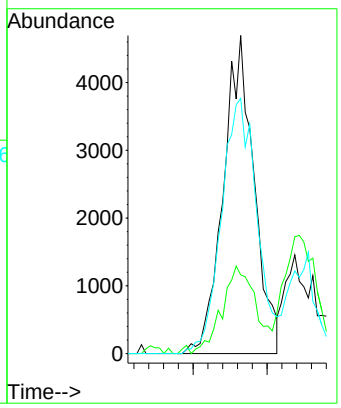


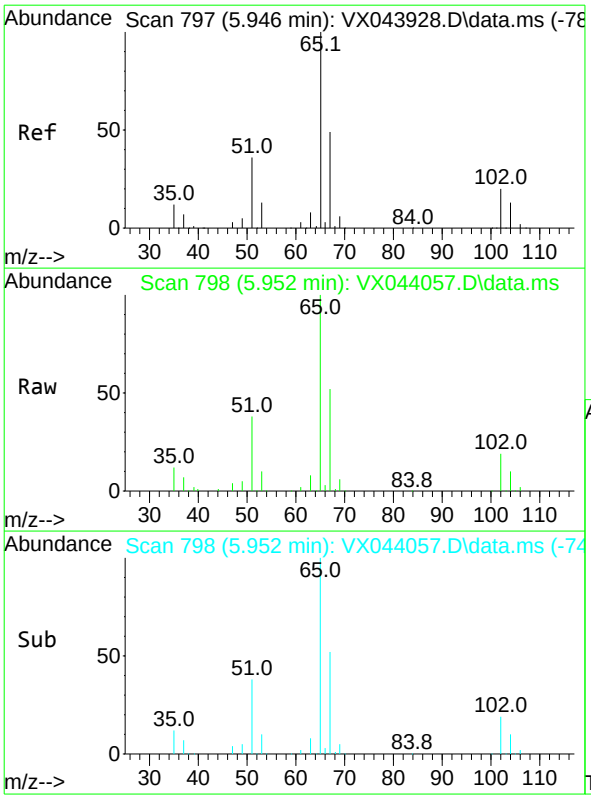


#31
Cyclohexane
Concen: 5.732 ug/l
RT: 5.464 min Scan# 718
Delta R.T. 0.006 min
Lab File: VX044057.D
Acq: 02 Dec 2024 11:49

Tgt Ion: 56 Resp: 13515

Ion	Ratio	Lower	Upper
56	100		
69	24.7	24.7	37.1
84	80.2	68.7	103.1



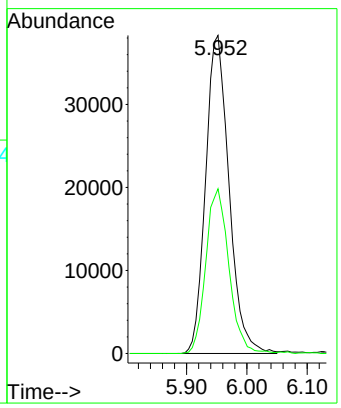


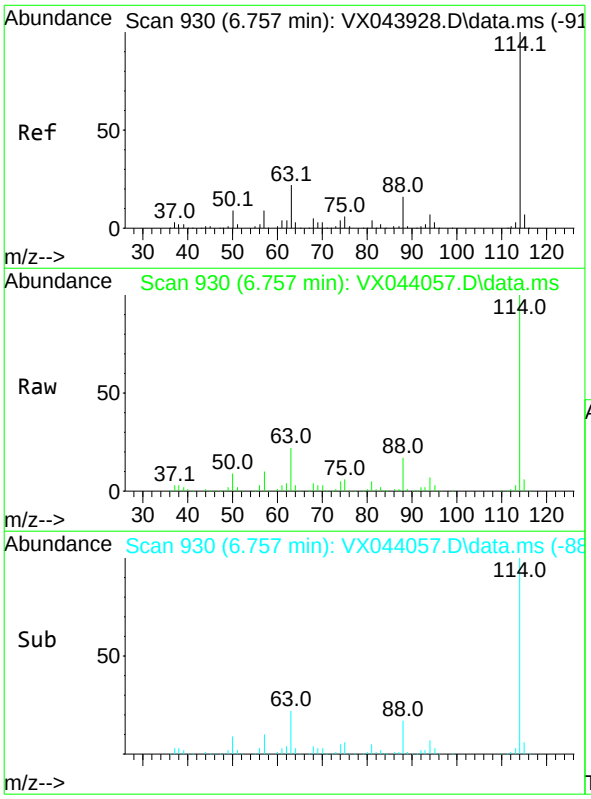
#33
1,2-Dichloroethane-d4
Concen: 48.901 ug/l
RT: 5.952 min Scan# 79
Delta R.T. 0.006 min
Lab File: VX044057.D
Acq: 02 Dec 2024 11:49

Instrument :
MSVOA_X
ClientSampleId :
MW-08

Tgt Ion: 65 Resp: 103454

Ion	Ratio	Lower	Upper
65	100		
67	51.0	0.0	100.8

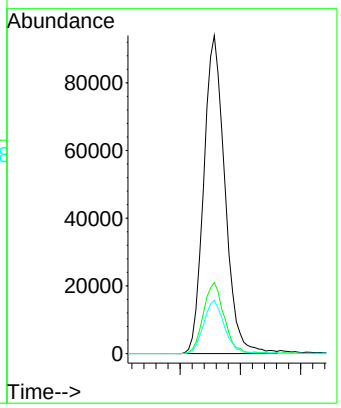


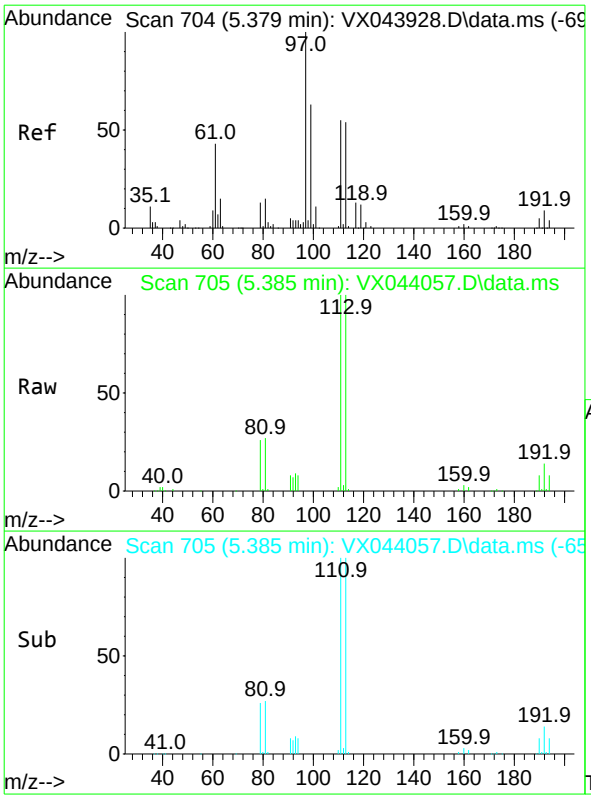


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.757 min Scan# 930
Delta R.T. -0.000 min
Lab File: VX044057.D
Acq: 02 Dec 2024 11:49

Tgt Ion:114 Resp: 229138

Ion	Ratio	Lower	Upper
114	100		
63	22.3	0.0	44.0
88	16.7	0.0	32.4



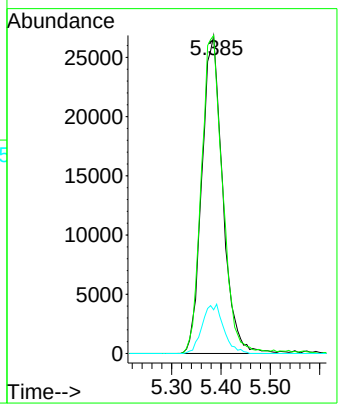


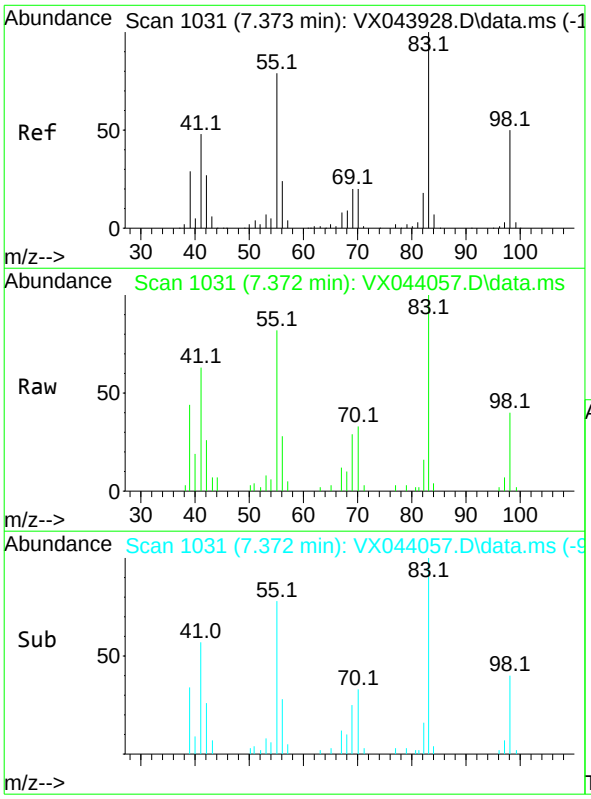
#35
Dibromofluoromethane
Concen: 47.957 ug/l
RT: 5.385 min Scan# 70
Delta R.T. 0.006 min
Lab File: VX044057.D
Acq: 02 Dec 2024 11:49

Instrument :
MSVOA_X
ClientSampleId :
MW-08

Tgt Ion:113 Resp: 78520

Ion	Ratio	Lower	Upper
113	100		
111	102.0	81.0	121.4
192	16.0	13.0	19.6

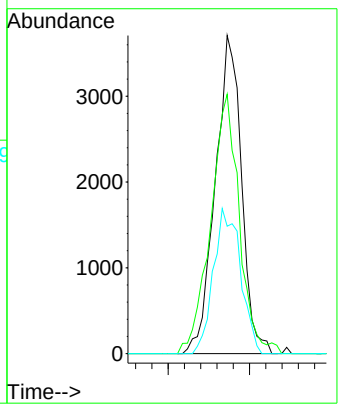


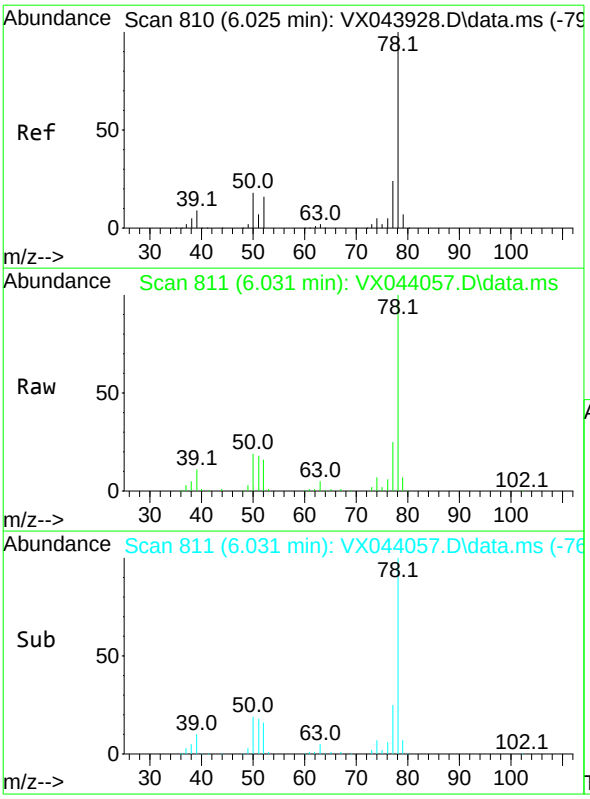


#39
Methylcyclohexane
Concen: 3.130 ug/l
RT: 7.372 min Scan# 1031
Delta R.T. -0.000 min
Lab File: VX044057.D
Acq: 02 Dec 2024 11:49

Tgt Ion: 83 Resp: 8295

Ion	Ratio	Lower	Upper
83	100		
55	81.5	63.1	94.7
98	40.0	40.0	60.0



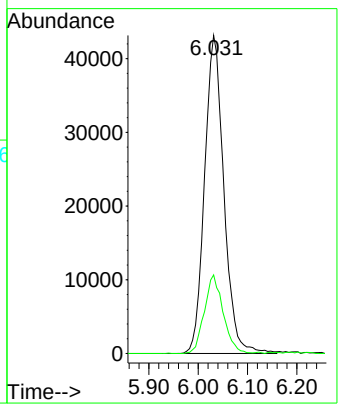


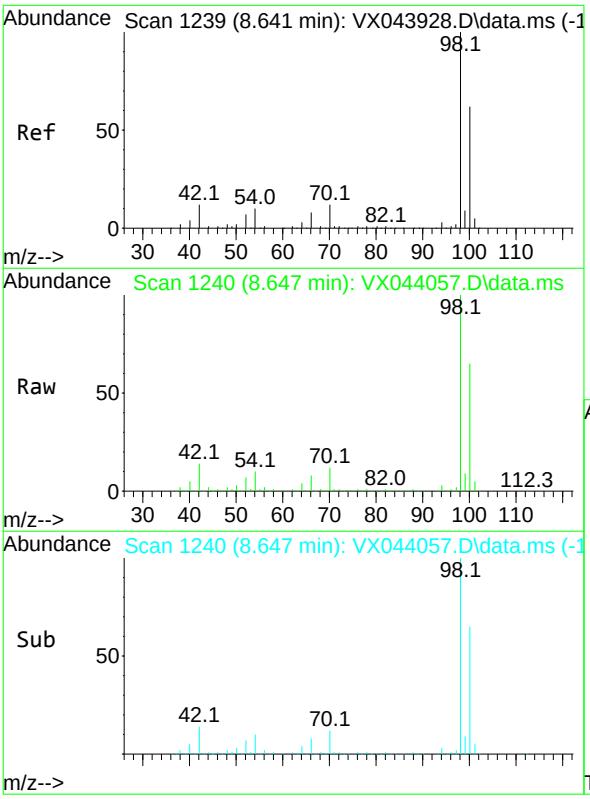
#40
Benzene
Concen: 18.449 ug/l
RT: 6.031 min Scan# 81
Delta R.T. 0.006 min
Lab File: VX044057.D
Acq: 02 Dec 2024 11:49

Instrument :
MSVOA_X
ClientSampleId :
MW-08

Tgt Ion: 78 Resp: 117250

Ion	Ratio	Lower	Upper
78	100		
77	24.7	19.2	28.8

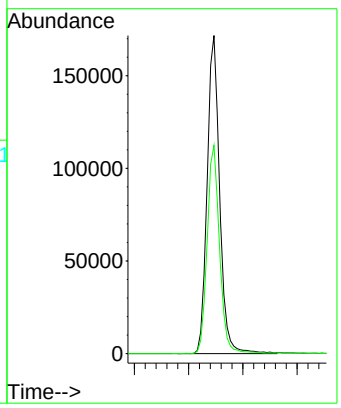


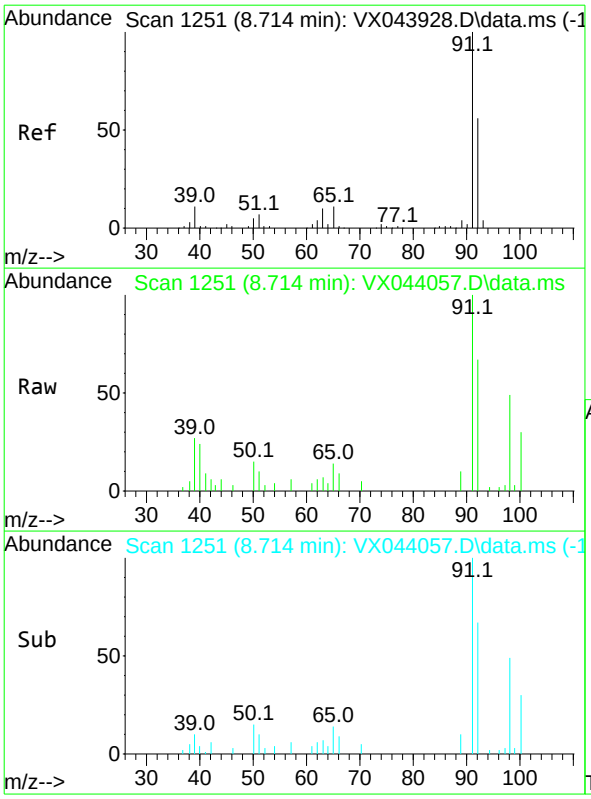


#50
Toluene-d8
Concen: 48.802 ug/l
RT: 8.647 min Scan# 1240
Delta R.T. 0.006 min
Lab File: VX044057.D
Acq: 02 Dec 2024 11:49

Tgt Ion: 98 Resp: 275436

Ion	Ratio	Lower	Upper
98	100		
100	64.7	52.6	79.0



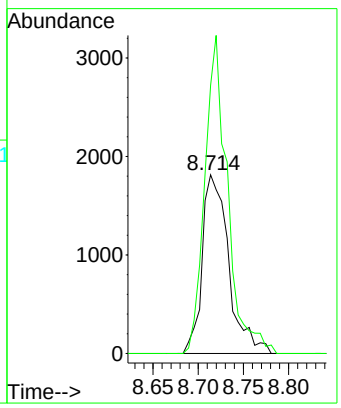


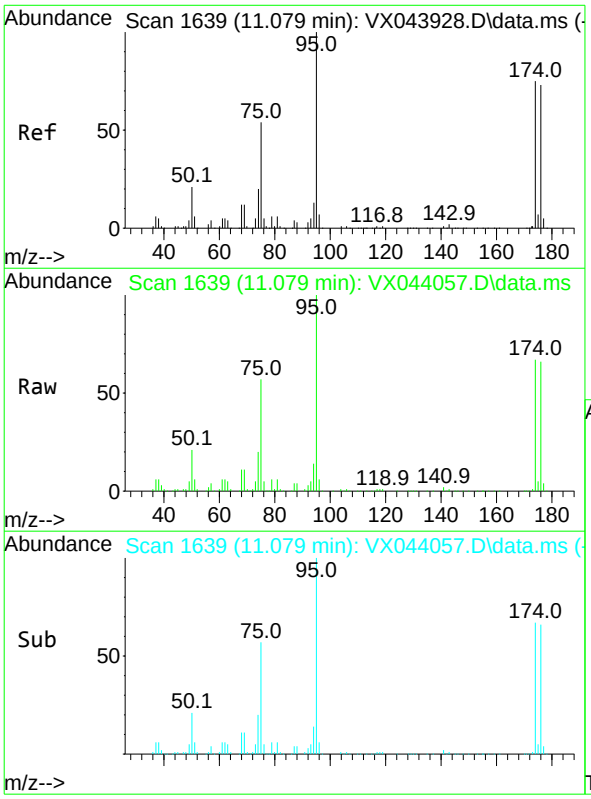
#52
Toluene
Concen: 0.971 ug/l
RT: 8.714 min Scan# 12
Delta R.T. -0.000 min
Lab File: VX044057.D
Acq: 02 Dec 2024 11:49

Instrument :
MSVOA_X
ClientSampleId :
MW-08

Tgt Ion: 92 Resp: 3695

Ion	Ratio	Lower	Upper
92	100		
91	153.1	139.7	209.5

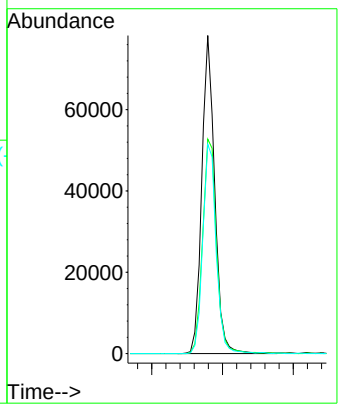


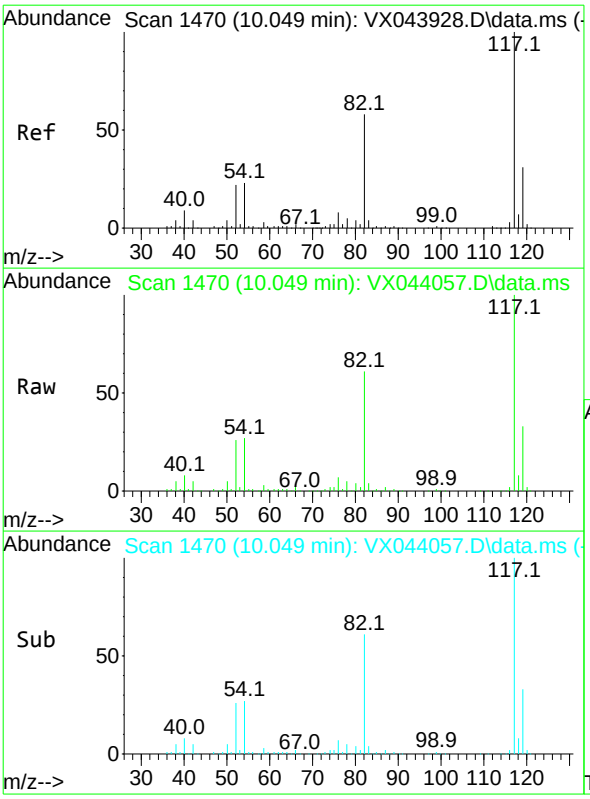


#62
4-Bromofluorobenzene
Concen: 51.606 ug/l
RT: 11.079 min Scan# 1639
Delta R.T. -0.000 min
Lab File: VX044057.D
Acq: 02 Dec 2024 11:49

Tgt Ion: 95 Resp: 99125

Ion	Ratio	Lower	Upper
95	100		
174	72.3	0.0	150.4
176	68.0	0.0	146.0



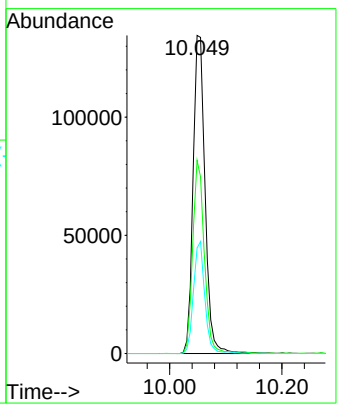


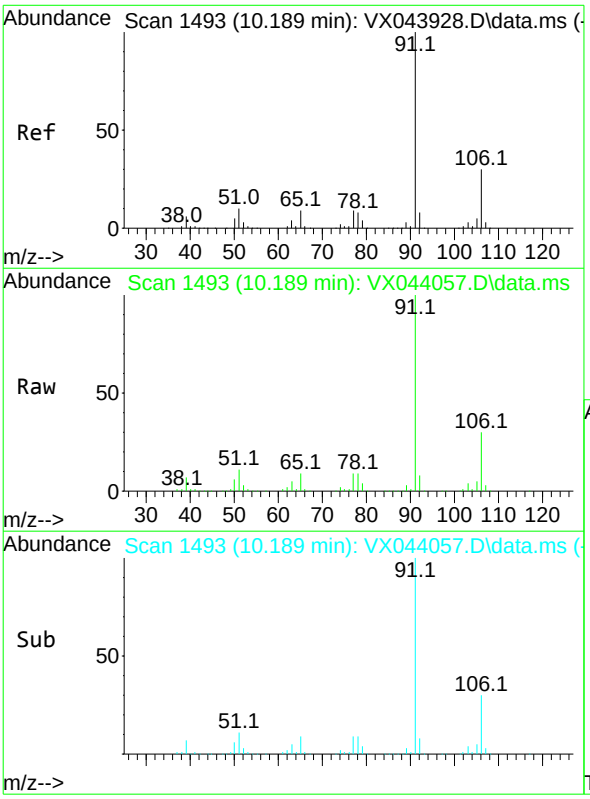
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.049 min Scan# 14
Delta R.T. -0.000 min
Lab File: VX044057.D
Acq: 02 Dec 2024 11:49

Instrument :
MSVOA_X
ClientSampleId :
MW-08

Tgt Ion:117 Resp: 199363

Ion	Ratio	Lower	Upper
117	100		
82	60.7	46.4	69.6
119	33.2	24.6	37.0

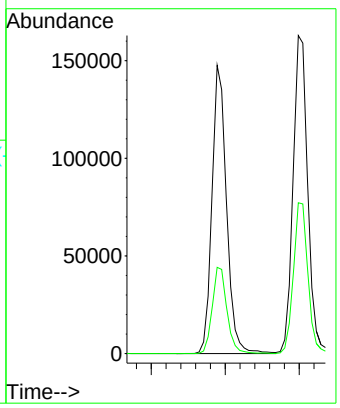




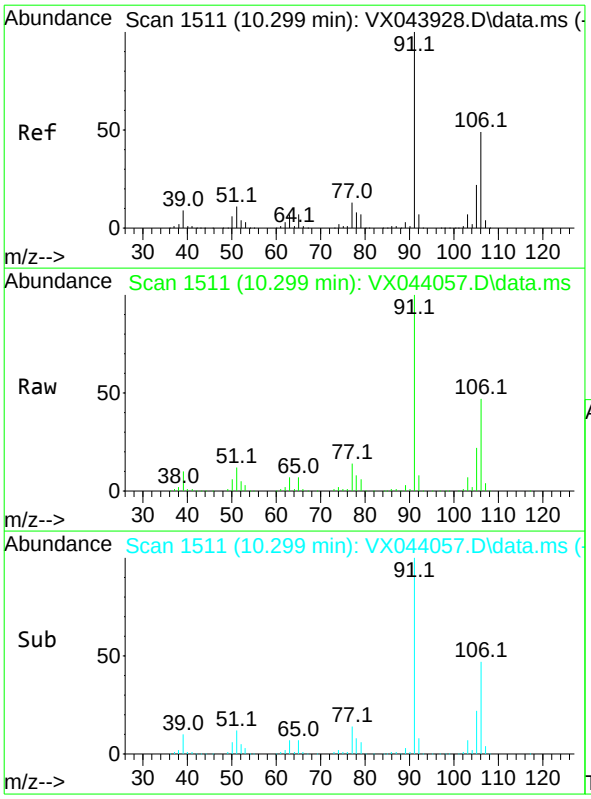
#67
Ethyl Benzene
Concen: 27.188 ug/l
RT: 10.189 min Scan# 1493
Delta R.T. -0.000 min
Lab File: VX044057.D
Acq: 02 Dec 2024 11:49

Tgt Ion: 91 Resp: 201719

Ion	Ratio	Lower	Upper
91	100		
106	29.9	23.6	35.4



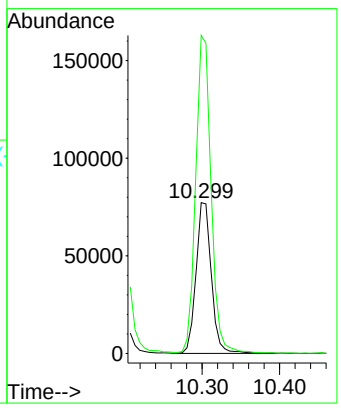
Instrument :
MSVOA_X
ClientSampleId :
MW-08

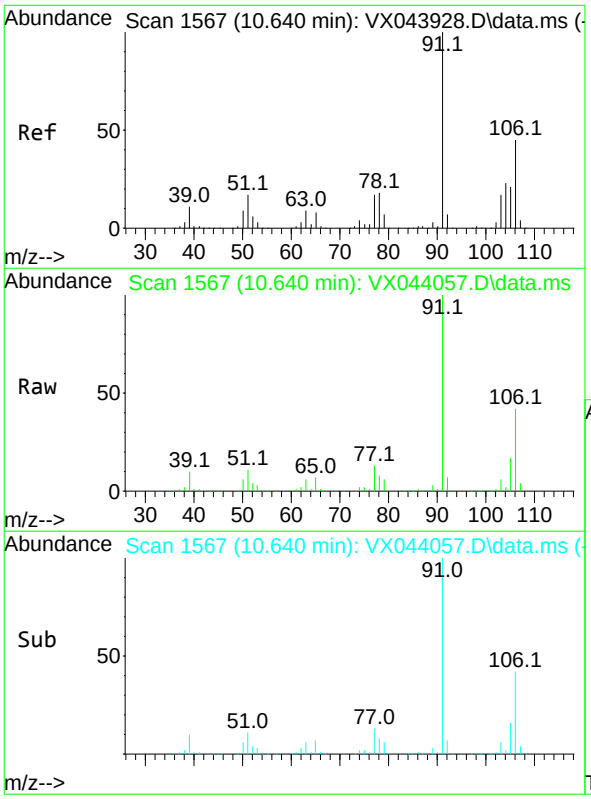


#68
m/p-Xylenes
Concen: 38.274 ug/l
RT: 10.299 min Scan# 15
Delta R.T. -0.000 min
Lab File: VX044057.D
Acq: 02 Dec 2024 11:49

Tgt Ion:106 Resp: 105899

Ion	Ratio	Lower	Upper
106	100		
91	212.1	168.1	252.1

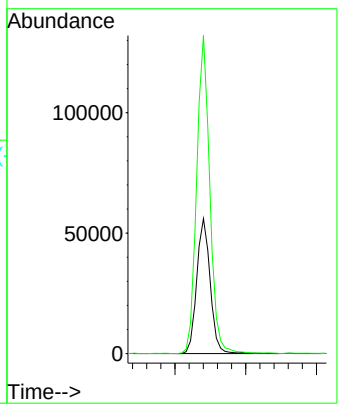


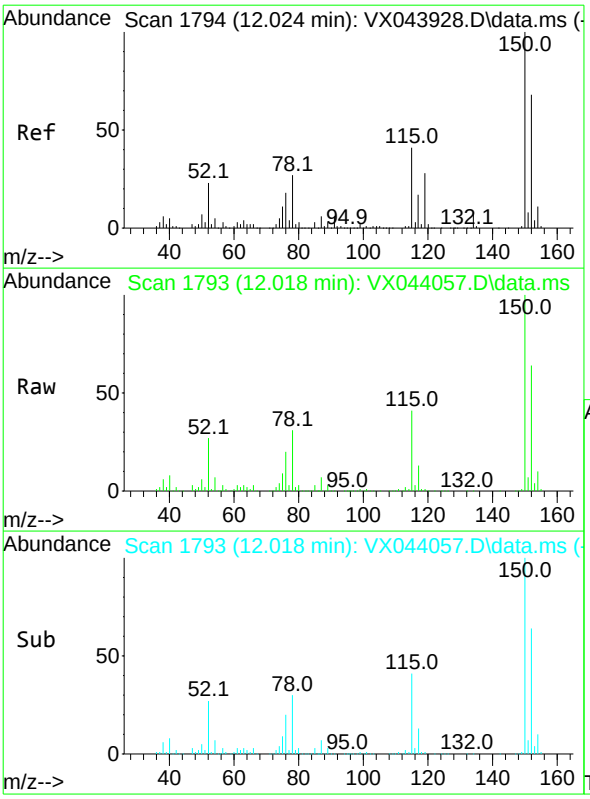


#69
o-Xylene
Concen: 27.344 ug/l
RT: 10.640 min Scan# 1567
Delta R.T. -0.000 min
Lab File: VX044057.D
Acq: 02 Dec 2024 11:49

Tgt Ion:106 Resp: 73869

Ion	Ratio	Lower	Upper
106	100		
91	230.1	110.2	330.6



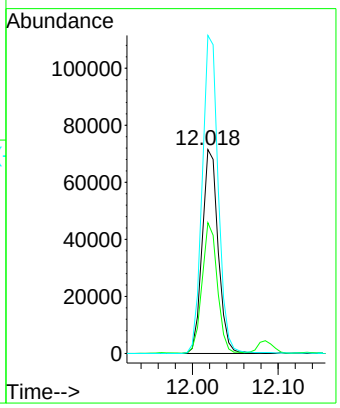


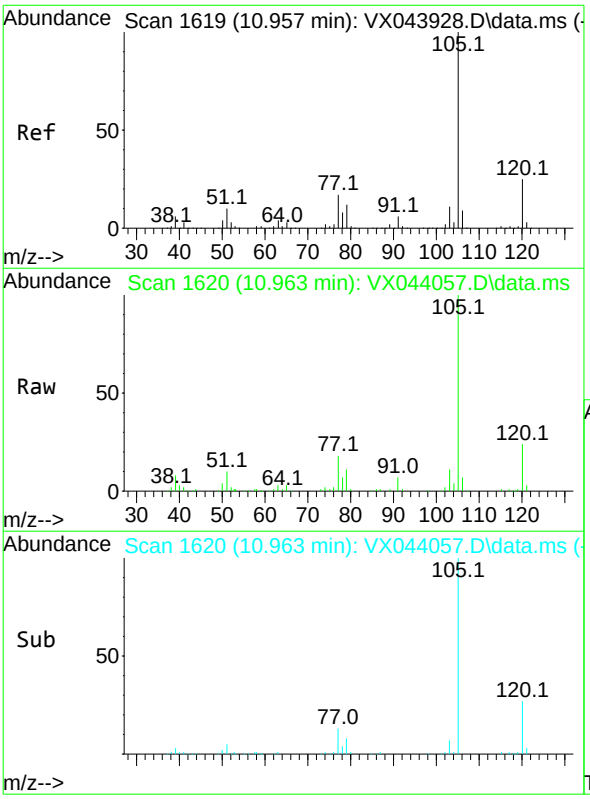
#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.018 min Scan# 17
Delta R.T. -0.006 min
Lab File: VX044057.D
Acq: 02 Dec 2024 11:49

Instrument :
MSVOA_X
ClientSampleId :
MW-08

Tgt Ion:152 Resp: 92150

Ion	Ratio	Lower	Upper
152	100		
115	61.4	45.4	136.2
150	157.4	0.0	353.0

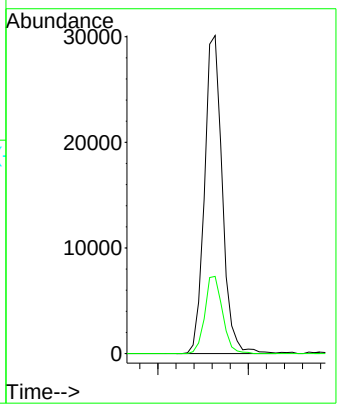


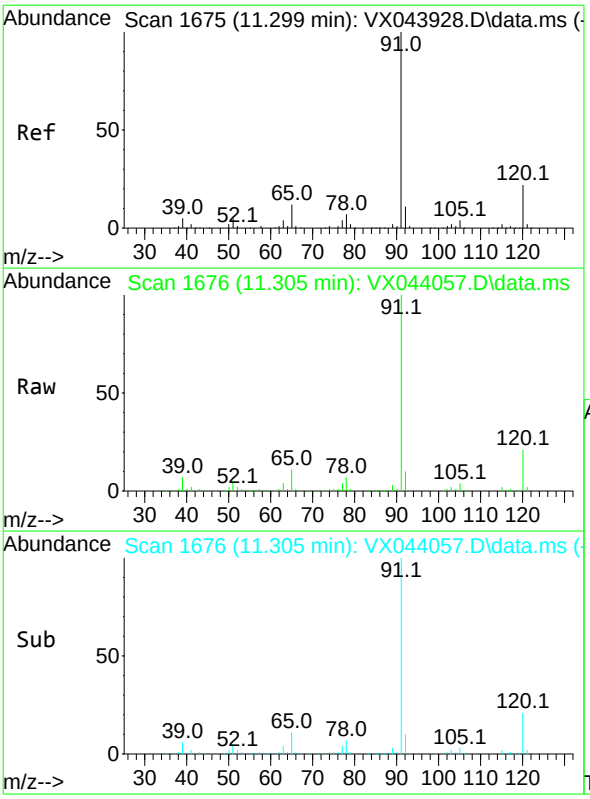


#73
Isopropylbenzene
Concen: 5.809 ug/l
RT: 10.963 min Scan# 1620
Delta R.T. 0.006 min
Lab File: VX044057.D
Acq: 02 Dec 2024 11:49

Tgt Ion:105 Resp: 41146

Ion	Ratio	Lower	Upper
105	100		
120	24.1	13.0	38.9



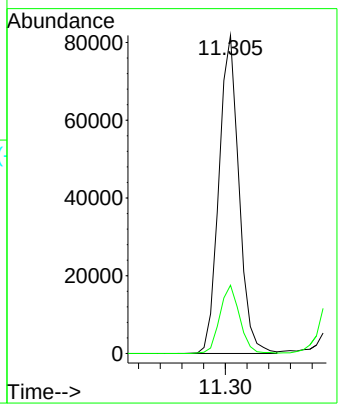


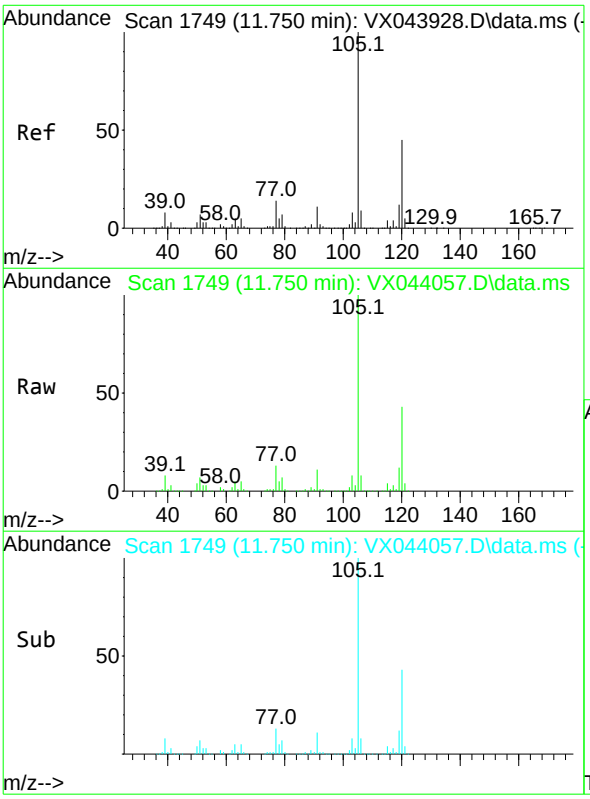
#78
n-propylbenzene
Concen: 13.246 ug/l
RT: 11.305 min Scan# 16
Delta R.T. 0.006 min
Lab File: VX044057.D
Acq: 02 Dec 2024 11:49

Instrument :
MSVOA_X
ClientSampleId :
MW-08

Tgt Ion: 91 Resp: 104791

Ion	Ratio	Lower	Upper
91	100		
120	21.3	11.5	34.4

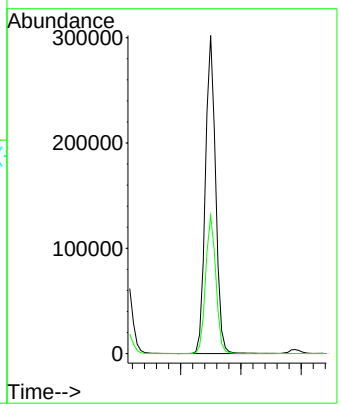


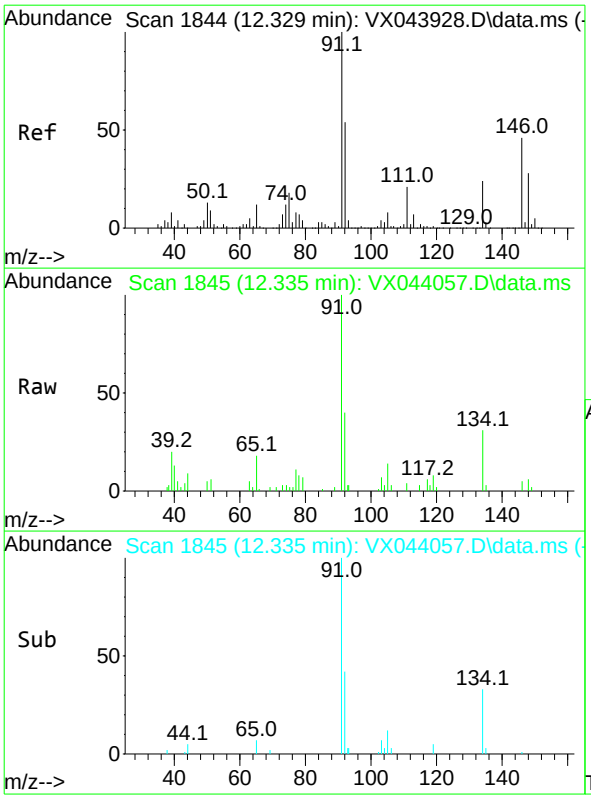


#84
1,2,4-Trimethylbenzene
Concen: 61.244 ug/l
RT: 11.750 min Scan# 1749
Delta R.T. -0.000 min
Lab File: VX044057.D
Acq: 02 Dec 2024 11:49

Tgt Ion:105 Resp: 355336

Ion	Ratio	Lower	Upper
105	100		
120	43.6	21.9	65.7



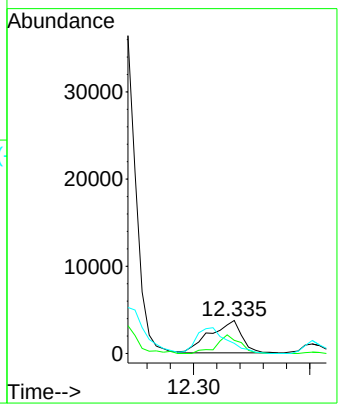


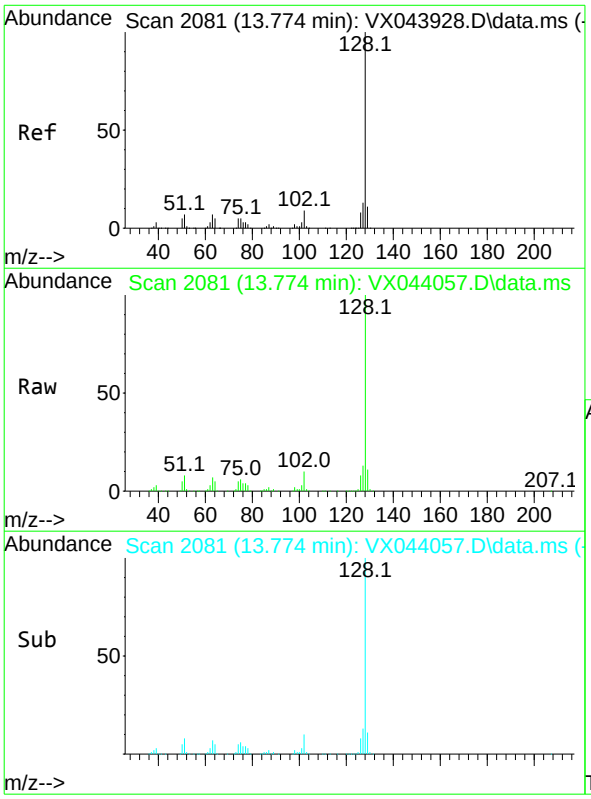
#89
n-Butylbenzene
Concen: 1.389 ug/l
RT: 12.335 min Scan# 18
Delta R.T. 0.006 min
Lab File: VX044057.D
Acq: 02 Dec 2024 11:49

Instrument :
MSVOA_X
ClientSampleId :
MW-08

Tgt Ion: 91 Resp: 7040

Ion	Ratio	Lower	Upper
91	100		
92	42.2	26.6	79.8
134	78.8	12.4	37.2#

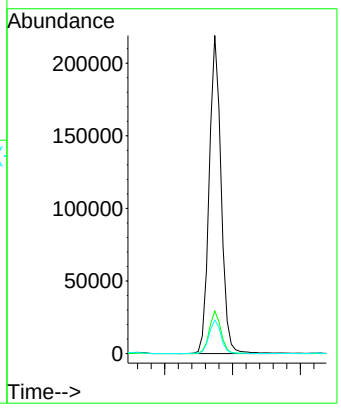




#95
Naphthalene
Concen: 40.430 ug/l
RT: 13.774 min Scan# 2081
Delta R.T. -0.000 min
Lab File: VX044057.D
Acq: 02 Dec 2024 11:49

Tgt Ion:128 Resp: 266488

Ion	Ratio	Lower	Upper
128	100		
127	13.1	10.2	15.2
129	10.7	8.6	12.8



Raw Data: **VX044060.D**

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

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	11/26/24
Project:	RFK Bridge	Date Received:	11/27/24
Client Sample ID:	MW-10	SDG No.:	P5021
Lab Sample ID:	P5021-03	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044060.D	1		12/02/24 12:58	VX120224

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
1634-04-4	Methyl tert-butyl Ether	1.00	U	0.16	1.00	ug/L
71-43-2	Benzene	1.00	U	0.16	1.00	ug/L
108-88-3	Toluene	1.00	U	0.18	1.00	ug/L
100-41-4	Ethyl Benzene	1.00	U	0.16	1.00	ug/L
179601-23-1	m/p-Xylenes	2.00	U	0.31	2.00	ug/L
95-47-6	o-Xylene	1.00	U	0.14	1.00	ug/L
98-82-8	Isopropylbenzene	1.00	U	0.13	1.00	ug/L
103-65-1	n-propylbenzene	0.27	J	0.14	1.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.33	J	0.18	1.00	ug/L
98-06-6	tert-Butylbenzene	0.34	J	0.17	1.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	1.00	U	0.18	1.00	ug/L
135-98-8	sec-Butylbenzene	0.33	J	0.17	1.00	ug/L
99-87-6	p-Isopropyltoluene	1.00	U	0.15	1.00	ug/L
104-51-8	n-Butylbenzene	1.10		0.22	1.00	ug/L
91-20-3	Naphthalene	2.10		0.59	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	51.8		74 - 125	104%	SPK: 50
1868-53-7	Dibromofluoromethane	46.4		75 - 124	93%	SPK: 50
2037-26-5	Toluene-d8	49.3		86 - 113	99%	SPK: 50
460-00-4	4-Bromofluorobenzene	49.9		77 - 121	100%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	121000	5.544			
540-36-3	1,4-Difluorobenzene	237000	6.751			
3114-55-4	Chlorobenzene-d5	202000	10.055			
3855-82-1	1,4-Dichlorobenzene-d4	89000	12.018			

Raw Data: **VX044060.D**

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

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	11/26/24
Project:	RFK Bridge	Date Received:	11/27/24
Client Sample ID:	MW-10	SDG No.:	P5021
Lab Sample ID:	P5021-03	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044060.D	1		12/02/24 12:58	VX120224

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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

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

Sample Results: **VX044060.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120224\
Data File : VX044060.D
Acq On : 02 Dec 2024 12:58
Operator : JC/MD
Sample : P5021-03
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
MW-10

Quant Time: Dec 03 00:18:13 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.544	168	121483	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.751	114	237218	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	202018	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	89001	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.952	65	107855	51.763	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 103.520%			
35) Dibromofluoromethane	5.379	113	78566	46.350	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 92.700%			
50) Toluene-d8	8.647	98	288141	49.314	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 98.620%			
62) 4-Bromofluorobenzene	11.079	95	99324	49.949	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 99.900%			
Target Compounds						Qvalue
16) Acetone	2.386	43	2775	2.900	ug/l #	88
17) Carbon Disulfide	2.508	76	1659	0.575	ug/l #	93
39) Methylcyclohexane	7.354	83	2672	0.974	ug/l #	40
78) n-propylbenzene	11.305	91	2072	0.271	ug/l	95
80) 1,3,5-Trimethylbenzene	11.451	105	1869	0.332	ug/l	98
83) tert-Butylbenzene	11.713	119	1880	0.337	ug/l	89
85) sec-Butylbenzene	11.884	105	2256	0.330	ug/l #	57
89) n-Butylbenzene	12.311	91	5519	1.127	ug/l #	9
95) Naphthalene	13.774	128	13084	2.055	ug/l #	70

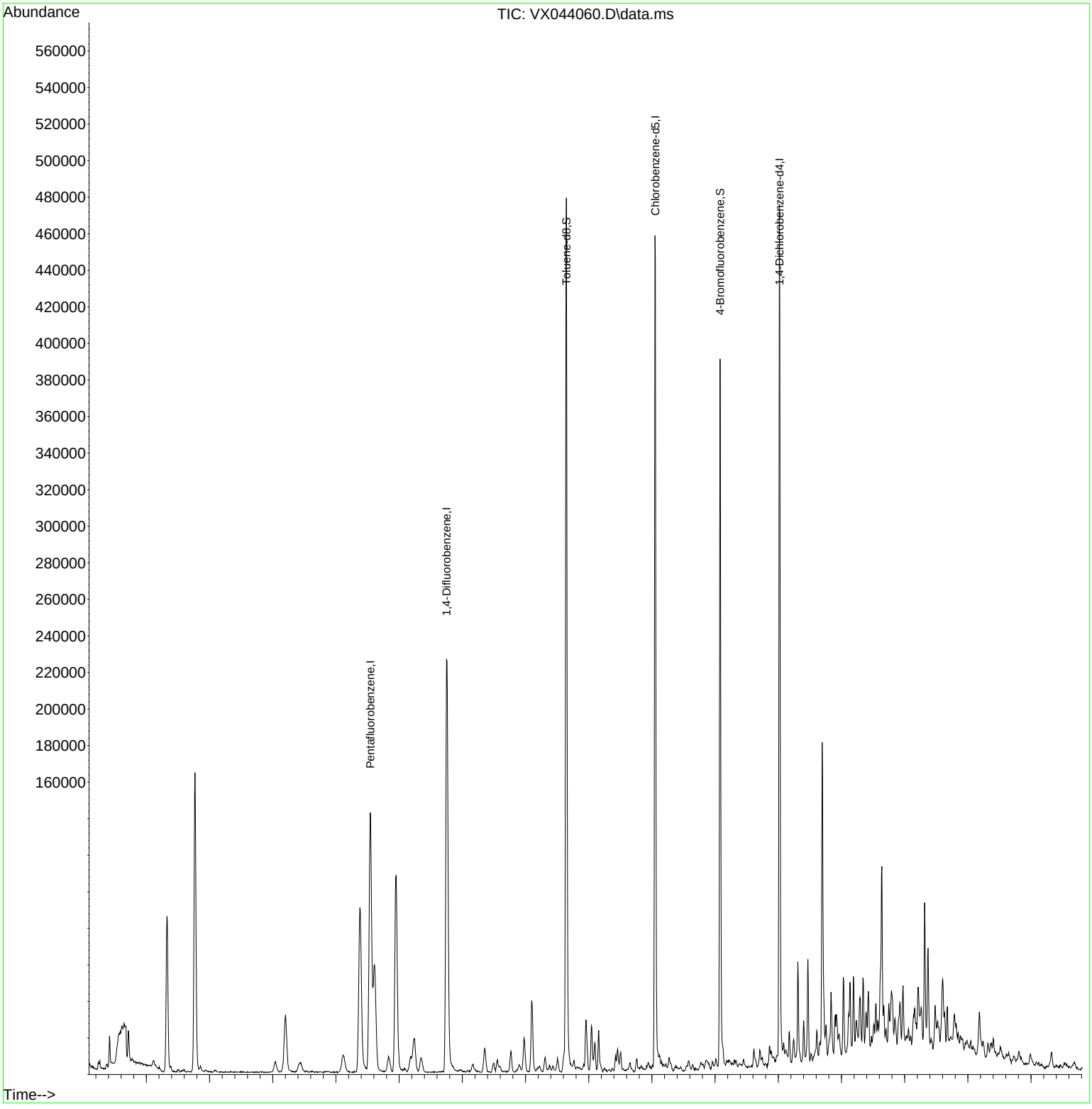
(#) = qualifier out of range (m) = manual integration (+) = signals summed

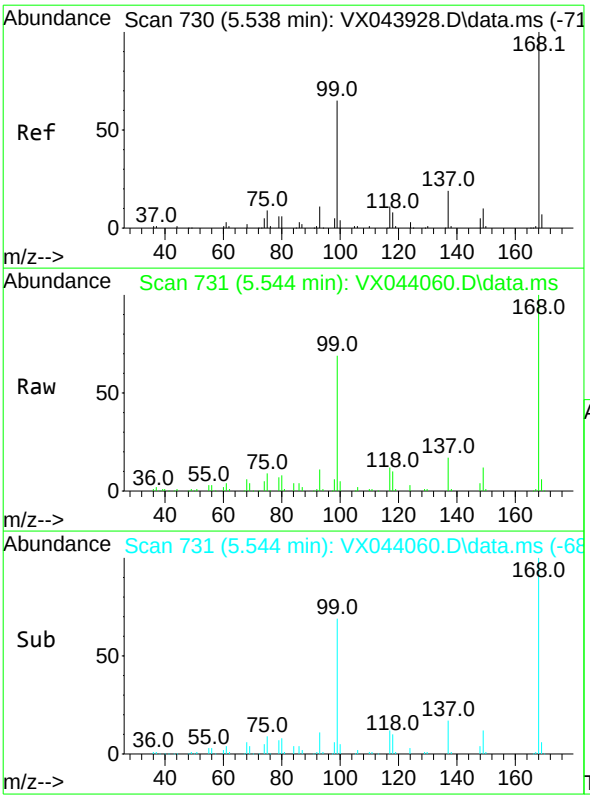
Sample Results: **VX044060.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120224\
Data File : VX044060.D
Acq On : 02 Dec 2024 12:58
Operator : JC/MD
Sample : P5021-03
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
MW-10

Quant Time: Dec 03 00:18:13 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration



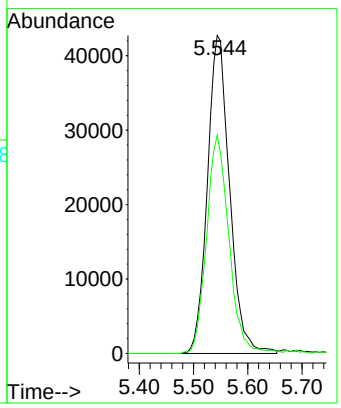


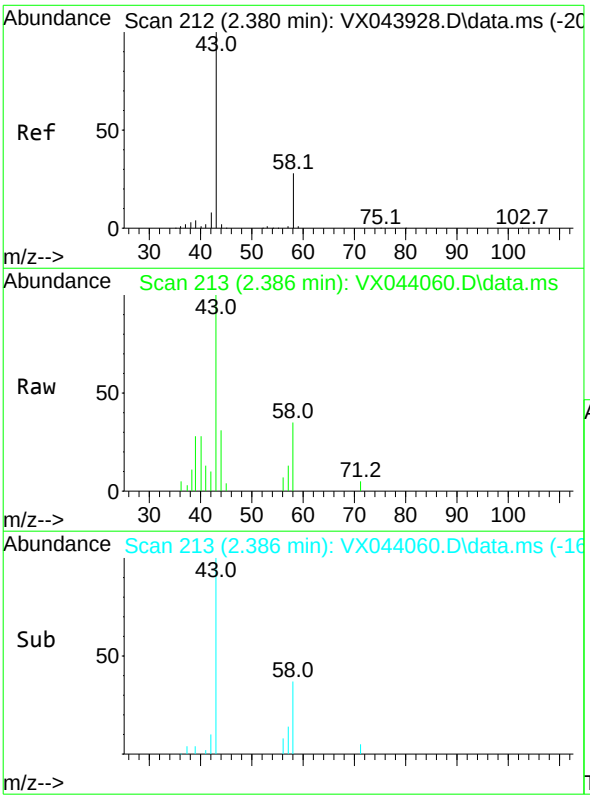
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.544 min Scan# 73
Delta R.T. 0.006 min
Lab File: VX044060.D
Acq: 02 Dec 2024 12:58

Instrument :
MSVOA_X
ClientSampleId :
MW-10

Tgt Ion:168 Resp: 121483

Ion	Ratio	Lower	Upper
168	100		
99	68.6	51.8	77.8

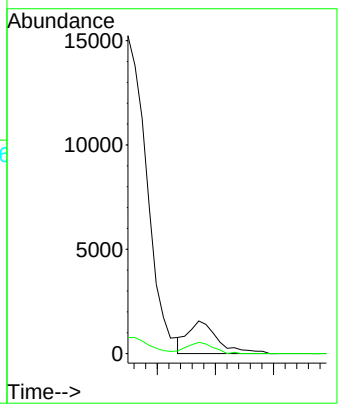


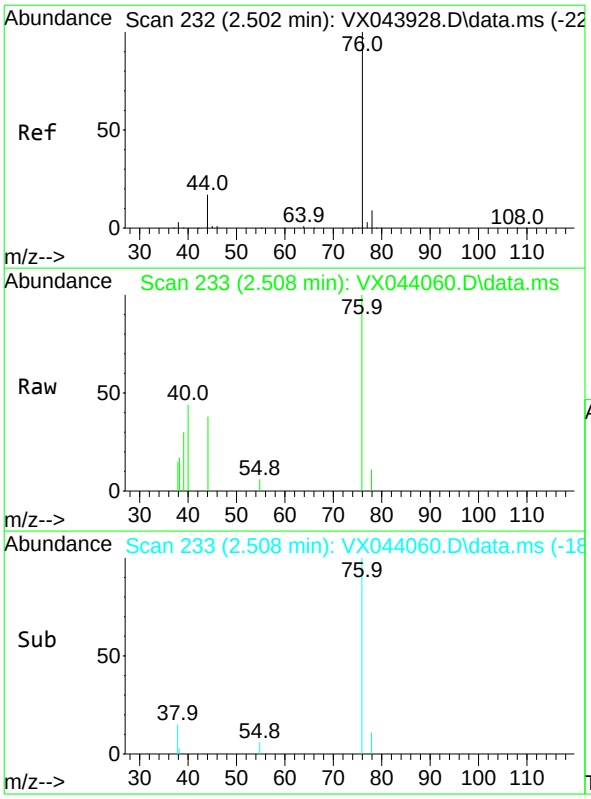


#16
Acetone
Concen: 2.900 ug/l
RT: 2.386 min Scan# 213
Delta R.T. 0.006 min
Lab File: VX044060.D
Acq: 02 Dec 2024 12:58

Tgt Ion: 43 Resp: 2775

Ion	Ratio	Lower	Upper
43	100		
58	34.6	22.7	34.1#



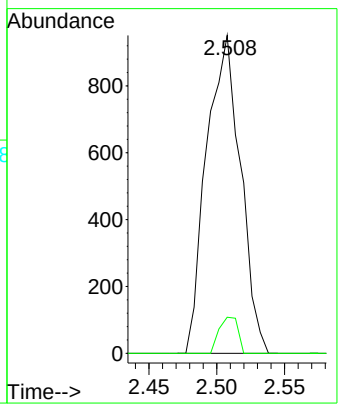


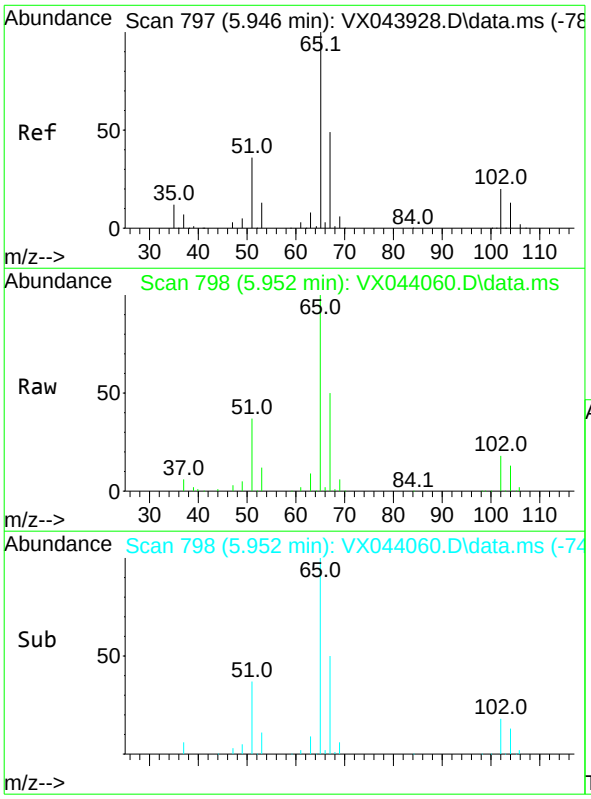
#17
Carbon Disulfide
Concen: 0.575 ug/l
RT: 2.508 min Scan# 23
Delta R.T. 0.006 min
Lab File: VX044060.D
Acq: 02 Dec 2024 12:58

Instrument :
MSVOA_X
ClientSampleId :
MW-10

Tgt Ion: 76 Resp: 1659

Ion	Ratio	Lower	Upper
76	100		
78	11.4	7.0	10.6#

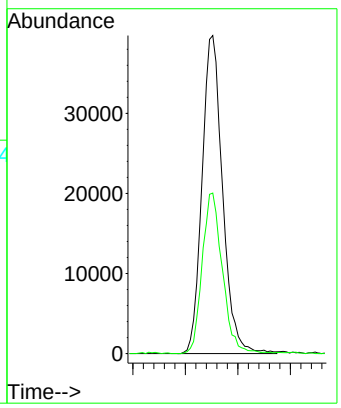


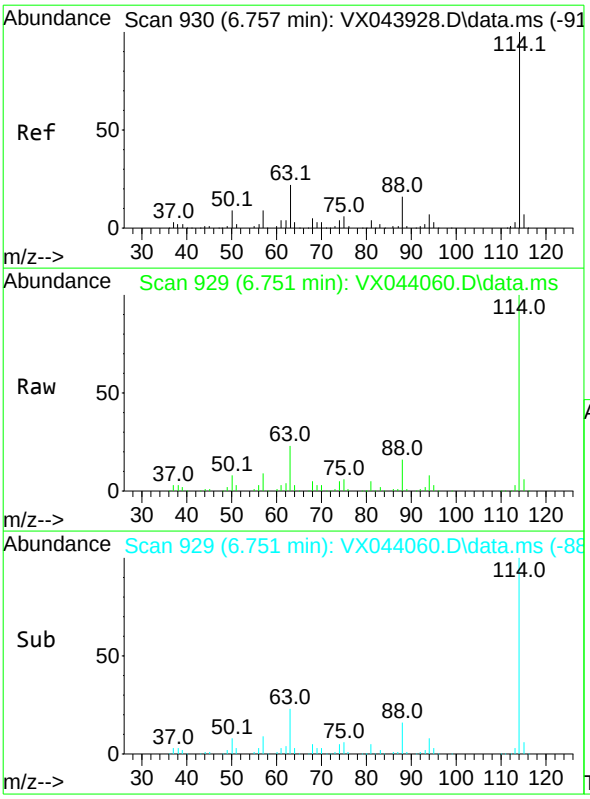


#33
1,2-Dichloroethane-d4
Concen: 51.763 ug/l
RT: 5.952 min Scan# 798
Delta R.T. 0.006 min
Lab File: VX044060.D
Acq: 02 Dec 2024 12:58

Tgt Ion: 65 Resp: 107855

Ion	Ratio	Lower	Upper
65	100		
67	49.7	0.0	100.8



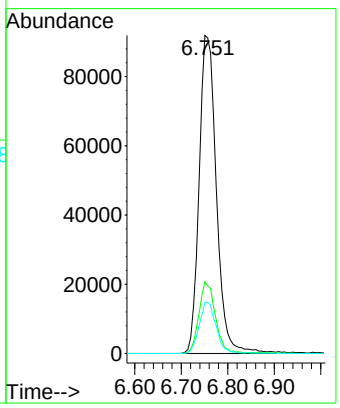


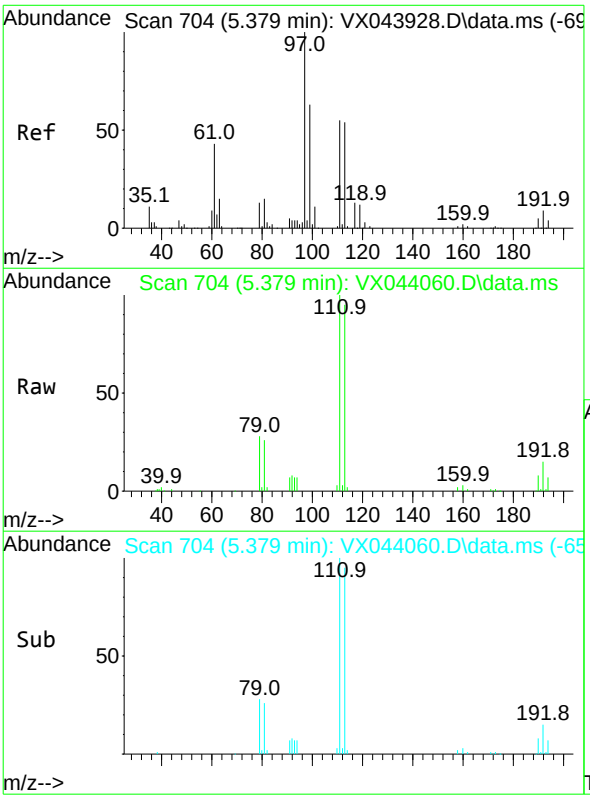
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.751 min Scan# 92
Delta R.T. -0.006 min
Lab File: VX044060.D
Acq: 02 Dec 2024 12:58

Instrument :
MSVOA_X
ClientSampleId :
MW-10

Tgt Ion:114 Resp: 237218

Ion	Ratio	Lower	Upper
114	100		
63	22.5	0.0	44.0
88	16.0	0.0	32.4

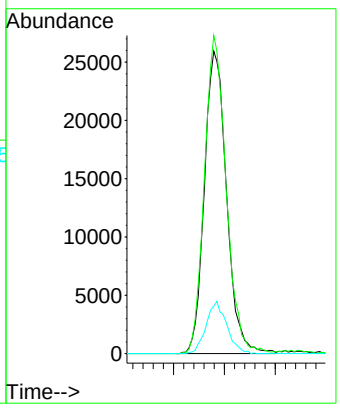


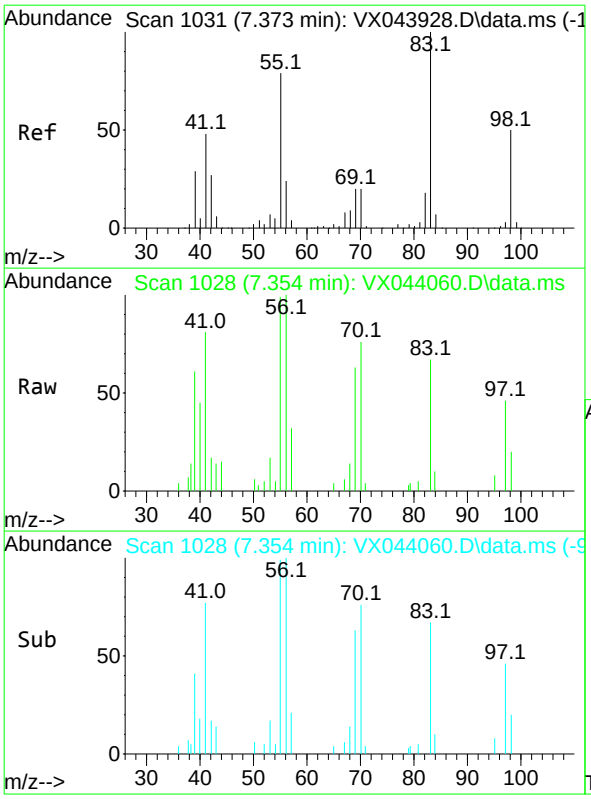


#35
Dibromofluoromethane
Concen: 46.350 ug/l
RT: 5.379 min Scan# 704
Delta R.T. -0.000 min
Lab File: VX044060.D
Acq: 02 Dec 2024 12:58

Tgt Ion:113 Resp: 78566

Ion	Ratio	Lower	Upper
113	100		
111	103.3	81.0	121.4
192	16.0	13.0	19.6



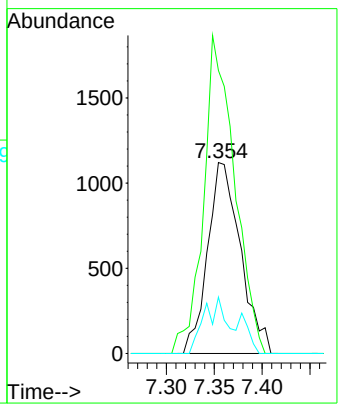


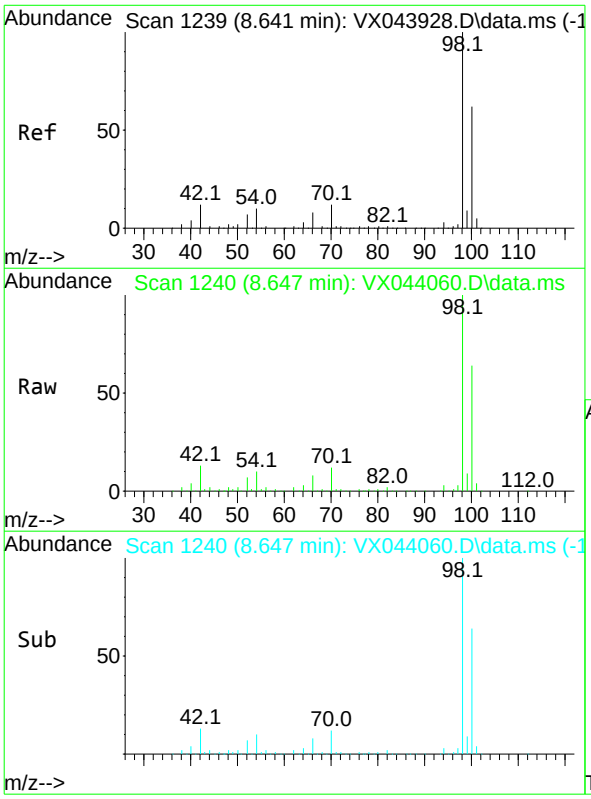
#39
Methylcyclohexane
Concen: 0.974 ug/l
RT: 7.354 min Scan# 10
Delta R.T. -0.018 min
Lab File: VX044060.D
Acq: 02 Dec 2024 12:58

Instrument :
MSVOA_X
ClientSampleId :
MW-10

Tgt Ion: 83 Resp: 2672

Ion	Ratio	Lower	Upper
83	100		
55	148.2	63.1	94.7#
98	29.5	40.0	60.0#

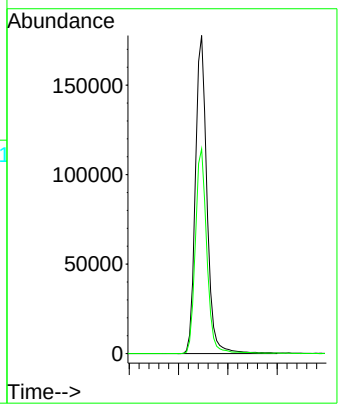


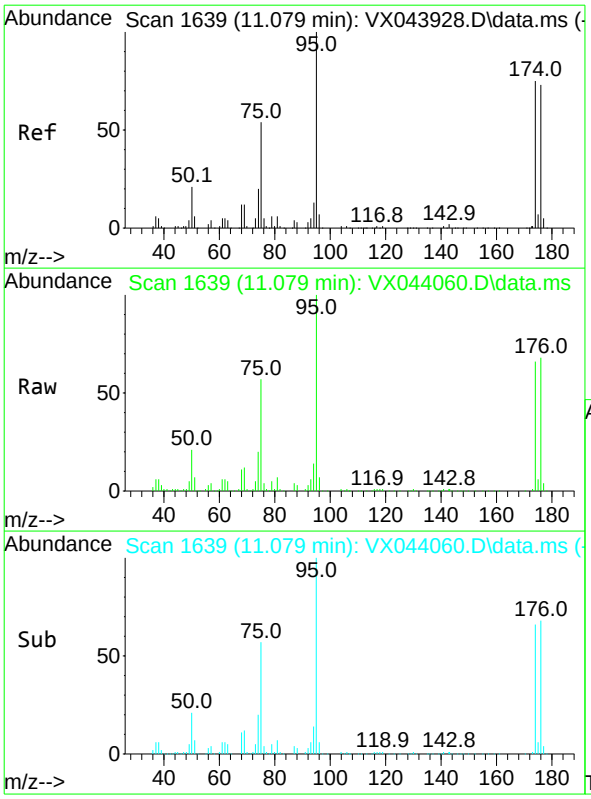


#50
Toluene-d8
Concen: 49.314 ug/l
RT: 8.647 min Scan# 1240
Delta R.T. 0.006 min
Lab File: VX044060.D
Acq: 02 Dec 2024 12:58

Tgt Ion: 98 Resp: 288141

Ion	Ratio	Lower	Upper
98	100		
100	64.1	52.6	79.0



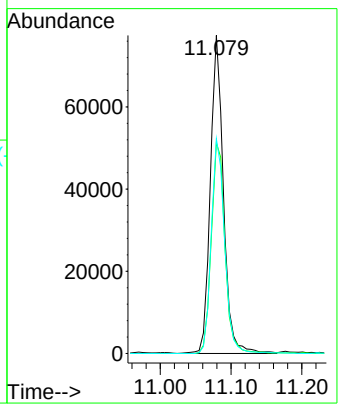


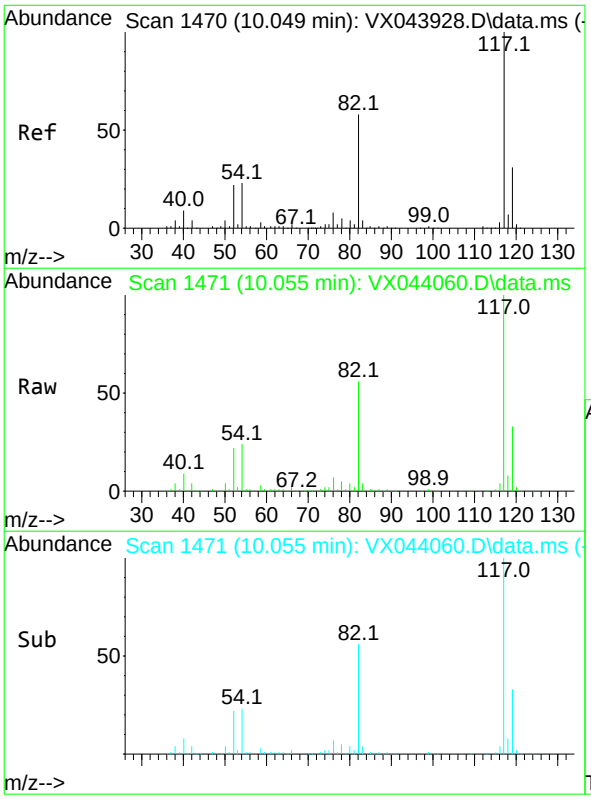
#62
4-Bromofluorobenzene
Concen: 49.949 ug/l
RT: 11.079 min Scan# 16
Delta R.T. -0.000 min
Lab File: VX044060.D
Acq: 02 Dec 2024 12:58

Instrument :
MSVOA_X
ClientSampleId :
MW-10

Tgt Ion: 95 Resp: 99324

Ion	Ratio	Lower	Upper
95	100		
174	69.0	0.0	150.4
176	69.1	0.0	146.0

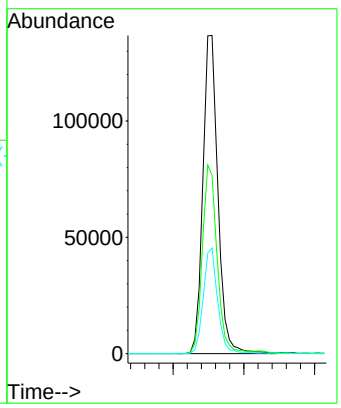


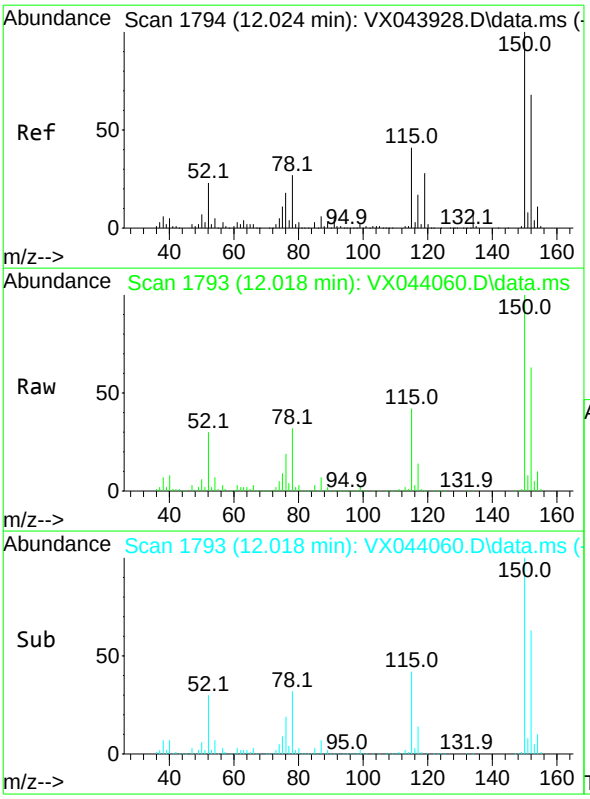


#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.055 min Scan# 1471
Delta R.T. 0.006 min
Lab File: VX044060.D
Acq: 02 Dec 2024 12:58

Tgt Ion:117 Resp: 202018

Ion	Ratio	Lower	Upper
117	100		
82	56.0	46.4	69.6
119	33.2	24.6	37.0



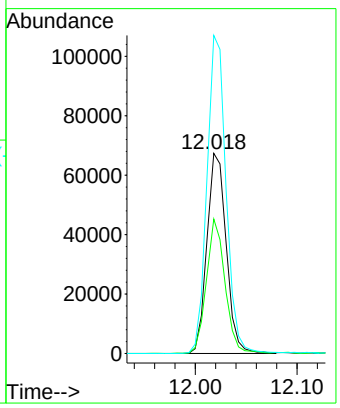


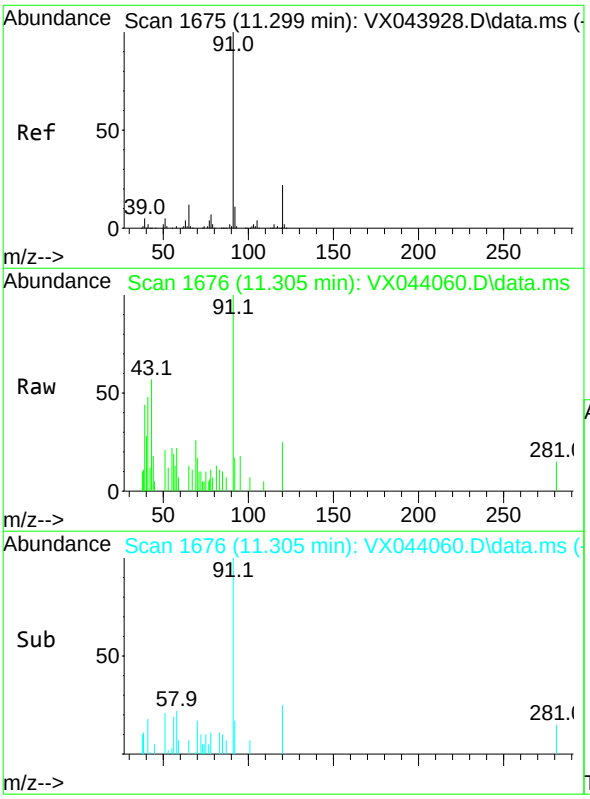
#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.018 min Scan# 17
Delta R.T. -0.006 min
Lab File: VX044060.D
Acq: 02 Dec 2024 12:58

Instrument :
MSVOA_X
ClientSampleId :
MW-10

Tgt Ion:152 Resp: 89001

Ion	Ratio	Lower	Upper
152	100		
115	64.8	45.4	136.2
150	157.0	0.0	353.0

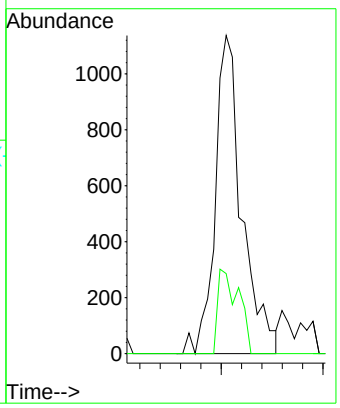


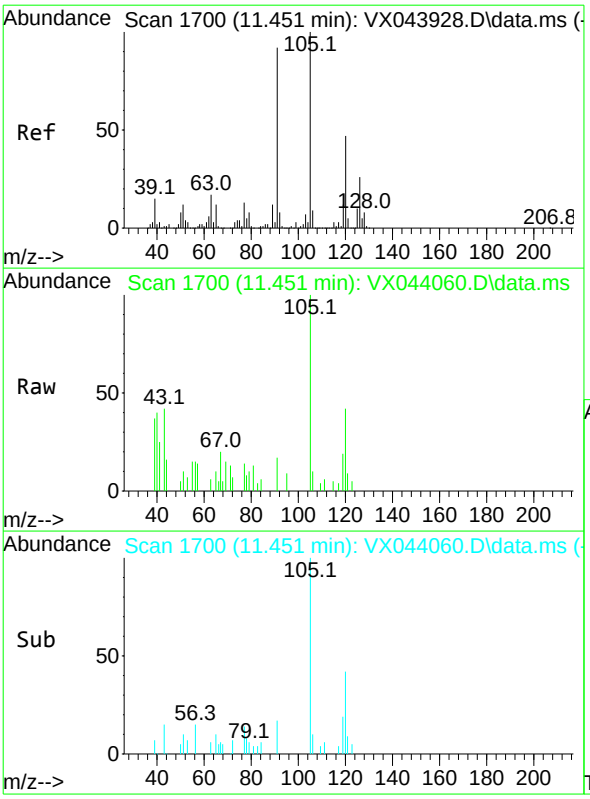


#78
n-propylbenzene
Concen: 0.271 ug/l
RT: 11.305 min Scan# 1676
Delta R.T. 0.006 min
Lab File: VX044060.D
Acq: 02 Dec 2024 12:58

Tgt Ion: 91 Resp: 2072

Ion	Ratio	Lower	Upper
91	100		
120	20.5	11.5	34.4



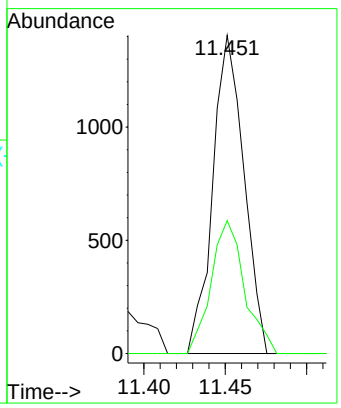


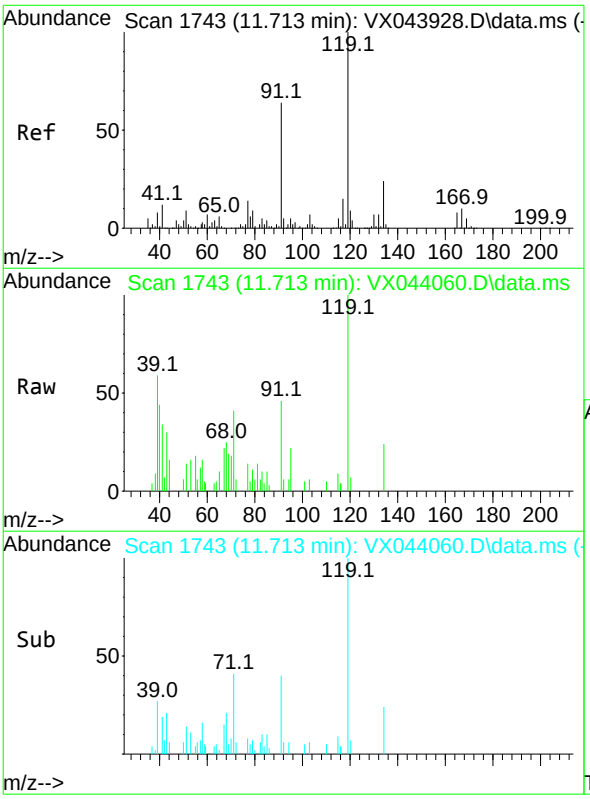
#80
1,3,5-Trimethylbenzene
Concen: 0.332 ug/l
RT: 11.451 min Scan# 17
Delta R.T. -0.000 min
Lab File: VX044060.D
Acq: 02 Dec 2024 12:58

Instrument :
MSVOA_X
ClientSampleId :
MW-10

Tgt Ion:105 Resp: 1869

Ion	Ratio	Lower	Upper
105	100		
120	44.9	23.3	69.8

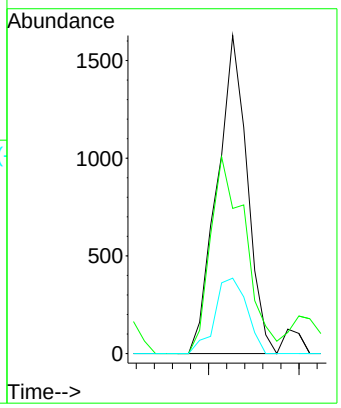


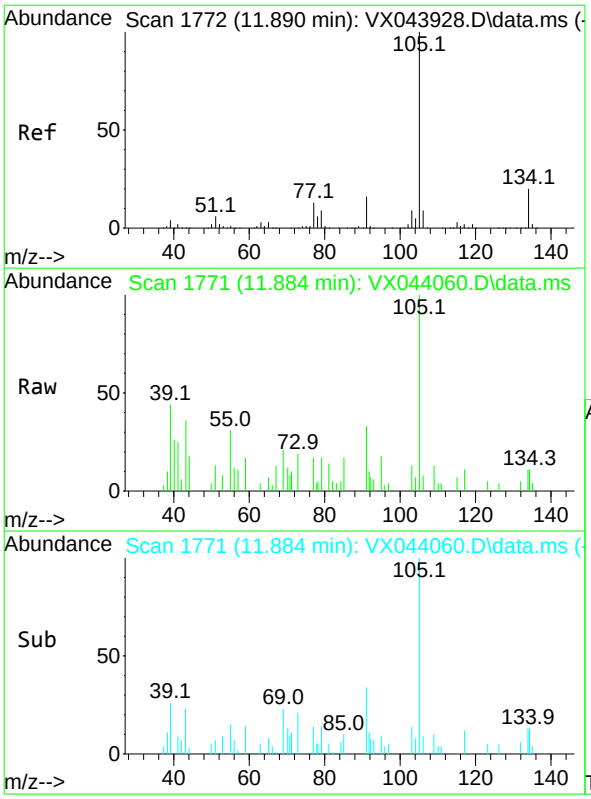


#83
tert-Butylbenzene
Concen: 0.337 ug/l
RT: 11.713 min Scan# 1743
Delta R.T. -0.000 min
Lab File: VX044060.D
Acq: 02 Dec 2024 12:58

Tgt Ion:119 Resp: 1880

Ion	Ratio	Lower	Upper
119	100		
91	72.2	31.0	93.0
134	25.3	11.6	34.8



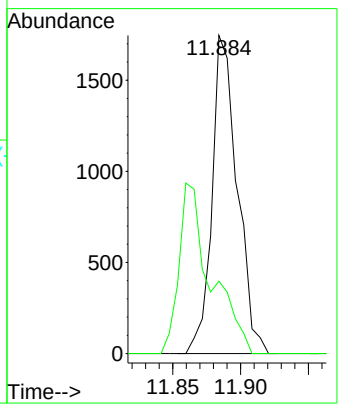


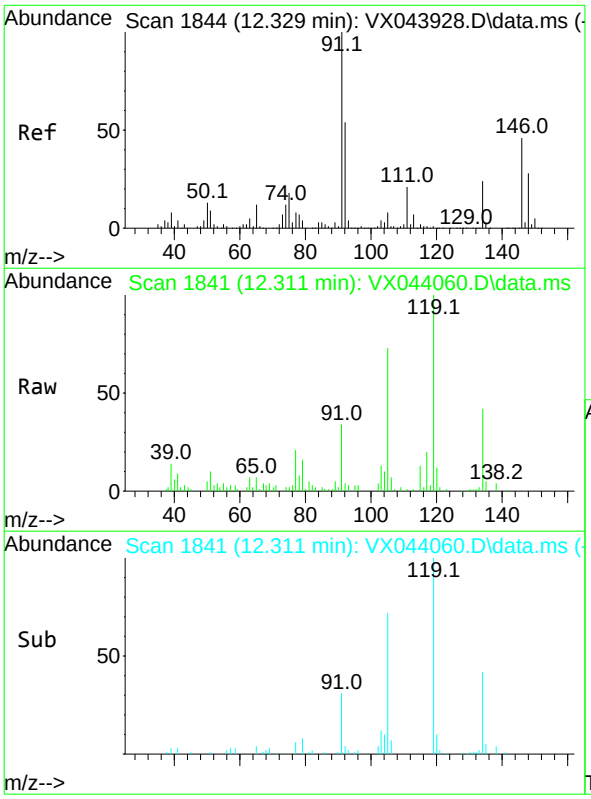
#85
sec-Butylbenzene
Concen: 0.330 ug/l
RT: 11.884 min Scan# 17
Delta R.T. -0.006 min
Lab File: VX044060.D
Acq: 02 Dec 2024 12:58

Instrument :
MSVOA_X
ClientSampleId :
MW-10

Tgt Ion:105 Resp: 2256

Ion	Ratio	Lower	Upper
105	100		
134	0.0	9.7	29.1#

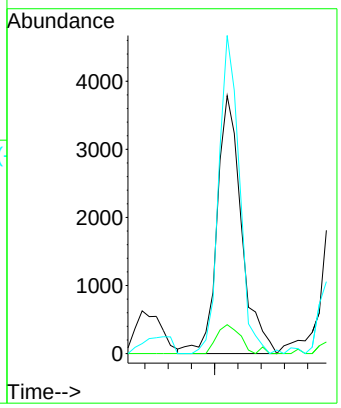


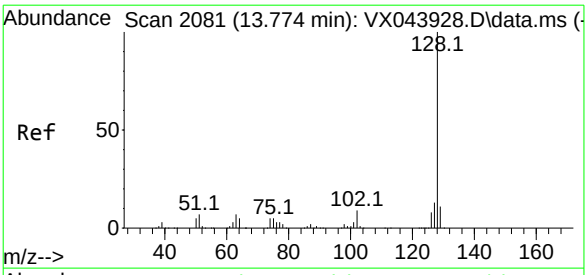


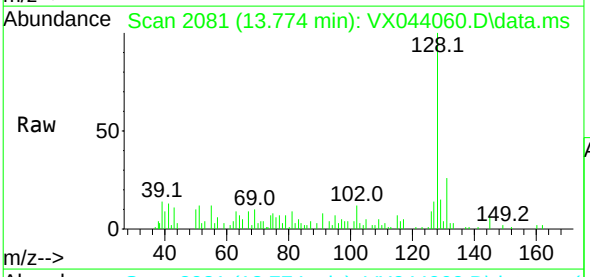
#89
n-Butylbenzene
Concen: 1.127 ug/l
RT: 12.311 min Scan# 1841
Delta R.T. -0.018 min
Lab File: VX044060.D
Acq: 02 Dec 2024 12:58

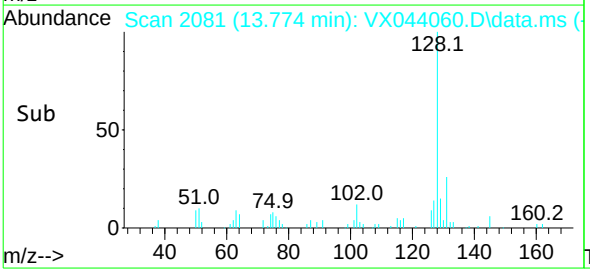
Tgt Ion: 91 Resp: 5519

Ion	Ratio	Lower	Upper
91	100		
92	10.5	26.6	79.8#
134	103.8	12.4	37.2#







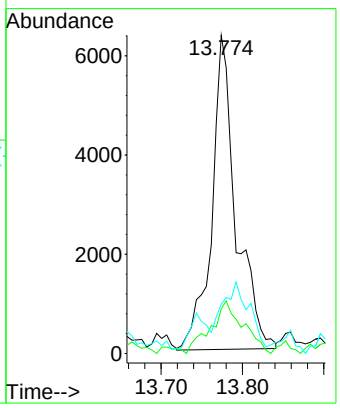


#95
Naphthalene
Concen: 2.055 ug/l
RT: 13.774 min Scan# 20
Delta R.T. -0.000 min
Lab File: VX044060.D
Acq: 02 Dec 2024 12:58

Instrument :
MSVOA_X
ClientSampleId :
MW-10

Tgt Ion:128 Resp: 13084

Ion	Ratio	Lower	Upper
128	100		
127	22.4	10.2	15.2#
129	24.3	8.6	12.8#



Raw Data: **VX044061.D**

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

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	11/26/24
Project:	RFK Bridge	Date Received:	11/27/24
Client Sample ID:	MW-11	SDG No.:	P5021
Lab Sample ID:	P5021-04	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044061.D	1		12/02/24 13:21	VX120224

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
1634-04-4	Methyl tert-butyl Ether	1.00	U	0.16	1.00	ug/L
71-43-2	Benzene	1.00	U	0.16	1.00	ug/L
108-88-3	Toluene	1.00	U	0.18	1.00	ug/L
100-41-4	Ethyl Benzene	1.00	U	0.16	1.00	ug/L
179601-23-1	m/p-Xylenes	2.00	U	0.31	2.00	ug/L
95-47-6	o-Xylene	1.00	U	0.14	1.00	ug/L
98-82-8	Isopropylbenzene	1.00	U	0.13	1.00	ug/L
103-65-1	n-propylbenzene	1.00	U	0.14	1.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	1.00	U	0.18	1.00	ug/L
98-06-6	tert-Butylbenzene	1.00	U	0.17	1.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	1.00	U	0.18	1.00	ug/L
135-98-8	sec-Butylbenzene	1.00	U	0.17	1.00	ug/L
99-87-6	p-Isopropyltoluene	1.00	U	0.15	1.00	ug/L
104-51-8	n-Butylbenzene	1.00	U	0.22	1.00	ug/L
91-20-3	Naphthalene	1.00	U	0.59	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	51.9		74 - 125	104%	SPK: 50
1868-53-7	Dibromofluoromethane	47.0		75 - 124	94%	SPK: 50
2037-26-5	Toluene-d8	51.0		86 - 113	102%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.6		77 - 121	103%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	120000	5.544			
540-36-3	1,4-Difluorobenzene	230000	6.757			
3114-55-4	Chlorobenzene-d5	209000	10.049			
3855-82-1	1,4-Dichlorobenzene-d4	91500	12.018			

Raw Data: **VX044061.D**

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

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	11/26/24
Project:	RFK Bridge	Date Received:	11/27/24
Client Sample ID:	MW-11	SDG No.:	P5021
Lab Sample ID:	P5021-04	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044061.D	1		12/02/24 13:21	VX120224

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\VX120224\
Data File : VX044061.D
Acq On : 02 Dec 2024 13:21
Operator : JC/MD
Sample : P5021-04
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
MW-11

Quant Time: Dec 03 00:18:50 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration

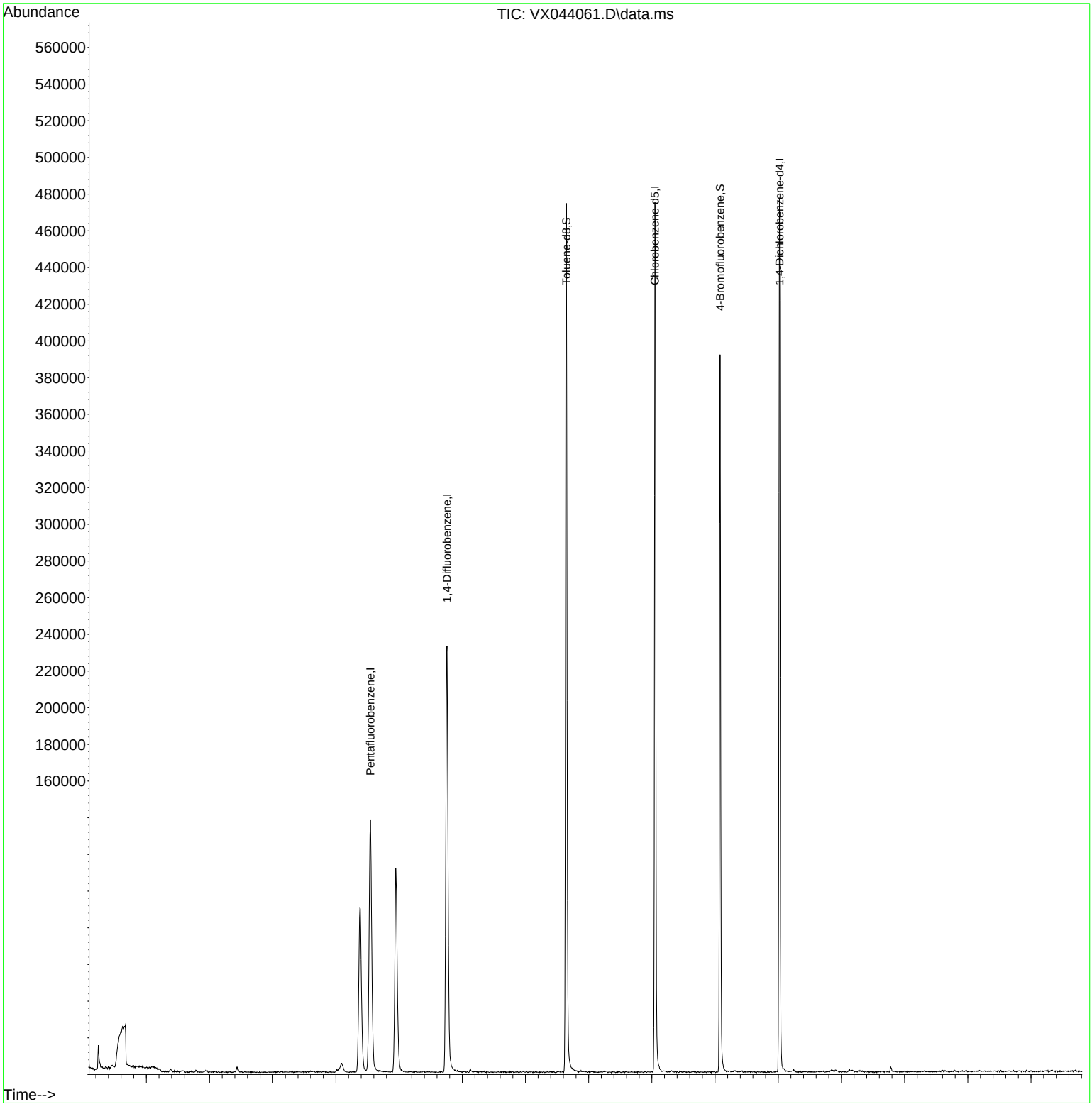
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.544	168	120070	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.757	114	229971	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.049	117	208817	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	91525	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.946	65	106938	51.927	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 103.860%			
35) Dibromofluoromethane	5.379	113	77289	47.034	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 94.060%			
50) Toluene-d8	8.647	98	288636	50.955	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 101.920%			
62) 4-Bromofluorobenzene	11.079	95	99490	51.609	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 103.220%			
Target Compounds						Qvalue
16) Acetone	2.386	43	1592	1.683	ug/l #	87
29) Tetrahydrofuran	5.032	42	1450	1.938	ug/l #	82
30) Chloroform	5.099	83	5656	1.886	ug/l	85
44) Trichloroethene	7.123	130	499	0.276	ug/l	58
95) Naphthalene	13.780	128	2354	0.360	ug/l #	88

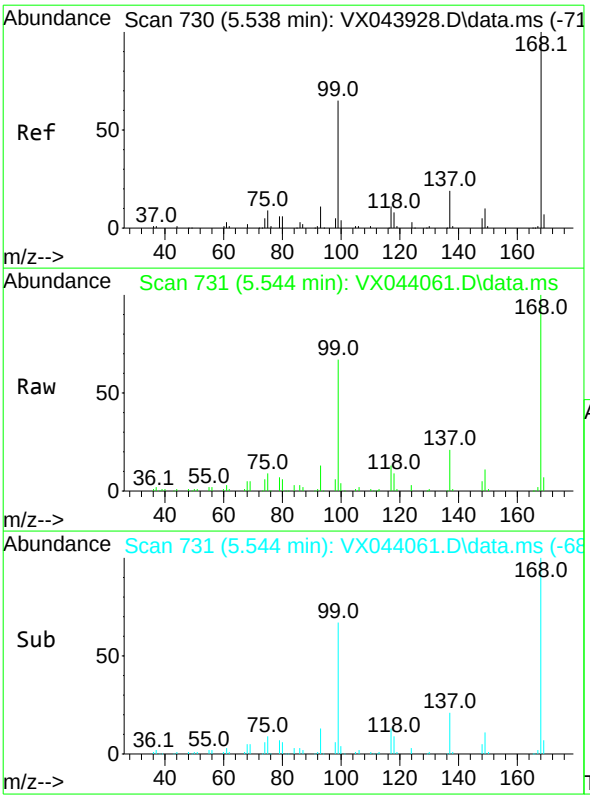
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120224\
Data File : VX044061.D
Acq On : 02 Dec 2024 13:21
Operator : JC/MD
Sample : P5021-04
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
MW-11

Quant Time: Dec 03 00:18:50 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration



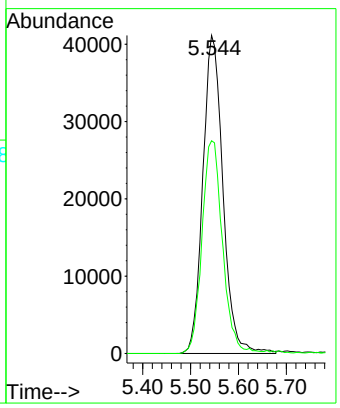


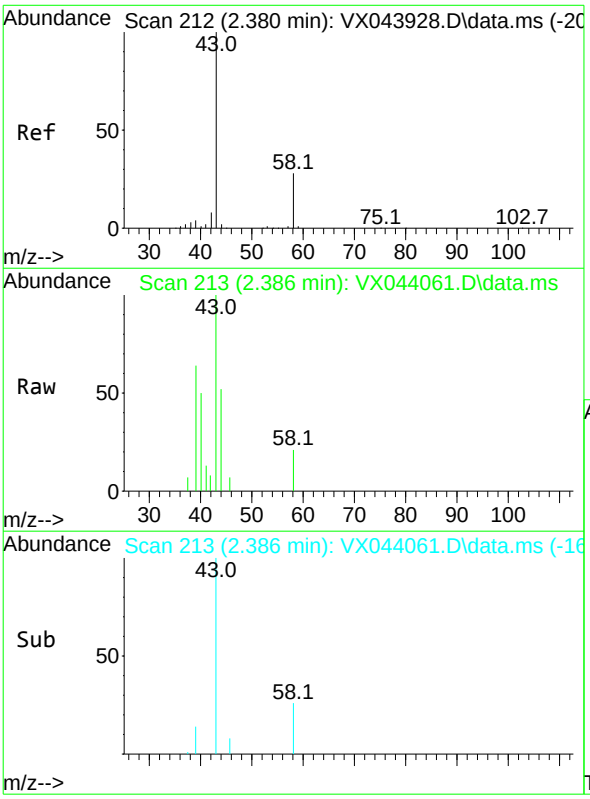
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.544 min Scan# 73
Delta R.T. 0.006 min
Lab File: VX044061.D
Acq: 02 Dec 2024 13:21

Instrument :
MSVOA_X
ClientSampleId :
MW-11

Tgt Ion:168 Resp: 120070

Ion	Ratio	Lower	Upper
168	100		
99	66.9	51.8	77.8

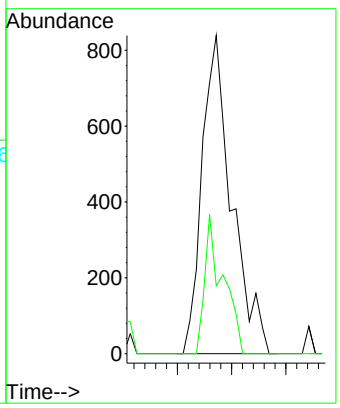


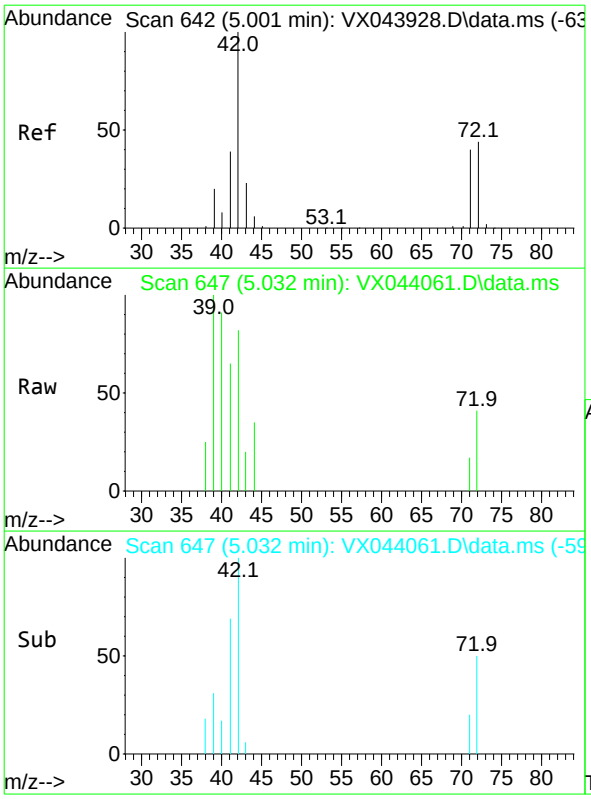


#16
Acetone
Concen: 1.683 ug/l
RT: 2.386 min Scan# 213
Delta R.T. 0.006 min
Lab File: VX044061.D
Acq: 02 Dec 2024 13:21

Tgt Ion: 43 Resp: 1592

Ion	Ratio	Lower	Upper
43	100		
58	21.3	22.7	34.1#



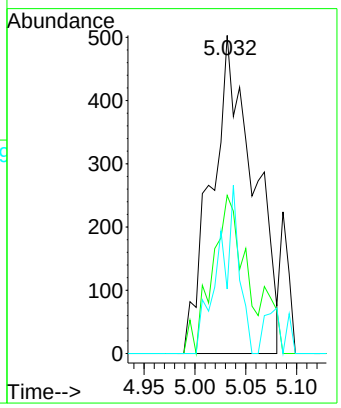


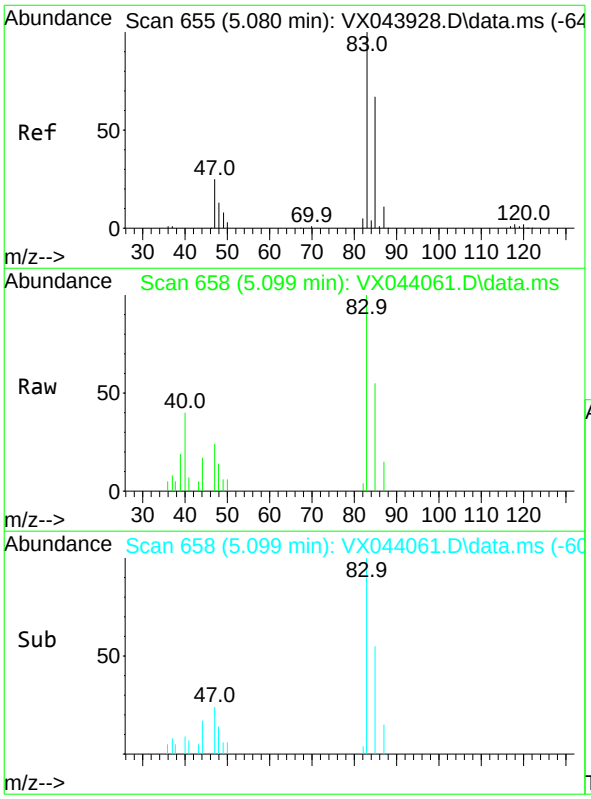
#29
Tetrahydrofuran
Concen: 1.938 ug/l
RT: 5.032 min Scan# 64
Delta R.T. 0.030 min
Lab File: VX044061.D
Acq: 02 Dec 2024 13:21

Instrument :
MSVOA_X
ClientSampleId :
MW-11

Tgt Ion: 42 Resp: 1450

Ion	Ratio	Lower	Upper
42	100		
72	37.8	36.4	54.6
71	25.4	33.4	50.0#

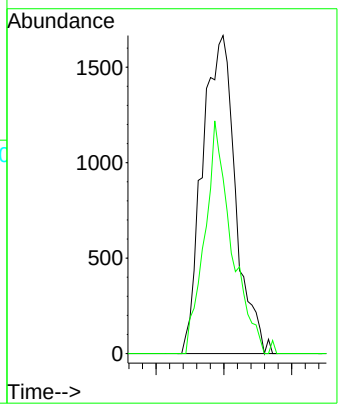


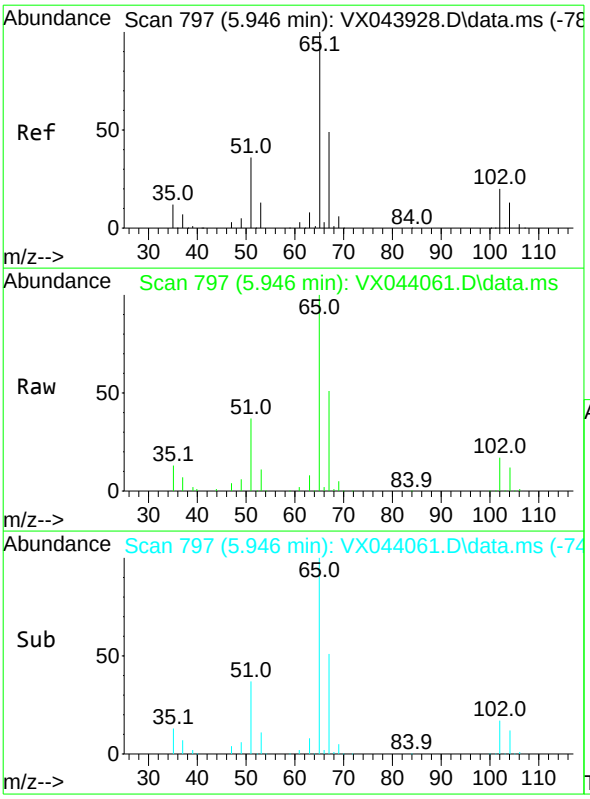


#30
Chloroform
Concen: 1.886 ug/l
RT: 5.099 min Scan# 658
Delta R.T. 0.018 min
Lab File: VX044061.D
Acq: 02 Dec 2024 13:21

Tgt Ion: 83 Resp: 5656

Ion	Ratio	Lower	Upper
83	100		
85	55.2	53.5	80.3



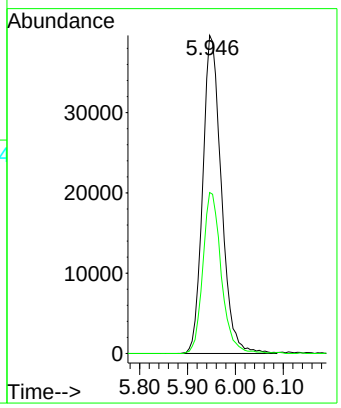


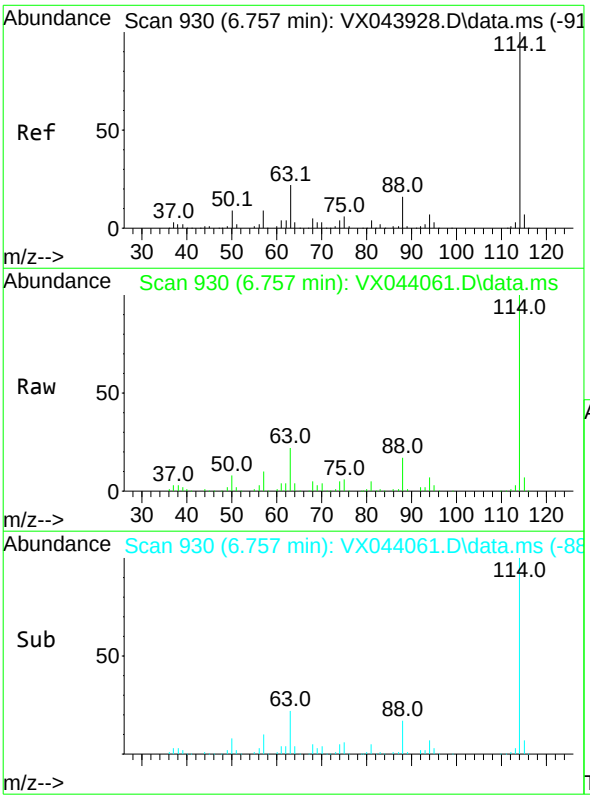
#33
1,2-Dichloroethane-d4
Concen: 51.927 ug/l
RT: 5.946 min Scan# 79
Delta R.T. -0.000 min
Lab File: VX044061.D
Acq: 02 Dec 2024 13:21

Instrument :
MSVOA_X
ClientSampleId :
MW-11

Tgt Ion: 65 Resp: 106938

Ion	Ratio	Lower	Upper
65	100		
67	50.2	0.0	100.8

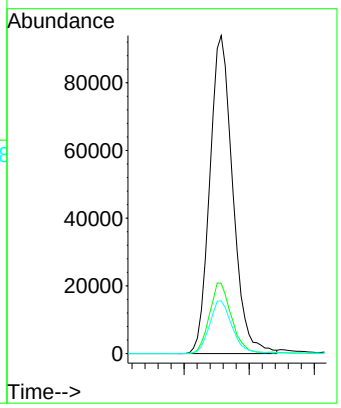


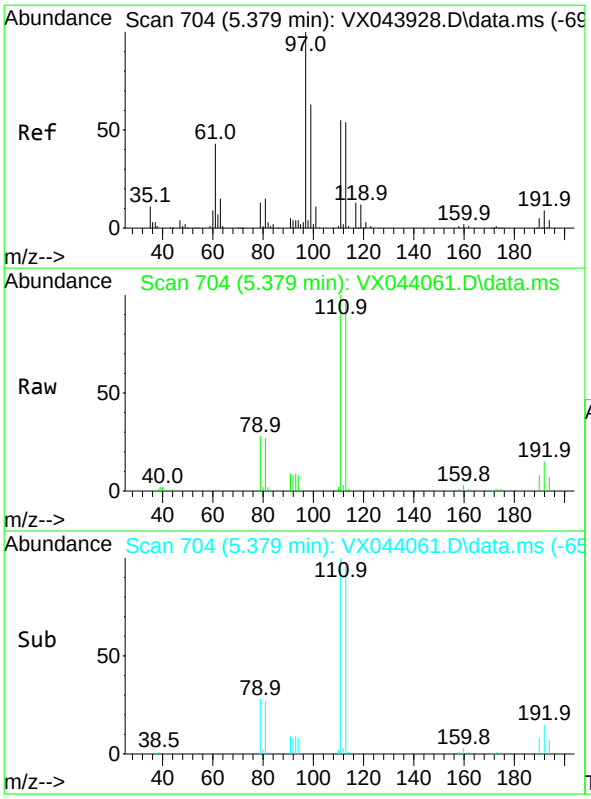


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.757 min Scan# 930
Delta R.T. -0.000 min
Lab File: VX044061.D
Acq: 02 Dec 2024 13:21

Tgt Ion:114 Resp: 229971

Ion	Ratio	Lower	Upper
114	100		
63	22.1	0.0	44.0
88	16.6	0.0	32.4



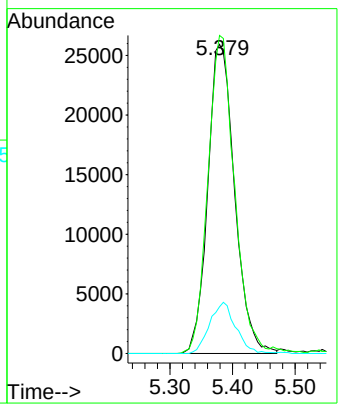


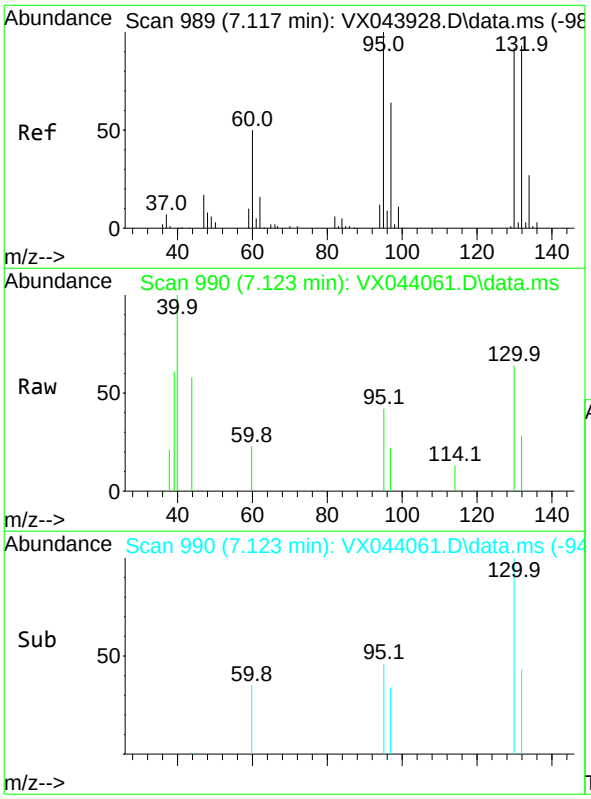
#35
Dibromofluoromethane
Concen: 47.034 ug/l
RT: 5.379 min Scan# 70
Delta R.T. -0.000 min
Lab File: VX044061.D
Acq: 02 Dec 2024 13:21

Instrument :
MSVOA_X
ClientSampleId :
MW-11

Tgt Ion:113 Resp: 77289

Ion	Ratio	Lower	Upper
113	100		
111	101.3	81.0	121.4
192	16.1	13.0	19.6

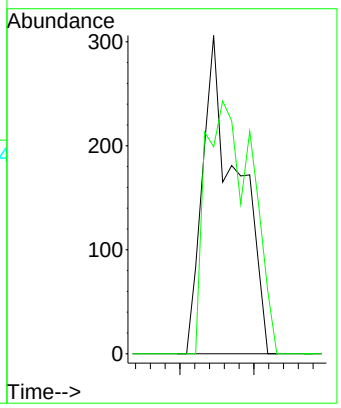


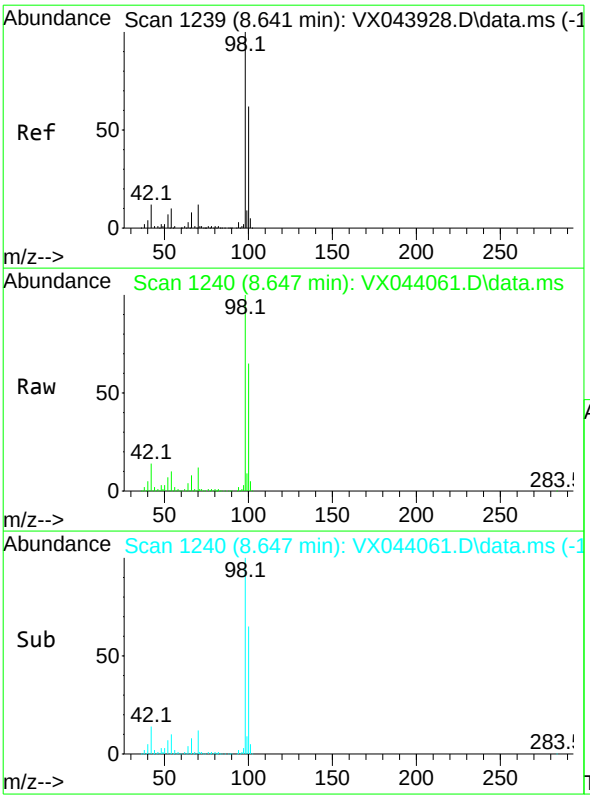


#44
Trichloroethene
Concen: 0.276 ug/l
RT: 7.123 min Scan# 990
Delta R.T. 0.006 min
Lab File: VX044061.D
Acq: 02 Dec 2024 13:21

Tgt Ion:130 Resp: 499

Ion	Ratio	Lower	Upper
130	100		
95	65.0	0.0	217.8



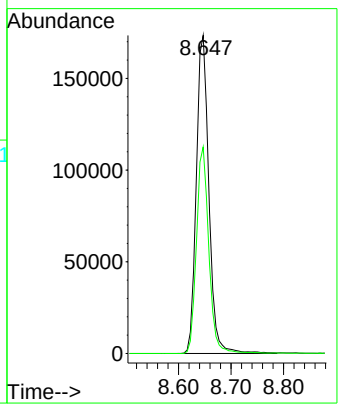


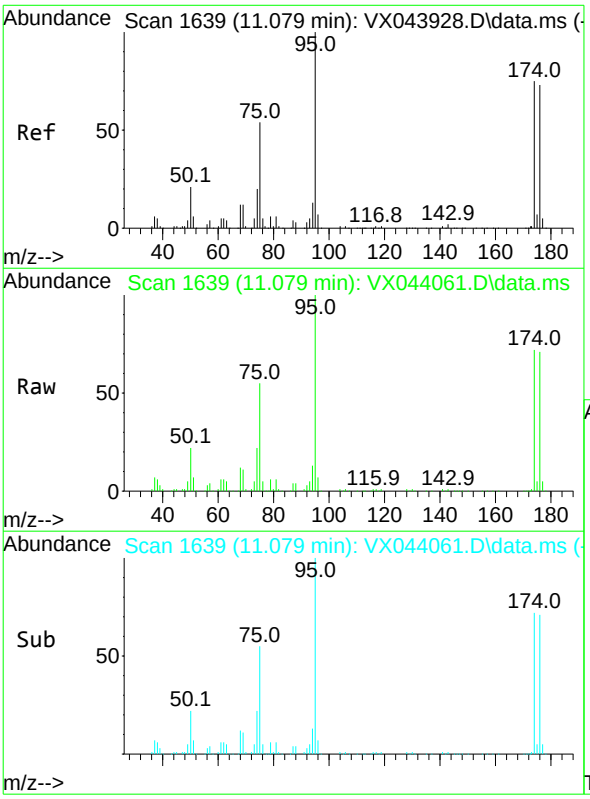
#50
Toluene-d8
Concen: 50.955 ug/l
RT: 8.647 min Scan# 12
Delta R.T. 0.006 min
Lab File: VX044061.D
Acq: 02 Dec 2024 13:21

Instrument :
MSVOA_X
ClientSampleId :
MW-11

Tgt Ion: 98 Resp: 288636

Ion	Ratio	Lower	Upper
98	100		
100	63.8	52.6	79.0

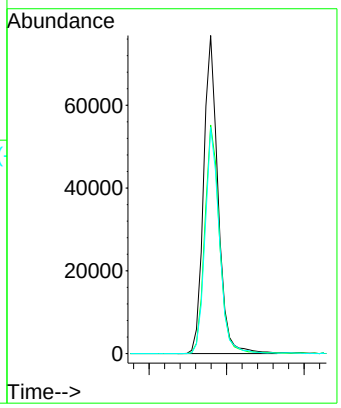


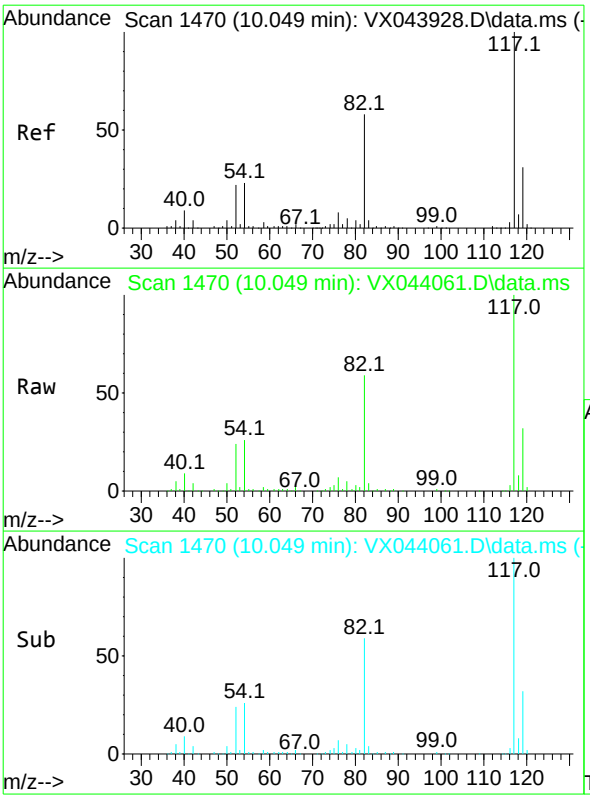


#62
4-Bromofluorobenzene
Concen: 51.609 ug/l
RT: 11.079 min Scan# 1639
Delta R.T. -0.000 min
Lab File: VX044061.D
Acq: 02 Dec 2024 13:21

Tgt Ion: 95 Resp: 99490

Ion	Ratio	Lower	Upper
95	100		
174	72.9	0.0	150.4
176	70.1	0.0	146.0



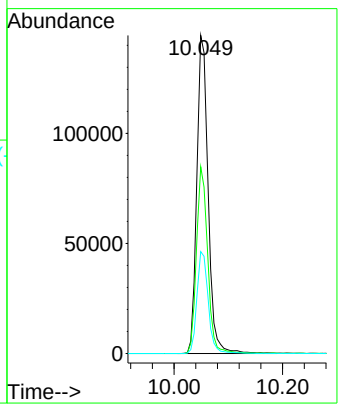


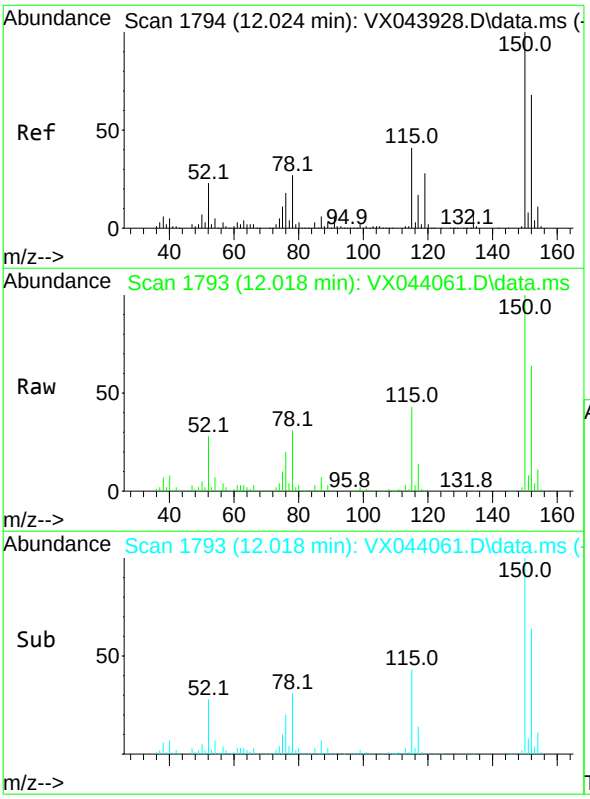
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.049 min Scan# 14
Delta R.T. -0.000 min
Lab File: VX044061.D
Acq: 02 Dec 2024 13:21

Instrument :
MSVOA_X
ClientSampleId :
MW-11

Tgt Ion:117 Resp: 208817

Ion	Ratio	Lower	Upper
117	100		
82	58.7	46.4	69.6
119	32.0	24.6	37.0

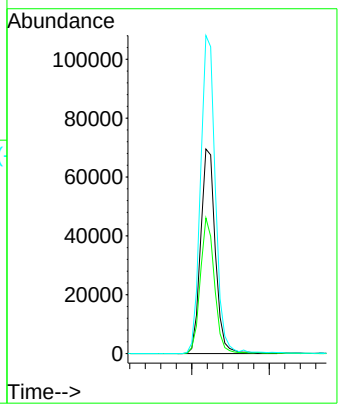


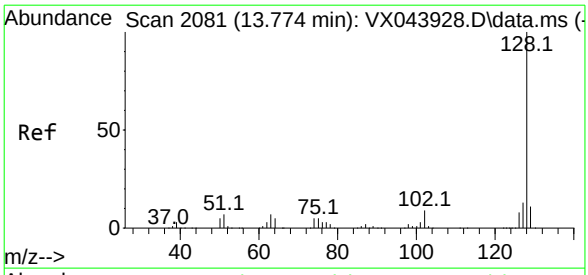


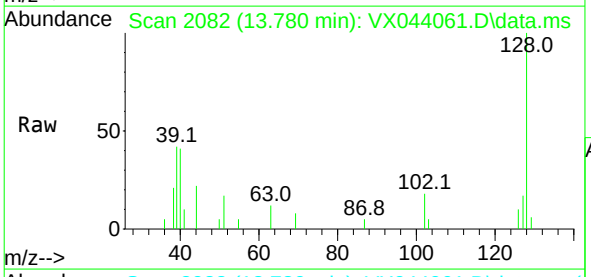
#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.018 min Scan# 1793
Delta R.T. -0.006 min
Lab File: VX044061.D
Acq: 02 Dec 2024 13:21

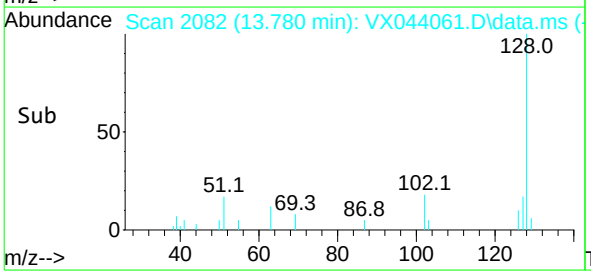
Tgt Ion:152 Resp: 91525

Ion	Ratio	Lower	Upper
152	100		
115	63.7	45.4	136.2
150	157.7	0.0	353.0







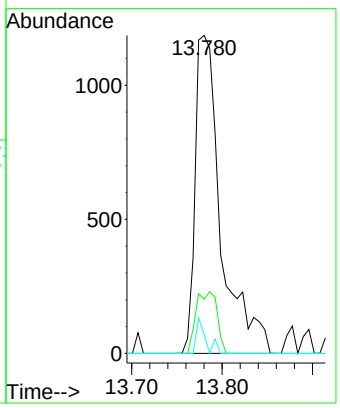


#95
Naphthalene
Concen: 0.360 ug/l
RT: 13.780 min Scan# 20
Delta R.T. 0.006 min
Lab File: VX044061.D
Acq: 02 Dec 2024 13:21

Instrument :
MSVOA_X
ClientSampleId :
MW-11

Tgt Ion:128 Resp: 2354

Ion	Ratio	Lower	Upper
128	100		
127	15.8	10.2	15.2#
129	4.0	8.6	12.8#



Raw Data: **VX044062.D**

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

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	11/26/24
Project:	RFK Bridge	Date Received:	11/27/24
Client Sample ID:	MW-13	SDG No.:	P5021
Lab Sample ID:	P5021-05	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044062.D	1		12/02/24 13:44	VX120224

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
1634-04-4	Methyl tert-butyl Ether	2.20		0.16	1.00	ug/L
71-43-2	Benzene	15.3		0.16	1.00	ug/L
108-88-3	Toluene	0.68	J	0.18	1.00	ug/L
100-41-4	Ethyl Benzene	19.0		0.16	1.00	ug/L
179601-23-1	m/p-Xylenes	3.60		0.31	2.00	ug/L
95-47-6	o-Xylene	4.40		0.14	1.00	ug/L
98-82-8	Isopropylbenzene	1.50		0.13	1.00	ug/L
103-65-1	n-propylbenzene	2.20		0.14	1.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.35	J	0.18	1.00	ug/L
98-06-6	tert-Butylbenzene	1.00	U	0.17	1.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	1.60		0.18	1.00	ug/L
135-98-8	sec-Butylbenzene	1.00	U	0.17	1.00	ug/L
99-87-6	p-Isopropyltoluene	1.00	U	0.15	1.00	ug/L
104-51-8	n-Butylbenzene	0.52	J	0.22	1.00	ug/L
91-20-3	Naphthalene	1.00	U	0.59	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	53.1		74 - 125	106%	SPK: 50
1868-53-7	Dibromofluoromethane	46.7		75 - 124	93%	SPK: 50
2037-26-5	Toluene-d8	50.2		86 - 113	100%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.1		77 - 121	102%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	126000	5.544			
540-36-3	1,4-Difluorobenzene	245000	6.757			
3114-55-4	Chlorobenzene-d5	217000	10.049			
3855-82-1	1,4-Dichlorobenzene-d4	94600	12.018			

Raw Data: **VX044062.D**

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

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	11/26/24
Project:	RFK Bridge	Date Received:	11/27/24
Client Sample ID:	MW-13	SDG No.:	P5021
Lab Sample ID:	P5021-05	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044062.D	1		12/02/24 13:44	VX120224

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\VX120224\
Data File : VX044062.D
Acq On : 02 Dec 2024 13:44
Operator : JC/MD
Sample : P5021-05
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
MW-13

Quant Time: Dec 03 00:19:26 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration

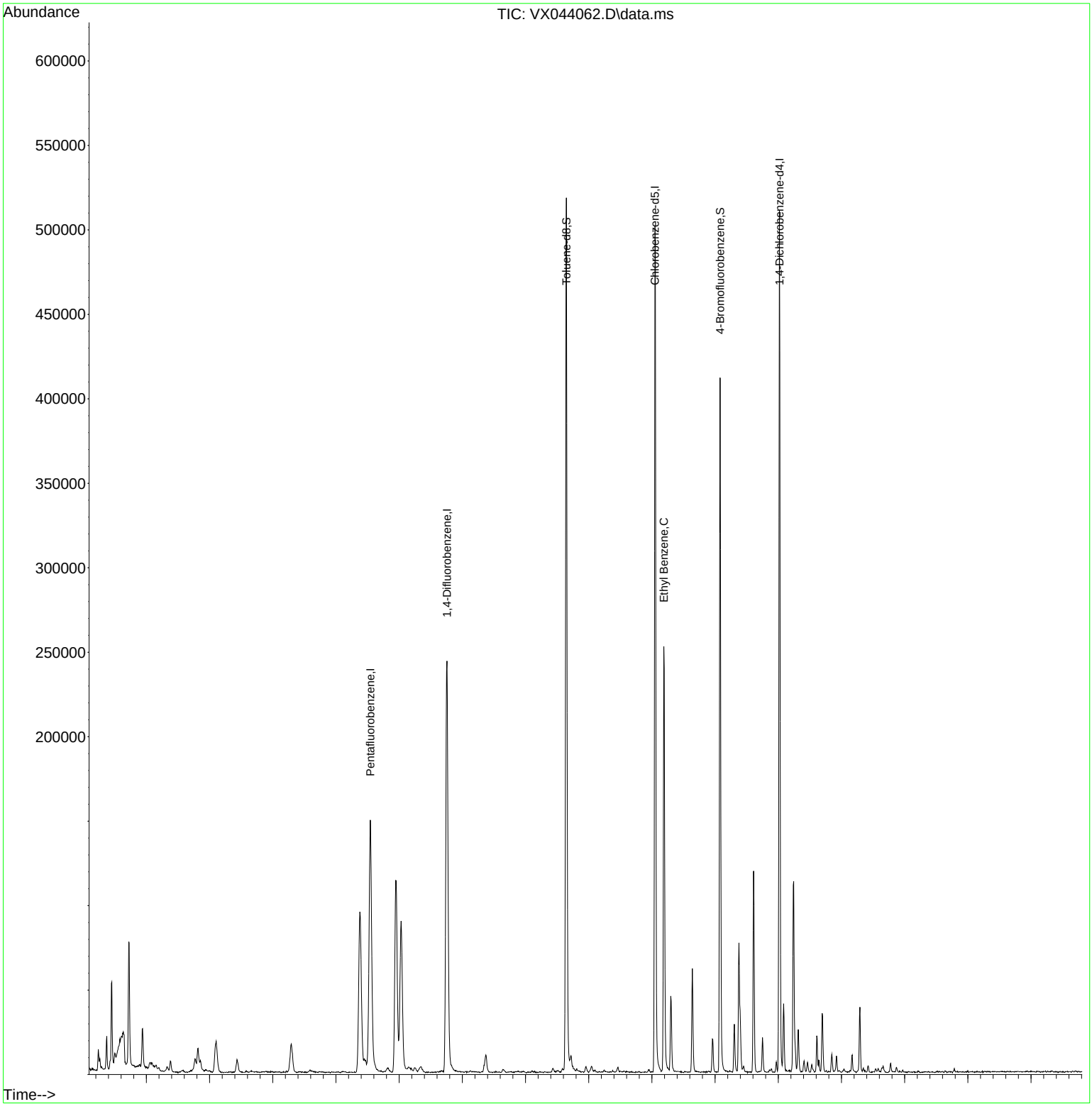
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.544	168	125796	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.757	114	244811	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.049	117	217402	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	94569	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.952	65	114570	53.100	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 106.200%			
35) Dibromofluoromethane	5.379	113	81725	46.719	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 93.440%			
50) Toluene-d8	8.647	98	302923	50.236	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 100.480%			
62) 4-Bromofluorobenzene	11.079	95	104846	51.090	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 102.180%			
Target Compounds						Qvalue
3) Chloromethane	1.294	50	427	0.255	ug/l #	83
16) Acetone	2.386	43	7069	7.133	ug/l	94
19) Methyl tert-butyl Ether	3.111	73	11729	2.228	ug/l #	33
25) 2-Butanone	4.587	43	2412	1.886	ug/l #	81
31) Cyclohexane	5.464	56	4254	1.769	ug/l	86
39) Methylcyclohexane	7.379	83	4027	1.422	ug/l	94
40) Benzene	6.031	78	103621	15.261	ug/l	99
52) Toluene	8.720	92	2744	0.675	ug/l	93
67) Ethyl Benzene	10.189	91	153861	19.017	ug/l	99
68) m/p-Xylenes	10.299	106	10991	3.643	ug/l	100
69) o-Xylene	10.640	106	12977	4.405	ug/l	95
73) Isopropylbenzene	10.963	105	11235	1.546	ug/l	100
78) n-propylbenzene	11.305	91	17776	2.189	ug/l	96
80) 1,3,5-Trimethylbenzene	11.451	105	2072	0.346	ug/l	98
84) 1,2,4-Trimethylbenzene	11.750	105	9411	1.581	ug/l	90
89) n-Butylbenzene	12.317	91	2718	0.523	ug/l #	8
95) Naphthalene	13.780	128	3546	0.524	ug/l	99

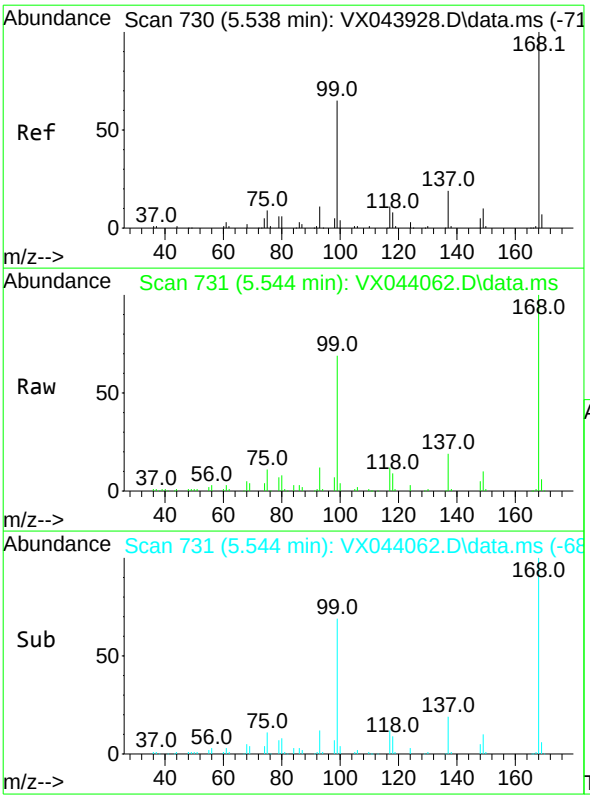
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120224\
Data File : VX044062.D
Acq On : 02 Dec 2024 13:44
Operator : JC/MD
Sample : P5021-05
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
MW-13

Quant Time: Dec 03 00:19:26 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration



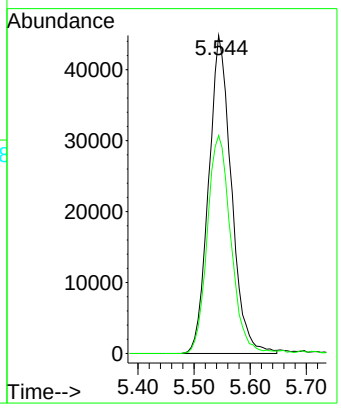


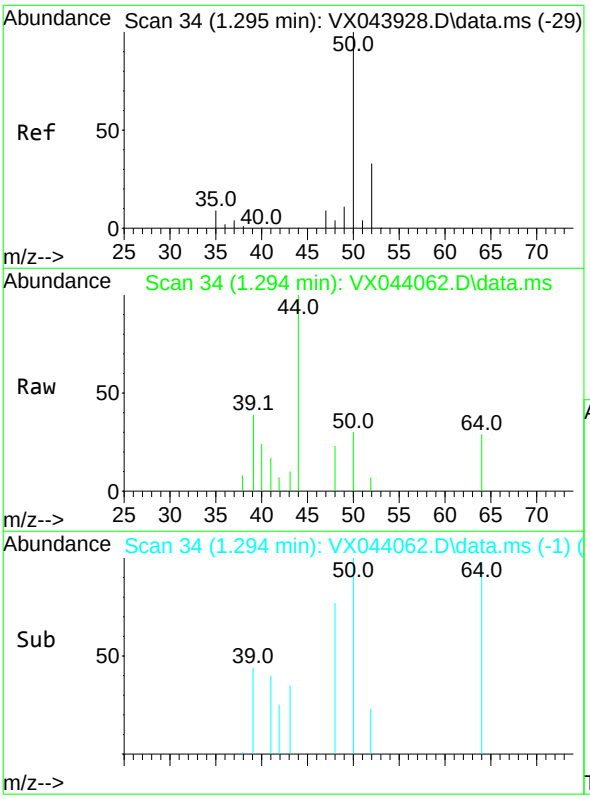
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.544 min Scan# 73
Delta R.T. 0.006 min
Lab File: VX044062.D
Acq: 02 Dec 2024 13:44

Instrument :
MSVOA_X
ClientSampleId :
MW-13

Tgt Ion:168 Resp: 125796

Ion	Ratio	Lower	Upper
168	100		
99	68.5	51.8	77.8

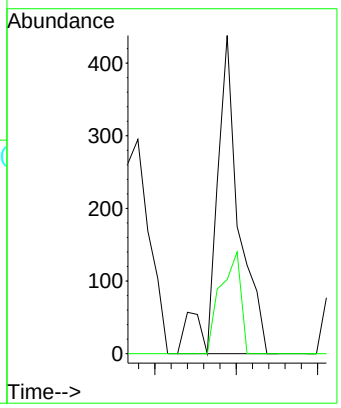


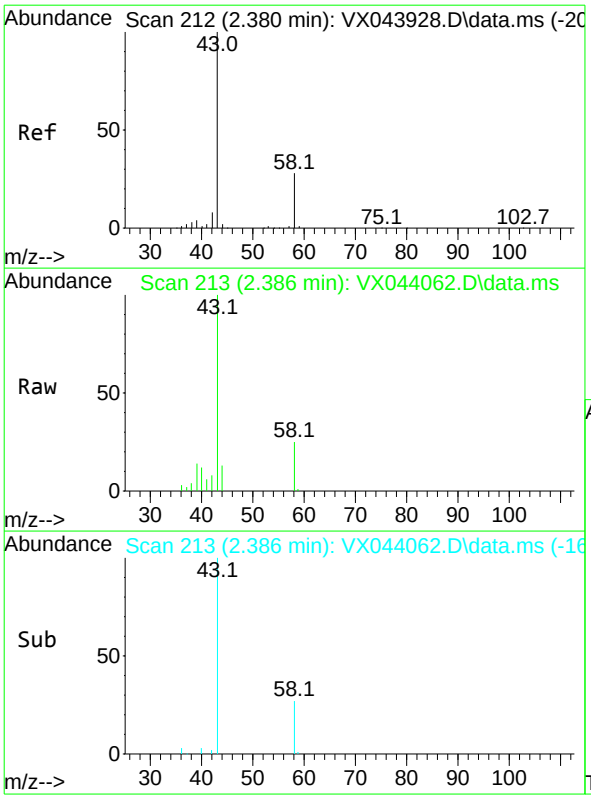


#3
Chloromethane
Concen: 0.255 ug/l
RT: 1.294 min Scan# 34
Delta R.T. -0.000 min
Lab File: VX044062.D
Acq: 02 Dec 2024 13:44

Tgt Ion: 50 Resp: 427

Ion	Ratio	Lower	Upper
50	100		
52	23.3	26.1	39.1#



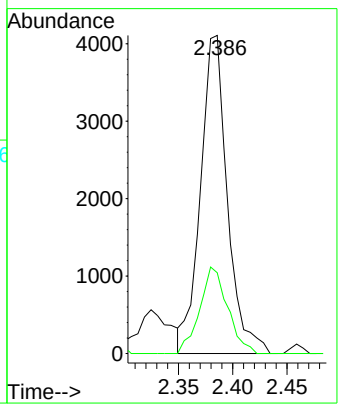


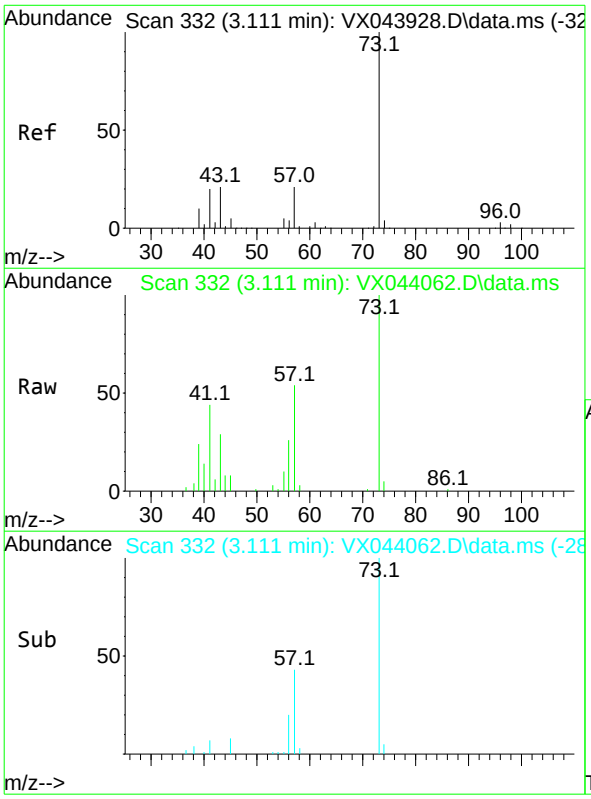
#16
Acetone
Concen: 7.133 ug/l
RT: 2.386 min Scan# 21
Delta R.T. 0.006 min
Lab File: VX044062.D
Acq: 02 Dec 2024 13:44

Instrument :
MSVOA_X
ClientSampleId :
MW-13

Tgt Ion: 43 Resp: 7069

Ion	Ratio	Lower	Upper
43	100		
58	25.4	22.7	34.1

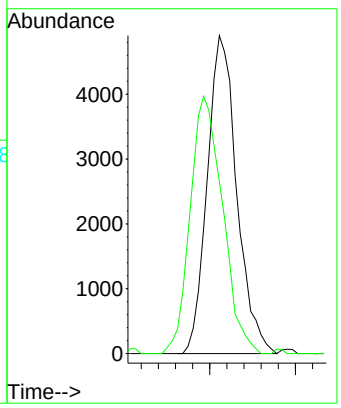


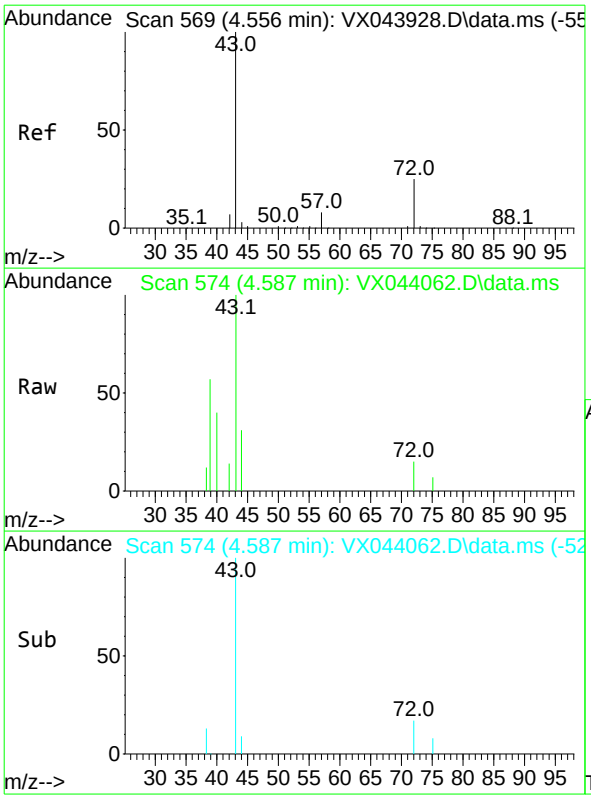


#19
Methyl tert-butyl Ether
Concen: 2.228 ug/l
RT: 3.111 min Scan# 332
Delta R.T. -0.000 min
Lab File: VX044062.D
Acq: 02 Dec 2024 13:44

Tgt Ion: 73 Resp: 11729

Ion	Ratio	Lower	Upper
73	100		
57	52.7	17.0	25.6#



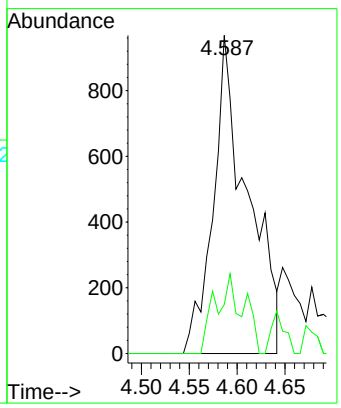


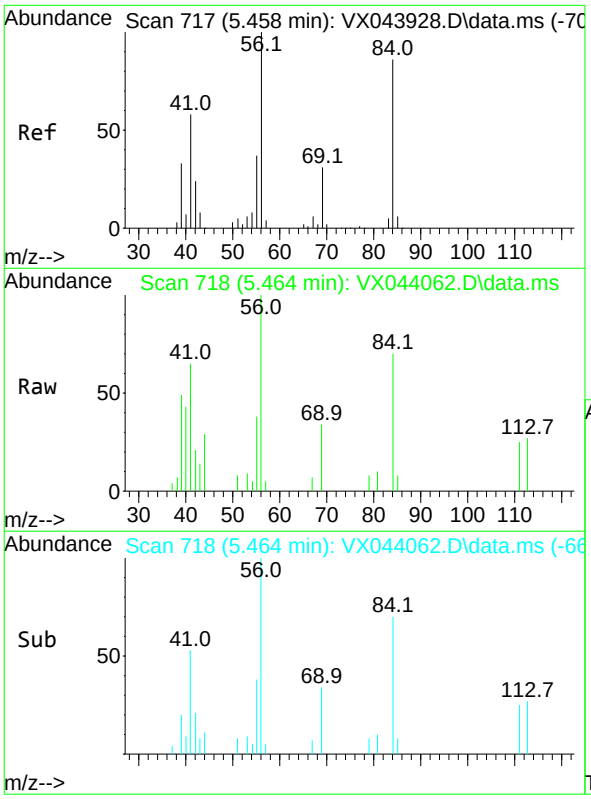
#25
2-Butanone
Concen: 1.886 ug/l
RT: 4.587 min Scan# 57
Delta R.T. 0.030 min
Lab File: VX044062.D
Acq: 02 Dec 2024 13:44

Instrument :
MSVOA_X
ClientSampleId :
MW-13

Tgt Ion: 43 Resp: 2412

Ion	Ratio	Lower	Upper
43	100		
72	15.4	20.2	30.2#

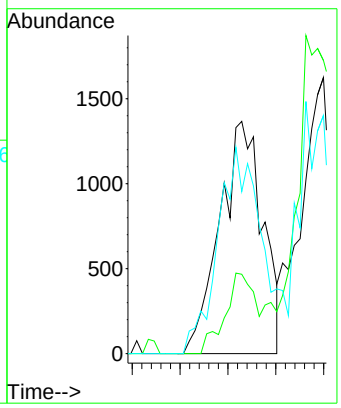


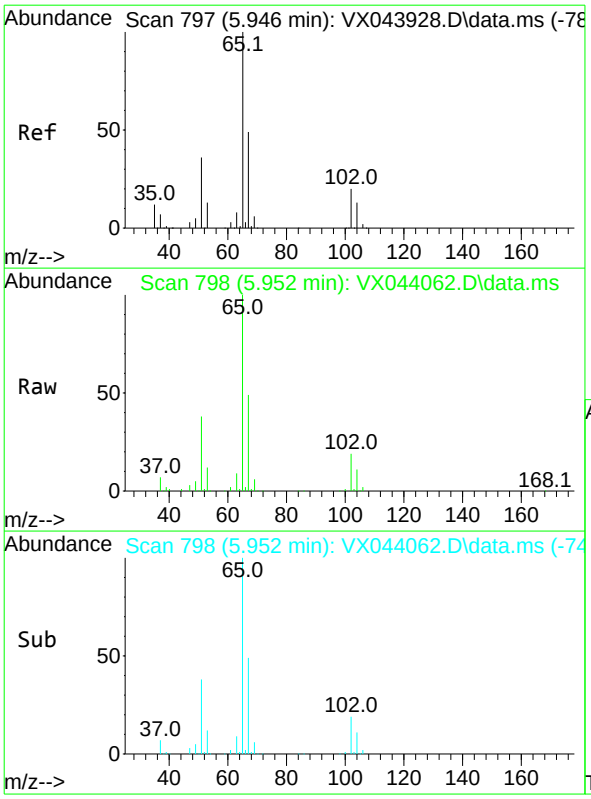


#31
Cyclohexane
Concen: 1.769 ug/l
RT: 5.464 min Scan# 718
Delta R.T. 0.006 min
Lab File: VX044062.D
Acq: 02 Dec 2024 13:44

Tgt Ion: 56 Resp: 4254

Ion	Ratio	Lower	Upper
56	100		
69	34.2	24.7	37.1
84	69.8	68.7	103.1



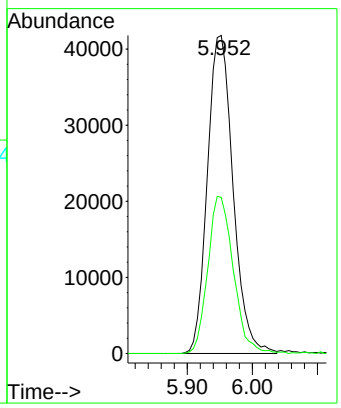


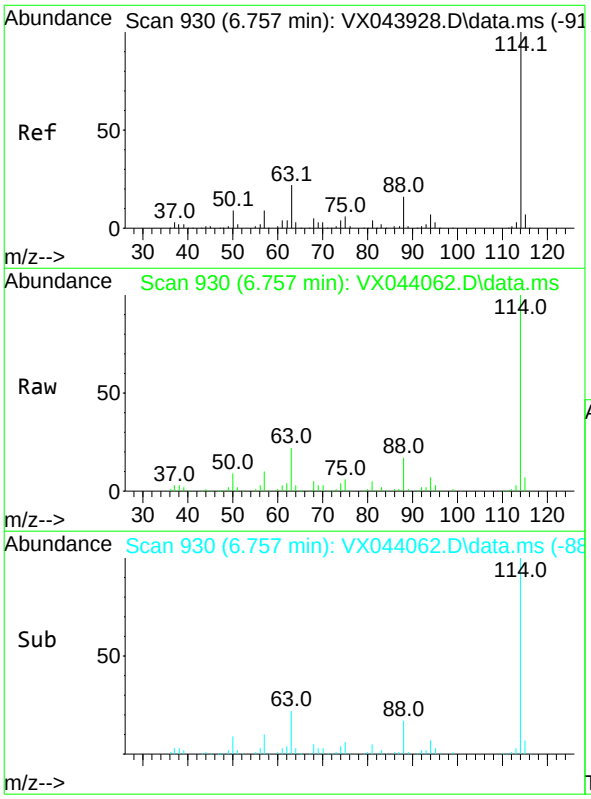
#33
1,2-Dichloroethane-d4
Concen: 53.100 ug/l
RT: 5.952 min Scan# 79
Delta R.T. 0.006 min
Lab File: VX044062.D
Acq: 02 Dec 2024 13:44

Instrument :
MSVOA_X
ClientSampleId :
MW-13

Tgt Ion: 65 Resp: 114570

Ion	Ratio	Lower	Upper
65	100		
67	49.1	0.0	100.8

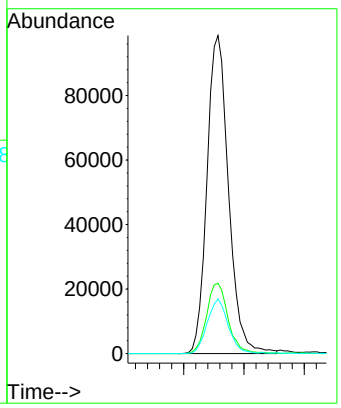


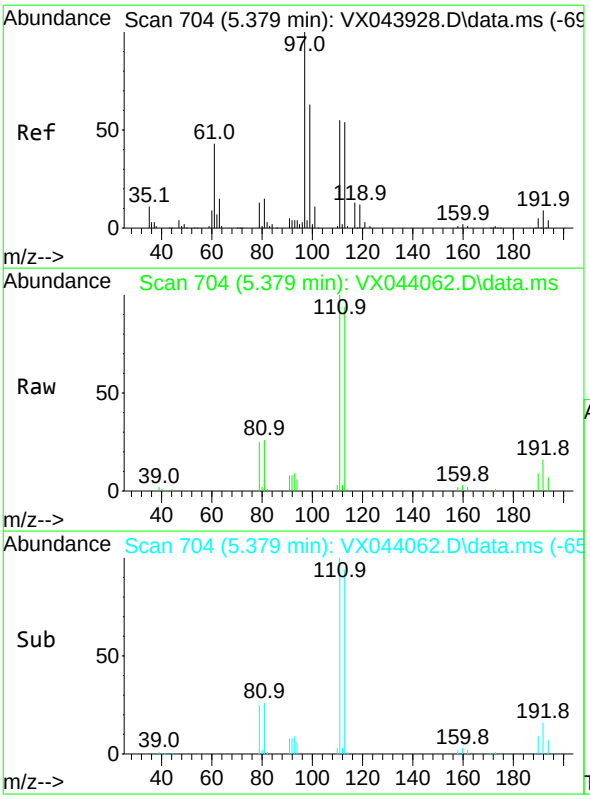


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.757 min Scan# 930
Delta R.T. -0.000 min
Lab File: VX044062.D
Acq: 02 Dec 2024 13:44

Tgt Ion:114 Resp: 244811

Ion	Ratio	Lower	Upper
114	100		
63	22.1	0.0	44.0
88	17.2	0.0	32.4



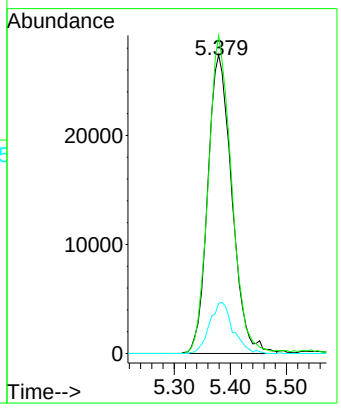


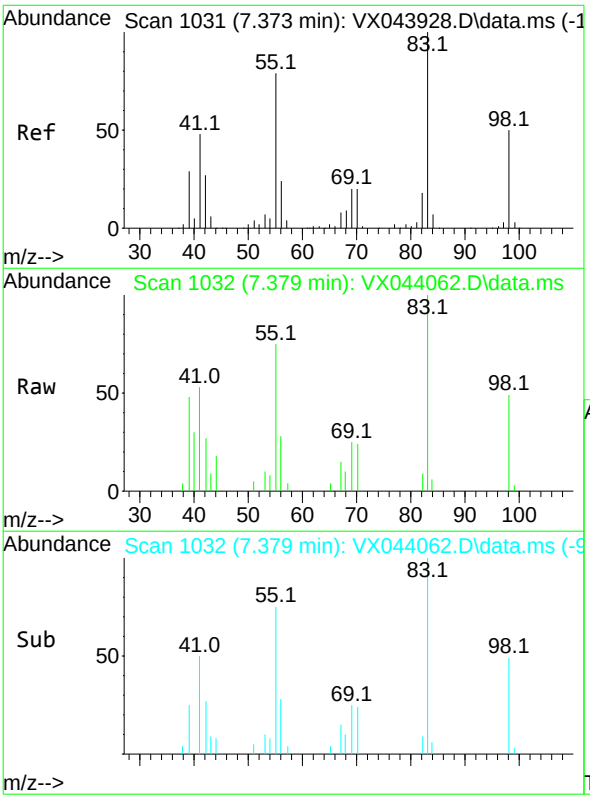
#35
Dibromofluoromethane
Concen: 46.719 ug/l
RT: 5.379 min Scan# 70
Delta R.T. -0.000 min
Lab File: VX044062.D
Acq: 02 Dec 2024 13:44

Instrument :
MSVOA_X
ClientSampleId :
MW-13

Tgt Ion:113 Resp: 81725

Ion	Ratio	Lower	Upper
113	100		
111	103.1	81.0	121.4
192	16.7	13.0	19.6

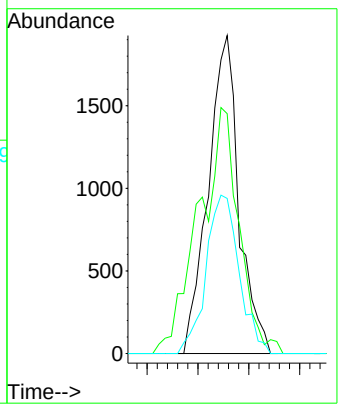


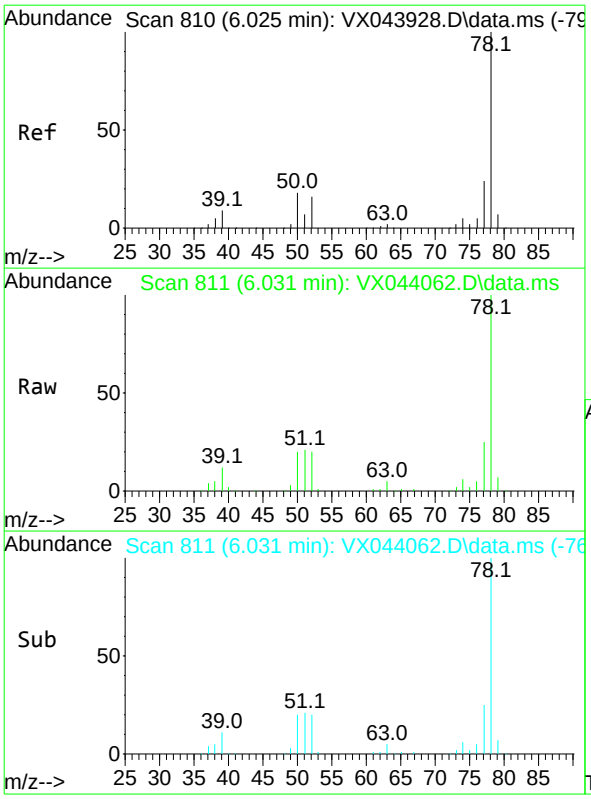


#39
Methylcyclohexane
Concen: 1.422 ug/l
RT: 7.379 min Scan# 1032
Delta R.T. 0.006 min
Lab File: VX044062.D
Acq: 02 Dec 2024 13:44

Tgt Ion: 83 Resp: 4027

Ion	Ratio	Lower	Upper
83	100		
55	71.6	63.1	94.7
98	48.8	40.0	60.0



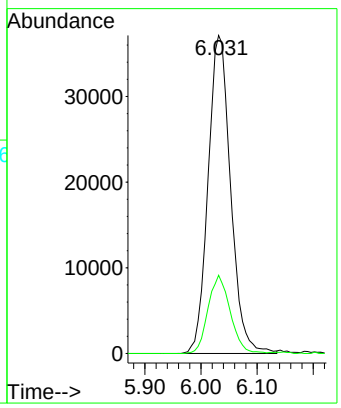


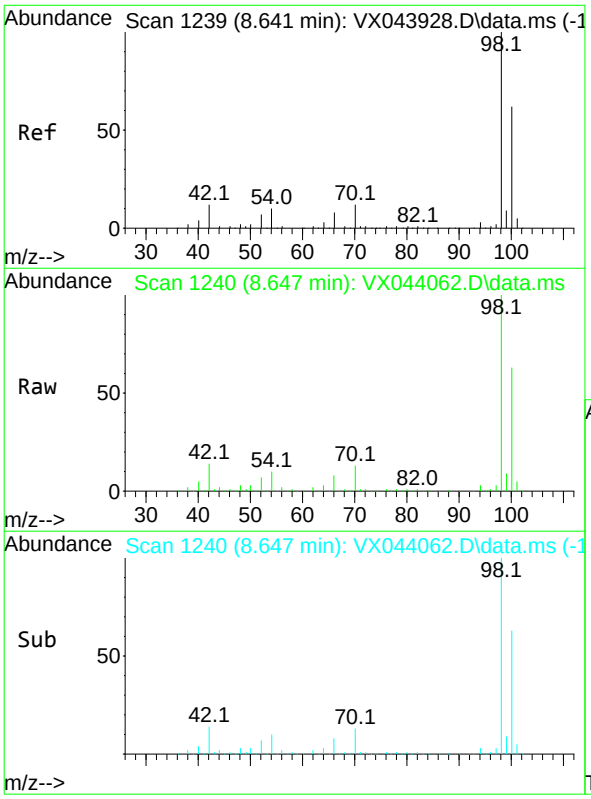
#40
Benzene
Concen: 15.261 ug/l
RT: 6.031 min Scan# 81
Delta R.T. 0.006 min
Lab File: VX044062.D
Acq: 02 Dec 2024 13:44

Instrument :
MSVOA_X
ClientSampleId :
MW-13

Tgt Ion: 78 Resp: 103621

Ion	Ratio	Lower	Upper
78	100		
77	24.6	19.2	28.8

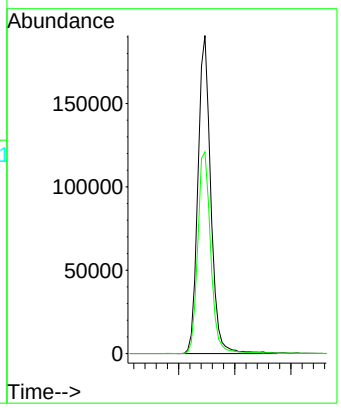


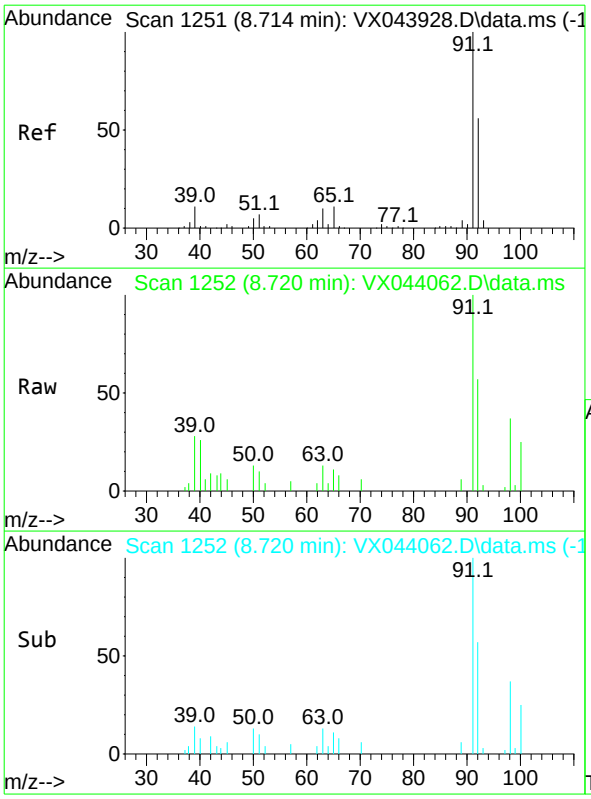


#50
Toluene-d8
Concen: 50.236 ug/l
RT: 8.647 min Scan# 1240
Delta R.T. 0.006 min
Lab File: VX044062.D
Acq: 02 Dec 2024 13:44

Tgt Ion: 98 Resp: 302923

Ion	Ratio	Lower	Upper
98	100		
100	64.5	52.6	79.0



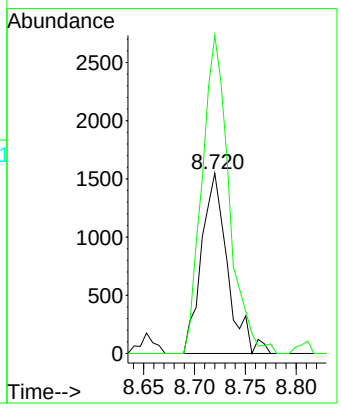


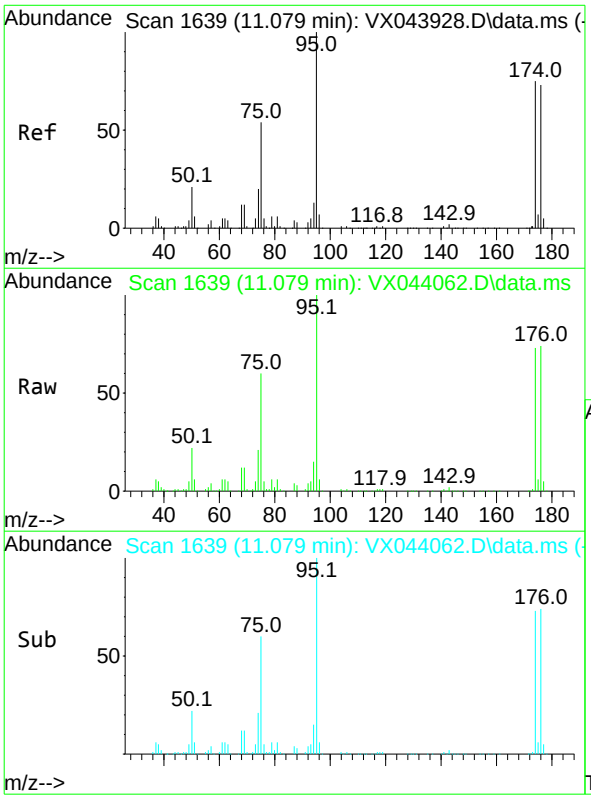
#52
Toluene
Concen: 0.675 ug/l
RT: 8.720 min Scan# 12
Delta R.T. 0.006 min
Lab File: VX044062.D
Acq: 02 Dec 2024 13:44

Instrument :
MSVOA_X
ClientSampleId :
MW-13

Tgt Ion: 92 Resp: 2744

Ion	Ratio	Lower	Upper
92	100		
91	183.7	139.7	209.5

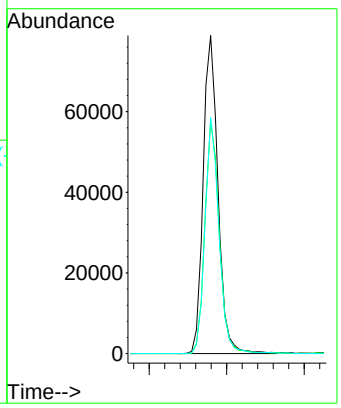


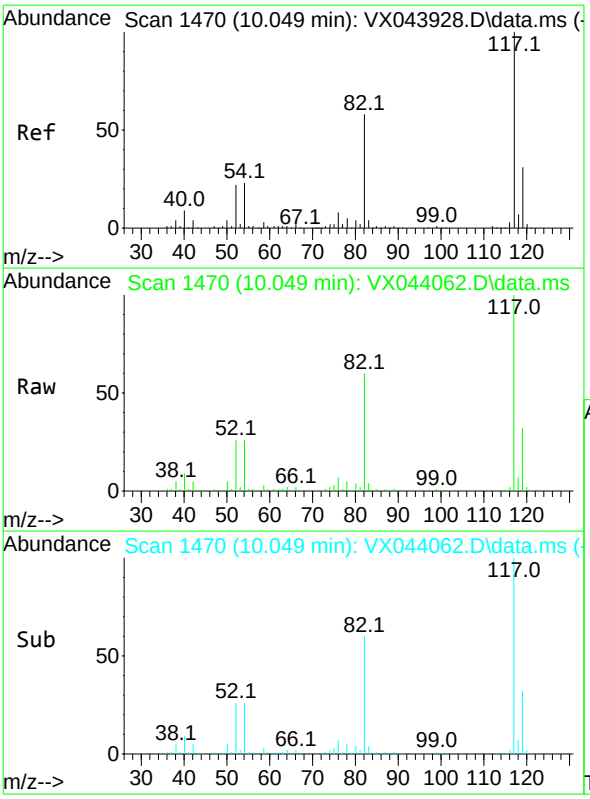


#62
4-Bromofluorobenzene
Concen: 51.090 ug/l
RT: 11.079 min Scan# 1639
Delta R.T. -0.000 min
Lab File: VX044062.D
Acq: 02 Dec 2024 13:44

Tgt Ion: 95 Resp: 104846

Ion	Ratio	Lower	Upper
95	100		
174	71.3	0.0	150.4
176	70.1	0.0	146.0



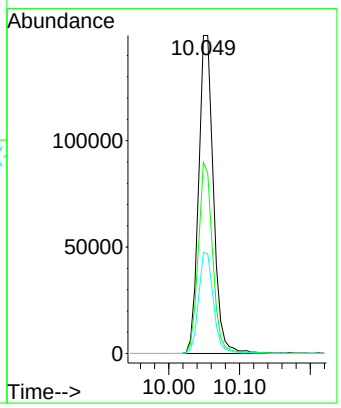


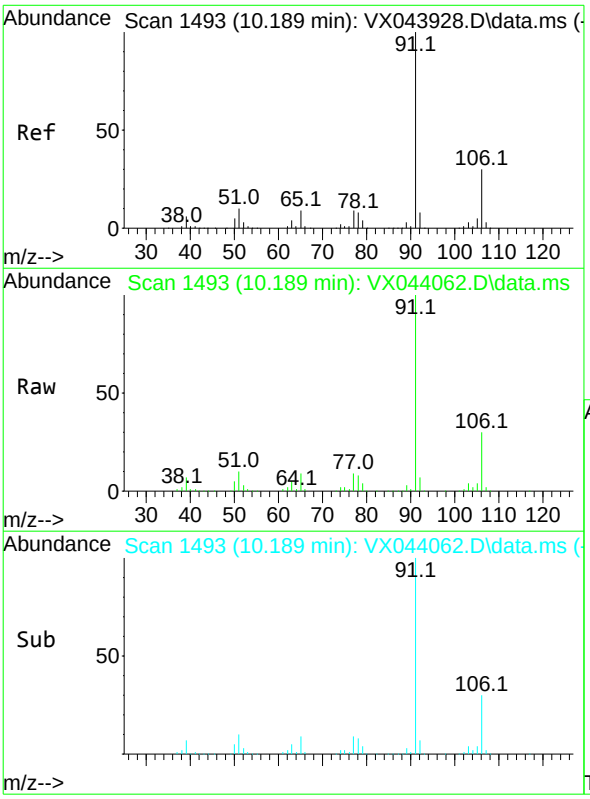
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.049 min Scan# 14
Delta R.T. -0.000 min
Lab File: VX044062.D
Acq: 02 Dec 2024 13:44

Instrument :
MSVOA_X
ClientSampleId :
MW-13

Tgt Ion:117 Resp: 217402

Ion	Ratio	Lower	Upper
117	100		
82	60.1	46.4	69.6
119	31.8	24.6	37.0

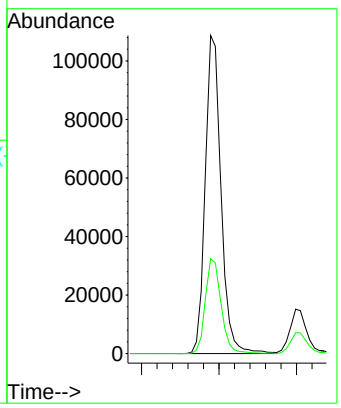


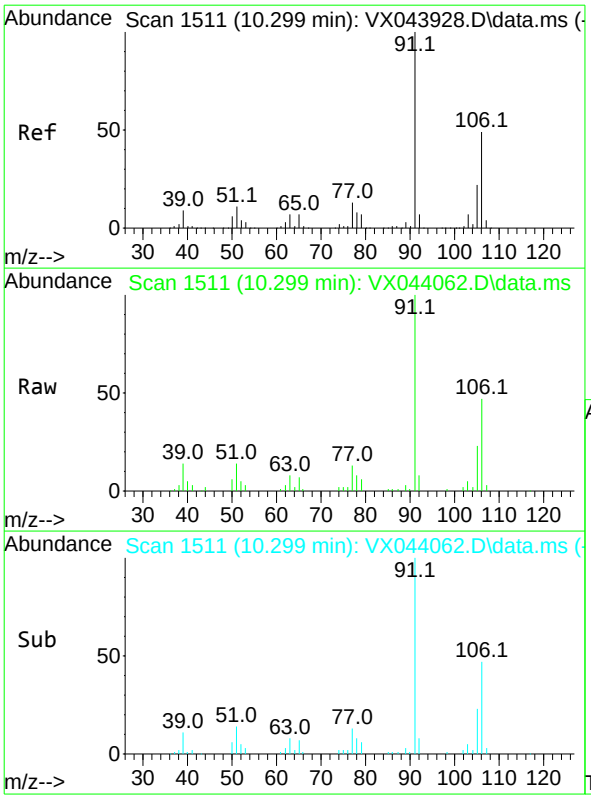


#67
Ethyl Benzene
Concen: 19.017 ug/l
RT: 10.189 min Scan# 1493
Delta R.T. -0.000 min
Lab File: VX044062.D
Acq: 02 Dec 2024 13:44

Tgt Ion: 91 Resp: 153861

Ion	Ratio	Lower	Upper
91	100		
106	29.8	23.6	35.4



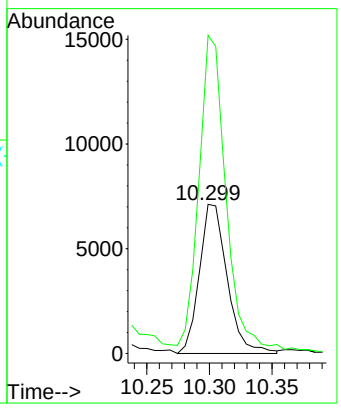


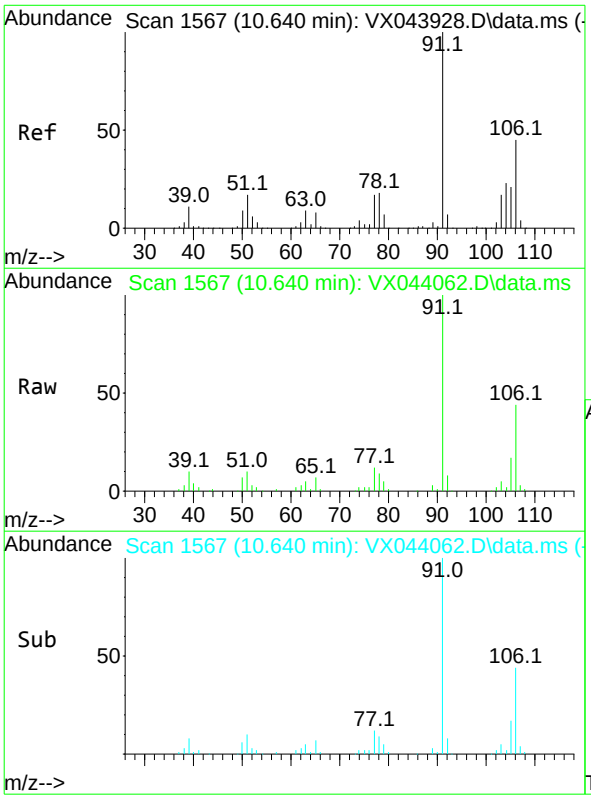
#68
m/p-Xylenes
Concen: 3.643 ug/l
RT: 10.299 min Scan# 15
Delta R.T. -0.000 min
Lab File: VX044062.D
Acq: 02 Dec 2024 13:44

Instrument :
MSVOA_X
ClientSampleId :
MW-13

Tgt Ion:106 Resp: 10991

Ion	Ratio	Lower	Upper
106	100		
91	209.8	168.1	252.1

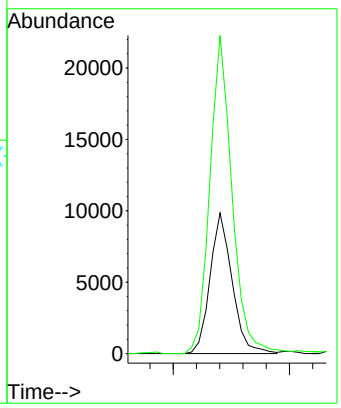


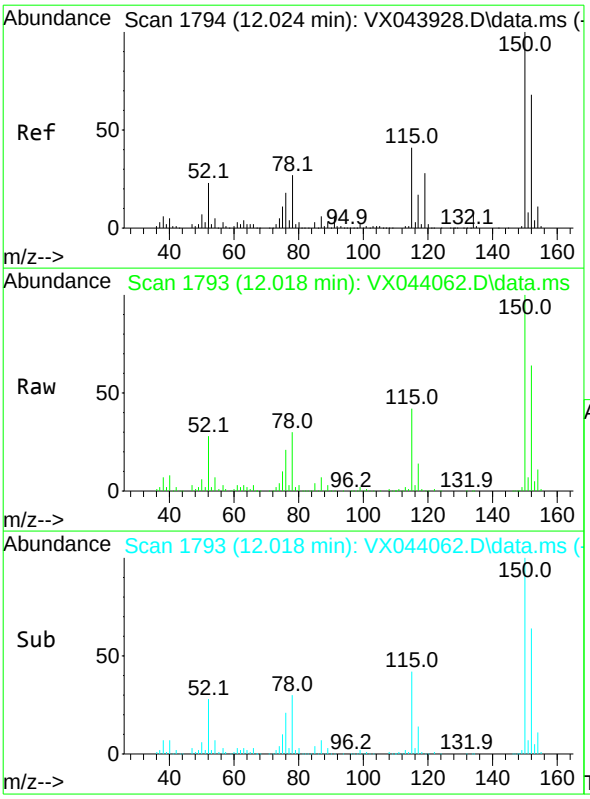


#69
o-Xylene
Concen: 4.405 ug/l
RT: 10.640 min Scan# 1567
Delta R.T. -0.000 min
Lab File: VX044062.D
Acq: 02 Dec 2024 13:44

Tgt Ion:106 Resp: 12977

Ion	Ratio	Lower	Upper
106	100		
91	227.7	110.2	330.6



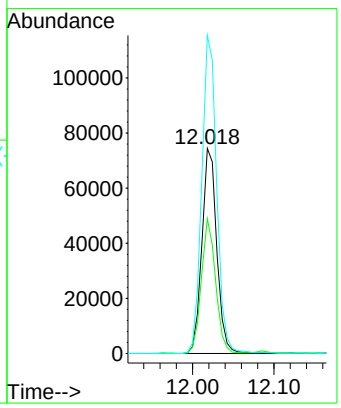


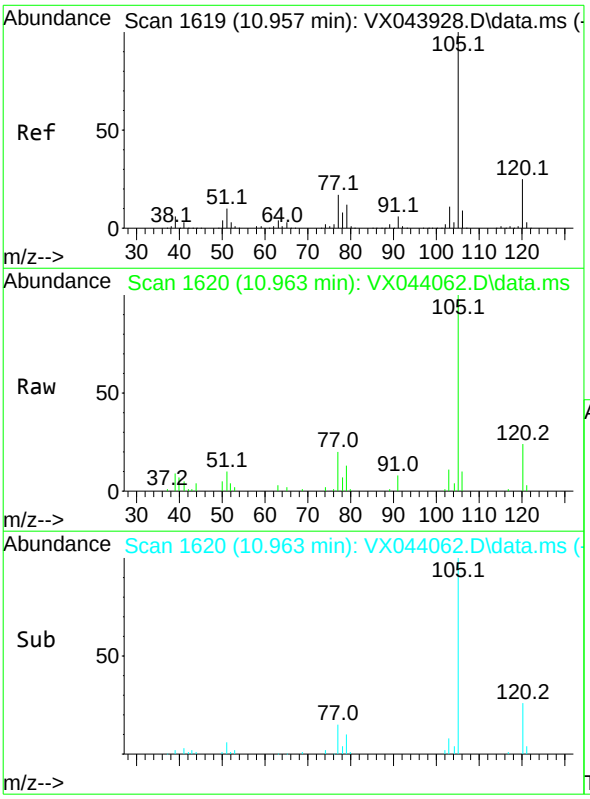
#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.018 min Scan# 17
Delta R.T. -0.006 min
Lab File: VX044062.D
Acq: 02 Dec 2024 13:44

Instrument :
MSVOA_X
ClientSampleId :
MW-13

Tgt Ion:152 Resp: 94569

Ion	Ratio	Lower	Upper
152	100		
115	62.9	45.4	136.2
150	155.1	0.0	353.0

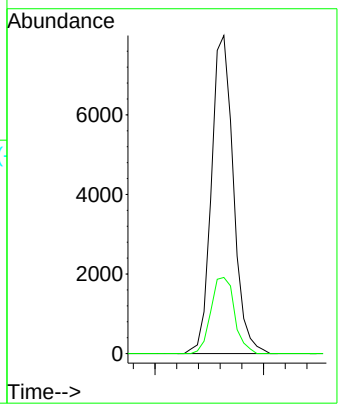


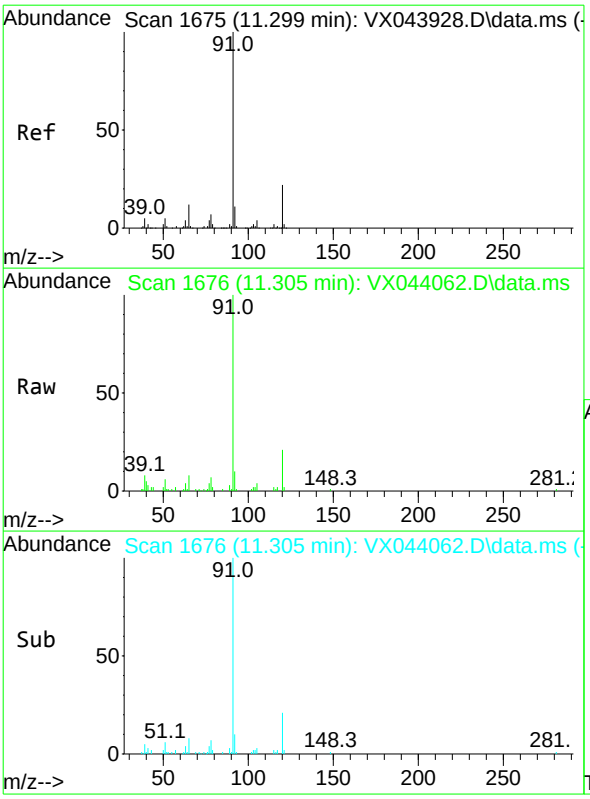


#73
Isopropylbenzene
Concen: 1.546 ug/l
RT: 10.963 min Scan# 1620
Delta R.T. 0.006 min
Lab File: VX044062.D
Acq: 02 Dec 2024 13:44

Tgt Ion:105 Resp: 11235

Ion	Ratio	Lower	Upper
105	100		
120	25.7	13.0	38.9



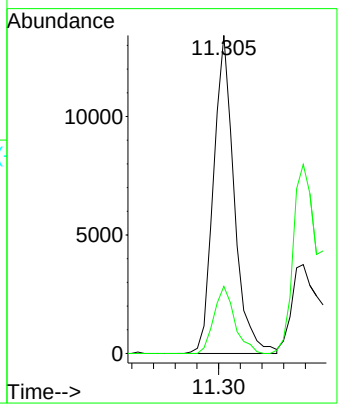


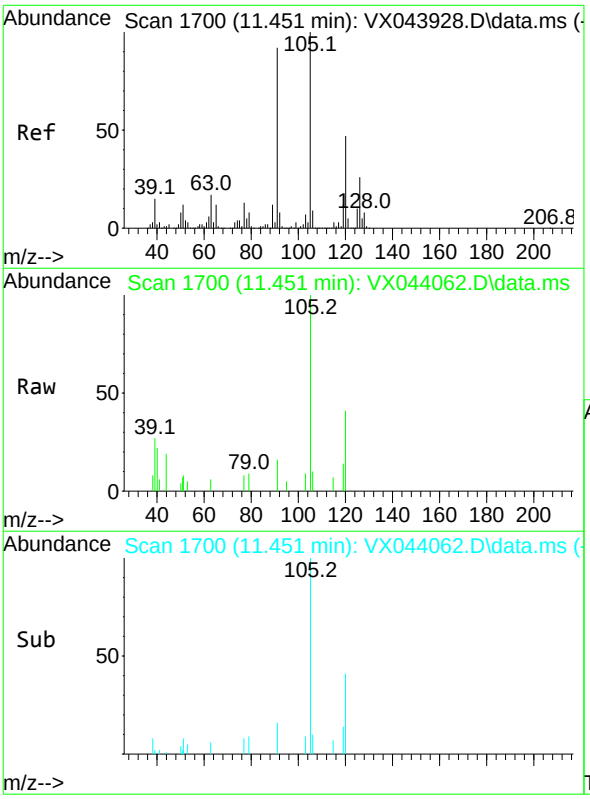
#78
n-propylbenzene
Concen: 2.189 ug/l
RT: 11.305 min Scan# 16
Delta R.T. 0.006 min
Lab File: VX044062.D
Acq: 02 Dec 2024 13:44

Instrument :
MSVOA_X
ClientSampleId :
MW-13

Tgt Ion: 91 Resp: 17776

Ion	Ratio	Lower	Upper
91	100		
120	21.1	11.5	34.4

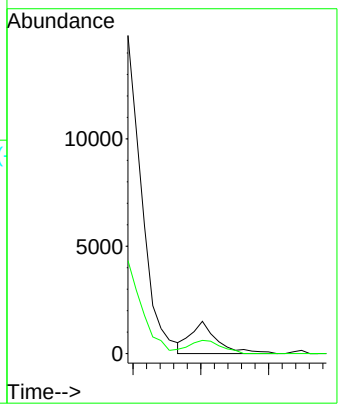


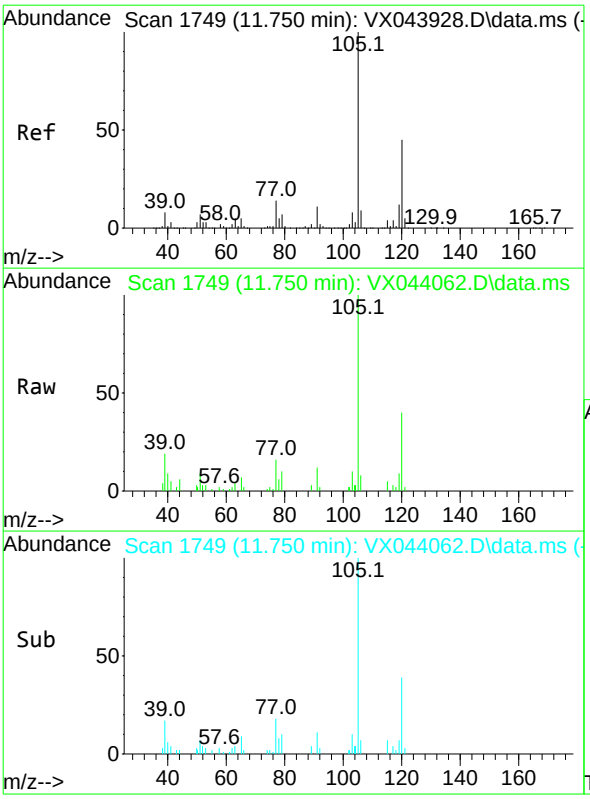


#80
1,3,5-Trimethylbenzene
Concen: 0.346 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. -0.000 min
Lab File: VX044062.D
Acq: 02 Dec 2024 13:44

Tgt Ion:105 Resp: 2072

Ion	Ratio	Lower	Upper
105	100		
120	48.1	23.3	69.8



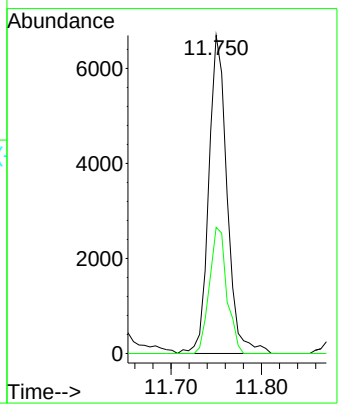


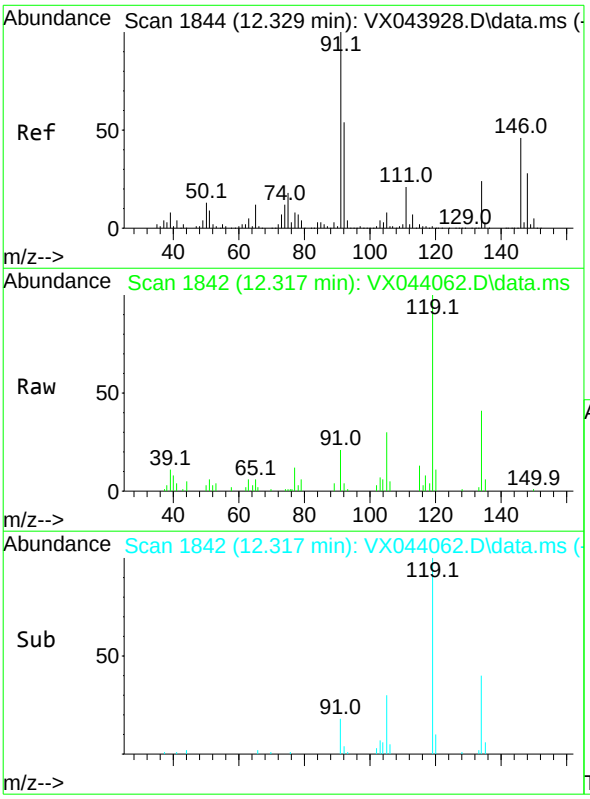
#84
1,2,4-Trimethylbenzene
Concen: 1.581 ug/l
RT: 11.750 min Scan# 17
Delta R.T. -0.000 min
Lab File: VX044062.D
Acq: 02 Dec 2024 13:44

Instrument :
MSVOA_X
ClientSampleId :
MW-13

Tgt Ion:105 Resp: 9411

Ion	Ratio	Lower	Upper
105	100		
120	37.6	21.9	65.7

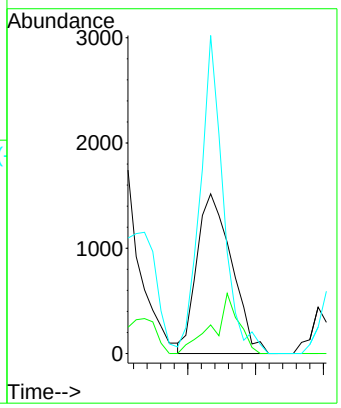


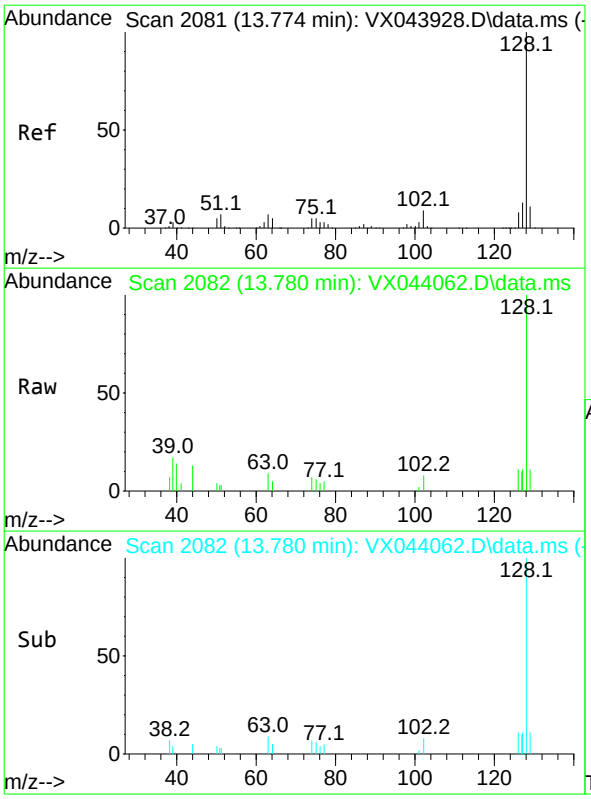


#89
n-Butylbenzene
Concen: 0.523 ug/l
RT: 12.317 min Scan# 1842
Delta R.T. -0.012 min
Lab File: VX044062.D
Acq: 02 Dec 2024 13:44

Tgt Ion: 91 Resp: 2718

Ion	Ratio	Lower	Upper
91	100		
92	27.6	26.6	79.8
134	131.6	12.4	37.2#



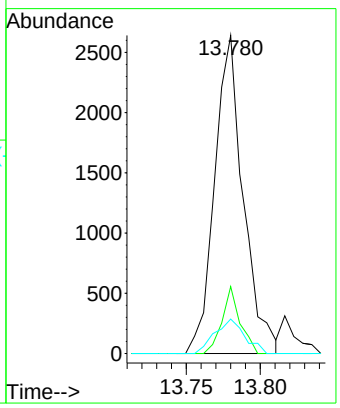


#95
Naphthalene
Concen: 0.524 ug/l
RT: 13.780 min Scan# 20
Delta R.T. 0.006 min
Lab File: VX044062.D
Acq: 02 Dec 2024 13:44

Instrument :
MSVOA_X
ClientSampleId :
MW-13

Tgt Ion:128 Resp: 3546

Ion	Ratio	Lower	Upper
128	100		
127	13.1	10.2	15.2
129	11.3	8.6	12.8



Raw Data: **VX044049.D**

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

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	11/26/24
Project:	RFK Bridge	Date Received:	11/27/24
Client Sample ID:	MW-12	SDG No.:	P5021
Lab Sample ID:	P5021-06	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044049.D	1		11/27/24 18:29	VX112724

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
1634-04-4	Methyl tert-butyl Ether	1.00	U	0.16	1.00	ug/L
71-43-2	Benzene	330	E	0.16	1.00	ug/L
108-88-3	Toluene	38.9		0.18	1.00	ug/L
100-41-4	Ethyl Benzene	760	E	0.16	1.00	ug/L
179601-23-1	m/p-Xylenes	250		0.31	2.00	ug/L
95-47-6	o-Xylene	100		0.14	1.00	ug/L
98-82-8	Isopropylbenzene	23.1		0.13	1.00	ug/L
103-65-1	n-propylbenzene	51.9		0.14	1.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	2.70		0.18	1.00	ug/L
98-06-6	tert-Butylbenzene	1.00	U	0.17	1.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	450	E	0.18	1.00	ug/L
135-98-8	sec-Butylbenzene	2.90		0.17	1.00	ug/L
99-87-6	p-Isopropyltoluene	3.50		0.15	1.00	ug/L
104-51-8	n-Butylbenzene	4.80		0.22	1.00	ug/L
91-20-3	Naphthalene	250	EQ	0.59	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	53.2		74 - 125	106%	SPK: 50
1868-53-7	Dibromofluoromethane	46.4		75 - 124	93%	SPK: 50
2037-26-5	Toluene-d8	50.2		86 - 113	100%	SPK: 50
460-00-4	4-Bromofluorobenzene	52.3		77 - 121	105%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	113000	5.55			
540-36-3	1,4-Difluorobenzene	218000	6.757			
3114-55-4	Chlorobenzene-d5	192000	10.055			
3855-82-1	1,4-Dichlorobenzene-d4	91200	12.018			

Raw Data: **VX044049.D**

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

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	11/26/24
Project:	RFK Bridge	Date Received:	11/27/24
Client Sample ID:	MW-12	SDG No.:	P5021
Lab Sample ID:	P5021-06	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044049.D	1		11/27/24 18:29	VX112724

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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

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

Sample Results: **VX044049.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112724\
Data File : VX044049.D
Acq On : 27 Nov 2024 18:29
Operator : JC/MD
Sample : P5021-06
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Nov 29 05:12:31 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
MW-12

Manual Integrations APPROVED

Reviewed By :John Carlone 12/02/2024
Supervised By :Mahesh Dadoda 12/02/2024

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.550	168	112926	50.000	ug/l	0.01
34) 1,4-Difluorobenzene	6.757	114	218400	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	192264	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	91181	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.952	65	103051	53.205	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 106.400%			
35) Dibromofluoromethane	5.379	113	72361	46.368	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 92.740%			
50) Toluene-d8	8.647	98	270048	50.200	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 100.400%			
62) 4-Bromofluorobenzene	11.079	95	95697	52.271	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 104.540%			
Target Compounds						Qvalue
16) Acetone	2.386	43	13437	15.105	ug/l	98
25) 2-Butanone	4.587	43	6874	5.989	ug/l	94
31) Cyclohexane	5.464	56	89284	41.360	ug/l	97
39) Methylcyclohexane	7.373	83	67694	26.795	ug/l	97
40) Benzene	6.031	78	2019952	333.462	ug/l	100
51) 4-Methyl-2-Pentanone	8.580	43	7404	3.158	ug/l	93
52) Toluene	8.714	92	140987	38.886	ug/l	98
67) Ethyl Benzene	10.195	91	5413672	756.596	ug/l	96
68) m/p-Xylenes	10.305	106	671832	251.777	ug/l	100
69) o-Xylene	10.640	106	272013	104.408	ug/l	95
73) Isopropylbenzene	10.957	105	161777	23.081	ug/l	99
78) n-propylbenzene	11.305	91	406301	51.903	ug/l	99
80) 1,3,5-Trimethylbenzene	11.451	105	15729m	2.728	ug/l	
84) 1,2,4-Trimethylbenzene	11.750	105	2586116	450.469	ug/l	100
85) sec-Butylbenzene	11.890	105	20478m	2.924	ug/l	
86) p-Isopropyltoluene	12.006	119	19673	3.459	ug/l #	74
89) n-Butylbenzene	12.329	91	24295m	4.844	ug/l	
95) Naphthalene	13.774	128	1603075	245.793	ug/l	99

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

Sample Results: **VX044049.D**

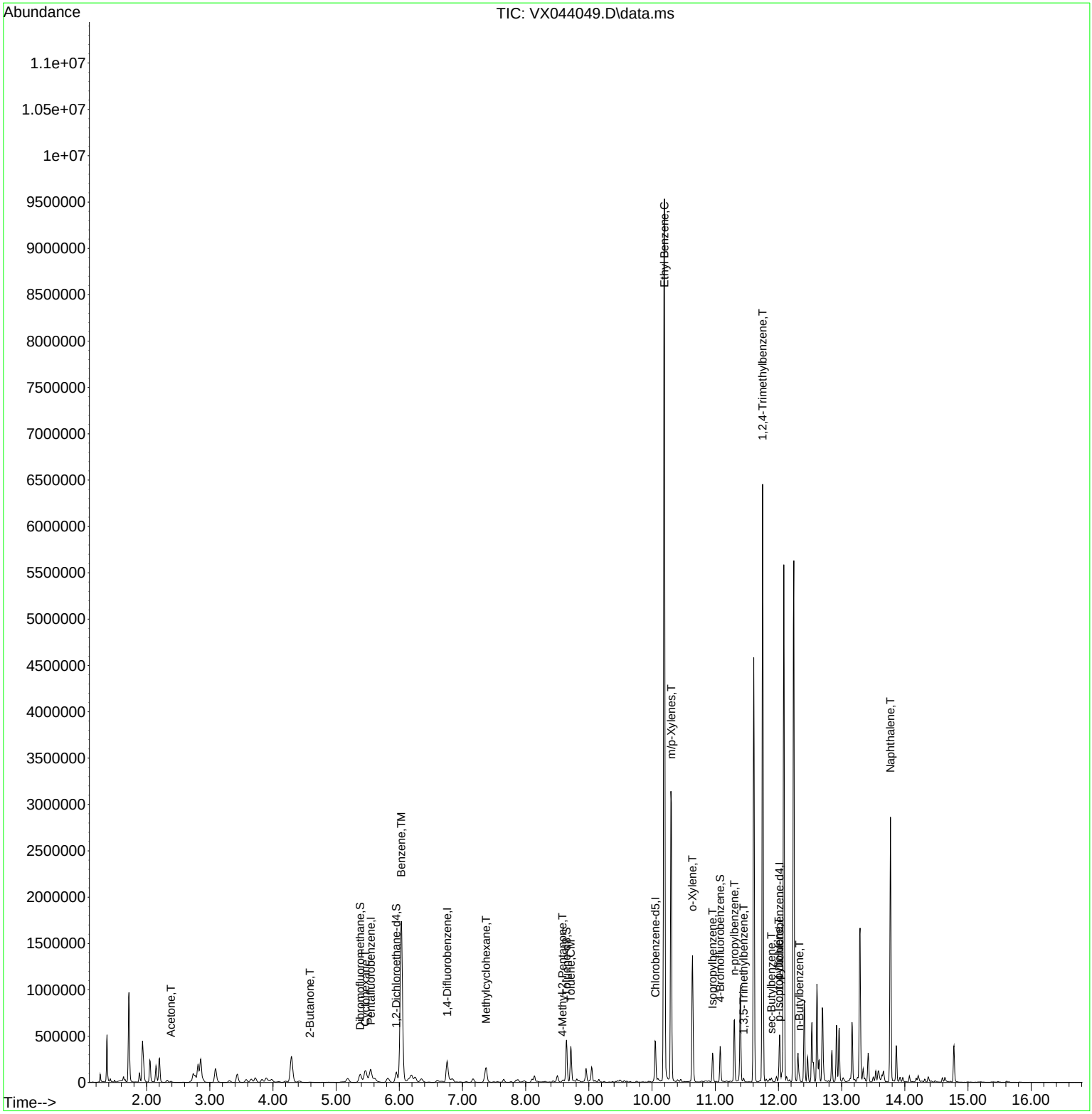
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112724\
Data File : VX044049.D
Acq On : 27 Nov 2024 18:29
Operator : JC/MD
Sample : P5021-06
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 27 Sample Multiplier: 1

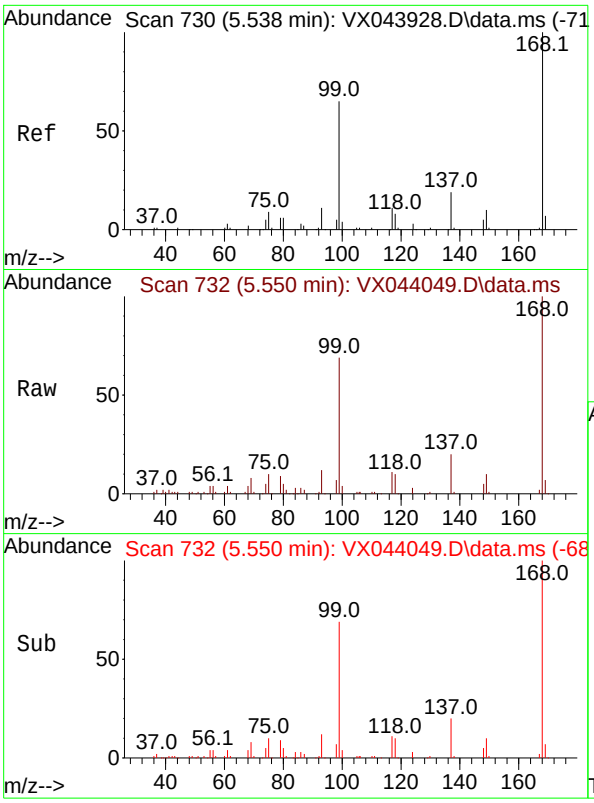
Quant Time: Nov 29 05:12:31 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
MW-12

Manual Integrations APPROVED

Reviewed By :John Carlone 12/02/2024
Supervised By :Mahesh Dadoda 12/02/2024

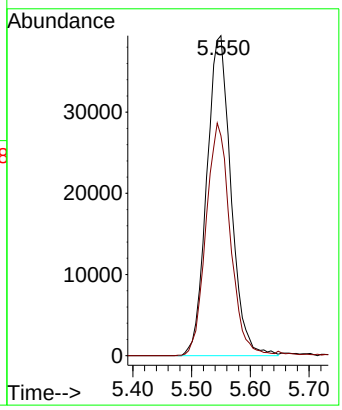




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.550 min Scan# 7
Delta R.T. 0.012 min
Lab File: VX044049.D
Acq: 27 Nov 2024 18:29

Tgt Ion:168 Resp: 11292

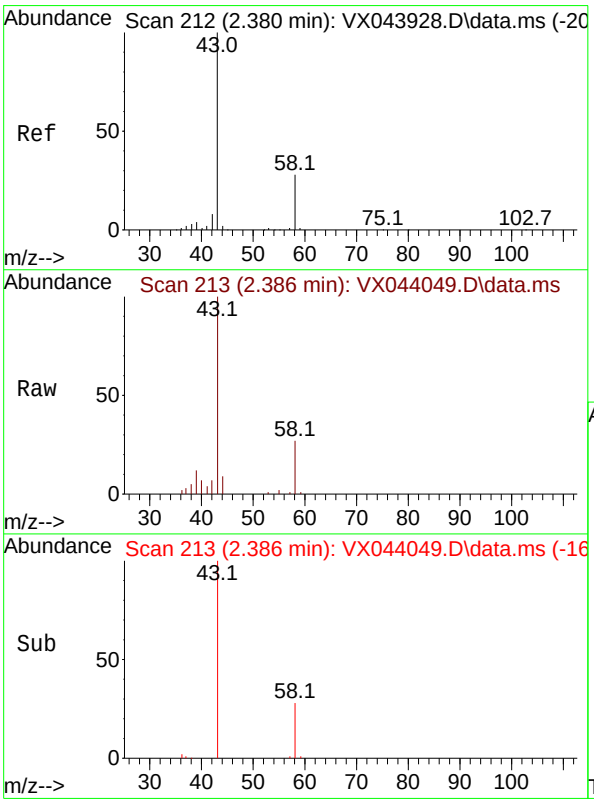
Ion	Ratio	Lower	Upper
168	100		
99	68.6	51.8	77.8



Instrument :
MSVOA_X
ClientSampleId :
MW-12

Manual Integrations
APPROVED

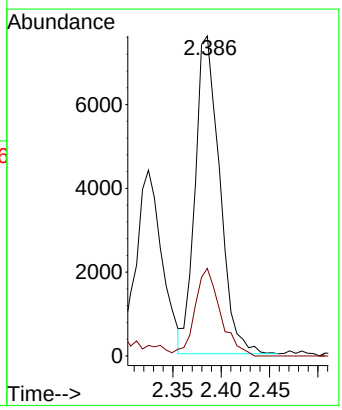
Reviewed By :John Carlone 12/02/2024
Supervised By :Mahesh Dadoda 12/02/2024

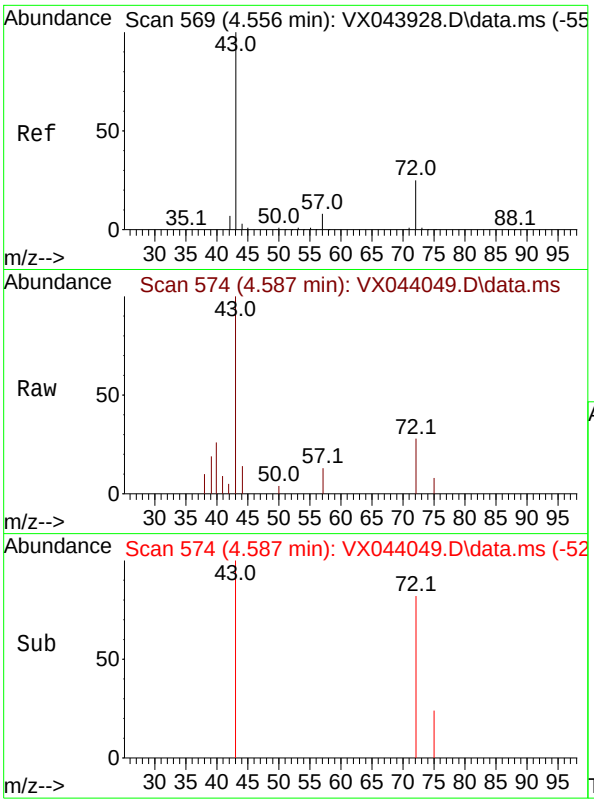


#16
Acetone
Concen: 15.105 ug/l
RT: 2.386 min Scan# 213
Delta R.T. 0.006 min
Lab File: VX044049.D
Acq: 27 Nov 2024 18:29

Tgt Ion: 43 Resp: 13437

Ion	Ratio	Lower	Upper
43	100		
58	27.5	22.7	34.1





#25
2-Butanone
Concen: 5.989 ug/l
RT: 4.587 min Scan# 5
Delta R.T. 0.030 min
Lab File: VX044049.D
Acq: 27 Nov 2024 18:29

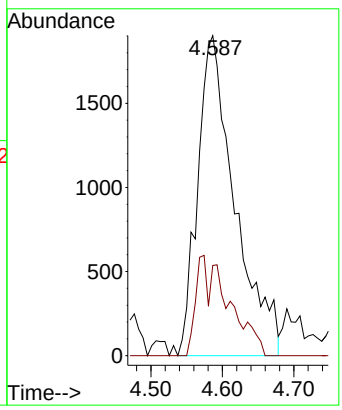
Tgt Ion: 43 Resp: 687

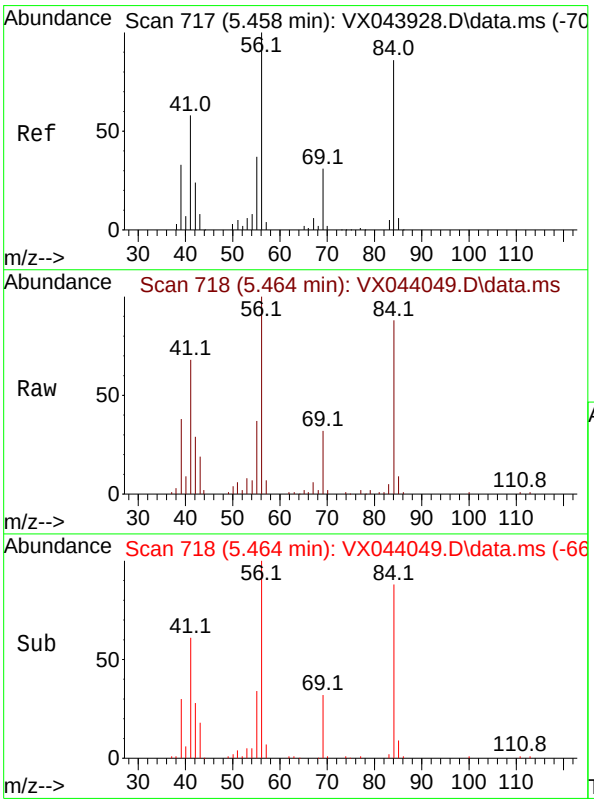
Ion	Ratio	Lower	Upper
43	100		
72	28.2	20.2	30.2

Instrument :
MSVOA_X
ClientSampleId :
MW-12

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/02/2024
Supervised By :Mahesh Dadoda 12/02/2024

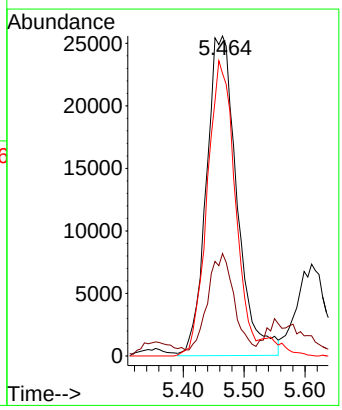


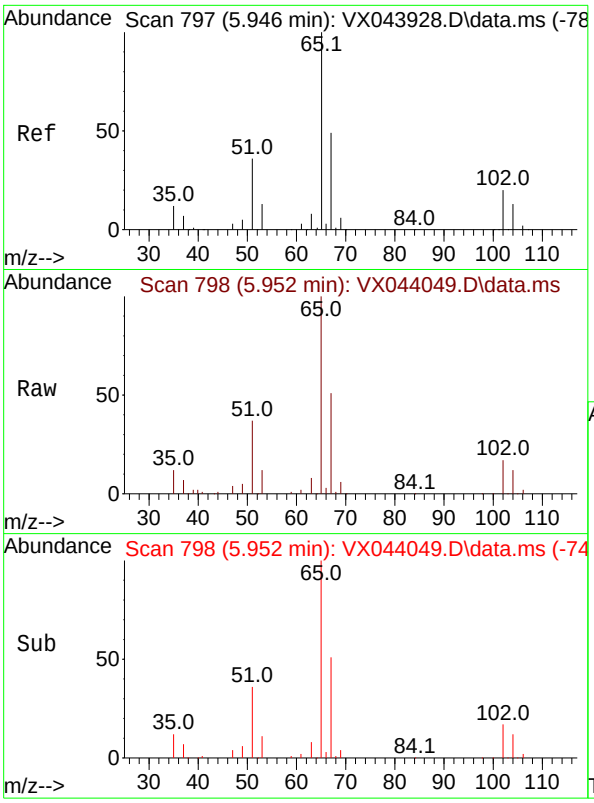


#31
Cyclohexane
Concen: 41.360 ug/l
RT: 5.464 min Scan# 718
Delta R.T. 0.006 min
Lab File: VX044049.D
Acq: 27 Nov 2024 18:29

Tgt Ion: 56 Resp: 89284

Ion	Ratio	Lower	Upper
56	100		
69	29.9	24.7	37.1
84	88.7	68.7	103.1





#33
1,2-Dichloroethane-d4
Concen: 53.205 ug/l
RT: 5.952 min Scan# 7
Delta R.T. 0.006 min
Lab File: VX044049.D
Acq: 27 Nov 2024 18:29

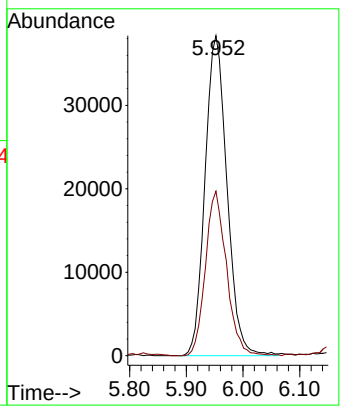
Tgt Ion: 65 Resp: 10305

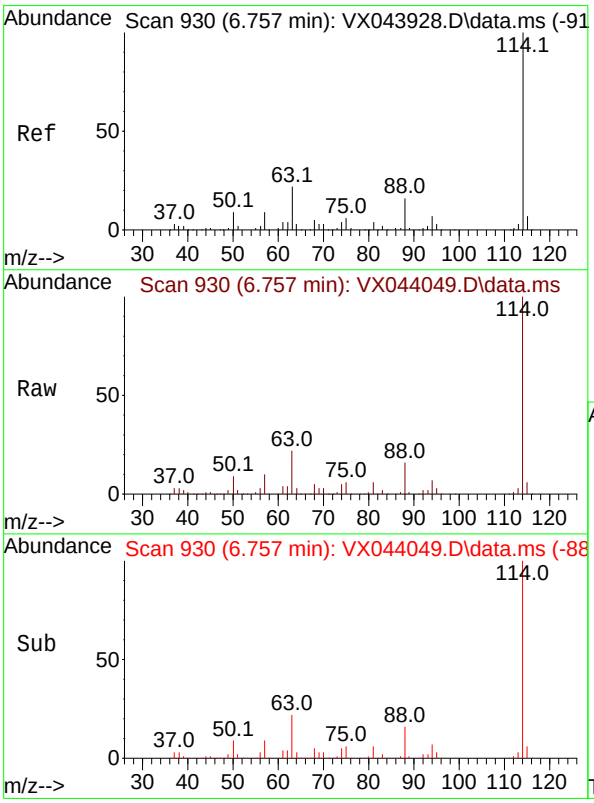
Ion	Ratio	Lower	Upper
65	100		
67	49.4	0.0	100.8

Instrument :
MSVOA_X
ClientSampleId :
MW-12

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/02/2024
Supervised By :Mahesh Dadoda 12/02/2024

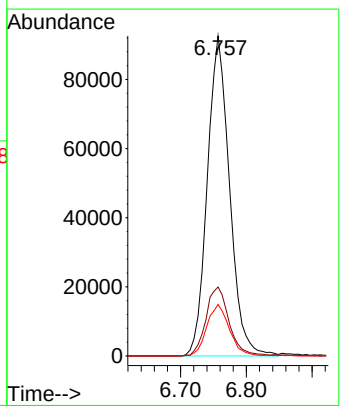


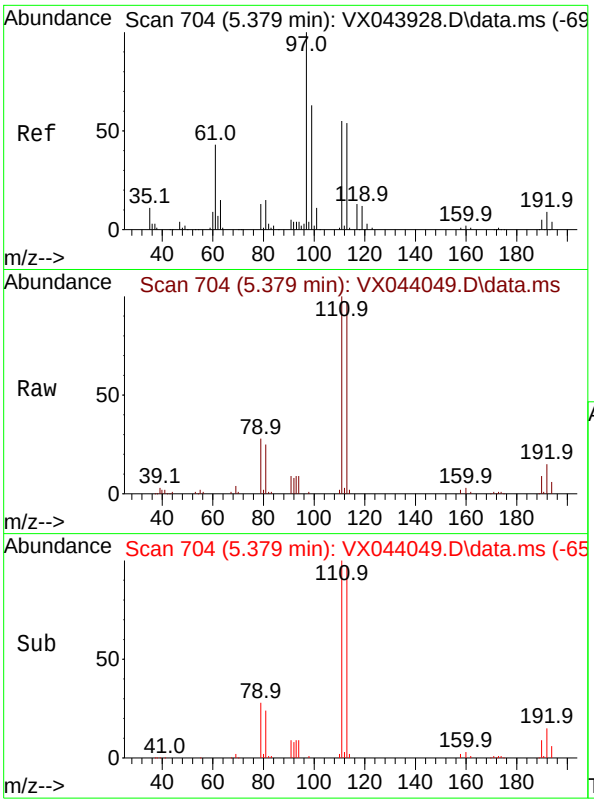


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.757 min Scan# 930
Delta R.T. -0.000 min
Lab File: VX044049.D
Acq: 27 Nov 2024 18:29

Tgt Ion:114 Resp: 218400

Ion	Ratio	Lower	Upper
114	100		
63	21.5	0.0	44.0
88	16.1	0.0	32.4





#35
Dibromofluoromethane
Concen: 46.368 ug/l
RT: 5.379 min Scan# 7
Delta R.T. -0.000 min
Lab File: VX044049.D
Acq: 27 Nov 2024 18:29

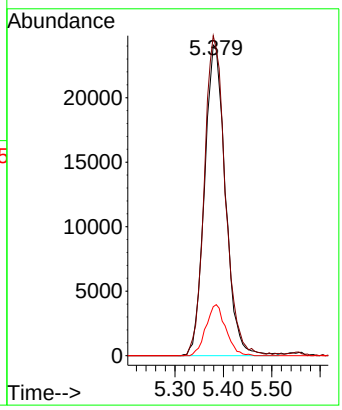
Tgt Ion:113 Resp: 7236

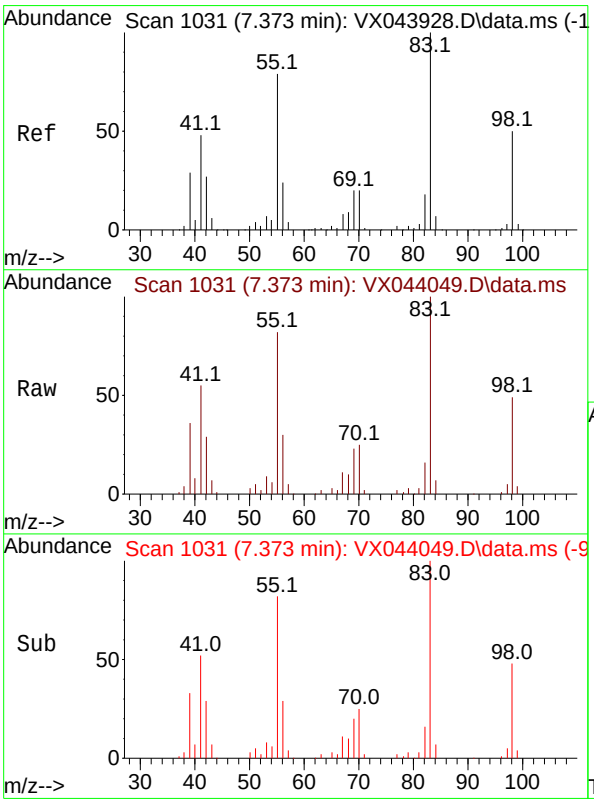
Ion	Ratio	Lower	Upper
113	100		
111	103.1	81.0	121.4
192	15.6	13.0	19.6

Instrument :
MSVOA_X
ClientSampleId :
MW-12

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/02/2024
Supervised By :Mahesh Dadoda 12/02/2024

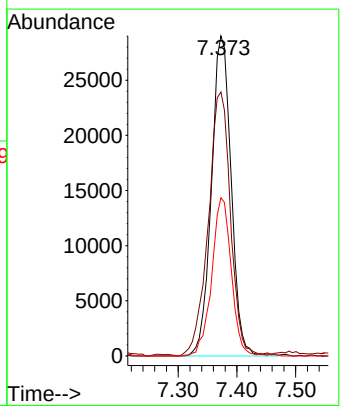


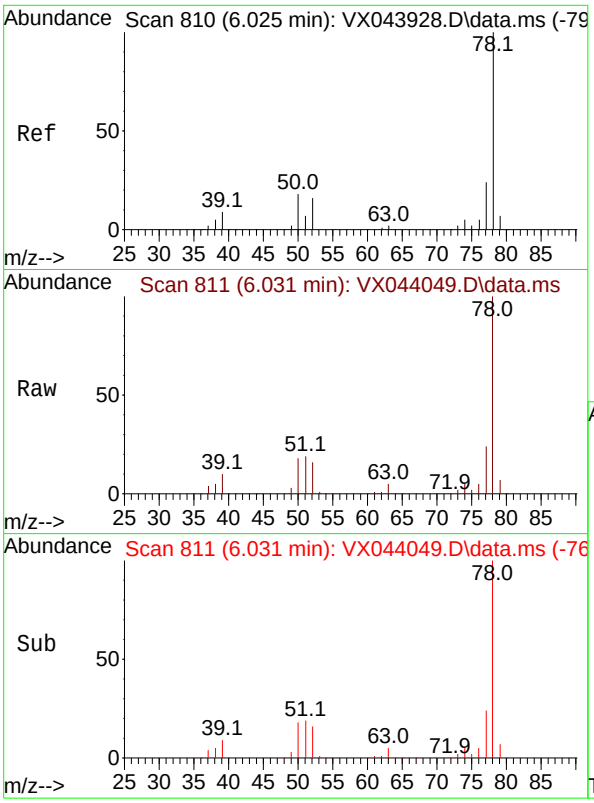


#39
Methylcyclohexane
Concen: 26.795 ug/l
RT: 7.373 min Scan# 1031
Delta R.T. -0.000 min
Lab File: VX044049.D
Acq: 27 Nov 2024 18:29

Tgt Ion: 83 Resp: 67694

Ion	Ratio	Lower	Upper
83	100		
55	82.5	63.1	94.7
98	49.4	40.0	60.0





#40
Benzene
Concen: 333.462 ug/l
RT: 6.031 min Scan# 81
Delta R.T. 0.006 min
Lab File: VX044049.D
Acq: 27 Nov 2024 18:29

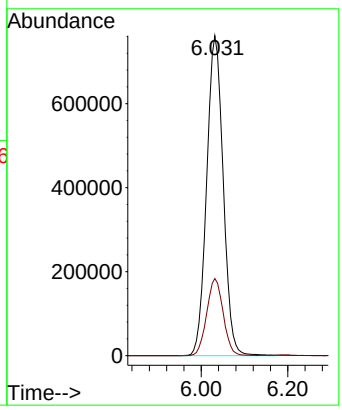
Tgt Ion: 78 Resp: 201995

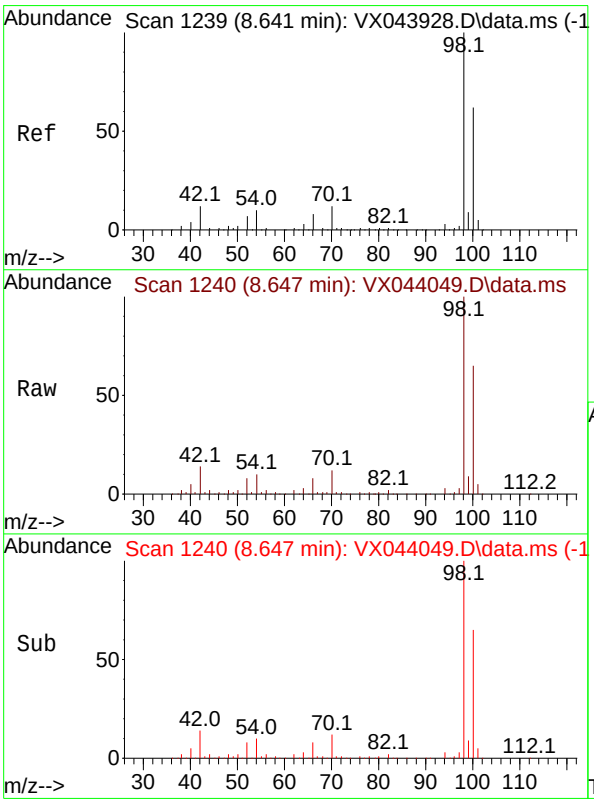
Ion	Ratio	Lower	Upper
78	100		
77	24.1	19.2	28.8

Instrument :
MSVOA_X
ClientSampleId :
MW-12

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/02/2024
Supervised By :Mahesh Dadoda 12/02/2024

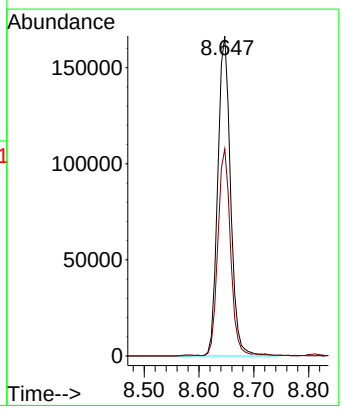


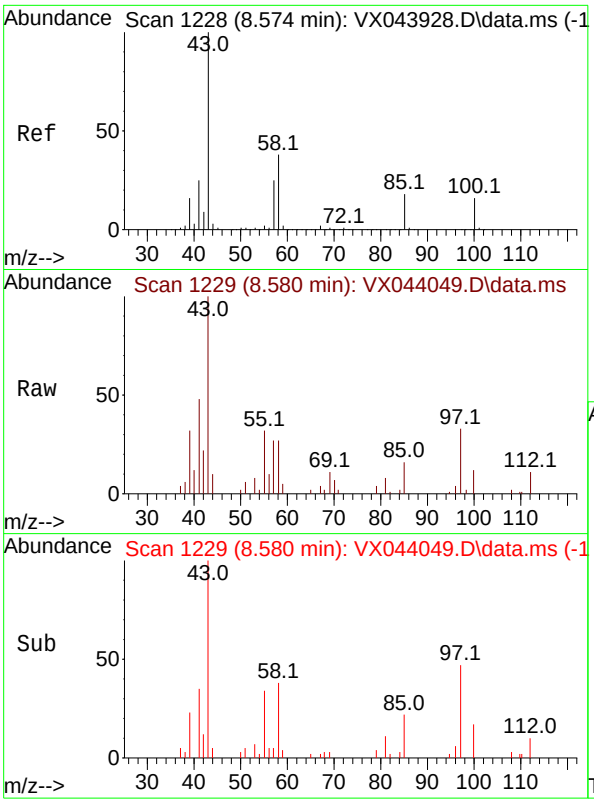


#50
Toluene-d8
Concen: 50.200 ug/l
RT: 8.647 min Scan# 1240
Delta R.T. 0.006 min
Lab File: VX044049.D
Acq: 27 Nov 2024 18:29

Tgt Ion: 98 Resp: 270048

Ion	Ratio	Lower	Upper
98	100		
100	63.6	52.6	79.0





#51
4-Methyl-2-Pentanone
Concen: 3.158 ug/l
RT: 8.580 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX044049.D
Acq: 27 Nov 2024 18:29

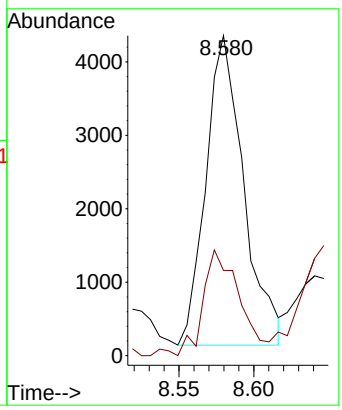
Tgt Ion: 43 Resp: 740

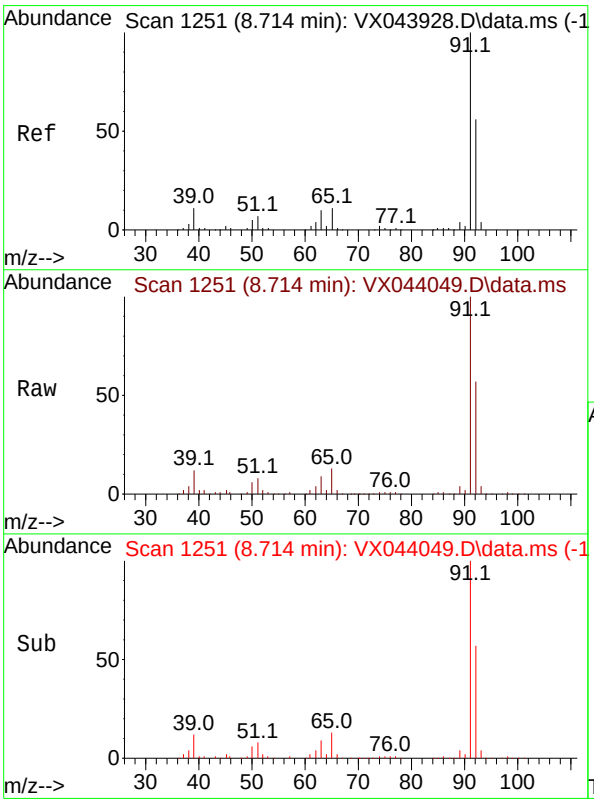
Ion	Ratio	Lower	Upper
43	100		
58	33.5	30.0	45.0

Instrument :
MSVOA_X
ClientSampleId :
MW-12

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/02/2024
Supervised By :Mahesh Dadoda 12/02/2024

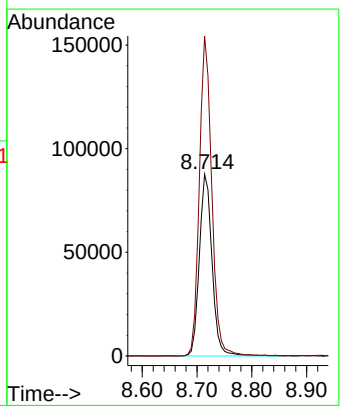


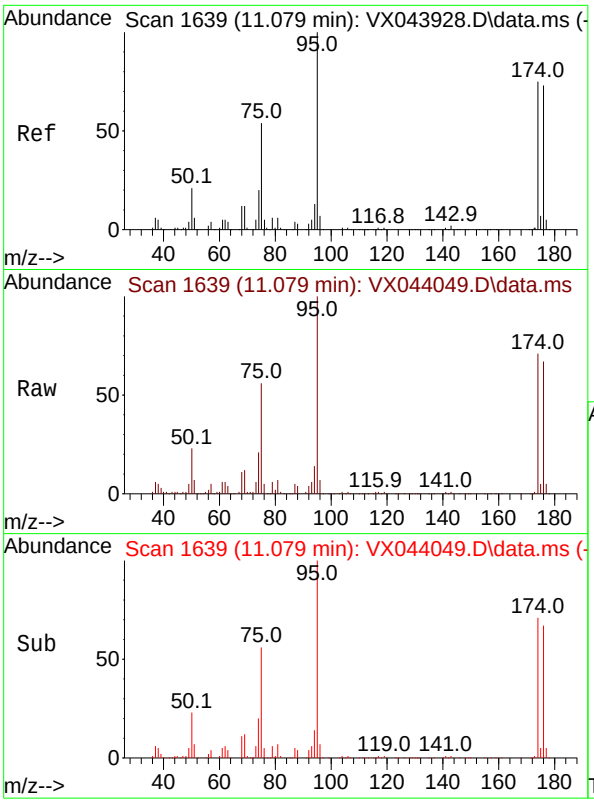


#52
Toluene
Concen: 38.886 ug/l
RT: 8.714 min Scan# 1251
Delta R.T. -0.000 min
Lab File: VX044049.D
Acq: 27 Nov 2024 18:29

Tgt Ion: 92 Resp: 140987

Ion	Ratio	Lower	Upper
92	100		
91	172.3	139.7	209.5





#62
4-Bromofluorobenzene
Concen: 52.271 ug/l
RT: 11.079 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX044049.D
Acq: 27 Nov 2024 18:29

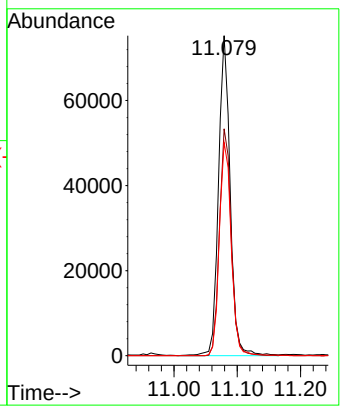
Instrument :
MSVOA_X
ClientSampleId :
MW-12

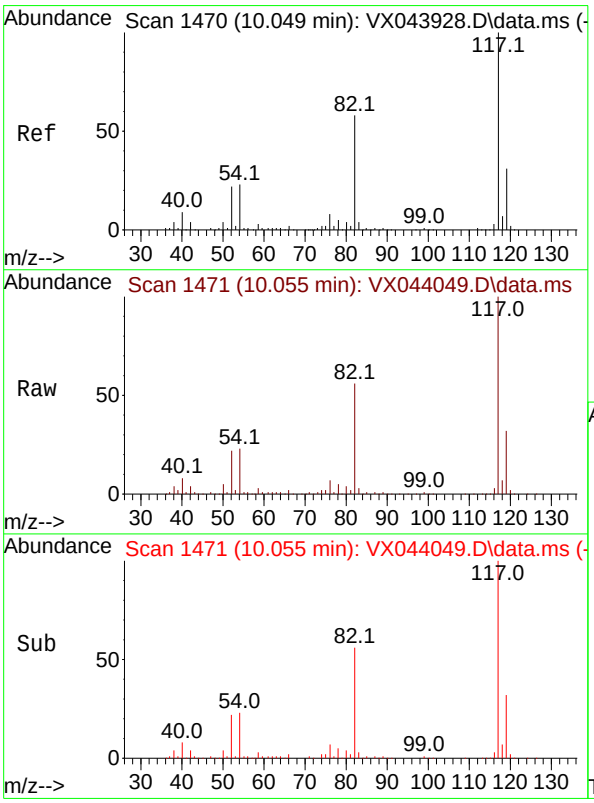
Tgt Ion: 95 Resp: 9569

Ion	Ratio	Lower	Upper
95	100		
174	71.4	0.0	150.4
176	67.7	0.0	146.0

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/02/2024
Supervised By :Mahesh Dadoda 12/02/2024

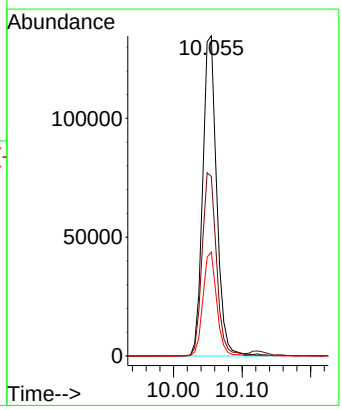


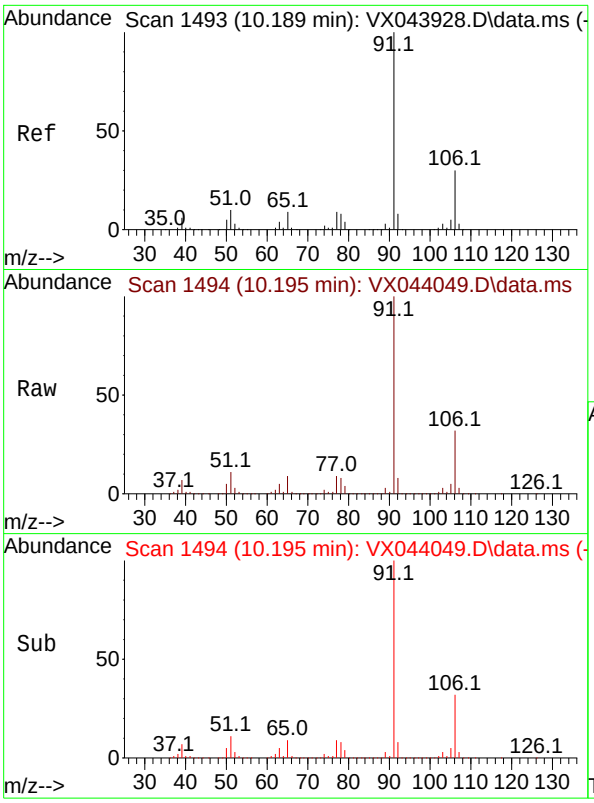


#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.055 min Scan# 1471
Delta R.T. 0.006 min
Lab File: VX044049.D
Acq: 27 Nov 2024 18:29

Tgt Ion:117 Resp: 192264

Ion	Ratio	Lower	Upper
117	100		
82	56.0	46.4	69.6
119	32.5	24.6	37.0





#67
Ethyl Benzene
Concen: 756.596 ug/l
RT: 10.195 min Scan# 14
Delta R.T. 0.006 min
Lab File: VX044049.D
Acq: 27 Nov 2024 18:29

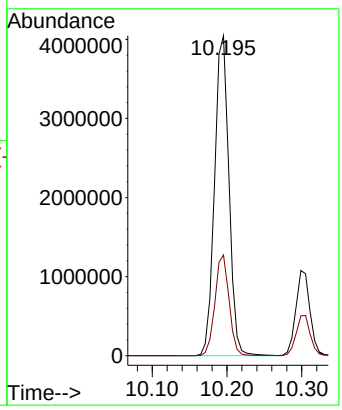
Tgt Ion: 91 Resp: 541367

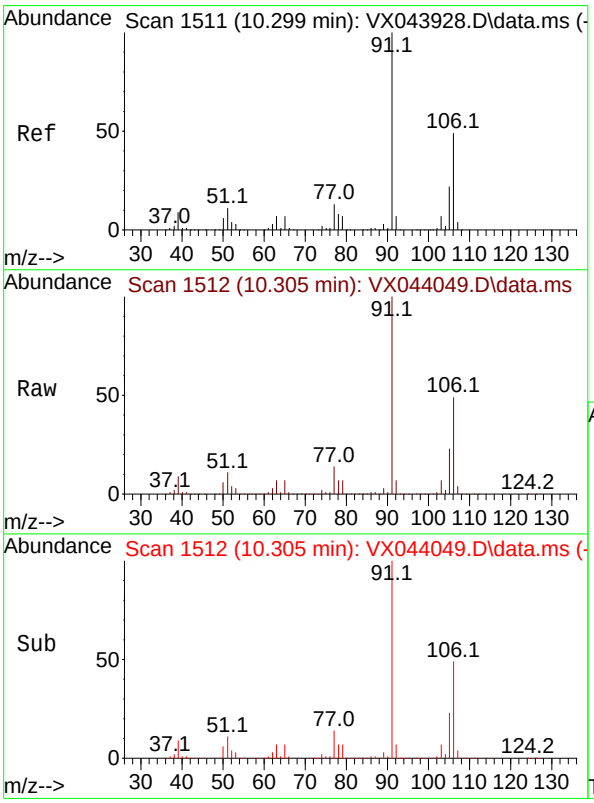
Ion	Ratio	Lower	Upper
91	100		
106	31.5	23.6	35.4

Instrument :
MSVOA_X
ClientSampleId :
MW-12

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/02/2024
Supervised By :Mahesh Dadoda 12/02/2024

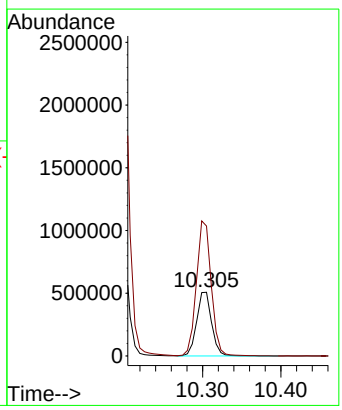


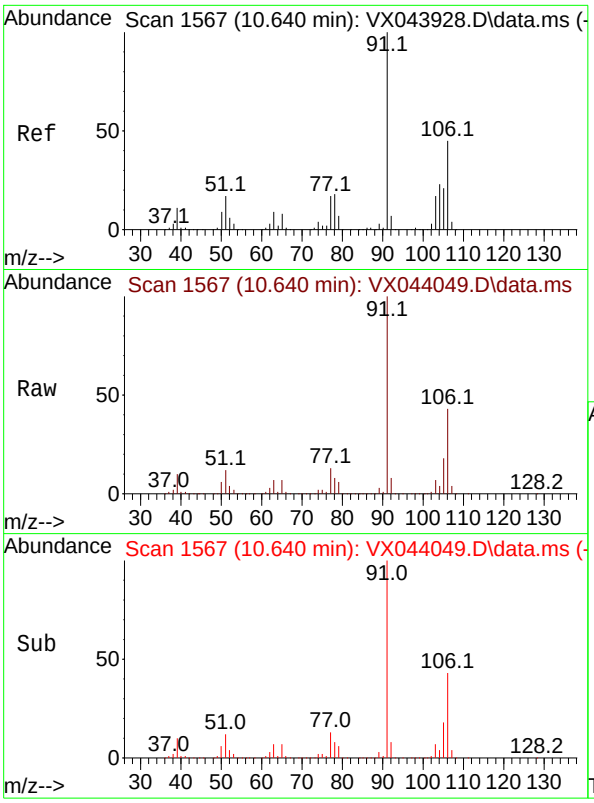


#68
m/p-Xylenes
Concen: 251.777 ug/l
RT: 10.305 min Scan# 1512
Delta R.T. 0.006 min
Lab File: VX044049.D
Acq: 27 Nov 2024 18:29

Tgt Ion:106 Resp: 671832

Ion	Ratio	Lower	Upper
106	100		
91	210.8	168.1	252.1





#69
o-Xylene
Concen: 104.408 ug/l
RT: 10.640 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX044049.D
Acq: 27 Nov 2024 18:29

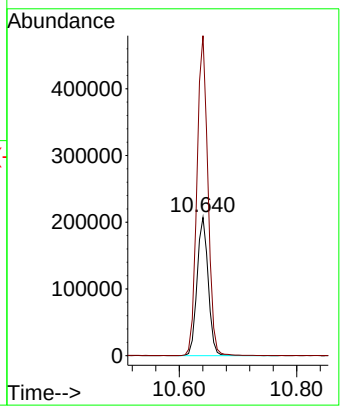
Tgt Ion:106 Resp: 27201

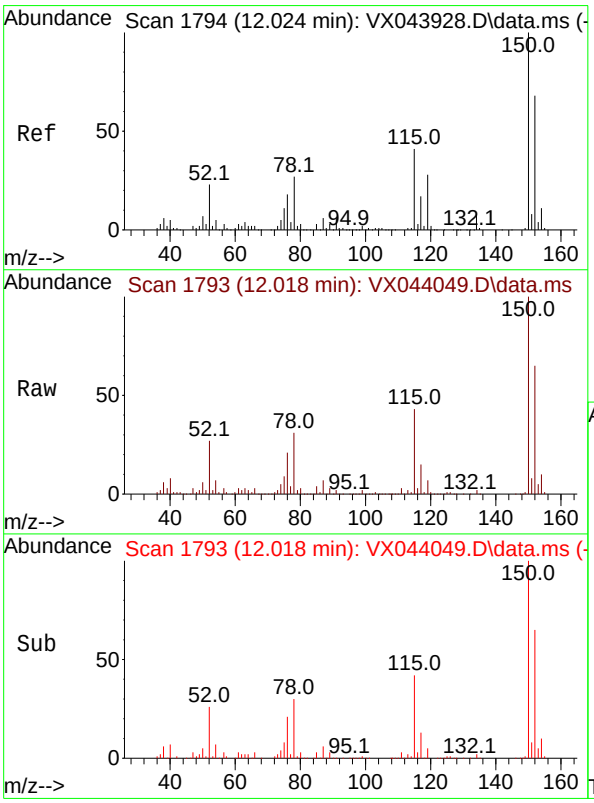
Ion	Ratio	Lower	Upper
106	100		
91	227.9	110.2	330.6

Instrument :
MSVOA_X
ClientSampleId :
MW-12

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/02/2024
Supervised By :Mahesh Dadoda 12/02/2024

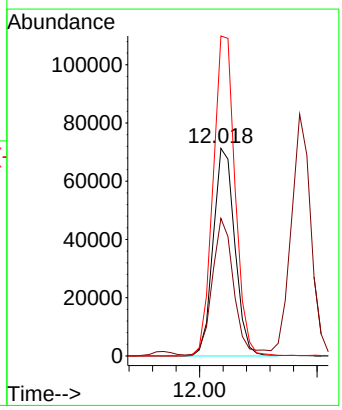


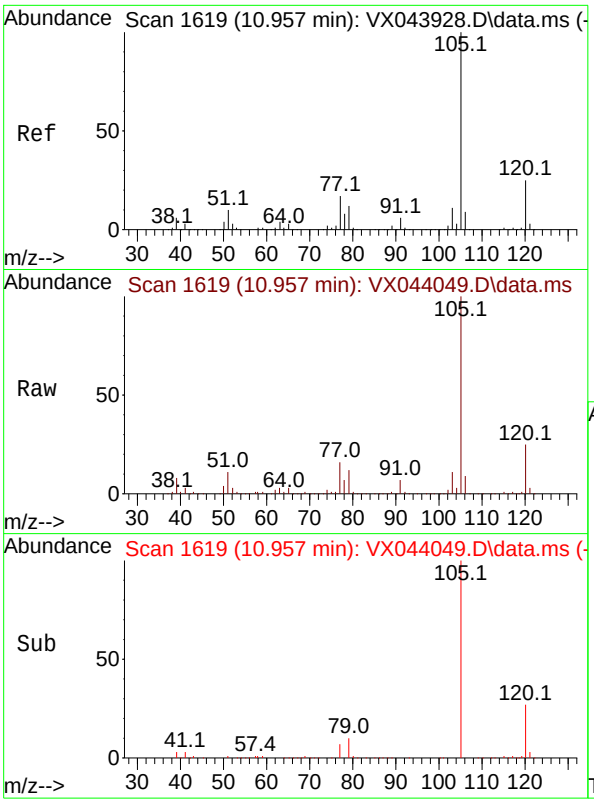


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.018 min Scan# 1793
Delta R.T. -0.006 min
Lab File: VX044049.D
Acq: 27 Nov 2024 18:29

Tgt Ion:152 Resp: 91181

Ion	Ratio	Lower	Upper
152	100		
115	63.9	45.4	136.2
150	156.7	0.0	353.0





#73
Isopropylbenzene
Concen: 23.081 ug/l
RT: 10.957 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX044049.D
Acq: 27 Nov 2024 18:29

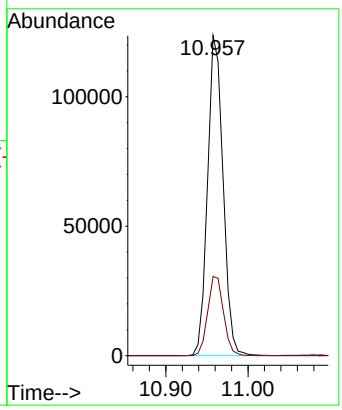
Tgt Ion:105 Resp: 16177

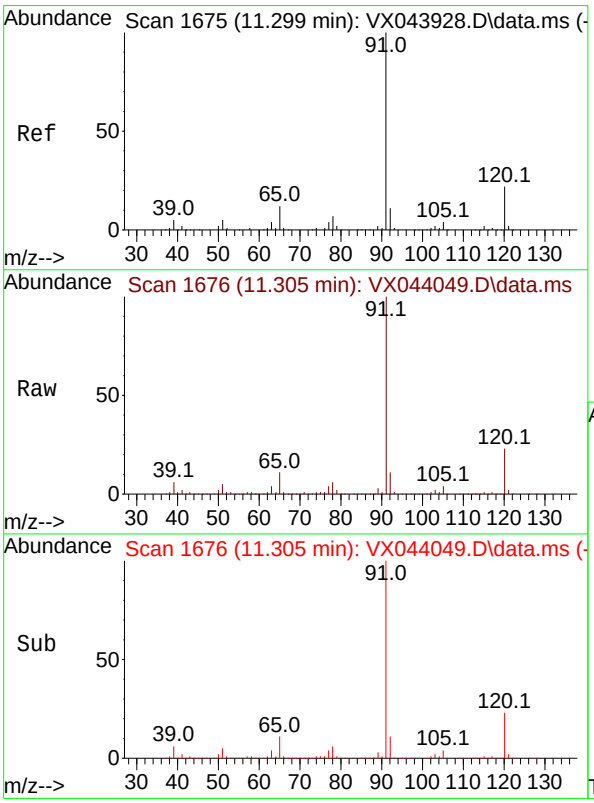
Ion	Ratio	Lower	Upper
105	100		
120	25.4	13.0	38.9

Instrument :
MSVOA_X
ClientSampleId :
MW-12

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/02/2024
Supervised By :Mahesh Dadoda 12/02/2024

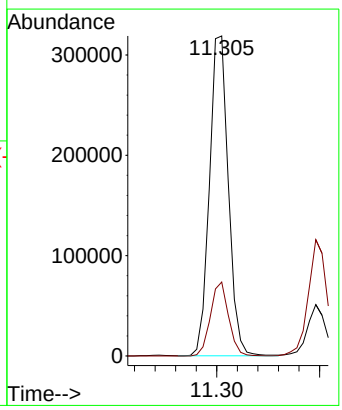


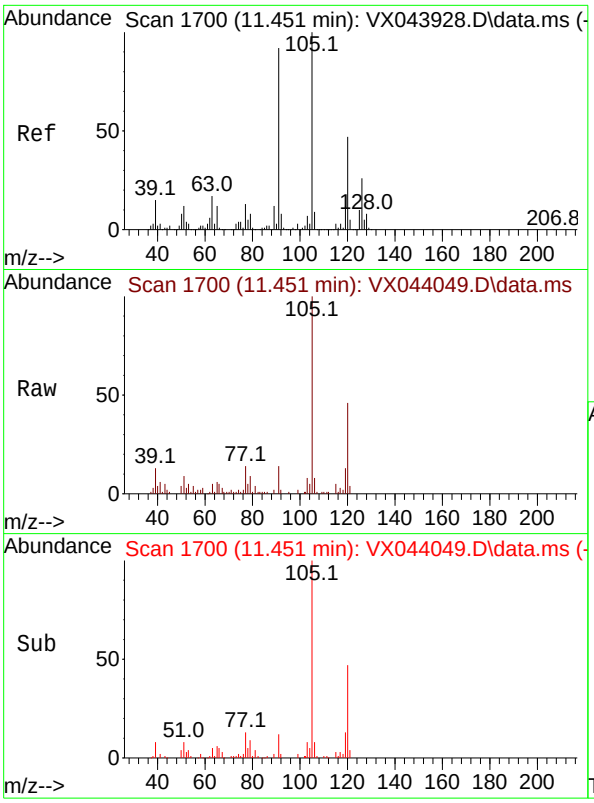


#78
n-propylbenzene
Concen: 51.903 ug/l
RT: 11.305 min Scan# 1676
Delta R.T. 0.006 min
Lab File: VX044049.D
Acq: 27 Nov 2024 18:29

Tgt Ion: 91 Resp: 406301

Ion	Ratio	Lower	Upper
91	100		
120	22.2	11.5	34.4





#80
1,3,5-Trimethylbenzene
Concen: 2.728 ug/l m
RT: 11.451 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX044049.D
Acq: 27 Nov 2024 18:29

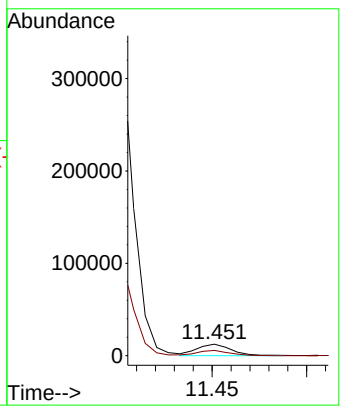
Tgt Ion:105 Resp: 1572

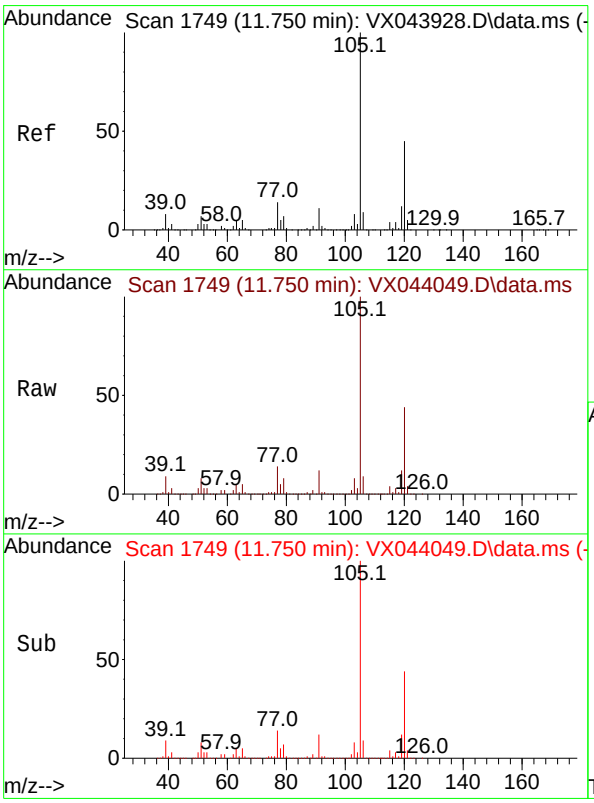
Ion	Ratio	Lower	Upper
105	100		
120	0.0	23.3	69.8#

Instrument :
MSVOA_X
ClientSampleId :
MW-12

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/02/2024
Supervised By :Mahesh Dadoda 12/02/2024

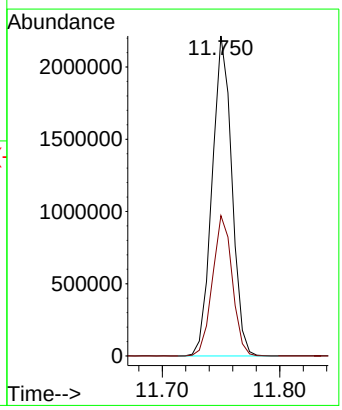


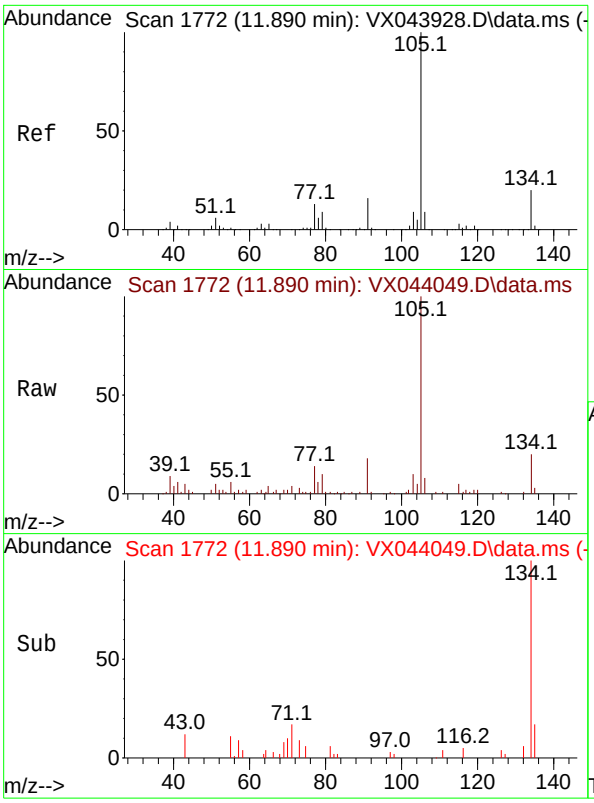


#84
1,2,4-Trimethylbenzene
Concen: 450.469 ug/l
RT: 11.750 min Scan# 1749
Delta R.T. -0.000 min
Lab File: VX044049.D
Acq: 27 Nov 2024 18:29

Tgt Ion:105 Resp: 2586116

Ion	Ratio	Lower	Upper
105	100		
120	43.9	21.9	65.7





#85
sec-Butylbenzene
Concen: 2.924 ug/l m
RT: 11.890 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX044049.D
Acq: 27 Nov 2024 18:29

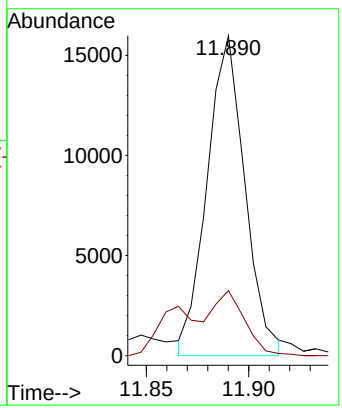
Tgt Ion:105 Resp: 2047

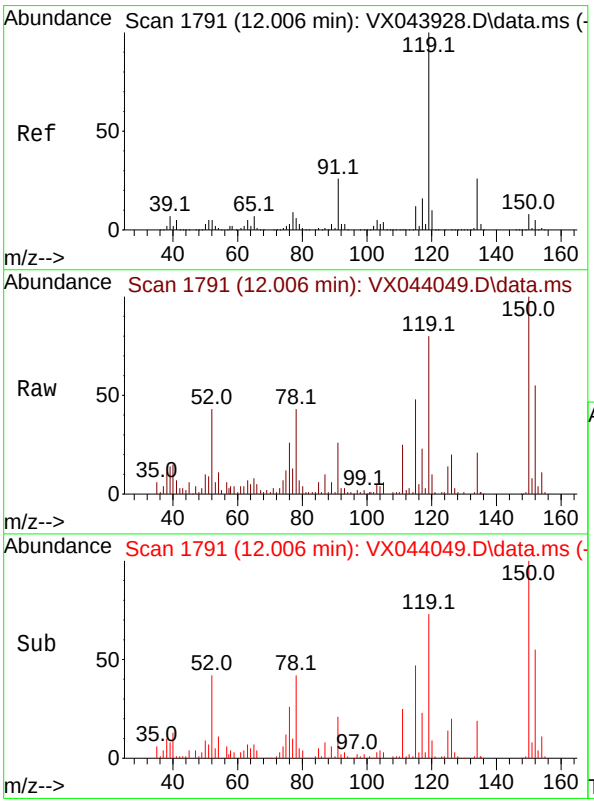
Ion	Ratio	Lower	Upper
105	100		
134	0.0	9.7	29.1#

Instrument :
MSVOA_X
ClientSampleId :
MW-12

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/02/2024
Supervised By :Mahesh Dadoda 12/02/2024

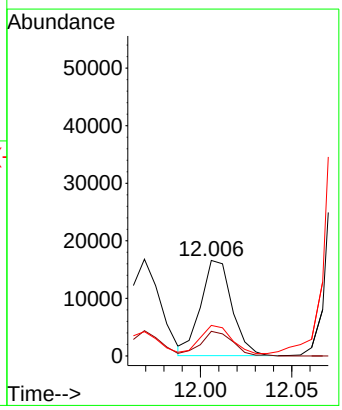


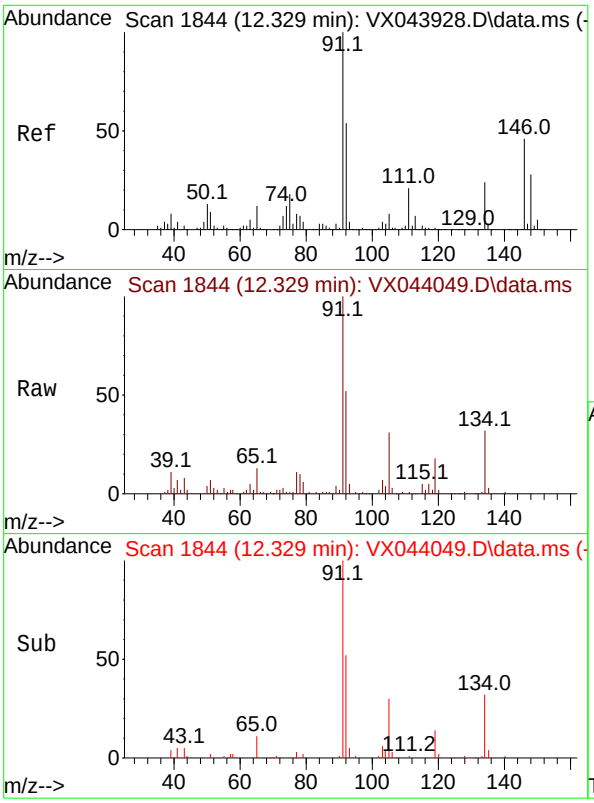


#86
p-Isopropyltoluene
Concen: 3.459 ug/l
RT: 12.006 min Scan# 1791
Delta R.T. -0.000 min
Lab File: VX044049.D
Acq: 27 Nov 2024 18:29

Tgt Ion:119 Resp: 19673

Ion	Ratio	Lower	Upper
119	100		
134	26.7	13.0	38.9
91	0.0	13.0	38.9#





#89
n-Butylbenzene
Concen: 4.844 ug/l m
RT: 12.329 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX044049.D
Acq: 27 Nov 2024 18:29

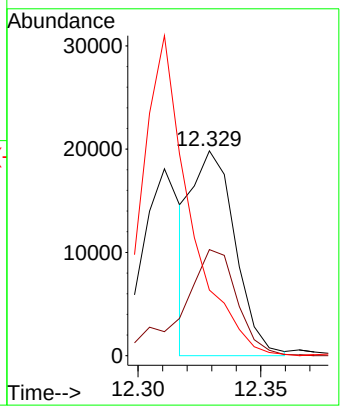
Tgt Ion: 91 Resp: 2429

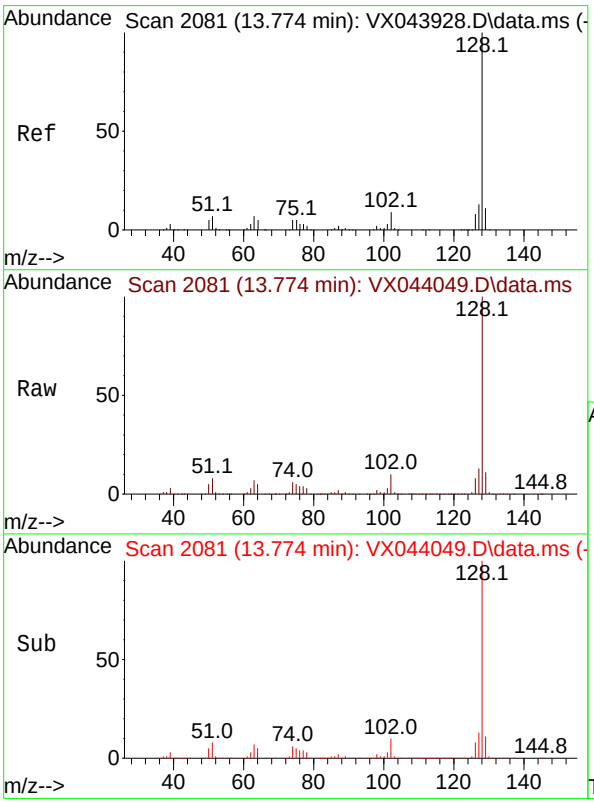
Ion	Ratio	Lower	Upper
91	100		
92	66.6	26.6	79.8
134	169.2	12.4	37.2

Instrument :
MSVOA_X
ClientSampleId :
MW-12

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/02/2024
Supervised By :Mahesh Dadoda 12/02/2024

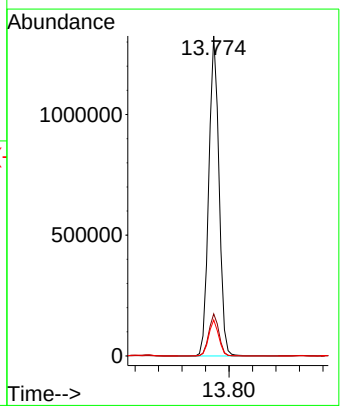




#95
Naphthalene
Concen: 245.793 ug/l
RT: 13.774 min Scan# 2081
Delta R.T. -0.000 min
Lab File: VX044049.D
Acq: 27 Nov 2024 18:29

Tgt Ion:128 Resp: 1603075

Ion	Ratio	Lower	Upper
128	100		
127	13.1	10.2	15.2
129	11.0	8.6	12.8



Raw Data: **VX044058.D**

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

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	11/26/24
Project:	RFK Bridge	Date Received:	11/27/24
Client Sample ID:	MW-12DL	SDG No.:	P5021
Lab Sample ID:	P5021-06DL	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044058.D	20		12/02/24 12:12	VX120224

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
1634-04-4	Methyl tert-butyl Ether	20.0	UD	3.20	20.0	ug/L
71-43-2	Benzene	270	D	3.20	20.0	ug/L
108-88-3	Toluene	30.0	D	3.60	20.0	ug/L
100-41-4	Ethyl Benzene	580	D	3.20	20.0	ug/L
179601-23-1	m/p-Xylenes	190	D	6.20	40.0	ug/L
95-47-6	o-Xylene	85.2	D	2.80	20.0	ug/L
98-82-8	Isopropylbenzene	18.6	JD	2.60	20.0	ug/L
103-65-1	n-propylbenzene	36.6	D	2.80	20.0	ug/L
108-67-8	1,3,5-Trimethylbenzene	20.0	UD	3.60	20.0	ug/L
98-06-6	tert-Butylbenzene	20.0	UD	3.40	20.0	ug/L
95-63-6	1,2,4-Trimethylbenzene	350	D	3.60	20.0	ug/L
135-98-8	sec-Butylbenzene	20.0	UD	3.40	20.0	ug/L
99-87-6	p-Isopropyltoluene	20.0	UD	3.00	20.0	ug/L
104-51-8	n-Butylbenzene	20.0	UD	4.40	20.0	ug/L
91-20-3	Naphthalene	180	D	11.8	20.0	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	51.2		74 - 125	102%	SPK: 50
1868-53-7	Dibromofluoromethane	46.3		75 - 124	93%	SPK: 50
2037-26-5	Toluene-d8	49.4		86 - 113	99%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.1		77 - 121	102%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	126000	5.544			
540-36-3	1,4-Difluorobenzene	245000	6.757			
3114-55-4	Chlorobenzene-d5	215000	10.055			
3855-82-1	1,4-Dichlorobenzene-d4	97900	12.018			

Raw Data: **VX044058.D**

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

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	11/26/24
Project:	RFK Bridge	Date Received:	11/27/24
Client Sample ID:	MW-12DL	SDG No.:	P5021
Lab Sample ID:	P5021-06DL	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044058.D	20		12/02/24 12:12	VX120224

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\VX120224\
Data File : VX044058.D
Acq On : 02 Dec 2024 12:12
Operator : JC/MD
Sample : P5021-06DL 20X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
MW-12DL

Quant Time: Dec 03 00:16:53 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration

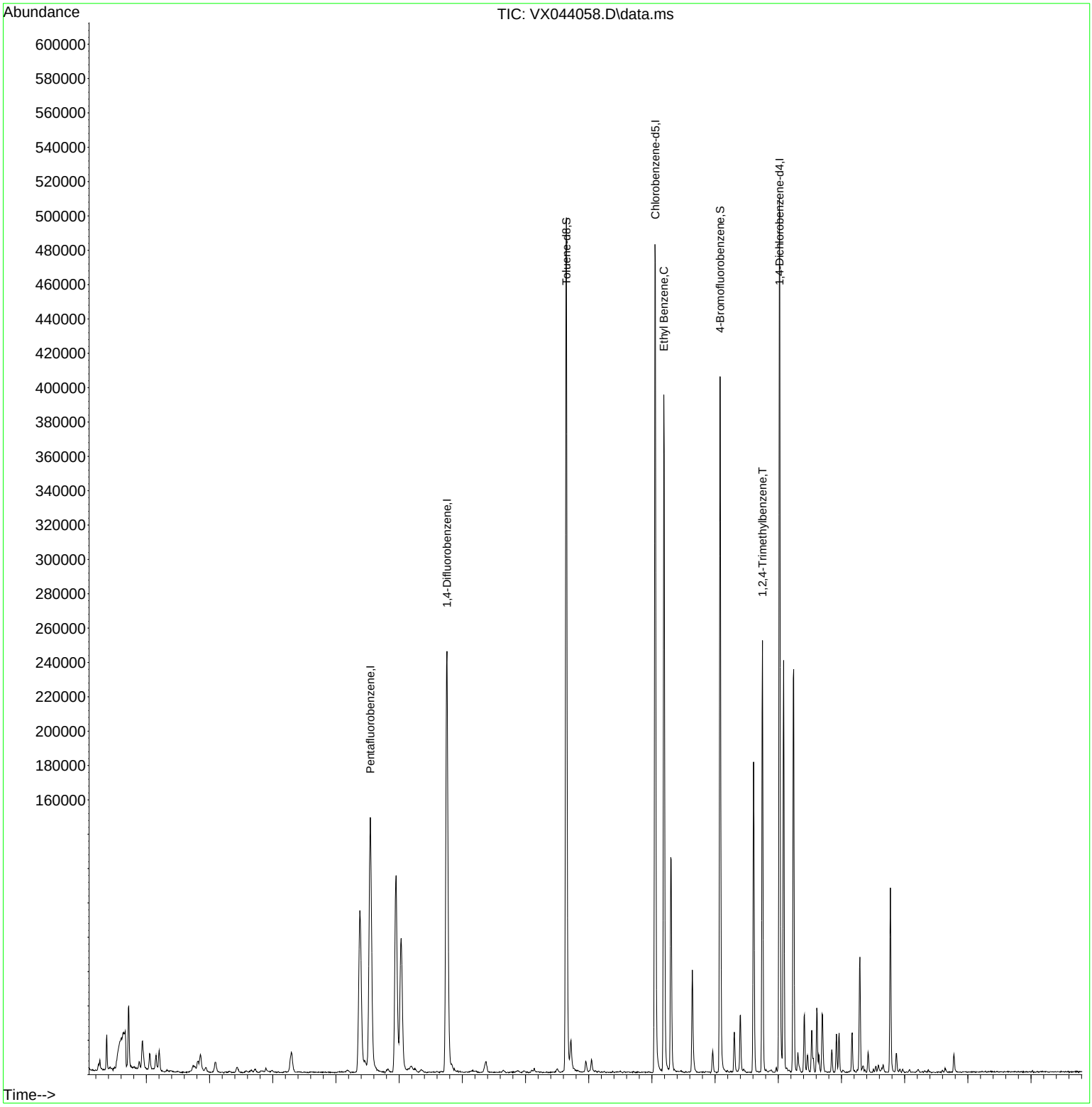
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.544	168	125735	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.757	114	244727	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	215420	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	97904	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.946	65	110514	51.245	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 102.500%			
35) Dibromofluoromethane	5.379	113	80905	46.266	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 92.540%			
50) Toluene-d8	8.647	98	298010	49.438	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 98.880%			
62) 4-Bromofluorobenzene	11.079	95	104817	51.094	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 102.180%			
Target Compounds						Qvalue
16) Acetone	2.386	43	1099	1.110	ug/l #	80
31) Cyclohexane	5.464	56	3691	1.536	ug/l	87
39) Methylcyclohexane	7.367	83	2531	0.894	ug/l #	80
40) Benzene	6.031	78	92068	13.564	ug/l	99
52) Toluene	8.720	92	6099	1.501	ug/l	91
67) Ethyl Benzene	10.189	91	233006	29.064	ug/l	98
68) m/p-Xylenes	10.305	106	28949	9.683	ug/l	96
69) o-Xylene	10.640	106	12436	4.260	ug/l	98
73) Isopropylbenzene	10.963	105	6999	0.930	ug/l	96
78) n-propylbenzene	11.305	91	15361	1.828	ug/l	93
84) 1,2,4-Trimethylbenzene	11.750	105	107822	17.492	ug/l	100
95) Naphthalene	13.774	128	62538	8.930	ug/l	100

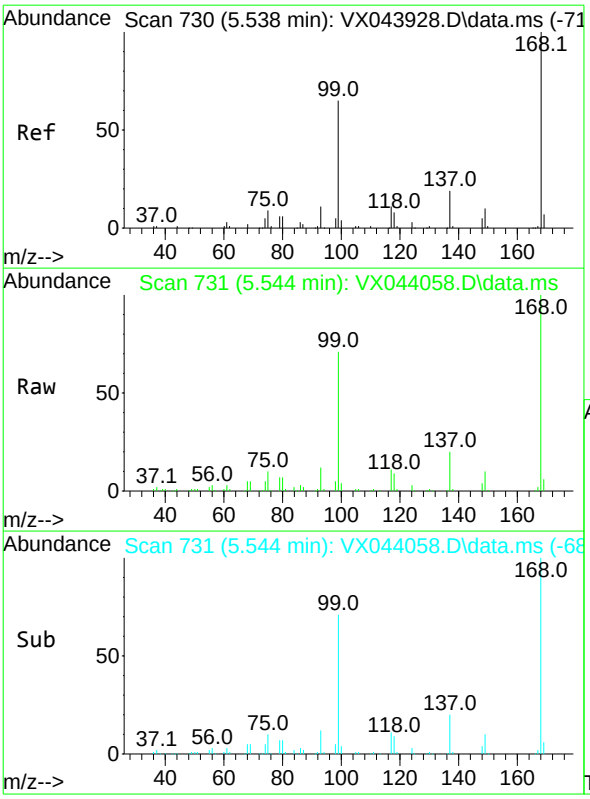
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120224\
Data File : VX044058.D
Acq On : 02 Dec 2024 12:12
Operator : JC/MD
Sample : P5021-06DL 20X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
MW-12DL

Quant Time: Dec 03 00:16:53 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration



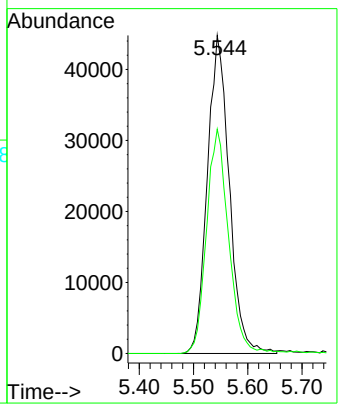


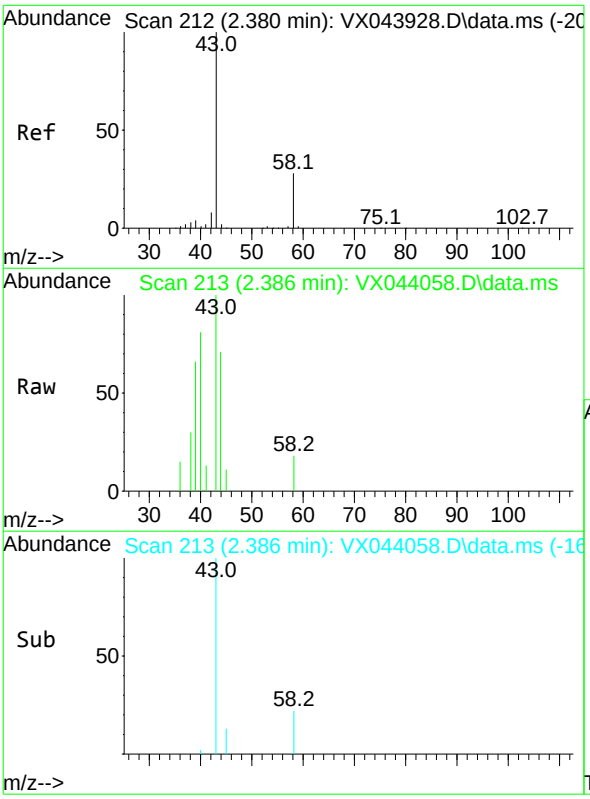
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.544 min Scan# 73
Delta R.T. 0.006 min
Lab File: VX044058.D
Acq: 02 Dec 2024 12:12

Instrument :
MSVOA_X
ClientSampleId :
MW-12DL

Tgt Ion:168 Resp: 125735

Ion	Ratio	Lower	Upper
168	100		
99	70.5	51.8	77.8

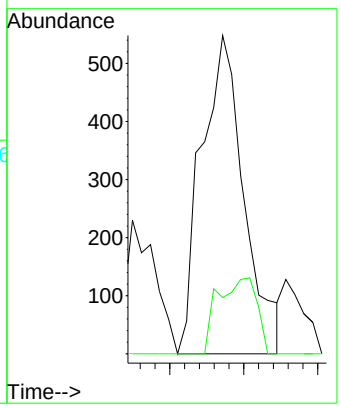


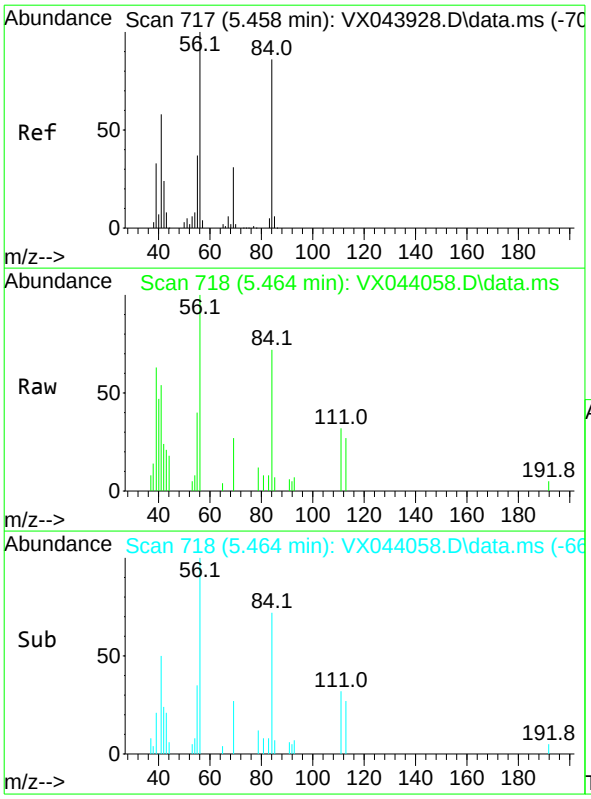


#16
Acetone
Concen: 1.110 ug/l
RT: 2.386 min Scan# 213
Delta R.T. 0.006 min
Lab File: VX044058.D
Acq: 02 Dec 2024 12:12

Tgt Ion: 43 Resp: 1099

Ion	Ratio	Lower	Upper
43	100		
58	17.7	22.7	34.1#



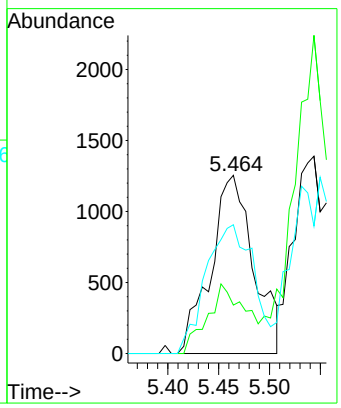


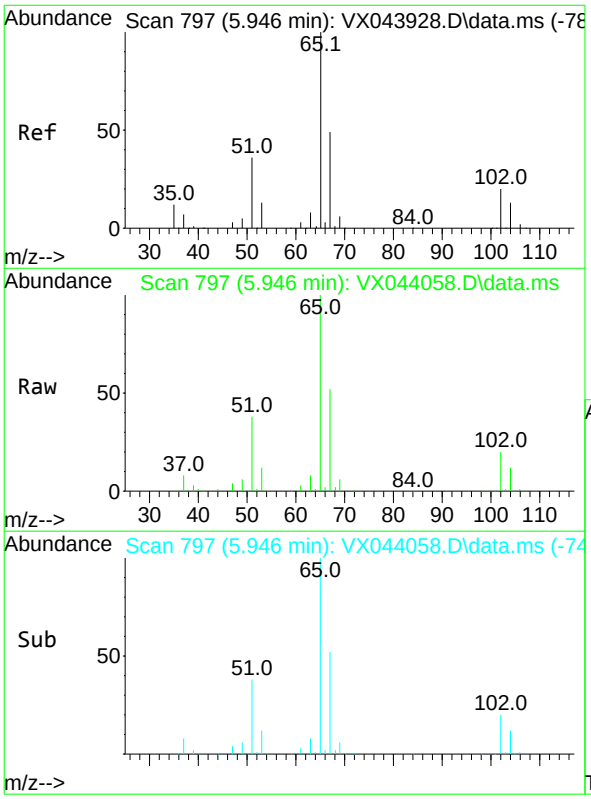
#31
Cyclohexane
Concen: 1.536 ug/l
RT: 5.464 min Scan# 71
Delta R.T. 0.006 min
Lab File: VX044058.D
Acq: 02 Dec 2024 12:12

Instrument :
MSVOA_X
ClientSampleId :
MW-12DL

Tgt Ion: 56 Resp: 3691

Ion	Ratio	Lower	Upper
56	100		
69	27.2	24.7	37.1
84	72.3	68.7	103.1

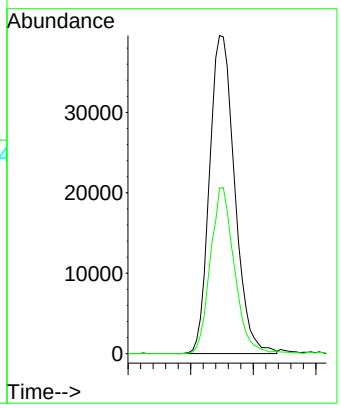


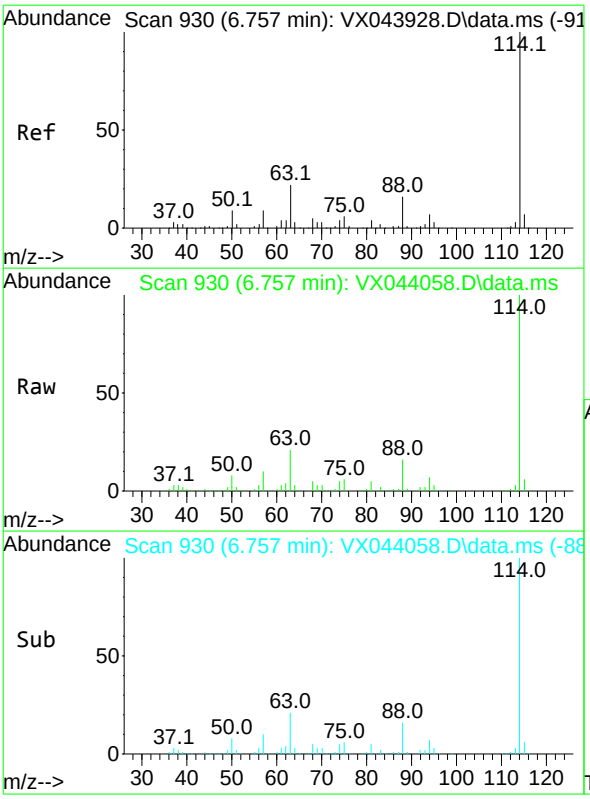


#33
1,2-Dichloroethane-d4
Concen: 51.245 ug/l
RT: 5.946 min Scan# 797
Delta R.T. -0.000 min
Lab File: VX044058.D
Acq: 02 Dec 2024 12:12

Tgt Ion: 65 Resp: 110514

Ion	Ratio	Lower	Upper
65	100		
67	49.6	0.0	100.8



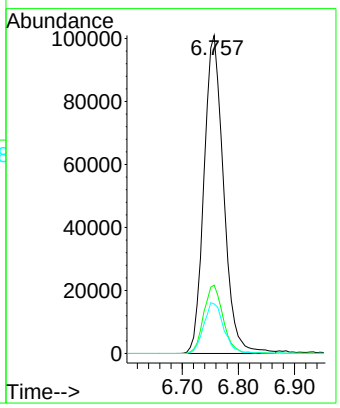


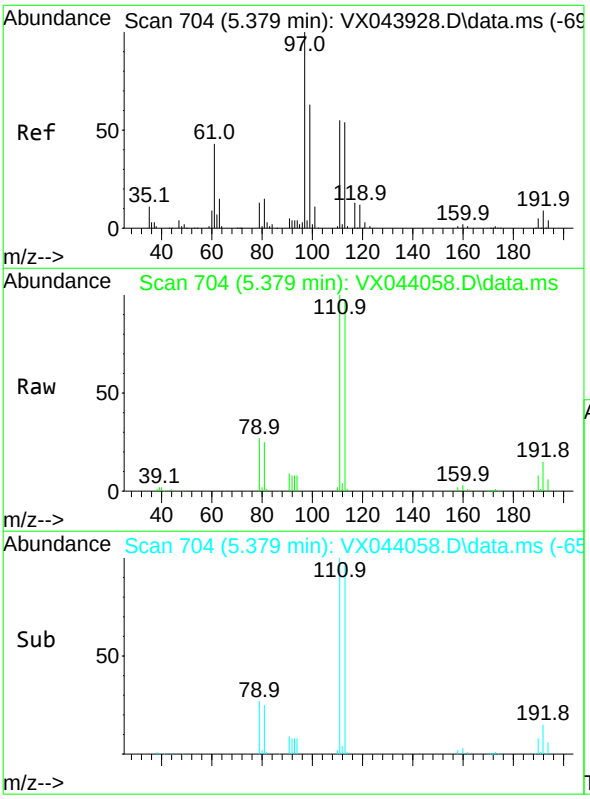
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.757 min Scan# 93
Delta R.T. -0.000 min
Lab File: VX044058.D
Acq: 02 Dec 2024 12:12

Instrument :
MSVOA_X
ClientSampleId :
MW-12DL

Tgt Ion:114 Resp: 244727

Ion	Ratio	Lower	Upper
114	100		
63	21.5	0.0	44.0
88	15.6	0.0	32.4

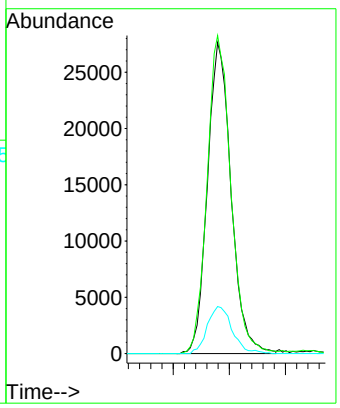


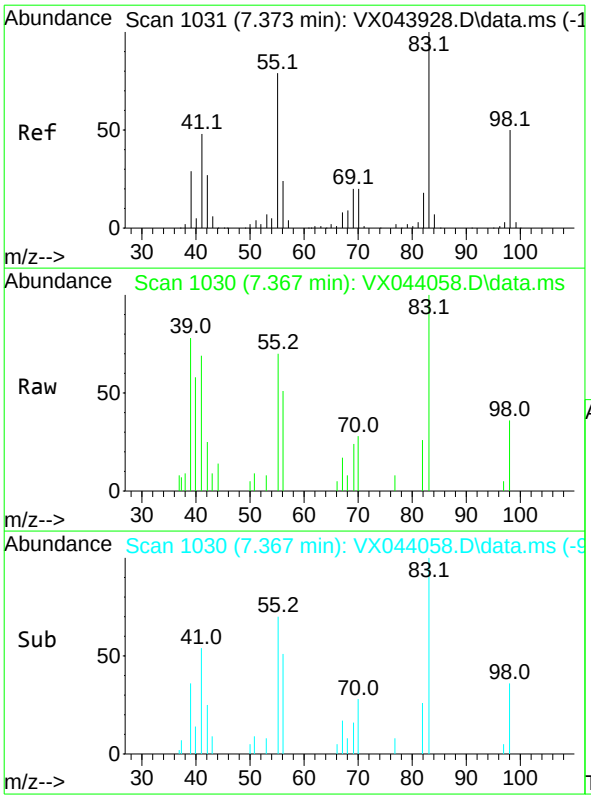


#35
Dibromofluoromethane
Concen: 46.266 ug/l
RT: 5.379 min Scan# 704
Delta R.T. -0.000 min
Lab File: VX044058.D
Acq: 02 Dec 2024 12:12

Tgt Ion:113 Resp: 80905

Ion	Ratio	Lower	Upper
113	100		
111	102.8	81.0	121.4
192	15.9	13.0	19.6



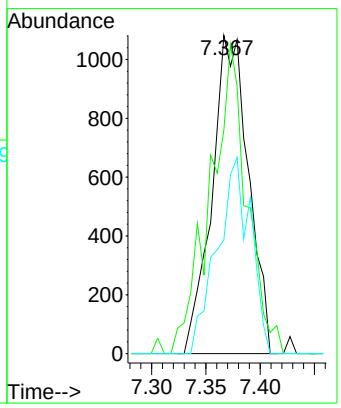


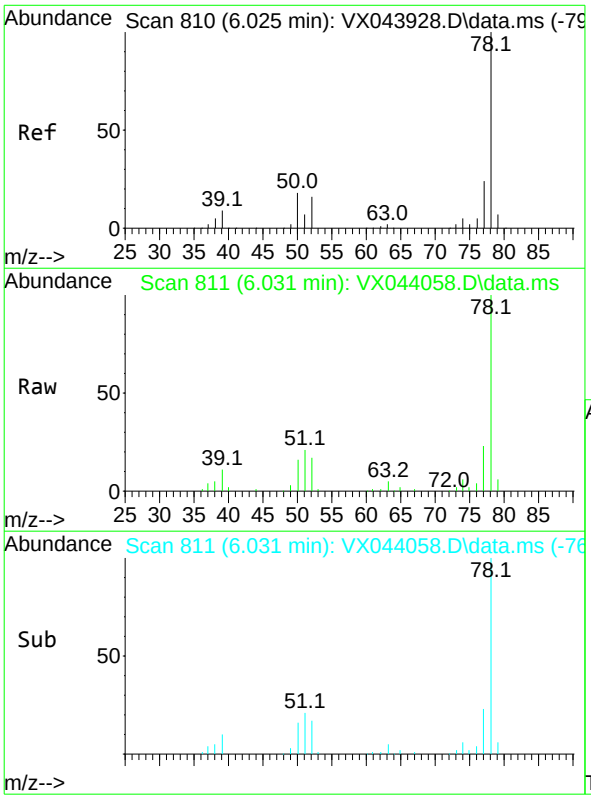
#39
Methylcyclohexane
Concen: 0.894 ug/l
RT: 7.367 min Scan# 10
Delta R.T. -0.006 min
Lab File: VX044058.D
Acq: 02 Dec 2024 12:12

Instrument :
MSVOA_X
ClientSampleId :
MW-12DL

Tgt Ion: 83 Resp: 2531

Ion	Ratio	Lower	Upper
83	100		
55	62.3	63.1	94.7#
98	35.8	40.0	60.0#

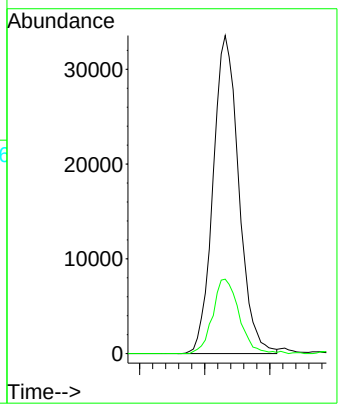


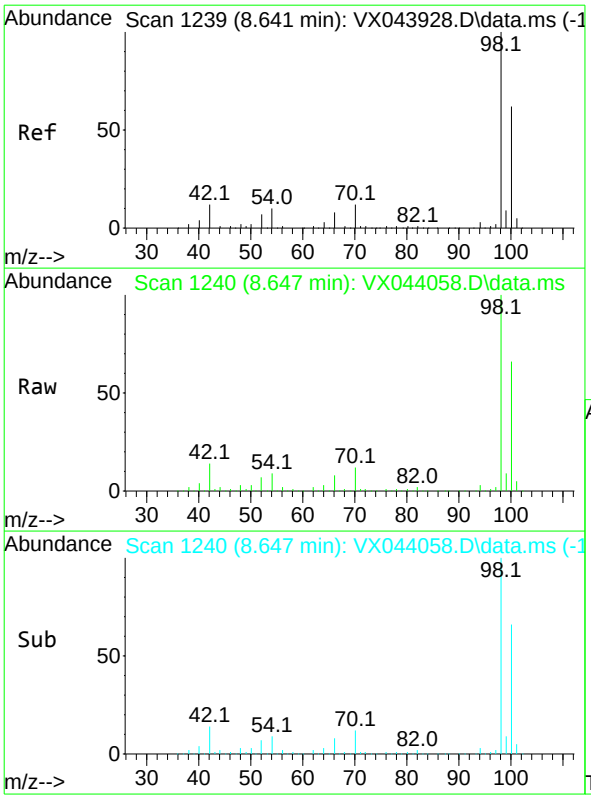


#40
Benzene
Concen: 13.564 ug/l
RT: 6.031 min Scan# 811
Delta R.T. 0.006 min
Lab File: VX044058.D
Acq: 02 Dec 2024 12:12

Tgt Ion: 78 Resp: 92068

Ion	Ratio	Lower	Upper
78	100		
77	23.4	19.2	28.8



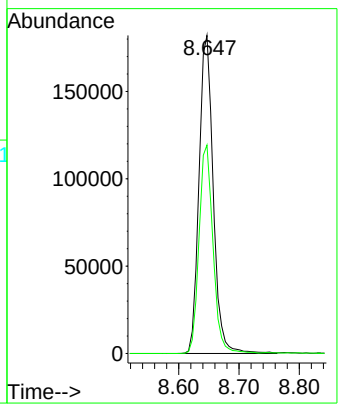


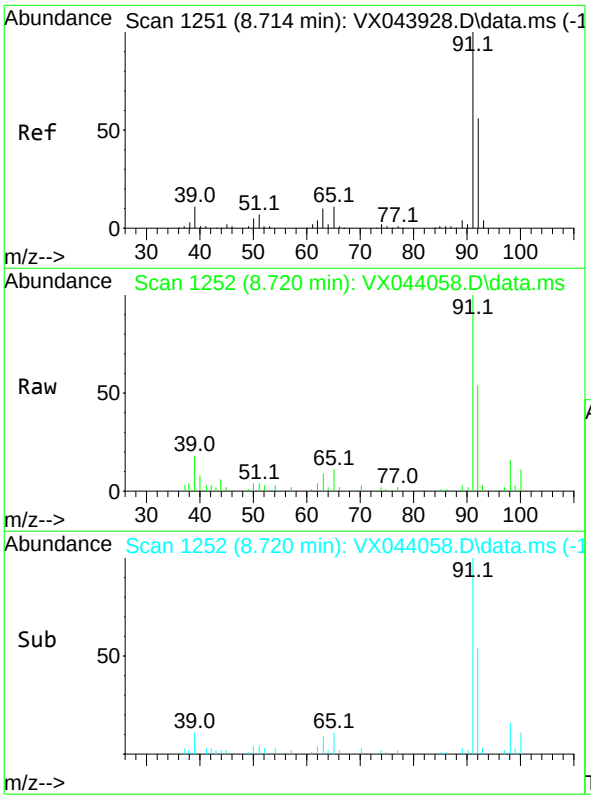
#50
Toluene-d8
Concen: 49.438 ug/l
RT: 8.647 min Scan# 12
Delta R.T. 0.006 min
Lab File: VX044058.D
Acq: 02 Dec 2024 12:12

Instrument :
MSVOA_X
ClientSampleId :
MW-12DL

Tgt Ion: 98 Resp: 298010

Ion	Ratio	Lower	Upper
98	100		
100	64.5	52.6	79.0

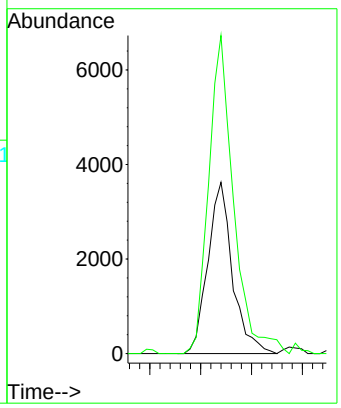


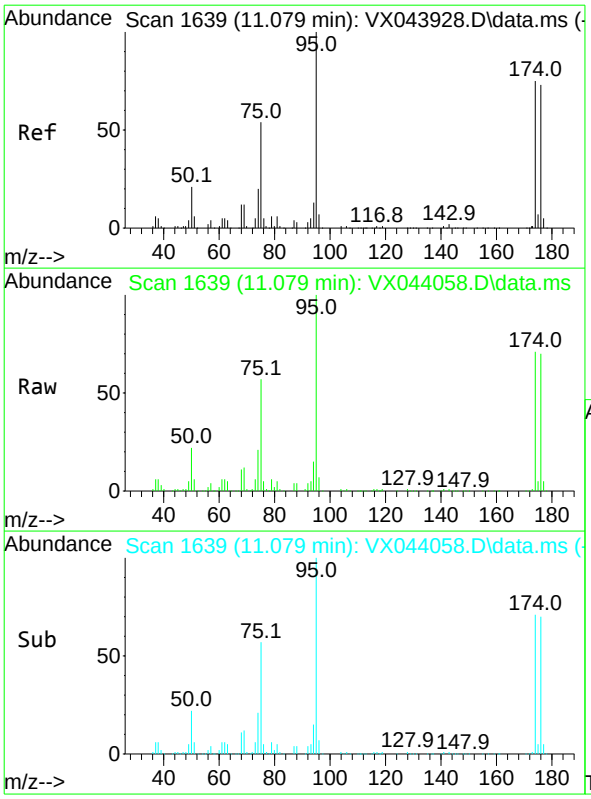


#52
Toluene
Concen: 1.501 ug/l
RT: 8.720 min Scan# 1252
Delta R.T. 0.006 min
Lab File: VX044058.D
Acq: 02 Dec 2024 12:12

Tgt Ion: 92 Resp: 6099

Ion	Ratio	Lower	Upper
92	100		
91	187.7	139.7	209.5



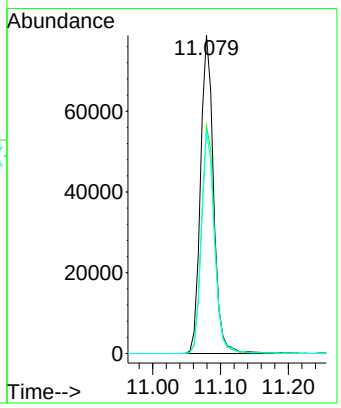


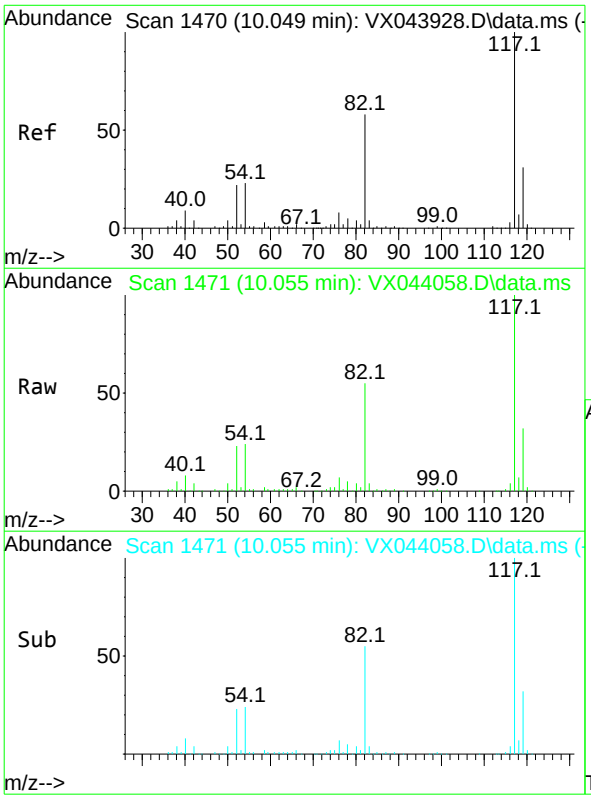
#62
4-Bromofluorobenzene
Concen: 51.094 ug/l
RT: 11.079 min Scan# 16
Delta R.T. -0.000 min
Lab File: VX044058.D
Acq: 02 Dec 2024 12:12

Instrument :
MSVOA_X
ClientSampleId :
MW-12DL

Tgt Ion: 95 Resp: 104817

Ion	Ratio	Lower	Upper
95	100		
174	71.6	0.0	150.4
176	70.4	0.0	146.0

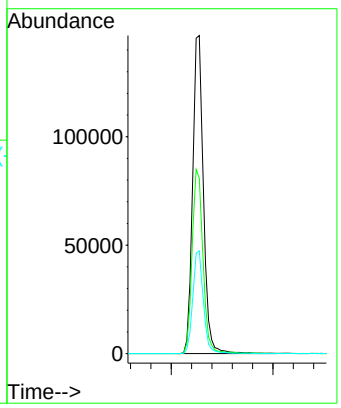


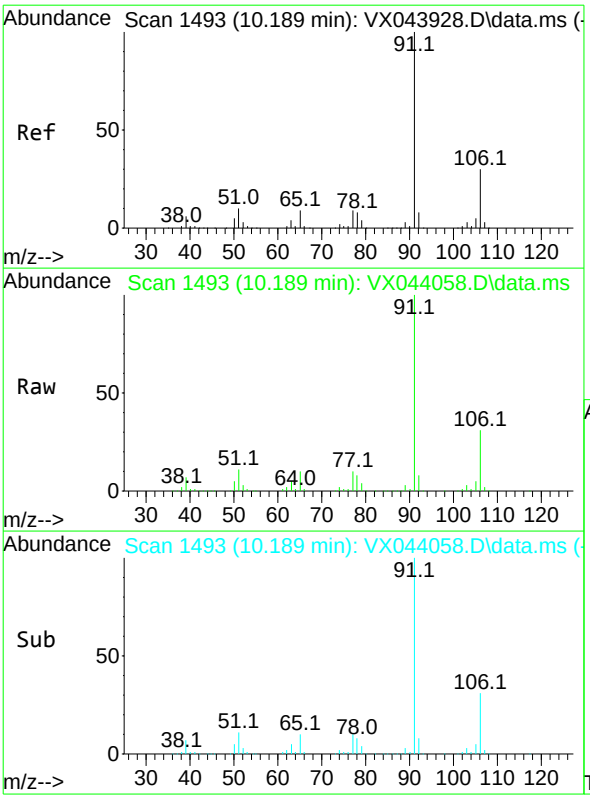


#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.055 min Scan# 1471
Delta R.T. 0.006 min
Lab File: VX044058.D
Acq: 02 Dec 2024 12:12

Tgt Ion:117 Resp: 215420

Ion	Ratio	Lower	Upper
117	100		
82	55.2	46.4	69.6
119	32.3	24.6	37.0



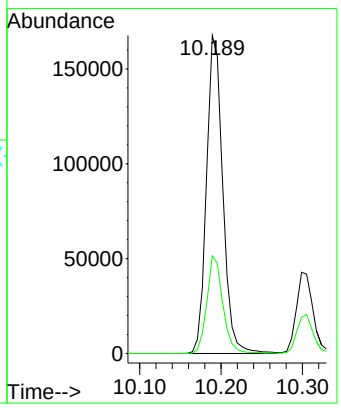


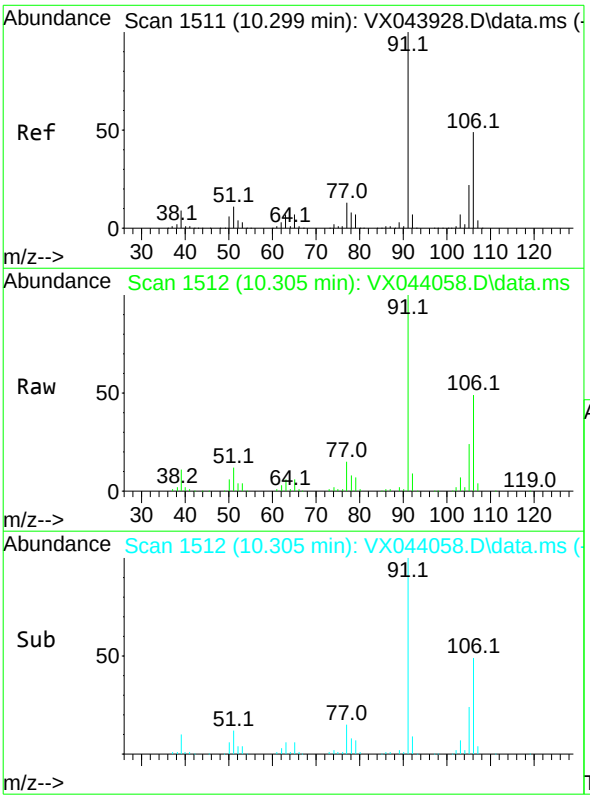
#67
Ethyl Benzene
Concen: 29.064 ug/l
RT: 10.189 min Scan# 14
Delta R.T. -0.000 min
Lab File: VX044058.D
Acq: 02 Dec 2024 12:12

Instrument :
MSVOA_X
ClientSampleId :
MW-12DL

Tgt Ion: 91 Resp: 233006

Ion	Ratio	Lower	Upper
91	100		
106	30.7	23.6	35.4

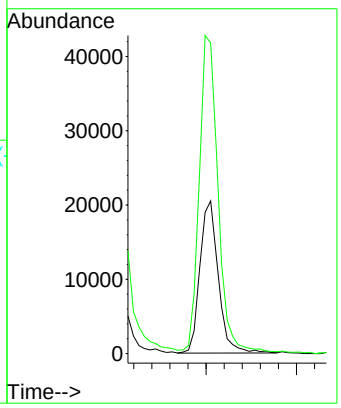


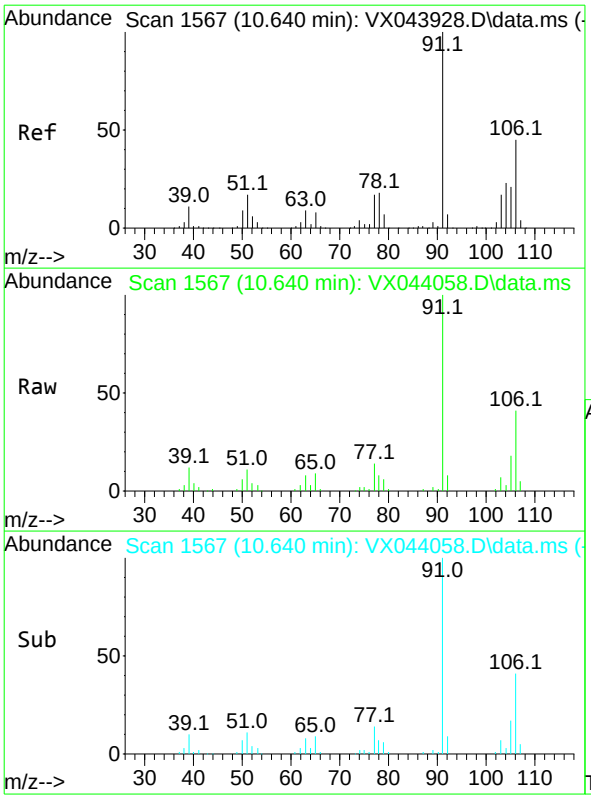


#68
m/p-Xylenes
Concen: 9.683 ug/l
RT: 10.305 min Scan# 1512
Delta R.T. 0.006 min
Lab File: VX044058.D
Acq: 02 Dec 2024 12:12

Tgt Ion:106 Resp: 28949

Ion	Ratio	Lower	Upper
106	100		
91	216.7	168.1	252.1



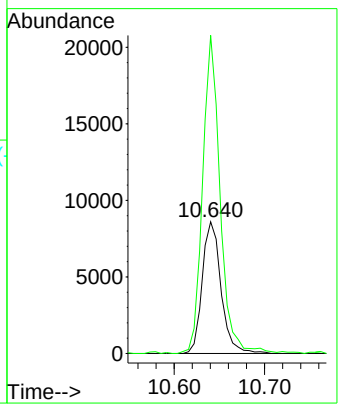


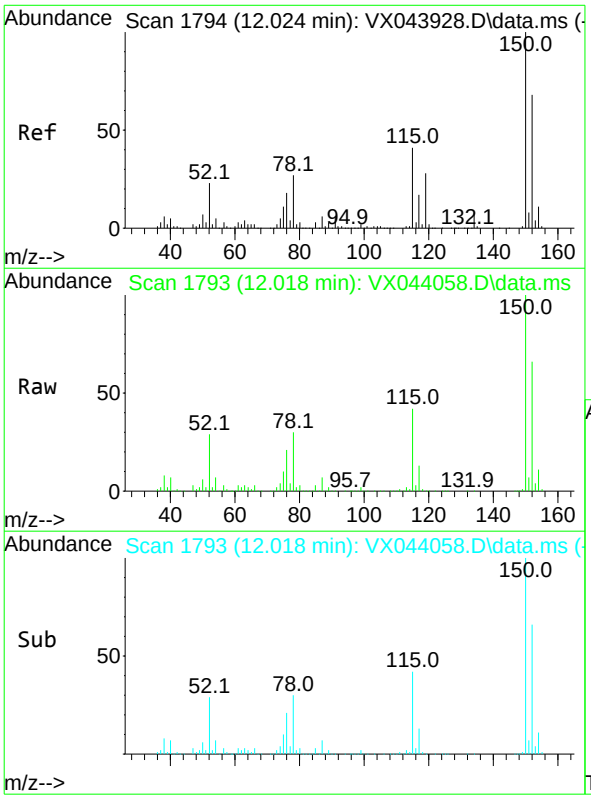
#69
o-Xylene
Concen: 4.260 ug/l
RT: 10.640 min Scan# 15
Delta R.T. -0.000 min
Lab File: VX044058.D
Acq: 02 Dec 2024 12:12

Instrument :
MSVOA_X
ClientSampleId :
MW-12DL

Tgt Ion:106 Resp: 12436

Ion	Ratio	Lower	Upper
106	100		
91	224.2	110.2	330.6

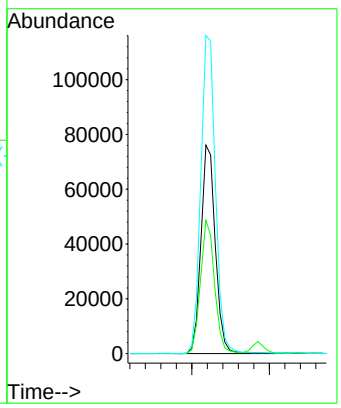




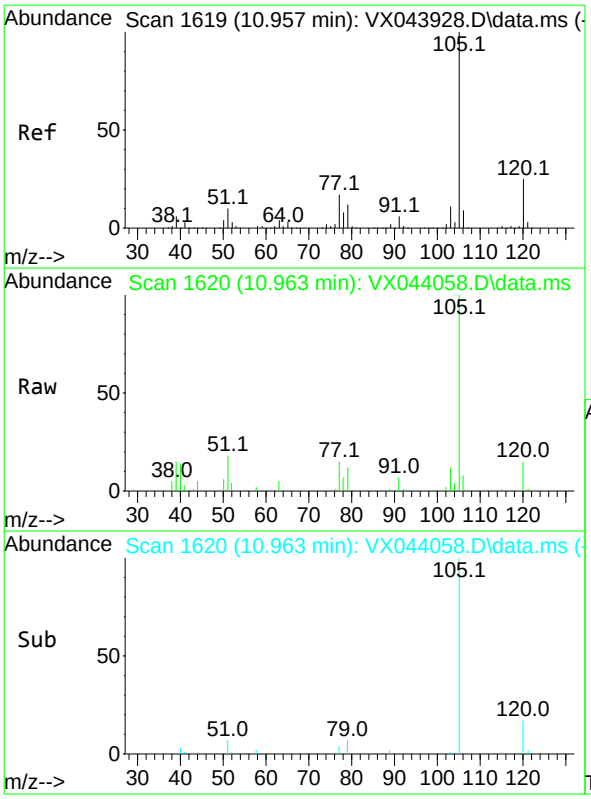
#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.018 min Scan# 1793
Delta R.T. -0.006 min
Lab File: VX044058.D
Acq: 02 Dec 2024 12:12

Tgt Ion:152 Resp: 97904

Ion	Ratio	Lower	Upper
152	100		
115	62.6	45.4	136.2
150	156.4	0.0	353.0



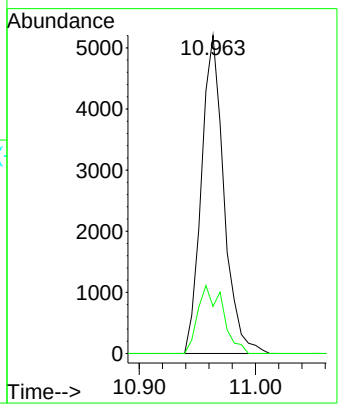
Instrument :
MSVOA_X
ClientSampleId :
MW-12DL

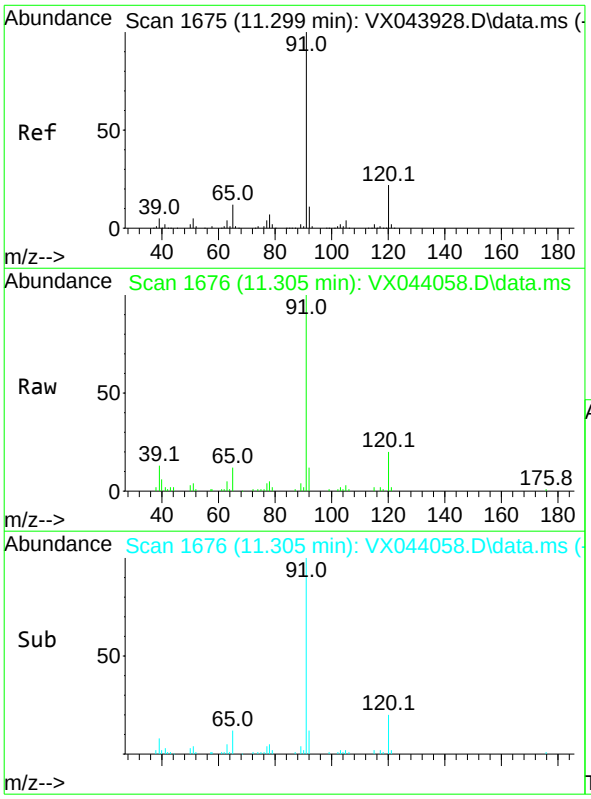


#73
Isopropylbenzene
Concen: 0.930 ug/l
RT: 10.963 min Scan# 16
Delta R.T. 0.006 min
Lab File: VX044058.D
Acq: 02 Dec 2024 12:12

Tgt Ion:105 Resp: 6999

Ion	Ratio	Lower	Upper
105	100		
120	23.9	13.0	38.9

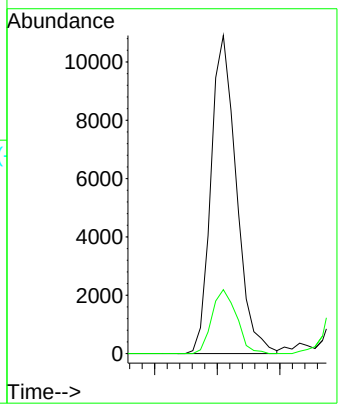


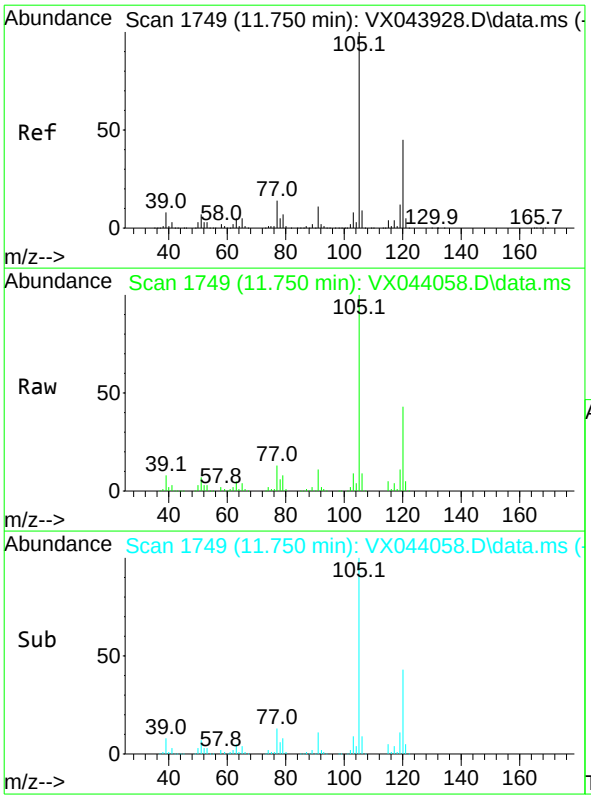


#78
n-propylbenzene
Concen: 1.828 ug/l
RT: 11.305 min Scan# 1676
Delta R.T. 0.006 min
Lab File: VX044058.D
Acq: 02 Dec 2024 12:12

Tgt Ion: 91 Resp: 15361

Ion	Ratio	Lower	Upper
91	100		
120	19.6	11.5	34.4



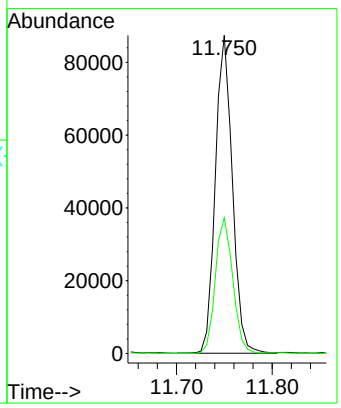


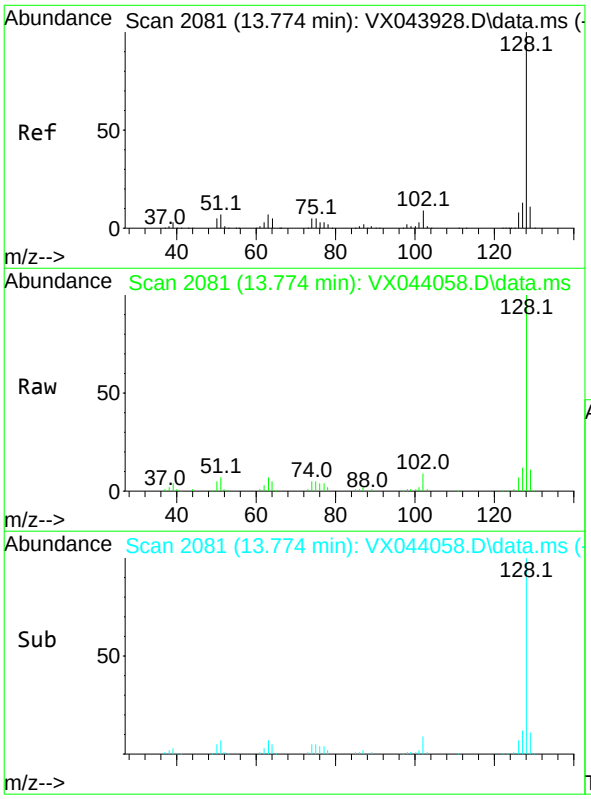
#84
1,2,4-Trimethylbenzene
Concen: 17.492 ug/l
RT: 11.750 min Scan# 17
Delta R.T. -0.000 min
Lab File: VX044058.D
Acq: 02 Dec 2024 12:12

Instrument :
MSVOA_X
ClientSampleId :
MW-12DL

Tgt Ion:105 Resp: 107822

Ion	Ratio	Lower	Upper
105	100		
120	43.7	21.9	65.7

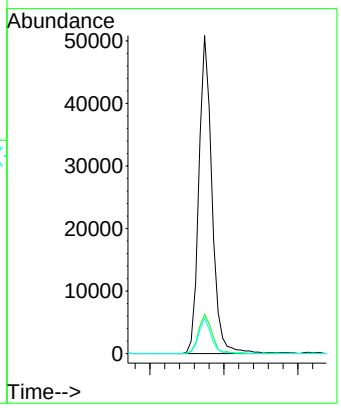




#95
Naphthalene
Concen: 8.930 ug/l
RT: 13.774 min Scan# 2081
Delta R.T. -0.000 min
Lab File: VX044058.D
Acq: 02 Dec 2024 12:12

Tgt Ion:128 Resp: 62538

Ion	Ratio	Lower	Upper
128	100		
127	12.5	10.2	15.2
129	10.8	8.6	12.8



CALIBRATION SUMMARY

Raw Data

Alliance TECHNICAL GROUP

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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: LIRO01

Lab Code: CHEM Case No.: P5021 SAS No.: P5021 SDG No.: P5021

Instrument ID: MSVOA_X Calibration Date(s): 11/21/2024 11/21/2024

Heated Purge: (Y/N) N Calibration Time(s): 09:47 12:03

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

LAB FILE ID: RRF001 = VX043925.D RRF005 = VX043926.D RRF020 = VX043927.D
RRF050 = VX043928.D RRF100 = VX043929.D RRF150 = VX043930.D

COMPOUND	RRF001	RRF005	RRF020	RRF050	RRF100	RRF150	$\overline{RRF}$	% RSD
Methyl tert-butyl Ether	1.732	1.991	2.212	2.264	2.160	2.192	2.092	9.5
Benzene	1.211	1.369	1.457	1.494	1.388	1.402	1.387	7
Toluene	0.636	0.839	0.883	0.921	0.850	0.852	0.830	12
Ethyl Benzene	1.579	1.831	1.910	2.024	1.884	1.938	1.861	8.2
m/p-Xylenes	0.610	0.663	0.704	0.762	0.700	0.725	0.694	7.6
o-Xylene	0.543	0.665	0.691	0.757	0.693	0.716	0.678	10.7
Isopropylbenzene	3.435	3.927	3.996	4.097	3.679	3.927	3.843	6.3
n-propylbenzene	3.667	4.115	4.469	4.733	4.286	4.486	4.293	8.6
1,3,5-Trimethylbenzene	2.704	3.115	3.352	3.444	3.118	3.238	3.162	8.2
tert-Butylbenzene	2.581	3.097	3.266	3.440	3.152	3.269	3.134	9.4
1,2,4-Trimethylbenzene	2.557	3.173	3.366	3.440	3.124	3.228	3.148	9.9
sec-Butylbenzene	3.116	3.921	3.968	4.249	3.812	3.974	3.840	10
p-Isopropyltoluene	2.255	3.043	3.316	3.521	3.219	3.362	3.119	14.5
n-Butylbenzene	1.897	2.580	2.805	3.184	2.909	3.126	2.750	17.2
Naphthalene	2.605	3.361	3.698	4.005	3.733	4.058	3.576	15
1,2-Dichloroethane-d4		0.926	0.876	0.751	0.855	0.880	0.858	7.6
Dibromofluoromethane		0.371	0.353	0.327	0.359	0.376	0.357	5.4
Toluene-d8		1.327	1.237	1.104	1.232	1.257	1.232	6.6
4-Bromofluorobenzene		0.401	0.414	0.387	0.438	0.455	0.419	6.6

* 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.

Response Factor Report MSVOA_X

Method Path : Z:\voasrv\HPCHEM1\MSVOA_X\Method\
Method File : 82X112124W.M
Title : SW846 8260
Last Update : Fri Nov 22 03:45:52 2024
Response Via : Initial Calibration

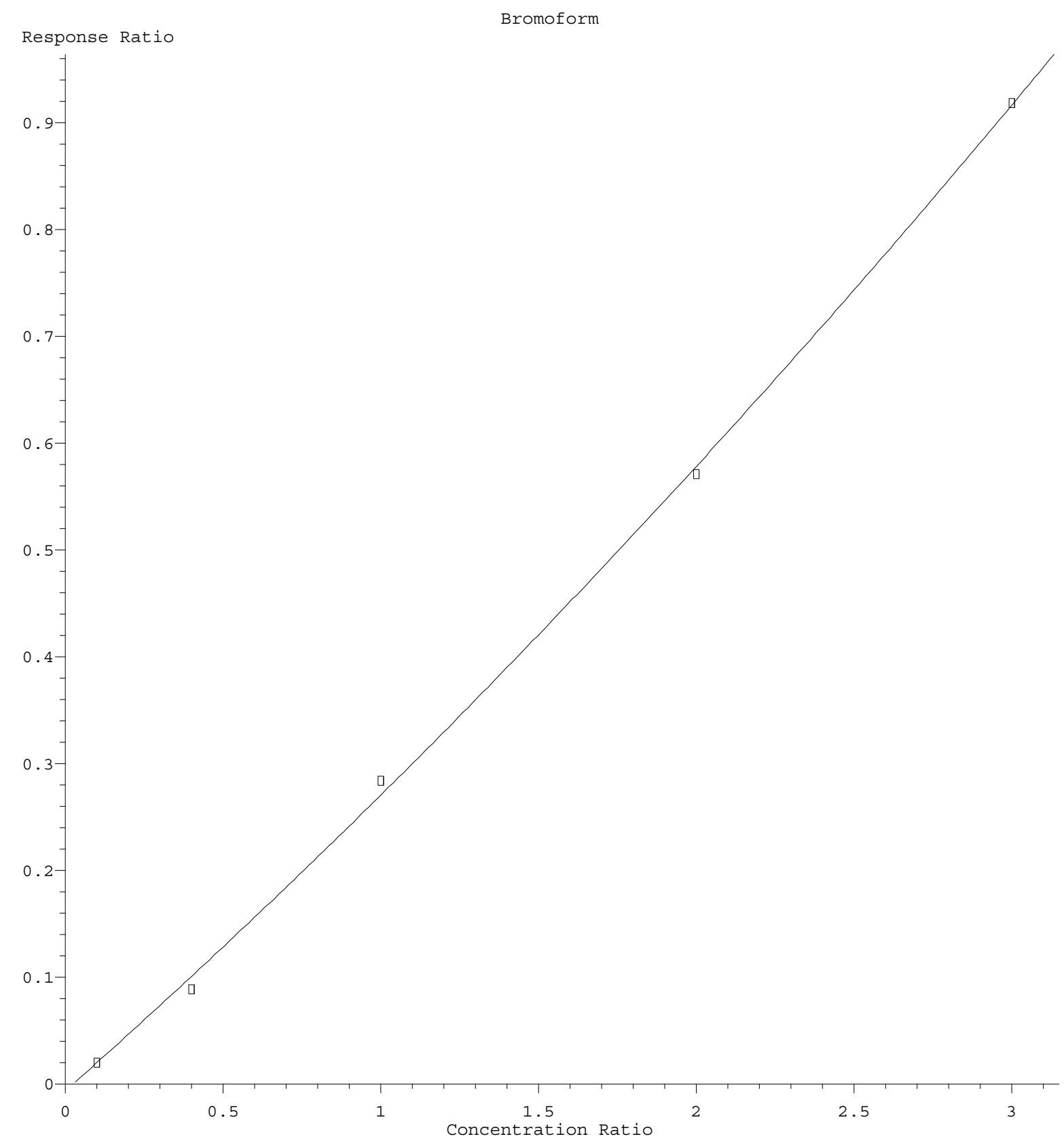
Calibration Files
1 =VX043925.D 5 =VX043926.D 20 =VX043927.D 50 =VX043928.D 100 =VX043929.D 150 =VX043930.D

		Compound	1	5	20	50	100	150	Avg	%RSD
1)	I	Pentafluorobenzene	----------ISTD----------							
2)	T	Dichlorodifluo...	0.634	0.633	0.641	0.684	0.601	0.608	0.633	4.64
3)	P	Chloromethane	0.578	0.662	0.720	0.697	0.665	0.677	0.667	7.26
4)	C	Vinyl Chloride	0.675	0.708	0.730	0.762	0.695	0.684	0.709	4.56#
5)	T	Bromomethane		0.425	0.438	0.445	0.429	0.442	0.436	1.95
6)	T	Chloroethane	0.579	0.429	0.404	0.459	0.368	0.354	0.432	18.87
7)	T	Trichlorofluor...	1.038	1.267	1.335	1.357	1.281	1.328	1.268	9.27
8)	T	Diethyl Ether	0.477	0.430	0.470	0.474	0.455	0.467	0.462	3.80
9)	T	1,1,2-Trichlor...	0.592	0.585	0.605	0.658	0.589	0.599	0.605	4.47
10)	T	Methyl Iodide		0.656	0.782	0.809	0.773	0.755	0.755	7.75
11)	T	Tert butyl alc...		0.123	0.133	0.145	0.134	0.154	0.138	8.73
12)	CM	1,1-Dichloroet...	0.596	0.530	0.585	0.600	0.572	0.576	0.576	4.38#
13)	T	Acrolein		0.158	0.128	0.145	0.145	0.148	0.145	7.53
14)	T	Allyl chloride	0.796	0.854	0.964	1.044	0.998	0.993	0.941	10.17
15)	T	Acrylonitrile	0.301	0.322	0.343	0.370	0.332	0.345	0.335	6.97
16)	T	Acetone	0.401	0.396	0.401	0.425	0.370	0.370	0.394	5.39
17)	T	Carbon Disulfide	1.082	0.956	1.078	1.287	1.330	1.398	1.188	14.64
18)	T	Methyl Acetate	0.931	0.871	0.911	0.987	0.894	0.910	0.917	4.32
19)	T	Methyl tert-bu...	1.732	1.991	2.212	2.264	2.160	2.192	2.092	9.52
20)	T	Methylene Chlo...	0.704	0.656	0.684	0.667	0.643	0.655	0.668	3.33
21)	T	trans-1,2-Dich...	0.545	0.563	0.609	0.633	0.600	0.619	0.595	5.72
22)	T	Diisopropyl ether	1.638	1.930	2.170	2.162	2.071	2.106	2.013	10.09
23)	T	Vinyl Acetate	1.244	1.542	1.833	1.941	1.858	1.914	1.722	15.93
24)	P	1,1-Dichloroet...	0.980	1.118	1.221	1.256	1.185	1.208	1.161	8.63
25)	T	2-Butanone	0.448	0.486	0.538	0.567	0.500	0.510	0.508	8.10
26)	T	2,2-Dichloropr...	0.902	0.997	1.062	1.141	1.082	1.109	1.049	8.28
27)	T	cis-1,2-Dichlo...	0.674	0.673	0.761	0.792	0.745	0.767	0.735	6.83
28)	T	Bromochloromet...	0.501	0.611	0.482	0.450	0.500	0.523	0.511	10.68
29)	T	Tetrahydrofuran	0.286	0.312	0.319	0.338	0.303	0.311	0.312	5.49
30)	C	Chloroform	1.070	1.238	1.309	1.316	1.269	1.293	1.249	7.41#
31)	T	Cyclohexane		0.911	0.976	1.041	0.926	0.925	0.956	5.60
32)	T	1,1,1-Trichlor...	0.873	1.005	1.133	1.184	1.119	1.149	1.077	10.86
33)	S	1,2-Dichloroet...		0.926	0.876	0.751	0.855	0.880	0.858	7.57
34)	I	1,4-Difluorobenzene	----------ISTD----------							
35)	S	Dibromofluorom...		0.371	0.353	0.327	0.359	0.376	0.357	5.43
36)	T	1,1-Dichloropr...	0.382	0.430	0.449	0.494	0.452	0.465	0.445	8.36
37)	T	Ethyl Acetate	0.517	0.549	0.549	0.610	0.539	0.552	0.553	5.61
38)	T	Carbon Tetrach...	0.439	0.466	0.491	0.558	0.520	0.528	0.500	8.69
39)	T	Methylcyclohexane	0.544	0.556	0.564	0.656	0.574	0.576	0.578	6.91
40)	TM	Benzene	1.211	1.369	1.457	1.494	1.388	1.402	1.387	7.04
41)	T	Methacrylonitrile	0.219	0.278	0.292	0.329	0.291	0.289	0.283	12.67
42)	TM	1,2-Dichloroet...	0.499	0.546	0.585	0.603	0.551	0.558	0.557	6.41
43)	T	Isopropyl Acetate	0.745	0.840	0.893	0.976	0.894	0.928	0.880	9.07
44)	TM	Trichloroethene	0.547	0.372	0.368	0.373	0.345	0.352	0.393	19.47
45)	C	1,2-Dichloropr...	0.288	0.322	0.361	0.371	0.346	0.350	0.340	8.84#
46)	T	Dibromomethane	0.239	0.240	0.280	0.293	0.276	0.284	0.269	8.58
47)	T	Bromodichlorom...	0.349	0.425	0.501	0.544	0.528	0.545	0.482	16.40
48)	T	Methyl methacr...	0.387	0.385	0.423	0.467	0.427	0.443	0.422	7.57
49)	T	1,4-Dioxane	0.006	0.008	0.008	0.008	0.008	0.007	0.008	11.13
50)	S	Toluene-d8		1.327	1.237	1.104	1.232	1.257	1.232	6.58
51)	T	4-Methyl-2-Pen...	0.437	0.527	0.562	0.606	0.539	0.548	0.537	10.41
52)	CM	Toluene	0.636	0.839	0.883	0.921	0.850	0.852	0.830	12.02#
53)	T	t-1,3-Dichloro...	0.341	0.413	0.507	0.569	0.549	0.570	0.491	19.21
54)	T	cis-1,3-Dichlo...	0.409	0.462	0.569	0.611	0.580	0.601	0.539	15.38
55)	T	1,1,2-Trichlor...	0.287	0.340	0.375	0.370	0.340	0.345	0.343	9.13

Method Path : Z:\voasrv\HPCHEM1\MSVOA_X\Method\
Method File : 82X112124W.M

56)	T	Ethyl methacry...	0.379	0.467	0.571	0.614	0.582	0.590	0.534	17.12
57)	T	1,3-Dichloropr...	0.480	0.574	0.620	0.625	0.579	0.585	0.577	9.04
58)	T	2-Chloroethyl ...	0.159	0.327	0.276	0.307	0.284	0.287	0.273	21.65
59)	T	2-Hexanone	0.297	0.393	0.431	0.471	0.410	0.419	0.403	14.49
60)	T	Dibromochlorom...	0.249	0.292	0.344	0.396	0.380	0.401	0.344	17.98
61)	T	1,2-Dibromoethane	0.258	0.339	0.373	0.385	0.358	0.367	0.346	13.33
62)	S	4-Bromofluorob...		0.401	0.414	0.387	0.438	0.455	0.419	6.61
63)	I	Chlorobenzene-d5	----------ISTD----------							
64)	T	Tetrachloroethene	0.304	0.342	0.336	0.349	0.315	0.332	0.330	5.14
65)	PM	Chlorobenzene	1.050	1.109	1.107	1.145	1.069	1.108	1.098	3.05
66)	T	1,1,1,2-Tetrac...	0.260	0.332	0.371	0.395	0.382	0.396	0.356	14.75
67)	C	Ethyl Benzene	1.579	1.831	1.910	2.024	1.884	1.938	1.861	8.19#
68)	T	m/p-Xylenes	0.610	0.663	0.704	0.762	0.700	0.725	0.694	7.57
69)	T	o-Xylene	0.543	0.665	0.691	0.757	0.693	0.716	0.678	10.75
70)	T	Styrene	0.859	1.025	1.174	1.263	1.186	1.217	1.121	13.47
71)	P	Bromoform	0.145	0.200	0.222	0.284	0.286	0.306	0.240	25.88
72)	I	1,4-Dichlorobenzen...	----------ISTD----------							
73)	T	Isopropylbenzene	3.435	3.927	3.996	4.097	3.679	3.927	3.843	6.32
74)	T	N-amyl acetate	1.249	1.648	1.867	1.996	1.895	2.029	1.780	16.45
75)	P	1,1,2,2-Tetrac...	1.198	1.356	1.375	1.393	1.260	1.314	1.316	5.70
76)	T	1,2,3-Trichlor...	0.863	1.246	1.153	1.181	1.053	1.084	1.096	12.17
77)	T	Bromobenzene	0.794	0.958	0.955	0.975	0.883	0.936	0.917	7.40
78)	T	n-propylbenzene	3.667	4.115	4.469	4.733	4.286	4.486	4.293	8.63
79)	T	2-Chlorotoluene	2.487	2.766	2.868	2.857	2.581	2.726	2.714	5.62
80)	T	1,3,5-Trimethy...	2.704	3.115	3.352	3.444	3.118	3.238	3.162	8.19
81)	T	trans-1,4-Dich...		0.298	0.374	0.443	0.423	0.471	0.402	16.90
82)	T	4-Chlorotoluene	2.660	3.005	3.187	3.329	3.025	3.180	3.064	7.54
83)	T	tert-Butylbenzene	2.581	3.097	3.266	3.440	3.152	3.269	3.134	9.42
84)	T	1,2,4-Trimethy...	2.557	3.173	3.366	3.440	3.124	3.228	3.148	9.95
85)	T	sec-Butylbenzene	3.116	3.921	3.968	4.249	3.812	3.974	3.840	9.97
86)	T	p-Isopropyltol...	2.255	3.043	3.316	3.521	3.219	3.362	3.119	14.50
87)	T	1,3-Dichlorobe...	1.580	1.656	1.701	1.764	1.623	1.696	1.670	3.88
88)	T	1,4-Dichlorobe...	1.730	1.638	1.706	1.782	1.650	1.710	1.702	3.10
89)	T	n-Butylbenzene	1.897	2.580	2.805	3.184	2.909	3.126	2.750	17.18
90)	T	Hexachloroethane	0.450	0.443	0.496	0.588	0.581	0.625	0.530	14.64
91)	T	1,2-Dichlorobe...	1.506	1.733	1.723	1.768	1.642	1.740	1.685	5.79
92)	T	1,2-Dibromo-3-...	0.213	0.254	0.252	0.284	0.275	0.304	0.264	12.00
93)	T	1,2,4-Trichlor...	0.849	0.905	0.987	1.084	1.012	1.125	0.994	10.53
94)	T	Hexachlorobuta...	0.382	0.384	0.376	0.411	0.384	0.419	0.393	4.54
95)	T	Naphthalene	2.605	3.361	3.698	4.005	3.733	4.058	3.576	15.03
96)	T	1,2,3-Trichlor...	0.753	0.960	1.055	1.118	1.018	1.130	1.006	13.83

(#) = Out of Range



R = 1.533e-002 A*A + 2.616e-001 A - 6.311e-003
Coef of Det (r^2) = 0.999408 Curve Fit: Quadratic
Method Name: Z:\voasrv\HPCHEM1\MSVOA X\Method\82X112124W.M
Calibration Table Last Updated: Fri Nov 22 03:45:52 2024

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043923.D
Acq On : 20 Nov 2024 19:16
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX112124

Manual Integrations APPROVED

Reviewed By :John Carlone 11/21/2024
Supervised By :Mahesh Dadoda 11/22/2024

Quant Time: Nov 21 07:05:02 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112024W.M
Quant Title : SW846 8260
QLast Update : Thu Nov 21 07:00:56 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.550	168	138810	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.757	114	250758	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	211620	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	102312	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.952	65	123698	58.016	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 116.040%			
35) Dibromofluoromethane	5.379	113	92258	54.792	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 109.580%			
50) Toluene-d8	8.647	98	312682	55.587	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 111.180%			
62) 4-Bromofluorobenzene	11.079	95	112440	60.492	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 120.980%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.166	85	87148	62.046	ug/l	98
3) Chloromethane	1.294	50	98071	55.867	ug/l	99
4) Vinyl Chloride	1.374	62	98663	55.940	ug/l	97
5) Bromomethane	1.593	94	55648	69.459	ug/l	100
6) Chloroethane	1.660	64	49530	58.791	ug/l	99
7) Trichlorofluoromethane	1.867	101	174189	69.274	ug/l	100
8) Diethyl Ether	2.136	74	61407	64.776	ug/l	96
9) 1,1,2-Trichlorotrifluo...	2.319	101	78888	53.013	ug/l	98
10) Methyl Iodide	2.441	142	108199	51.664	ug/l	95
11) Tert butyl alcohol	3.001	59	96228	283.818	ug/l	99
12) 1,1-Dichloroethene	2.306	96	77411	53.599	ug/l	87
13) Acrolein	2.239	56	103637	272.556	ug/l	99
14) Allyl chloride	2.654	41	136615	58.343	ug/l	89
15) Acrylonitrile	3.068	53	241080	276.221	ug/l	98
16) Acetone	2.392	43	227575	265.748	ug/l	93
17) Carbon Disulfide	2.502	76	170454	54.052	ug/l	99
18) Methyl Acetate	2.703	43	128026	54.593	ug/l	98
19) Methyl tert-butyl Ether	3.117	73	308920	57.868	ug/l	99
20) Methylene Chloride	2.782	84	92077	51.368	ug/l	95
21) trans-1,2-Dichloroethene	3.087	96	87463	55.548	ug/l	97
22) Diisopropyl ether	3.763	45	296742	58.005	ug/l	96
23) Vinyl Acetate	3.721	43	1303089	314.256	ug/l	98
24) 1,1-Dichloroethane	3.605	63	169925	56.478	ug/l	100
25) 2-Butanone	4.562	43	345310	288.244	ug/l	97
26) 2,2-Dichloropropane	4.465	77	141245	57.127	ug/l	97
27) cis-1,2-Dichloroethene	4.483	96	106274	54.236	ug/l	96
28) Bromochloromethane	4.891	49	68700	54.265	ug/l	94
29) Tetrahydrofuran	5.007	42	220135	284.374	ug/l	97
30) Chloroform	5.086	83	178903	57.044	ug/l	100
31) Cyclohexane	5.458	56	128800	52.818	ug/l	93
32) 1,1,1-Trichloroethane	5.379	97	155630	58.048	ug/l	98
36) 1,1-Dichloropropene	5.684	75	112658	53.685	ug/l	99
37) Ethyl Acetate	4.715	43	139478	59.057	ug/l	97
38) Carbon Tetrachloride	5.666	117	124606	56.086	ug/l	98
39) Methylcyclohexane	7.373	83	138032	52.543	ug/l	97
40) Benzene	6.031	78	349857	53.028	ug/l	99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043923.D
Acq On : 20 Nov 2024 19:16
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Nov 21 07:05:02 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112024W.M
Quant Title : SW846 8260
QLast Update : Thu Nov 21 07:00:56 2024
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
ICVVX112124

Manual Integrations APPROVED

Reviewed By :John Carlone 11/21/2024
Supervised By :Mahesh Dadoda 11/22/2024

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
41) Methacrylonitrile	4.922	41	73757	59.928 ug/l		96
42) 1,2-Dichloroethane	6.080	62	141058	58.882 ug/l		97
43) Isopropyl Acetate	6.342	43	224533	60.266 ug/l		94
44) Trichloroethene	7.123	130	87313	48.004 ug/l		99
45) 1,2-Dichloropropane	7.427	63	87107	53.869 ug/l		100
46) Dibromomethane	7.580	93	69900	57.366 ug/l		95
47) Bromodichloromethane	7.818	83	125370	58.559 ug/l		97
48) Methyl methacrylate	7.696	41	105250	56.995 ug/l	#	88
49) 1,4-Dioxane	7.665	88	45681m	1161.399 ug/l		
51) 4-Methyl-2-Pentanone	8.574	43	689501	296.806 ug/l		95
52) Toluene	8.714	92	217080	57.032 ug/l		99
53) t-1,3-Dichloropropene	8.976	75	128331	59.078 ug/l		99
54) cis-1,3-Dichloropropene	8.360	75	139851	56.813 ug/l	#	91
55) 1,1,2-Trichloroethane	9.153	97	86975	58.565 ug/l		98
56) Ethyl methacrylate	9.116	69	141716	60.268 ug/l	#	89
57) 1,3-Dichloropropane	9.305	76	146448	58.860 ug/l		100
58) 2-Chloroethyl Vinyl ether	8.238	63	346010	280.598 ug/l		98
59) 2-Hexanone	9.433	43	513732	313.432 ug/l		94
60) Dibromochloromethane	9.519	129	90863	62.789 ug/l		99
61) 1,2-Dibromoethane	9.610	107	89087	57.509 ug/l		98
64) Tetrachloroethene	9.269	164	69945	51.529 ug/l		97
65) Chlorobenzene	10.079	112	230498	52.143 ug/l		99
66) 1,1,1,2-Tetrachloroethane	10.159	131	80691	54.848 ug/l		97
67) Ethyl Benzene	10.189	91	404866	54.424 ug/l		98
68) m/p-Xylenes	10.299	106	300638	108.500 ug/l		96
69) o-Xylene	10.640	106	149788	55.404 ug/l		99
70) Styrene	10.652	104	250564	56.236 ug/l		97
71) Bromoform	10.799	173	56733	49.198 ug/l	#	97
73) Isopropylbenzene	10.963	105	387920	53.117 ug/l		99
74) N-amyl acetate	10.841	43	193137	51.587 ug/l		94
75) 1,1,2,2-Tetrachloroethane	11.213	83	134303	54.391 ug/l		99
76) 1,2,3-Trichloropropane	11.238	75	110813m	53.071 ug/l		
77) Bromobenzene	11.195	156	92179	51.501 ug/l		98
78) n-propylbenzene	11.305	91	441866	54.835 ug/l		98
79) 2-Chlorotoluene	11.366	91	277003	54.025 ug/l		99
80) 1,3,5-Trimethylbenzene	11.451	105	322601	53.291 ug/l		100
81) trans-1,4-Dichloro-2-b...	11.018	75	39924	48.469 ug/l		93
82) 4-Chlorotoluene	11.451	91	313937	53.165 ug/l		98
83) tert-Butylbenzene	11.713	119	320262	51.719 ug/l		98
84) 1,2,4-Trimethylbenzene	11.750	105	327564	53.283 ug/l		98
85) sec-Butylbenzene	11.890	105	389571	52.682 ug/l		99
86) p-Isopropyltoluene	12.006	119	325801	52.472 ug/l		98
87) 1,3-Dichlorobenzene	11.969	146	168646	50.841 ug/l		99
88) 1,4-Dichlorobenzene	12.042	146	167075	49.126 ug/l		98
89) n-Butylbenzene	12.329	91	283194	53.527 ug/l		98
90) Hexachloroethane	12.536	117	55605	46.087 ug/l		95
91) 1,2-Dichlorobenzene	12.335	146	169920	48.926 ug/l		99
92) 1,2-Dibromo-3-Chloropr...	12.939	75	27323	45.200 ug/l		97
93) 1,2,4-Trichlorobenzene	13.585	180	98885	48.719 ug/l		97
94) Hexachlorobutadiene	13.725	225	39642	47.658 ug/l		98
95) Naphthalene	13.774	128	381936	50.468 ug/l		99
96) 1,2,3-Trichlorobenzene	13.963	180	104145	49.248 ug/l		99

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043923.D
Acq On : 20 Nov 2024 19:16
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX112124

Manual Integrations APPROVED

Reviewed By :John Carlone 11/21/2024
Supervised By :Mahesh Dadoda 11/22/2024

Quant Time: Nov 21 07:05:02 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112024W.M
Quant Title : SW846 8260
QLast Update : Thu Nov 21 07:00:56 2024
Response via : Initial Calibration

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

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

ICAL Form

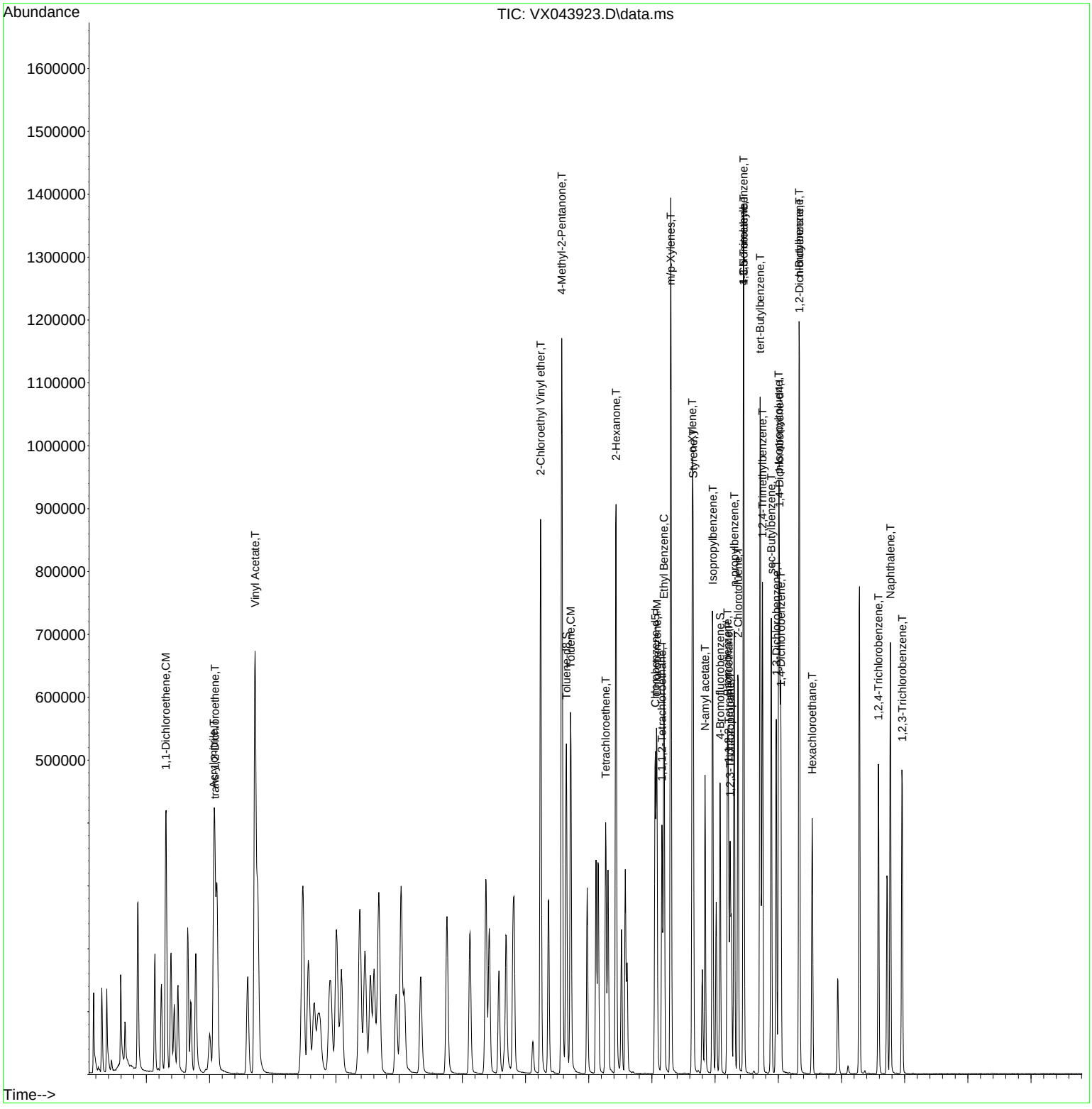
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043923.D
Acq On : 20 Nov 2024 19:16
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Nov 21 07:05:02 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112024W.M
Quant Title : SW846 8260
QLast Update : Thu Nov 21 07:00:56 2024
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
ICVVX112124

Manual Integrations APPROVED

Reviewed By :John Carlone 11/21/2024
Supervised By :Mahesh Dadoda 11/22/2024



Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043923.D
Acq On : 20 Nov 2024 19:16
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX112124

Quant Time: Nov 21 07:05:02 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112024W.M
Quant Title : SW846 8260
QLast Update : Thu Nov 21 07:00:56 2024
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	78	0.00
2	T	Dichlorodifluoromethane	0.611	0.628	-2.8	89	0.00
3	P	Chloromethane	0.660	0.707	-7.1	84	0.00
4	C	Vinyl Chloride	0.680	0.711	-4.6#	94	0.00
5	T	Bromomethane	0.408	0.401	1.7	102	0.00
6	T	Chloroethane	0.401	0.357	11.0	102	0.00
7	T	Trichlorofluoromethane	1.197	1.255	-4.8	105	0.00
8	T	Diethyl Ether	0.440	0.442	-0.5	101	0.00
9	T	1,1,2-Trichlorotrifluoroeth	0.584	0.568	2.7	83	0.00
10	T	Methyl Iodide	0.749	0.779	-4.0	78	0.00
11	T	Tert butyl alcohol	0.138	0.139	-0.7	93	0.00
12	CM	1,1-Dichloroethene	0.566	0.558	1.4#	80	0.00
13	T	Acrolein	0.145	0.149	-2.8	81	0.00
14	T	Allyl chloride	0.921	0.984	-6.8	83	0.00
15	T	Acrylonitrile	0.328	0.347	-5.8	83	0.00
16	T	Acetone	0.373	0.328	12.1	85	0.00
17	T	Carbon Disulfide	1.163	1.228	-5.6	84	0.00
18	T	Methyl Acetate	0.892	0.922	-3.4	86	0.00
19	T	Methyl tert-butyl Ether	2.047	2.225	-8.7	87	0.00
20	T	Methylene Chloride	0.662	0.663	-0.2	82	0.00
21	T	trans-1,2-Dichloroethene	0.586	0.630	-7.5	84	0.00
22	T	Diisopropyl ether	1.969	2.138	-8.6	87	0.00
23	T	Vinyl Acetate	1.666	1.878	-12.7	91	0.00
24	P	1,1-Dichloroethane	1.137	1.224	-7.7	86	0.00
25	T	2-Butanone	0.489	0.498	-1.8	86	0.00
26	T	2,2-Dichloropropane	1.009	1.018	-0.9	87	0.00
27	T	cis-1,2-Dichloroethene	0.723	0.766	-5.9	83	0.00
28	T	Bromochloromethane	0.512	0.495	3.3	84	0.00
29	T	Tetrahydrofuran	0.303	0.317	-4.6	86	0.00
30	C	Chloroform	1.221	1.289	-5.6#	87	0.00
31	T	Cyclohexane	0.922	0.928	-0.7	83	0.00
32	T	1,1,1-Trichloroethane	1.047	1.121	-7.1	87	0.00
33	S	1,2-Dichloroethane-d4	0.864	0.891	-3.1	89	0.00
34	I	1,4-Difluorobenzene	1.000	1.000	0.0	76	0.00
35	S	Dibromofluoromethane	0.360	0.368	-2.2	82	0.00
36	T	1,1-Dichloropropene	0.431	0.449	-4.2	84	0.00
37	T	Ethyl Acetate	0.514	0.556	-8.2	90	0.00
38	T	Carbon Tetrachloride	0.480	0.497	-3.5	87	0.00
39	T	Methylcyclohexane	0.555	0.550	0.9	81	0.00
40	TM	Benzene	1.360	1.395	-2.6	80	0.00
41	T	Methacrylonitrile	0.274	0.294	-7.3	87	0.00
42	TM	1,2-Dichloroethane	0.536	0.563	-5.0	90	0.00
43	T	Isopropyl Acetate	0.840	0.895	-6.5	92	0.00
44	TM	Trichloroethene	0.385	0.348	9.6	82	0.00
45	C	1,2-Dichloropropane	0.331	0.347	-4.8#	82	0.00
46	T	Dibromomethane	0.260	0.279	-7.3	87	0.00
47	T	Bromodichloromethane	0.467	0.500	-7.1	84	0.00
48	T	Methyl methacrylate	0.388	0.420	-8.2	89	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043923.D
Acq On : 20 Nov 2024 19:16
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX112124

Quant Time: Nov 21 07:05:02 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112024W.M
Quant Title : SW846 8260
QLast Update : Thu Nov 21 07:00:56 2024
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	T	1,4-Dioxane	0.006	0.009	-50.0#	120	0.00
50	S	Toluene-d8	1.247	1.247	0.0	80	0.00
51	T	4-Methyl-2-Pentanone	0.515	0.550	-6.8	88	0.00
52	CM	Toluene	0.812	0.866	-6.7#	81	0.00
53	T	t-1,3-Dichloropropene	0.475	0.512	-7.8	83	0.00
54	T	cis-1,3-Dichloropropene	0.521	0.558	-7.1	84	0.00
55	T	1,1,2-Trichloroethane	0.335	0.347	-3.6	82	0.00
56	T	Ethyl methacrylate	0.519	0.565	-8.9	82	0.00
57	T	1,3-Dichloropropane	0.564	0.584	-3.5	81	0.00
58	T	2-Chloroethyl Vinyl ether	0.265	0.276	-4.2	82	0.00
59	T	2-Hexanone	0.384	0.410	-6.8	88	0.00
60	T	Dibromochloromethane	0.333	0.362	-8.7	84	0.00
61	T	1,2-Dibromoethane	0.337	0.355	-5.3	82	0.00
62	S	4-Bromofluorobenzene	0.426	0.448	-5.2	81	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	77	0.00
64	T	Tetrachloroethene	0.325	0.331	-1.8	79	0.00
65	PM	Chlorobenzene	1.085	1.089	-0.4	78	0.00
66	T	1,1,1,2-Tetrachloroethane	0.350	0.381	-8.9	81	0.00
67	C	Ethyl Benzene	1.828	1.913	-4.6#	80	0.00
68	T	m/p-Xylenes	0.682	0.710	-4.1	78	0.00
69	T	o-Xylene	0.665	0.708	-6.5	79	0.00
70	T	Styrene	1.104	1.184	-7.2	78	0.00
71	P	Bromoform	0.234	0.268	-14.5	83	0.00
72	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	77	0.00
73	T	Isopropylbenzene	3.765	3.792	-0.7	81	0.00
74	T	N-amyl acetate	1.717	1.888	-10.0	90	0.00
75	P	1,1,2,2-Tetrachloroethane	1.289	1.313	-1.9	82	0.00
76	T	1,2,3-Trichloropropane	1.069	1.083	-1.3	82	0.00
77	T	Bromobenzene	0.902	0.901	0.1	78	0.00
78	T	n-propylbenzene	4.192	4.319	-3.0	81	0.00
79	T	2-Chlorotoluene	2.665	2.707	-1.6	81	0.00
80	T	1,3,5-Trimethylbenzene	3.096	3.153	-1.8	80	0.00
81	T	trans-1,4-Dichloro-2-butene	0.388	0.390	-0.5	80	0.00
82	T	4-Chlorotoluene	3.000	3.068	-2.3	80	0.00
83	T	tert-Butylbenzene	3.073	3.130	-1.9	78	0.00
84	T	1,2,4-Trimethylbenzene	3.094	3.202	-3.5	79	0.00
85	T	sec-Butylbenzene	3.750	3.808	-1.5	79	0.00
86	T	p-Isopropyltoluene	3.057	3.184	-4.2	78	0.00
87	T	1,3-Dichlorobenzene	1.647	1.648	-0.1	78	0.00
88	T	1,4-Dichlorobenzene	1.648	1.633	0.9	78	0.00
89	T	n-Butylbenzene	2.657	2.768	-4.2	81	0.00
90	T	Hexachloroethane	0.515	0.543	-5.4	85	0.00
91	T	1,2-Dichlorobenzene	1.665	1.661	0.2	78	0.00
92	T	1,2-Dibromo-3-Chloropropane	0.258	0.267	-3.5	83	0.00
93	T	1,2,4-Trichlorobenzene	0.976	0.967	0.9	76	0.00
94	T	Hexachlorobutadiene	0.386	0.387	-0.3	80	0.00
95	T	Naphthalene	3.532	3.733	-5.7	77	0.00

Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043923.D
Acq On : 20 Nov 2024 19:16
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX112124

Quant Time: Nov 21 07:05:02 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112024W.M
Quant Title : SW846 8260
QLast Update : Thu Nov 21 07:00:56 2024
Response via : Initial Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	0.991	1.018	-2.7	76	0.00

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

Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043923.D
Acq On : 20 Nov 2024 19:16
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX112124

Quant Time: Nov 21 07:05:02 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112024W.M
Quant Title : SW846 8260
QLast Update : Thu Nov 21 07:00:56 2024
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	78	0.00
2	T	Dichlorodifluoromethane	50.000	62.046	-24.1	89	0.00
3	P	Chloromethane	50.000	55.867	-11.7	84	0.00
4	C	Vinyl Chloride	50.000	55.940	-11.9#	94	0.00
5	T	Bromomethane	50.000	69.459	-38.9#	102	0.00
6	T	Chloroethane	50.000	58.791	-17.6	102	0.00
7	T	Trichlorofluoromethane	50.000	69.274	-38.5#	105	0.00
8	T	Diethyl Ether	50.000	64.776	-29.6#	101	0.00
9	T	1,1,2-Trichlorotrifluoroeth	50.000	53.013	-6.0	83	0.00
10	T	Methyl Iodide	50.000	51.664	-3.3	78	0.00
11	T	Tert butyl alcohol	250.000	283.818	-13.5	93	0.00
12	CM	1,1-Dichloroethene	50.000	53.599	-7.2#	80	0.00
13	T	Acrolein	250.000	272.556	-9.0	81	0.00
14	T	Allyl chloride	50.000	58.343	-16.7	83	0.00
15	T	Acrylonitrile	250.000	276.221	-10.5	83	0.00
16	T	Acetone	250.000	265.748	-6.3	85	0.00
17	T	Carbon Disulfide	50.000	54.052	-8.1	84	0.00
18	T	Methyl Acetate	50.000	54.593	-9.2	86	0.00
19	T	Methyl tert-butyl Ether	50.000	57.868	-15.7	87	0.00
20	T	Methylene Chloride	50.000	51.368	-2.7	82	0.00
21	T	trans-1,2-Dichloroethene	50.000	55.548	-11.1	84	0.00
22	T	Diisopropyl ether	50.000	58.005	-16.0	87	0.00
23	T	Vinyl Acetate	250.000	314.256	-25.7#	91	0.00
24	P	1,1-Dichloroethane	50.000	56.478	-13.0	86	0.00
25	T	2-Butanone	250.000	288.244	-15.3	86	0.00
26	T	2,2-Dichloropropane	50.000	57.127	-14.3	87	0.00
27	T	cis-1,2-Dichloroethene	50.000	54.236	-8.5	83	0.00
28	T	Bromochloromethane	50.000	54.265	-8.5	84	0.00
29	T	Tetrahydrofuran	250.000	284.374	-13.7	86	0.00
30	C	Chloroform	50.000	57.044	-14.1#	87	0.00
31	T	Cyclohexane	50.000	52.818	-5.6	83	0.00
32	T	1,1,1-Trichloroethane	50.000	58.048	-16.1	87	0.00
33	S	1,2-Dichloroethane-d4	50.000	58.016	-16.0	89	0.00
34	I	1,4-Difluorobenzene	50.000	50.000	0.0	76	0.00
35	S	Dibromofluoromethane	50.000	54.792	-9.6	82	0.00
36	T	1,1-Dichloropropene	50.000	53.685	-7.4	84	0.00
37	T	Ethyl Acetate	50.000	59.057	-18.1	90	0.00
38	T	Carbon Tetrachloride	50.000	56.086	-12.2	87	0.00
39	T	Methylcyclohexane	50.000	52.543	-5.1	81	0.00
40	TM	Benzene	50.000	53.028	-6.1	80	0.00
41	T	Methacrylonitrile	50.000	59.928	-19.9	87	0.00
42	TM	1,2-Dichloroethane	50.000	58.882	-17.8	90	0.00
43	T	Isopropyl Acetate	50.000	60.266	-20.5	92	0.00
44	TM	Trichloroethene	50.000	48.004	4.0	82	0.00
45	C	1,2-Dichloropropane	50.000	53.869	-7.7#	82	0.00
46	T	Dibromomethane	50.000	57.366	-14.7	87	0.00
47	T	Bromodichloromethane	50.000	58.559	-17.1	84	0.00
48	T	Methyl methacrylate	50.000	56.995	-14.0	89	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043923.D
Acq On : 20 Nov 2024 19:16
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX112124

Quant Time: Nov 21 07:05:02 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112024W.M
Quant Title : SW846 8260
QLast Update : Thu Nov 21 07:00:56 2024
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	1161.399	-16.1	120	0.00
50	S	Toluene-d8	50.000	55.587	-11.2	80	0.00
51	T	4-Methyl-2-Pentanone	250.000	296.806	-18.7	88	0.00
52	CM	Toluene	50.000	57.032	-14.1#	81	0.00
53	T	t-1,3-Dichloropropene	50.000	59.078	-18.2	83	0.00
54	T	cis-1,3-Dichloropropene	50.000	56.813	-13.6	84	0.00
55	T	1,1,2-Trichloroethane	50.000	58.565	-17.1	82	0.00
56	T	Ethyl methacrylate	50.000	60.268	-20.5	82	0.00
57	T	1,3-Dichloropropane	50.000	58.860	-17.7	81	0.00
58	T	2-Chloroethyl Vinyl ether	250.000	280.598	-12.2	82	0.00
59	T	2-Hexanone	250.000	313.432	-25.4#	88	0.00
60	T	Dibromochloromethane	50.000	62.789	-25.6#	84	0.00
61	T	1,2-Dibromoethane	50.000	57.509	-15.0	82	0.00
62	S	4-Bromofluorobenzene	50.000	60.492	-21.0	81	0.00
63	I	Chlorobenzene-d5	50.000	50.000	0.0	77	0.00
64	T	Tetrachloroethene	50.000	51.529	-3.1	79	0.00
65	PM	Chlorobenzene	50.000	52.143	-4.3	78	0.00
66	T	1,1,1,2-Tetrachloroethane	50.000	54.848	-9.7	81	0.00
67	C	Ethyl Benzene	50.000	54.424	-8.8#	80	0.00
68	T	m/p-Xylenes	100.000	108.500	-8.5	78	0.00
69	T	o-Xylene	50.000	55.404	-10.8	79	0.00
70	T	Styrene	50.000	56.236	-12.5	78	0.00
71	P	Bromoform	50.000	49.198	1.6	83	0.00
72	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	77	0.00
73	T	Isopropylbenzene	50.000	53.117	-6.2	81	0.00
74	T	N-amyl acetate	50.000	51.587	-3.2	90	0.00
75	P	1,1,2,2-Tetrachloroethane	50.000	54.391	-8.8	82	0.00
76	T	1,2,3-Trichloropropane	50.000	53.071	-6.1	82	0.00
77	T	Bromobenzene	50.000	51.501	-3.0	78	0.00
78	T	n-propylbenzene	50.000	54.835	-9.7	81	0.00
79	T	2-Chlorotoluene	50.000	54.025	-8.0	81	0.00
80	T	1,3,5-Trimethylbenzene	50.000	53.291	-6.6	80	0.00
81	T	trans-1,4-Dichloro-2-butene	50.000	48.469	3.1	80	0.00
82	T	4-Chlorotoluene	50.000	53.165	-6.3	80	0.00
83	T	tert-Butylbenzene	50.000	51.719	-3.4	78	0.00
84	T	1,2,4-Trimethylbenzene	50.000	53.283	-6.6	79	0.00
85	T	sec-Butylbenzene	50.000	52.682	-5.4	79	0.00
86	T	p-Isopropyltoluene	50.000	52.472	-4.9	78	0.00
87	T	1,3-Dichlorobenzene	50.000	50.841	-1.7	78	0.00
88	T	1,4-Dichlorobenzene	50.000	49.126	1.7	78	0.00
89	T	n-Butylbenzene	50.000	53.527	-7.1	81	0.00
90	T	Hexachloroethane	50.000	46.087	7.8	85	0.00
91	T	1,2-Dichlorobenzene	50.000	48.926	2.1	78	0.00
92	T	1,2-Dibromo-3-Chloropropane	50.000	45.200	9.6	83	0.00
93	T	1,2,4-Trichlorobenzene	50.000	48.719	2.6	76	0.00
94	T	Hexachlorobutadiene	50.000	47.658	4.7	80	0.00
95	T	Naphthalene	50.000	50.468	-0.9	77	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043923.D
Acq On : 20 Nov 2024 19:16
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX112124

Quant Time: Nov 21 07:05:02 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112024W.M
Quant Title : SW846 8260
QLast Update : Thu Nov 21 07:00:56 2024
Response via : Initial Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	50.000	49.248	1.5	76	0.00

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

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043925.D
Acq On : 21 Nov 2024 09:47
Operator : JC/MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :John Carlone 11/22/2024
Supervised By :Mahesh Dadoda 11/22/2024

Quant Time: Nov 22 03:27:42 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:25:42 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.544	168	148984	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.751	114	260569	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.049	117	218244	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.024	152	92854	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	0.000	65	0d	0.000	ug/l	
Spiked Amount 50.000	Range 74 - 125		Recovery =	0.000%#		
35) Dibromofluoromethane	0.000	113	0d	0.000	ug/l	
Spiked Amount 50.000	Range 75 - 124		Recovery =	0.000%#		
50) Toluene-d8	0.000	98	0d	0.000	ug/l	
Spiked Amount 50.000	Range 86 - 113		Recovery =	0.000%#		
62) 4-Bromofluorobenzene	0.000	95	0d	0.000	ug/l	
Spiked Amount 50.000	Range 77 - 121		Recovery =	0.000%#		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.167	85	1889	1.001	ug/l	88
3) Chloromethane	1.295	50	1723	0.868	ug/l	90
4) Vinyl Chloride	1.374	62	2010	0.951	ug/l #	81
6) Chloroethane	1.666	64	1724	1.339	ug/l #	82
7) Trichlorofluoromethane	1.874	101	3093	0.819	ug/l	92
8) Diethyl Ether	2.136	74	1421	1.032	ug/l	75
9) 1,1,2-Trichlorotrifluo...	2.313	101	1764	0.979	ug/l	94
12) 1,1-Dichloroethene	2.300	96	1775	1.034	ug/l #	62
14) Allyl chloride	2.654	41	2371	0.845	ug/l	87
15) Acrylonitrile	3.063	53	4483	4.485	ug/l	95
16) Acetone	2.386	43	5977	5.093	ug/l #	86
17) Carbon Disulfide	2.502	76	3223	0.910	ug/l	99
18) Methyl Acetate	2.703	43	2775	1.015	ug/l	97
19) Methyl tert-butyl Ether	3.105	73	5162	0.828	ug/l	94
20) Methylene Chloride	2.782	84	2099	1.054	ug/l #	73
21) trans-1,2-Dichloroethene	3.081	96	1624	0.916	ug/l	97
22) Diisopropyl ether	3.751	45	4882	0.814	ug/l #	30
23) Vinyl Acetate	3.727	43	18541	3.613	ug/l	98
24) 1,1-Dichloroethane	3.593	63	2919	0.844	ug/l #	94
25) 2-Butanone	4.581	43	6676	4.408	ug/l	92
26) 2,2-Dichloropropane	4.459	77	2687	0.860	ug/l	86
27) cis-1,2-Dichloroethene	4.495	96	2007	0.916	ug/l	89
28) Bromochloromethane	4.904	49	1494m	0.981	ug/l	
29) Tetrahydrofuran	5.013	42	4264	4.593	ug/l	95
30) Chloroform	5.093	83	3187	0.856	ug/l #	76
32) 1,1,1-Trichloroethane	5.373	97	2600	0.810	ug/l #	46
36) 1,1-Dichloropropene	5.690	75	1993	0.859	ug/l #	80
37) Ethyl Acetate	4.733	43	2692m	0.935	ug/l	
38) Carbon Tetrachloride	5.660	117	2287	0.877	ug/l #	78
39) Methylcyclohexane	7.379	83	2835	0.941	ug/l	90
40) Benzene	6.032	78	6312	0.873	ug/l #	84
41) Methacrylonitrile	4.934	41	1141m	0.774	ug/l	
42) 1,2-Dichloroethane	6.086	62	2602	0.896	ug/l	84
43) Isopropyl Acetate	6.355	43	3881	0.847	ug/l #	90
44) Trichloroethene	7.123	130	2850	1.393	ug/l	82
45) 1,2-Dichloropropane	7.428	63	1503	0.849	ug/l	100

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043925.D
Acq On : 21 Nov 2024 09:47
Operator : JC/MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :John Carlone 11/22/2024
Supervised By :Mahesh Dadoda 11/22/2024

Quant Time: Nov 22 03:27:42 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:25:42 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) Dibromomethane	7.580	93	1246	0.890	ug/l		94
47) Bromodichloromethane	7.824	83	1819	0.724	ug/l	#	93
48) Methyl methacrylate	7.702	41	2017m	0.917	ug/l		
49) 1,4-Dioxane	7.671	88	613	16.166	ug/l	#	50
51) 4-Methyl-2-Pentanone	8.574	43	11392	4.073	ug/l		96
52) Toluene	8.714	92	3313	0.766	ug/l		82
53) t-1,3-Dichloropropene	8.988	75	1776	0.694	ug/l	#	86
54) cis-1,3-Dichloropropene	8.366	75	2132	0.759	ug/l	#	84
55) 1,1,2-Trichloroethane	9.153	97	1496	0.838	ug/l	#	85
56) Ethyl methacrylate	9.122	69	1973	0.709	ug/l	#	82
57) 1,3-Dichloropropane	9.305	76	2502	0.832	ug/l		98
58) 2-Chloroethyl Vinyl ether	8.245	63	4135	2.662	ug/l		93
59) 2-Hexanone	9.439	43	7726	3.675	ug/l		99
60) Dibromochloromethane	9.519	129	1296	0.723	ug/l		93
61) 1,2-Dibromoethane	9.610	107	1342	0.743	ug/l	#	80
64) Tetrachloroethene	9.269	164	1329	0.924	ug/l		88
65) Chlorobenzene	10.073	112	4585	0.957	ug/l	#	86
66) 1,1,1,2-Tetrachloroethane	10.165	131	1136	0.731	ug/l	#	66
67) Ethyl Benzene	10.195	91	6890	0.848	ug/l	#	86
68) m/p-Xylenes	10.305	106	5324	1.758	ug/l		95
69) o-Xylene	10.640	106	2370	0.801	ug/l		95
70) Styrene	10.665	104	3751	0.767	ug/l		97
71) Bromoform	10.799	173	632	1.756	ug/l	#	87
73) Isopropylbenzene	10.964	105	6379	0.894	ug/l		94
74) N-amyl acetate	10.848	43	2319	0.701	ug/l		93
75) 1,1,2,2-Tetrachloroethane	11.214	83	2224	0.910	ug/l		83
76) 1,2,3-Trichloropropane	11.244	75	1603m	0.801	ug/l		
77) Bromobenzene	11.201	156	1475	0.866	ug/l		94
78) n-propylbenzene	11.305	91	6810	0.854	ug/l		95
79) 2-Chlorotoluene	11.366	91	4618	0.916	ug/l		92
80) 1,3,5-Trimethylbenzene	11.451	105	5022	0.855	ug/l		96
82) 4-Chlorotoluene	11.457	91	4940	0.868	ug/l		94
83) tert-Butylbenzene	11.713	119	4794	0.824	ug/l		96
84) 1,2,4-Trimethylbenzene	11.750	105	4748	0.812	ug/l		99
85) sec-Butylbenzene	11.890	105	5787	0.812	ug/l		94
86) p-Isopropyltoluene	12.012	119	4187	0.723	ug/l		87
87) 1,3-Dichlorobenzene	11.969	146	2934	0.946	ug/l		93
88) 1,4-Dichlorobenzene	12.043	146	3212m	1.020	ug/l		
89) n-Butylbenzene	12.335	91	3522	0.690	ug/l		93
90) Hexachloroethane	12.536	117	835	0.848	ug/l		86
91) 1,2-Dichlorobenzene	12.335	146	2796	0.893	ug/l		96
92) 1,2-Dibromo-3-Chloropr...	12.957	75	395	0.807	ug/l		65
93) 1,2,4-Trichlorobenzene	13.597	180	1576	0.854	ug/l		78
94) Hexachlorobutadiene	13.725	225	709	0.972	ug/l		89
95) Naphthalene	13.780	128	4837	0.728	ug/l		99
96) 1,2,3-Trichlorobenzene	13.963	180	1398	0.749	ug/l		81

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

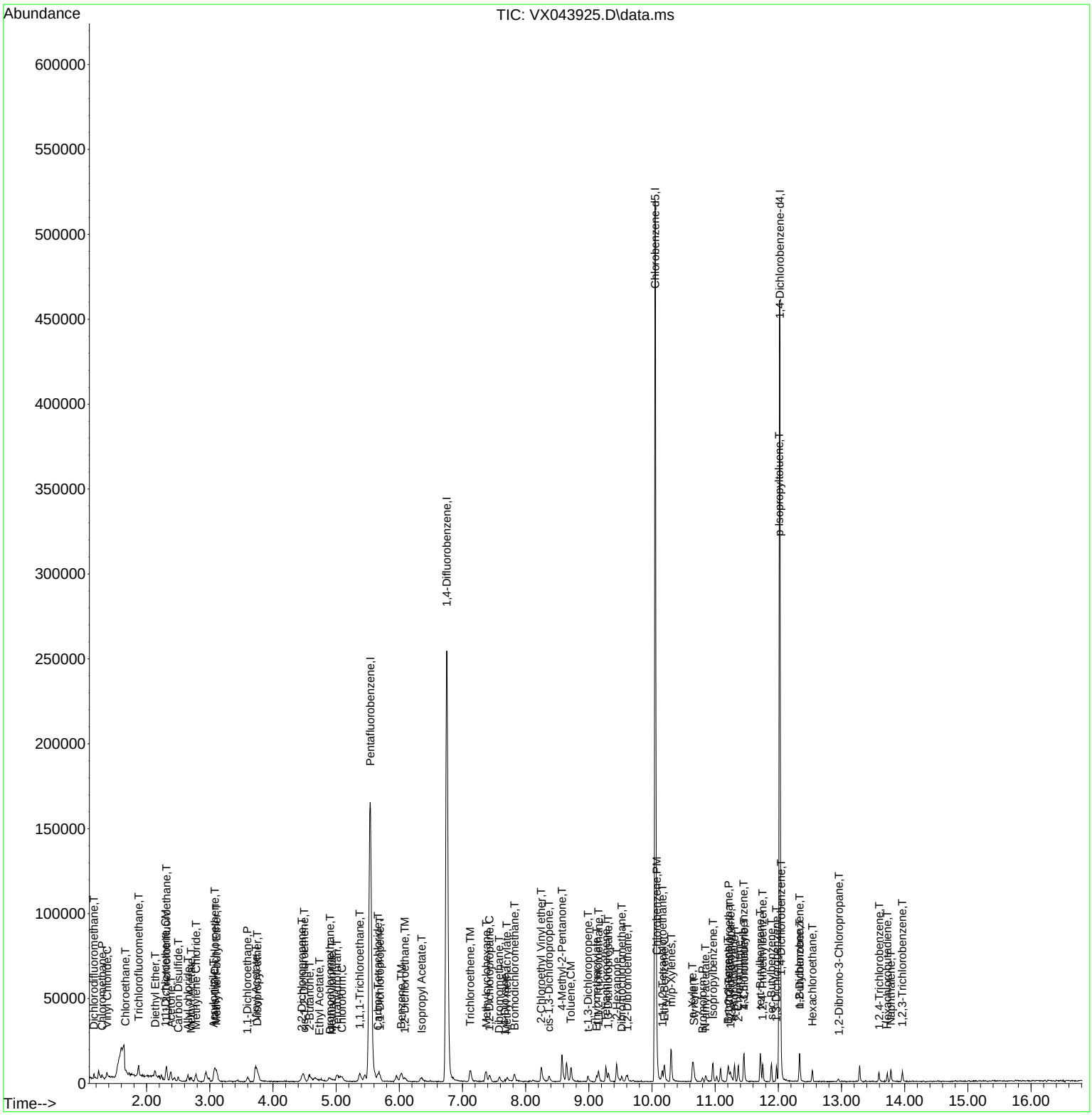
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043925.D
Acq On : 21 Nov 2024 09:47
Operator : JC/MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Nov 22 03:27:42 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:25:42 2024
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :John Carlone 11/22/2024
Supervised By :Mahesh Dadoda 11/22/2024



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043926.D
Acq On : 21 Nov 2024 10:14
Operator : JC/MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 13 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :John Carlone 11/22/2024
Supervised By :Mahesh Dadoda 11/22/2024

Quant Time: Nov 22 03:28:43 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:25:42 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.543	168	150793	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.757	114	264969	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	223514	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.024	152	96662	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.952	65	13961	5.398	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery =	10.800%#		
35) Dibromofluoromethane	5.379	113	9842	5.198	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	10.400%#		
50) Toluene-d8	8.646	98	35173	5.389	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery =	10.780%#		
62) 4-Bromofluorobenzene	11.079	95	10618	4.780	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery =	9.560%#		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.166	85	9545	4.997	ug/l	87
3) Chloromethane	1.294	50	9980	4.965	ug/l	98
4) Vinyl Chloride	1.373	62	10682	4.996	ug/l	100
5) Bromomethane	1.593	94	6415	4.877	ug/l	90
6) Chloroethane	1.666	64	6474	4.969	ug/l	99
7) Trichlorofluoromethane	1.867	101	19099	4.996	ug/l	91
8) Diethyl Ether	2.129	74	6480	4.651	ug/l	88
9) 1,1,2-Trichlorotrifluo...	2.318	101	8824	4.839	ug/l	98
10) Methyl Iodide	2.440	142	9897	4.346	ug/l	98
11) Tert butyl alcohol	2.995	59	9278m	22.349	ug/l	
12) 1,1-Dichloroethene	2.306	96	7987	4.597	ug/l	87
13) Acrolein	2.239	56	11940	27.287	ug/l	97
14) Allyl chloride	2.654	41	12874	4.534	ug/l	96
15) Acrylonitrile	3.062	53	24290	24.010	ug/l	99
16) Acetone	2.385	43	29886	25.159	ug/l	95
17) Carbon Disulfide	2.495	76	14415	4.022	ug/l #	94
18) Methyl Acetate	2.702	43	13127	4.745	ug/l	97
19) Methyl tert-butyl Ether	3.117	73	30022	4.759	ug/l #	88
20) Methylene Chloride	2.782	84	9895	4.909	ug/l	95
21) trans-1,2-Dichloroethene	3.080	96	8486	4.730	ug/l #	80
22) Diisopropyl ether	3.757	45	29102	4.794	ug/l #	65
23) Vinyl Acetate	3.721	43	116242	22.382	ug/l	100
24) 1,1-Dichloroethane	3.599	63	16857	4.813	ug/l	98
25) 2-Butanone	4.568	43	36680	23.931	ug/l	96
26) 2,2-Dichloropropane	4.458	77	15040	4.755	ug/l #	76
27) cis-1,2-Dichloroethene	4.477	96	10153	4.579	ug/l	96
28) Bromochloromethane	4.891	49	9210	5.974	ug/l	100
29) Tetrahydrofuran	5.007	42	23518	25.028	ug/l	96
30) Chloroform	5.086	83	18661	4.954	ug/l	97
31) Cyclohexane	5.458	56	13740	4.767	ug/l #	85
32) 1,1,1-Trichloroethane	5.379	97	15162	4.667	ug/l	96
36) 1,1-Dichloropropene	5.690	75	11406	4.834	ug/l	97
37) Ethyl Acetate	4.720	43	14551m	4.968	ug/l	
38) Carbon Tetrachloride	5.665	117	12348	4.658	ug/l	97
39) Methylcyclohexane	7.372	83	14721	4.803	ug/l	95
40) Benzene	6.031	78	36283	4.937	ug/l	94

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043926.D
Acq On : 21 Nov 2024 10:14
Operator : JC/MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Nov 22 03:28:43 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:25:42 2024
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :John Carlone 11/22/2024
Supervised By :Mahesh Dadoda 11/22/2024

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	4.928	41	7355	4.907	ug/l	#	95
42) 1,2-Dichloroethane	6.080	62	14467	4.901	ug/l		99
43) Isopropyl Acetate	6.348	43	22267	4.777	ug/l		99
44) Trichloroethene	7.128	130	9852	4.736	ug/l		92
45) 1,2-Dichloropropane	7.427	63	8525	4.736	ug/l		91
46) Dibromomethane	7.586	93	6372	4.475	ug/l		93
47) Bromodichloromethane	7.823	83	11249	4.405	ug/l		96
48) Methyl methacrylate	7.695	41	10190	4.556	ug/l		95
49) 1,4-Dioxane	7.677	88	4090m	106.070	ug/l		
51) 4-Methyl-2-Pentanone	8.573	43	69843	24.556	ug/l		97
52) Toluene	8.714	92	22218	5.051	ug/l		96
53) t-1,3-Dichloropropene	8.982	75	10937	4.200	ug/l		94
54) cis-1,3-Dichloropropene	8.366	75	12253	4.292	ug/l		94
55) 1,1,2-Trichloroethane	9.152	97	9000	4.957	ug/l		94
56) Ethyl methacrylate	9.116	69	12381	4.378	ug/l		96
57) 1,3-Dichloropropane	9.311	76	15211	4.973	ug/l		98
58) 2-Chloroethyl Vinyl ether	8.238	63	43351	27.673	ug/l		100
59) 2-Hexanone	9.433	43	52072	24.357	ug/l		100
60) Dibromochloromethane	9.518	129	7738	4.247	ug/l		99
61) 1,2-Dibromoethane	9.610	107	8985	4.894	ug/l		98
64) Tetrachloroethene	9.274	164	7642	5.185	ug/l		93
65) Chlorobenzene	10.079	112	24792	5.050	ug/l		98
66) 1,1,1,2-Tetrachloroethane	10.158	131	7421	4.661	ug/l		96
67) Ethyl Benzene	10.195	91	40927	4.920	ug/l		95
68) m/p-Xylenes	10.305	106	29635	9.553	ug/l		99
69) o-Xylene	10.640	106	14856	4.905	ug/l		98
70) Styrene	10.658	104	22907	4.573	ug/l		97
71) Bromoform	10.799	173	4476	5.004	ug/l	#	99
73) Isopropylbenzene	10.957	105	37958	5.109	ug/l		99
74) N-amyl acetate	10.841	43	15928	4.627	ug/l		97
75) 1,1,2,2-Tetrachloroethane	11.213	83	13107	5.152	ug/l		100
76) 1,2,3-Trichloropropane	11.237	75	12040m	5.776	ug/l		
77) Bromobenzene	11.195	156	9259	5.224	ug/l		97
78) n-propylbenzene	11.305	91	39774	4.793	ug/l		98
79) 2-Chlorotoluene	11.366	91	26740	5.096	ug/l		99
80) 1,3,5-Trimethylbenzene	11.451	105	30114	4.926	ug/l		97
81) trans-1,4-Dichloro-2-b...	11.018	75	2880	3.707	ug/l	#	77
82) 4-Chlorotoluene	11.451	91	29049	4.903	ug/l		96
83) tert-Butylbenzene	11.713	119	29934	4.940	ug/l		97
84) 1,2,4-Trimethylbenzene	11.750	105	30674	5.040	ug/l		97
85) sec-Butylbenzene	11.890	105	37899	5.105	ug/l		96
86) p-Isopropyltoluene	12.006	119	29412	4.878	ug/l		98
87) 1,3-Dichlorobenzene	11.969	146	16008	4.959	ug/l		99
88) 1,4-Dichlorobenzene	12.036	146	15837	4.831	ug/l		89
89) n-Butylbenzene	12.335	91	24938	4.691	ug/l		99
90) Hexachloroethane	12.536	117	4279	4.173	ug/l		99
91) 1,2-Dichlorobenzene	12.335	146	16747	5.140	ug/l		98
92) 1,2-Dibromo-3-Chloropr...	12.945	75	2454	4.814	ug/l		85
93) 1,2,4-Trichlorobenzene	13.591	180	8746	4.553	ug/l		98
94) Hexachlorobutadiene	13.725	225	3713	4.891	ug/l		97
95) Naphthalene	13.774	128	32485	4.698	ug/l		99
96) 1,2,3-Trichlorobenzene	13.963	180	9280	4.773	ug/l		96

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043926.D
Acq On : 21 Nov 2024 10:14
Operator : JC/MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 13 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :John Carlone 11/22/2024
Supervised By :Mahesh Dadoda 11/22/2024

Quant Time: Nov 22 03:28:43 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:25:42 2024
Response via : Initial Calibration

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

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

ICAL Form

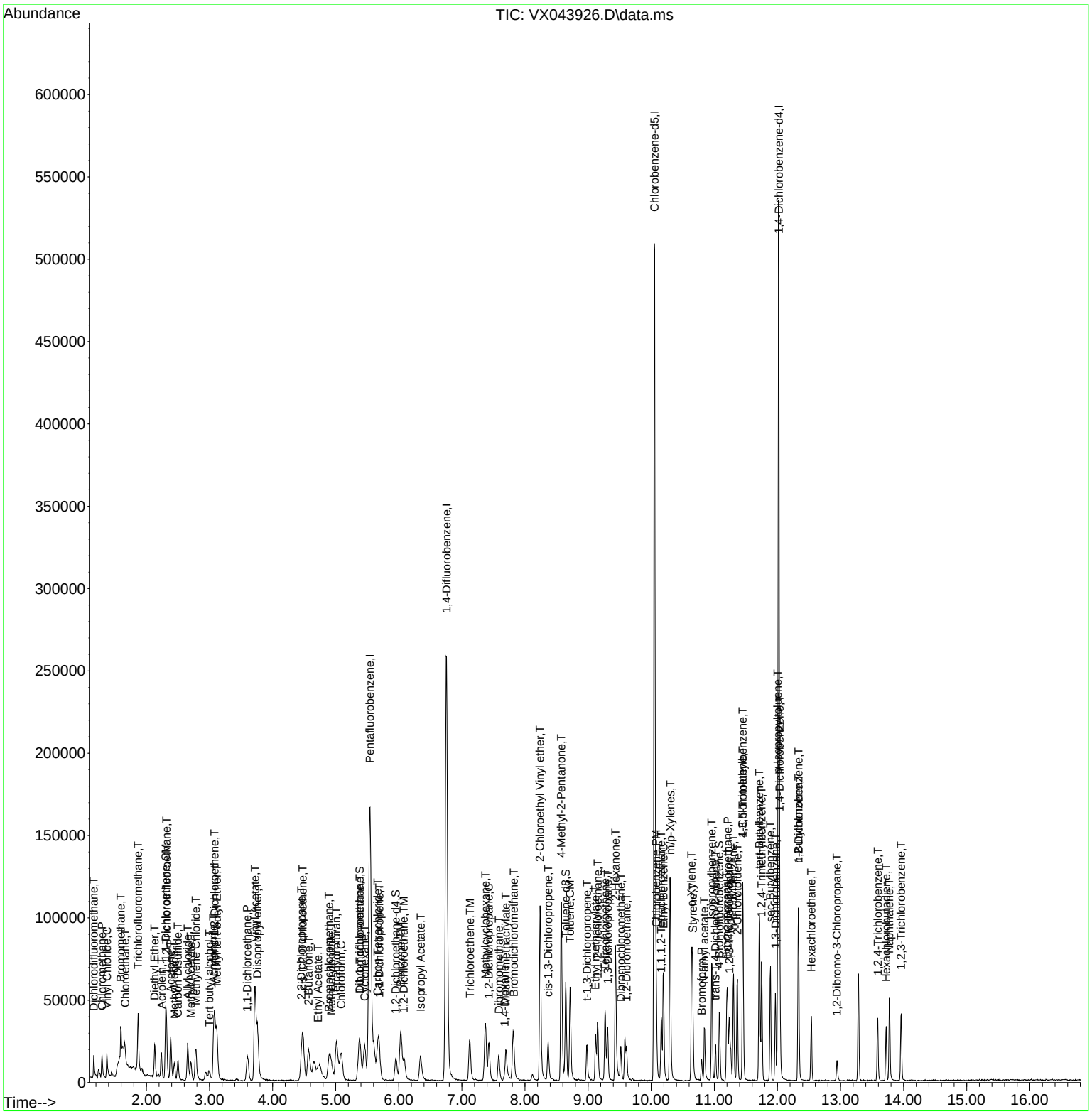
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043926.D
Acq On : 21 Nov 2024 10:14
Operator : JC/MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Nov 22 03:28:43 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:25:42 2024
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :John Carlone 11/22/2024
Supervised By :Mahesh Dadoda 11/22/2024



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043927.D
Acq On : 21 Nov 2024 10:37
Operator : JC/MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 14 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :John Carlone 11/22/2024
Supervised By :Mahesh Dadoda 11/22/2024

Quant Time: Nov 21 11:27:10 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112024W.M
Quant Title : SW846 8260
QLast Update : Thu Nov 21 11:25:29 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.550	168	137617	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.757	114	247844	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	217871	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.024	152	98477	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.952	65	48239	22.821	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery =	45.640%#		
35) Dibromofluoromethane	5.385	113	35015	21.040	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	42.080%#		
50) Toluene-d8	8.647	98	122646	22.060	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery =	44.120%#		
62) 4-Bromofluorobenzene	11.079	95	41087	22.365	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery =	44.720%#		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.167	85	35268	25.327	ug/l	98
3) Chloromethane	1.295	50	39622	22.767	ug/l	93
4) Vinyl Chloride	1.374	62	40173	22.975	ug/l	95
5) Bromomethane	1.593	94	24112	30.357	ug/l	98
6) Chloroethane	1.666	64	22213	26.595	ug/l	97
7) Trichlorofluoromethane	1.868	101	73464	29.469	ug/l	99
8) Diethyl Ether	2.136	74	25875	27.531	ug/l	99
9) 1,1,2-Trichlorotrifluo...	2.319	101	33284	22.561	ug/l	96
10) Methyl Iodide	2.441	142	43047	20.733	ug/l	94
11) Tert butyl alcohol	3.002	59	36554	108.748	ug/l	100
12) 1,1-Dichloroethene	2.307	96	32180	22.474	ug/l	96
13) Acrolein	2.240	56	35249	93.505	ug/l	99
14) Allyl chloride	2.660	41	53053	22.853	ug/l #	88
15) Acrylonitrile	3.069	53	94417	109.118	ug/l	99
16) Acetone	2.386	43	110373	130.004	ug/l	89
17) Carbon Disulfide	2.502	76	59349	18.983	ug/l	98
18) Methyl Acetate	2.709	43	50136	21.564	ug/l	99
19) Methyl tert-butyl Ether	3.117	73	121776	23.009	ug/l	100
20) Methylene Chloride	2.788	84	37633	21.177	ug/l	97
21) trans-1,2-Dichloroethene	3.087	96	33545	21.489	ug/l	100
22) Diisopropyl ether	3.764	45	119475	23.557	ug/l	91
23) Vinyl Acetate	3.721	43	504408	122.699	ug/l	98
24) 1,1-Dichloroethane	3.599	63	67233	22.540	ug/l	99
25) 2-Butanone	4.568	43	148152	124.741	ug/l	97
26) 2,2-Dichloropropane	4.471	77	58444	23.843	ug/l	96
27) cis-1,2-Dichloroethene	4.483	96	41866	21.551	ug/l	94
28) Bromochloromethane	4.891	49	26507	21.119	ug/l	90
29) Tetrahydrofuran	5.013	42	87736	114.321	ug/l	98
30) Chloroform	5.087	83	72049	23.172	ug/l	97
31) Cyclohexane	5.458	56	53731	22.225	ug/l	97
32) 1,1,1-Trichloroethane	5.379	97	62394	23.474	ug/l	98
36) 1,1-Dichloropropene	5.684	75	44465	21.438	ug/l	99
37) Ethyl Acetate	4.715	43	54426	23.316	ug/l	97
38) Carbon Tetrachloride	5.672	117	48701	22.179	ug/l	99
39) Methylcyclohexane	7.379	83	55958	21.551	ug/l	99
40) Benzene	6.025	78	144401	22.144	ug/l	100

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043927.D
Acq On : 21 Nov 2024 10:37
Operator : JC/MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 14 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :John Carlone 11/22/2024
Supervised By :Mahesh Dadoda 11/22/2024

Quant Time: Nov 21 11:27:10 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112024W.M
Quant Title : SW846 8260
QLast Update : Thu Nov 21 11:25:29 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
41) Methacrylonitrile	4.922	41	28938	23.789 ug/l		95
42) 1,2-Dichloroethane	6.086	62	57981	24.487 ug/l		98
43) Isopropyl Acetate	6.349	43	88577	24.054 ug/l		94
44) Trichloroethene	7.117	130	36440	20.270 ug/l		95
45) 1,2-Dichloropropane	7.428	63	35791	22.394 ug/l		97
46) Dibromomethane	7.580	93	27799	23.082 ug/l		96
47) Bromodichloromethane	7.818	83	49665	23.471 ug/l	#	94
48) Methyl methacrylate	7.690	41	41962	22.991 ug/l	#	87
49) 1,4-Dioxane	7.665	88	12071	310.503 ug/l	#	62
51) 4-Methyl-2-Pentanone	8.574	43	278479	121.285 ug/l		95
52) Toluene	8.714	92	87569	23.277 ug/l		99
53) t-1,3-Dichloropropene	8.976	75	50294	23.425 ug/l		99
54) cis-1,3-Dichloropropene	8.366	75	56407	23.184 ug/l	#	91
55) 1,1,2-Trichloroethane	9.153	97	37148	25.308 ug/l		96
56) Ethyl methacrylate	9.116	69	56585	24.347 ug/l	#	88
57) 1,3-Dichloropropane	9.305	76	61420	24.976 ug/l		99
58) 2-Chloroethyl Vinyl ether	8.238	63	136842	112.277 ug/l		96
59) 2-Hexanone	9.433	43	213629	131.869 ug/l		93
60) Dibromochloromethane	9.519	129	34133	23.864 ug/l		100
61) 1,2-Dibromoethane	9.610	107	36985	24.156 ug/l		99
64) Tetrachloroethene	9.269	164	29274	20.948 ug/l		98
65) Chlorobenzene	10.080	112	96469	21.197 ug/l		97
66) 1,1,1,2-Tetrachloroethane	10.159	131	32353	21.360 ug/l		98
67) Ethyl Benzene	10.189	91	166435	21.731 ug/l		98
68) m/p-Xylenes	10.299	106	122658	42.997 ug/l		95
69) o-Xylene	10.640	106	60254	21.648 ug/l		94
70) Styrene	10.653	104	102329	22.308 ug/l		97
71) Bromoform	10.799	173	19329	19.555 ug/l	#	97
73) Isopropylbenzene	10.964	105	157405	22.393 ug/l		99
74) N-amyl acetate	10.842	43	73525	23.459 ug/l		93
75) 1,1,2,2-Tetrachloroethane	11.213	83	54158	22.787 ug/l		99
76) 1,2,3-Trichloropropane	11.238	75	45423m	22.601 ug/l		
77) Bromobenzene	11.195	156	37631	21.843 ug/l		97
78) n-propylbenzene	11.305	91	176034	22.696 ug/l		98
79) 2-Chlorotoluene	11.360	91	112986	22.894 ug/l		99
80) 1,3,5-Trimethylbenzene	11.451	105	132041	22.662 ug/l		97
81) trans-1,4-Dichloro-2-b...	11.018	75	14743	20.654 ug/l		88
82) 4-Chlorotoluene	11.451	91	125521	22.085 ug/l		99
83) tert-Butylbenzene	11.713	119	128636	21.582 ug/l		97
84) 1,2,4-Trimethylbenzene	11.750	105	132595	22.408 ug/l		99
85) sec-Butylbenzene	11.890	105	156312	21.962 ug/l		98
86) p-Isopropyltoluene	12.006	119	130605	21.854 ug/l		98
87) 1,3-Dichlorobenzene	11.969	146	67003	20.986 ug/l		99
88) 1,4-Dichlorobenzene	12.043	146	67195	20.527 ug/l		98
89) n-Butylbenzene	12.329	91	110491	21.698 ug/l		98
90) Hexachloroethane	12.536	117	19547	19.432 ug/l		95
91) 1,2-Dichlorobenzene	12.335	146	67852	20.298 ug/l		98
92) 1,2-Dibromo-3-Chloropr...	12.945	75	9939	20.259 ug/l		93
93) 1,2,4-Trichlorobenzene	13.591	180	38866	19.894 ug/l		100
94) Hexachlorobutadiene	13.725	225	14818	18.508 ug/l		91
95) Naphthalene	13.774	128	145678	19.999 ug/l		99
96) 1,2,3-Trichlorobenzene	13.963	180	41554	20.415 ug/l		97

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043927.D
Acq On : 21 Nov 2024 10:37
Operator : JC/MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 14 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :John Carlone 11/22/2024
Supervised By :Mahesh Dadoda 11/22/2024

Quant Time: Nov 21 11:27:10 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112024W.M
Quant Title : SW846 8260
QLast Update : Thu Nov 21 11:25:29 2024
Response via : Initial Calibration

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

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

ICAL Form

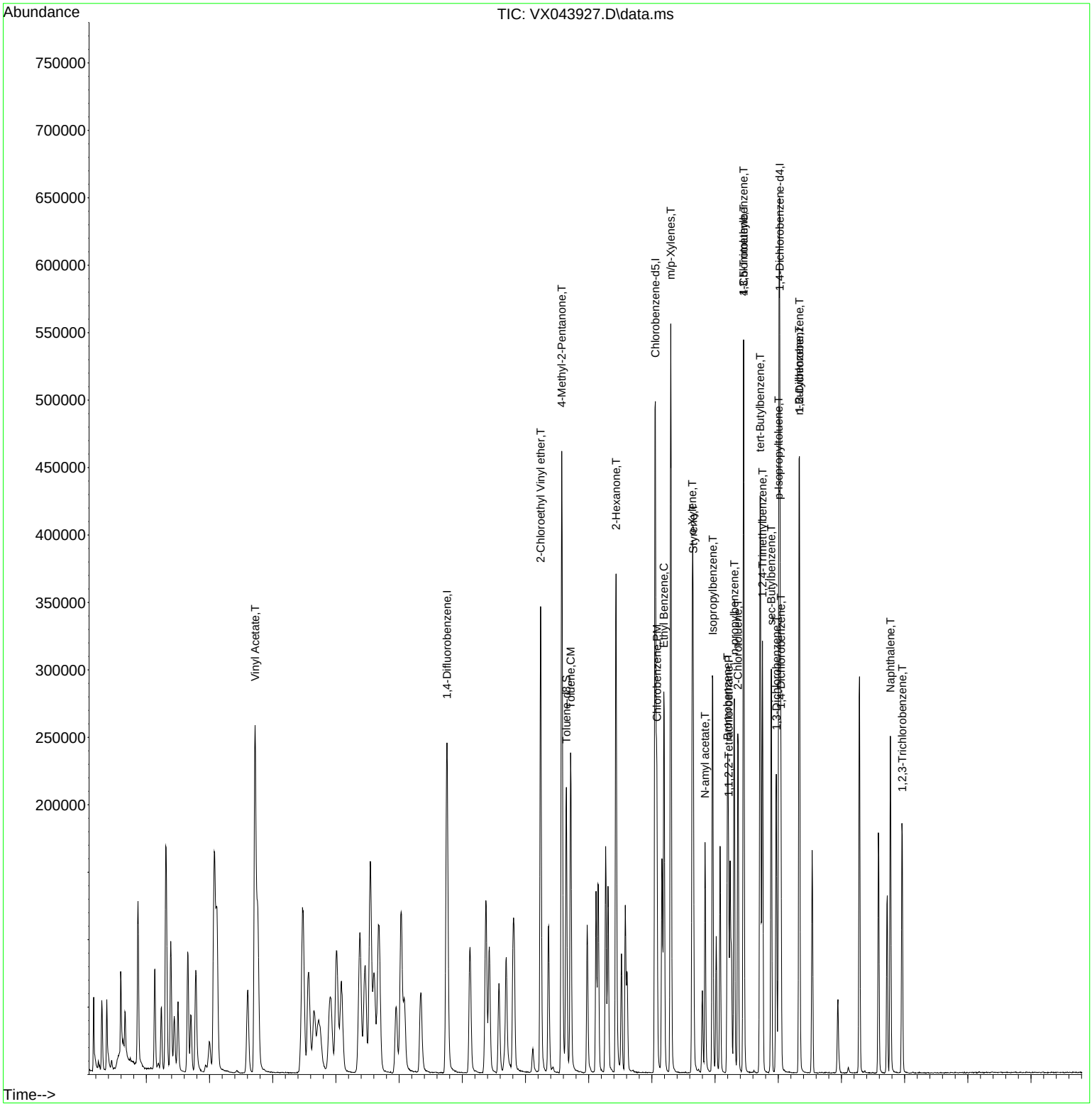
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043927.D
Acq On : 21 Nov 2024 10:37
Operator : JC/MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Nov 21 11:27:10 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112024W.M
Quant Title : SW846 8260
QLast Update : Thu Nov 21 11:25:29 2024
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :John Carlone 11/22/2024
Supervised By :Mahesh Dadoda 11/22/2024



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043928.D
Acq On : 21 Nov 2024 11:17
Operator : JC/MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 15 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 11/22/2024
Supervised By :Mahesh Dadoda 11/22/2024

Quant Time: Nov 21 12:14:30 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112024W.M
Quant Title : SW846 8260
QLast Update : Thu Nov 21 11:25:29 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.538	168	138578	50.000	ug/l	-0.01
34) 1,4-Difluorobenzene	6.757	114	241629	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.049	117	212243	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.024	152	100316	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.946	65	104086	48.899	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 97.800%			
35) Dibromofluoromethane	5.379	113	78954	48.663	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 97.320%			
50) Toluene-d8	8.641	98	266650	49.194	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 98.380%			
62) 4-Bromofluorobenzene	11.079	95	93510	52.209	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 104.420%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.167	85	94790	67.600	ug/l	98
3) Chloromethane	1.295	50	96646	55.148	ug/l	100
4) Vinyl Chloride	1.374	62	105586	59.966	ug/l	100
5) Bromomethane	1.593	94	61728	77.177	ug/l	97
6) Chloroethane	1.660	64	63580	75.594	ug/l	98
7) Trichlorofluoromethane	1.868	101	188045	74.909	ug/l	100
8) Diethyl Ether	2.130	74	65665	69.383	ug/l	96
9) 1,1,2-Trichlorotrifluo...	2.313	101	91167	61.367	ug/l	97
10) Methyl Iodide	2.441	142	112083	53.608	ug/l	95
11) Tert butyl alcohol	2.995	59	100130	295.821	ug/l	99
12) 1,1-Dichloroethene	2.307	96	83087	57.625	ug/l	92
13) Acrolein	2.233	56	100647	265.136	ug/l	97
14) Allyl chloride	2.654	41	144663	61.883	ug/l	91
15) Acrylonitrile	3.063	53	256493	294.373	ug/l	98
16) Acetone	2.380	43	294611	344.605	ug/l	93
17) Carbon Disulfide	2.502	76	178294	56.633	ug/l	99
18) Methyl Acetate	2.703	43	136735	58.404	ug/l	97
19) Methyl tert-butyl Ether	3.111	73	313754	58.872	ug/l	98
20) Methylene Chloride	2.782	84	92475	51.676	ug/l	94
21) trans-1,2-Dichloroethene	3.081	96	87752	55.825	ug/l	95
22) Diisopropyl ether	3.758	45	299631	58.668	ug/l	94
23) Vinyl Acetate	3.715	43	1344870	324.875	ug/l	97
24) 1,1-Dichloroethane	3.599	63	174008	57.932	ug/l	99
25) 2-Butanone	4.556	43	392575	328.247	ug/l	97
26) 2,2-Dichloropropane	4.465	77	158151	64.072	ug/l	96
27) cis-1,2-Dichloroethene	4.477	96	109742	56.100	ug/l	94
28) Bromochloromethane	4.885	49	62386	49.360	ug/l	88
29) Tetrahydrofuran	5.001	42	234208	303.060	ug/l	97
30) Chloroform	5.080	83	182404	58.257	ug/l	94
31) Cyclohexane	5.458	56	144224	59.242	ug/l	95
32) 1,1,1-Trichloroethane	5.373	97	164023	61.280	ug/l	98
36) 1,1-Dichloropropene	5.678	75	119269	58.983	ug/l	99
37) Ethyl Acetate	4.709	43	147393	64.767	ug/l	98
38) Carbon Tetrachloride	5.666	117	134725	62.932	ug/l	97
39) Methylcyclohexane	7.373	83	158586	62.647	ug/l	95
40) Benzene	6.025	78	360978	56.780	ug/l	98

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043928.D
Acq On : 21 Nov 2024 11:17
Operator : JC/MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Nov 21 12:14:30 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112024W.M
Quant Title : SW846 8260
QLast Update : Thu Nov 21 11:25:29 2024
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 11/22/2024
Supervised By :Mahesh Dadoda 11/22/2024

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	4.916	41	79507	67.041	ug/l		96
42) 1,2-Dichloroethane	6.074	62	145681	63.109	ug/l		97
43) Isopropyl Acetate	6.336	43	235856	65.697	ug/l		94
44) Trichloroethene	7.117	130	90015	51.360	ug/l		91
45) 1,2-Dichloropropane	7.422	63	89529	57.459	ug/l		98
46) Dibromomethane	7.574	93	70679	60.196	ug/l		96
47) Bromodichloromethane	7.818	83	131365	63.678	ug/l		97
48) Methyl methacrylate	7.690	41	112803	63.393	ug/l	#	88
49) 1,4-Dioxane	7.659	88	33402	881.301	ug/l	#	73
51) 4-Methyl-2-Pentanone	8.574	43	732582	327.265	ug/l		95
52) Toluene	8.714	92	222500	60.664	ug/l		97
53) t-1,3-Dichloropropene	8.976	75	137451	65.667	ug/l		98
54) cis-1,3-Dichloropropene	8.360	75	147638	62.243	ug/l		92
55) 1,1,2-Trichloroethane	9.147	97	89441	62.501	ug/l		97
56) Ethyl methacrylate	9.116	69	148281	65.443	ug/l	#	88
57) 1,3-Dichloropropane	9.305	76	151124	63.034	ug/l		100
58) 2-Chloroethyl Vinyl ether	8.238	63	371281	312.467	ug/l		98
59) 2-Hexanone	9.427	43	568460	359.925	ug/l		93
60) Dibromochloromethane	9.519	129	95641	68.588	ug/l		99
61) 1,2-Dibromoethane	9.604	107	92940	62.263	ug/l		99
64) Tetrachloroethene	9.269	164	74157	54.472	ug/l		99
65) Chlorobenzene	10.080	112	243080	54.828	ug/l		98
66) 1,1,1,2-Tetrachloroethane	10.159	131	83934	56.885	ug/l		98
67) Ethyl Benzene	10.189	91	429559	57.573	ug/l		97
68) m/p-Xylenes	10.299	106	323661	116.466	ug/l		96
69) o-Xylene	10.640	106	160643	59.245	ug/l		99
70) Styrene	10.653	104	268004	59.974	ug/l		98
71) Bromoform	10.799	173	60267	62.587	ug/l	#	98
73) Isopropylbenzene	10.957	105	411000	57.397	ug/l		99
74) N-amyl acetate	10.842	43	200195	62.704	ug/l		94
75) 1,1,2,2-Tetrachloroethane	11.214	83	139756	57.726	ug/l		100
76) 1,2,3-Trichloropropane	11.238	75	118450m	57.858	ug/l		
77) Bromobenzene	11.195	156	97761	55.706	ug/l		97
78) n-propylbenzene	11.299	91	474802	60.094	ug/l		100
79) 2-Chlorotoluene	11.360	91	286649	57.018	ug/l		100
80) 1,3,5-Trimethylbenzene	11.451	105	345531	58.215	ug/l		98
81) trans-1,4-Dichloro-2-b...	11.018	75	44450	61.129	ug/l		96
82) 4-Chlorotoluene	11.451	91	333946	57.679	ug/l		100
83) tert-Butylbenzene	11.713	119	345112	56.841	ug/l		97
84) 1,2,4-Trimethylbenzene	11.750	105	345112	57.254	ug/l		99
85) sec-Butylbenzene	11.890	105	426284	58.794	ug/l		99
86) p-Isopropyltoluene	12.006	119	353256	58.026	ug/l		99
87) 1,3-Dichlorobenzene	11.969	146	176936	54.401	ug/l		99
88) 1,4-Dichlorobenzene	12.037	146	178728	53.598	ug/l		98
89) n-Butylbenzene	12.329	91	319448	61.581	ug/l		99
90) Hexachloroethane	12.536	117	59010	57.586	ug/l		96
91) 1,2-Dichlorobenzene	12.335	146	177334	52.077	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	12.939	75	28467	56.961	ug/l		94
93) 1,2,4-Trichlorobenzene	13.585	180	108749	54.645	ug/l		98
94) Hexachlorobutadiene	13.725	225	41267	50.599	ug/l		95
95) Naphthalene	13.774	128	401752	54.142	ug/l		100
96) 1,2,3-Trichlorobenzene	13.963	180	112162	54.094	ug/l		96

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043928.D
Acq On : 21 Nov 2024 11:17
Operator : JC/MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 15 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 11/22/2024
Supervised By :Mahesh Dadoda 11/22/2024

Quant Time: Nov 21 12:14:30 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112024W.M
Quant Title : SW846 8260
QLast Update : Thu Nov 21 11:25:29 2024
Response via : Initial Calibration

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

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

ICAL Form

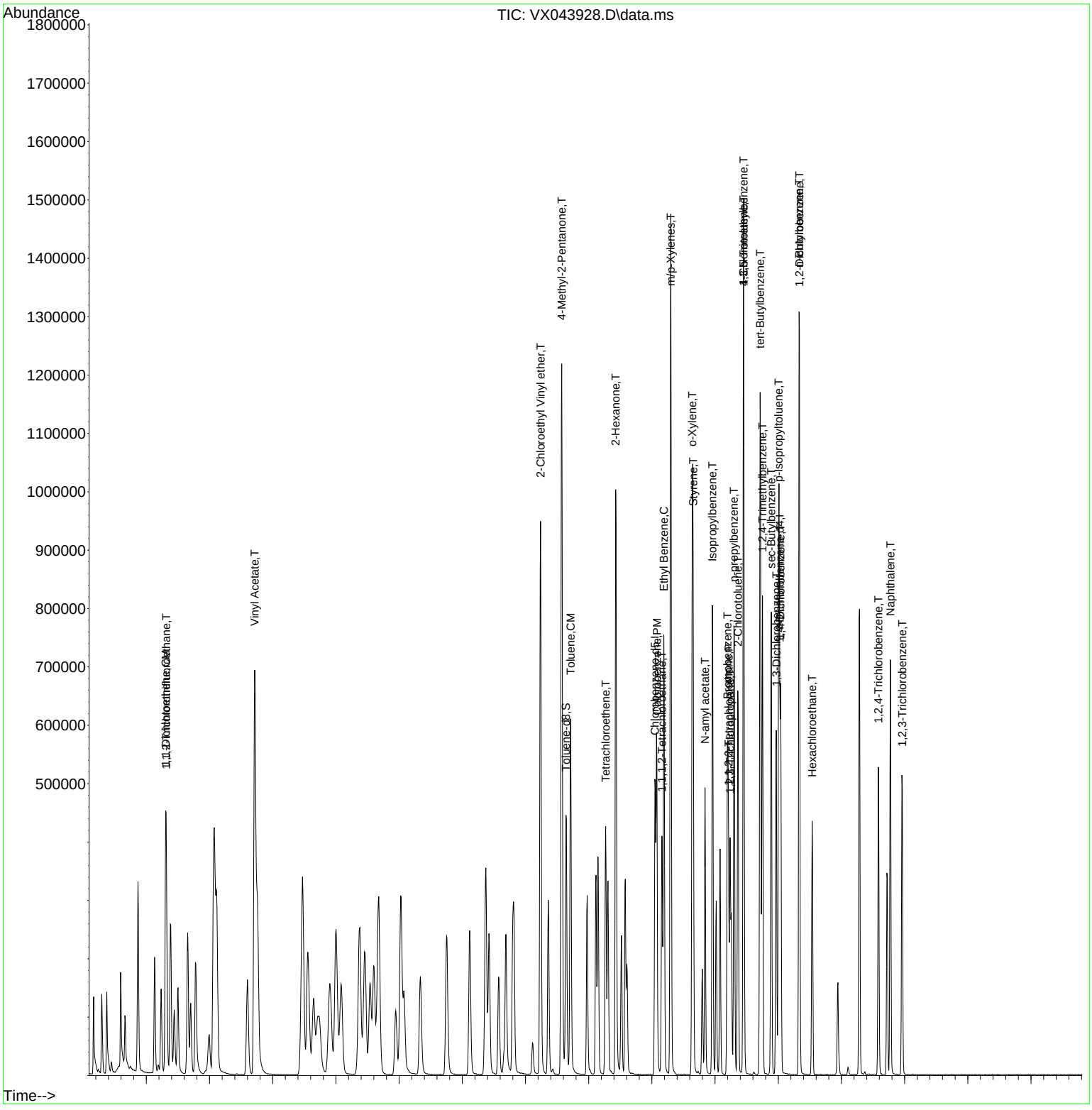
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043928.D
Acq On : 21 Nov 2024 11:17
Operator : JC/MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Nov 21 12:14:30 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112024W.M
Quant Title : SW846 8260
QLast Update : Thu Nov 21 11:25:29 2024
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 11/22/2024
Supervised By :Mahesh Dadoda 11/22/2024



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043929.D
Acq On : 21 Nov 2024 11:40
Operator : JC/MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 16 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :John Carlone 11/22/2024
Supervised By :Mahesh Dadoda 11/22/2024

Quant Time: Nov 21 12:15:02 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112024W.M
Quant Title : SW846 8260
QLast Update : Thu Nov 21 11:25:29 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.544	168	138314	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.757	114	246419	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	215595	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	104048	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.946	65	236531	111.333	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 222.660%#			
35) Dibromofluoromethane	5.379	113	176869	106.893	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 213.780%#			
50) Toluene-d8	8.647	98	607337	109.870	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 219.740%#			
62) 4-Bromofluorobenzene	11.079	95	215953	118.228	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 236.460%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.167	85	166145	118.713	ug/l	97
3) Chloromethane	1.295	50	183899	105.136	ug/l	100
4) Vinyl Chloride	1.374	62	192221	109.377	ug/l	98
5) Bromomethane	1.593	94	118792	148.807	ug/l	99
6) Chloroethane	1.660	64	101816	121.286	ug/l	98
7) Trichlorofluoromethane	1.868	101	354375	141.438	ug/l	100
8) Diethyl Ether	2.136	74	125840	133.219	ug/l	96
9) 1,1,2-Trichlorotrifluo...	2.319	101	162988	109.922	ug/l	96
10) Methyl Iodide	2.441	142	213858	102.481	ug/l	96
11) Tert butyl alcohol	3.002	59	184757	546.882	ug/l	100
12) 1,1-Dichloroethene	2.307	96	158111	109.868	ug/l	89
13) Acrolein	2.240	56	200929	530.320	ug/l	99
14) Allyl chloride	2.654	41	276068	118.320	ug/l	90
15) Acrylonitrile	3.069	53	458624	527.361	ug/l	97
16) Acetone	2.386	43	511112	598.985	ug/l	92
17) Carbon Disulfide	2.502	76	367958	117.100	ug/l	99
18) Methyl Acetate	2.703	43	247225	105.800	ug/l	96
19) Methyl tert-butyl Ether	3.117	73	597600	112.347	ug/l	99
20) Methylene Chloride	2.782	84	178008	99.663	ug/l	96
21) trans-1,2-Dichloroethene	3.087	96	165989	105.798	ug/l	98
22) Diisopropyl ether	3.764	45	572855	112.380	ug/l	97
23) Vinyl Acetate	3.721	43	2570419	622.111	ug/l	97
24) 1,1-Dichloroethane	3.605	63	327756	109.327	ug/l	99
25) 2-Butanone	4.562	43	690992	578.867	ug/l	98
26) 2,2-Dichloropropane	4.471	77	299254	121.468	ug/l	97
27) cis-1,2-Dichloroethene	4.483	96	206207	105.613	ug/l	94
28) Bromochloromethane	4.898	49	138227	109.575	ug/l	91
29) Tetrahydrofuran	5.007	42	419337	543.649	ug/l	97
30) Chloroform	5.087	83	350923	112.294	ug/l	97
31) Cyclohexane	5.458	56	256114	105.404	ug/l	97
32) 1,1,1-Trichloroethane	5.373	97	309469	115.841	ug/l	98
36) 1,1-Dichloropropene	5.684	75	222573	107.931	ug/l	99
37) Ethyl Acetate	4.715	43	265631	114.453	ug/l	97
38) Carbon Tetrachloride	5.672	117	256290	117.390	ug/l	97
39) Methylcyclohexane	7.373	83	283075	109.652	ug/l	98
40) Benzene	6.032	78	684139	105.520	ug/l	98

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043929.D
Acq On : 21 Nov 2024 11:40
Operator : JC/MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Nov 21 12:15:02 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112024W.M
Quant Title : SW846 8260
QLast Update : Thu Nov 21 11:25:29 2024
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :John Carlone 11/22/2024
Supervised By :Mahesh Dadoda 11/22/2024

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
41) Methacrylonitrile	4.922	41	143256	118.447 ug/l	94
42) 1,2-Dichloroethane	6.080	62	271641	115.387 ug/l	98
43) Isopropyl Acetate	6.342	43	440615	120.346 ug/l	94
44) Trichloroethene	7.123	130	169796	94.997 ug/l	98
45) 1,2-Dichloropropane	7.428	63	170741	107.450 ug/l	99
46) Dibromomethane	7.574	93	135928	113.518 ug/l	96
47) Bromodichloromethane	7.818	83	260442	123.792 ug/l	97
48) Methyl methacrylate	7.690	41	210614	116.061 ug/l	88
49) 1,4-Dioxane	7.665	88	62845	1625.913 ug/l #	72
51) 4-Methyl-2-Pentanone	8.574	43	1329064	582.189 ug/l	95
52) Toluene	8.714	92	418999	112.018 ug/l	99
53) t-1,3-Dichloropropene	8.976	75	270418	126.680 ug/l	99
54) cis-1,3-Dichloropropene	8.360	75	285627	118.077 ug/l #	89
55) 1,1,2-Trichloroethane	9.147	97	167357	114.675 ug/l	97
56) Ethyl methacrylate	9.116	69	286893	124.157 ug/l #	90
57) 1,3-Dichloropropane	9.305	76	285511	116.773 ug/l	99
58) 2-Chloroethyl Vinyl ether	8.238	63	698756	576.637 ug/l	98
59) 2-Hexanone	9.433	43	1011261	627.842 ug/l	95
60) Dibromochloromethane	9.519	129	187476	131.832 ug/l	99
61) 1,2-Dibromoethane	9.610	107	176345	115.841 ug/l	99
64) Tetrachloroethene	9.269	164	135740	98.157 ug/l	97
65) Chlorobenzene	10.080	112	461076	102.382 ug/l	100
66) 1,1,1,2-Tetrachloroethane	10.159	131	164586	109.812 ug/l	97
67) Ethyl Benzene	10.189	91	812289	107.178 ug/l	98
68) m/p-Xylenes	10.299	106	603451	213.769 ug/l	96
69) o-Xylene	10.640	106	298739	108.462 ug/l	98
70) Styrene	10.653	104	511251	112.628 ug/l	98
71) Bromoform	10.799	173	123114	125.866 ug/l #	98
73) Isopropylbenzene	10.957	105	765623	103.086 ug/l	99
74) N-amyl acetate	10.842	43	394438	119.112 ug/l	94
75) 1,1,2,2-Tetrachloroethane	11.213	83	262302	104.456 ug/l	99
76) 1,2,3-Trichloropropane	11.238	75	219028m	103.148 ug/l	
77) Bromobenzene	11.195	156	183742	100.944 ug/l	98
78) n-propylbenzene	11.305	91	891893	108.835 ug/l	99
79) 2-Chlorotoluene	11.360	91	537190	103.022 ug/l	100
80) 1,3,5-Trimethylbenzene	11.451	105	648916	105.408 ug/l	99
81) trans-1,4-Dichloro-2-b...	11.018	75	88041	116.733 ug/l	97
82) 4-Chlorotoluene	11.451	91	629590	104.841 ug/l	100
83) tert-Butylbenzene	11.713	119	655918	104.157 ug/l	99
84) 1,2,4-Trimethylbenzene	11.750	105	650156	103.992 ug/l	100
85) sec-Butylbenzene	11.890	105	793233	105.481 ug/l	100
86) p-Isopropyltoluene	12.006	119	669819	106.078 ug/l	99
87) 1,3-Dichlorobenzene	11.969	146	337665	100.095 ug/l	99
88) 1,4-Dichlorobenzene	12.043	146	343312	99.262 ug/l	99
89) n-Butylbenzene	12.329	91	605284	112.498 ug/l	99
90) Hexachloroethane	12.536	117	120913	113.763 ug/l	93
91) 1,2-Dichlorobenzene	12.335	146	341767	96.765 ug/l	98
92) 1,2-Dibromo-3-Chloropr...	12.939	75	57287	110.517 ug/l	94
93) 1,2,4-Trichlorobenzene	13.585	180	210571	102.015 ug/l	98
94) Hexachlorobutadiene	13.725	225	79822	94.363 ug/l	95
95) Naphthalene	13.774	128	776740	100.923 ug/l	100
96) 1,2,3-Trichlorobenzene	13.963	180	211814	98.491 ug/l	99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043929.D
Acq On : 21 Nov 2024 11:40
Operator : JC/MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 16 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :John Carlone 11/22/2024
Supervised By :Mahesh Dadoda 11/22/2024

Quant Time: Nov 21 12:15:02 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112024W.M
Quant Title : SW846 8260
QLast Update : Thu Nov 21 11:25:29 2024
Response via : Initial Calibration

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

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

ICAL Form

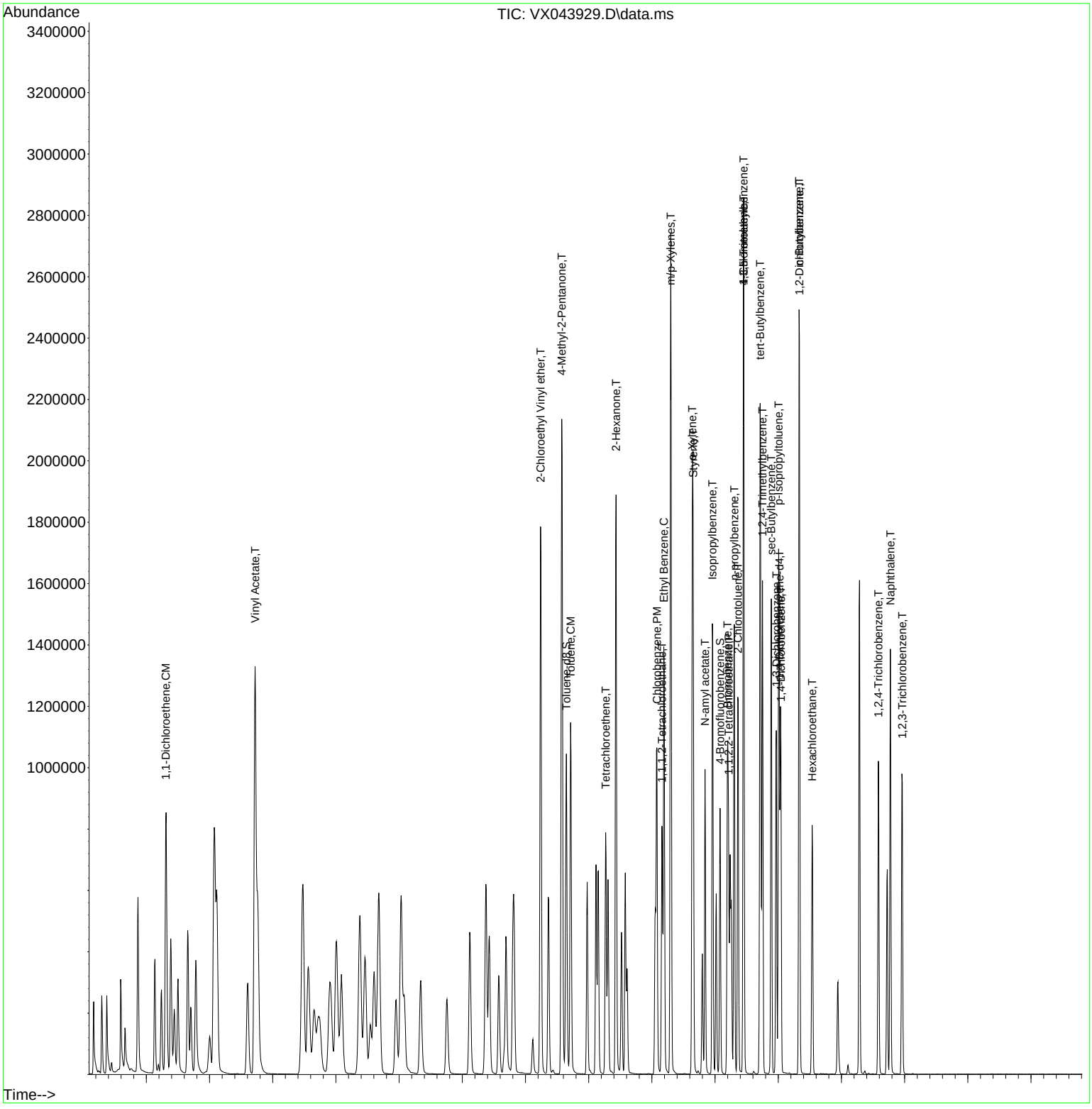
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043929.D
Acq On : 21 Nov 2024 11:40
Operator : JC/MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Nov 21 12:15:02 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112024W.M
Quant Title : SW846 8260
QLast Update : Thu Nov 21 11:25:29 2024
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :John Carlone 11/22/2024
Supervised By :Mahesh Dadoda 11/22/2024



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043930.D
Acq On : 21 Nov 2024 12:03
Operator : JC/MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Nov 21 12:32:05 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112024W.M
Quant Title : SW846 8260
QLast Update : Thu Nov 21 12:18:48 2024
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :John Carlone 11/22/2024
Supervised By :Mahesh Dadoda 11/22/2024

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.550	168	132286	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.757	114	237642	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	203280	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.024	152	96376	50.000	ug/l	# 0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.952	65	349080	171.797	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 343.600%#			
35) Dibromofluoromethane	5.385	113	268135	168.036	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 336.080%#			
50) Toluene-d8	8.647	98	896413	168.154	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 336.300%#			
62) 4-Bromofluorobenzene	11.079	95	324612	184.279	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 368.560%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.166	85	241389	180.335	ug/l	97
3) Chloromethane	1.294	50	268770	160.659	ug/l	100
4) Vinyl Chloride	1.374	62	271568	161.568	ug/l	99
5) Bromomethane	1.593	94	175581	229.967	ug/l	98
6) Chloroethane	1.660	64	140375	174.839	ug/l	98
7) Trichlorofluoromethane	1.861	101	527057	219.944	ug/l	100
8) Diethyl Ether	2.136	74	185146	204.934	ug/l	94
9) 1,1,2-Trichlorotrifluo...	2.312	101	237653	167.580	ug/l	97
10) Methyl Iodide	2.440	142	299792	150.207	ug/l	96
11) Tert butyl alcohol	3.014	59	306168	947.555	ug/l	99
12) 1,1-Dichloroethene	2.306	96	228504	166.017	ug/l	91
13) Acrolein	2.239	56	294638	813.086	ug/l	100
14) Allyl chloride	2.654	41	394228	176.662	ug/l	91
15) Acrylonitrile	3.068	53	684169	822.558	ug/l	98
16) Acetone	2.392	43	734161	899.588	ug/l	92
17) Carbon Disulfide	2.501	76	554853	184.625	ug/l	100
18) Methyl Acetate	2.703	43	361338	161.681	ug/l	98
19) Methyl tert-butyl Ether	3.117	73	869848	170.980	ug/l	98
20) Methylene Chloride	2.782	84	260099	152.260	ug/l	94
21) trans-1,2-Dichloroethene	3.081	96	245485	163.596	ug/l	95
22) Diisopropyl ether	3.763	45	835960	171.467	ug/l	96
23) Vinyl Acetate	3.721	43	3797951	961.094	ug/l	97
24) 1,1-Dichloroethane	3.599	63	479590	167.262	ug/l	99
25) 2-Butanone	4.568	43	1012692	887.025	ug/l	97
26) 2,2-Dichloropropane	4.465	77	440061	186.761	ug/l	97
27) cis-1,2-Dichloroethene	4.483	96	304342	162.978	ug/l	94
28) Bromochloromethane	4.891	49	207753	172.194	ug/l	91
29) Tetrahydrofuran	5.007	42	617277	836.734	ug/l	98
30) Chloroform	5.092	83	513285	171.734	ug/l	98
31) Cyclohexane	5.458	56	367157	157.989	ug/l	98
32) 1,1,1-Trichloroethane	5.373	97	455922	178.438	ug/l	98
36) 1,1-Dichloropropene	5.684	75	331239	166.559	ug/l	98
37) Ethyl Acetate	4.721	43	393670	175.887	ug/l	97
38) Carbon Tetrachloride	5.672	117	376287	178.719	ug/l	98
39) Methylcyclohexane	7.372	83	410333	164.816	ug/l	96
40) Benzene	6.031	78	999210	159.808	ug/l	98

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043930.D
Acq On : 21 Nov 2024 12:03
Operator : JC/MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Nov 21 12:32:05 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112024W.M
Quant Title : SW846 8260
QLast Update : Thu Nov 21 12:18:48 2024
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :John Carlone 11/22/2024
Supervised By :Mahesh Dadoda 11/22/2024

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
41) Methacrylonitrile	4.922	41	206026	176.637 ug/l		95
42) 1,2-Dichloroethane	6.080	62	397508	175.089 ug/l		98
43) Isopropyl Acetate	6.342	43	661839	187.445 ug/l		94
44) Trichloroethene	7.123	130	251071	145.657 ug/l		97
45) 1,2-Dichloropropane	7.427	63	249394	162.744 ug/l		100
46) Dibromomethane	7.580	93	202329	175.212 ug/l		95
47) Bromodichloromethane	7.818	83	388259	191.362 ug/l		97
48) Methyl methacrylate	7.690	41	315872	180.493 ug/l		88
49) 1,4-Dioxane	7.665	88	106634	2860.706 ug/l	#	76
51) 4-Methyl-2-Pentanone	8.580	43	1954925	887.971 ug/l		96
52) Toluene	8.714	92	607179	168.323 ug/l		97
53) t-1,3-Dichloropropene	8.976	75	406346	197.387 ug/l		100
54) cis-1,3-Dichloropropene	8.366	75	428549	183.704 ug/l		93
55) 1,1,2-Trichloroethane	9.153	97	245706	174.579 ug/l		99
56) Ethyl methacrylate	9.116	69	420409	188.658 ug/l	#	88
57) 1,3-Dichloropropane	9.305	76	416811	176.770 ug/l		100
58) 2-Chloroethyl Vinyl ether	8.244	63	1023576	875.887 ug/l		98
59) 2-Hexanone	9.433	43	1493755	961.650 ug/l		94
60) Dibromochloromethane	9.518	129	286188	208.679 ug/l		100
61) 1,2-Dibromoethane	9.610	107	261369	178.035 ug/l		100
64) Tetrachloroethene	9.268	164	202262	155.122 ug/l		98
65) Chlorobenzene	10.079	112	675513	159.085 ug/l		98
66) 1,1,1,2-Tetrachloroethane	10.159	131	241604	170.964 ug/l		97
67) Ethyl Benzene	10.195	91	1181693	165.365 ug/l		100
68) m/p-Xylenes	10.299	106	884067	332.148 ug/l		97
69) o-Xylene	10.640	106	436919	168.240 ug/l		98
70) Styrene	10.652	104	742061	173.379 ug/l		97
71) Bromoform	10.799	173	186691	161.632 ug/l	#	100
73) Isopropylbenzene	10.963	105	1135309	165.031 ug/l		99
74) N-amyl acetate	10.841	43	586560	159.995 ug/l		94
75) 1,1,2,2-Tetrachloroethane	11.213	83	379947	163.351 ug/l		99
76) 1,2,3-Trichloropropane	11.238	75	313344m	159.312 ug/l		
77) Bromobenzene	11.195	156	270671	160.539 ug/l		98
78) n-propylbenzene	11.305	91	1296979	170.866 ug/l		99
79) 2-Chlorotoluene	11.366	91	788163	163.185 ug/l		99
80) 1,3,5-Trimethylbenzene	11.451	105	936129	164.167 ug/l		99
81) trans-1,4-Dichloro-2-b...	11.018	75	136104	161.734 ug/l		99
82) 4-Chlorotoluene	11.451	91	919566	165.319 ug/l		100
83) tert-Butylbenzene	11.713	119	945058	162.017 ug/l		98
84) 1,2,4-Trimethylbenzene	11.750	105	933275	161.161 ug/l		100
85) sec-Butylbenzene	11.890	105	1148877	164.934 ug/l		100
86) p-Isopropyltoluene	12.006	119	972007	166.189 ug/l		99
87) 1,3-Dichlorobenzene	11.969	146	490336	156.923 ug/l		99
88) 1,4-Dichlorobenzene	12.042	146	494318	154.301 ug/l		99
89) n-Butylbenzene	12.329	91	903805	181.353 ug/l		99
90) Hexachloroethane	12.536	117	180575	151.823 ug/l		96
91) 1,2-Dichlorobenzene	12.335	146	503214	153.818 ug/l		99
92) 1,2-Dibromo-3-Chloropr...	12.939	75	87963	146.019 ug/l		93
93) 1,2,4-Trichlorobenzene	13.585	180	325289	170.137 ug/l		99
94) Hexachlorobutadiene	13.725	225	121126	154.589 ug/l		97
95) Naphthalene	13.774	128	1173154	164.565 ug/l		100
96) 1,2,3-Trichlorobenzene	13.963	180	326693	164.001 ug/l		99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043930.D
Acq On : 21 Nov 2024 12:03
Operator : JC/MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 17 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :John Carlone 11/22/2024
Supervised By :Mahesh Dadoda 11/22/2024

Quant Time: Nov 21 12:32:05 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112024W.M
Quant Title : SW846 8260
QLast Update : Thu Nov 21 12:18:48 2024
Response via : Initial Calibration

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

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

ICAL Form

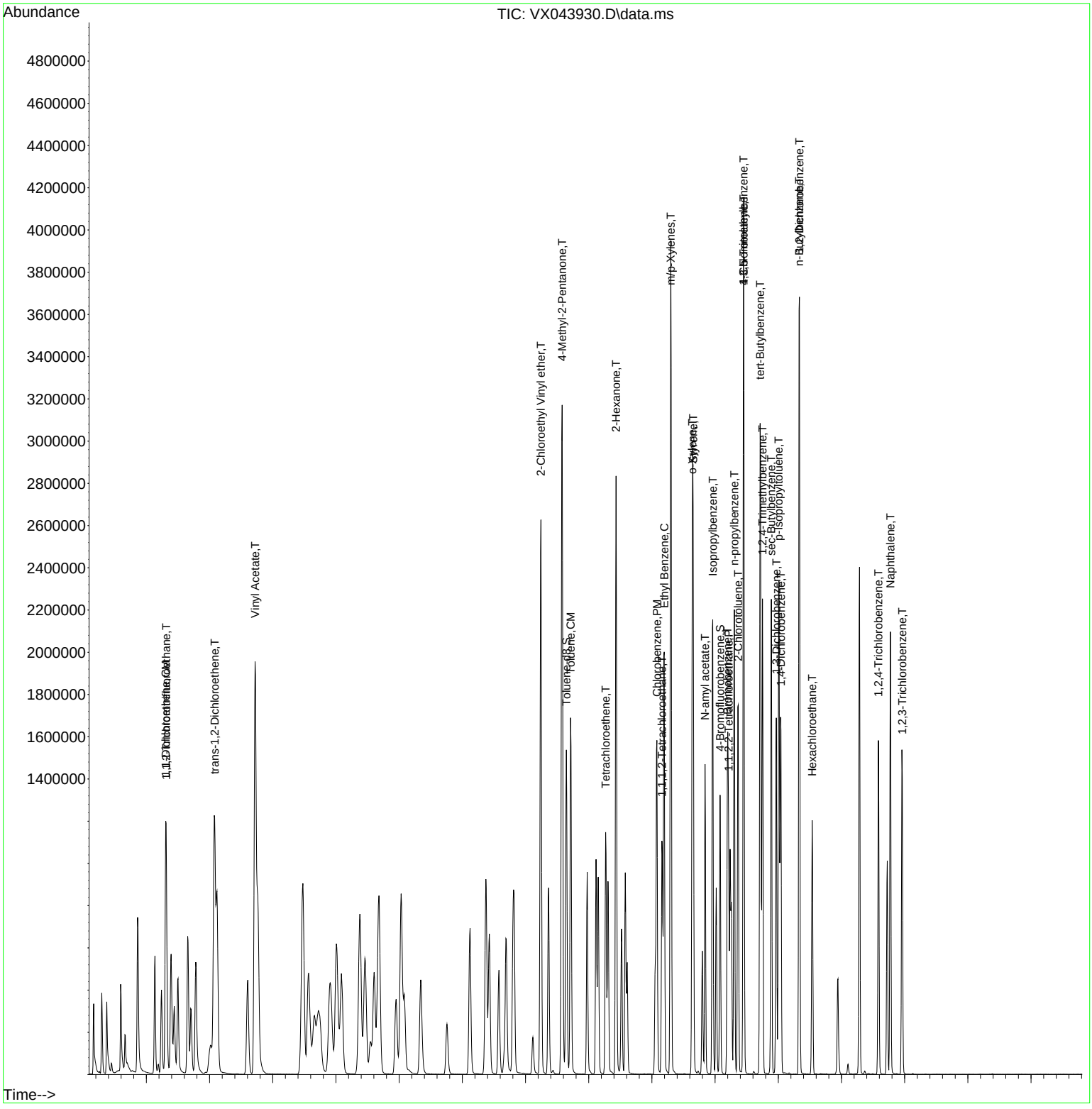
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043930.D
Acq On : 21 Nov 2024 12:03
Operator : JC/MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Nov 21 12:32:05 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112024W.M
Quant Title : SW846 8260
QLast Update : Thu Nov 21 12:18:48 2024
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :John Carlone 11/22/2024
Supervised By :Mahesh Dadoda 11/22/2024



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043932.D
Acq On : 21 Nov 2024 13:57
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 20 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX112124

Manual Integrations APPROVED

Reviewed By :John Carlone 11/22/2024
Supervised By :Mahesh Dadoda 11/22/2024

Quant Time: Nov 22 03:54:00 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.544	168	131073	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.751	114	229009	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.049	117	198776	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	96489	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.946	65	112818	50.183	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 100.360%			
35) Dibromofluoromethane	5.379	113	85815	52.442	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 104.880%			
50) Toluene-d8	8.647	98	289000	51.234	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 102.460%			
62) 4-Bromofluorobenzene	11.079	95	103640	53.987	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 107.980%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.167	85	83916	50.537	ug/l	99
3) Chloromethane	1.295	50	85795	49.100	ug/l	98
4) Vinyl Chloride	1.374	62	93147	50.118	ug/l	97
5) Bromomethane	1.593	94	53783	47.040	ug/l	100
6) Chloroethane	1.660	64	46342	40.921	ug/l	100
7) Trichlorofluoromethane	1.868	101	177461	53.407	ug/l	99
8) Diethyl Ether	2.130	74	57339	47.345	ug/l	100
9) 1,1,2-Trichlorotrifluo...	2.313	101	80458	50.762	ug/l	98
10) Methyl Iodide	2.441	142	96234	48.614	ug/l	100
11) Tert butyl alcohol	2.995	59	85927	238.127	ug/l	99
12) 1,1-Dichloroethene	2.307	96	72787	48.192	ug/l	99
13) Acrolein	2.233	56	89571	235.500	ug/l	98
14) Allyl chloride	2.654	41	127367	51.610	ug/l	99
15) Acrylonitrile	3.063	53	227832	259.090	ug/l	99
16) Acetone	2.386	43	257802	249.676	ug/l	99
17) Carbon Disulfide	2.496	76	153826	49.375	ug/l	100
18) Methyl Acetate	2.703	43	121774	50.643	ug/l	98
19) Methyl tert-butyl Ether	3.111	73	275221	50.186	ug/l	98
20) Methylene Chloride	2.782	84	82274	46.954	ug/l	98
21) trans-1,2-Dichloroethene	3.081	96	76687	49.179	ug/l	97
22) Diisopropyl ether	3.758	45	264554	50.132	ug/l	96
23) Vinyl Acetate	3.715	43	1189244	263.441	ug/l	100
24) 1,1-Dichloroethane	3.599	63	153635	50.466	ug/l	98
25) 2-Butanone	4.556	43	348803	261.804	ug/l	98
26) 2,2-Dichloropropane	4.459	77	143910	52.343	ug/l	100
27) cis-1,2-Dichloroethene	4.477	96	95076	49.326	ug/l	99
28) Bromochloromethane	4.891	49	62874	46.920	ug/l	96
29) Tetrahydrofuran	5.001	42	207942	254.585	ug/l	100
30) Chloroform	5.080	83	163357	49.891	ug/l	98
31) Cyclohexane	5.458	56	128482	51.278	ug/l	97
32) 1,1,1-Trichloroethane	5.373	97	144908	51.320	ug/l	99
36) 1,1-Dichloropropene	5.678	75	108518	53.218	ug/l	97
37) Ethyl Acetate	4.709	43	133283	52.656	ug/l	97
38) Carbon Tetrachloride	5.660	117	118655	51.786	ug/l	99
39) Methylcyclohexane	7.373	83	141696	53.489	ug/l	93
40) Benzene	6.025	78	319222	50.257	ug/l	98

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043932.D
Acq On : 21 Nov 2024 13:57
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 20 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX112124

Manual Integrations APPROVED

Reviewed By :John Carlone 11/22/2024
Supervised By :Mahesh Dadoda 11/22/2024

Quant Time: Nov 22 03:54:00 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
41) Methacrylonitrile	4.916	41	69766	53.851 ug/l	99
42) 1,2-Dichloroethane	6.074	62	128623	50.421 ug/l	100
43) Isopropyl Acetate	6.336	43	207332	51.469 ug/l	99
44) Trichloroethene	7.117	130	80113	44.554 ug/l	90
45) 1,2-Dichloropropane	7.422	63	74380	47.811 ug/l	98
46) Dibromomethane	7.574	93	62345	50.662 ug/l	99
47) Bromodichloromethane	7.818	83	116199	52.648 ug/l	99
48) Methyl methacrylate	7.690	41	101062	52.284 ug/l	99
49) 1,4-Dioxane	7.659	88	31178	905.506 ug/l #	86
51) 4-Methyl-2-Pentanone	8.574	43	652721	265.520 ug/l	100
52) Toluene	8.714	92	195814	51.507 ug/l	98
53) t-1,3-Dichloropropene	8.976	75	119461	53.077 ug/l	96
54) cis-1,3-Dichloropropene	8.360	75	128808	52.205 ug/l	99
55) 1,1,2-Trichloroethane	9.147	97	78575	50.069 ug/l	97
56) Ethyl methacrylate	9.116	69	129841	53.118 ug/l	100
57) 1,3-Dichloropropane	9.305	76	134680	50.945 ug/l	99
58) 2-Chloroethyl Vinyl ether	8.238	63	315358	235.230 ug/l	99
59) 2-Hexanone	9.427	43	504444	273.011 ug/l	100
60) Dibromochloromethane	9.519	129	82754	52.557 ug/l	99
61) 1,2-Dibromoethane	9.604	107	83098	52.367 ug/l	100
64) Tetrachloroethene	9.269	164	66054	50.396 ug/l	97
65) Chlorobenzene	10.073	112	209963	48.094 ug/l	98
66) 1,1,1,2-Tetrachloroethane	10.159	131	74354	52.515 ug/l	98
67) Ethyl Benzene	10.189	91	377215	50.991 ug/l	97
68) m/p-Xylenes	10.299	106	282971	102.572 ug/l	99
69) o-Xylene	10.640	106	138437	51.396 ug/l	98
70) Styrene	10.653	104	230449	51.728 ug/l	99
71) Bromoform	10.799	173	50837	47.449 ug/l #	98
73) Isopropylbenzene	10.957	105	365084	49.222 ug/l	99
74) N-amyl acetate	10.842	43	176627	51.406 ug/l	99
75) 1,1,2,2-Tetrachloroethane	11.214	83	125346	49.356 ug/l	99
76) 1,2,3-Trichloropropane	11.238	75	105742m	49.973 ug/l	
77) Bromobenzene	11.195	156	85070	48.081 ug/l	99
78) n-propylbenzene	11.305	91	419586	50.652 ug/l	99
79) 2-Chlorotoluene	11.360	91	249079	47.551 ug/l	100
80) 1,3,5-Trimethylbenzene	11.451	105	305922	50.134 ug/l	99
81) trans-1,4-Dichloro-2-b...	11.018	75	38583	49.756 ug/l	98
82) 4-Chlorotoluene	11.451	91	287717	48.652 ug/l	100
83) tert-Butylbenzene	11.713	119	303408	50.165 ug/l	99
84) 1,2,4-Trimethylbenzene	11.750	105	306251	50.410 ug/l	100
85) sec-Butylbenzene	11.890	105	372793	50.307 ug/l	99
86) p-Isopropyltoluene	12.006	119	310060	51.511 ug/l	100
87) 1,3-Dichlorobenzene	11.969	146	153164	47.529 ug/l	99
88) 1,4-Dichlorobenzene	12.043	146	155422	47.306 ug/l	97
89) n-Butylbenzene	12.329	91	276075	52.020 ug/l	99
90) Hexachloroethane	12.536	117	51229	50.050 ug/l	97
91) 1,2-Dichlorobenzene	12.335	146	154980	47.656 ug/l	99
92) 1,2-Dibromo-3-Chloropr...	12.939	75	25968	51.030 ug/l	99
93) 1,2,4-Trichlorobenzene	13.585	180	94896	49.495 ug/l	99
94) Hexachlorobutadiene	13.725	225	37937	50.065 ug/l	97
95) Naphthalene	13.774	128	357725	51.831 ug/l	100
96) 1,2,3-Trichlorobenzene	13.957	180	99447	51.246 ug/l	98

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043932.D
Acq On : 21 Nov 2024 13:57
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 20 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX112124

Manual Integrations APPROVED

Reviewed By :John Carlone 11/22/2024
Supervised By :Mahesh Dadoda 11/22/2024

Quant Time: Nov 22 03:54:00 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration

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

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

ICAL Form

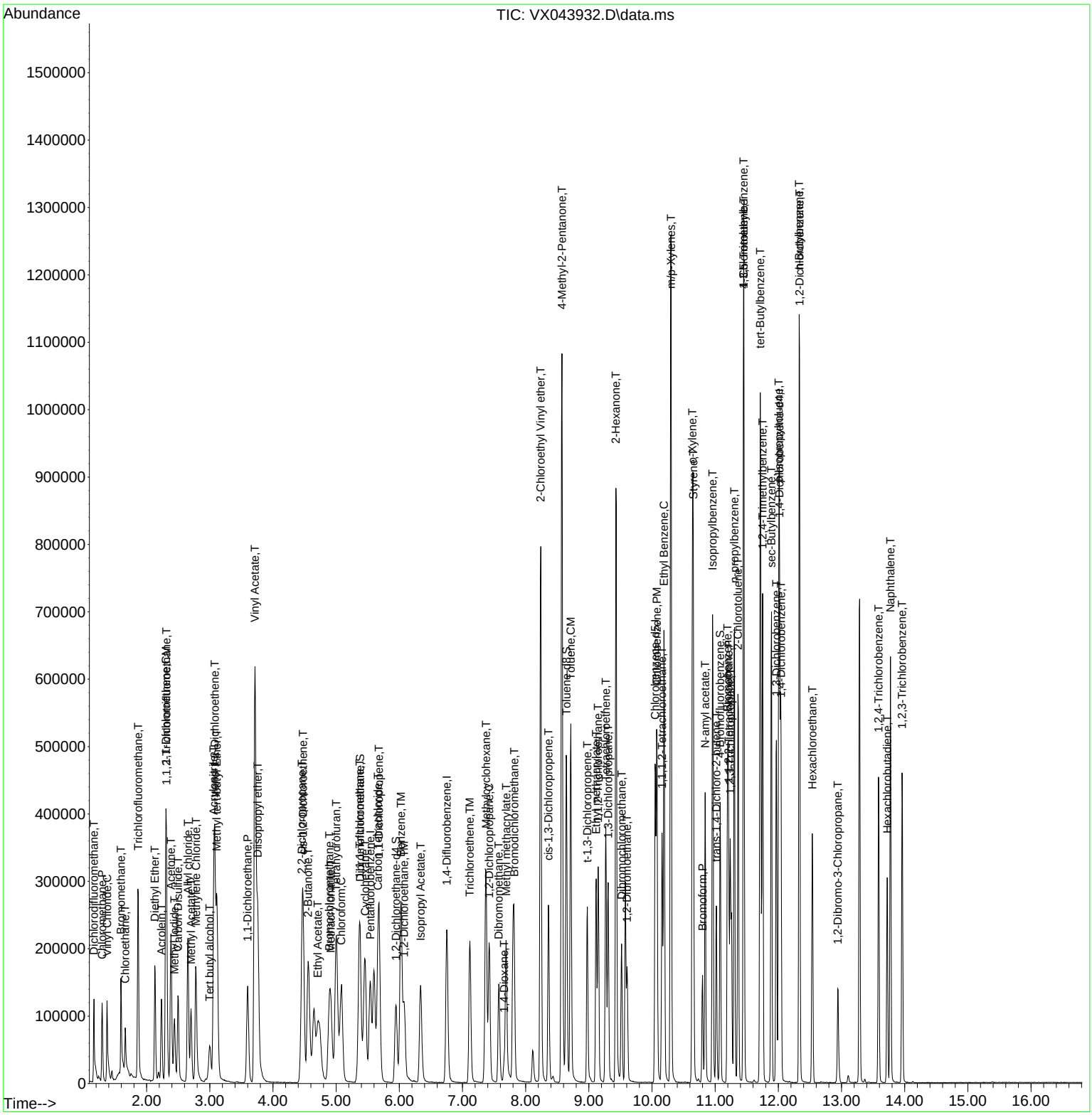
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043932.D
Acq On : 21 Nov 2024 13:57
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Nov 22 03:54:00 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
ICVVX112124

Manual Integrations APPROVED

Reviewed By :John Carlone 11/22/2024
Supervised By :Mahesh Dadoda 11/22/2024



Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043932.D
Acq On : 21 Nov 2024 13:57
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 20 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX112124

Quant Time: Nov 22 03:54:00 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
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	95	0.00
2	T	Dichlorodifluoromethane	0.633	0.640	-1.1	89	0.00
3	P	Chloromethane	0.667	0.655	1.8	89	0.00
4	C	Vinyl Chloride	0.709	0.711	-0.3#	88	0.00
5	T	Bromomethane	0.436	0.410	6.0	87	0.00
6	T	Chloroethane	0.432	0.354	18.1	73	0.00
7	T	Trichlorofluoromethane	1.268	1.354	-6.8	94	0.00
8	T	Diethyl Ether	0.462	0.437	5.4	87	0.00
9	T	1,1,2-Trichlorotrifluoroeth	0.605	0.614	-1.5	88	0.00
10	T	Methyl Iodide	0.755	0.734	2.8	86	0.00
11	T	Tert butyl alcohol	0.138	0.131	5.1	86	0.00
12	CM	1,1-Dichloroethene	0.576	0.555	3.6#	88	0.00
13	T	Acrolein	0.145	0.137	5.5	89	0.00
14	T	Allyl chloride	0.941	0.972	-3.3	88	0.00
15	T	Acrylonitrile	0.335	0.348	-3.9	89	0.00
16	T	Acetone	0.394	0.393	0.3	88	0.00
17	T	Carbon Disulfide	1.188	1.174	1.2	86	0.00
18	T	Methyl Acetate	0.917	0.929	-1.3	89	0.00
19	T	Methyl tert-butyl Ether	2.092	2.100	-0.4	88	0.00
20	T	Methylene Chloride	0.668	0.628	6.0	89	0.00
21	T	trans-1,2-Dichloroethene	0.595	0.585	1.7	87	0.00
22	T	Diisopropyl ether	2.013	2.018	-0.2	88	0.00
23	T	Vinyl Acetate	1.722	1.815	-5.4	88	0.00
24	P	1,1-Dichloroethane	1.161	1.172	-0.9	88	0.00
25	T	2-Butanone	0.508	0.532	-4.7	89	0.00
26	T	2,2-Dichloropropane	1.049	1.098	-4.7	91	0.00
27	T	cis-1,2-Dichloroethene	0.735	0.725	1.4	87	0.00
28	T	Bromochloromethane	0.511	0.480	6.1	101	0.00
29	T	Tetrahydrofuran	0.312	0.317	-1.6	89	0.00
30	C	Chloroform	1.249	1.246	0.2#	90	0.00
31	T	Cyclohexane	0.956	0.980	-2.5	89	0.00
32	T	1,1,1-Trichloroethane	1.077	1.106	-2.7	88	0.00
33	S	1,2-Dichloroethane-d4	0.858	0.861	-0.3	108	0.00
34	I	1,4-Difluorobenzene	1.000	1.000	0.0	95	0.00
35	S	Dibromofluoromethane	0.357	0.375	-5.0	109	0.00
36	T	1,1-Dichloropropene	0.445	0.474	-6.5	91	0.00
37	T	Ethyl Acetate	0.553	0.582	-5.2	90	0.00
38	T	Carbon Tetrachloride	0.500	0.518	-3.6	88	0.00
39	T	Methylcyclohexane	0.578	0.619	-7.1	89	0.00
40	TM	Benzene	1.387	1.394	-0.5	88	0.00
41	T	Methacrylonitrile	0.283	0.305	-7.8	88	0.00
42	TM	1,2-Dichloroethane	0.557	0.562	-0.9	88	0.00
43	T	Isopropyl Acetate	0.880	0.905	-2.8	88	0.00
44	TM	Trichloroethene	0.393	0.350	10.9	89	0.00
45	C	1,2-Dichloropropane	0.340	0.325	4.4#	83	0.00
46	T	Dibromomethane	0.269	0.272	-1.1	88	0.00
47	T	Bromodichloromethane	0.482	0.507	-5.2	88	0.00
48	T	Methyl methacrylate	0.422	0.441	-4.5	90	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043932.D
Acq On : 21 Nov 2024 13:57
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 20 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX112124

Quant Time: Nov 22 03:54:00 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
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	0.008	0.007	12.5	79	0.00
50	S	Toluene-d8	1.232	1.262	-2.4	108	0.00
51	T	4-Methyl-2-Pentanone	0.537	0.570	-6.1	89	0.00
52	CM	Toluene	0.830	0.855	-3.0#	88	0.00
53	T	t-1,3-Dichloropropene	0.491	0.522	-6.3	87	0.00
54	T	cis-1,3-Dichloropropene	0.539	0.562	-4.3	87	0.00
55	T	1,1,2-Trichloroethane	0.343	0.343	0.0	88	0.00
56	T	Ethyl methacrylate	0.534	0.567	-6.2	88	0.00
57	T	1,3-Dichloropropane	0.577	0.588	-1.9	89	0.00
58	T	2-Chloroethyl Vinyl ether	0.273	0.275	-0.7	85	0.00
59	T	2-Hexanone	0.403	0.441	-9.4	89	0.00
60	T	Dibromochloromethane	0.344	0.361	-4.9	87	0.00
61	T	1,2-Dibromoethane	0.346	0.363	-4.9	89	0.00
62	S	4-Bromofluorobenzene	0.419	0.453	-8.1	111	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	94	0.00
64	T	Tetrachloroethene	0.330	0.332	-0.6	89	0.00
65	PM	Chlorobenzene	1.098	1.056	3.8	86	0.00
66	T	1,1,1,2-Tetrachloroethane	0.356	0.374	-5.1	89	0.00
67	C	Ethyl Benzene	1.861	1.898	-2.0#	88	0.00
68	T	m/p-Xylenes	0.694	0.712	-2.6	87	0.00
69	T	o-Xylene	0.678	0.696	-2.7	86	0.00
70	T	Styrene	1.121	1.159	-3.4	86	0.00
71	P	Bromoform	0.240	0.256	-6.7	84	0.00
72	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	96	0.00
73	T	Isopropylbenzene	3.843	3.784	1.5	89	0.00
74	T	N-amyl acetate	1.780	1.831	-2.9	88	0.00
75	P	1,1,2,2-Tetrachloroethane	1.316	1.299	1.3	90	0.00
76	T	1,2,3-Trichloropropane	1.096	1.096	0.0	89	0.00
77	T	Bromobenzene	0.917	0.882	3.8	87	0.00
78	T	n-propylbenzene	4.293	4.349	-1.3	88	0.00
79	T	2-Chlorotoluene	2.714	2.581	4.9	87	0.00
80	T	1,3,5-Trimethylbenzene	3.162	3.171	-0.3	89	0.00
81	T	trans-1,4-Dichloro-2-butene	0.402	0.400	0.5	87	0.00
82	T	4-Chlorotoluene	3.064	2.982	2.7	86	0.00
83	T	tert-Butylbenzene	3.134	3.144	-0.3	88	0.00
84	T	1,2,4-Trimethylbenzene	3.148	3.174	-0.8	89	0.00
85	T	sec-Butylbenzene	3.840	3.864	-0.6	87	0.00
86	T	p-Isopropyltoluene	3.119	3.213	-3.0	88	0.00
87	T	1,3-Dichlorobenzene	1.670	1.587	5.0	87	0.00
88	T	1,4-Dichlorobenzene	1.702	1.611	5.3	87	0.00
89	T	n-Butylbenzene	2.750	2.861	-4.0	86	0.00
90	T	Hexachloroethane	0.530	0.531	-0.2	87	0.00
91	T	1,2-Dichlorobenzene	1.685	1.606	4.7	87	0.00
92	T	1,2-Dibromo-3-Chloropropane	0.264	0.269	-1.9	91	0.00
93	T	1,2,4-Trichlorobenzene	0.994	0.983	1.1	87	0.00
94	T	Hexachlorobutadiene	0.393	0.393	0.0	92	0.00
95	T	Naphthalene	3.576	3.707	-3.7	89	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043932.D
Acq On : 21 Nov 2024 13:57
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 20 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX112124

Quant Time: Nov 22 03:54:00 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
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	1.006	1.031	-2.5	89	0.00

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

Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043932.D
Acq On : 21 Nov 2024 13:57
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 20 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX112124

Quant Time: Nov 22 03:54:00 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
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	95	0.00
2	T	Dichlorodifluoromethane	50.000	50.537	-1.1	89	0.00
3	P	Chloromethane	50.000	49.100	1.8	89	0.00
4	C	Vinyl Chloride	50.000	50.118	-0.2#	88	0.00
5	T	Bromomethane	50.000	47.040	5.9	87	0.00
6	T	Chloroethane	50.000	40.921	18.2	73	0.00
7	T	Trichlorofluoromethane	50.000	53.407	-6.8	94	0.00
8	T	Diethyl Ether	50.000	47.345	5.3	87	0.00
9	T	1,1,2-Trichlorotrifluoroeth	50.000	50.762	-1.5	88	0.00
10	T	Methyl Iodide	50.000	48.614	2.8	86	0.00
11	T	Tert butyl alcohol	250.000	238.127	4.7	86	0.00
12	CM	1,1-Dichloroethene	50.000	48.192	3.6#	88	0.00
13	T	Acrolein	250.000	235.500	5.8	89	0.00
14	T	Allyl chloride	50.000	51.610	-3.2	88	0.00
15	T	Acrylonitrile	250.000	259.090	-3.6	89	0.00
16	T	Acetone	250.000	249.676	0.1	88	0.00
17	T	Carbon Disulfide	50.000	49.375	1.3	86	0.00
18	T	Methyl Acetate	50.000	50.643	-1.3	89	0.00
19	T	Methyl tert-butyl Ether	50.000	50.186	-0.4	88	0.00
20	T	Methylene Chloride	50.000	46.954	6.1	89	0.00
21	T	trans-1,2-Dichloroethene	50.000	49.179	1.6	87	0.00
22	T	Diisopropyl ether	50.000	50.132	-0.3	88	0.00
23	T	Vinyl Acetate	250.000	263.441	-5.4	88	0.00
24	P	1,1-Dichloroethane	50.000	50.466	-0.9	88	0.00
25	T	2-Butanone	250.000	261.804	-4.7	89	0.00
26	T	2,2-Dichloropropane	50.000	52.343	-4.7	91	0.00
27	T	cis-1,2-Dichloroethene	50.000	49.326	1.3	87	0.00
28	T	Bromochloromethane	50.000	46.920	6.2	101	0.00
29	T	Tetrahydrofuran	250.000	254.585	-1.8	89	0.00
30	C	Chloroform	50.000	49.891	0.2#	90	0.00
31	T	Cyclohexane	50.000	51.278	-2.6	89	0.00
32	T	1,1,1-Trichloroethane	50.000	51.320	-2.6	88	0.00
33	S	1,2-Dichloroethane-d4	50.000	50.183	-0.4	108	0.00
34	I	1,4-Difluorobenzene	50.000	50.000	0.0	95	0.00
35	S	Dibromofluoromethane	50.000	52.442	-4.9	109	0.00
36	T	1,1-Dichloropropene	50.000	53.218	-6.4	91	0.00
37	T	Ethyl Acetate	50.000	52.656	-5.3	90	0.00
38	T	Carbon Tetrachloride	50.000	51.786	-3.6	88	0.00
39	T	Methylcyclohexane	50.000	53.489	-7.0	89	0.00
40	TM	Benzene	50.000	50.257	-0.5	88	0.00
41	T	Methacrylonitrile	50.000	53.851	-7.7	88	0.00
42	TM	1,2-Dichloroethane	50.000	50.421	-0.8	88	0.00
43	T	Isopropyl Acetate	50.000	51.469	-2.9	88	0.00
44	TM	Trichloroethene	50.000	44.554	10.9	89	0.00
45	C	1,2-Dichloropropane	50.000	47.811	4.4#	83	0.00
46	T	Dibromomethane	50.000	50.662	-1.3	88	0.00
47	T	Bromodichloromethane	50.000	52.648	-5.3	88	0.00
48	T	Methyl methacrylate	50.000	52.284	-4.6	90	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043932.D
Acq On : 21 Nov 2024 13:57
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 20 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX112124

Quant Time: Nov 22 03:54:00 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
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	905.506	9.4	79	0.00
50	S	Toluene-d8	50.000	51.234	-2.5	108	0.00
51	T	4-Methyl-2-Pentanone	250.000	265.520	-6.2	89	0.00
52	CM	Toluene	50.000	51.507	-3.0#	88	0.00
53	T	t-1,3-Dichloropropene	50.000	53.077	-6.2	87	0.00
54	T	cis-1,3-Dichloropropene	50.000	52.205	-4.4	87	0.00
55	T	1,1,2-Trichloroethane	50.000	50.069	-0.1	88	0.00
56	T	Ethyl methacrylate	50.000	53.118	-6.2	88	0.00
57	T	1,3-Dichloropropane	50.000	50.945	-1.9	89	0.00
58	T	2-Chloroethyl Vinyl ether	250.000	235.230	5.9	85	0.00
59	T	2-Hexanone	250.000	273.011	-9.2	89	0.00
60	T	Dibromochloromethane	50.000	52.557	-5.1	87	0.00
61	T	1,2-Dibromoethane	50.000	52.367	-4.7	89	0.00
62	S	4-Bromofluorobenzene	50.000	53.987	-8.0	111	0.00
63	I	Chlorobenzene-d5	50.000	50.000	0.0	94	0.00
64	T	Tetrachloroethene	50.000	50.396	-0.8	89	0.00
65	PM	Chlorobenzene	50.000	48.094	3.8	86	0.00
66	T	1,1,1,2-Tetrachloroethane	50.000	52.515	-5.0	89	0.00
67	C	Ethyl Benzene	50.000	50.991	-2.0#	88	0.00
68	T	m/p-Xylenes	100.000	102.572	-2.6	87	0.00
69	T	o-Xylene	50.000	51.396	-2.8	86	0.00
70	T	Styrene	50.000	51.728	-3.5	86	0.00
71	P	Bromoform	50.000	47.449	5.1	84	0.00
72	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	96	0.00
73	T	Isopropylbenzene	50.000	49.222	1.6	89	0.00
74	T	N-amyl acetate	50.000	51.406	-2.8	88	0.00
75	P	1,1,2,2-Tetrachloroethane	50.000	49.356	1.3	90	0.00
76	T	1,2,3-Trichloropropane	50.000	49.973	0.1	89	0.00
77	T	Bromobenzene	50.000	48.081	3.8	87	0.00
78	T	n-propylbenzene	50.000	50.652	-1.3	88	0.00
79	T	2-Chlorotoluene	50.000	47.551	4.9	87	0.00
80	T	1,3,5-Trimethylbenzene	50.000	50.134	-0.3	89	0.00
81	T	trans-1,4-Dichloro-2-butene	50.000	49.756	0.5	87	0.00
82	T	4-Chlorotoluene	50.000	48.652	2.7	86	0.00
83	T	tert-Butylbenzene	50.000	50.165	-0.3	88	0.00
84	T	1,2,4-Trimethylbenzene	50.000	50.410	-0.8	89	0.00
85	T	sec-Butylbenzene	50.000	50.307	-0.6	87	0.00
86	T	p-Isopropyltoluene	50.000	51.511	-3.0	88	0.00
87	T	1,3-Dichlorobenzene	50.000	47.529	4.9	87	0.00
88	T	1,4-Dichlorobenzene	50.000	47.306	5.4	87	0.00
89	T	n-Butylbenzene	50.000	52.020	-4.0	86	0.00
90	T	Hexachloroethane	50.000	50.050	-0.1	87	0.00
91	T	1,2-Dichlorobenzene	50.000	47.656	4.7	87	0.00
92	T	1,2-Dibromo-3-Chloropropane	50.000	51.030	-2.1	91	0.00
93	T	1,2,4-Trichlorobenzene	50.000	49.495	1.0	87	0.00
94	T	Hexachlorobutadiene	50.000	50.065	-0.1	92	0.00
95	T	Naphthalene	50.000	51.831	-3.7	89	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043932.D
Acq On : 21 Nov 2024 13:57
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 20 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX112124

Quant Time: Nov 22 03:54:00 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	50.000	51.246	-2.5	89	0.00

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

Alliance TECHNICAL GROUP

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: LIRO01

Lab Code: CHEM Case No.: P5021 SAS No.: P5021 SDG No.: P5021

Instrument ID: MSVOA_X Calibration Date/Time: 11/27/2024 08:46

Lab File ID: VX044024.D Init. Calib. Date(s): 11/21/2024 11/21/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 09:47 12:03

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Methyl tert-butyl Ether	2.092	1.967		-5.97	20
Benzene	1.387	1.345		-3.03	20
Toluene	0.830	0.830		0	20
Ethyl Benzene	1.861	1.877		0.86	20
m/p-Xylenes	0.694	0.703		1.3	20
o-Xylene	0.678	0.683		0.74	20
Isopropylbenzene	3.843	3.898		1.43	20
n-propylbenzene	4.293	4.376		1.93	20
1,3,5-Trimethylbenzene	3.162	3.201		1.23	20
tert-Butylbenzene	3.134	3.187		1.69	20
1,2,4-Trimethylbenzene	3.148	3.189		1.3	20
sec-Butylbenzene	3.840	3.885		1.17	20
p-Isopropyltoluene	3.119	3.286		5.35	20
n-Butylbenzene	2.750	2.884		4.87	20
Naphthalene	3.576	3.607		0.87	20
1,2-Dichloroethane-d4	0.858	0.810		-5.59	20
Dibromofluoromethane	0.357	0.370		3.64	20
Toluene-d8	1.232	1.254		1.79	20
4-Bromofluorobenzene	0.419	0.419		0	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\VX112724\
Data File : VX044024.D
Acq On : 27 Nov 2024 08:46
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 28 00:38:28 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 12/02/2024
Supervised By :Mahesh Dadoda 12/02/2024

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.537	168	130547	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.751	114	218884	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.049	117	184783	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	86408	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.946	65	105740	47.224	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 94.440%			
35) Dibromofluoromethane	5.373	113	81072	51.835	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 103.680%			
50) Toluene-d8	8.641	98	274377	50.892	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 101.780%			
62) 4-Bromofluorobenzene	11.079	95	91711	49.983	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 99.960%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.166	85	75311	45.538	ug/l	97
3) Chloromethane	1.294	50	80534	46.275	ug/l	100
4) Vinyl Chloride	1.374	62	82993	44.835	ug/l	99
5) Bromomethane	1.599	94	56349	49.483	ug/l	97
6) Chloroethane	1.666	64	55879	49.541	ug/l	99
7) Trichlorofluoromethane	1.874	101	146941	44.400	ug/l	96
8) Diethyl Ether	2.130	74	54109	44.858	ug/l	97
9) 1,1,2-Trichlorotrifluo...	2.319	101	74240	47.028	ug/l	99
10) Methyl Iodide	2.440	142	92802	47.069	ug/l	98
11) Tert butyl alcohol	2.995	59	81551	226.911	ug/l	99
12) 1,1-Dichloroethene	2.312	96	66795	44.403	ug/l	95
13) Acrolein	2.233	56	77197	203.784	ug/l	100
14) Allyl chloride	2.654	41	114657	46.647	ug/l	99
15) Acrylonitrile	3.056	53	208420	237.970	ug/l	98
16) Acetone	2.380	43	254666	247.633	ug/l	100
17) Carbon Disulfide	2.501	76	126471	40.758	ug/l	99
18) Methyl Acetate	2.697	43	111020	46.357	ug/l	98
19) Methyl tert-butyl Ether	3.111	73	256756	47.008	ug/l	97
20) Methylene Chloride	2.782	84	78624	45.052	ug/l	97
21) trans-1,2-Dichloroethene	3.081	96	69531	44.770	ug/l	98
22) Diisopropyl ether	3.751	45	242068	46.056	ug/l	88
23) Vinyl Acetate	3.715	43	1076290	239.380	ug/l	99
24) 1,1-Dichloroethane	3.599	63	140775	46.428	ug/l	98
25) 2-Butanone	4.550	43	319354	240.666	ug/l	99
26) 2,2-Dichloropropane	4.465	77	127370	46.513	ug/l	100
27) cis-1,2-Dichloroethene	4.477	96	87873	45.773	ug/l	99
28) Bromochloromethane	4.885	49	64047	47.988	ug/l	97
29) Tetrahydrofuran	4.995	42	186406	229.138	ug/l	99
30) Chloroform	5.080	83	152301	46.702	ug/l	97
31) Cyclohexane	5.458	56	110939	44.455	ug/l	97
32) 1,1,1-Trichloroethane	5.373	97	134412	47.795	ug/l	99
36) 1,1-Dichloropropene	5.678	75	93645	48.048	ug/l	99
37) Ethyl Acetate	4.708	43	114449	47.306	ug/l	99
38) Carbon Tetrachloride	5.659	117	112105	51.191	ug/l	97
39) Methylcyclohexane	7.366	83	122366	48.328	ug/l	96
40) Benzene	6.025	78	294332	48.482	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112724\
Data File : VX044024.D
Acq On : 27 Nov 2024 08:46
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 28 00:38:28 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 12/02/2024
Supervised By :Mahesh Dadoda 12/02/2024

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	4.910	41	62598	50.554	ug/l		95
42) 1,2-Dichloroethane	6.074	62	117341	48.126	ug/l		98
43) Isopropyl Acetate	6.330	43	188495	48.957	ug/l		100
44) Trichloroethene	7.116	130	73684	42.874	ug/l		99
45) 1,2-Dichloropropane	7.421	63	75438	50.735	ug/l		97
46) Dibromomethane	7.574	93	59934	50.955	ug/l		99
47) Bromodichloromethane	7.811	83	110104	52.194	ug/l		100
48) Methyl methacrylate	7.683	41	89682	48.543	ug/l		98
49) 1,4-Dioxane	7.665	88	31598	960.155	ug/l		87
51) 4-Methyl-2-Pentanone	8.567	43	581863	247.644	ug/l		99
52) Toluene	8.714	92	181747	50.018	ug/l		98
53) t-1,3-Dichloropropene	8.976	75	109813	51.048	ug/l		99
54) cis-1,3-Dichloropropene	8.360	75	118961	50.445	ug/l		98
55) 1,1,2-Trichloroethane	9.147	97	73258	48.840	ug/l		96
56) Ethyl methacrylate	9.116	69	116068	49.680	ug/l		99
57) 1,3-Dichloropropane	9.305	76	126674	50.133	ug/l		100
58) 2-Chloroethyl Vinyl ether	8.232	63	300041	234.146	ug/l		100
59) 2-Hexanone	9.427	43	450164	254.904	ug/l		100
60) Dibromochloromethane	9.518	129	78916	52.438	ug/l		100
61) 1,2-Dibromoethane	9.604	107	76467	50.417	ug/l		99
64) Tetrachloroethene	9.269	164	62443	51.249	ug/l		97
65) Chlorobenzene	10.073	112	198983	49.030	ug/l		100
66) 1,1,1,2-Tetrachloroethane	10.159	131	69620	52.895	ug/l		99
67) Ethyl Benzene	10.189	91	346780	50.427	ug/l		99
68) m/p-Xylenes	10.299	106	259750	101.285	ug/l		99
69) o-Xylene	10.640	106	126134	50.375	ug/l		99
70) Styrene	10.652	104	210843	50.911	ug/l		99
71) Bromoform	10.799	173	47573	47.741	ug/l	#	99
73) Isopropylbenzene	10.957	105	336827	50.711	ug/l		99
74) N-amyl acetate	10.841	43	150540	48.925	ug/l		99
75) 1,1,2,2-Tetrachloroethane	11.207	83	112445	49.441	ug/l		99
76) 1,2,3-Trichloropropane	11.238	75	93407m	49.294	ug/l		
77) Bromobenzene	11.195	156	78818	49.744	ug/l		98
78) n-propylbenzene	11.299	91	378104	50.969	ug/l		98
79) 2-Chlorotoluene	11.360	91	227955	48.595	ug/l		99
80) 1,3,5-Trimethylbenzene	11.451	105	276587	50.615	ug/l		99
81) trans-1,4-Dichloro-2-b...	11.018	75	33226	47.847	ug/l		98
82) 4-Chlorotoluene	11.451	91	263736	49.800	ug/l		99
83) tert-Butylbenzene	11.713	119	275397	50.846	ug/l		99
84) 1,2,4-Trimethylbenzene	11.750	105	275517	50.643	ug/l		100
85) sec-Butylbenzene	11.890	105	335675	50.583	ug/l		99
86) p-Isopropyltoluene	12.006	119	283919	52.671	ug/l		99
87) 1,3-Dichlorobenzene	11.969	146	143580	49.754	ug/l		99
88) 1,4-Dichlorobenzene	12.036	146	142164	48.319	ug/l		98
89) n-Butylbenzene	12.329	91	249177	52.430	ug/l		100
90) Hexachloroethane	12.536	117	46037	50.225	ug/l		100
91) 1,2-Dichlorobenzene	12.335	146	144679	49.679	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	12.939	75	22768	49.961	ug/l		97
93) 1,2,4-Trichlorobenzene	13.585	180	85047	49.533	ug/l		99
94) Hexachlorobutadiene	13.725	225	33606	49.524	ug/l		97
95) Naphthalene	13.774	128	311649	50.423	ug/l		100
96) 1,2,3-Trichlorobenzene	13.957	180	88547	50.952	ug/l		95

Sample Results: **VX044024.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112724\
Data File : VX044024.D
Acq On : 27 Nov 2024 08:46
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 12/02/2024
Supervised By :Mahesh Dadoda 12/02/2024

Quant Time: Nov 28 00:38:28 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration

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

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

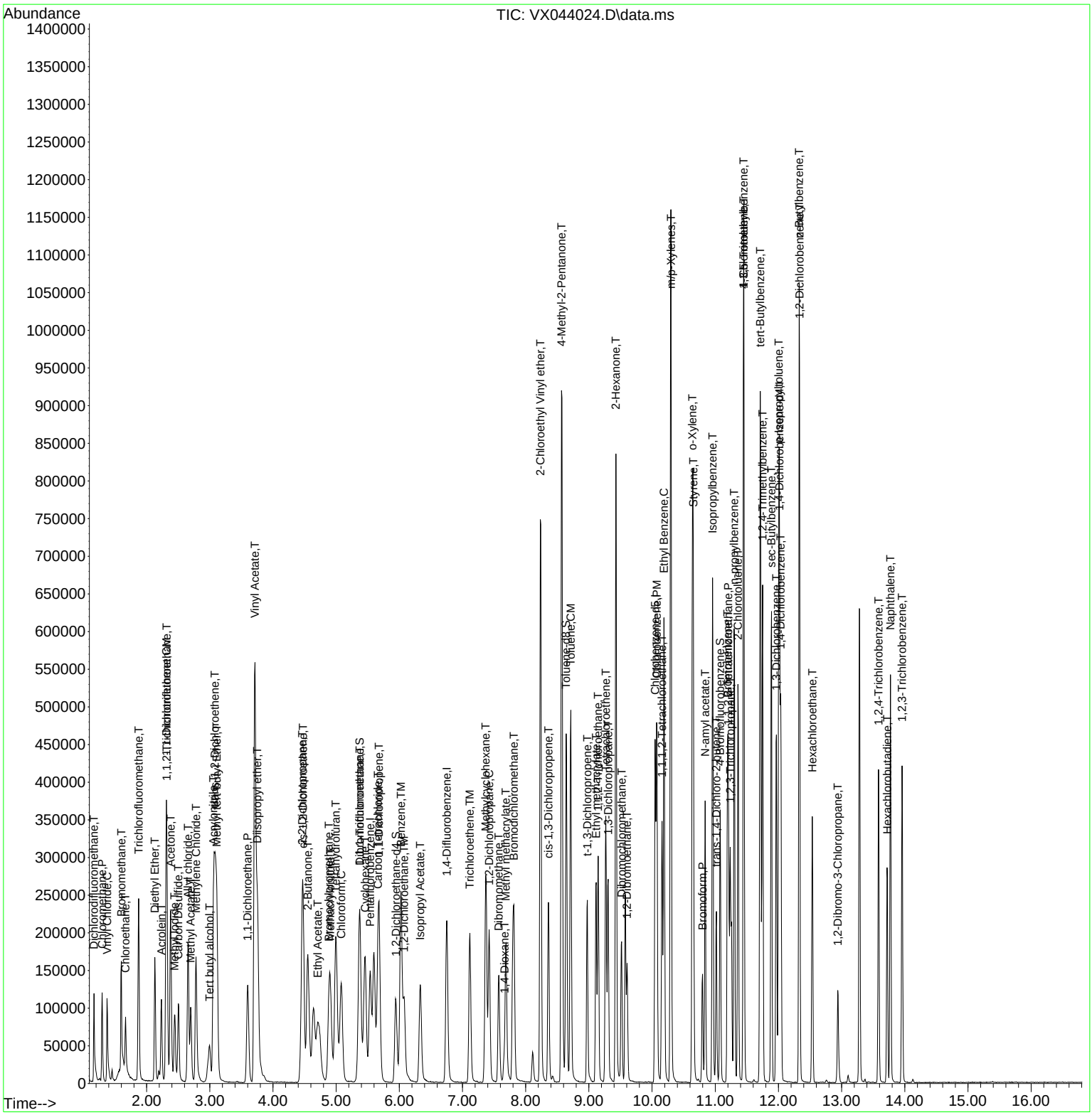
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112724\
Data File : VX044024.D
Acq On : 27 Nov 2024 08:46
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 28 00:38:28 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 12/02/2024
Supervised By :Mahesh Dadoda 12/02/2024



Sample Results: **VX044024.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112724\
Data File : VX044024.D
Acq On : 27 Nov 2024 08:46
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Nov 28 00:38:28 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
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	94	0.00
2	T	Dichlorodifluoromethane	0.633	0.577	8.8	79	0.00
3	P	Chloromethane	0.667	0.617	7.5	83	0.00
4	C	Vinyl Chloride	0.709	0.636	10.3#	79	0.00
5	T	Bromomethane	0.436	0.432	0.9	91	0.00
6	T	Chloroethane	0.432	0.428	0.9	88	0.00
7	T	Trichlorofluoromethane	1.268	1.126	11.2	78	0.00
8	T	Diethyl Ether	0.462	0.414	10.4	82	0.00
9	T	1,1,2-Trichlorotrifluoroeth	0.605	0.569	6.0	81	0.00
10	T	Methyl Iodide	0.755	0.711	5.8	83	0.00
11	T	Tert butyl alcohol	0.138	0.125	9.4	81	0.00
12	CM	1,1-Dichloroethene	0.576	0.512	11.1#	80	0.00
13	T	Acrolein	0.145	0.118	18.6	77	0.00
14	T	Allyl chloride	0.941	0.878	6.7	79	0.00
15	T	Acrylonitrile	0.335	0.319	4.8	81	0.00
16	T	Acetone	0.394	0.390	1.0	86	0.00
17	T	Carbon Disulfide	1.188	0.969	18.4	71	0.00
18	T	Methyl Acetate	0.917	0.850	7.3	81	0.00
19	T	Methyl tert-butyl Ether	2.092	1.967	6.0	82	0.00
20	T	Methylene Chloride	0.668	0.602	9.9	85	0.00
21	T	trans-1,2-Dichloroethene	0.595	0.533	10.4	79	0.00
22	T	Diisopropyl ether	2.013	1.854	7.9	81	0.00
23	T	Vinyl Acetate	1.722	1.649	4.2	80	0.00
24	P	1,1-Dichloroethane	1.161	1.078	7.1	81	0.00
25	T	2-Butanone	0.508	0.489	3.7	81	0.00
26	T	2,2-Dichloropropane	1.049	0.976	7.0	81	0.00
27	T	cis-1,2-Dichloroethene	0.735	0.673	8.4	80	0.00
28	T	Bromochloromethane	0.511	0.491	3.9	103	0.00
29	T	Tetrahydrofuran	0.312	0.286	8.3	80	0.00
30	C	Chloroform	1.249	1.167	6.6#	83	0.00
31	T	Cyclohexane	0.956	0.850	11.1	77	0.00
32	T	1,1,1-Trichloroethane	1.077	1.030	4.4	82	0.00
33	S	1,2-Dichloroethane-d4	0.858	0.810	5.6	102	0.00
34	I	1,4-Difluorobenzene	1.000	1.000	0.0	91	0.00
35	S	Dibromofluoromethane	0.357	0.370	-3.6	103	0.00
36	T	1,1-Dichloropropene	0.445	0.428	3.8	79	0.00
37	T	Ethyl Acetate	0.553	0.523	5.4	78	0.00
38	T	Carbon Tetrachloride	0.500	0.512	-2.4	83	0.00
39	T	Methylcyclohexane	0.578	0.559	3.3	77	0.00
40	TM	Benzene	1.387	1.345	3.0	82	0.00
41	T	Methacrylonitrile	0.283	0.286	-1.1	79	0.00
42	TM	1,2-Dichloroethane	0.557	0.536	3.8	81	0.00
43	T	Isopropyl Acetate	0.880	0.861	2.2	80	0.00
44	TM	Trichloroethene	0.393	0.337	14.2	82	0.00
45	C	1,2-Dichloropropane	0.340	0.345	-1.5#	84	0.00
46	T	Dibromomethane	0.269	0.274	-1.9	85	0.00
47	T	Bromodichloromethane	0.482	0.503	-4.4	84	0.00
48	T	Methyl methacrylate	0.422	0.410	2.8	80	0.00

Sample Results: **VX044024.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112724\
Data File : VX044024.D
Acq On : 27 Nov 2024 08:46
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Nov 28 00:38:28 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
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	0.008	0.007	12.5	80	0.00
50	S	Toluene-d8	1.232	1.254	-1.8	103	0.00
51	T	4-Methyl-2-Pentanone	0.537	0.532	0.9	79	0.00
52	CM	Toluene	0.830	0.830	0.0	82	0.00
53	T	t-1,3-Dichloropropene	0.491	0.502	-2.2	80	0.00
54	T	cis-1,3-Dichloropropene	0.539	0.543	-0.7	81	0.00
55	T	1,1,2-Trichloroethane	0.343	0.335	2.3	82	0.00
56	T	Ethyl methacrylate	0.534	0.530	0.7	78	0.00
57	T	1,3-Dichloropropane	0.577	0.579	-0.3	84	0.00
58	T	2-Chloroethyl Vinyl ether	0.273	0.274	-0.4	81	0.00
59	T	2-Hexanone	0.403	0.411	-2.0	79	0.00
60	T	Dibromochloromethane	0.344	0.361	-4.9	83	0.00
61	T	1,2-Dibromoethane	0.346	0.349	-0.9	82	0.00
62	S	4-Bromofluorobenzene	0.419	0.419	0.0	98	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	87	0.00
64	T	Tetrachloroethene	0.330	0.338	-2.4	84	0.00
65	PM	Chlorobenzene	1.098	1.077	1.9	82	0.00
66	T	1,1,1,2-Tetrachloroethane	0.356	0.377	-5.9	83	0.00
67	C	Ethyl Benzene	1.861	1.877	-0.9#	81	0.00
68	T	m/p-Xylenes	0.694	0.703	-1.3	80	0.00
69	T	o-Xylene	0.678	0.683	-0.7	79	0.00
70	T	Styrene	1.121	1.141	-1.8	79	0.00
71	P	Bromoform	0.240	0.257	-7.1	79	0.00
72	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	86	0.00
73	T	Isopropylbenzene	3.843	3.898	-1.4	82	0.00
74	T	N-amyl acetate	1.780	1.742	2.1	75	0.00
75	P	1,1,2,2-Tetrachloroethane	1.316	1.301	1.1	80	0.00
76	T	1,2,3-Trichloropropane	1.096	1.081	1.4	79	0.00
77	T	Bromobenzene	0.917	0.912	0.5	81	0.00
78	T	n-propylbenzene	4.293	4.376	-1.9	80	0.00
79	T	2-Chlorotoluene	2.714	2.638	2.8	80	0.00
80	T	1,3,5-Trimethylbenzene	3.162	3.201	-1.2	80	0.00
81	T	trans-1,4-Dichloro-2-butene	0.402	0.385	4.2	75	0.00
82	T	4-Chlorotoluene	3.064	3.052	0.4	79	0.00
83	T	tert-Butylbenzene	3.134	3.187	-1.7	80	0.00
84	T	1,2,4-Trimethylbenzene	3.148	3.189	-1.3	80	0.00
85	T	sec-Butylbenzene	3.840	3.885	-1.2	79	0.00
86	T	p-Isopropyltoluene	3.119	3.286	-5.4	80	0.00
87	T	1,3-Dichlorobenzene	1.670	1.662	0.5	81	0.00
88	T	1,4-Dichlorobenzene	1.702	1.645	3.3	80	0.00
89	T	n-Butylbenzene	2.750	2.884	-4.9	78	0.00
90	T	Hexachloroethane	0.530	0.533	-0.6	78	0.00
91	T	1,2-Dichlorobenzene	1.685	1.674	0.7	82	0.00
92	T	1,2-Dibromo-3-Chloropropane	0.264	0.263	0.4	80	0.00
93	T	1,2,4-Trichlorobenzene	0.994	0.984	1.0	78	0.00
94	T	Hexachlorobutadiene	0.393	0.389	1.0	81	0.00
95	T	Naphthalene	3.576	3.607	-0.9	78	0.00

Sample Results: **VX044024.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112724\
Data File : VX044024.D
Acq On : 27 Nov 2024 08:46
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Nov 28 00:38:28 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
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	1.006	1.025	-1.9	79	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 5

Sample Results: **VX044024.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112724\
Data File : VX044024.D
Acq On : 27 Nov 2024 08:46
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Nov 28 00:38:28 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
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	94	0.00
2	T	Dichlorodifluoromethane	50.000	45.538	8.9	79	0.00
3	P	Chloromethane	50.000	46.275	7.5	83	0.00
4	C	Vinyl Chloride	50.000	44.835	10.3#	79	0.00
5	T	Bromomethane	50.000	49.483	1.0	91	0.00
6	T	Chloroethane	50.000	49.541	0.9	88	0.00
7	T	Trichlorofluoromethane	50.000	44.400	11.2	78	0.00
8	T	Diethyl Ether	50.000	44.858	10.3	82	0.00
9	T	1,1,2-Trichlorotrifluoroeth	50.000	47.028	5.9	81	0.00
10	T	Methyl Iodide	50.000	47.069	5.9	83	0.00
11	T	Tert butyl alcohol	250.000	226.911	9.2	81	0.00
12	CM	1,1-Dichloroethene	50.000	44.403	11.2#	80	0.00
13	T	Acrolein	250.000	203.784	18.5	77	0.00
14	T	Allyl chloride	50.000	46.647	6.7	79	0.00
15	T	Acrylonitrile	250.000	237.970	4.8	81	0.00
16	T	Acetone	250.000	247.633	0.9	86	0.00
17	T	Carbon Disulfide	50.000	40.758	18.5	71	0.00
18	T	Methyl Acetate	50.000	46.357	7.3	81	0.00
19	T	Methyl tert-butyl Ether	50.000	47.008	6.0	82	0.00
20	T	Methylene Chloride	50.000	45.052	9.9	85	0.00
21	T	trans-1,2-Dichloroethene	50.000	44.770	10.5	79	0.00
22	T	Diisopropyl ether	50.000	46.056	7.9	81	0.00
23	T	Vinyl Acetate	250.000	239.380	4.2	80	0.00
24	P	1,1-Dichloroethane	50.000	46.428	7.1	81	0.00
25	T	2-Butanone	250.000	240.666	3.7	81	0.00
26	T	2,2-Dichloropropane	50.000	46.513	7.0	81	0.00
27	T	cis-1,2-Dichloroethene	50.000	45.773	8.5	80	0.00
28	T	Bromochloromethane	50.000	47.988	4.0	103	0.00
29	T	Tetrahydrofuran	250.000	229.138	8.3	80	0.00
30	C	Chloroform	50.000	46.702	6.6#	83	0.00
31	T	Cyclohexane	50.000	44.455	11.1	77	0.00
32	T	1,1,1-Trichloroethane	50.000	47.795	4.4	82	0.00
33	S	1,2-Dichloroethane-d4	50.000	47.224	5.6	102	0.00
34	I	1,4-Difluorobenzene	50.000	50.000	0.0	91	0.00
35	S	Dibromofluoromethane	50.000	51.835	-3.7	103	0.00
36	T	1,1-Dichloropropene	50.000	48.048	3.9	79	0.00
37	T	Ethyl Acetate	50.000	47.306	5.4	78	0.00
38	T	Carbon Tetrachloride	50.000	51.191	-2.4	83	0.00
39	T	Methylcyclohexane	50.000	48.328	3.3	77	0.00
40	TM	Benzene	50.000	48.482	3.0	82	0.00
41	T	Methacrylonitrile	50.000	50.554	-1.1	79	0.00
42	TM	1,2-Dichloroethane	50.000	48.126	3.7	81	0.00
43	T	Isopropyl Acetate	50.000	48.957	2.1	80	0.00
44	TM	Trichloroethene	50.000	42.874	14.3	82	0.00
45	C	1,2-Dichloropropane	50.000	50.735	-1.5#	84	0.00
46	T	Dibromomethane	50.000	50.955	-1.9	85	0.00
47	T	Bromodichloromethane	50.000	52.194	-4.4	84	0.00
48	T	Methyl methacrylate	50.000	48.543	2.9	80	0.00

Sample Results: **VX044024.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112724\
Data File : VX044024.D
Acq On : 27 Nov 2024 08:46
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Nov 28 00:38:28 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
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	960.155	4.0	80	0.00
50	S	Toluene-d8	50.000	50.892	-1.8	103	0.00
51	T	4-Methyl-2-Pentanone	250.000	247.644	0.9	79	0.00
52	CM	Toluene	50.000	50.018	-0.0#	82	0.00
53	T	t-1,3-Dichloropropene	50.000	51.048	-2.1	80	0.00
54	T	cis-1,3-Dichloropropene	50.000	50.445	-0.9	81	0.00
55	T	1,1,2-Trichloroethane	50.000	48.840	2.3	82	0.00
56	T	Ethyl methacrylate	50.000	49.680	0.6	78	0.00
57	T	1,3-Dichloropropane	50.000	50.133	-0.3	84	0.00
58	T	2-Chloroethyl Vinyl ether	250.000	234.146	6.3	81	0.00
59	T	2-Hexanone	250.000	254.904	-2.0	79	0.00
60	T	Dibromochloromethane	50.000	52.438	-4.9	83	0.00
61	T	1,2-Dibromoethane	50.000	50.417	-0.8	82	0.00
62	S	4-Bromofluorobenzene	50.000	49.983	0.0	98	0.00
63	I	Chlorobenzene-d5	50.000	50.000	0.0	87	0.00
64	T	Tetrachloroethene	50.000	51.249	-2.5	84	0.00
65	PM	Chlorobenzene	50.000	49.030	1.9	82	0.00
66	T	1,1,1,2-Tetrachloroethane	50.000	52.895	-5.8	83	0.00
67	C	Ethyl Benzene	50.000	50.427	-0.9#	81	0.00
68	T	m/p-Xylenes	100.000	101.285	-1.3	80	0.00
69	T	o-Xylene	50.000	50.375	-0.8	79	0.00
70	T	Styrene	50.000	50.911	-1.8	79	0.00
71	P	Bromoform	50.000	47.741	4.5	79	0.00
72	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	86	0.00
73	T	Isopropylbenzene	50.000	50.711	-1.4	82	0.00
74	T	N-amyl acetate	50.000	48.925	2.2	75	0.00
75	P	1,1,2,2-Tetrachloroethane	50.000	49.441	1.1	80	0.00
76	T	1,2,3-Trichloropropane	50.000	49.294	1.4	79	0.00
77	T	Bromobenzene	50.000	49.744	0.5	81	0.00
78	T	n-propylbenzene	50.000	50.969	-1.9	80	0.00
79	T	2-Chlorotoluene	50.000	48.595	2.8	80	0.00
80	T	1,3,5-Trimethylbenzene	50.000	50.615	-1.2	80	0.00
81	T	trans-1,4-Dichloro-2-butene	50.000	47.847	4.3	75	0.00
82	T	4-Chlorotoluene	50.000	49.800	0.4	79	0.00
83	T	tert-Butylbenzene	50.000	50.846	-1.7	80	0.00
84	T	1,2,4-Trimethylbenzene	50.000	50.643	-1.3	80	0.00
85	T	sec-Butylbenzene	50.000	50.583	-1.2	79	0.00
86	T	p-Isopropyltoluene	50.000	52.671	-5.3	80	0.00
87	T	1,3-Dichlorobenzene	50.000	49.754	0.5	81	0.00
88	T	1,4-Dichlorobenzene	50.000	48.319	3.4	80	0.00
89	T	n-Butylbenzene	50.000	52.430	-4.9	78	0.00
90	T	Hexachloroethane	50.000	50.225	-0.5	78	0.00
91	T	1,2-Dichlorobenzene	50.000	49.679	0.6	82	0.00
92	T	1,2-Dibromo-3-Chloropropane	50.000	49.961	0.1	80	0.00
93	T	1,2,4-Trichlorobenzene	50.000	49.533	0.9	78	0.00
94	T	Hexachlorobutadiene	50.000	49.524	1.0	81	0.00
95	T	Naphthalene	50.000	50.423	-0.8	78	0.00

Sample Results: **VX044024.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112724\
Data File : VX044024.D
Acq On : 27 Nov 2024 08:46
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Nov 28 00:38:28 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
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	50.952	-1.9	79	0.00

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

Raw Data: **VX044052.D**

Alliance TECHNICAL GROUP

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: LIRO01

Lab Code: CHEM Case No.: P5021 SAS No.: P5021 SDG No.: P5021

Instrument ID: MSVOA_X Calibration Date/Time: 12/02/2024 09:45

Lab File ID: VX044052.D Init. Calib. Date(s): 11/21/2024 11/21/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 09:47 12:03

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Methyl tert-butyl Ether	2.092	2.203		5.31	20
Benzene	1.387	1.412		1.8	20
Toluene	0.830	0.852		2.65	20
Ethyl Benzene	1.861	1.956		5.11	20
m/p-Xylenes	0.694	0.726		4.61	20
o-Xylene	0.678	0.704		3.84	20
Isopropylbenzene	3.843	3.944		2.63	20
n-propylbenzene	4.293	4.440		3.42	20
1,3,5-Trimethylbenzene	3.162	3.291		4.08	20
tert-Butylbenzene	3.134	3.312		5.68	20
1,2,4-Trimethylbenzene	3.148	3.302		4.89	20
sec-Butylbenzene	3.840	4.041		5.23	20
p-Isopropyltoluene	3.119	3.375		8.21	20
n-Butylbenzene	2.750	3.049		10.87	20
Naphthalene	3.576	3.761		5.17	20
1,2-Dichloroethane-d4	0.858	0.890		3.73	20
Dibromofluoromethane	0.357	0.379		6.16	20
Toluene-d8	1.232	1.268		2.92	20
4-Bromofluorobenzene	0.419	0.442		5.49	20

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

Sample Results: **VX044052.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120224\
Data File : VX044052.D
Acq On : 02 Dec 2024 09:45
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 03 00:12:37 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 12/03/2024
Supervised By :Mahesh Dadoda 12/03/2024

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.543	168	140021	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.750	114	242098	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.049	117	204952	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	98861	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.946	65	124611	51.887	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 103.780%			
35) Dibromofluoromethane	5.373	113	91744	53.034	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 106.060%			
50) Toluene-d8	8.640	98	306897	51.465	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 102.940%			
62) 4-Bromofluorobenzene	11.079	95	106993	52.721	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 105.440%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.166	85	86493	48.760	ug/l	96
3) Chloromethane	1.294	50	83366	44.661	ug/l	97
4) Vinyl Chloride	1.373	62	90554	45.609	ug/l	99
5) Bromomethane	1.599	94	61375	50.250	ug/l	97
6) Chloroethane	1.666	64	55849	46.164	ug/l	99
7) Trichlorofluoromethane	1.867	101	175841	49.537	ug/l	100
8) Diethyl Ether	2.129	74	61929	47.867	ug/l	98
9) 1,1,2-Trichlorotrifluo...	2.318	101	89039	52.586	ug/l	99
10) Methyl Iodide	2.440	142	107895	51.022	ug/l	97
11) Tert butyl alcohol	3.007	59	82554	214.160	ug/l	97
12) 1,1-Dichloroethene	2.306	96	80026	49.599	ug/l	96
13) Acrolein	2.233	56	110346	271.581	ug/l	98
14) Allyl chloride	2.654	41	138703	52.611	ug/l	98
15) Acrylonitrile	3.062	53	227682	242.374	ug/l	99
16) Acetone	2.379	43	270514	245.245	ug/l	99
17) Carbon Disulfide	2.501	76	168533	50.639	ug/l	98
18) Methyl Acetate	2.696	43	127328	49.569	ug/l	99
19) Methyl tert-butyl Ether	3.111	73	308452	52.651	ug/l	99
20) Methylene Chloride	2.782	84	89121	47.611	ug/l	97
21) trans-1,2-Dichloroethene	3.080	96	81277	48.792	ug/l	96
22) Diisopropyl ether	3.757	45	300056	53.226	ug/l	96
23) Vinyl Acetate	3.714	43	1270483	263.452	ug/l	99
24) 1,1-Dichloroethane	3.599	63	168066	51.678	ug/l	99
25) 2-Butanone	4.550	43	340993	239.586	ug/l	100
26) 2,2-Dichloropropane	4.458	77	159292	54.235	ug/l	100
27) cis-1,2-Dichloroethene	4.476	96	102274	49.670	ug/l	96
28) Bromochloromethane	4.885	49	69670	48.669	ug/l	97
29) Tetrahydrofuran	4.995	42	199491	228.630	ug/l	99
30) Chloroform	5.080	83	179380	51.284	ug/l	97
31) Cyclohexane	5.458	56	130363	48.704	ug/l	98
32) 1,1,1-Trichloroethane	5.367	97	162737	53.951	ug/l	99
36) 1,1-Dichloropropene	5.677	75	113428	52.618	ug/l	98
37) Ethyl Acetate	4.702	43	127248	47.553	ug/l	99
38) Carbon Tetrachloride	5.665	117	135548	55.961	ug/l	98
39) Methylcyclohexane	7.366	83	145683	52.020	ug/l	100
40) Benzene	6.025	78	341850	50.910	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120224\
Data File : VX044052.D
Acq On : 02 Dec 2024 09:45
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 03 00:12:37 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 12/03/2024
Supervised By :Mahesh Dadoda 12/03/2024

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
41) Methacrylonitrile	4.909	41	72182	52.704 ug/l	98
42) 1,2-Dichloroethane	6.074	62	140487	52.094 ug/l	99
43) Isopropyl Acetate	6.330	43	219674	51.584 ug/l	99
44) Trichloroethene	7.110	130	85401	44.927 ug/l	93
45) 1,2-Dichloropropane	7.421	63	86127	52.369 ug/l	98
46) Dibromomethane	7.573	93	68292	52.494 ug/l	99
47) Bromodichloromethane	7.817	83	135862	58.229 ug/l	100
48) Methyl methacrylate	7.689	41	102048	49.940 ug/l	99
49) 1,4-Dioxane	7.665	88	33859	930.205 ug/l #	88
51) 4-Methyl-2-Pentanone	8.573	43	647758	249.255 ug/l	99
52) Toluene	8.713	92	206208	51.308 ug/l	99
53) t-1,3-Dichloropropene	8.970	75	133476	56.098 ug/l	98
54) cis-1,3-Dichloropropene	8.360	75	142364	54.580 ug/l	98
55) 1,1,2-Trichloroethane	9.146	97	84935	51.196 ug/l	98
56) Ethyl methacrylate	9.116	69	134166	51.920 ug/l	98
57) 1,3-Dichloropropane	9.305	76	144385	51.664 ug/l	99
58) 2-Chloroethyl Vinyl ether	8.238	63	278297	196.017 ug/l	99
59) 2-Hexanone	9.427	43	498051	254.978 ug/l	99
60) Dibromochloromethane	9.518	129	97377	58.500 ug/l	98
61) 1,2-Dibromoethane	9.604	107	87062	51.899 ug/l	100
64) Tetrachloroethene	9.268	164	69696	51.572 ug/l	96
65) Chlorobenzene	10.073	112	228907	50.853 ug/l	100
66) 1,1,1,2-Tetrachloroethane	10.158	131	83832	57.425 ug/l	99
67) Ethyl Benzene	10.189	91	400918	52.562 ug/l	99
68) m/p-Xylenes	10.299	106	297563	104.612 ug/l	100
69) o-Xylene	10.640	106	144197	51.921 ug/l	96
70) Styrene	10.652	104	247778	53.942 ug/l	98
71) Bromoform	10.799	173	60728	54.373 ug/l #	99
73) Isopropylbenzene	10.957	105	389946	51.313 ug/l	99
74) N-amyl acetate	10.841	43	179547	51.002 ug/l	100
75) 1,1,2,2-Tetrachloroethane	11.213	83	126860	48.753 ug/l	100
76) 1,2,3-Trichloropropane	11.237	75	108048m	49.837 ug/l	
77) Bromobenzene	11.195	156	91526	50.488 ug/l	98
78) n-propylbenzene	11.298	91	438915	51.714 ug/l	99
79) 2-Chlorotoluene	11.359	91	266250	49.609 ug/l	100
80) 1,3,5-Trimethylbenzene	11.451	105	325391	52.045 ug/l	100
81) trans-1,4-Dichloro-2-b...	11.018	75	40241	50.649 ug/l	97
82) 4-Chlorotoluene	11.451	91	312748	51.616 ug/l	100
83) tert-Butylbenzene	11.713	119	327397	52.833 ug/l	98
84) 1,2,4-Trimethylbenzene	11.750	105	326413	52.440 ug/l	99
85) sec-Butylbenzene	11.890	105	399542	52.623 ug/l	100
86) p-Isopropyltoluene	12.006	119	333695	54.107 ug/l	100
87) 1,3-Dichlorobenzene	11.969	146	169834	51.438 ug/l	99
88) 1,4-Dichlorobenzene	12.036	146	168265	49.987 ug/l	97
89) n-Butylbenzene	12.329	91	301456	55.440 ug/l	99
90) Hexachloroethane	12.536	117	59433	56.673 ug/l	95
91) 1,2-Dichlorobenzene	12.335	146	168498	50.569 ug/l	98
92) 1,2-Dibromo-3-Chloropr...	12.938	75	26916	51.624 ug/l	96
93) 1,2,4-Trichlorobenzene	13.585	180	102903	52.383 ug/l	97
94) Hexachlorobutadiene	13.725	225	42001	54.099 ug/l	96
95) Naphthalene	13.774	128	371814	52.580 ug/l	99
96) 1,2,3-Trichlorobenzene	13.963	180	103759	52.185 ug/l	97

Sample Results: **VX044052.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120224\
Data File : VX044052.D
Acq On : 02 Dec 2024 09:45
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 03 00:12:37 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 12/03/2024
Supervised By :Mahesh Dadoda 12/03/2024

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

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

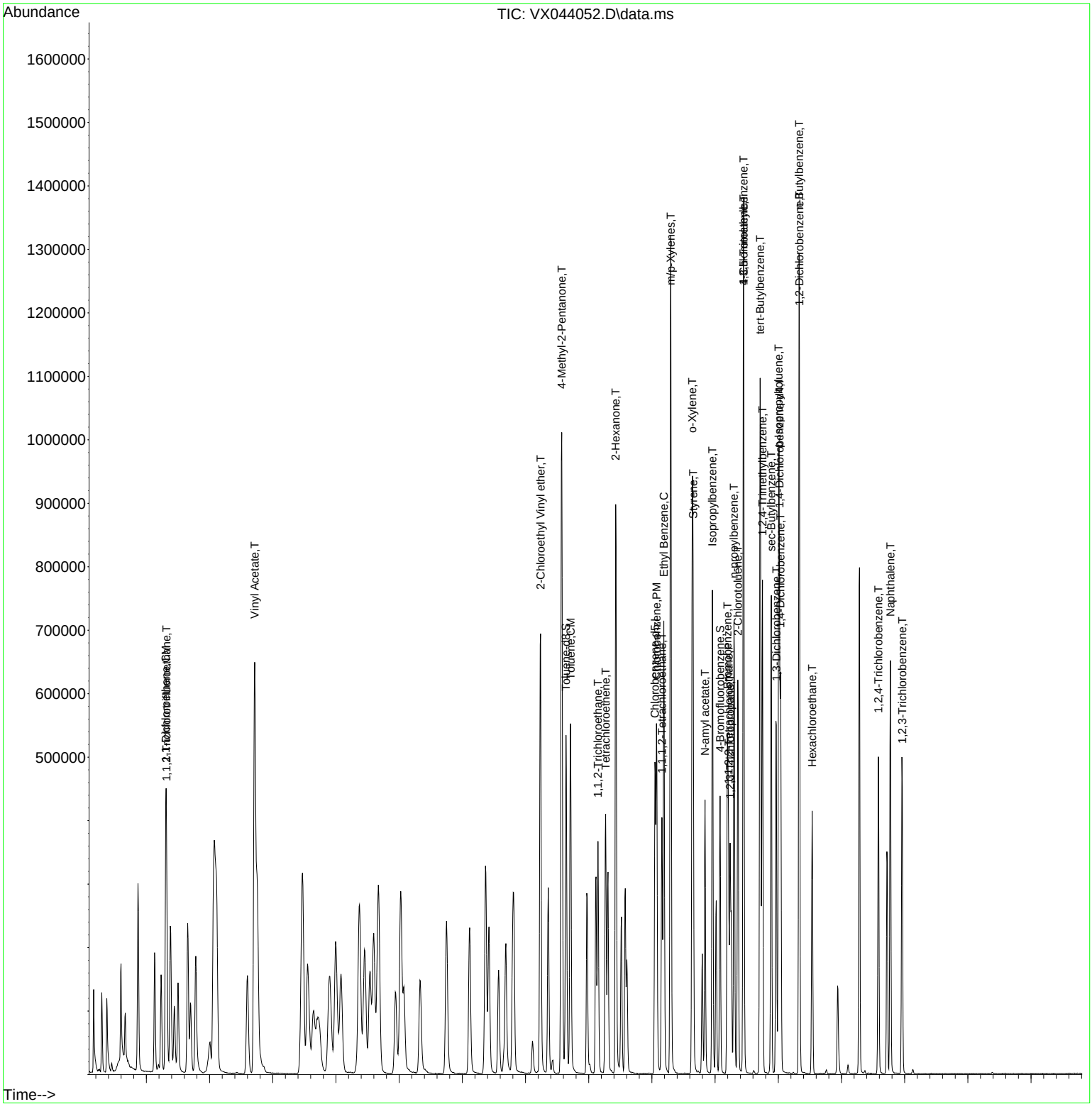
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120224\
Data File : VX044052.D
Acq On : 02 Dec 2024 09:45
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 03 00:12:37 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 12/03/2024
Supervised By :Mahesh Dadoda 12/03/2024



Sample Results: **VX044052.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120224\
Data File : VX044052.D
Acq On : 02 Dec 2024 09:45
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Dec 03 00:12:37 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
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	101	0.00
2	T	Dichlorodifluoromethane	0.633	0.618	2.4	91	0.00
3	P	Chloromethane	0.667	0.595	10.8	86	0.00
4	C	Vinyl Chloride	0.709	0.647	8.7#	86	0.00
5	T	Bromomethane	0.436	0.438	-0.5	99	0.00
6	T	Chloroethane	0.432	0.399	7.6	88	0.00
7	T	Trichlorofluoromethane	1.268	1.256	0.9	94	0.00
8	T	Diethyl Ether	0.462	0.442	4.3	94	0.00
9	T	1,1,2-Trichlorotrifluoroeth	0.605	0.636	-5.1	98	0.00
10	T	Methyl Iodide	0.755	0.771	-2.1	96	0.00
11	T	Tert butyl alcohol	0.138	0.118	14.5	82	0.01
12	CM	1,1-Dichloroethene	0.576	0.572	0.7#	96	0.00
13	T	Acrolein	0.145	0.158	-9.0	110	0.00
14	T	Allyl chloride	0.941	0.991	-5.3	96	0.00
15	T	Acrylonitrile	0.335	0.325	3.0	89	0.00
16	T	Acetone	0.394	0.386	2.0	92	0.00
17	T	Carbon Disulfide	1.188	1.204	-1.3	95	0.00
18	T	Methyl Acetate	0.917	0.909	0.9	93	0.00
19	T	Methyl tert-butyl Ether	2.092	2.203	-5.3	98	0.00
20	T	Methylene Chloride	0.668	0.636	4.8	96	0.00
21	T	trans-1,2-Dichloroethene	0.595	0.580	2.5	93	0.00
22	T	Diisopropyl ether	2.013	2.143	-6.5	100	0.00
23	T	Vinyl Acetate	1.722	1.815	-5.4	94	0.00
24	P	1,1-Dichloroethane	1.161	1.200	-3.4	97	0.00
25	T	2-Butanone	0.508	0.487	4.1	87	0.00
26	T	2,2-Dichloropropane	1.049	1.138	-8.5	101	0.00
27	T	cis-1,2-Dichloroethene	0.735	0.730	0.7	93	0.00
28	T	Bromochloromethane	0.511	0.498	2.5	112	0.00
29	T	Tetrahydrofuran	0.312	0.285	8.7	85	0.00
30	C	Chloroform	1.249	1.281	-2.6#	98	0.00
31	T	Cyclohexane	0.956	0.931	2.6	90	0.00
32	T	1,1,1-Trichloroethane	1.077	1.162	-7.9	99	0.00
33	S	1,2-Dichloroethane-d4	0.858	0.890	-3.7	120	0.00
34	I	1,4-Difluorobenzene	1.000	1.000	0.0	100	0.00
35	S	Dibromofluoromethane	0.357	0.379	-6.2	116	0.00
36	T	1,1-Dichloropropene	0.445	0.469	-5.4	95	0.00
37	T	Ethyl Acetate	0.553	0.526	4.9	86	0.00
38	T	Carbon Tetrachloride	0.500	0.560	-12.0	101	0.00
39	T	Methylcyclohexane	0.578	0.602	-4.2	92	0.00
40	TM	Benzene	1.387	1.412	-1.8	95	0.00
41	T	Methacrylonitrile	0.283	0.298	-5.3	91	0.00
42	TM	1,2-Dichloroethane	0.557	0.580	-4.1	96	0.00
43	T	Isopropyl Acetate	0.880	0.907	-3.1	93	0.00
44	TM	Trichloroethene	0.393	0.353	10.2	95	0.00
45	C	1,2-Dichloropropane	0.340	0.356	-4.7#	96	0.00
46	T	Dibromomethane	0.269	0.282	-4.8	97	0.00
47	T	Bromodichloromethane	0.482	0.561	-16.4	103	0.00
48	T	Methyl methacrylate	0.422	0.422	0.0	90	0.00

Sample Results: **VX044052.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120224\
Data File : VX044052.D
Acq On : 02 Dec 2024 09:45
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Dec 03 00:12:37 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
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	0.008	0.007	12.5	86	0.00
50	S	Toluene-d8	1.232	1.268	-2.9	115	0.00
51	T	4-Methyl-2-Pentanone	0.537	0.535	0.4	88	0.00
52	CM	Toluene	0.830	0.852	-2.7#	93	0.00
53	T	t-1,3-Dichloropropene	0.491	0.551	-12.2	97	0.00
54	T	cis-1,3-Dichloropropene	0.539	0.588	-9.1	96	0.00
55	T	1,1,2-Trichloroethane	0.343	0.351	-2.3	95	0.00
56	T	Ethyl methacrylate	0.534	0.554	-3.7	90	0.00
57	T	1,3-Dichloropropane	0.577	0.596	-3.3	96	0.00
58	T	2-Chloroethyl Vinyl ether	0.273	0.230	15.8	75	0.00
59	T	2-Hexanone	0.403	0.411	-2.0	88	0.00
60	T	Dibromochloromethane	0.344	0.402	-16.9	102	0.00
61	T	1,2-Dibromoethane	0.346	0.360	-4.0	94	0.00
62	S	4-Bromofluorobenzene	0.419	0.442	-5.5	114	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	97	0.00
64	T	Tetrachloroethene	0.330	0.340	-3.0	94	0.00
65	PM	Chlorobenzene	1.098	1.117	-1.7	94	0.00
66	T	1,1,1,2-Tetrachloroethane	0.356	0.409	-14.9	100	0.00
67	C	Ethyl Benzene	1.861	1.956	-5.1#	93	0.00
68	T	m/p-Xylenes	0.694	0.726	-4.6	92	0.00
69	T	o-Xylene	0.678	0.704	-3.8	90	0.00
70	T	Styrene	1.121	1.209	-7.9	92	0.00
71	P	Bromoform	0.240	0.296	-23.3	101	0.00
72	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	99	0.00
73	T	Isopropylbenzene	3.843	3.944	-2.6	95	0.00
74	T	N-amyl acetate	1.780	1.816	-2.0	90	0.00
75	P	1,1,2,2-Tetrachloroethane	1.316	1.283	2.5	91	0.00
76	T	1,2,3-Trichloropropane	1.096	1.093	0.3	91	0.00
77	T	Bromobenzene	0.917	0.926	-1.0	94	0.00
78	T	n-propylbenzene	4.293	4.440	-3.4	92	0.00
79	T	2-Chlorotoluene	2.714	2.693	0.8	93	0.00
80	T	1,3,5-Trimethylbenzene	3.162	3.291	-4.1	94	0.00
81	T	trans-1,4-Dichloro-2-butene	0.402	0.407	-1.2	91	0.00
82	T	4-Chlorotoluene	3.064	3.164	-3.3	94	0.00
83	T	tert-Butylbenzene	3.134	3.312	-5.7	95	0.00
84	T	1,2,4-Trimethylbenzene	3.148	3.302	-4.9	95	0.00
85	T	sec-Butylbenzene	3.840	4.041	-5.2	94	0.00
86	T	p-Isopropyltoluene	3.119	3.375	-8.2	94	0.00
87	T	1,3-Dichlorobenzene	1.670	1.718	-2.9	96	0.00
88	T	1,4-Dichlorobenzene	1.702	1.702	0.0	94	0.00
89	T	n-Butylbenzene	2.750	3.049	-10.9	94	0.00
90	T	Hexachloroethane	0.530	0.601	-13.4	101	0.00
91	T	1,2-Dichlorobenzene	1.685	1.704	-1.1	95	0.00
92	T	1,2-Dibromo-3-Chloropropane	0.264	0.272	-3.0	95	0.00
93	T	1,2,4-Trichlorobenzene	0.994	1.041	-4.7	95	0.00
94	T	Hexachlorobutadiene	0.393	0.425	-8.1	102	0.00
95	T	Naphthalene	3.576	3.761	-5.2	93	0.00

Sample Results: **VX044052.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120224\
Data File : VX044052.D
Acq On : 02 Dec 2024 09:45
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Dec 03 00:12:37 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
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	1.006	1.050	-4.4	93	0.00

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

Sample Results: **VX044052.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120224\
Data File : VX044052.D
Acq On : 02 Dec 2024 09:45
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Dec 03 00:12:37 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
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	101	0.00
2	T	Dichlorodifluoromethane	50.000	48.760	2.5	91	0.00
3	P	Chloromethane	50.000	44.661	10.7	86	0.00
4	C	Vinyl Chloride	50.000	45.609	8.8#	86	0.00
5	T	Bromomethane	50.000	50.250	-0.5	99	0.00
6	T	Chloroethane	50.000	46.164	7.7	88	0.00
7	T	Trichlorofluoromethane	50.000	49.537	0.9	94	0.00
8	T	Diethyl Ether	50.000	47.867	4.3	94	0.00
9	T	1,1,2-Trichlorotrifluoroeth	50.000	52.586	-5.2	98	0.00
10	T	Methyl Iodide	50.000	51.022	-2.0	96	0.00
11	T	Tert butyl alcohol	250.000	214.160	14.3	82	0.01
12	CM	1,1-Dichloroethene	50.000	49.599	0.8#	96	0.00
13	T	Acrolein	250.000	271.581	-8.6	110	0.00
14	T	Allyl chloride	50.000	52.611	-5.2	96	0.00
15	T	Acrylonitrile	250.000	242.374	3.1	89	0.00
16	T	Acetone	250.000	245.245	1.9	92	0.00
17	T	Carbon Disulfide	50.000	50.639	-1.3	95	0.00
18	T	Methyl Acetate	50.000	49.569	0.9	93	0.00
19	T	Methyl tert-butyl Ether	50.000	52.651	-5.3	98	0.00
20	T	Methylene Chloride	50.000	47.611	4.8	96	0.00
21	T	trans-1,2-Dichloroethene	50.000	48.792	2.4	93	0.00
22	T	Diisopropyl ether	50.000	53.226	-6.5	100	0.00
23	T	Vinyl Acetate	250.000	263.452	-5.4	94	0.00
24	P	1,1-Dichloroethane	50.000	51.678	-3.4	97	0.00
25	T	2-Butanone	250.000	239.586	4.2	87	0.00
26	T	2,2-Dichloropropane	50.000	54.235	-8.5	101	0.00
27	T	cis-1,2-Dichloroethene	50.000	49.670	0.7	93	0.00
28	T	Bromochloromethane	50.000	48.669	2.7	112	0.00
29	T	Tetrahydrofuran	250.000	228.630	8.5	85	0.00
30	C	Chloroform	50.000	51.284	-2.6#	98	0.00
31	T	Cyclohexane	50.000	48.704	2.6	90	0.00
32	T	1,1,1-Trichloroethane	50.000	53.951	-7.9	99	0.00
33	S	1,2-Dichloroethane-d4	50.000	51.887	-3.8	120	0.00
34	I	1,4-Difluorobenzene	50.000	50.000	0.0	100	0.00
35	S	Dibromofluoromethane	50.000	53.034	-6.1	116	0.00
36	T	1,1-Dichloropropene	50.000	52.618	-5.2	95	0.00
37	T	Ethyl Acetate	50.000	47.553	4.9	86	0.00
38	T	Carbon Tetrachloride	50.000	55.961	-11.9	101	0.00
39	T	Methylcyclohexane	50.000	52.020	-4.0	92	0.00
40	TM	Benzene	50.000	50.910	-1.8	95	0.00
41	T	Methacrylonitrile	50.000	52.704	-5.4	91	0.00
42	TM	1,2-Dichloroethane	50.000	52.094	-4.2	96	0.00
43	T	Isopropyl Acetate	50.000	51.584	-3.2	93	0.00
44	TM	Trichloroethene	50.000	44.927	10.1	95	0.00
45	C	1,2-Dichloropropane	50.000	52.369	-4.7#	96	0.00
46	T	Dibromomethane	50.000	52.494	-5.0	97	0.00
47	T	Bromodichloromethane	50.000	58.229	-16.5	103	0.00
48	T	Methyl methacrylate	50.000	49.940	0.1	90	0.00

Sample Results: **VX044052.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120224\
Data File : VX044052.D
Acq On : 02 Dec 2024 09:45
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Dec 03 00:12:37 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
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	930.205	7.0	86	0.00
50	S	Toluene-d8	50.000	51.465	-2.9	115	0.00
51	T	4-Methyl-2-Pentanone	250.000	249.255	0.3	88	0.00
52	CM	Toluene	50.000	51.308	-2.6#	93	0.00
53	T	t-1,3-Dichloropropene	50.000	56.098	-12.2	97	0.00
54	T	cis-1,3-Dichloropropene	50.000	54.580	-9.2	96	0.00
55	T	1,1,2-Trichloroethane	50.000	51.196	-2.4	95	0.00
56	T	Ethyl methacrylate	50.000	51.920	-3.8	90	0.00
57	T	1,3-Dichloropropane	50.000	51.664	-3.3	96	0.00
58	T	2-Chloroethyl Vinyl ether	250.000	196.017	21.6	75	0.00
59	T	2-Hexanone	250.000	254.978	-2.0	88	0.00
60	T	Dibromochloromethane	50.000	58.500	-17.0	102	0.00
61	T	1,2-Dibromoethane	50.000	51.899	-3.8	94	0.00
62	S	4-Bromofluorobenzene	50.000	52.721	-5.4	114	0.00
63	I	Chlorobenzene-d5	50.000	50.000	0.0	97	0.00
64	T	Tetrachloroethene	50.000	51.572	-3.1	94	0.00
65	PM	Chlorobenzene	50.000	50.853	-1.7	94	0.00
66	T	1,1,1,2-Tetrachloroethane	50.000	57.425	-14.8	100	0.00
67	C	Ethyl Benzene	50.000	52.562	-5.1#	93	0.00
68	T	m/p-Xylenes	100.000	104.612	-4.6	92	0.00
69	T	o-Xylene	50.000	51.921	-3.8	90	0.00
70	T	Styrene	50.000	53.942	-7.9	92	0.00
71	P	Bromoform	50.000	54.373	-8.7	101	0.00
72	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	99	0.00
73	T	Isopropylbenzene	50.000	51.313	-2.6	95	0.00
74	T	N-amyl acetate	50.000	51.002	-2.0	90	0.00
75	P	1,1,2,2-Tetrachloroethane	50.000	48.753	2.5	91	0.00
76	T	1,2,3-Trichloropropane	50.000	49.837	0.3	91	0.00
77	T	Bromobenzene	50.000	50.488	-1.0	94	0.00
78	T	n-propylbenzene	50.000	51.714	-3.4	92	0.00
79	T	2-Chlorotoluene	50.000	49.609	0.8	93	0.00
80	T	1,3,5-Trimethylbenzene	50.000	52.045	-4.1	94	0.00
81	T	trans-1,4-Dichloro-2-butene	50.000	50.649	-1.3	91	0.00
82	T	4-Chlorotoluene	50.000	51.616	-3.2	94	0.00
83	T	tert-Butylbenzene	50.000	52.833	-5.7	95	0.00
84	T	1,2,4-Trimethylbenzene	50.000	52.440	-4.9	95	0.00
85	T	sec-Butylbenzene	50.000	52.623	-5.2	94	0.00
86	T	p-Isopropyltoluene	50.000	54.107	-8.2	94	0.00
87	T	1,3-Dichlorobenzene	50.000	51.438	-2.9	96	0.00
88	T	1,4-Dichlorobenzene	50.000	49.987	0.0	94	0.00
89	T	n-Butylbenzene	50.000	55.440	-10.9	94	0.00
90	T	Hexachloroethane	50.000	56.673	-13.3	101	0.00
91	T	1,2-Dichlorobenzene	50.000	50.569	-1.1	95	0.00
92	T	1,2-Dibromo-3-Chloropropane	50.000	51.624	-3.2	95	0.00
93	T	1,2,4-Trichlorobenzene	50.000	52.383	-4.8	95	0.00
94	T	Hexachlorobutadiene	50.000	54.099	-8.2	102	0.00
95	T	Naphthalene	50.000	52.580	-5.2	93	0.00

Sample Results: **VX044052.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120224\
Data File : VX044052.D
Acq On : 02 Dec 2024 09:45
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Dec 03 00:12:37 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
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	52.185	-4.4	93	0.00

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

QC SAMPLE DATA

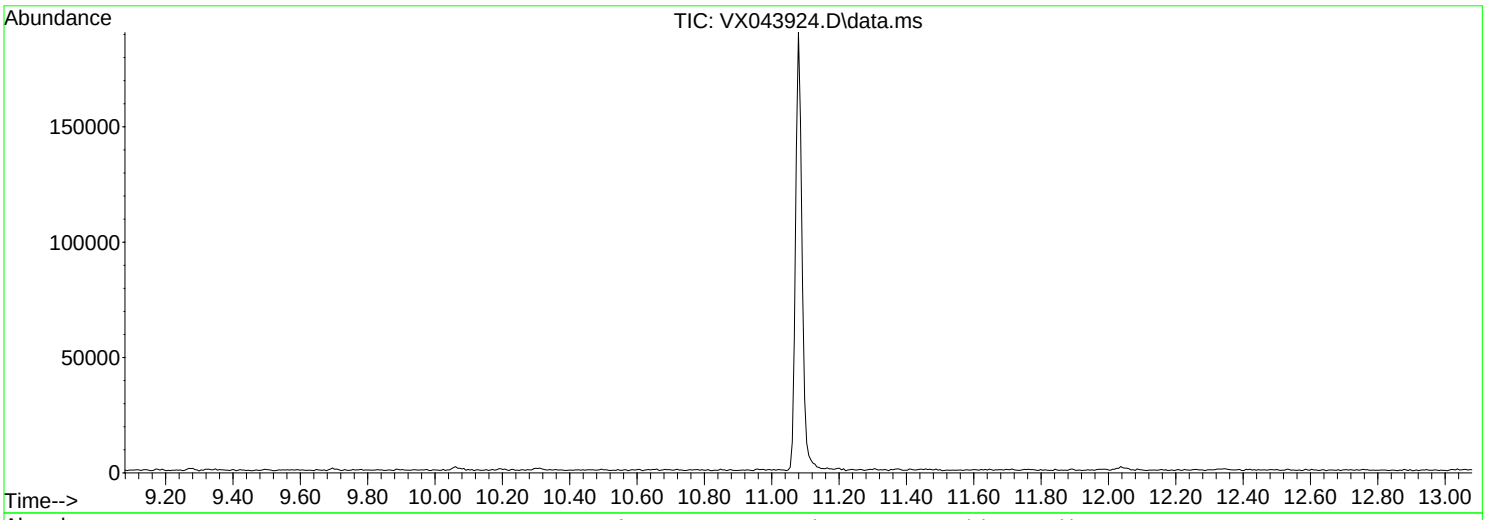
Sample Results: **VX043924.D**

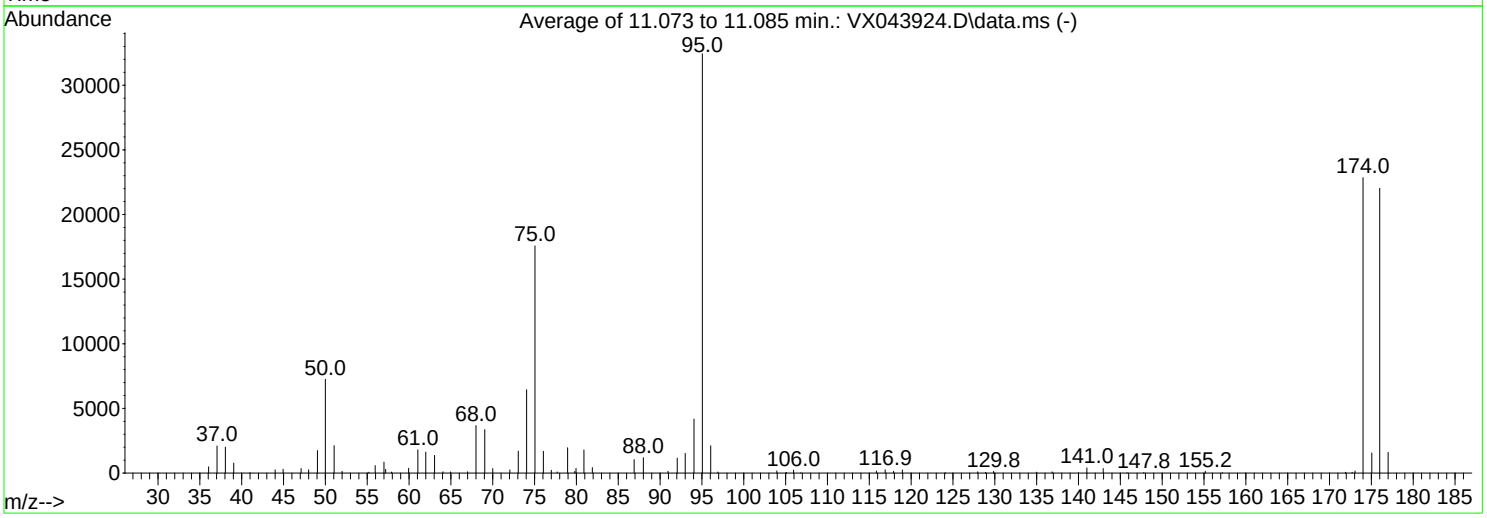
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112124\
Data File : VX043924.D
Acq On : 21 Nov 2024 08:51
Operator : JC/MD
Sample : BFB
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112024W.M
Title : SW846 8260
Last Update : Fri Nov 22 00:18:05 2024





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

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.4	7254	PASS
75	95	30	60	54.2	17573	PASS
95	95	100	100	100.0	32437	PASS
96	95	5	9	6.5	2112	PASS
173	174	0.00	2	0.7	162	PASS
174	95	50	100	70.5	22853	PASS
175	174	5	9	6.8	1557	PASS
176	174	95	101	96.4	22030	PASS
177	176	5	9	7.3	1600	PASS

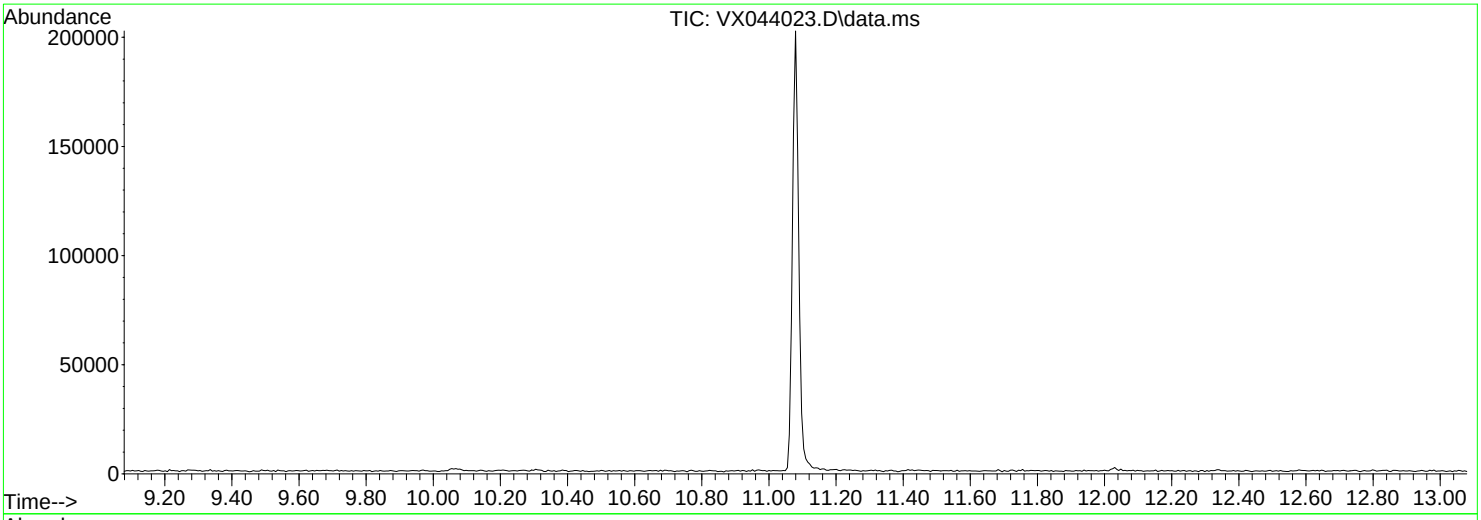
Sample Results: **VX044023.D**

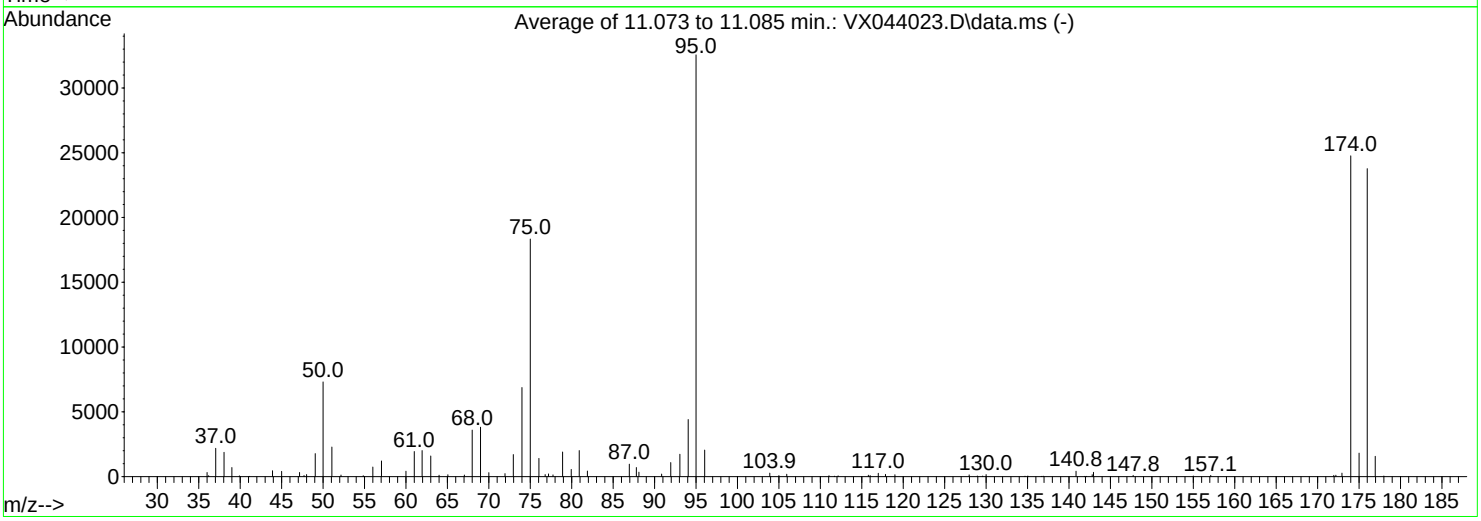
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112724\
Data File : VX044023.D
Acq On : 27 Nov 2024 07:52
Operator : JC/MD
Sample : BFB
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Title : SW846 8260
Last Update : Fri Nov 22 03:45:52 2024





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	22.5	7314	PASS
75	95	30	60	56.3	18335	PASS
95	95	100	100	100.0	32555	PASS
96	95	5	9	6.3	2051	PASS
173	174	0.00	2	1.1	266	PASS
174	95	50	100	76.1	24760	PASS
175	174	5	9	7.3	1810	PASS
176	174	95	101	96.0	23773	PASS
177	176	5	9	6.6	1572	PASS

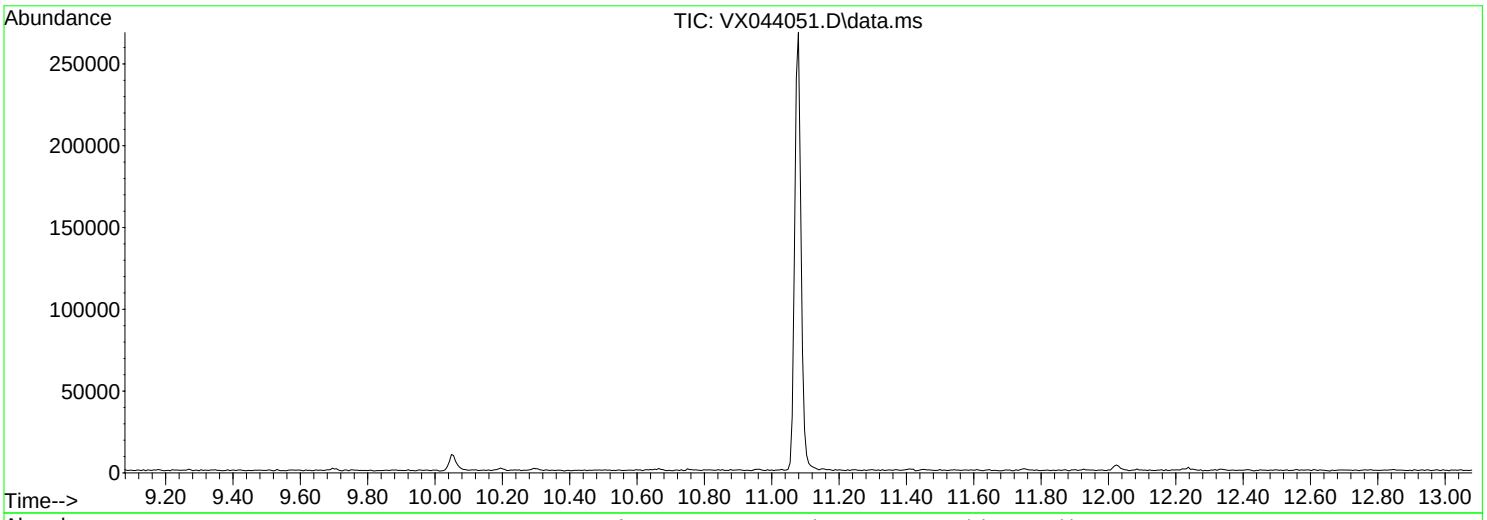
Sample Results: **VX044051.D**

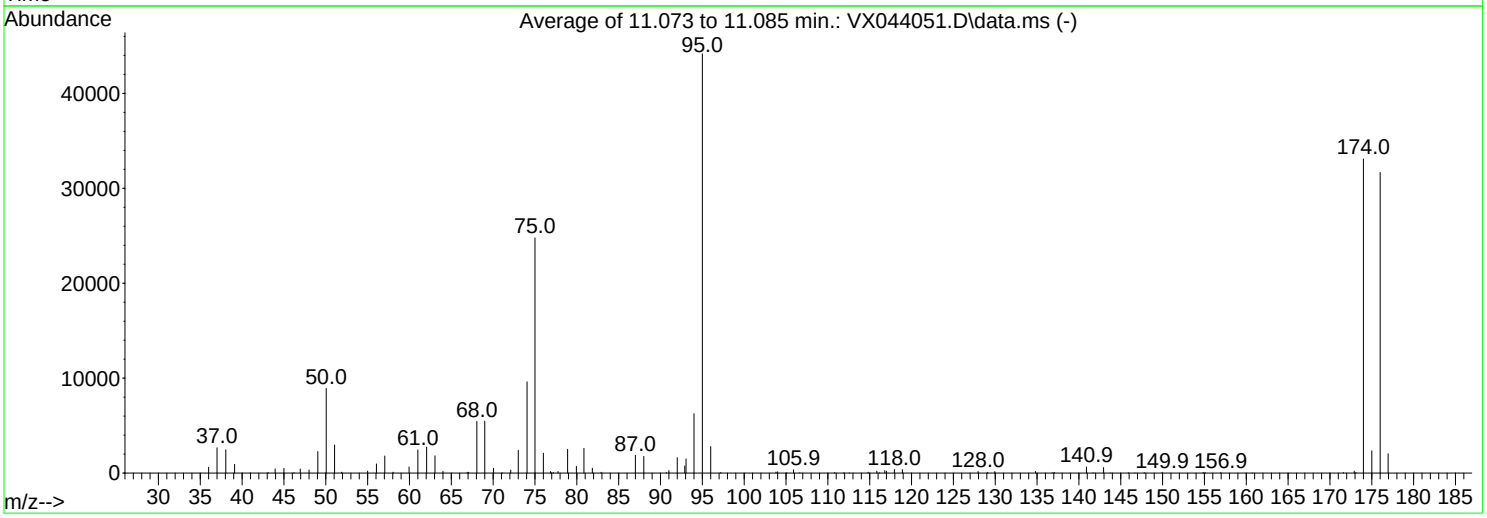
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120224\
Data File : VX044051.D
Acq On : 02 Dec 2024 08:35
Operator : JC/MD
Sample : BFB
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Title : SW846 8260
Last Update : Fri Nov 22 03:45:52 2024





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	20.2	8923	PASS
75	95	30	60	56.1	24773	PASS
95	95	100	100	100.0	44176	PASS
96	95	5	9	6.3	2787	PASS
173	174	0.00	2	0.6	215	PASS
174	95	50	100	74.9	33096	PASS
175	174	5	9	7.1	2350	PASS
176	174	95	101	95.7	31664	PASS
177	176	5	9	6.4	2039	PASS

Raw Data: **VX044026.D**

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

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	
Project:	RFK Bridge	Date Received:	
Client Sample ID:	VX1127WBL01	SDG No.:	P5021
Lab Sample ID:	VX1127WBL01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044026.D	1		11/27/24 09:38	VX112724

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
1634-04-4	Methyl tert-butyl Ether	1.00	U	0.16	1.00	ug/L
71-43-2	Benzene	1.00	U	0.16	1.00	ug/L
108-88-3	Toluene	1.00	U	0.18	1.00	ug/L
100-41-4	Ethyl Benzene	1.00	U	0.16	1.00	ug/L
179601-23-1	m/p-Xylenes	2.00	U	0.31	2.00	ug/L
95-47-6	o-Xylene	1.00	U	0.14	1.00	ug/L
98-82-8	Isopropylbenzene	1.00	U	0.13	1.00	ug/L
103-65-1	n-propylbenzene	1.00	U	0.14	1.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	1.00	U	0.18	1.00	ug/L
98-06-6	tert-Butylbenzene	1.00	U	0.17	1.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	1.00	U	0.18	1.00	ug/L
135-98-8	sec-Butylbenzene	1.00	U	0.17	1.00	ug/L
99-87-6	p-Isopropyltoluene	1.00	U	0.15	1.00	ug/L
104-51-8	n-Butylbenzene	1.00	U	0.22	1.00	ug/L
91-20-3	Naphthalene	1.00	U	0.59	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	50.8		74 - 125	102%	SPK: 50
1868-53-7	Dibromofluoromethane	46.6		75 - 124	93%	SPK: 50
2037-26-5	Toluene-d8	48.9		86 - 113	98%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.2		77 - 121	94%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	126000	5.538			
540-36-3	1,4-Difluorobenzene	244000	6.751			
3114-55-4	Chlorobenzene-d5	213000	10.049			
3855-82-1	1,4-Dichlorobenzene-d4	92000	12.018			

Raw Data: **VX044026.D**

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

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	
Project:	RFK Bridge	Date Received:	
Client Sample ID:	VX1127WBL01	SDG No.:	P5021
Lab Sample ID:	VX1127WBL01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044026.D	1		11/27/24 09:38	VX112724

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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

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

Sample Results: **VX044026.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112724\
Data File : VX044026.D
Acq On : 27 Nov 2024 09:38
Operator : JC/MD
Sample : VX1127WBL01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VX1127WBL01

Quant Time: Nov 28 00:39:55 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.538	168	125569	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.751	114	244455	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.049	117	212718	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	92049	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.946	65	109431	50.810	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 101.620%			
35) Dibromofluoromethane	5.379	113	81333	46.562	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 93.120%			
50) Toluene-d8	8.647	98	294241	48.867	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 97.740%			
62) 4-Bromofluorobenzene	11.079	95	96700	47.189	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 94.380%			

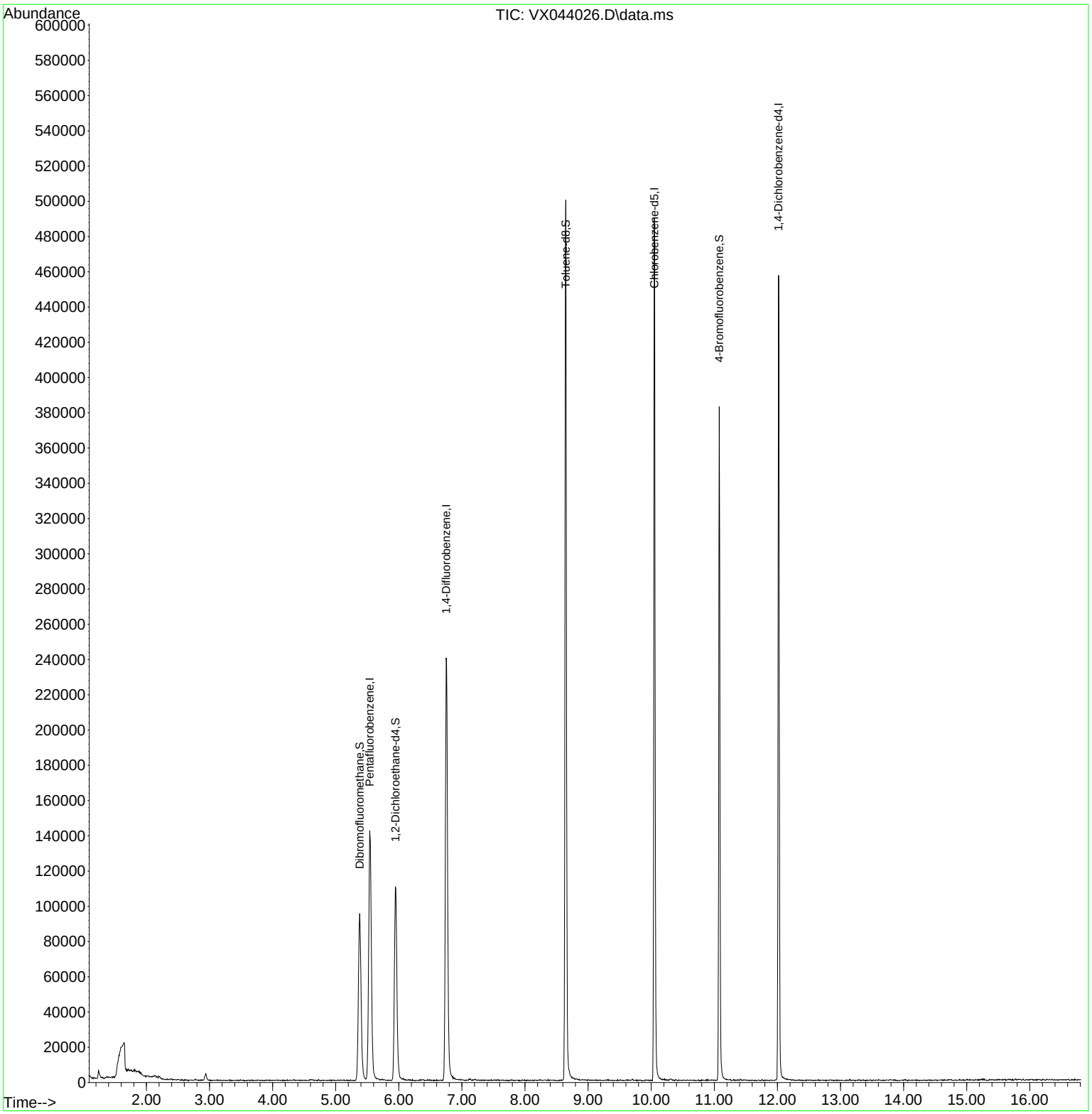
Target Compounds Qvalue

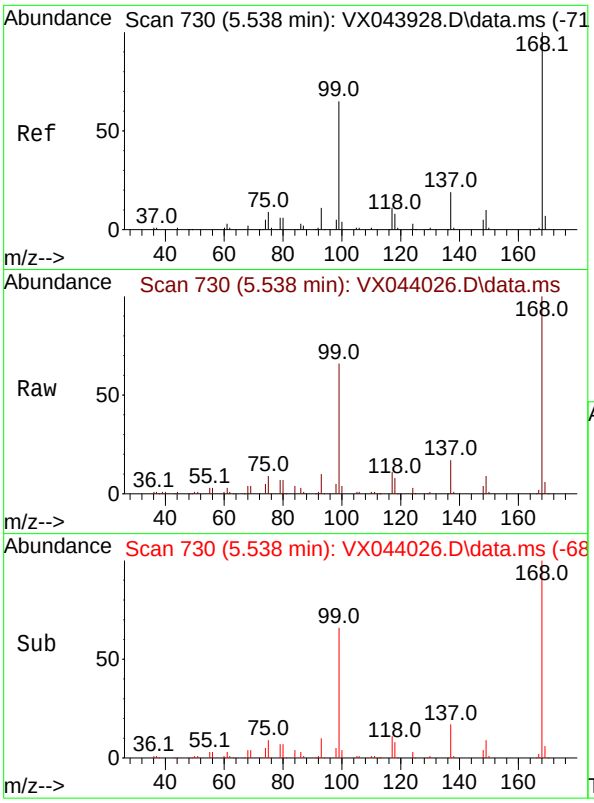
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112724\
Data File : VX044026.D
Acq On : 27 Nov 2024 09:38
Operator : JC/MD
Sample : VX1127WBL01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VX1127WBL01

Quant Time: Nov 28 00:39:55 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration



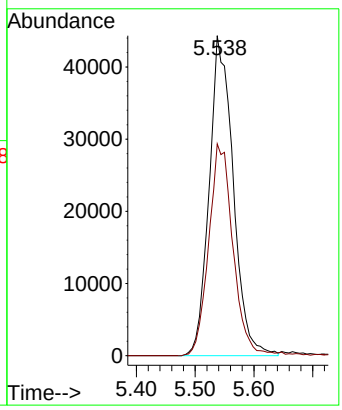


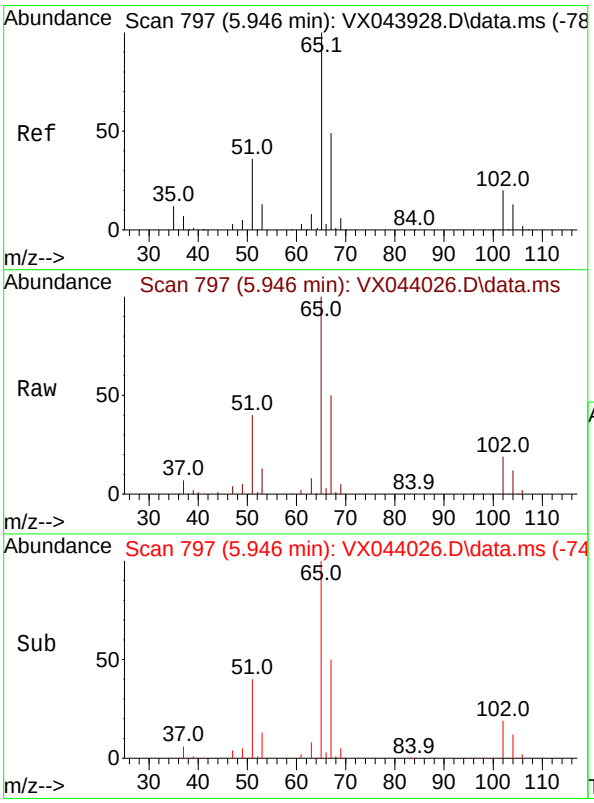
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.538 min Scan# 7
Delta R.T. -0.000 min
Lab File: VX044026.D
Acq: 27 Nov 2024 09:38

Instrument :
MSVOA_X
ClientSampleId :
VX1127WBL01

Tgt Ion:168 Resp: 125569

Ion	Ratio	Lower	Upper
168	100		
99	66.2	51.8	77.8

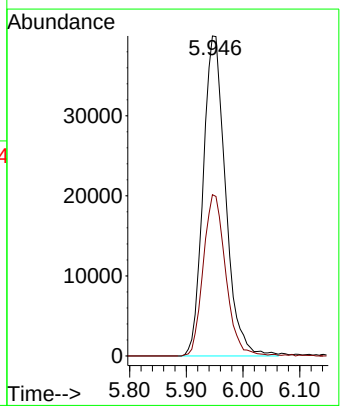


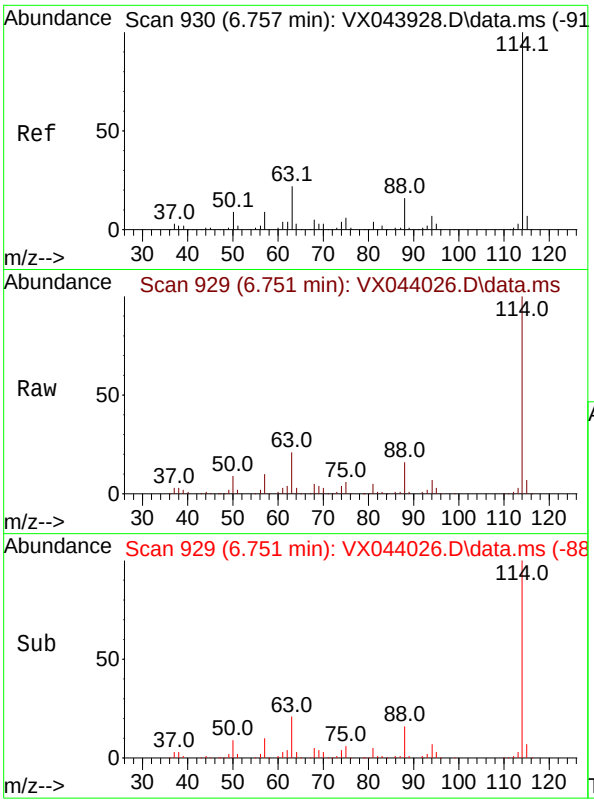


#33
1,2-Dichloroethane-d4
Concen: 50.810 ug/l
RT: 5.946 min Scan# 797
Delta R.T. -0.000 min
Lab File: VX044026.D
Acq: 27 Nov 2024 09:38

Tgt Ion: 65 Resp: 109431

Ion	Ratio	Lower	Upper
65	100		
67	50.4	0.0	100.8



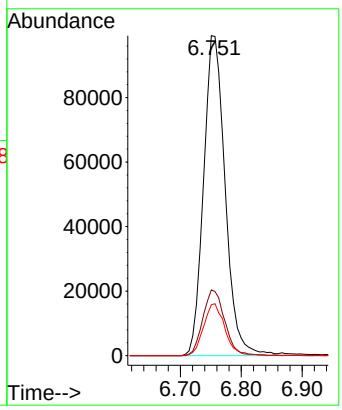


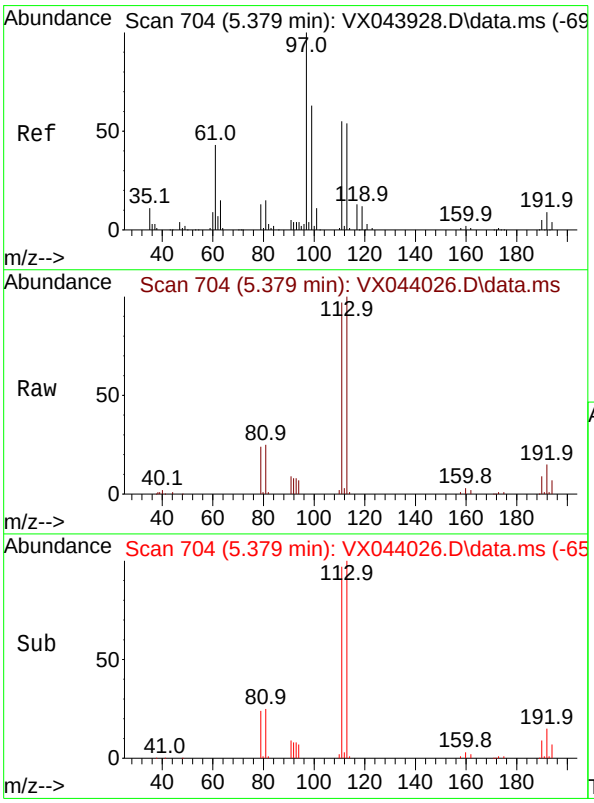
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.751 min Scan# 9
Delta R.T. -0.006 min
Lab File: VX044026.D
Acq: 27 Nov 2024 09:38

Instrument :
MSVOA_X
ClientSampleId :
VX1127WBL01

Tgt Ion:114 Resp: 244455

Ion	Ratio	Lower	Upper
114	100		
63	20.6	0.0	44.0
88	15.9	0.0	32.4

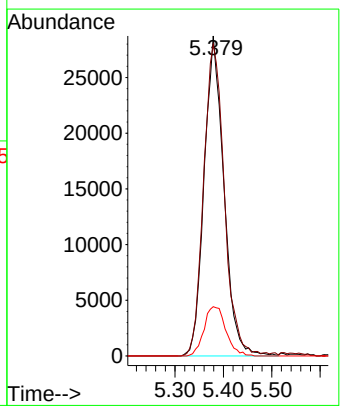


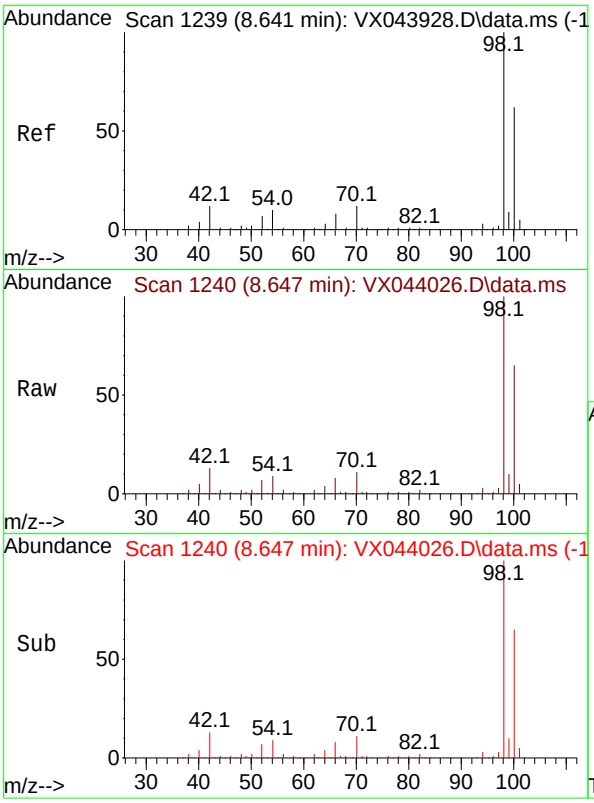


#35
Dibromofluoromethane
Concen: 46.562 ug/l
RT: 5.379 min Scan# 704
Delta R.T. -0.000 min
Lab File: VX044026.D
Acq: 27 Nov 2024 09:38

Tgt Ion:113 Resp: 81333

Ion	Ratio	Lower	Upper
113	100		
111	103.0	81.0	121.4
192	17.1	13.0	19.6



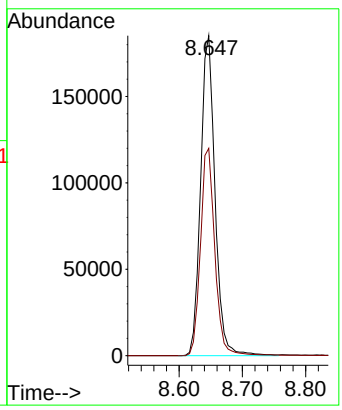


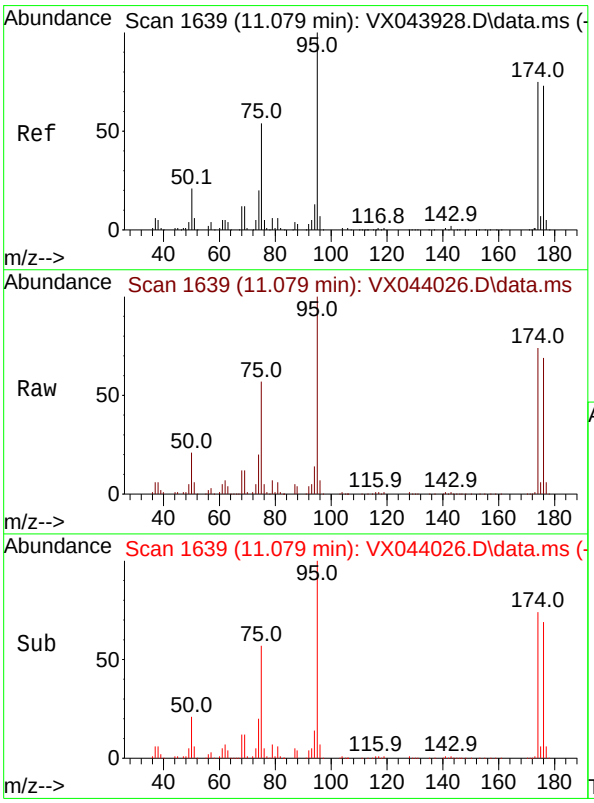
#50
Toluene-d8
Concen: 48.867 ug/l
RT: 8.647 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX044026.D
Acq: 27 Nov 2024 09:38

Instrument :
MSVOA_X
ClientSampleId :
VX1127WBL01

Tgt Ion: 98 Resp: 294241

Ion	Ratio	Lower	Upper
98	100		
100	64.8	52.6	79.0

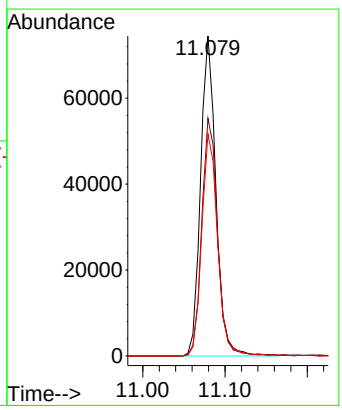


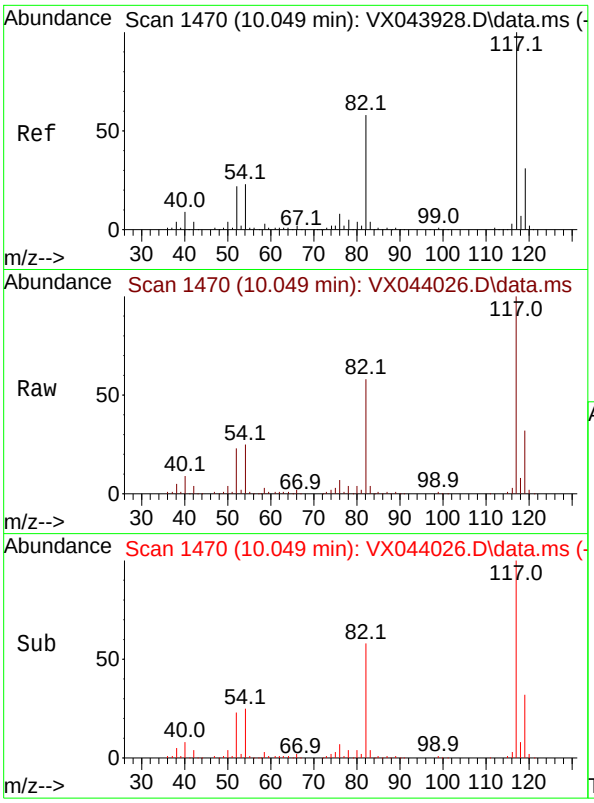


#62
4-Bromofluorobenzene
Concen: 47.189 ug/l
RT: 11.079 min Scan# 1639
Delta R.T. -0.000 min
Lab File: VX044026.D
Acq: 27 Nov 2024 09:38

Tgt Ion: 95 Resp: 96700

Ion	Ratio	Lower	Upper
95	100		
174	75.9	0.0	150.4
176	71.7	0.0	146.0



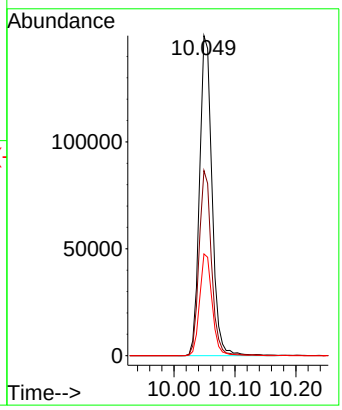


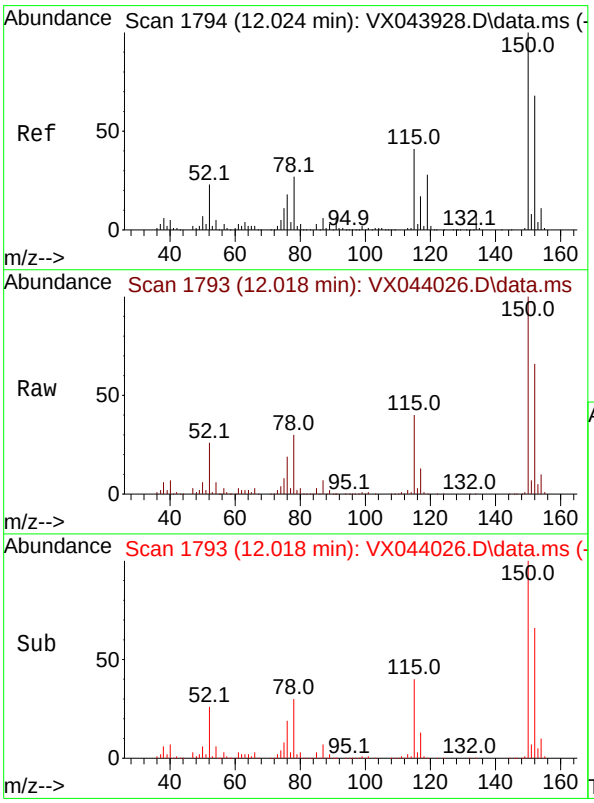
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.049 min Scan# 14
Delta R.T. -0.000 min
Lab File: VX044026.D
Acq: 27 Nov 2024 09:38

Instrument :
MSVOA_X
ClientSampleId :
VX1127WBL01

Tgt Ion:117 Resp: 212718

Ion	Ratio	Lower	Upper
117	100		
82	57.9	46.4	69.6
119	31.8	24.6	37.0

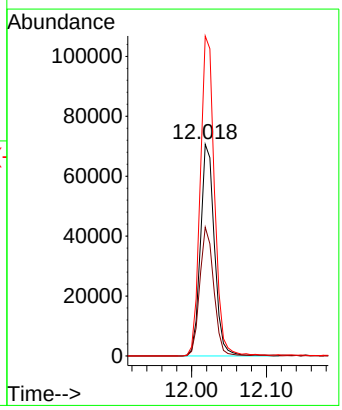




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.018 min Scan# 1793
Delta R.T. -0.006 min
Lab File: VX044026.D
Acq: 27 Nov 2024 09:38

Tgt Ion:152 Resp: 92049

Ion	Ratio	Lower	Upper
152	100		
115	60.7	45.4	136.2
150	153.6	0.0	353.0



Raw Data: **VX044054.D**

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

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	
Project:	RFK Bridge	Date Received:	
Client Sample ID:	VX1202WBL01	SDG No.:	P5021
Lab Sample ID:	VX1202WBL01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044054.D	1		12/02/24 10:37	VX120224

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
1634-04-4	Methyl tert-butyl Ether	1.00	U	0.16	1.00	ug/L
71-43-2	Benzene	1.00	U	0.16	1.00	ug/L
108-88-3	Toluene	1.00	U	0.18	1.00	ug/L
100-41-4	Ethyl Benzene	1.00	U	0.16	1.00	ug/L
179601-23-1	m/p-Xylenes	2.00	U	0.31	2.00	ug/L
95-47-6	o-Xylene	1.00	U	0.14	1.00	ug/L
98-82-8	Isopropylbenzene	1.00	U	0.13	1.00	ug/L
103-65-1	n-propylbenzene	1.00	U	0.14	1.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	1.00	U	0.18	1.00	ug/L
98-06-6	tert-Butylbenzene	1.00	U	0.17	1.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	1.00	U	0.18	1.00	ug/L
135-98-8	sec-Butylbenzene	1.00	U	0.17	1.00	ug/L
99-87-6	p-Isopropyltoluene	1.00	U	0.15	1.00	ug/L
104-51-8	n-Butylbenzene	1.00	U	0.22	1.00	ug/L
91-20-3	Naphthalene	1.00	U	0.59	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	49.6		74 - 125	99%	SPK: 50
1868-53-7	Dibromofluoromethane	47.3		75 - 124	95%	SPK: 50
2037-26-5	Toluene-d8	48.6		86 - 113	97%	SPK: 50
460-00-4	4-Bromofluorobenzene	46.5		77 - 121	93%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	138000	5.544			
540-36-3	1,4-Difluorobenzene	263000	6.757			
3114-55-4	Chlorobenzene-d5	221000	10.049			
3855-82-1	1,4-Dichlorobenzene-d4	93300	12.018			

Raw Data: **VX044054.D**

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

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	
Project:	RFK Bridge	Date Received:	
Client Sample ID:	VX1202WBL01	SDG No.:	P5021
Lab Sample ID:	VX1202WBL01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044054.D	1		12/02/24 10:37	VX120224

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\VX120224\
Data File : VX044054.D
Acq On : 02 Dec 2024 10:37
Operator : JC/MD
Sample : VX1202WBL01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VX1202WBL01

Quant Time: Dec 03 00:13:59 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.544	168	137622	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.757	114	262897	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.049	117	221008	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	93273	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.946	65	117110	49.613	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery =	99.220%		
35) Dibromofluoromethane	5.379	113	88908	47.328	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	94.660%		
50) Toluene-d8	8.647	98	314875	48.626	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery =	97.260%		
62) 4-Bromofluorobenzene	11.079	95	102573	46.544	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery =	93.080%		

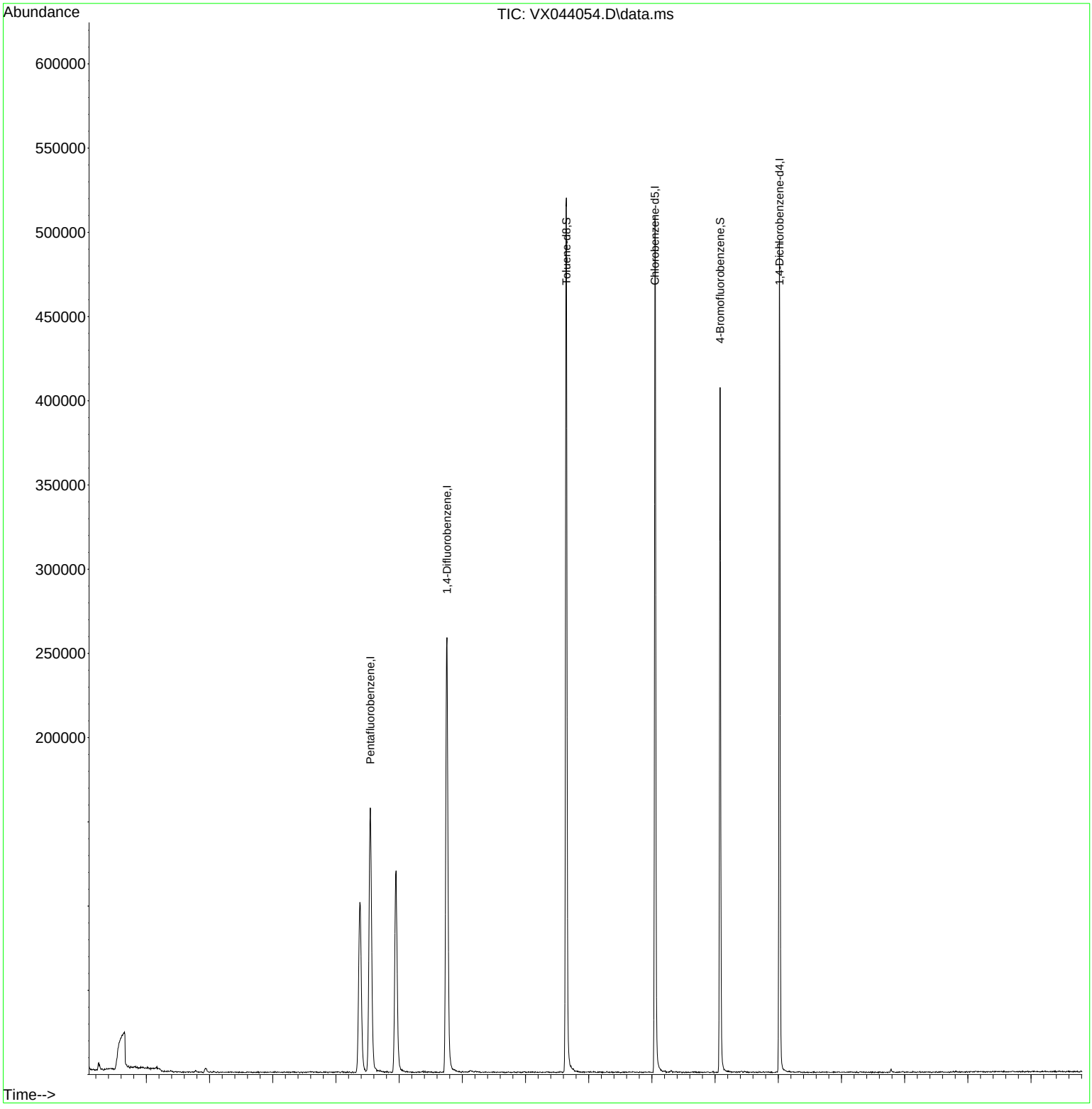
Target Compounds Qvalue

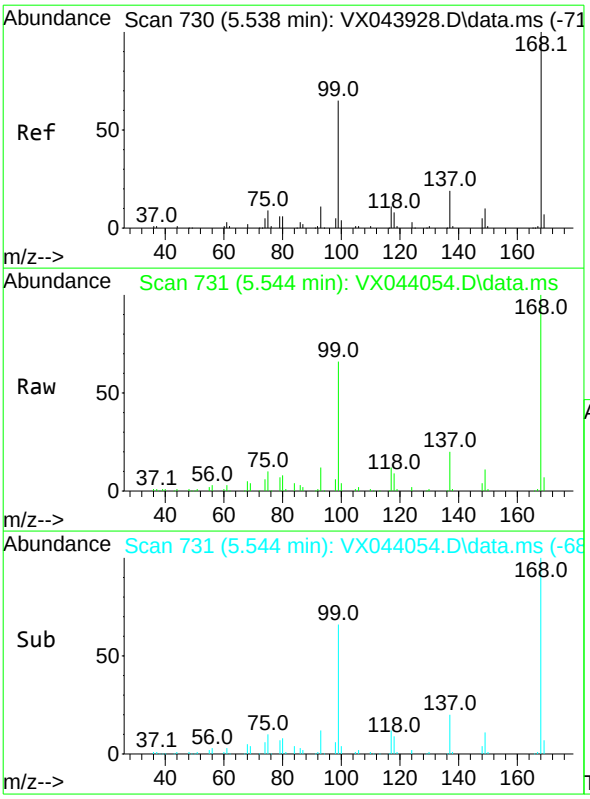
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120224\
Data File : VX044054.D
Acq On : 02 Dec 2024 10:37
Operator : JC/MD
Sample : VX1202WBL01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VX1202WBL01

Quant Time: Dec 03 00:13:59 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration



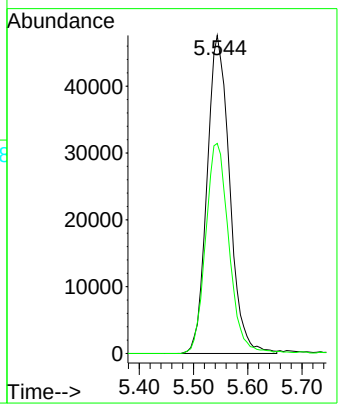


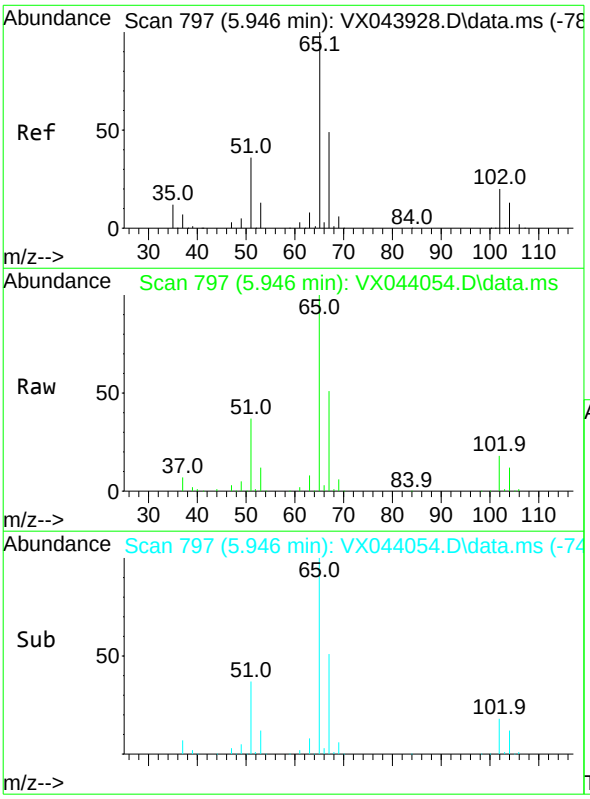
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.544 min Scan# 73
Delta R.T. 0.006 min
Lab File: VX044054.D
Acq: 02 Dec 2024 10:37

Instrument :
MSVOA_X
ClientSampleId :
VX1202WBL01

Tgt Ion:168 Resp: 137622

Ion	Ratio	Lower	Upper
168	100		
99	66.1	51.8	77.8

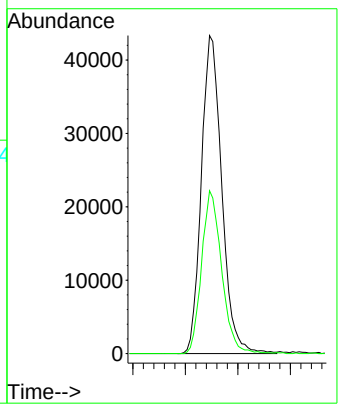


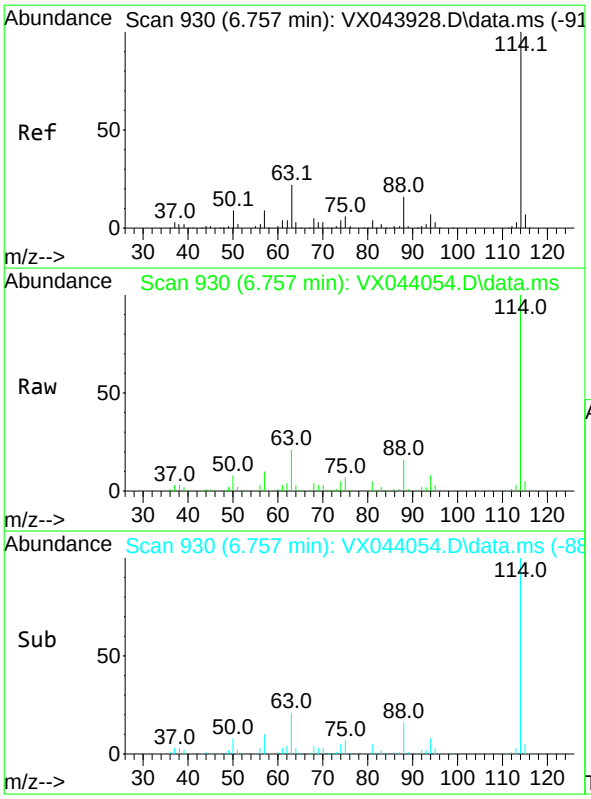


#33
1,2-Dichloroethane-d4
Concen: 49.613 ug/l
RT: 5.946 min Scan# 797
Delta R.T. -0.000 min
Lab File: VX044054.D
Acq: 02 Dec 2024 10:37

Tgt Ion: 65 Resp: 117110

Ion	Ratio	Lower	Upper
65	100		
67	50.2	0.0	100.8



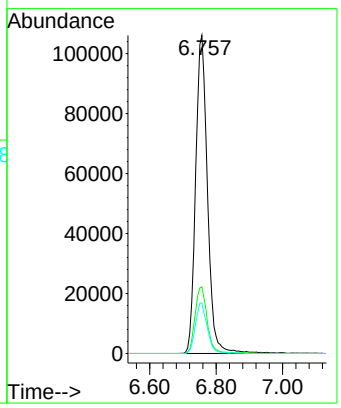


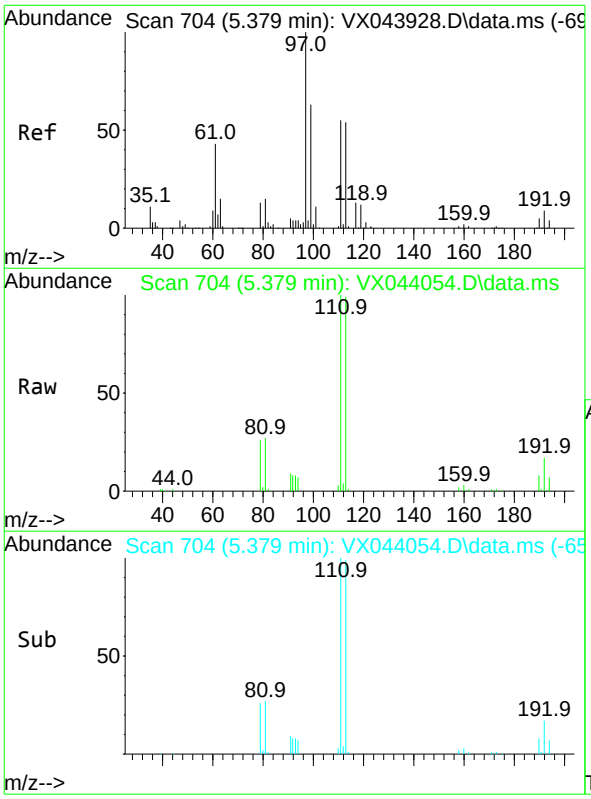
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.757 min Scan# 93
Delta R.T. -0.000 min
Lab File: VX044054.D
Acq: 02 Dec 2024 10:37

Instrument :
MSVOA_X
ClientSampleId :
VX1202WBL01

Tgt Ion:114 Resp: 262897

Ion	Ratio	Lower	Upper
114	100		
63	20.9	0.0	44.0
88	15.9	0.0	32.4

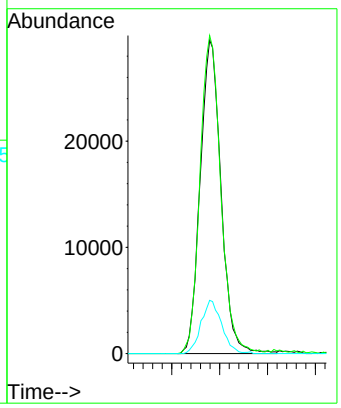


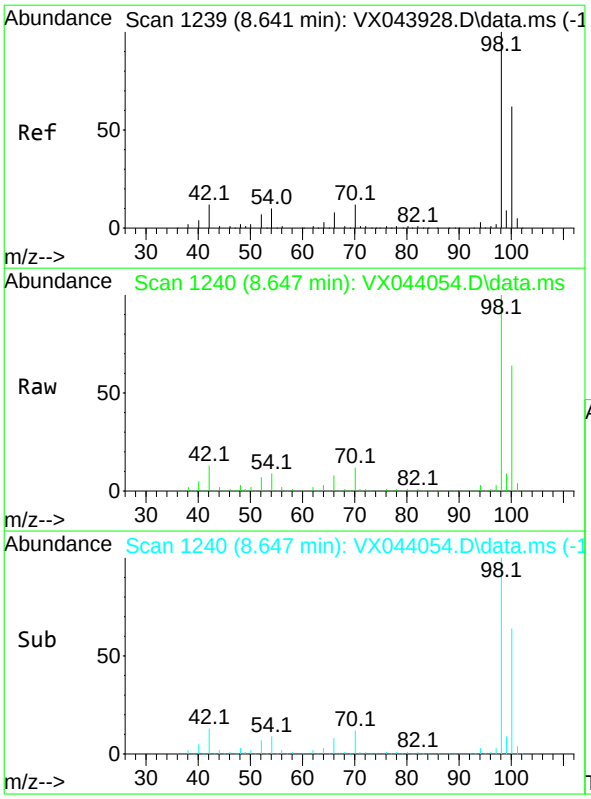


#35
Dibromofluoromethane
Concen: 47.328 ug/l
RT: 5.379 min Scan# 704
Delta R.T. -0.000 min
Lab File: VX044054.D
Acq: 02 Dec 2024 10:37

Tgt Ion:113 Resp: 88908

Ion	Ratio	Lower	Upper
113	100		
111	101.6	81.0	121.4
192	16.8	13.0	19.6



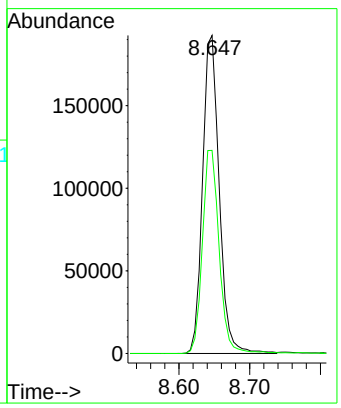


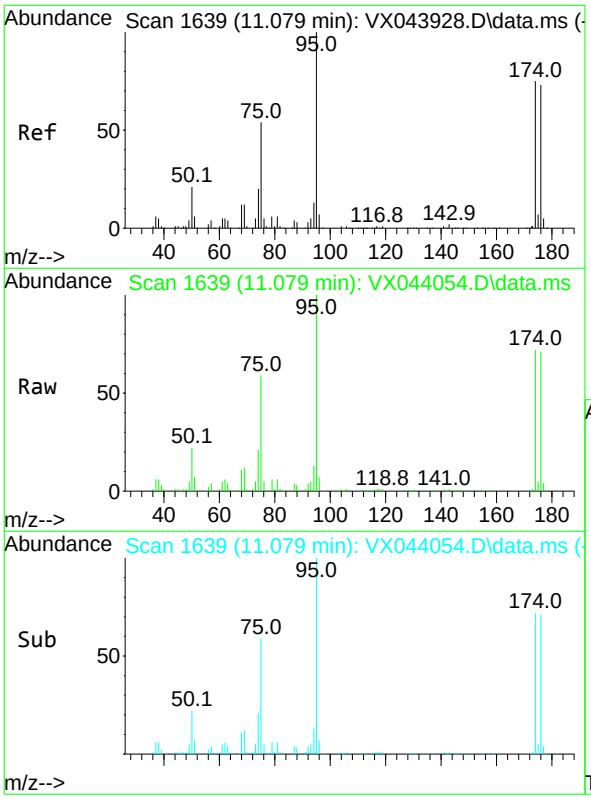
#50
Toluene-d8
Concen: 48.626 ug/l
RT: 8.647 min Scan# 12
Delta R.T. 0.006 min
Lab File: VX044054.D
Acq: 02 Dec 2024 10:37

Instrument :
MSVOA_X
ClientSampleId :
VX1202WBL01

Tgt Ion: 98 Resp: 314875

Ion	Ratio	Lower	Upper
98	100		
100	64.5	52.6	79.0

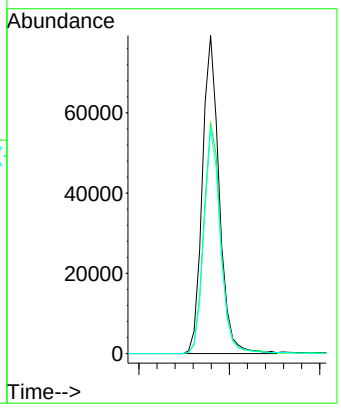


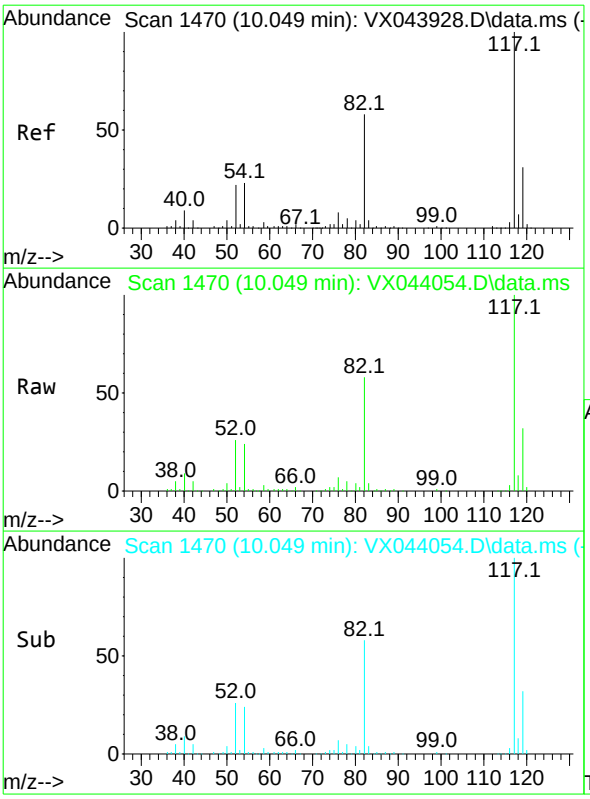


#62
4-Bromofluorobenzene
Concen: 46.544 ug/l
RT: 11.079 min Scan# 1639
Delta R.T. -0.000 min
Lab File: VX044054.D
Acq: 02 Dec 2024 10:37

Tgt Ion: 95 Resp: 102573

Ion	Ratio	Lower	Upper
95	100		
174	73.0	0.0	150.4
176	70.1	0.0	146.0



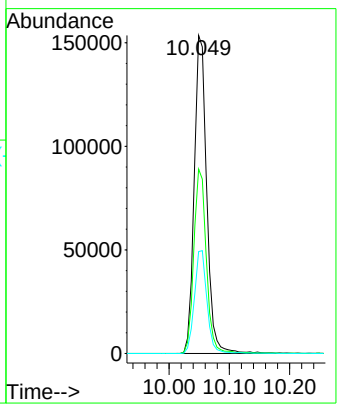


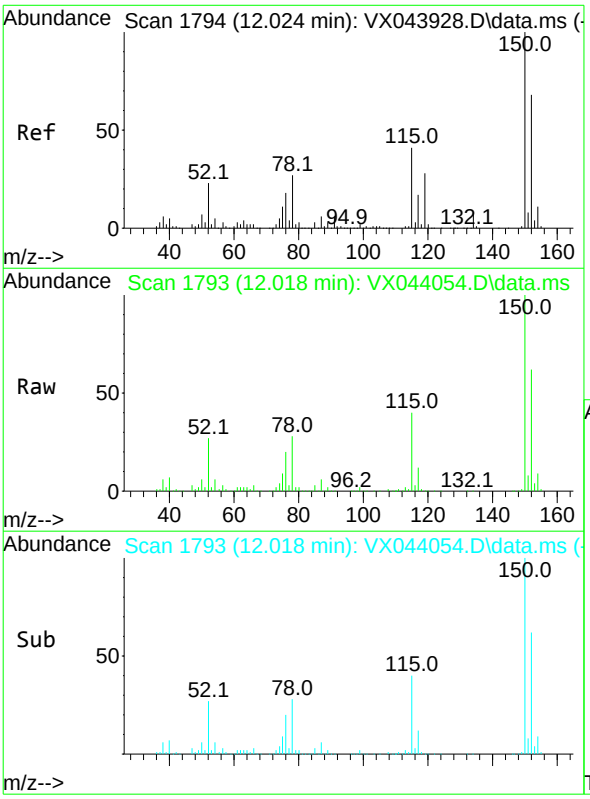
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.049 min Scan# 14
Delta R.T. -0.000 min
Lab File: VX044054.D
Acq: 02 Dec 2024 10:37

Instrument :
MSVOA_X
ClientSampleId :
VX1202WBL01

Tgt Ion:117 Resp: 221008

Ion	Ratio	Lower	Upper
117	100		
82	58.0	46.4	69.6
119	32.0	24.6	37.0

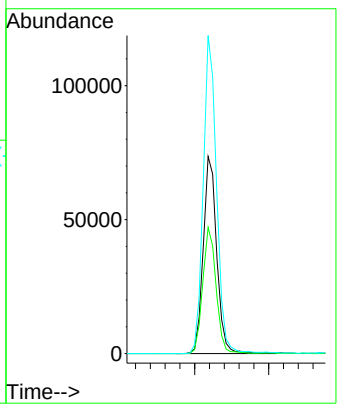




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.018 min Scan# 1793
Delta R.T. -0.006 min
Lab File: VX044054.D
Acq: 02 Dec 2024 10:37

Tgt Ion:152 Resp: 93273

Ion	Ratio	Lower	Upper
152	100		
115	63.3	45.4	136.2
150	159.5	0.0	353.0



Raw Data: **VX044028.D**

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

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	
Project:	RFK Bridge	Date Received:	
Client Sample ID:	VX1127WBS01	SDG No.:	P5021
Lab Sample ID:	VX1127WBS01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044028.D	1		11/27/24 10:27	VX112724

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
1634-04-4	Methyl tert-butyl Ether	21.6		0.16	1.00	ug/L
71-43-2	Benzene	20.9		0.16	1.00	ug/L
108-88-3	Toluene	21.2		0.18	1.00	ug/L
100-41-4	Ethyl Benzene	21.1		0.16	1.00	ug/L
179601-23-1	m/p-Xylenes	42.2		0.31	2.00	ug/L
95-47-6	o-Xylene	21.0		0.14	1.00	ug/L
98-82-8	Isopropylbenzene	21.5		0.13	1.00	ug/L
103-65-1	n-propylbenzene	21.6		0.14	1.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	21.9		0.18	1.00	ug/L
98-06-6	tert-Butylbenzene	21.5		0.17	1.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	21.9		0.18	1.00	ug/L
135-98-8	sec-Butylbenzene	21.5		0.17	1.00	ug/L
99-87-6	p-Isopropyltoluene	22.4		0.15	1.00	ug/L
104-51-8	n-Butylbenzene	21.5		0.22	1.00	ug/L
91-20-3	Naphthalene	20.8		0.59	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	54.7		74 - 125	109%	SPK: 50
1868-53-7	Dibromofluoromethane	53.5		75 - 124	107%	SPK: 50
2037-26-5	Toluene-d8	53.1		86 - 113	106%	SPK: 50
460-00-4	4-Bromofluorobenzene	53.6		77 - 121	107%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	107000	5.544			
540-36-3	1,4-Difluorobenzene	193000	6.757			
3114-55-4	Chlorobenzene-d5	163000	10.049			
3855-82-1	1,4-Dichlorobenzene-d4	74600	12.018			

Raw Data: **VX044028.D**

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

Report of Analysis

Client:	LiRo Engineers, Inc.		Date Collected:		
Project:	RFK Bridge		Date Received:		
Client Sample ID:	VX1127WBS01		SDG No.:	P5021	
Lab Sample ID:	VX1127WBS01		Matrix:	Water	
Analytical Method:	SW8260		% Solid:	0	
Sample Wt/Vol:	5 Units:	mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	DB-624UI ID :	0.18	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044028.D	1		11/27/24 10:27	VX112724

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\VX112724\
Data File : VX044028.D
Acq On : 27 Nov 2024 10:27
Operator : JC/MD
Sample : VX1127WBS01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 28 00:41:13 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX1127WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 12/02/2024
Supervised By :Mahesh Dadoda 12/02/2024

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.544	168	106843	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.757	114	192894	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.049	117	162801	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	74629	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.952	65	100231	54.695	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 109.400%			
35) Dibromofluoromethane	5.373	113	73794	53.539	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 107.080%			
50) Toluene-d8	8.647	98	252386	53.120	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 106.240%			
62) 4-Bromofluorobenzene	11.079	95	86716	53.629	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 107.260%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.166	85	27495	20.314	ug/l	94
3) Chloromethane	1.294	50	26987	18.947	ug/l	99
4) Vinyl Chloride	1.374	62	29060	19.182	ug/l	100
5) Bromomethane	1.599	94	20720	22.232	ug/l	96
6) Chloroethane	1.666	64	21222	22.989	ug/l	99
7) Trichlorofluoromethane	1.874	101	53465	19.739	ug/l	98
8) Diethyl Ether	2.130	74	19864	20.121	ug/l	92
9) 1,1,2-Trichlorotrifluo...	2.319	101	26558	20.556	ug/l	98
10) Methyl Iodide	2.441	142	32784	20.317	ug/l	98
11) Tert butyl alcohol	2.995	59	30927	105.144	ug/l	99
12) 1,1-Dichloroethene	2.313	96	24109	19.583	ug/l	97
13) Acrolein	2.233	56	35136	113.329	ug/l	97
14) Allyl chloride	2.654	41	40607	20.186	ug/l	98
15) Acrylonitrile	3.062	53	77862	108.625	ug/l	100
16) Acetone	2.380	43	84832	100.790	ug/l	99
17) Carbon Disulfide	2.502	76	39530	15.566	ug/l #	94
18) Methyl Acetate	2.703	43	41426	21.135	ug/l	98
19) Methyl tert-butyl Ether	3.111	73	96442	21.574	ug/l	99
20) Methylene Chloride	2.782	84	28993	20.299	ug/l	98
21) trans-1,2-Dichloroethene	3.087	96	24792	19.505	ug/l	99
22) Diisopropyl ether	3.757	45	93836	21.814	ug/l	91
23) Vinyl Acetate	3.715	43	393185	106.851	ug/l	100
24) 1,1-Dichloroethane	3.605	63	52965	21.343	ug/l	99
25) 2-Butanone	4.556	43	116345	107.130	ug/l	98
26) 2,2-Dichloropropane	4.465	77	46353	20.683	ug/l	98
27) cis-1,2-Dichloroethene	4.483	96	31844	20.268	ug/l	98
28) Bromochloromethane	4.885	49	25724	23.550	ug/l	100
29) Tetrahydrofuran	5.007	42	69973	105.096	ug/l	99
30) Chloroform	5.086	83	57229	21.442	ug/l	99
31) Cyclohexane	5.458	56	40860	20.006	ug/l	98
32) 1,1,1-Trichloroethane	5.373	97	49182	21.368	ug/l	99
36) 1,1-Dichloropropene	5.678	75	35415	20.619	ug/l	98
37) Ethyl Acetate	4.708	43	43844	20.564	ug/l	99
38) Carbon Tetrachloride	5.666	117	37602	19.484	ug/l	97
39) Methylcyclohexane	7.373	83	44056	19.744	ug/l	96
40) Benzene	6.025	78	111946	20.924	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112724\
Data File : VX044028.D
Acq On : 27 Nov 2024 10:27
Operator : JC/MD
Sample : VX1127WBS01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 28 00:41:13 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX1127WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 12/02/2024
Supervised By :Mahesh Dadoda 12/02/2024

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	4.916	41	22392	20.520	ug/l		93
42) 1,2-Dichloroethane	6.080	62	45301	21.083	ug/l		98
43) Isopropyl Acetate	6.336	43	73293	21.601	ug/l		98
44) Trichloroethene	7.123	130	27471	18.138	ug/l		87
45) 1,2-Dichloropropane	7.428	63	27650	21.101	ug/l		96
46) Dibromomethane	7.580	93	21820	21.051	ug/l		98
47) Bromodichloromethane	7.818	83	39427	21.208	ug/l		95
48) Methyl methacrylate	7.690	41	32981	20.257	ug/l		99
49) 1,4-Dioxane	7.665	88	10873	374.909	ug/l		88
51) 4-Methyl-2-Pentanone	8.574	43	224664	108.502	ug/l		98
52) Toluene	8.714	92	67843	21.186	ug/l		99
53) t-1,3-Dichloropropene	8.976	75	38544	20.332	ug/l		96
54) cis-1,3-Dichloropropene	8.360	75	42337	20.372	ug/l		97
55) 1,1,2-Trichloroethane	9.147	97	29041	21.970	ug/l		99
56) Ethyl methacrylate	9.116	69	42360	20.574	ug/l		97
57) 1,3-Dichloropropane	9.305	76	48650	21.848	ug/l		99
58) 2-Chloroethyl Vinyl ether	8.238	63	96276	84.678	ug/l		98
59) 2-Hexanone	9.427	43	165931	106.618	ug/l		99
60) Dibromochloromethane	9.519	129	26588	20.047	ug/l		99
61) 1,2-Dibromoethane	9.604	107	28577	21.380	ug/l		98
64) Tetrachloroethene	9.269	164	22848	21.284	ug/l		98
65) Chlorobenzene	10.079	112	75049	20.989	ug/l		97
66) 1,1,1,2-Tetrachloroethane	10.159	131	25332	21.845	ug/l		97
67) Ethyl Benzene	10.189	91	127753	21.086	ug/l		96
68) m/p-Xylenes	10.299	106	95260	42.161	ug/l		98
69) o-Xylene	10.640	106	46330	21.001	ug/l		96
70) Styrene	10.653	104	77290	21.183	ug/l		99
71) Bromoform	10.799	173	14795	18.188	ug/l	#	100
73) Isopropylbenzene	10.957	105	123185	21.473	ug/l		99
74) N-amyl acetate	10.842	43	56606	21.300	ug/l		99
75) 1,1,2,2-Tetrachloroethane	11.207	83	43345	22.067	ug/l		99
76) 1,2,3-Trichloropropane	11.238	75	35313m	21.577	ug/l		
77) Bromobenzene	11.195	156	28883	21.106	ug/l		99
78) n-propylbenzene	11.305	91	138143	21.561	ug/l		98
79) 2-Chlorotoluene	11.360	91	85482	21.099	ug/l		99
80) 1,3,5-Trimethylbenzene	11.451	105	103509	21.932	ug/l		99
81) trans-1,4-Dichloro-2-b...	11.018	75	10067	16.785	ug/l		88
82) 4-Chlorotoluene	11.451	91	99072	21.660	ug/l		100
83) tert-Butylbenzene	11.713	119	100413	21.465	ug/l		99
84) 1,2,4-Trimethylbenzene	11.750	105	102845	21.888	ug/l		99
85) sec-Butylbenzene	11.890	105	123296	21.512	ug/l		100
86) p-Isopropyltoluene	12.006	119	104453	22.436	ug/l		99
87) 1,3-Dichlorobenzene	11.969	146	52068	20.890	ug/l		98
88) 1,4-Dichlorobenzene	12.043	146	52046	20.482	ug/l		96
89) n-Butylbenzene	12.329	91	88149	21.475	ug/l		98
90) Hexachloroethane	12.536	117	14370	18.152	ug/l		99
91) 1,2-Dichlorobenzene	12.335	146	53612	21.314	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	12.939	75	7627	19.378	ug/l		95
93) 1,2,4-Trichlorobenzene	13.585	180	29045	19.586	ug/l		99
94) Hexachlorobutadiene	13.719	225	12147	20.726	ug/l		99
95) Naphthalene	13.774	128	111128	20.818	ug/l		99
96) 1,2,3-Trichlorobenzene	13.963	180	30605	20.390	ug/l		97

Sample Results: **VX044028.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112724\
Data File : VX044028.D
Acq On : 27 Nov 2024 10:27
Operator : JC/MD
Sample : VX1127WBS01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 28 00:41:13 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX1127WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 12/02/2024
Supervised By :Mahesh Dadoda 12/02/2024

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

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

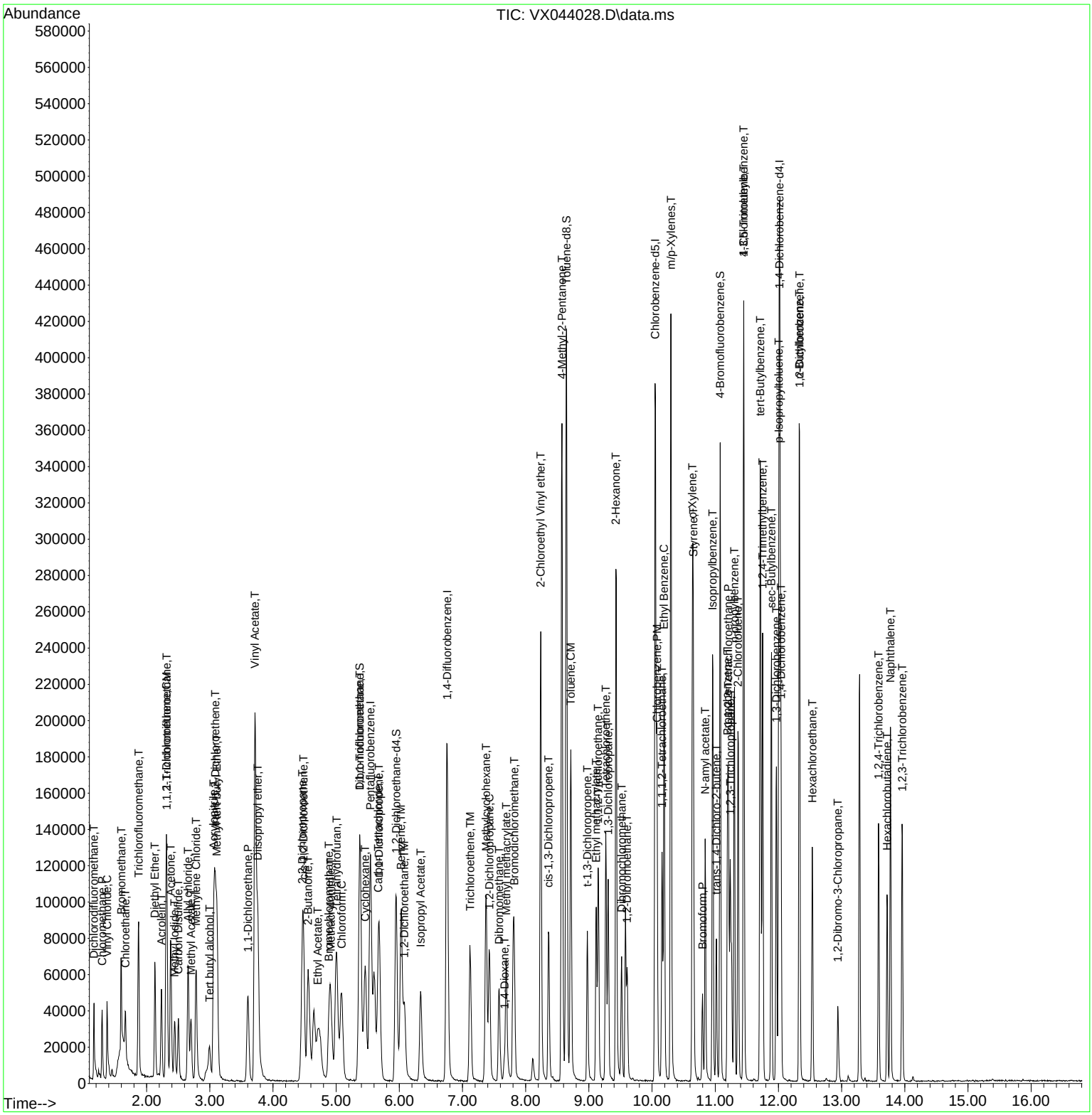
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112724\
Data File : VX044028.D
Acq On : 27 Nov 2024 10:27
Operator : JC/MD
Sample : VX1127WBS01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 28 00:41:13 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX1127WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 12/02/2024
Supervised By :Mahesh Dadoda 12/02/2024



Raw Data: **VX044055.D**

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

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	
Project:	RFK Bridge	Date Received:	
Client Sample ID:	VX1202WBS01	SDG No.:	P5021
Lab Sample ID:	VX1202WBS01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044055.D	1		12/02/24 11:00	VX120224

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
1634-04-4	Methyl tert-butyl Ether	20.3		0.16	1.00	ug/L
71-43-2	Benzene	19.4		0.16	1.00	ug/L
108-88-3	Toluene	19.4		0.18	1.00	ug/L
100-41-4	Ethyl Benzene	20.7		0.16	1.00	ug/L
179601-23-1	m/p-Xylenes	41.5		0.31	2.00	ug/L
95-47-6	o-Xylene	21.3		0.14	1.00	ug/L
98-82-8	Isopropylbenzene	20.6		0.13	1.00	ug/L
103-65-1	n-propylbenzene	20.7		0.14	1.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	21.3		0.18	1.00	ug/L
98-06-6	tert-Butylbenzene	21.3		0.17	1.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	21.2		0.18	1.00	ug/L
135-98-8	sec-Butylbenzene	20.8		0.17	1.00	ug/L
99-87-6	p-Isopropyltoluene	21.5		0.15	1.00	ug/L
104-51-8	n-Butylbenzene	20.1		0.22	1.00	ug/L
91-20-3	Naphthalene	20.3		0.59	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	54.9		74 - 125	110%	SPK: 50
1868-53-7	Dibromofluoromethane	53.7		75 - 124	107%	SPK: 50
2037-26-5	Toluene-d8	50.8		86 - 113	102%	SPK: 50
460-00-4	4-Bromofluorobenzene	52.8		77 - 121	105%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	134000	5.55			
540-36-3	1,4-Difluorobenzene	237000	6.757			
3114-55-4	Chlorobenzene-d5	191000	10.055			
3855-82-1	1,4-Dichlorobenzene-d4	90100	12.018			

Raw Data: **VX044055.D**

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

Report of Analysis

Client:	LiRo Engineers, Inc.		Date Collected:		
Project:	RFK Bridge		Date Received:		
Client Sample ID:	VX1202WBS01		SDG No.:	P5021	
Lab Sample ID:	VX1202WBS01		Matrix:	Water	
Analytical Method:	SW8260		% Solid:	0	
Sample Wt/Vol:	5 Units:	mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group1	
GC Column:	DB-624UI ID :	0.18	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044055.D	1		12/02/24 11:00	VX120224

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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

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

Sample Results: **VX044055.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120224\
Data File : VX044055.D
Acq On : 02 Dec 2024 11:00
Operator : JC/MD
Sample : VX1202WBS01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 03 00:14:21 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX1202WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 12/03/2024
Supervised By :Mahesh Dadoda 12/03/2024

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.550	168	133564	50.000	ug/l	0.01
34) 1,4-Difluorobenzene	6.757	114	236701	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	191057	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	90073	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.946	65	125654	54.850	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 109.700%			
35) Dibromofluoromethane	5.379	113	90819	53.696	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 107.400%			
50) Toluene-d8	8.647	98	296189	50.802	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 101.600%			
62) 4-Bromofluorobenzene	11.079	95	104667	52.750	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 105.500%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.166	85	29716	17.562	ug/l	100
3) Chloromethane	1.294	50	30111	16.911	ug/l	99
4) Vinyl Chloride	1.374	62	32379	17.097	ug/l	95
5) Bromomethane	1.593	94	23059	19.792	ug/l	97
6) Chloroethane	1.666	64	19812	17.168	ug/l	98
7) Trichlorofluoromethane	1.867	101	59672	17.623	ug/l	96
8) Diethyl Ether	2.136	74	21417	17.354	ug/l	95
9) 1,1,2-Trichlorotrifluo...	2.319	101	29983	18.564	ug/l	99
10) Methyl Iodide	2.441	142	38201	18.938	ug/l	99
11) Tert butyl alcohol	3.001	59	32200	87.571	ug/l	98
12) 1,1-Dichloroethene	2.313	96	27855	18.099	ug/l	99
13) Acrolein	2.239	56	40750	105.141	ug/l	97
14) Allyl chloride	2.654	41	47601	18.928	ug/l	97
15) Acrylonitrile	3.062	53	80290	89.603	ug/l	98
16) Acetone	2.386	43	94179	89.509	ug/l	96
17) Carbon Disulfide	2.502	76	50453	15.892	ug/l	99
18) Methyl Acetate	2.703	43	46123	18.824	ug/l	98
19) Methyl tert-butyl Ether	3.111	73	113241	20.264	ug/l	97
20) Methylene Chloride	2.782	84	32788	18.363	ug/l	96
21) trans-1,2-Dichloroethene	3.081	96	29606	18.632	ug/l	98
22) Diisopropyl ether	3.757	45	110045	20.464	ug/l	90
23) Vinyl Acetate	3.715	43	447653	97.315	ug/l	99
24) 1,1-Dichloroethane	3.605	63	61692	19.887	ug/l	99
25) 2-Butanone	4.556	43	122715	90.389	ug/l	100
26) 2,2-Dichloropropane	4.471	77	57471	20.513	ug/l	100
27) cis-1,2-Dichloroethene	4.483	96	37812	19.251	ug/l	98
28) Bromochloromethane	4.891	49	24973	18.289	ug/l	99
29) Tetrahydrofuran	5.001	42	72622	87.253	ug/l	99
30) Chloroform	5.086	83	67602	20.261	ug/l	98
31) Cyclohexane	5.458	56	45725	17.909	ug/l	93
32) 1,1,1-Trichloroethane	5.373	97	59601	20.714	ug/l	99
36) 1,1-Dichloropropene	5.684	75	41511	19.696	ug/l	99
37) Ethyl Acetate	4.715	43	45913	17.549	ug/l	98
38) Carbon Tetrachloride	5.672	117	46126	19.477	ug/l	92
39) Methylcyclohexane	7.373	83	48820	17.830	ug/l	97
40) Benzene	6.031	78	127296	19.390	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120224\
Data File : VX044055.D
Acq On : 02 Dec 2024 11:00
Operator : JC/MD
Sample : VX1202WBS01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 03 00:14:21 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX1202WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 12/03/2024
Supervised By :Mahesh Dadoda 12/03/2024

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
41) Methacrylonitrile	4.916	41	25048	18.706 ug/l	95
42) 1,2-Dichloroethane	6.080	62	54009	20.484 ug/l	99
43) Isopropyl Acetate	6.336	43	79280	19.041 ug/l	99
44) Trichloroethene	7.123	130	31641	17.025 ug/l	96
45) 1,2-Dichloropropane	7.427	63	32914	20.470 ug/l	92
46) Dibromomethane	7.580	93	25657	20.171 ug/l	98
47) Bromodichloromethane	7.818	83	46362	20.323 ug/l	96
48) Methyl methacrylate	7.696	41	36925	18.482 ug/l	99
49) 1,4-Dioxane	7.671	88	11948	335.731 ug/l #	79
51) 4-Methyl-2-Pentanone	8.574	43	235866	92.830 ug/l	99
52) Toluene	8.714	92	76076	19.361 ug/l	98
53) t-1,3-Dichloropropene	8.976	75	44286	19.037 ug/l	99
54) cis-1,3-Dichloropropene	8.366	75	49007	19.217 ug/l	97
55) 1,1,2-Trichloroethane	9.147	97	31692	19.538 ug/l	95
56) Ethyl methacrylate	9.116	69	49341	19.530 ug/l	98
57) 1,3-Dichloropropane	9.305	76	54631	19.994 ug/l	99
58) 2-Chloroethyl Vinyl ether	8.238	63	123411	88.471 ug/l	98
59) 2-Hexanone	9.433	43	179096	93.779 ug/l	98
60) Dibromochloromethane	9.519	129	31304	19.235 ug/l	97
61) 1,2-Dibromoethane	9.604	107	32243	19.659 ug/l	99
64) Tetrachloroethene	9.269	164	24903	19.767 ug/l	98
65) Chlorobenzene	10.079	112	82674	19.702 ug/l	100
66) 1,1,1,2-Tetrachloroethane	10.159	131	28160	20.693 ug/l	98
67) Ethyl Benzene	10.189	91	147229	20.706 ug/l	97
68) m/p-Xylenes	10.299	106	110161	41.545 ug/l	99
69) o-Xylene	10.640	106	55187	21.316 ug/l	98
70) Styrene	10.652	104	89632	20.932 ug/l	98
71) Bromoform	10.799	173	18242	19.030 ug/l #	100
73) Isopropylbenzene	10.957	105	142787	20.623 ug/l	99
74) N-amyl acetate	10.841	43	64575	20.133 ug/l	99
75) 1,1,2,2-Tetrachloroethane	11.213	83	47782	20.155 ug/l	99
76) 1,2,3-Trichloropropane	11.238	75	39067m	19.778 ug/l	
77) Bromobenzene	11.195	156	33215	20.110 ug/l	98
78) n-propylbenzene	11.305	91	159743	20.657 ug/l	99
79) 2-Chlorotoluene	11.360	91	99937	20.438 ug/l	98
80) 1,3,5-Trimethylbenzene	11.451	105	121093	21.258 ug/l	99
81) trans-1,4-Dichloro-2-b...	11.018	75	13239	18.289 ug/l	95
82) 4-Chlorotoluene	11.451	91	116017	21.016 ug/l	99
83) tert-Butylbenzene	11.713	119	120448	21.333 ug/l	100
84) 1,2,4-Trimethylbenzene	11.750	105	120363	21.224 ug/l	99
85) sec-Butylbenzene	11.890	105	143763	20.782 ug/l	100
86) p-Isopropyltoluene	12.006	119	120535	21.451 ug/l	99
87) 1,3-Dichlorobenzene	11.969	146	60741	20.192 ug/l	99
88) 1,4-Dichlorobenzene	12.036	146	61904	20.184 ug/l	98
89) n-Butylbenzene	12.329	91	99591	20.102 ug/l	99
90) Hexachloroethane	12.536	117	18114	18.958 ug/l	96
91) 1,2-Dichlorobenzene	12.335	146	62628	20.630 ug/l	99
92) 1,2-Dibromo-3-Chloropr...	12.945	75	8844	18.617 ug/l	97
93) 1,2,4-Trichlorobenzene	13.585	180	34973	19.540 ug/l	98
94) Hexachlorobutadiene	13.725	225	13825	19.544 ug/l	99
95) Naphthalene	13.774	128	130543	20.262 ug/l	99
96) 1,2,3-Trichlorobenzene	13.957	180	35504	19.599 ug/l	97

Sample Results: **VX044055.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120224\
Data File : VX044055.D
Acq On : 02 Dec 2024 11:00
Operator : JC/MD
Sample : VX1202WBS01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 03 00:14:21 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX1202WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 12/03/2024
Supervised By :Mahesh Dadoda 12/03/2024

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

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

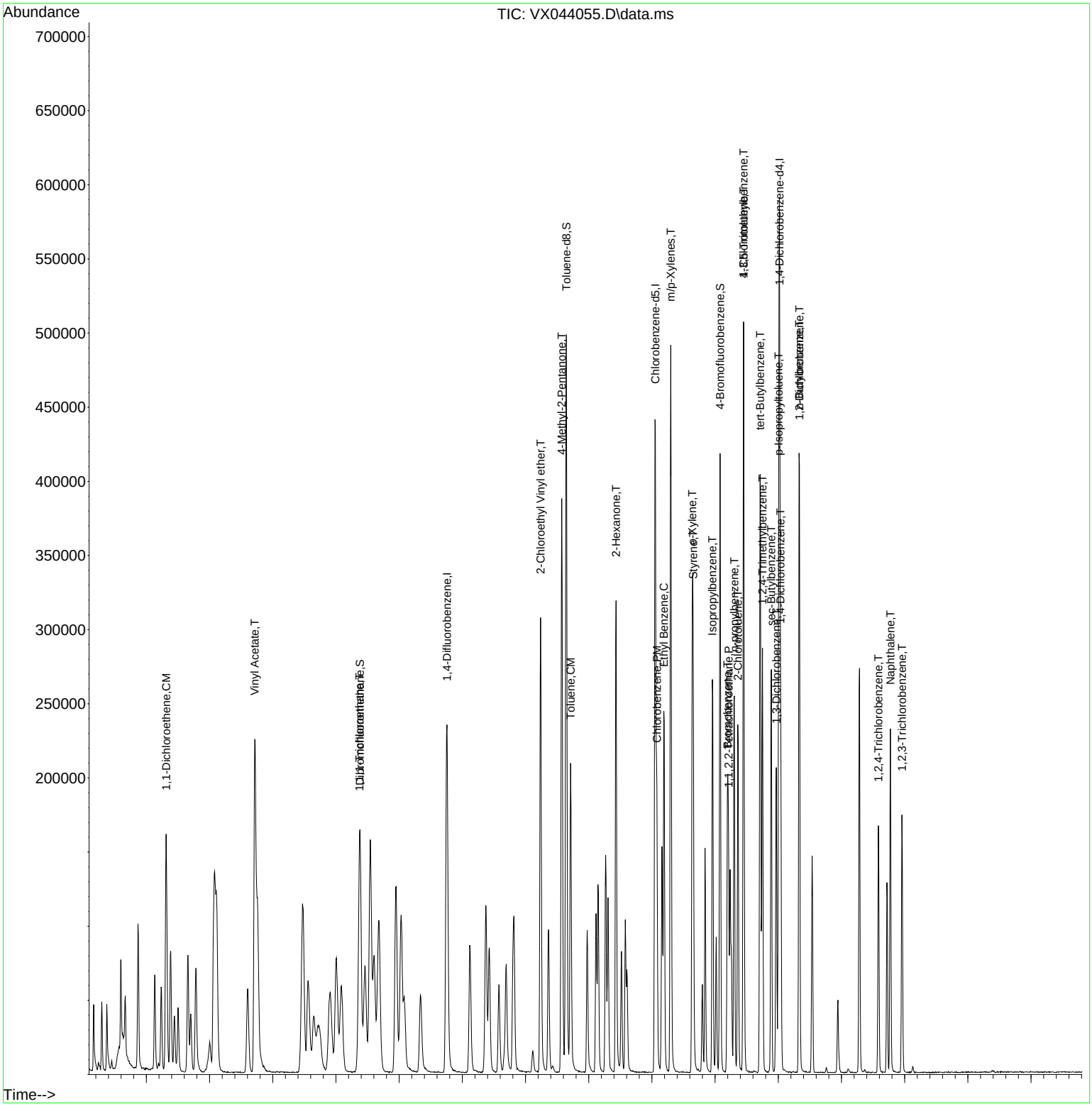
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120224\
Data File : VX044055.D
Acq On : 02 Dec 2024 11:00
Operator : JC/MD
Sample : VX1202WBS01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 03 00:14:21 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX1202WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 12/03/2024
Supervised By :Mahesh Dadoda 12/03/2024



Raw Data: **VX044041.D**

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

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	
Project:	RFK Bridge	Date Received:	
Client Sample ID:	VX1127WBSD01	SDG No.:	P5021
Lab Sample ID:	VX1127WBSD01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044041.D	1		11/27/24 15:25	VX112724

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
1634-04-4	Methyl tert-butyl Ether	19.8		0.16	1.00	ug/L
71-43-2	Benzene	17.4		0.16	1.00	ug/L
108-88-3	Toluene	18.4		0.18	1.00	ug/L
100-41-4	Ethyl Benzene	18.5		0.16	1.00	ug/L
179601-23-1	m/p-Xylenes	36.1		0.31	2.00	ug/L
95-47-6	o-Xylene	18.8		0.14	1.00	ug/L
98-82-8	Isopropylbenzene	18.8		0.13	1.00	ug/L
103-65-1	n-propylbenzene	18.9		0.14	1.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	19.1		0.18	1.00	ug/L
98-06-6	tert-Butylbenzene	18.5		0.17	1.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	19.3		0.18	1.00	ug/L
135-98-8	sec-Butylbenzene	18.5		0.17	1.00	ug/L
99-87-6	p-Isopropyltoluene	19.0		0.15	1.00	ug/L
104-51-8	n-Butylbenzene	18.5		0.22	1.00	ug/L
91-20-3	Naphthalene	32.1		0.59	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	51.5		74 - 125	103%	SPK: 50
1868-53-7	Dibromofluoromethane	46.2		75 - 124	92%	SPK: 50
2037-26-5	Toluene-d8	47.1		86 - 113	94%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.5		77 - 121	97%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	127000	5.544			
540-36-3	1,4-Difluorobenzene	240000	6.757			
3114-55-4	Chlorobenzene-d5	206000	10.049			
3855-82-1	1,4-Dichlorobenzene-d4	92100	12.018			

Raw Data: **VX044041.D**

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

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	
Project:	RFK Bridge	Date Received:	
Client Sample ID:	VX1127WBSD01	SDG No.:	P5021
Lab Sample ID:	VX1127WBSD01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044041.D	1		11/27/24 15:25	VX112724

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\VX112724\
Data File : VX044041.D
Acq On : 27 Nov 2024 15:25
Operator : JC/MD
Sample : VX1127WBSD01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Nov 28 00:49:48 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX1127WBSD01

Manual Integrations APPROVED

Reviewed By :John Carlone 12/02/2024
Supervised By :Mahesh Dadoda 12/02/2024

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.544	168	127369	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.757	114	240268	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.049	117	205658	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.018	152	92085	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.946	65	112556	51.523	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 103.040%			
35) Dibromofluoromethane	5.379	113	79370	46.230	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 92.460%			
50) Toluene-d8	8.647	98	278542	47.066	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 94.140%			
62) 4-Bromofluorobenzene	11.079	95	97608	48.462	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 96.920%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.166	85	25936	16.074	ug/l	94
3) Chloromethane	1.294	50	25998	15.311	ug/l	98
4) Vinyl Chloride	1.374	62	29254	16.198	ug/l	98
5) Bromomethane	1.593	94	20643	18.580	ug/l	91
6) Chloroethane	1.666	64	21324	19.377	ug/l	98
7) Trichlorofluoromethane	1.873	101	54025	16.732	ug/l	100
8) Diethyl Ether	2.136	74	21026	17.866	ug/l	94
9) 1,1,2-Trichlorotrifluo...	2.319	101	27168	17.639	ug/l	97
10) Methyl Iodide	2.447	142	35852	18.638	ug/l	97
11) Tert butyl alcohol	2.989	59	28305	80.722	ug/l	95
12) 1,1-Dichloroethene	2.306	96	25114	17.112	ug/l	94
13) Acrolein	2.233	56	37101	100.382	ug/l	100
14) Allyl chloride	2.660	41	41624	17.357	ug/l	95
15) Acrylonitrile	3.062	53	75266	88.082	ug/l	97
16) Acetone	2.386	43	72376	72.133	ug/l	99
17) Carbon Disulfide	2.501	76	39751	13.130	ug/l	96
18) Methyl Acetate	2.703	43	46536	19.916	ug/l	96
19) Methyl tert-butyl Ether	3.111	73	105439	19.786	ug/l	97
20) Methylene Chloride	2.782	84	30367	17.835	ug/l	96
21) trans-1,2-Dichloroethene	3.081	96	26548	17.520	ug/l	98
22) Diisopropyl ether	3.757	45	99922	19.486	ug/l	88
23) Vinyl Acetate	3.721	43	393058	89.602	ug/l	100
24) 1,1-Dichloroethane	3.605	63	54878	18.551	ug/l	99
25) 2-Butanone	4.562	43	112991	87.275	ug/l	99
26) 2,2-Dichloropropane	4.471	77	46487	17.400	ug/l	100
27) cis-1,2-Dichloroethene	4.483	96	34387	18.359	ug/l	99
28) Bromochloromethane	4.897	49	22637	17.384	ug/l	98
29) Tetrahydrofuran	5.007	42	72798	91.719	ug/l	99
30) Chloroform	5.086	83	60194	18.919	ug/l	94
31) Cyclohexane	5.458	56	42196	17.330	ug/l	97
32) 1,1,1-Trichloroethane	5.373	97	52147	19.005	ug/l	100
36) 1,1-Dichloropropene	5.684	75	37013	17.301	ug/l	98
37) Ethyl Acetate	4.714	43	45715	17.214	ug/l	98
38) Carbon Tetrachloride	5.672	117	39329	16.361	ug/l	99
39) Methylcyclohexane	7.379	83	43900	15.795	ug/l	96
40) Benzene	6.031	78	115821	17.380	ug/l	96

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112724\
Data File : VX044041.D
Acq On : 27 Nov 2024 15:25
Operator : JC/MD
Sample : VX1127WBSD01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Nov 28 00:49:48 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX1127WBSD01

Manual Integrations APPROVED

Reviewed By :John Carlone 12/02/2024
Supervised By :Mahesh Dadoda 12/02/2024

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	4.916	41	24112	17.740	ug/l		96
42) 1,2-Dichloroethane	6.086	62	49932	18.656	ug/l		98
43) Isopropyl Acetate	6.342	43	75731	17.919	ug/l		99
44) Trichloroethene	7.123	130	28142	14.918	ug/l		98
45) 1,2-Dichloropropane	7.427	63	29734	18.217	ug/l		100
46) Dibromomethane	7.580	93	23350	18.085	ug/l		96
47) Bromodichloromethane	7.818	83	40574	17.522	ug/l		99
48) Methyl methacrylate	7.689	41	34514	17.019	ug/l		99
49) 1,4-Dioxane	7.671	88	10711	296.503	ug/l		90
51) 4-Methyl-2-Pentanone	8.573	43	235366	91.258	ug/l		97
52) Toluene	8.714	92	73481	18.423	ug/l		98
53) t-1,3-Dichloropropene	8.976	75	40540	17.168	ug/l		93
54) cis-1,3-Dichloropropene	8.366	75	44564	17.215	ug/l		99
55) 1,1,2-Trichloroethane	9.153	97	29202	17.736	ug/l		97
56) Ethyl methacrylate	9.116	69	45568	17.768	ug/l		97
57) 1,3-Dichloropropane	9.305	76	50028	18.037	ug/l		100
58) 2-Chloroethyl Vinyl ether	8.238	63	109304	77.153	ug/l		99
59) 2-Hexanone	9.433	43	171810	88.628	ug/l		99
60) Dibromochloromethane	9.518	129	26298	15.919	ug/l		99
61) 1,2-Dibromoethane	9.610	107	29718	17.850	ug/l		99
64) Tetrachloroethene	9.268	164	25504	18.807	ug/l		96
65) Chlorobenzene	10.079	112	78428	17.363	ug/l		99
66) 1,1,1,2-Tetrachloroethane	10.159	131	25798	17.611	ug/l		99
67) Ethyl Benzene	10.189	91	141788	18.525	ug/l		98
68) m/p-Xylenes	10.299	106	102916	36.057	ug/l		99
69) o-Xylene	10.640	106	52325	18.776	ug/l		99
70) Styrene	10.652	104	82874	17.980	ug/l		97
71) Bromoform	10.799	173	14739	14.652	ug/l	#	97
73) Isopropylbenzene	10.957	105	133242	18.824	ug/l		98
74) N-amyl acetate	10.841	43	61904	18.878	ug/l		97
75) 1,1,2,2-Tetrachloroethane	11.213	83	44209	18.240	ug/l		98
76) 1,2,3-Trichloropropane	11.238	75	37068m	18.356	ug/l		
77) Bromobenzene	11.195	156	30733	18.201	ug/l		100
78) n-propylbenzene	11.305	91	149228	18.876	ug/l		99
79) 2-Chlorotoluene	11.360	91	92211	18.446	ug/l		98
80) 1,3,5-Trimethylbenzene	11.451	105	111198	19.095	ug/l		99
81) trans-1,4-Dichloro-2-b...	11.018	75	10482	14.164	ug/l	#	85
82) 4-Chlorotoluene	11.451	91	106504	18.871	ug/l		98
83) tert-Butylbenzene	11.713	119	106852	18.512	ug/l		96
84) 1,2,4-Trimethylbenzene	11.750	105	111698	19.265	ug/l		97
85) sec-Butylbenzene	11.890	105	130741	18.487	ug/l		99
86) p-Isopropyltoluene	12.006	119	108910	18.959	ug/l		99
87) 1,3-Dichlorobenzene	11.969	146	54803	17.820	ug/l		99
88) 1,4-Dichlorobenzene	12.042	146	55390	17.666	ug/l		96
89) n-Butylbenzene	12.329	91	93726	18.505	ug/l		99
90) Hexachloroethane	12.536	117	14292	14.631	ug/l		94
91) 1,2-Dichlorobenzene	12.335	146	56686	18.264	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	12.945	75	8198	16.880	ug/l		92
93) 1,2,4-Trichlorobenzene	13.585	180	30806	16.836	ug/l		98
94) Hexachlorobutadiene	13.725	225	12322	17.039	ug/l		98
95) Naphthalene	13.774	128	211326	32.084	ug/l		98
96) 1,2,3-Trichlorobenzene	13.963	180	31338	16.921	ug/l		91

Sample Results: **VX044041.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112724\
Data File : VX044041.D
Acq On : 27 Nov 2024 15:25
Operator : JC/MD
Sample : VX1127WBSD01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 19 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VX1127WBSD01

Manual Integrations APPROVED

Reviewed By :John Carlone 12/02/2024
Supervised By :Mahesh Dadoda 12/02/2024

Quant Time: Nov 28 00:49:48 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration

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

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

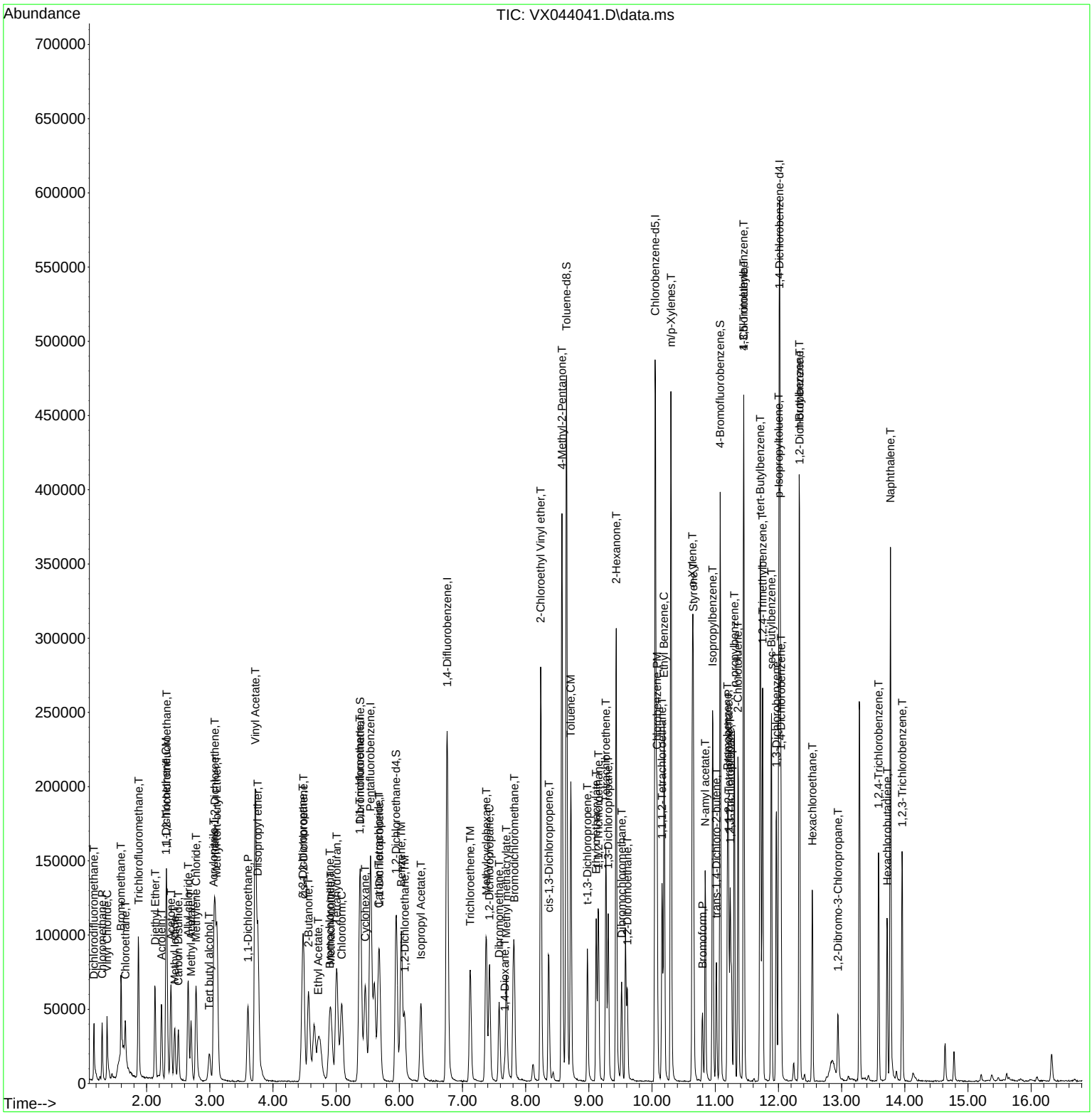
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX112724\
Data File : VX044041.D
Acq On : 27 Nov 2024 15:25
Operator : JC/MD
Sample : VX1127WBSD01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Nov 28 00:49:48 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X112124W.M
Quant Title : SW846 8260
QLast Update : Fri Nov 22 03:45:52 2024
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX1127WBSD01

Manual Integrations APPROVED

Reviewed By :John Carlone 12/02/2024
Supervised By :Mahesh Dadoda 12/02/2024



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

Manual Integration Report

Sequence:	vx112124	Instrument	MSVOA_x

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICV050	VX043923.D	1,2,3-Trichloropropane	JOHN	11/21/2024 9:44:34 AM	MMDadoda	11/22/2024 3:33:41 PM	Peak Integrated by Software
VSTDICV050	VX043923.D	1,4-Dioxane	JOHN	11/21/2024 9:44:34 AM	MMDadoda	11/22/2024 3:33:41 PM	Peak Integrated by Software
VSTDICC001	VX043925.D	1,2,3-Trichloropropane	JOHN	11/22/2024 9:57:01 AM	MMDadoda	11/22/2024 3:33:43 PM	Peak Integrated by Software
VSTDICC001	VX043925.D	1,4-Dichlorobenzene	JOHN	11/22/2024 9:57:01 AM	MMDadoda	11/22/2024 3:33:43 PM	Peak Integrated by Software
VSTDICC001	VX043925.D	Bromochloromethane	JOHN	11/22/2024 9:57:01 AM	MMDadoda	11/22/2024 3:33:43 PM	Peak Integrated by Software
VSTDICC001	VX043925.D	Ethyl Acetate	JOHN	11/22/2024 9:57:01 AM	MMDadoda	11/22/2024 3:33:43 PM	Peak Integrated by Software
VSTDICC001	VX043925.D	Methacrylonitrile	JOHN	11/22/2024 9:57:01 AM	MMDadoda	11/22/2024 3:33:43 PM	Peak Integrated by Software
VSTDICC001	VX043925.D	Methyl methacrylate	JOHN	11/22/2024 9:57:01 AM	MMDadoda	11/22/2024 3:33:43 PM	Peak Integrated by Software
VSTDICC005	VX043926.D	1,2,3-Trichloropropane	JOHN	11/22/2024 9:57:07 AM	MMDadoda	11/22/2024 3:33:44 PM	Peak Integrated by Software
VSTDICC005	VX043926.D	1,4-Dioxane	JOHN	11/22/2024 9:57:07 AM	MMDadoda	11/22/2024 3:33:44 PM	Peak Integrated by Software
VSTDICC005	VX043926.D	Ethyl Acetate	JOHN	11/22/2024 9:57:07 AM	MMDadoda	11/22/2024 3:33:44 PM	Peak Integrated by Software
VSTDICC005	VX043926.D	Tert butyl alcohol	JOHN	11/22/2024 9:57:07 AM	MMDadoda	11/22/2024 3:33:44 PM	Peak Integrated by Software
VSTDICC020	VX043927.D	1,2,3-Trichloropropane	JOHN	11/22/2024 9:57:12 AM	MMDadoda	11/22/2024 3:33:46 PM	Peak Integrated by Software

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

Manual Integration Report

Sequence:	vx112124	Instrument	MSVOA_x

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC020	VX043927.D	1,4-Dioxane	JOHN	11/22/2024 9:57:12 AM	MMDadoda	11/22/2024 3:33:46 PM	Peak Integrated by Software
VSTDICCC050	VX043928.D	1,2,3-Trichloropropane	JOHN	11/22/2024 9:57:17 AM	MMDadoda	11/22/2024 3:33:47 PM	Peak Integrated by Software
VSTDICCC050	VX043928.D	1,4-Dioxane	JOHN	11/22/2024 9:57:17 AM	MMDadoda	11/22/2024 3:33:47 PM	Peak Integrated by Software
VSTDICC100	VX043929.D	1,2,3-Trichloropropane	JOHN	11/22/2024 9:57:21 AM	MMDadoda	11/22/2024 3:33:49 PM	Peak Integrated by Software
VSTDICC100	VX043929.D	1,4-Dioxane	JOHN	11/22/2024 9:57:21 AM	MMDadoda	11/22/2024 3:33:49 PM	Peak Integrated by Software
VSTDICC150	VX043930.D	1,2,3-Trichloropropane	JOHN	11/22/2024 9:57:26 AM	MMDadoda	11/22/2024 3:33:50 PM	Peak Integrated by Software
VSTDICV050	VX043932.D	1,2,3-Trichloropropane	JOHN	11/22/2024 9:57:30 AM	MMDadoda	11/22/2024 3:33:52 PM	Peak Integrated by Software
VSTDCCC050	VX043948.D	1,2,3-Trichloropropane	MMDadoda	11/29/2024 8:03:03 AM	SAM	11/29/2024 8:03:34 AM	Peak Integrated by Software
VSTDCCC050	VX043948.D	2-Chloroethyl Vinyl ether	MMDadoda	11/29/2024 8:03:03 AM	SAM	11/29/2024 8:03:34 AM	Peak Integrated by Software

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

Manual Integration Report

Sequence:	VX112724	Instrument	MSVOA_x

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC050	VX044024.D	1,2,3-Trichloropropane	JOHN	12/2/2024 9:50:52 AM	MMDadoda	12/2/2024 10:24:29 AM	Peak Integrated by Software
VX1127WBS01	VX044028.D	1,2,3-Trichloropropane	JOHN	12/2/2024 9:51:00 AM	MMDadoda	12/2/2024 10:24:32 AM	Peak Integrated by Software
VX1127WBSD01	VX044041.D	1,2,3-Trichloropropane	JOHN	12/2/2024 9:52:27 AM	MMDadoda	12/2/2024 10:24:33 AM	Peak Integrated by Software
P5021-06	VX044049.D	1,3,5-Trimethylbenzene	JOHN	12/2/2024 9:52:44 AM	MMDadoda	12/2/2024 10:24:38 AM	Peak Integrated by Software
P5021-06	VX044049.D	n-Butylbenzene	JOHN	12/2/2024 9:52:44 AM	MMDadoda	12/2/2024 10:24:38 AM	Peak Integrated by Software
P5021-06	VX044049.D	sec-Butylbenzene	JOHN	12/2/2024 9:52:44 AM	MMDadoda	12/2/2024 10:24:38 AM	Peak Integrated by Software
VSTDCCC050	VX044050.D	1,2,3-Trichloropropane	JOHN	12/2/2024 9:52:48 AM	MMDadoda	12/2/2024 10:24:40 AM	Peak Integrated by Software
VSTDCCC050	VX044050.D	1,4-Dioxane	JOHN	12/2/2024 9:52:48 AM	MMDadoda	12/2/2024 10:24:40 AM	Peak Integrated by Software

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

Manual Integration Report

Sequence:	VX120224	Instrument	MSVOA_x

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC050	VX044052.D	1,2,3-Trichloropropane	JOHN	12/3/2024 9:44:54 AM	MMDadoda	12/3/2024 1:39:18 PM	Peak Integrated by Software
VX1202WBS01	VX044055.D	1,2,3-Trichloropropane	JOHN	12/3/2024 9:44:58 AM	MMDadoda	12/3/2024 1:39:19 PM	Peak Integrated by Software
P5021-01	VX044059.D	n-Butylbenzene	JOHN	12/3/2024 9:45:07 AM	MMDadoda	12/3/2024 1:39:23 PM	Peak Integrated by Software
VSTDCCC050	VX044078.D	1,2,3-Trichloropropane	JOHN	12/3/2024 9:45:20 AM	MMDadoda	12/3/2024 1:39:25 PM	Peak Integrated by Software

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

Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QCBatch ID # VX112124

Review By	John Carlone	Review On	11/21/2024 9:44:50 AM		
Supervise By	Mahesh Dadoda	Supervise On	11/22/2024 3:34:00 PM		
SubDirectory	VX112124	HP Acquire Method		HP Processing Method	82X112124W.M

STD. NAME	STD REF.#
Tune/Reschk	VP131686,VP131690
Initial Calibration Stds	VP131716,VP131717,VP131718,VP131719,VP131720,VP131721
CCC	VP131691
Internal Standard/PEM	
ICV/I.BLK	VP131722
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VX043915.D	20 Nov 2024 15:43	JC/MD	Not Ok
2	VSTDICC001	VX043916.D	20 Nov 2024 16:11	JC/MD	Not Ok
3	VSTDICC005	VX043917.D	20 Nov 2024 16:57	JC/MD	Not Ok
4	VSTDICC020	VX043918.D	20 Nov 2024 17:20	JC/MD	Not Ok
5	VSTDICCC050	VX043919.D	20 Nov 2024 17:43	JC/MD	Not Ok
6	VSTDICC100	VX043920.D	20 Nov 2024 18:06	JC/MD	Not Ok
7	VSTDICC150	VX043921.D	20 Nov 2024 18:30	JC/MD	Not Ok
8	IBLK	VX043922.D	20 Nov 2024 18:53	JC/MD	Not Ok
9	VSTDICV050	VX043923.D	20 Nov 2024 19:16	JC/MD	Not Ok
10	BFB	VX043924.D	21 Nov 2024 08:51	JC/MD	Ok
11	VSTDICC001	VX043925.D	21 Nov 2024 09:47	JC/MD	Ok,M
12	VSTDICC005	VX043926.D	21 Nov 2024 10:14	JC/MD	Ok,M
13	VSTDICC020	VX043927.D	21 Nov 2024 10:37	JC/MD	Ok,M
14	VSTDICCC050	VX043928.D	21 Nov 2024 11:17	JC/MD	Ok,M
15	VSTDICC100	VX043929.D	21 Nov 2024 11:40	JC/MD	Ok,M
16	VSTDICC150	VX043930.D	21 Nov 2024 12:03	JC/MD	Ok,M
17	IBLK	VX043931.D	21 Nov 2024 12:27	JC/MD	Ok
18	VSTDICV050	VX043932.D	21 Nov 2024 13:57	JC/MD	Ok,M
19	VX1121MBL01	VX043933.D	21 Nov 2024 14:27	JC/MD	Ok
20	VX1121WBL01	VX043934.D	21 Nov 2024 14:50	JC/MD	Ok
21	VX1121WBS01	VX043935.D	21 Nov 2024 15:13	JC/MD	Ok,M

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

Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QCBatch ID # VX112124

Review By	John Carlone	Review On	11/21/2024 9:44:50 AM		
Supervise By	Mahesh Dadoda	Supervise On	11/22/2024 3:34:00 PM		
SubDirectory	VX112124	HP Acquire Method		HP Processing Method	82X112124W.M

STD. NAME	STD REF.#
Tune/Reschk	VP131686,VP131690
Initial Calibration Stds	VP131716,VP131717,VP131718,VP131719,VP131720,VP131721
CCC	VP131691
Internal Standard/PEM	
ICV/I.BLK	VP131722
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

22	VX1121WBSD01	VX043936.D	21 Nov 2024 15:40	JC/MD	Ok,M
23	P4921-01	VX043937.D	21 Nov 2024 16:03	JC/MD	Ok
24	P4934-01	VX043938.D	21 Nov 2024 16:27	JC/MD	Ok
25	P4934-09	VX043939.D	21 Nov 2024 16:50	JC/MD	Ok
26	P4934-11	VX043940.D	21 Nov 2024 17:13	JC/MD	Ok
27	P4934-02	VX043941.D	21 Nov 2024 17:36	JC/MD	Ok
28	P4934-03	VX043942.D	21 Nov 2024 17:59	JC/MD	Ok
29	P4934-08	VX043943.D	21 Nov 2024 18:23	JC/MD	Ok
30	P4934-10	VX043944.D	21 Nov 2024 18:46	JC/MD	Ok
31	P4934-04	VX043945.D	21 Nov 2024 19:09	JC/MD	Ok
32	P4934-12	VX043946.D	21 Nov 2024 19:32	JC/MD	Ok
33	P4934-05	VX043947.D	21 Nov 2024 19:55	JC/MD	Ok
34	VSTDCCC050	VX043948.D	21 Nov 2024 20:18	JC/MD	Ok,M

M : Manual Integration

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

Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QCBatch ID # VX112724

Review By	John Carlone	Review On	12/2/2024 10:20:52 AM		
Supervise By	Mahesh Dadoda	Supervise On	12/2/2024 10:24:46 AM		
SubDirectory	VX112724	HP Acquire Method		HP Processing Method	82X112124W.M

STD. NAME	STD REF.#
Tune/Reschk	VP131824
Initial Calibration Stds	
CCC	VP131825,VP131826
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VX044023.D	27 Nov 2024 07:52	JC/MD	Ok
2	VSTDCCC050	VX044024.D	27 Nov 2024 08:46	JC/MD	Ok,M
3	VX1127MBL01	VX044025.D	27 Nov 2024 09:15	JC/MD	Ok
4	VX1127WBL01	VX044026.D	27 Nov 2024 09:38	JC/MD	Ok
5	VX1127MBS01	VX044027.D	27 Nov 2024 10:01	JC/MD	Ok,M
6	VX1127WBS01	VX044028.D	27 Nov 2024 10:27	JC/MD	Ok,M
7	P5006-18	VX044029.D	27 Nov 2024 10:50	JC/MD	Ok
8	PB165270TB	VX044030.D	27 Nov 2024 11:13	JC/MD	Ok
9	P5001-01	VX044031.D	27 Nov 2024 11:36	JC/MD	ReRun
10	P5001-02	VX044032.D	27 Nov 2024 11:59	JC/MD	ReRun
11	P5001-03	VX044033.D	27 Nov 2024 12:22	JC/MD	ReRun
12	P5001-04	VX044034.D	27 Nov 2024 12:45	JC/MD	ReRun
13	P5001-05	VX044035.D	27 Nov 2024 13:08	JC/MD	Dilution
14	P5001-06	VX044036.D	27 Nov 2024 13:31	JC/MD	Dilution
15	P5001-08	VX044037.D	27 Nov 2024 13:54	JC/MD	ReRun
16	P5001-09	VX044038.D	27 Nov 2024 14:16	JC/MD	Dilution
17	P5001-10	VX044039.D	27 Nov 2024 14:39	JC/MD	Dilution
18	P5001-11	VX044040.D	27 Nov 2024 15:02	JC/MD	ReRun
19	VX1127WBSD01	VX044041.D	27 Nov 2024 15:25	JC/MD	Ok,M
20	VX1127MBSD01	VX044042.D	27 Nov 2024 15:48	JC/MD	Ok,M
21	P4960-05	VX044043.D	27 Nov 2024 16:11	JC/MD	Ok

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

Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QCBatch ID # VX112724

Review By	John Carlone	Review On	12/2/2024 10:20:52 AM		
Supervise By	Mahesh Dadoda	Supervise On	12/2/2024 10:24:46 AM		
SubDirectory	VX112724	HP Acquire Method		HP Processing Method	82X112124W.M

STD. NAME	STD REF.#
Tune/Reschk	VP131824
Initial Calibration Stds	
CCC	VP131825,VP131826
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

22	P5021-02	VX044044.D	27 Nov 2024 16:34	JC/MD	ReRun
23	P5021-01	VX044045.D	27 Nov 2024 16:57	JC/MD	ReRun
24	P5021-03	VX044046.D	27 Nov 2024 17:20	JC/MD	ReRun
25	P5021-04	VX044047.D	27 Nov 2024 17:43	JC/MD	ReRun
26	P5021-05	VX044048.D	27 Nov 2024 18:06	JC/MD	ReRun
27	P5021-06	VX044049.D	27 Nov 2024 18:29	JC/MD	Dilution
28	VSTDCCC050	VX044050.D	27 Nov 2024 18:52	JC/MD	Ok,M

M : Manual Integration

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

Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QCBatch ID # VX120224

Review By	John Carlone	Review On	12/3/2024 9:50:50 AM		
Supervise By	Mahesh Dadoda	Supervise On	12/3/2024 1:39:36 PM		
SubDirectory	VX120224	HP Acquire Method		HP Processing Method	82X112124W.M

STD. NAME	STD REF.#
Tune/Reschk	VP131840
Initial Calibration Stds	
CCC	VP131841,VP131842
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VX044051.D	02 Dec 2024 08:35	JC/MD	Ok
2	VSTDCCC050	VX044052.D	02 Dec 2024 09:45	JC/MD	Ok,M
3	VX1202MBL01	VX044053.D	02 Dec 2024 10:14	JC/MD	Ok
4	VX1202WBL01	VX044054.D	02 Dec 2024 10:37	JC/MD	Ok
5	VX1202WBS01	VX044055.D	02 Dec 2024 11:00	JC/MD	Ok,M
6	VX1202WBSD01	VX044056.D	02 Dec 2024 11:27	JC/MD	Ok,M
7	P5021-02	VX044057.D	02 Dec 2024 11:49	JC/MD	Ok
8	P5021-06DL	VX044058.D	02 Dec 2024 12:12	JC/MD	Ok
9	P5021-01	VX044059.D	02 Dec 2024 12:35	JC/MD	Ok,M
10	P5021-03	VX044060.D	02 Dec 2024 12:58	JC/MD	Ok
11	P5021-04	VX044061.D	02 Dec 2024 13:21	JC/MD	Ok
12	P5021-05	VX044062.D	02 Dec 2024 13:44	JC/MD	Ok
13	PB165251TB	VX044063.D	02 Dec 2024 14:07	JC/MD	Ok
14	P4995-02	VX044064.D	02 Dec 2024 14:30	JC/MD	Ok
15	P5001-05DL	VX044065.D	02 Dec 2024 14:52	JC/MD	Ok
16	P5001-06DL	VX044066.D	02 Dec 2024 15:15	JC/MD	Ok
17	P5001-09DL	VX044067.D	02 Dec 2024 15:38	JC/MD	Ok
18	P5001-10DL	VX044068.D	02 Dec 2024 16:01	JC/MD	Ok
19	P5001-01RE	VX044069.D	02 Dec 2024 16:24	JC/MD	Confirms
20	P5001-02RE	VX044070.D	02 Dec 2024 16:47	JC/MD	Confirms
21	P5001-03RE	VX044071.D	02 Dec 2024 17:10	JC/MD	Confirms

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

Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QCBatch ID # VX120224

Review By	John Carlone	Review On	12/3/2024 9:50:50 AM		
Supervise By	Mahesh Dadoda	Supervise On	12/3/2024 1:39:36 PM		
SubDirectory	VX120224	HP Acquire Method		HP Processing Method	82X112124W.M

STD. NAME	STD REF.#
Tune/Reschk	VP131840
Initial Calibration Stds	
CCC	VP131841,VP131842
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

22	P5001-04RE	VX044072.D	02 Dec 2024 17:32	JC/MD	Confirms
23	P5001-08RE	VX044073.D	02 Dec 2024 17:55	JC/MD	Confirms
24	P5001-11RE	VX044074.D	02 Dec 2024 18:18	JC/MD	Confirms
25	PB165299TB	VX044075.D	02 Dec 2024 18:41	JC/MD	Ok
26	P5006-01	VX044076.D	02 Dec 2024 19:04	JC/MD	ReRun
27	P5006-02	VX044077.D	02 Dec 2024 19:27	JC/MD	ReRun
28	VSTDCCC050	VX044078.D	02 Dec 2024 19:50	JC/MD	Ok,M

M : Manual Integration

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

Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QCBatch ID # VX112124

Review By	John Carlone	Review On	11/21/2024 9:44:50 AM		
Supervise By	Mahesh Dadoda	Supervise On	11/22/2024 3:34:00 PM		
SubDirectory	VX112124	HP Acquire Method		HP Processing Method	82X112124W.M

STD. NAME	STD REF.#
Tune/Reschk	VP131686,VP131690
Initial Calibration Stds	VP131716,VP131717,VP131718,VP131719,VP131720,VP131721
CCC	VP131691
Internal Standard/PEM	
ICV/I.BLK	VP131722
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VX043915.D	20 Nov 2024 15:43		JC/MD	Not Ok
2	VSTDICC001	VSTDICC001	VX043916.D	20 Nov 2024 16:11	%D failed for Comp. #71,74,90,92 in 01 PPB	JC/MD	Not Ok
3	VSTDICC005	VSTDICC005	VX043917.D	20 Nov 2024 16:57	%D failed for Comp. #81 in 05 PPB	JC/MD	Not Ok
4	VSTDICC020	VSTDICC020	VX043918.D	20 Nov 2024 17:20		JC/MD	Not Ok
5	VSTDICCC050	VSTDICC050	VX043919.D	20 Nov 2024 17:43		JC/MD	Not Ok
6	VSTDICC100	VSTDICC100	VX043920.D	20 Nov 2024 18:06		JC/MD	Not Ok
7	VSTDICC150	VSTDICC150	VX043921.D	20 Nov 2024 18:30		JC/MD	Not Ok
8	IBLK	IBLK	VX043922.D	20 Nov 2024 18:53		JC/MD	Not Ok
9	VSTDICV050	ICVVX112124	VX043923.D	20 Nov 2024 19:16	Failed	JC/MD	Not Ok
10	BFB	BFB	VX043924.D	21 Nov 2024 08:51		JC/MD	Ok
11	VSTDICC001	VSTDICC001	VX043925.D	21 Nov 2024 09:47	%D failed for Comp. #71 in 01 PPB	JC/MD	Ok,M
12	VSTDICC005	VSTDICC005	VX043926.D	21 Nov 2024 10:14	QR- 58,71	JC/MD	Ok,M
13	VSTDICC020	VSTDICC020	VX043927.D	21 Nov 2024 10:37		JC/MD	Ok,M
14	VSTDICCC050	VSTDICCC050	VX043928.D	21 Nov 2024 11:17		JC/MD	Ok,M
15	VSTDICC100	VSTDICC100	VX043929.D	21 Nov 2024 11:40		JC/MD	Ok,M
16	VSTDICC150	VSTDICC150	VX043930.D	21 Nov 2024 12:03		JC/MD	Ok,M
17	IBLK	IBLK	VX043931.D	21 Nov 2024 12:27		JC/MD	Ok

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

Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QCBatch ID # VX112124

Review By	John Carlone	Review On	11/21/2024 9:44:50 AM		
Supervise By	Mahesh Dadoda	Supervise On	11/22/2024 3:34:00 PM		
SubDirectory	VX112124	HP Acquire Method		HP Processing Method	82X112124W.M

STD. NAME	STD REF.#
Tune/Reschk	VP131686,VP131690
Initial Calibration Stds	VP131716,VP131717,VP131718,VP131719,VP131720,VP131721
CCC	VP131691
Internal Standard/PEM	
ICV/I.BLK	VP131722
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

18	VSTDICV050	ICVVX112124	VX043932.D	21 Nov 2024 13:57		JC/MD	Ok,M
19	VX1121MBL01	VX1121MBL01	VX043933.D	21 Nov 2024 14:27		JC/MD	Ok
20	VX1121WBL01	VX1121WBL01	VX043934.D	21 Nov 2024 14:50		JC/MD	Ok
21	VX1121WBS01	VX1121WBS01	VX043935.D	21 Nov 2024 15:13		JC/MD	Ok,M
22	VX1121WBSD01	VX1121WBSD01	VX043936.D	21 Nov 2024 15:40		JC/MD	Ok,M
23	P4921-01	WC-11-A-202411	VX043937.D	21 Nov 2024 16:03	vial B pH#5.0	JC/MD	Ok
24	P4934-01	TB-01-20241118	VX043938.D	21 Nov 2024 16:27	vial A pH<2 TB;	JC/MD	Ok
25	P4934-09	FB-01-20241119	VX043939.D	21 Nov 2024 16:50	vial A pH<2 FB;	JC/MD	Ok
26	P4934-11	RB-01-20241119	VX043940.D	21 Nov 2024 17:13	vial A pH<2	JC/MD	Ok
27	P4934-02	BPOW6-11-20241118	VX043941.D	21 Nov 2024 17:36	vial A pH<2	JC/MD	Ok
28	P4934-03	BPOW6-7-20241118	VX043942.D	21 Nov 2024 17:59	vial A pH<2	JC/MD	Ok
29	P4934-08	BPOW6-9-20241119	VX043943.D	21 Nov 2024 18:23	vial A pH<2	JC/MD	Ok
30	P4934-10	BPOW6-8-20241119	VX043944.D	21 Nov 2024 18:46	vial A pH<2	JC/MD	Ok
31	P4934-04	DUP-01-20241118	VX043945.D	21 Nov 2024 19:09	vial A pH<2	JC/MD	Ok
32	P4934-12	DUP-02-20241119	VX043946.D	21 Nov 2024 19:32	vial A pH<2	JC/MD	Ok
33	P4934-05	BPOW6-10-20241119	VX043947.D	21 Nov 2024 19:55	vial A pH<2	JC/MD	Ok
34	VSTDCCC050	VSTDCCC050EC	VX043948.D	21 Nov 2024 20:18		JC/MD	Ok,M

M : Manual Integration

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

Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QCBatch ID # VX112724

Review By	John Carlone	Review On	12/2/2024 10:20:52 AM		
Supervise By	Mahesh Dadoda	Supervise On	12/2/2024 10:24:46 AM		
SubDirectory	VX112724	HP Acquire Method		HP Processing Method	82X112124W.M

STD. NAME	STD REF.#
Tune/Reschk	VP131824
Initial Calibration Stds	
CCC	VP131825,VP131826
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VX044023.D	27 Nov 2024 07:52		JC/MD	Ok
2	VSTDCCC050	VSTDCCC050	VX044024.D	27 Nov 2024 08:46	V13516	JC/MD	Ok,M
3	VX1127MBL01	VX1127MBL01	VX044025.D	27 Nov 2024 09:15		JC/MD	Ok
4	VX1127WBL01	VX1127WBL01	VX044026.D	27 Nov 2024 09:38		JC/MD	Ok
5	VX1127MBS01	VX1127MBS01	VX044027.D	27 Nov 2024 10:01		JC/MD	Ok,M
6	VX1127WBS01	VX1127WBS01	VX044028.D	27 Nov 2024 10:27		JC/MD	Ok,M
7	P5006-18	TW-WTS-02	VX044029.D	27 Nov 2024 10:50		JC/MD	Ok
8	PB165270TB	PB165270TB	VX044030.D	27 Nov 2024 11:13		JC/MD	Ok
9	P5001-01	SPLP-C1-1	VX044031.D	27 Nov 2024 11:36	vial A pH#6.0 Surrogate fail;BSD failed low	JC/MD	ReRun
10	P5001-02	SPLP-C1-2	VX044032.D	27 Nov 2024 11:59	vial A pH#6.0 Surrogate fail;BSD failed low	JC/MD	ReRun
11	P5001-03	SPLP-C1-3	VX044033.D	27 Nov 2024 12:22	vial A pH#6.0 Surrogate fail;BSD failed low	JC/MD	ReRun
12	P5001-04	SPLP-C2-1	VX044034.D	27 Nov 2024 12:45	vial A pH#6.0 Surrogate fail;BSD failed low	JC/MD	ReRun
13	P5001-05	SPLP-C2-2	VX044035.D	27 Nov 2024 13:08	vial A pH#6.0 Surrogate fail;BSD failed low;Need 10X	JC/MD	Dilution
14	P5001-06	SPLP-C2-3	VX044036.D	27 Nov 2024 13:31	vial A pH#6.0 Surrogate fail;BSD failed low;Need 10X	JC/MD	Dilution
15	P5001-08	SPLP-C3-1	VX044037.D	27 Nov 2024 13:54	vial A pH#6.0 E Flag in Previous Sample;Surrogate fail;BSD failed low	JC/MD	ReRun
16	P5001-09	SPLP-C3-2	VX044038.D	27 Nov 2024 14:16	vial A pH#6.0 Surrogate fail;BSD failed low;Need 10X	JC/MD	Dilution

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

Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QCBatch ID # VX112724

Review By	John Carlone	Review On	12/2/2024 10:20:52 AM		
Supervise By	Mahesh Dadoda	Supervise On	12/2/2024 10:24:46 AM		
SubDirectory	VX112724	HP Acquire Method		HP Processing Method	82X112124W.M

STD. NAME	STD REF.#
Tune/Reschk	VP131824
Initial Calibration Stds	
CCC	VP131825,VP131826
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

17	P5001-10	SPLP-C3-3	VX044039.D	27 Nov 2024 14:39	vial A pH#6.0 Surrogate fail;BSD failed low;Need 10X	JC/MD	Dilution
18	P5001-11	SPLP-C4-1	VX044040.D	27 Nov 2024 15:02	vial A pH#6.0 Surrogate fail;BSD failed low	JC/MD	ReRun
19	VX1127WBSD01	VX1127WBSD01	VX044041.D	27 Nov 2024 15:25	Recovery failed low for comp. #44,60,71 and failed high for comp. #95	JC/MD	Ok,M
20	VX1127MBSD01	VX1127MBSD01	VX044042.D	27 Nov 2024 15:48		JC/MD	Ok,M
21	P4960-05	SW3	VX044043.D	27 Nov 2024 16:11		JC/MD	Ok
22	P5021-02	MW-08	VX044044.D	27 Nov 2024 16:34	vial A pH<2 BSD failed high;Run @ Lower Dilution	JC/MD	ReRun
23	P5021-01	MW-06	VX044045.D	27 Nov 2024 16:57	vial A pH<2 BSD failed high	JC/MD	ReRun
24	P5021-03	MW-10	VX044046.D	27 Nov 2024 17:20	vial A pH<2 BSD failed high	JC/MD	ReRun
25	P5021-04	MW-11	VX044047.D	27 Nov 2024 17:43	vial A pH<2 BSD failed high	JC/MD	ReRun
26	P5021-05	MW-13	VX044048.D	27 Nov 2024 18:06	vial A pH<2 BSD failed high	JC/MD	ReRun
27	P5021-06	MW-12	VX044049.D	27 Nov 2024 18:29	vial A pH<2 BSD failed high;Need 20X	JC/MD	Dilution
28	VSTDCCC050	VSTDCCC050EC	VX044050.D	27 Nov 2024 18:52		JC/MD	Ok,M

M : Manual Integration

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

Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QCBatch ID # VX120224

Review By	John Carlone	Review On	12/3/2024 9:50:50 AM		
Supervise By	Mahesh Dadoda	Supervise On	12/3/2024 1:39:36 PM		
SubDirectory	VX120224	HP Acquire Method		HP Processing Method	82X112124W.M

STD. NAME	STD REF.#
Tune/Reschk	VP131840
Initial Calibration Stds	
CCC	VP131841,VP131842
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VX044051.D	02 Dec 2024 08:35		JC/MD	Ok
2	VSTDCCC050	VSTDCCC050	VX044052.D	02 Dec 2024 09:45	V13516	JC/MD	Ok,M
3	VX1202MBL01	VX1202MBL01	VX044053.D	02 Dec 2024 10:14		JC/MD	Ok
4	VX1202WBL01	VX1202WBL01	VX044054.D	02 Dec 2024 10:37		JC/MD	Ok
5	VX1202WBS01	VX1202WBS01	VX044055.D	02 Dec 2024 11:00		JC/MD	Ok,M
6	VX1202WBSD01	VX1202WBSD01	VX044056.D	02 Dec 2024 11:27		JC/MD	Ok,M
7	P5021-02	MW-08	VX044057.D	02 Dec 2024 11:49	vial B pH<2	JC/MD	Ok
8	P5021-06DL	MW-12DL	VX044058.D	02 Dec 2024 12:12	vial B pH<2	JC/MD	Ok
9	P5021-01	MW-06	VX044059.D	02 Dec 2024 12:35	vial B pH<2	JC/MD	Ok,M
10	P5021-03	MW-10	VX044060.D	02 Dec 2024 12:58	vial B pH<2	JC/MD	Ok
11	P5021-04	MW-11	VX044061.D	02 Dec 2024 13:21	vial B pH<2	JC/MD	Ok
12	P5021-05	MW-13	VX044062.D	02 Dec 2024 13:44	vial B pH<2	JC/MD	Ok
13	PB165251TB	PB165251TB	VX044063.D	02 Dec 2024 14:07		JC/MD	Ok
14	P4995-02	001	VX044064.D	02 Dec 2024 14:30	vial A pH#5.0	JC/MD	Ok
15	P5001-05DL	SPLP-C2-2DL	VX044065.D	02 Dec 2024 14:52	vial B pH#6.0	JC/MD	Ok
16	P5001-06DL	SPLP-C2-3DL	VX044066.D	02 Dec 2024 15:15	vial B pH#6.0	JC/MD	Ok
17	P5001-09DL	SPLP-C3-2DL	VX044067.D	02 Dec 2024 15:38	vial B pH#6.0	JC/MD	Ok
18	P5001-10DL	SPLP-C3-3DL	VX044068.D	02 Dec 2024 16:01	vial B pH#6.0	JC/MD	Ok

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

Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QCBatch ID # VX120224

Review By	John Carlone	Review On	12/3/2024 9:50:50 AM		
Supervise By	Mahesh Dadoda	Supervise On	12/3/2024 1:39:36 PM		
SubDirectory	VX120224	HP Acquire Method		HP Processing Method	82X112124W.M

STD. NAME	STD REF.#
Tune/Reschk	VP131840
Initial Calibration Stds	
CCC	VP131841,VP131842
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

19	P5001-01RE	SPLP-C1-1RE	VX044069.D	02 Dec 2024 16:24	vial B pH#6.0 Surrogate fail	JC/MD	Confirms
20	P5001-02RE	SPLP-C1-2RE	VX044070.D	02 Dec 2024 16:47	vial B pH#6.0 Surrogate fail	JC/MD	Confirms
21	P5001-03RE	SPLP-C1-3RE	VX044071.D	02 Dec 2024 17:10	vial B pH#6.0 Surrogate fail	JC/MD	Confirms
22	P5001-04RE	SPLP-C2-1RE	VX044072.D	02 Dec 2024 17:32	vial B pH#6.0 Surrogate fail	JC/MD	Confirms
23	P5001-08RE	SPLP-C3-1RE	VX044073.D	02 Dec 2024 17:55	vial B pH#6.0 Surrogate fail	JC/MD	Confirms
24	P5001-11RE	SPLP-C4-1RE	VX044074.D	02 Dec 2024 18:18	vial B pH#6.0 Surrogate fail	JC/MD	Confirms
25	PB165299TB	PB165299TB	VX044075.D	02 Dec 2024 18:41		JC/MD	Ok
26	P5006-01	SPLP-C4-2	VX044076.D	02 Dec 2024 19:04	vial A pH#6.0 Surrogate fail	JC/MD	ReRun
27	P5006-02	SPLP-C4-3	VX044077.D	02 Dec 2024 19:27	vial A pH#6.0 Surrogate fail	JC/MD	ReRun
28	VSTDCCC050	VSTDCCC050EC	VX044078.D	02 Dec 2024 19:50		JC/MD	Ok,M

M : Manual Integration

SHIPPING DOCUMENTS

CHEMTECH
CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax: (908) 78-8922
www.chemtech.net

Chemtech Project Number: P5021

COC Number:

CLIENT INFORMATION

COMPANY: Liro Environmental Inc.
ADDRESS: 690 Delaware Ave
CITY: Buffalo STATE: NY ZIP: 14209
ATTENTION: Martin Wesolowski
PHONE:716.970.4273 FAX:716.882.9640

PROJECT INFORMATION

PROJECT NAME: RMB, RFK Bridge Randall's Island
PROJECT #: RMB-2023 LOCATION: NY
PROJECT MANAGER: Martin Wesolowski
E-MAIL: Wesolowskim@liro.com
PHONE:716-970-9640 FAX:716-882-9640

BILLING INFORMATION

BILL TO: Same PO#
ADDRESS: Same
CITY: Same STATE: ZIP:
ATTENTION Same PHONE:

DATA TURNAROUND INFORMATION

FAX:_____ DAYS*
HARD COPY: standard DAYS*
EDD_____ DAYS*
* TO BE APPROVED BY CHEMTECH
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

☐ RESEULTS ONLY ☐ USEPA CLP
☐ RESULTS + QC ☐ New York State ASP "B"
☐ New Jersey REDUCED ☐ New York State ASP "A"
☐ New Jersey CLP ☐ Other_____
☐ EDD Format_____

ANALYSIS

	1	2	3	4	5	6	7	8	9
	CP-51 VOCs	CP-51 SVOCs	Tables 2 & 3						

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# of Bottles	PRESERVATIVES 1	2	3	4	5	6	7	8	9	COMMENTS
								A	Ice								<-- Specify Preservatives A-HCl B-HNO3 C-H2SO4 D-NaOH E-ICE F-Other
1.	MW-06	GW		X	11/26/24	11:05	5	X	X	X							
2.	MW-08	GW		X	11/26/24	11:55	5	X	X	X							
3.	MW-10	GW		X	11/26/24	12:40	5	X	X	X							
4.	MW-11	GW		X	11/26/24	13:20	5	X	X	X							
5.	MW-13	GW		X	11/26/24	13:35	4	X	X	X							
6.	MW-12	GW		X	11/26/24	13:50	5	X	X	X							
7.																	
8.																	
9.																	
10.																	

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE PROSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER	DATE/TIME	RECEIVED BY
1.	11/26/24 1600	1.
RELINQUISHED BY	DATE/TIME	RECEIVED BY
2.	1005 11-27-24	2.
RELINQUISHED BY	DATE/TIME	RECEIVED FOR LAB BY
3.		3.

Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant ☐ Cooler Temp 2.4-C
MeOH extraction requires an additional 4oz. Jar for percent solid ☐ Ice in Cooler?: yes
Comments: ZR Cur #1

Page_____of_____

SHIPPED VIA: CLIENT: ☐ Hand Delivered ☐ Overnight
CHEMTECH: ☐ Picked Up ☐ Overnight

Shipment Complete ☐ YES ☐ NO

WHITE - CHEMTECH COPYFOR RETURN TO CLIENT **YELLOW** - CHEMTECH COPY **PINK** - SAMPLER COPY

CHEMTECH 284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488

Alliance TECHNICAL GROUP

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : P5021 LIRO01
Client Name : LiRo Engineers, Inc.
Client Contact : Martin Wesolowski
Invoice Name : LiRo Engineers, Inc.
Invoice Contact : Martin Wesolowski

Order Date : 11/27/2024 10:41:00 AM
Project Name : RFK Bridge
Receive DateTime : 11/27/2024 10:05:00 AM
Purchase Order :

Project Mgr :
Report Type : NYS ASP A
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
P5021-01	MW-06	Water	11/26/2024	11:05					
					VOCMS Group1		8260-Low		10 Bus. Days
P5021-02	MW-08	Water	11/26/2024	11:55					
					VOCMS Group1		8260-Low		10 Bus. Days
P5021-03	MW-10	Water	11/26/2024	12:40					
					VOCMS Group1		8260-Low		10 Bus. Days
P5021-04	MW-11	Water	11/26/2024	13:20					
					VOCMS Group1		8260-Low		10 Bus. Days
P5021-05	MW-13	Water	11/26/2024	13:35					
					VOCMS Group1		8260-Low		10 Bus. Days
P5021-06	MW-12	Water	11/26/2024	13:50					
					VOCMS Group1		8260-Low		10 Bus. Days

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : P5021 LIRO01
Client Name : LiRo Engineers, Inc.
Client Contact : Martin Wesolowski
Invoice Name : LiRo Engineers, Inc.
Invoice Contact : Martin Wesolowski

Order Date : 11/27/2024 10:41:00 AM
Project Name : RFK Bridge
Receive DateTime : 11/27/2024 10:05:00 AM
Purchase Order :

Project Mgr :
Report Type : NYS ASP A
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

Relinguished By : [signature]
Date / Time : 11.27.24 1200

Received By : [signature]
Date / Time : 11/27/24 12:00 Ng # 4
Storage Area : VOA Refridgerator Room